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

**12/30/2020**

RE: W0 73
Lot 73 W0

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

**Site Information:**

Customer: Project Name: W0 73
Lot/Block: Model:
Address: Subdivision:
City: State:

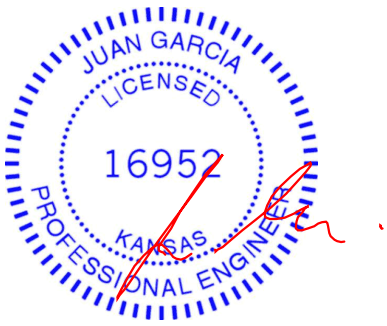
**General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):**

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.4
Wind Code: N/A Wind Speed: 115 mph
Roof Load: 45.0 psf Floor Load: N/A psf

This package includes 65 individual, dated Truss Design Drawings and 0 Additional Drawings.

| No. | Seal# | Truss Name | Date | No. | Seal# | Truss Name | Date |
|---|---|---|---|---|---|---|---|
| 1 | I43839719 | A3 | 12/3/2020 | 21 | I43839739 | E2 | 12/3/2020 |
| 2 | I43839720 | A4 | 12/3/2020 | 22 | I43839740 | E3 | 12/3/2020 |
| 3 | I43839721 | A5 | 12/3/2020 | 23 | I43839741 | E4 | 12/3/2020 |
| 4 | I43839722 | B1 | 12/3/2020 | 24 | I43839742 | E5 | 12/3/2020 |
| 5 | I43839723 | B2 | 12/3/2020 | 25 | I43839743 | E6 | 12/3/2020 |
| 6 | I43839724 | B3 | 12/3/2020 | 26 | I43839744 | E7 | 12/3/2020 |
| 7 | I43839725 | B4 | 12/3/2020 | 27 | I43839745 | E8 | 12/3/2020 |
| 8 | I43839726 | B5 | 12/3/2020 | 28 | I43839746 | E9 | 12/3/2020 |
| 9 | I43839727 | B6 | 12/3/2020 | 29 | I43839747 | G1 | 12/3/2020 |
| 10 | I43839728 | B7 | 12/3/2020 | 30 | I43839748 | G2 | 12/3/2020 |
| 11 | I43839729 | B8 | 12/3/2020 | 31 | I43839749 | G3 | 12/3/2020 |
| 12 | I43839730 | B9 | 12/3/2020 | 32 | I43839750 | G4 | 12/3/2020 |
| 13 | I43839731 | C1 | 12/3/2020 | 33 | I43839751 | G5 | 12/3/2020 |
| 14 | I43839732 | C2 | 12/3/2020 | 34 | I43839752 | J4 | 12/3/2020 |
| 15 | I43839733 | D1 | 12/3/2020 | 35 | I43839753 | J5 | 12/3/2020 |
| 16 | I43839734 | D2 | 12/3/2020 | 36 | I43839754 | J6 | 12/3/2020 |
| 17 | I43839735 | D3 | 12/3/2020 | 37 | I43839755 | J7 | 12/3/2020 |
| 18 | I43839736 | D4 | 12/3/2020 | 38 | I43839756 | J8 | 12/3/2020 |
| 19 | I43839737 | D5 | 12/3/2020 | 39 | I43839757 | J9 | 12/3/2020 |
| 20 | I43839738 | E1 | 12/3/2020 | 40 | I43839758 | J10 | 12/3/2020 |

The truss drawing(s) referenced above have been prepared by MiTek USA, Inc under my direct supervision based on the parameters provided by Wheeler - Waverly.
Truss Design Engineer's Name: Garcia, Juan
My license renewal date for the state of Kansas is April 30, 2022.
Kansas COA: E-943




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

December 03, 2020
Garcia, Juan

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

12/30/2020

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

RE: W0 73 - Lot 73 W0

**Site Information:**

Project Customer: Project Name: W0 73
Lot/Block: Subdivision:
Address:
City, County: State:

| No. | Seal# | Truss Name | Date |
|---|---|---|---|
| 41 | I43839759 | J11 | 12/3/2020 |
| 42 | I43839760 | J12 | 12/3/2020 |
| 43 | I43839761 | J13 | 12/3/2020 |
| 44 | I43839762 | J14 | 12/3/2020 |
| 45 | I43839763 | J14A | 12/3/2020 |
| 46 | I43839764 | J15A | 12/3/2020 |
| 47 | I43839765 | J16 | 12/3/2020 |
| 48 | I43839766 | J17A | 12/3/2020 |
| 49 | I43839767 | J18 | 12/3/2020 |
| 50 | I43839768 | J19 | 12/3/2020 |
| 51 | I43839769 | J20 | 12/3/2020 |
| 52 | I43839770 | J21 | 12/3/2020 |
| 53 | I43839771 | J22 | 12/3/2020 |
| 54 | I43839772 | J23 | 12/3/2020 |
| 55 | I43839773 | J24 | 12/3/2020 |
| 56 | I43839774 | J25 | 12/3/2020 |
| 57 | I43839775 | J26 | 12/3/2020 |
| 58 | I43839776 | J27 | 12/3/2020 |
| 59 | I43839777 | LAY1 | 12/3/2020 |
| 60 | I43839778 | LAY2 | 12/3/2020 |
| 61 | I43839779 | LAY3 | 12/3/2020 |
| 62 | I43839780 | LAY4 | 12/3/2020 |
| 63 | I43839781 | V1 | 12/3/2020 |
| 64 | I43839782 | V2 | 12/3/2020 |
| 65 | I43839783 | V3 | 12/3/2020 |

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

**12/30/2020**

RE: W0 73
Lot 73 W0

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

**Site Information:**

Customer: Project Name: W0 73
Lot/Block: Model:
Address: Subdivision:
City: State:

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

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.4
Wind Code: N/A Wind Speed: 115 mph
Roof Load: 45.0 psf Floor Load: N/A psf

This package includes 65 individual, dated Truss Design Drawings and 0 Additional Drawings.

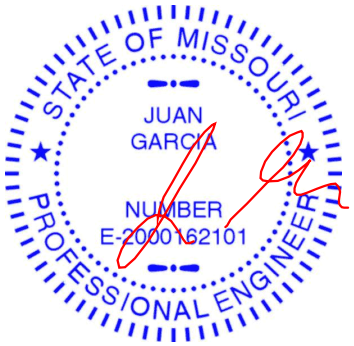
| No. | Seal# | Truss Name | Date | No. | Seal# | Truss Name | Date |
|---|---|---|---|---|---|---|---|
| 1 | I43839719 | A3 | 12/3/2020 | 21 | I43839739 | E2 | 12/3/2020 |
| 2 | I43839720 | A4 | 12/3/2020 | 22 | I43839740 | E3 | 12/3/2020 |
| 3 | I43839721 | A5 | 12/3/2020 | 23 | I43839741 | E4 | 12/3/2020 |
| 4 | I43839722 | B1 | 12/3/2020 | 24 | I43839742 | E5 | 12/3/2020 |
| 5 | I43839723 | B2 | 12/3/2020 | 25 | I43839743 | E6 | 12/3/2020 |
| 6 | I43839724 | B3 | 12/3/2020 | 26 | I43839744 | E7 | 12/3/2020 |
| 7 | I43839725 | B4 | 12/3/2020 | 27 | I43839745 | E8 | 12/3/2020 |
| 8 | I43839726 | B5 | 12/3/2020 | 28 | I43839746 | E9 | 12/3/2020 |
| 9 | I43839727 | B6 | 12/3/2020 | 29 | I43839747 | G1 | 12/3/2020 |
| 10 | I43839728 | B7 | 12/3/2020 | 30 | I43839748 | G2 | 12/3/2020 |
| 11 | I43839729 | B8 | 12/3/2020 | 31 | I43839749 | G3 | 12/3/2020 |
| 12 | I43839730 | B9 | 12/3/2020 | 32 | I43839750 | G4 | 12/3/2020 |
| 13 | I43839731 | C1 | 12/3/2020 | 33 | I43839751 | G5 | 12/3/2020 |
| 14 | I43839732 | C2 | 12/3/2020 | 34 | I43839752 | J4 | 12/3/2020 |
| 15 | I43839733 | D1 | 12/3/2020 | 35 | I43839753 | J5 | 12/3/2020 |
| 16 | I43839734 | D2 | 12/3/2020 | 36 | I43839754 | J6 | 12/3/2020 |
| 17 | I43839735 | D3 | 12/3/2020 | 37 | I43839755 | J7 | 12/3/2020 |
| 18 | I43839736 | D4 | 12/3/2020 | 38 | I43839756 | J8 | 12/3/2020 |
| 19 | I43839737 | D5 | 12/3/2020 | 39 | I43839757 | J9 | 12/3/2020 |
| 20 | I43839738 | E1 | 12/3/2020 | 40 | I43839758 | J10 | 12/3/2020 |

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.

December 03, 2020

Garcia, Juan

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

12/30/2020

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

RE: W0 73 - Lot 73 W0

**Site Information:**

Project Customer: Project Name: W0 73
Lot/Block: Subdivision:
Address:
City, County: State:

| No. | Seal# | Truss Name | Date |
|---|---|---|---|
| 41 | I43839759 | J11 | 12/3/2020 |
| 42 | I43839760 | J12 | 12/3/2020 |
| 43 | I43839761 | J13 | 12/3/2020 |
| 44 | I43839762 | J14 | 12/3/2020 |
| 45 | I43839763 | J14A | 12/3/2020 |
| 46 | I43839764 | J15A | 12/3/2020 |
| 47 | I43839765 | J16 | 12/3/2020 |
| 48 | I43839766 | J17A | 12/3/2020 |
| 49 | I43839767 | J18 | 12/3/2020 |
| 50 | I43839768 | J19 | 12/3/2020 |
| 51 | I43839769 | J20 | 12/3/2020 |
| 52 | I43839770 | J21 | 12/3/2020 |
| 53 | I43839771 | J22 | 12/3/2020 |
| 54 | I43839772 | J23 | 12/3/2020 |
| 55 | I43839773 | J24 | 12/3/2020 |
| 56 | I43839774 | J25 | 12/3/2020 |
| 57 | I43839775 | J26 | 12/3/2020 |
| 58 | I43839776 | J27 | 12/3/2020 |
| 59 | I43839777 | LAY1 | 12/3/2020 |
| 60 | I43839778 | LAY2 | 12/3/2020 |
| 61 | I43839779 | LAY3 | 12/3/2020 |
| 62 | I43839780 | LAY4 | 12/3/2020 |
| 63 | I43839781 | V1 | 12/3/2020 |
| 64 | I43839782 | V2 | 12/3/2020 |
| 65 | I43839783 | V3 | 12/3/2020 |

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/30/2020

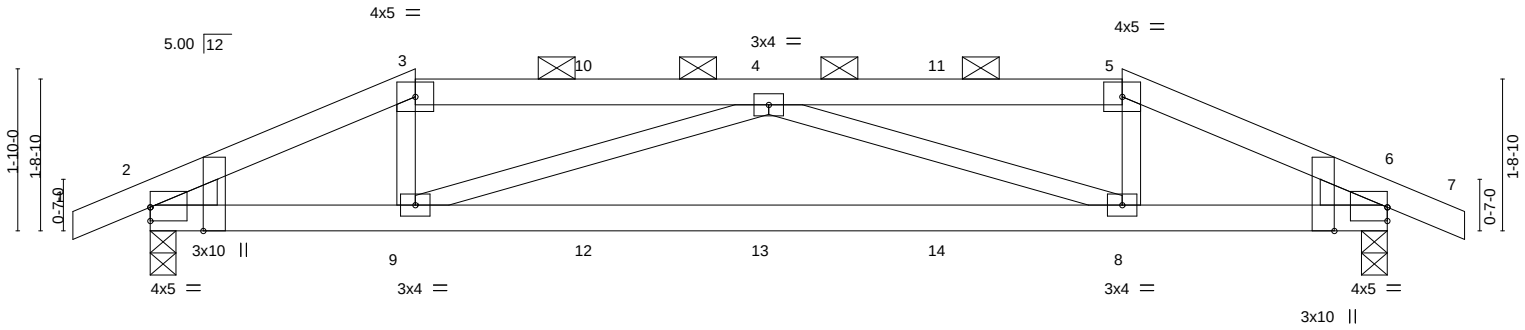
| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | A3 | Hip Girder | 1 | 1 | I43839719 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:06 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-8TRpp1Js8VS?ZBVtR3BhgrGJSmxi8BUTxyM_AryCyC?

-0-10-8 | 3-0-0 | 7-0-0 | 11-0-0 | 14-0-0 | 14-10-8
0-10-8 | 3-0-0 | 4-0-0 | 4-0-0 | 3-0-0 | 0-10-8

Scale = 1:26.1




3-0-0 | 11-0-0 | 14-0-0
3-0-0 | 8-0-0 | 3-0-0

Plate Offsets (X,Y)-- [2:0-0-0,0-1-14], [2:0-3-3,Edge], [6:Edge,0-1-14], [6:0-3-3,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 | 0.36 | Vert(LL) | -0.13 | 8-9 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.71 | Vert(CT) | -0.28 | 8-9 | >590 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.29 | Horz(CT) | 0.03 | 6 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | Wind(LL) | 0.06 | 8-9 | >999 | 240 | Weight: 45 lb | FT = 10% |

**LUMBER-**
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2
WEDGE
Left: 2x4 SPF No.2 , Right: 2x4 SPF No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 5-1-6 oc purlins, except 2-0-0 oc purlins (5-3-14 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 7-10-7 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 6=0-3-8
Max Horz 2=28(LC 33)
Max Uplift 2=-220(LC 4), 6=-220(LC 5)
Max Grav 2=745(LC 1), 6=745(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1310/346, 3-4=-1098/324, 4-5=-1098/324, 5-6=-1310/346
BOT CHORD 2-9=-278/1121, 8-9=-548/1623, 6-8=-282/1121
WEBS 3-9=0/416, 5-8=0/416, 4-9=-577/284, 4-8=-577/284

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=220, 6=220.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 85 lb down and 151 lb up at 3-0-0, 69 lb down and 55 lb up at 5-0-0, 69 lb down and 55 lb up at 7-0-0, and 69 lb down and 55 lb up at 9-0-0, and 85 lb down and 151 lb up at 11-0-0 on top chord, and 26 lb down at 3-0-0, 16 lb down at 5-0-0, 16 lb down at 7-0-0, and 16 lb down at 9-0-0, and 26 lb down at 10-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

December 3,2020

Continued on page 2



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | A3 | Hip Girder | 1 | 1 | I43839719 |

Job Reference (optional)



**LOAD CASE(S)** Standard

Uniform Loads (plf)

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

Concentrated Loads (lb)

Vert: 3=-15(F) 5=-15(F) 9=-8(F) 8=-8(F) 4=-15(F) 10=-15(F) 11=-15(F) 12=-8(F) 13=-8(F) 14=-8(F)

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | A4 | Hip | 1 | 1 | I43839720 |

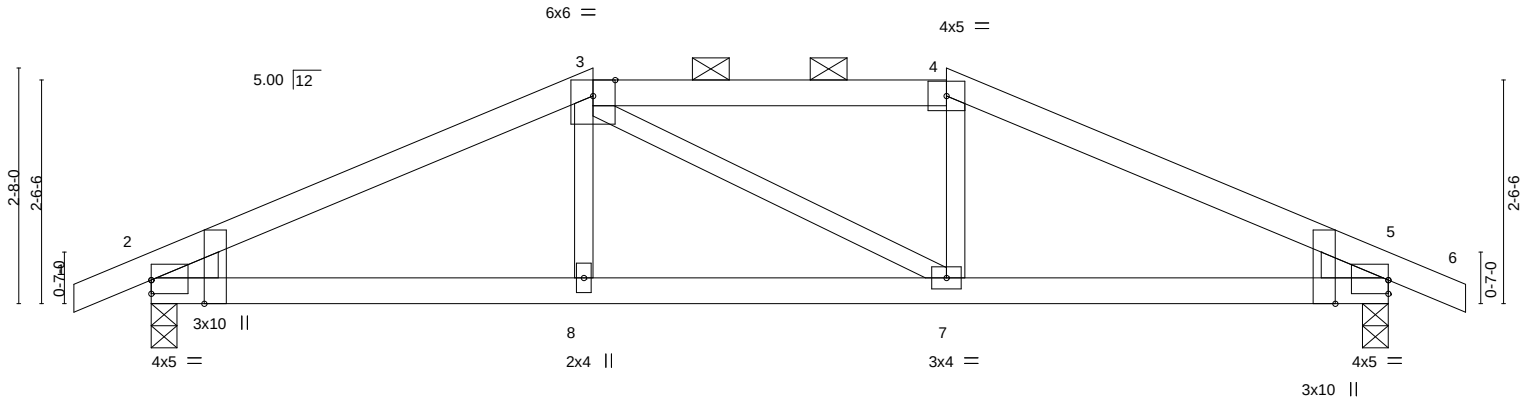
Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:06 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-8TRpp1Js8VS?ZBVtR3BhgrGJzm1V8F1TxyM_AryCyC?

**RELEASE FOR CONSTRUCTION**
**AS NOTED ON PLANS REVIEW**
**DEVELOPMENT SERVICES**
**LEE'S SUMMIT, MISSOURI**
**12/30/2020**

-0-10-8 0-10-8 | 5-0-0 5-0-0 | 9-0-0 4-0-0 | 14-0-0 5-0-0 | 14-10-8 0-10-8

Scale = 1:26.1




5-0-0 5-0-0 | 9-0-0 4-0-0 | 14-0-0 5-0-0

Plate Offsets (X,Y)-- [2:0-0-0,0-1-14], [2:0-3-3,Edge], [5:0-0-0,0-1-14], [5:0-3-3,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 | 0.33 | Vert(LL) | -0.03 | 8 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.34 | Vert(CT) | -0.06 | 2-8 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.06 | Horz(CT) | 0.02 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | Wind(LL) | 0.02 | 2-8 | >999 | 240 | Weight: 44 lb | FT = 10% |

**LUMBER-**
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2
WEDGE
Left: 2x4 SPF No.2 , Right: 2x4 SPF No.2

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

**REACTIONS.** (size) 2=0-3-8, 5=0-3-8
Max Horz 2=42(LC 12)
Max Uplift 2=-90(LC 4), 5=-90(LC 5)
Max Grav 2=688(LC 1), 5=688(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1042/113, 3-4=-871/125, 4-5=-1042/112
BOT CHORD 2-8=-59/876, 7-8=-62/871, 5-7=-56/876

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

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

December 3,2020




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | A5 | Common | 5 | 1 | I43839721 |

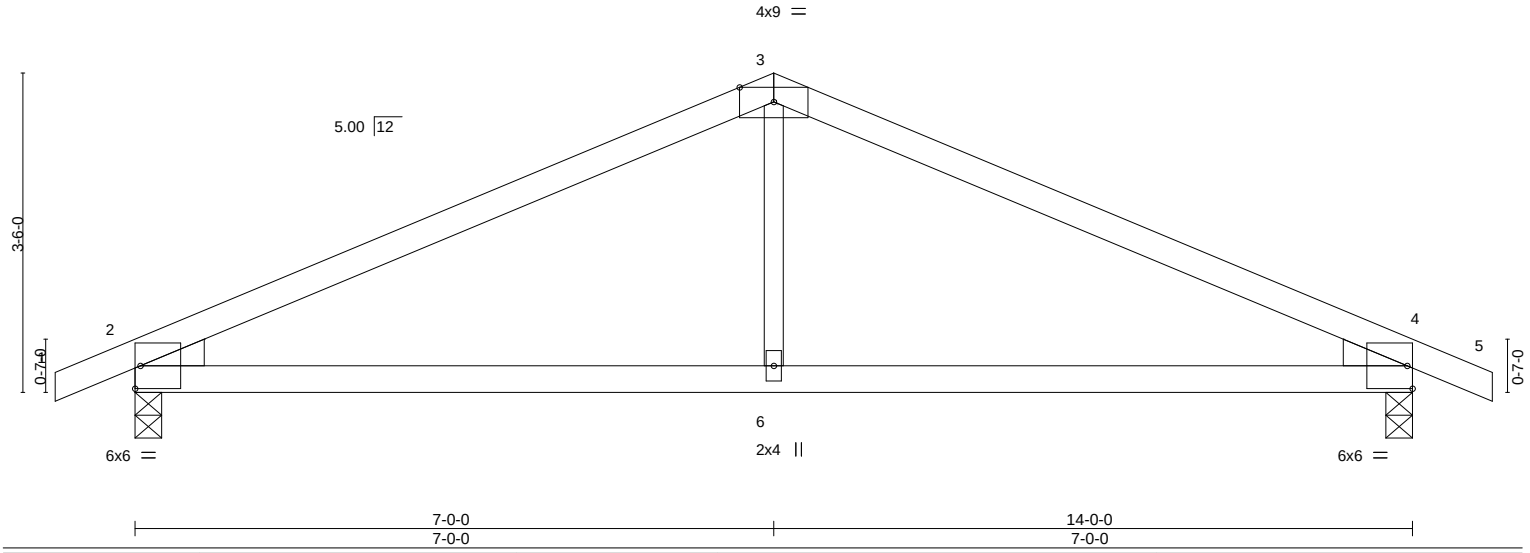
Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:07 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-cg?B0NJUvpasAL43_miwD3oOWALdthbdAc6XiHyCyC_

**RELEASE FOR CONSTRUCTION**
**AS NOTED ON PLANS REVIEW**
**DEVELOPMENT SERVICES**
**LEE'S SUMMIT, MISSOURI**
**12/30/2020**

-0-10-8 0-10-8 | 7-0-0 7-0-0 | 14-0-0 7-0-0 | 14-10-8 0-10-8

Scale = 1:25.3




| 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 | 0.73 | Vert(LL) | -0.06 | 4-6 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.47 | Vert(CT) | -0.13 | 4-6 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.11 | Horz(CT) | 0.02 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.05 | 2-6 | >999 | 240 | Weight: 40 lb | FT = 10% |

**LUMBER-**
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2
WEDGE
Left: 2x4 SPF No.2 , Right: 2x4 SPF No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 3-10-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 4=0-3-8
Max Horz 2=-58(LC 9)
Max Uplift 2=-102(LC 8), 4=-102(LC 9)
Max Grav 2=688(LC 1), 4=688(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-933/104, 3-4=-933/104
BOT CHORD 2-6=-41/758, 4-6=-41/758
WEBS 3-6=0/333

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=102, 4=102.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

December 3,2020




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | B1 | GABLE | 1 | 1 | I43839722 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:09 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-Z27yR3LkRQqaQeES6BkOIUuu8z6FLbMwdwbemAyCyBy

-0-10-8 10-0-0 20-0-0 20-10-8
0-10-8 10-0-0 10-0-0 0-10-8

Scale = 1:45.2

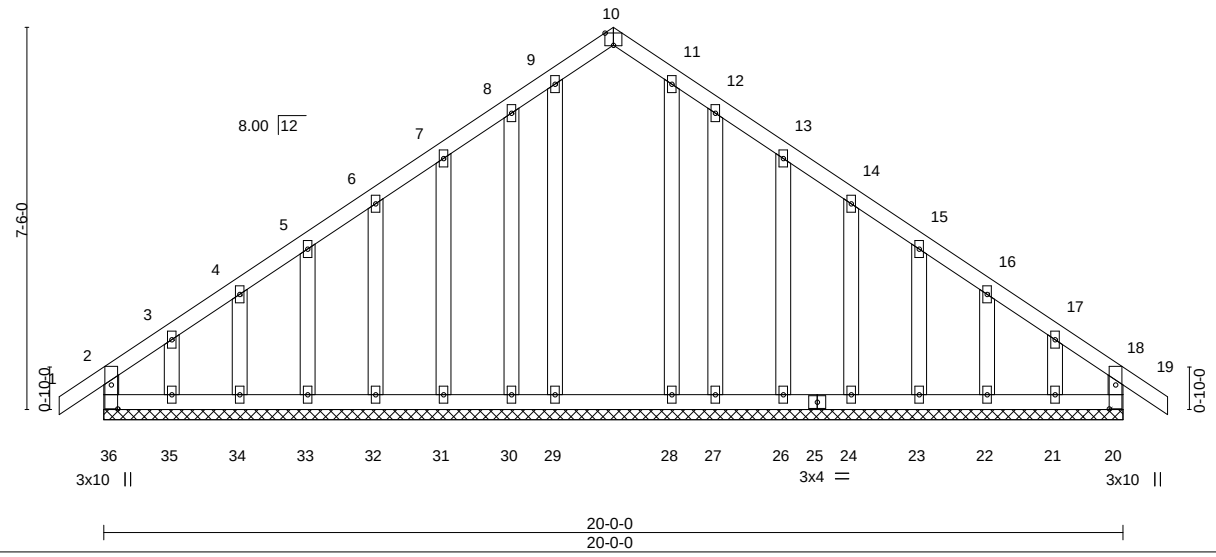



Plate Offsets (X,Y)-- [10:0-2-0,Edge], [20:0-5-10,0-1-8], [36:0-5-10,0-1-8]

| LOADING (psf) | | SPACING- 2-0-0 | | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.08 | Vert(LL) | -0.00 | 19 | n/r | 120 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.08 | Vert(CT) | -0.00 | 19 | n/r | 120 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.09 | Horz(CT) | 0.00 | 20 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-R | | | | | | | Weight: 115 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 20-0-0.
(lb) - Max Horz 36=213(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 36, 20, 34, 33, 32, 31, 30, 27, 26, 24, 23, 22 except 35=-155(LC 8), 21=-145(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 36, 20, 35, 34, 33, 32, 31, 30, 29, 28, 27, 26, 24, 23, 22, 21

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

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 1-4-0 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, with BCDL = 10.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 36, 20, 34, 33, 32, 31, 30, 27, 26, 24, 23, 22 except (jt=lb) 35=155, 21=145.
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.



December 3,2020



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/30/2020

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | B2 | Common | 1 | 1 | I43839723 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:10 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-1FhKeOMMCkyR1opeguFdrhQ0gNH14vr3saKBIcyCyBx

-0-10-8 5-2-0 10-0-0 14-9-15 20-0-0 20-10-8
0-10-8 5-2-0 4-9-15 4-10-0 5-2-1 0-10-8

Scale = 1:46.3

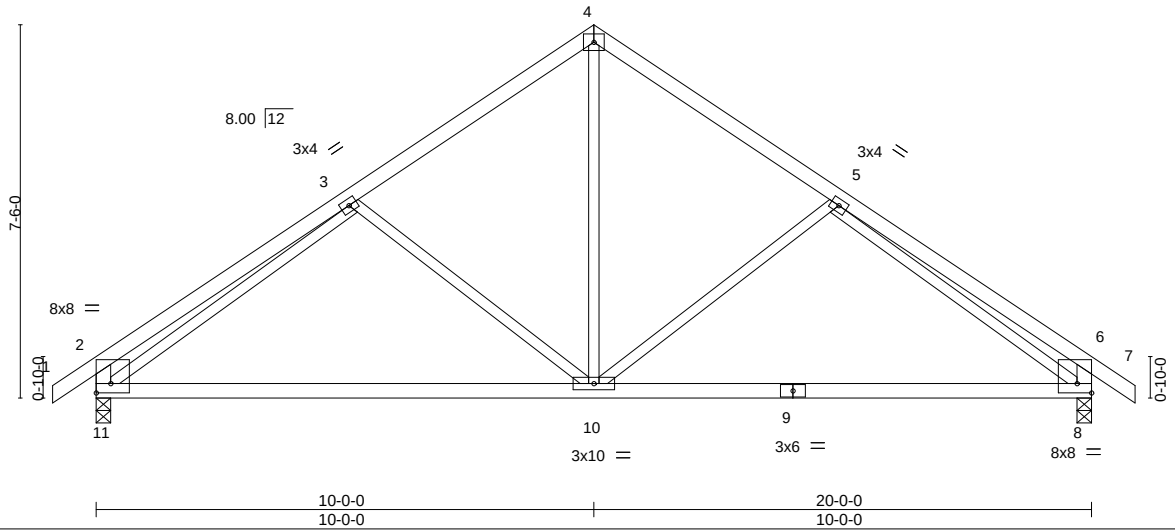



Plate Offsets (X,Y)-- [2:Edge,0-2-4], [8:Edge,0-2-4]

| 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 | 0.28 | Vert(LL) | -0.18 | 8-10 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.81 | Vert(CT) | -0.37 | 8-10 | >633 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.65 | Horz(CT) | 0.03 | 8 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.02 | 10 | >999 | 240 | Weight: 79 lb | FT = 10% |

**LUMBER-**
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-11,6-8: 2x4 SPF No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 5-11-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 11=0-3-8, 8=0-3-8
Max Horz 11=213(LC 7)
Max Uplift 11=-123(LC 8), 8=-123(LC 9)
Max Grav 11=958(LC 1), 8=958(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-485/125, 3-4=-875/159, 4-5=-875/158, 5-6=-485/124, 2-11=-460/148, 6-8=-460/148
BOT CHORD 10-11=-153/869, 8-10=-48/843
WEBS 4-10=-55/534, 5-10=-292/220, 3-10=-292/220, 3-11=-662/94, 5-8=-662/94

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=123, 8=123.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
ARKANSAS
PROFESSIONAL ENGINEER

December 3,2020




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|---|
| W0 73 | B3 | Common | | 2 | 1 | I43839724 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:11 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-VRFiskN_z14lfyNqDcmsNvzB8ndFpK9C4E4kq2yCyBw

**RELEASE FOR CONSTRUCTION**
**AS NOTED ON PLANS REVIEW**
**DEVELOPMENT SERVICES**
**LEE'S SUMMIT, MISSOURI**
**12/30/2020**

| 5-2-0 | 10-0-0 | 14-9-15 | 20-0-0 | 20-10-8 |
|---|---|---|---|---|
| 5-2-0 | 4-9-15 | 4-10-0 | 5-2-1 | 0-10-8 |

Scale = 1:45.9

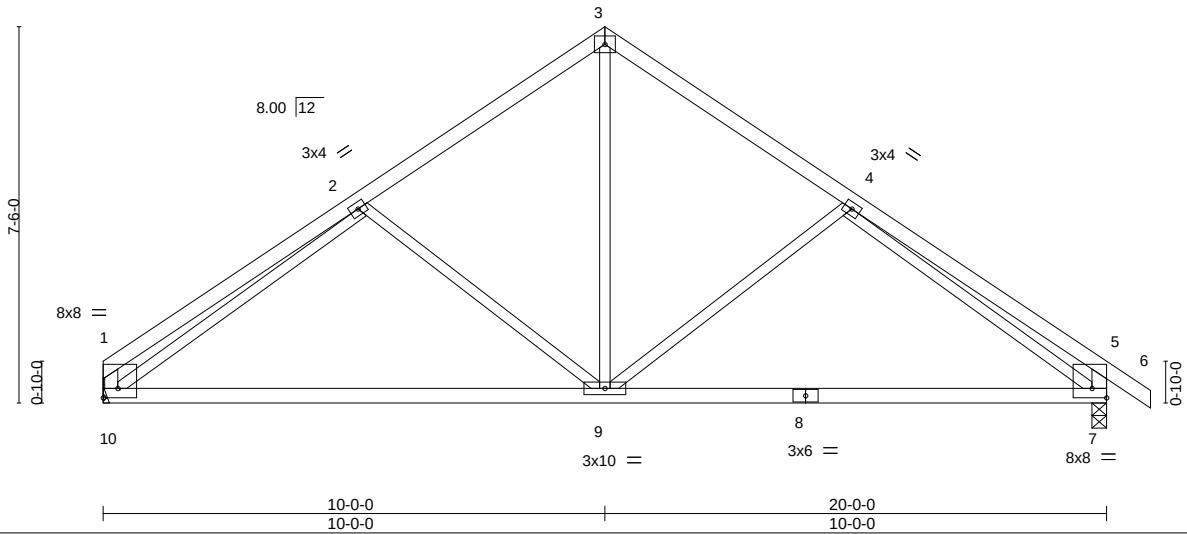



Plate Offsets (X,Y)-- [1:Edge,0-2-4], [7:Edge,0-2-4]

| 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 | 0.30 | Vert(LL) | -0.18 | 7-9 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.81 | Vert(CT) | -0.37 | 7-9 | >633 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.71 | Horz(CT) | 0.03 | 7 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.02 | 9 | >999 | 240 | Weight: 78 lb | FT = 10% |

**LUMBER-**
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
1-10,5-7: 2x4 SPF No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 5-11-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 10=Mechanical, 7=0-3-8
Max Horz 10=-207(LC 6)
Max Uplift 10=-100(LC 8), 7=-123(LC 9)
Max Grav 10=885(LC 1), 7=960(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-431/79, 2-3=-879/159, 3-4=-877/159, 4-5=-485/124, 1-10=-348/94, 5-7=-460/148
BOT CHORD 9-10=-156/879, 7-9=-48/846
WEBS 3-9=-57/541, 4-9=-292/220, 2-9=-302/224, 2-10=-724/125, 4-7=-665/94

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10 except (jt=lb) 7=123.
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.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

December 3,2020




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

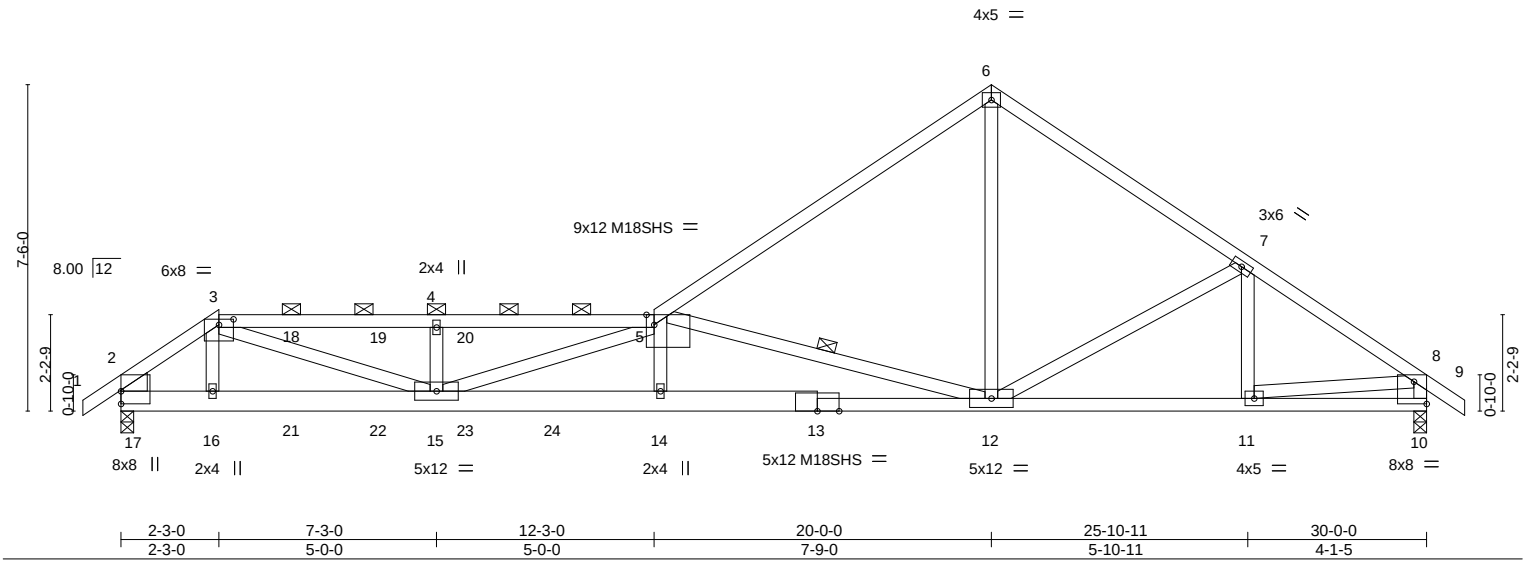
| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | B4 | ROOF SPECIAL GIRDER | 1 | 2 | I43839725 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:12 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-zdp434NdkLD9H6y1nJH5w6WBLBwuYluMJupIMVyCyBv

| -0-10-8 | 2-3-0 | 7-3-0 | 12-3-0 | 20-0-0 | 25-10-11 | 30-0-0 | 30-10-8 |
|---|---|---|---|---|---|---|---|
| 0-10-8 | 2-3-0 | 5-0-0 | 5-0-0 | 7-9-0 | 5-10-11 | 4-1-5 | 0-10-8 |

Scale = 1:52.9




| 2-3-0 | 7-3-0 | 12-3-0 | 20-0-0 | 25-10-11 | 30-0-0 |
|---|---|---|---|---|---|
| 2-3-0 | 5-0-0 | 5-0-0 | 7-9-0 | 5-10-11 | 4-1-5 |

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

| 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 | 0.91 | Vert(LL) | -0.39 | 14-15 | >907 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.98 | Vert(CT) | -0.69 | 14-15 | >511 | 240 | M18SHS | 197/144 |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.87 | Horz(CT) | 0.08 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | Wind(LL) | 0.30 | 14-15 | >999 | 240 | Weight: 273 lb | FT = 10% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x4 SPF No.2 |
| BOT CHORD | 2x6 SPF 1650F 1.4E *Except* 10-13: 2x4 SPF 2100F 1.8E |
| WEBS | 2x4 SPF No.2 *Except* 2-17: 2x8 SP DSS |

**BRACING-**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-4-2 max.): 3-5. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS | 1 Row at midpt 5-12 |

**REACTIONS.** (size) 17=0-3-8, 10=0-3-8
Max Horz 17=213(LC 7)
Max Uplift 17=-516(LC 8), 10=-234(LC 9)
Max Grav 17=2628(LC 1), 10=1826(LC 1)

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

| | |
|---|---|
| TOP CHORD | 2-3=-2927/546, 3-4=-7731/1381, 4-5=-7731/1381, 5-6=-2347/346, 6-7=-2302/404, 7-8=-2425/318, 2-17=-1824/353, 8-10=-1779/251 |
| BOT CHORD | 16-17=-511/2360, 15-16=-525/2405, 14-15=-1490/8859, 12-14=-1490/8908, 11-12=-200/1957 |
| WEBS | 3-16=-592/174, 3-15=-954/5688, 4-15=-722/331, 5-15=-1209/233, 5-14=-12/647, 5-12=-7305/1335, 6-12=-237/1943, 7-12=-293/222, 8-11=-176/1782 |

**NOTES-**

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=516, 10=234.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Continued on page 2

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
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16952
KANSAS
PROFESSIONAL ENGINEER

December 3,2020



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | B4 | ROOF SPECIAL GIRDER | 1 | 2 | I43839725 |

Job Reference (optional)



**NOTES-**

12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 158 lb down and 98 lb up at 3-11-4, and 158 lb down and 98 lb up at 5-11-4, and 158 lb down and 98 lb up at 7-11-4 on top chord, and 199 lb down and 86 lb up at 2-3-0, 66 lb down at 3-11-4, 66 lb down at 5-11-4, and 66 lb down at 7-11-4, and 1017 lb down and 175 lb up at 9-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-70, 2-3=-70, 3-5=-70, 5-6=-70, 6-8=-70, 8-9=-70, 10-17=-20
   Concentrated Loads (lb)
   Vert: 16=-199(F) 18=-108(F) 19=-108(F) 20=-108(F) 21=-33(F) 22=-33(F) 23=-33(F) 24=-1017(F)



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

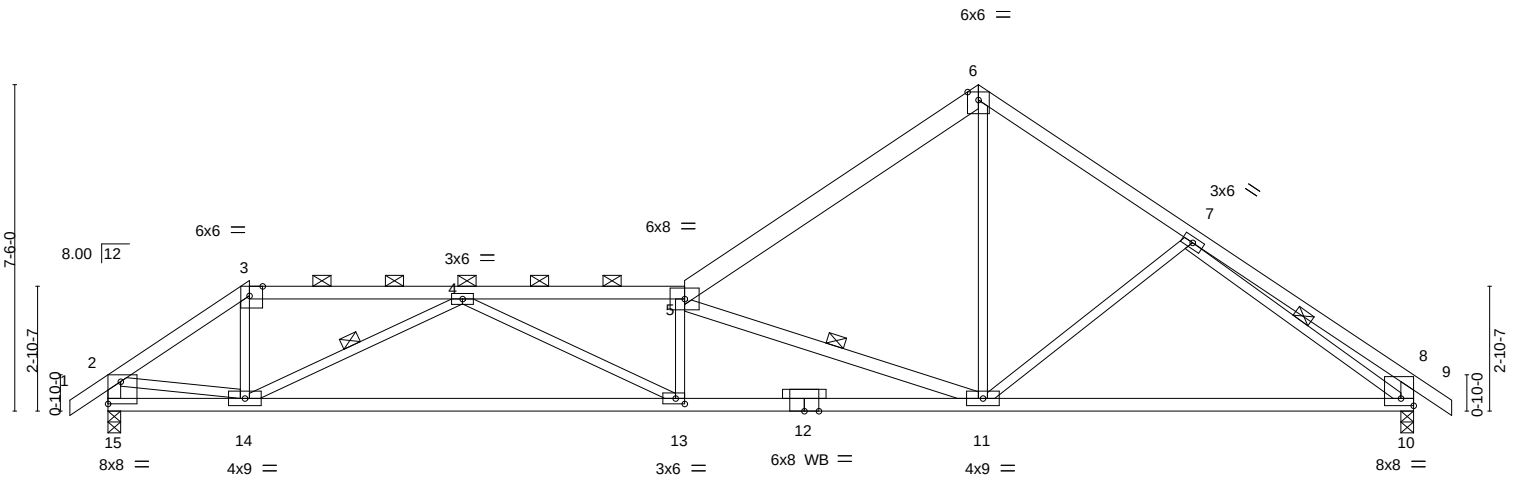
| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | B5 | Roof Special | 1 | 1 | I43839726 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:13 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-RqMTHQOFVfL0uGXDL1pKTK2QBaNzHExVYYZrvxyCyBu

| -0-10-8 | 3-3-0 | 8-1-12 | 13-3-0 | 20-0-0 | 24-10-0 | 30-0-0 | 30-10-8 |
|---|---|---|---|---|---|---|---|
| 0-10-8 | 3-3-0 | 4-10-12 | 5-1-4 | 6-9-0 | 4-10-0 | 5-2-1 | 0-10-8 |

Scale = 1:52.9




| 3-3-0 | 13-3-0 | 20-0-0 | 30-0-0 |
|---|---|---|---|
| 3-3-0 | 10-0-0 | 6-9-0 | 10-0-0 |

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

| 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 | 0.65 | Vert(LL) | -0.25 | 13 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.54 | Vert(CT) | -0.57 | 13-14 | >628 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.75 | Horz(CT) | 0.09 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.19 | 13 | >999 | 240 | Weight: 122 lb | FT = 10% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x4 SPF No.2 *Except* 5-6: 2x6 SPF No.2 |
| BOT CHORD | 2x4 SPF 2100F 1.8E |
| WEBS | 2x3 SPF No.2 *Except* 5-11,2-15,8-10: 2x4 SPF No.2 |
| OTHERS | 2x3 SPF No.2 |

**BRACING-**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 4-3-1 oc purlins, except end verticals, and 2-0-0 oc purlins (2-5-14 max.): 3-5. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS | 1 Row at midpt 4-14, 5-11, 7-10 |

**REACTIONS.** (size) 15=0-3-8, 10=0-3-8
Max Horz 15=-213(LC 6)
Max Uplift 15=-230(LC 8), 10=-142(LC 9)
Max Grav 15=1408(LC 1), 10=1408(LC 1)

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

| | |
|---|---|
| TOP CHORD | 2-3=-1817/241, 3-4=-1442/232, 4-5=-3826/524, 5-6=-1609/209, 6-7=-1612/267, 7-8=-624/121, 2-15=-1421/212, 8-10=-546/147 |
| BOT CHORD | 13-14=-538/3028, 11-13=-538/3836, 10-11=-128/1402 |
| WEBS | 3-14=-22/724, 4-14=-1787/334, 4-13=-22/897, 5-13=-257/110, 5-11=-2762/498, 6-11=-114/1256, 2-14=-80/1380, 7-10=-1235/190 |

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=230, 10=142.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 3,2020



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | B6 | Roof Special | 1 | 1 | I43839727 |

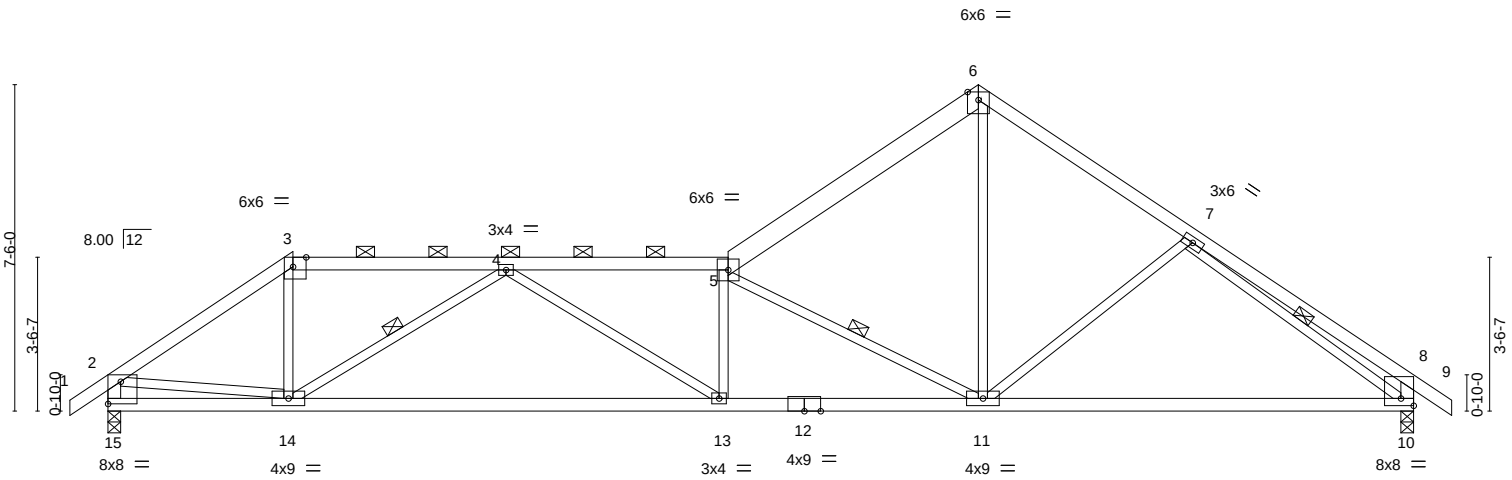
Job Reference (optional)

**RELEASE FOR CONSTRUCTION**
**AS NOTED ON PLANS REVIEW**
**DEVELOPMENT SERVICES**
**LEE'S SUMMIT, MISSOURI**
**12/30/2020**

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:14 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-v0wrUmPtGyTtWP6PvkKZ?Xbe8_cA0eefnCIPRNyCyBt

-0-10-8 4-3-0 9-1-12 14-3-0 20-0-0 24-10-0 30-0-0 30-10-8
0-10-8 4-3-0 4-10-12 5-1-4 5-9-0 4-10-0 5-2-1 0-10-8

Scale = 1:52.9




4-3-0 14-3-0 20-0-0 30-0-0
4-3-0 10-0-0 5-9-0 10-0-0

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

| 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 | 0.51 | Vert(LL) | -0.29 | 13-14 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.93 | Vert(CT) | -0.64 | 13-14 | >554 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.92 | Horz(CT) | 0.10 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.15 | 13 | >999 | 240 | Weight: 120 lb | FT = 10% |

**LUMBER-**
TOP CHORD 2x4 SPF No.2 *Except* 5-6: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 2-15,8-10: 2x4 SPF No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 4-1-7 oc purlins, except end verticals, and 2-0-0 oc purlins (2-11-4 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 4-14, 5-11, 7-10

**REACTIONS.** (size) 15=0-3-8, 10=0-3-8
Max Horz 15=-213(LC 6)
Max Uplift 15=-230(LC 8), 10=-142(LC 9)
Max Grav 15=1408(LC 1), 10=1408(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1858/260, 3-4=-1460/256, 4-5=-3080/432, 5-6=-1612/221, 6-7=-1610/267, 7-8=-620/116, 2-15=-1399/229, 8-10=-544/145
BOT CHORD 14-15=-218/325, 13-14=-448/2585, 11-13=-418/3085, 10-11=-129/1401
WEBS 3-14=-20/711, 4-14=-1344/250, 4-13=-18/590, 5-11=-2102/397, 6-11=-140/1291, 2-14=-37/1301, 7-10=-1238/198

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=230, 10=142.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

December 3,2020




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | B7 | Roof Special | 1 | 1 | I43839728 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:15 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-NCUDi6QV0Gbk8ZhcSSroYl7q8Oz4l96o?s2yzqyCyBs

| -0-10-8 | 5-3-0 | 10-1-12 | 15-3-0 | 20-0-0 | 24-10-0 | 30-0-0 | 30-10-8 |
|---|---|---|---|---|---|---|---|
| 0-10-8 | 5-3-0 | 4-10-12 | 5-1-4 | 4-9-0 | 4-10-0 | 5-2-1 | 0-10-8 |

Scale = 1:55.4

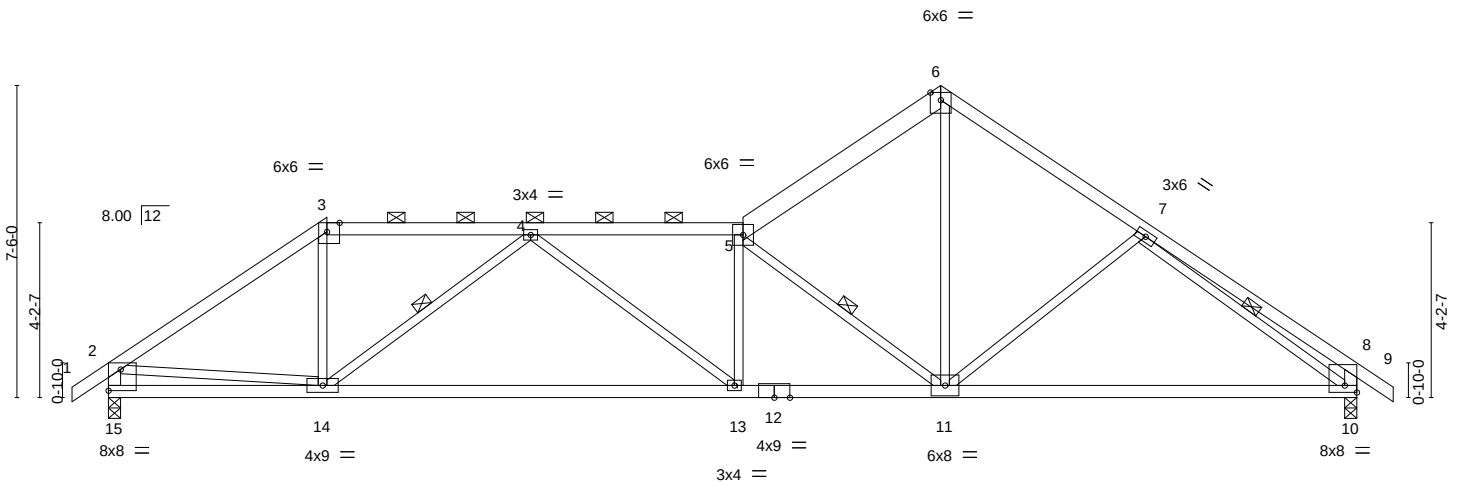



Plate Offsets (X,Y)-- [3:0-3-10,Edge], [10:Edge,0-2-0], [15:Edge,0-6-2]

| 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 | 0.43 | Vert(LL) | -0.28 | 13-14 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.88 | Vert(CT) | -0.61 | 13-14 | >585 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.65 | Horz(CT) | 0.08 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.12 | 13 | >999 | 240 | Weight: 121 lb | FT = 10% |

**LUMBER-**
TOP CHORD 2x4 SPF No.2 *Except* 5-6: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 2-15,8-10: 2x4 SPF No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 3-11-12 oc purlins, except end verticals, and 2-0-0 oc purlins (3-3-8 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 9-3-4 oc bracing.
WEBS 1 Row at midpt 4-14, 5-11, 7-10

**REACTIONS.** (size) 15=0-3-8, 10=0-3-8
Max Horz 15=-213(LC 6)
Max Uplift 15=-230(LC 8), 10=-142(LC 9)
Max Grav 15=1408(LC 1), 10=1408(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1868/270, 3-4=-1452/274, 4-5=-2564/373, 5-6=-1590/232, 6-7=-1608/267, 7-8=-620/115, 2-15=-1381/241, 8-10=-543/144
BOT CHORD 14-15=-252/439, 13-14=-379/2269, 11-13=-330/2566, 10-11=-129/1402
WEBS 3-14=-10/675, 4-14=-1039/191, 4-13=-16/384, 5-11=-1699/335, 6-11=-164/1327, 2-14=-56/1169, 7-10=-1237/201

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=230, 10=142.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 3,2020



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/30/2020

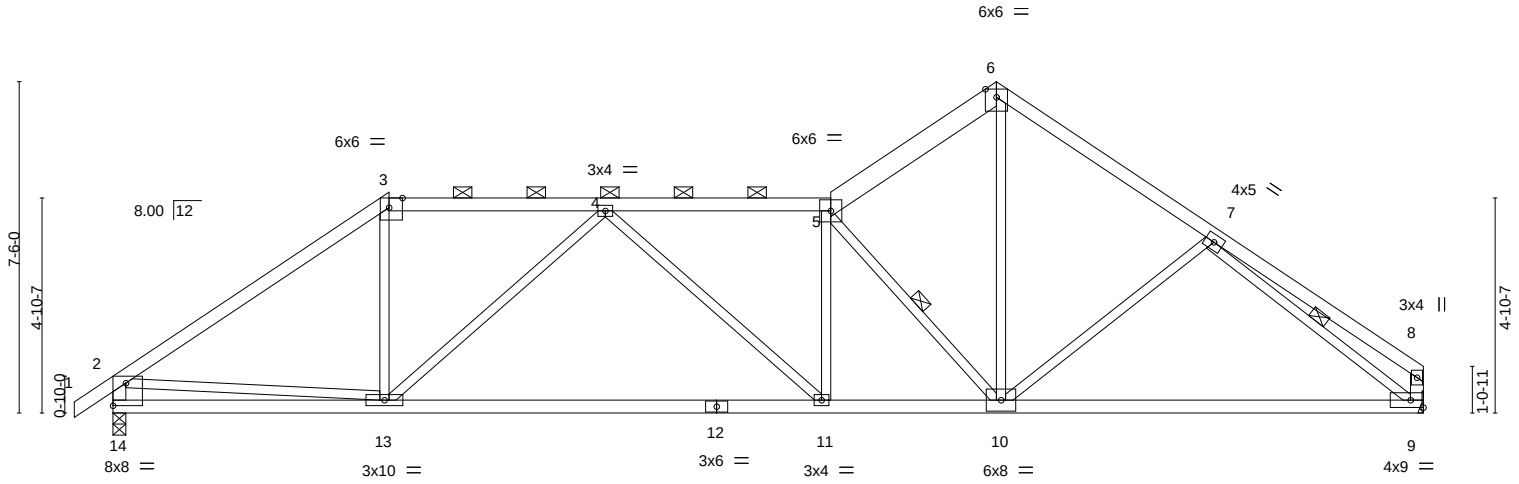
| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | B8 | Roof Special | 1 | 1 | I43839729 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:15 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-NCUDi6QV0Gbk8ZhcSSroYl7orOzkl59o?s2yzqyCyBs

| -0-10-8 | 6-3-0 | 11-1-12 | 16-3-0 | 20-0-0 | 24-10-0 | 29-8-0 |
|---|---|---|---|---|---|---|
| 0-10-8 | 6-3-0 | 4-10-12 | 5-1-4 | 3-9-0 | 4-10-0 | 4-10-0 |

Scale = 1:52.2




| 6-3-0 | 16-3-0 | 20-0-0 | 29-8-0 |
|---|---|---|---|
| 6-3-0 | 10-0-0 | 3-9-0 | 9-8-0 |

Plate Offsets (X,Y)-- [3:0-3-10,Edge], [14:Edge,0-6-2]

| 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 | 0.51 | Vert(LL) | -0.26 | 11-13 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.84 | Vert(CT) | -0.57 | 11-13 | >619 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.90 | Horz(CT) | 0.07 | 9 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.09 | 11-13 | >999 | 240 | Weight: 120 lb | FT = 10% |

**LUMBER-**
TOP CHORD 2x4 SPF No.2 *Except* 5-6: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 2-14,8-9: 2x4 SPF No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 3-8-5 oc purlins, except end verticals, and 2-0-0 oc purlins (3-8-0 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 9-10-14 oc bracing.
WEBS 1 Row at midpt 5-10, 7-9

**REACTIONS.** (size) 14=0-3-8, 9=Mechanical
Max Horz 14=208(LC 5)
Max Uplift 14=-228(LC 8), 9=-121(LC 8)
Max Grav 14=1395(LC 1), 9=1321(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1839/273, 3-4=-1413/286, 4-5=-2131/326, 5-6=-1522/240, 6-7=-1561/263, 7-8=-370/53, 2-14=-1352/251, 8-9=-310/76
BOT CHORD 13-14=-325/566, 11-13=-331/1992, 10-11=-268/2131, 9-10=-133/1318
WEBS 3-13=0/612, 4-13=-788/168, 5-10=-1442/296, 6-10=-185/1313, 2-13=-96/990, 7-9=-1417/227

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=228, 9=121.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 3,2020




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | B9 | Half Hip | 1 | 1 | I43839730 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:16 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-rO2bvSQ7nZjbljGo09M14ygxioRLUjOyEWnVVGyCyBr

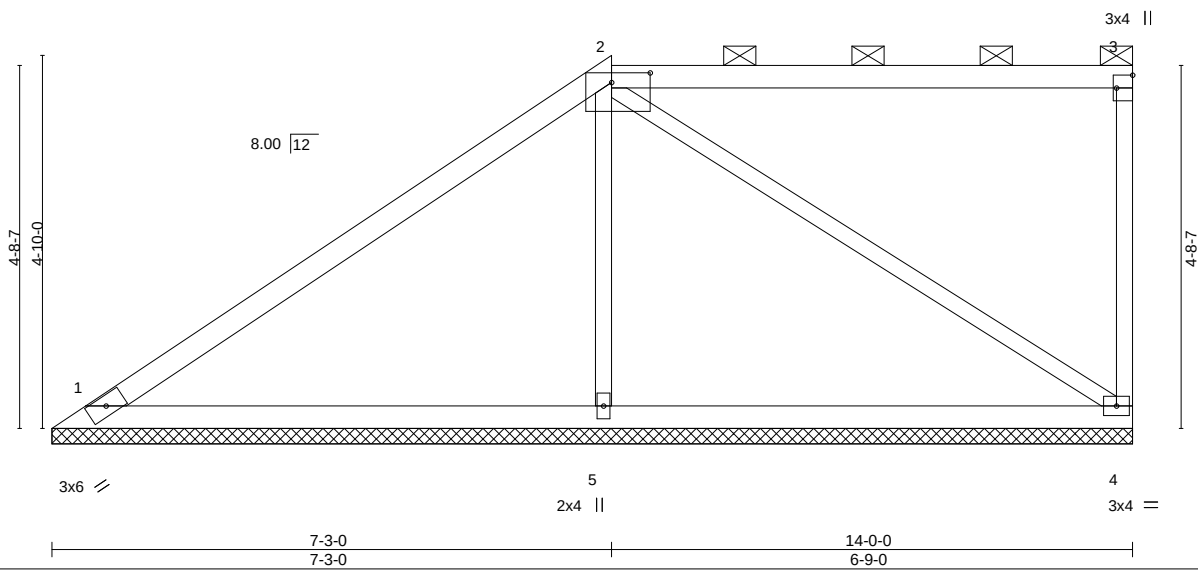



Plate Offsets (X,Y)-- [2:0-6-0,0-1-8], [3:Edge,0-2-8]

| 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 | 0.70 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.37 | Vert(CT) | n/a | - | n/a | 999 | M18SHS | 197/144 |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.20 | Horz(CT) | -0.00 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | | | | | | Weight: 46 lb | FT = 10% |

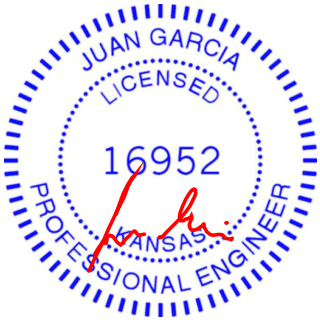
**LUMBER-**
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2

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

**REACTIONS.** (size) 1=14-0-0, 4=14-0-0, 5=14-0-0
Max Horz 1=175(LC 5)
Max Uplift 1=-52(LC 8), 4=-85(LC 5), 5=-54(LC 5)
Max Grav 1=310(LC 1), 4=314(LC 1), 5=583(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-402/148

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


December 3,2020



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 | |
|---|---|---|---|---|---|---|
| W0 73 | C1 | Common Supported Gable | 1 | 1 | Job Reference (optional) | I43839731 |

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:17 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-Kbcz7oRlYtrSNtr_astGdADFDCsrDD25TAX32iyCyBq

-0-10-8 0-10-8 | 5-8-0 5-8-0 | 11-4-0 5-8-0 | 12-2-8 0-10-8

4x5 =

Scale = 1:29.1

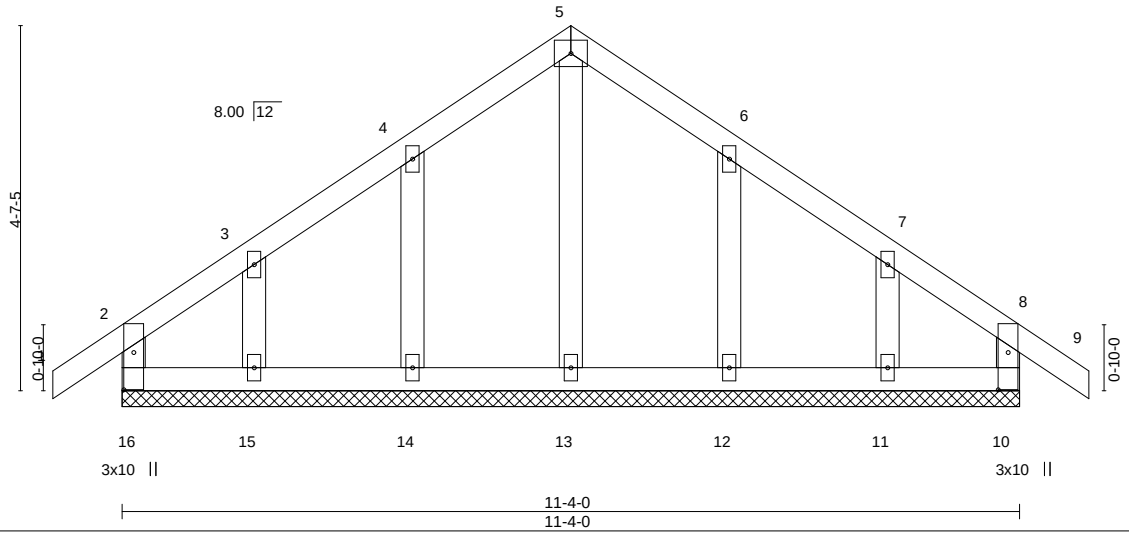



Plate Offsets (X,Y)-- [10:0-5-10,0-1-8], [16:0-5-10,0-1-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.07 | Vert(LL) | -0.00 | 9 | n/r | 120 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.03 | Vert(CT) | -0.00 | 9 | n/r | 120 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.04 | Horz(CT) | 0.00 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-R | | | | | | | Weight: 46 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 11-4-0.
(lb) - Max Horz 16=-137(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 16, 10, 14, 15, 12, 11
Max Grav All reactions 250 lb or less at joint(s) 16, 10, 13, 14, 15, 12, 11

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

**NOTES-**

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



December 3,2020



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | C2 | Common Girder | 4 | 2 | I43839732 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:18 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-onAMK7SNJBzI?1QA8aOVANlJab5ayZWEhqGca8yCyBp

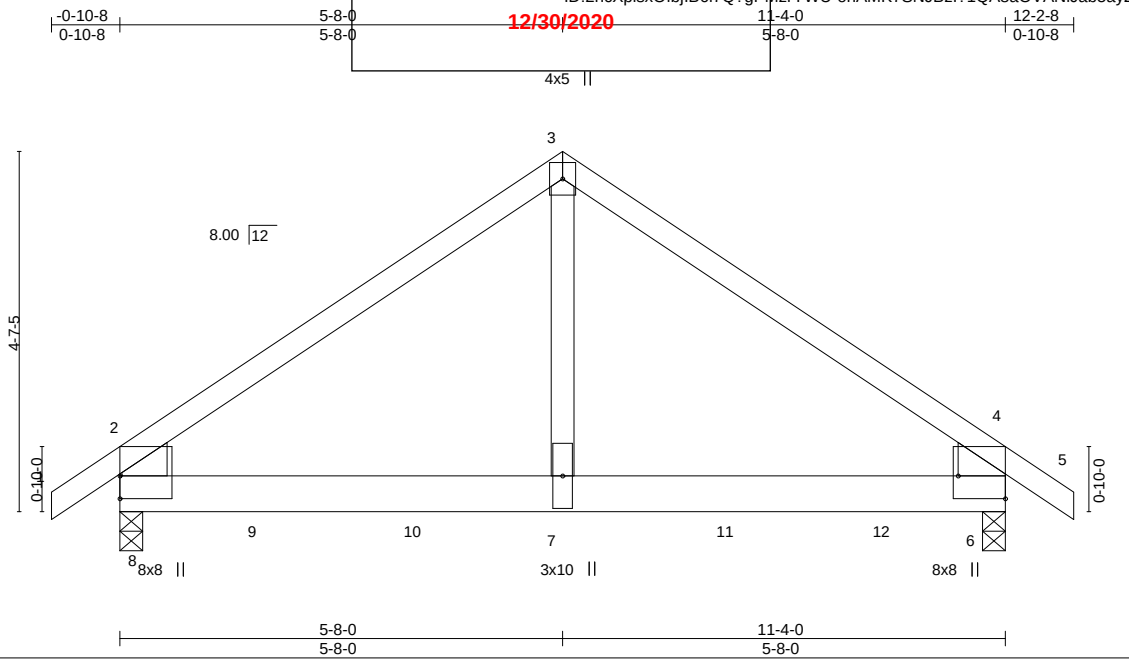



Plate Offsets (X,Y)-- [6:Edge,0-7-4]

| 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 | 0.55 | Vert(LL) | -0.06 | 7-8 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.45 | Vert(CT) | -0.10 | 7-8 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.48 | Horz(CT) | 0.01 | 6 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-R | | Wind(LL) | 0.03 | 7-8 | >999 | 240 | Weight: 104 lb | FT = 10% |

**LUMBER-**
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x8 SP 2400F 2.0E *Except*
3-7: 2x4 SPF No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 5-8-9 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 8=0-3-8, 6=0-3-8
Max Horz 8=-138(LC 6)
Max Uplift 8=-145(LC 8), 6=-148(LC 9)
Max Grav 8=3949(LC 2), 6=4125(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3784/158, 3-4=-3784/158, 2-8=-2336/174, 4-6=-2336/174
BOT CHORD 7-8=-49/3047, 6-7=-49/3047
WEBS 3-7=-41/3886

**NOTES-**
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=145, 6=148.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1421 lb down and 34 lb up at 1-10-0, 1421 lb down and 34 lb up at 3-10-0, 1421 lb down and 34 lb up at 5-10-0, and 1421 lb down and 34 lb up at 7-10-0, and 1421 lb down and 34 lb up at 9-10-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard



December 3,2020

Continued on page 2

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | C2 | Common Girder | 1 | 2 | I43839732 |

Wheeler Lumber, Waverly, KS - 66871, Job Reference (optional)

8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:18 2020 Page 2
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-onAMK7SNJBzI?1QA8aOVANlJab5ayZWEhqGca8yCyBp

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-5=-70, 6-8=-20
   Concentrated Loads (lb)
   Vert: 7=-1373(B) 9=-1373(B) 10=-1373(B) 11=-1373(B) 12=-1373(B)

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | D1 | HIP GIRDER | 1 | 2 | I43839733 |

Job Reference (optional)

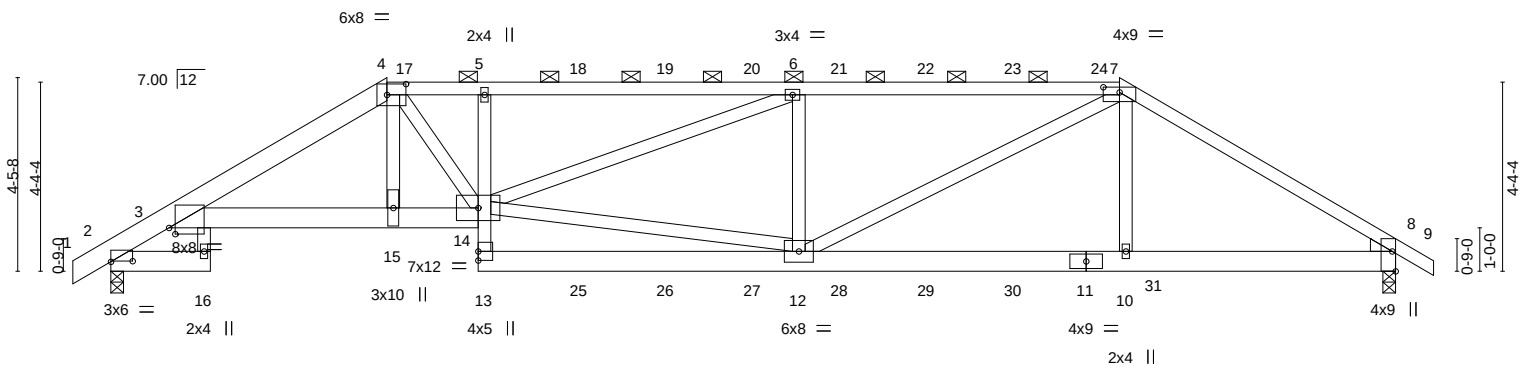
**RELEASE FOR CONSTRUCTION**
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/30/2020

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:20 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-kAH6lpUeroD0EKZZF?RzForeNPgYQTwX98lje1yCyBn

| -0-10-8 | 2-3-8 | 6-4-5 | 8-5-8 | 15-10-2 | 23-2-11 | 29-7-0 | 30-5-8 |
|---|---|---|---|---|---|---|---|
| 0-10-8 | 2-3-8 | 4-0-13 | 2-1-3 | 7-4-10 | 7-4-10 | 6-4-5 | 0-10-8 |

Scale = 1:53.1




| 2-3-8 | 6-4-5 | 8-5-8 | 15-10-2 | 23-2-11 | 29-7-0 |
|---|---|---|---|---|---|
| 2-3-8 | 4-0-13 | 2-1-3 | 7-4-10 | 7-4-10 | 6-4-5 |

Plate Offsets (X,Y)-- [2:0-6-0,0-0-3], [3:0-1-11,0-1-11], [4:0-5-4,0-3-0], [7:0-4-8,0-1-7], [8:Edge,0-0-15]

| 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 | 0.59 | Vert(LL) | -0.15 | 14 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.86 | Vert(CT) | -0.27 | 12-13 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.48 | Horz(CT) | 0.18 | 8 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.13 | 14 | >999 | 240 | Weight: 299 lb | FT = 10% |

**LUMBER-**
TOP CHORD 2x6 SP DSS *Except*
4-7: 2x4 SPF 2100F 1.8E, 7-9: 2x4 SPF No.2
BOT CHORD 2x6 SPF No.2 *Except*
5-13: 2x4 SPF No.2
WEBS 2x4 SPF No.2
WEDGE
Right: 2x4 SPF No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 5-11-9 oc purlins, except
2-0-0 oc purlins (6-0-0 max.): 4-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 2-16.

**REACTIONS.** (size) 2=0-3-8, 8=0-3-8
Max Horz 2=112(LC 7)
Max Uplift 2=-478(LC 8), 8=-447(LC 9)
Max Grav 2=2367(LC 1), 8=2367(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1496/334, 3-4=-4918/1071, 4-5=-4960/1088, 5-6=-4966/1096, 6-7=-4705/907, 7-8=-3920/731
BOT CHORD 3-15=-991/4324, 14-15=-1003/4377, 5-14=-535/269, 12-13=-118/809, 10-12=-548/3170, 8-10=-549/3193
WEBS 4-15=-255/1078, 4-14=-281/1069, 12-14=-799/3930, 6-14=-215/319, 6-12=-1107/496, 7-12=-418/1834, 7-10=-57/639

**NOTES-**
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=478, 8=447.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Continued on page 2

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

December 3,2020



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | D1 | HIP GIRDER | 4 | 2 | I43839733 |

Wheeler Lumber, Waverly, KS - 66871, Job Reference (optional)

8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:20 2020 Page 2
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-kAH6lpUeroD0EKZZF?RzForeNPgYQTwX98lje1yCyBn

**NOTES-**

11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 123 lb down and 99 lb up at 6-9-7, 125 lb down and 77 lb up at 8-9-7, 125 lb down and 77 lb up at 10-9-7, 125 lb down and 77 lb up at 12-9-7, 125 lb down and 77 lb up at 14-9-7, 125 lb down and 77 lb up at 16-9-8, 125 lb down and 77 lb up at 18-9-8, and 125 lb down and 77 lb up at 20-9-8, and 120 lb down and 77 lb up at 22-9-8 on top chord, and 353 lb down and 185 lb up at 6-4-5, 54 lb down and 28 lb up at 6-9-7, 60 lb down at 8-7-4, 60 lb down at 10-9-7, 60 lb down at 12-9-7, 60 lb down at 14-9-7, 60 lb down at 16-9-8, 60 lb down at 18-9-8, 60 lb down at 20-9-8, and 60 lb down at 22-9-8, and 357 lb down and 168 lb up at 23-2-11 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-70, 4-7=-70, 7-9=-70, 2-16=-20, 3-14=-20, 8-13=-20
   Concentrated Loads (lb)
   Vert: 14=-45(F) 5=-93(F) 15=-399(F) 10=-357(F) 17=-75(F) 18=-93(F) 19=-93(F) 20=-93(F) 21=-93(F) 22=-93(F) 23=-93(F) 24=-93(F) 25=-45(F) 26=-45(F) 27=-45(F) 28=-45(F) 29=-45(F) 30=-45(F) 31=-45(F)

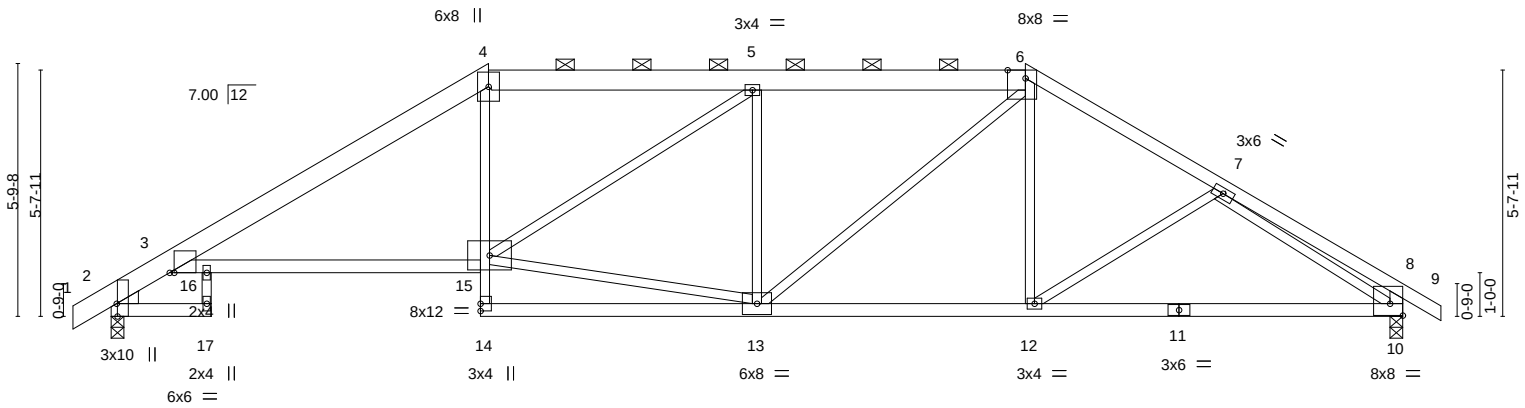
| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | D2 | Hip | 1 | 1 | I43839734 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:21 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-CMrUy9UGc6LtsU8lpiyCn0NpOp3B9q6hOoVGBTyCyBm

-0-10-8 2-3-8 8-7-11 14-9-8 20-11-5 25-4-6 29-7-0 30-5-8
0-10-8 2-3-8 6-4-3 6-1-13 6-1-13 4-5-2 4-2-10 0-10-8

Scale = 1:52.8




2-3-8 8-5-8 14-9-8 20-11-5 29-7-0
2-3-8 6-2-0 6-4-0 6-1-13 8-7-11

Plate Offsets (X,Y)-- [2:0-3-8,Edge], [3:0-1-4,0-0-0], [6:0-4-15,Edge], [10:Edge,0-3-4]

| 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 | 0.64 | Vert(LL) | -0.27 | 15-16 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.65 | Vert(CT) | -0.53 | 15-16 | >664 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.87 | Horz(CT) | 0.30 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.21 | 15-16 | >999 | 240 | Weight: 135 lb | FT = 10% |

**LUMBER-**
TOP CHORD 2x6 SP DSS *Except*
4-6: 2x6 SPF No.2, 6-9: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
3-15: 2x4 SPF 2100F 1.8E, 4-14: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
8-10: 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 3-10-5 oc purlins, except end verticals, and 2-0-0 oc purlins (5-0-1 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8
Max Horz 2=156(LC 7)
Max Uplift 2=-131(LC 8), 10=-131(LC 9)
Max Grav 2=1390(LC 1), 10=1390(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-876/97, 3-4=-2344/196, 4-5=-1981/207, 5-6=-1875/177, 6-7=-1808/142, 7-8=-552/61, 8-10=-468/99
BOT CHORD 3-16=-227/2017, 15-16=-228/2021, 4-15=-28/563, 12-13=-51/1508, 10-12=-95/1579
WEBS 13-15=-191/1891, 5-13=-579/232, 6-13=-184/582, 6-12=0/295, 7-10=-1441/135

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=131, 10=131.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

December 3,2020



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | D3 | Hip | 1 | 1 | I43839735 |

Job Reference (optional)

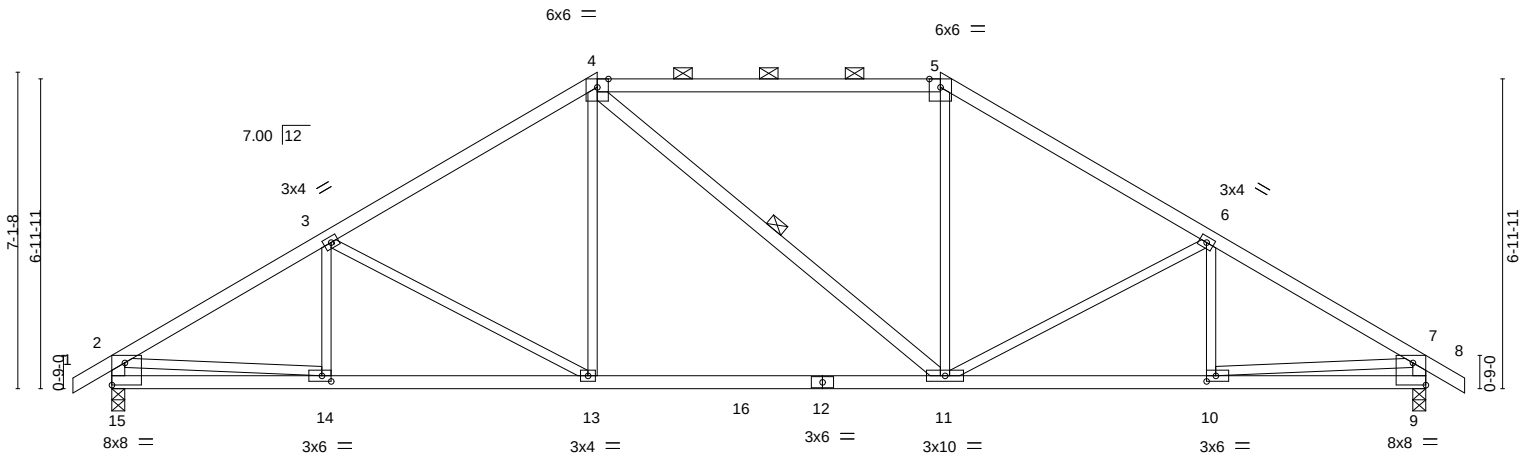
**RELEASE FOR CONSTRUCTION**
**AS NOTED ON PLANS REVIEW**
**DEVELOPMENT SERVICES**
**LEE'S SUMMIT, MISSOURI**
**12/3/2020**

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:22 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-gYPsAVVuNPTkUejyNQTRKDwzIDOAuNWqcSEqjwyCyBI

| -0-10-8 | 4-10-0 | 10-11-2 | 18-7-14 | 24-9-0 | 29-7-0 | 30-5-8 |
|---|---|---|---|---|---|---|
| 0-10-8 | 4-10-0 | 6-1-2 | 7-8-11 | 6-1-2 | 4-10-0 | 0-10-8 |

Scale = 1:51.9




| 4-10-0 | 10-11-2 | 18-7-14 | 24-9-0 | 29-7-0 |
|---|---|---|---|---|
| 4-10-0 | 6-1-2 | 7-8-11 | 6-1-2 | 4-10-0 |

Plate Offsets (X,Y)-- [9:Edge,0-6-0], [10:0-2-8,0-1-8], [14:0-2-8,0-1-8], [15:Edge,0-6-0]

| 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 | 0.69 | Vert(LL) | -0.16 | 11-13 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.73 | Vert(CT) | -0.29 | 11-13 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.48 | Horz(CT) | 0.06 | 9 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.05 | 13-14 | >999 | 240 | Weight: 120 lb | FT = 10% |

**LUMBER-**
TOP CHORD 2x4 SPF No.2 *Except*
4-5: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
4-11,2-15,7-9: 2x4 SPF No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 3-9-13 oc purlins, except end verticals, and 2-0-0 oc purlins (4-10-14 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-11

**REACTIONS.** (size) 15=0-3-8, 9=0-3-8
Max Horz 15=198(LC 7)
Max Uplift 15=-153(LC 8), 9=-153(LC 9)
Max Grav 15=1443(LC 2), 9=1435(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2063/199, 3-4=-1774/172, 4-5=-1445/200, 5-6=-1758/172, 6-7=-2051/199, 2-15=-1352/177, 7-9=-1345/177
BOT CHORD 14-15=-174/476, 13-14=-201/1798, 11-13=-83/1458, 10-11=-99/1712, 9-10=-43/343
WEBS 3-13=-409/190, 4-13=-3/505, 5-11=0/466, 6-11=-412/190, 2-14=-64/1386, 7-10=-56/1378

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=153, 9=153.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

December 3,2020




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

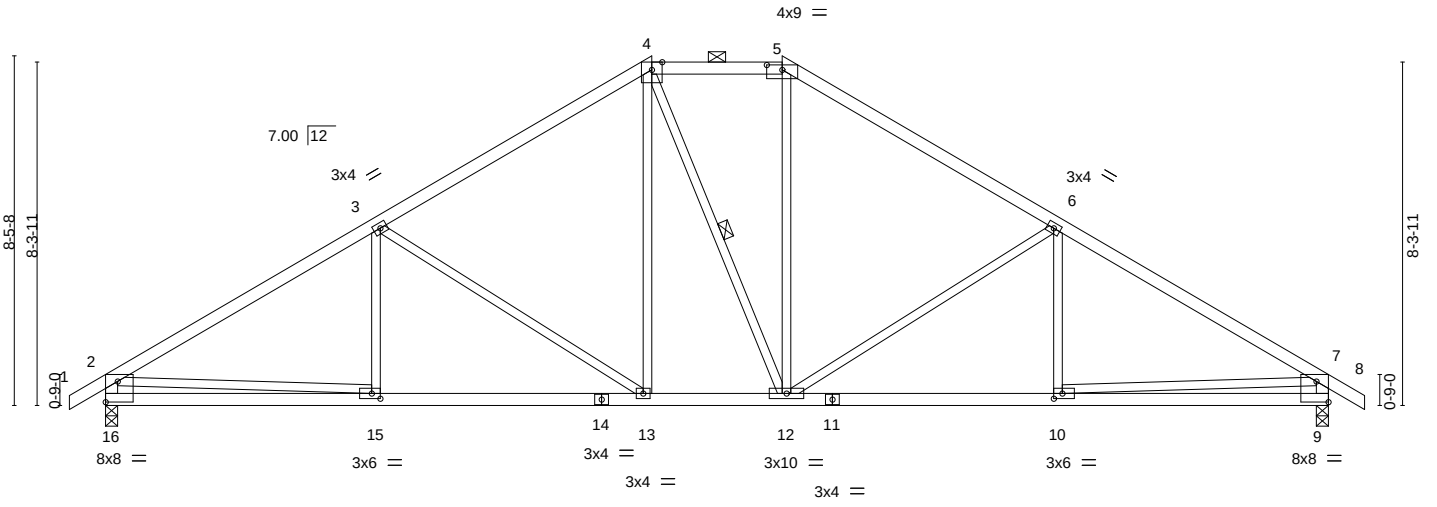
| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | D4 | Hip | 1 | 1 | I43839736 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:23 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-8lzFNrWW8jbb5oI8w7_gtRT9nco4dlVzr5_NFMyCyBk

-0-10-8 6-6-8 13-2-9 16-4-7 23-0-8 29-7-0 30-5-8
0-10-8 6-6-8 6-8-1 3-1-14 6-8-1 6-6-8 0-10-8

Scale = 1:55.7




6-6-8 13-2-9 16-4-7 23-0-8 29-7-0
6-6-8 6-8-1 3-1-14 6-8-1 6-6-8

Plate Offsets (X,Y)-- [5:0-4-8,0-1-7], [9:Edge,0-6-0], [10:0-2-8,0-1-8], [15:0-2-8,0-1-8], [16:Edge,0-6-0]

| 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 | 0.58 | Vert(LL) | -0.08 | 13-15 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL 1.15 | BC | 0.49 | Vert(CT) | -0.18 | 13-15 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr YES | WB | 0.81 | Horz(CT) | 0.05 | 9 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | Matrix-S | | Wind(LL) | 0.05 | 13-15 | >999 | 240 | Weight: 124 lb | FT = 10% |

**LUMBER-**
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-16,7-9: 2x4 SPF No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 3-7-5 oc purlins, except end verticals, and 2-0-0 oc purlins (5-2-5 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-12

**REACTIONS.** (size) 16=0-3-8, 9=0-3-8
Max Horz 16=233(LC 7)
Max Uplift 16=-171(LC 8), 9=-171(LC 9)
Max Grav 16=1390(LC 1), 9=1390(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1985/221, 3-4=-1512/204, 4-5=-1196/229, 5-6=-1513/204, 6-7=-1985/221, 2-16=-1325/205, 7-9=-1324/205
BOT CHORD 15-16=-250/637, 13-15=-216/1620, 12-13=-32/1195, 10-12=-90/1620, 9-10=-135/506
WEBS 3-13=-544/218, 4-13=-62/389, 5-12=-52/379, 6-12=-541/218, 2-15=0/1120, 7-10=0/1118

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=171, 9=171.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 3,2020



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

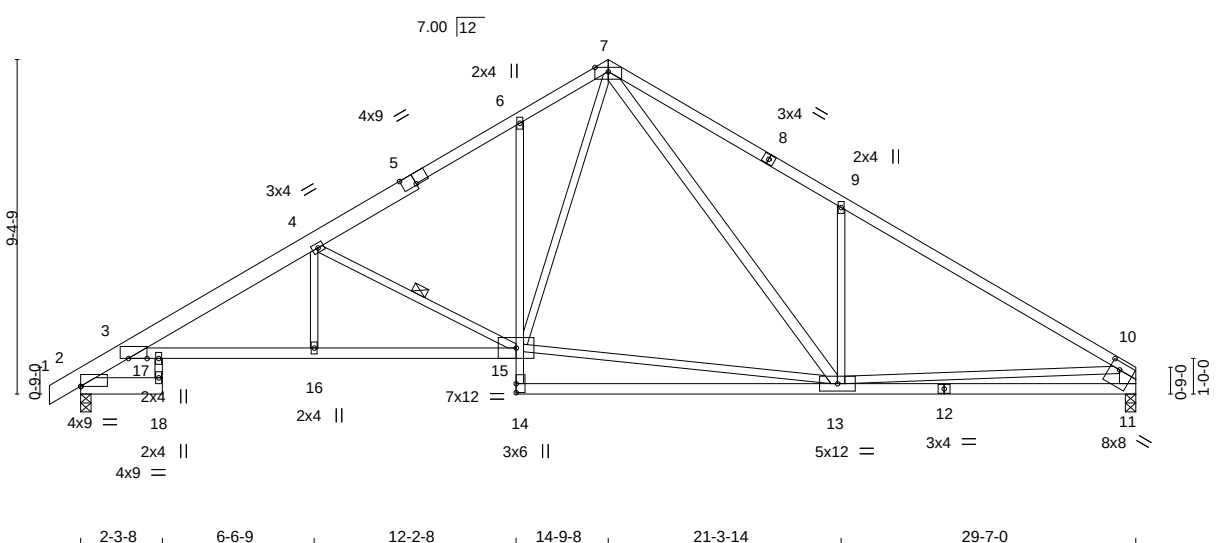
| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | D5 | Roof Special | 1 | 1 | I43839737 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:24 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-cxXdbBX8v1jSjytKUrVvPe?L606PME174IjwnoyCyBj

-0-10-8 2-3-8 6-6-9 12-2-8 14-9-8 21-3-14 29-7-0
0-10-8 2-3-8 4-3-1 5-7-15 2-7-0 6-6-6 8-3-2

Scale: 3/16"=1'




2-3-8 6-6-9 12-2-8 14-9-8 21-3-14 29-7-0
2-3-8 4-3-1 5-7-15 2-7-0 6-6-6 8-3-2

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

| 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 | 0.54 | Vert(LL) | -0.18 | 13-14 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.61 | Vert(CT) | -0.42 | 13-14 | >844 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.67 | Horz(CT) | 0.19 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.14 | 16-17 | >999 | 240 | Weight: 142 lb | FT = 10% |

**LUMBER-**

TOP CHORD 2x4 SPF No.2 *Except*
1-5: 2x6 SP 2400F 2.0E, 8-10: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except*
2-18: 2x6 SPF No.2, 3-15: 2x4 SPF 2100F 1.8E, 6-14: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
7-13: 2x4 SPF No.2, 10-11: 2x6 SPF No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 3-8-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-15

**REACTIONS.** (size) 2=0-3-8, 11=0-3-8
Max Horz 2=248(LC 7)
Max Uplift 2=-181(LC 8), 11=-156(LC 9)
Max Grav 2=1387(LC 1), 11=1313(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-892/166, 3-4=-2567/333, 4-6=-1784/254, 6-7=-1652/347, 7-9=-1914/428, 9-10=-1930/221, 10-11=-1238/198
BOT CHORD 3-17=-363/2248, 16-17=-363/2248, 15-16=-363/2249, 11-13=-150/538
WEBS 4-16=0/315, 4-15=-982/287, 13-15=-56/1029, 7-15=-233/922, 7-13=-302/762, 9-13=-585/352, 10-13=-29/1017

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=181, 11=156.
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.



December 3,2020



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | E1 | Roof Special Girder | 1 | 1 | I43839738 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:25 2020 Page 1
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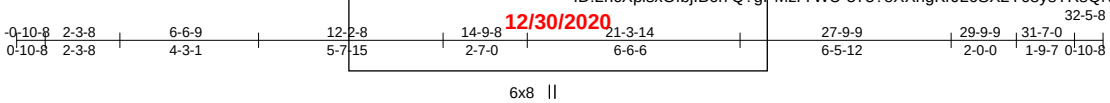


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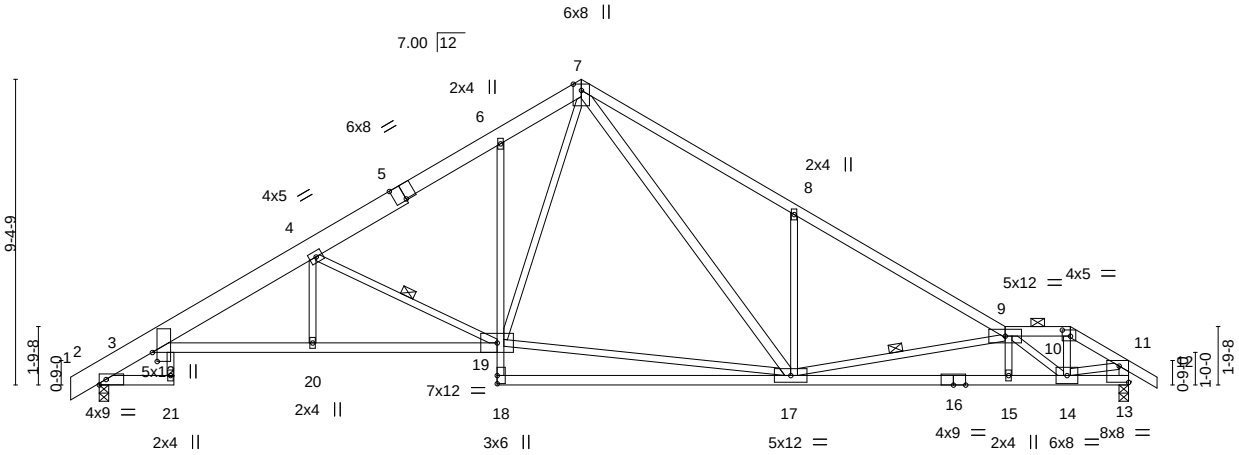


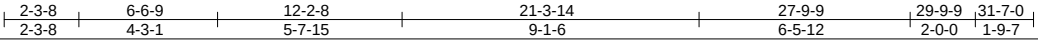




Plate Offsets (X,Y)-- [3:0-3-5,0-1-12], [5:0-4-0,Edge], [10:0-3-0,0-2-4], [13:Edge,0-6-0]

| 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 | 0.86 | Vert(LL) | -0.19 | 17-18 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.91 | Vert(CT) | -0.43 | 17-18 | >868 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.72 | Horz(CT) | 0.22 | 13 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.12 | 19-20 | >999 | 240 | Weight: 163 lb | FT = 10% |

**LUMBER-**

TOP CHORD 2x4 SPF No.2 *Except*
5-7: 2x6 SPF No.2, 1-5: 2x8 SP DSS
BOT CHORD 2x4 SPF No.2 *Except*
6-18: 2x3 SPF No.2, 16-18: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
7-17,11-13: 2x4 SPF No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-8-6 max.): 9-10.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 4-19, 9-17

**REACTIONS.** (size) 2=0-3-8, 13=0-3-8
Max Horz 2=252(LC 28)
Max Uplift 2=-179(LC 8), 13=-213(LC 9)
Max Grav 2=1493(LC 1), 13=1476(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-887/192, 3-4=-2751/335, 4-6=-2004/263, 6-7=-1864/359, 7-8=-2303/462, 8-9=-2294/277, 9-10=-1524/224, 10-11=-1754/239, 11-13=-1431/222
BOT CHORD 3-20=-364/2481, 19-20=-362/2481, 15-17=-360/3028, 14-15=-355/3030
WEBS 4-19=-1019/281, 17-19=-62/1217, 7-19=-230/965, 7-17=-326/1019, 8-17=-518/308, 9-17=-1154/264, 9-14=-1916/246, 10-14=-139/814, 11-14=-157/1379

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=179, 13=213.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 131 lb down and 68 lb up at 29-9-9 on top chord, and 12 lb down and 10 lb up at 29-8-13 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard



December 3,2020

Continued on page 2



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | E1 | Roof Special Girder | 1 | 1 | I43839738 |

Job Reference (optional)



**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-7=-70, 7-9=-70, 9-10=-70, 10-11=-70, 11-12=-70, 2-21=-20, 3-19=-20, 13-18=-20
   Concentrated Loads (lb)
   Vert: 14=4(F)

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/30/2020

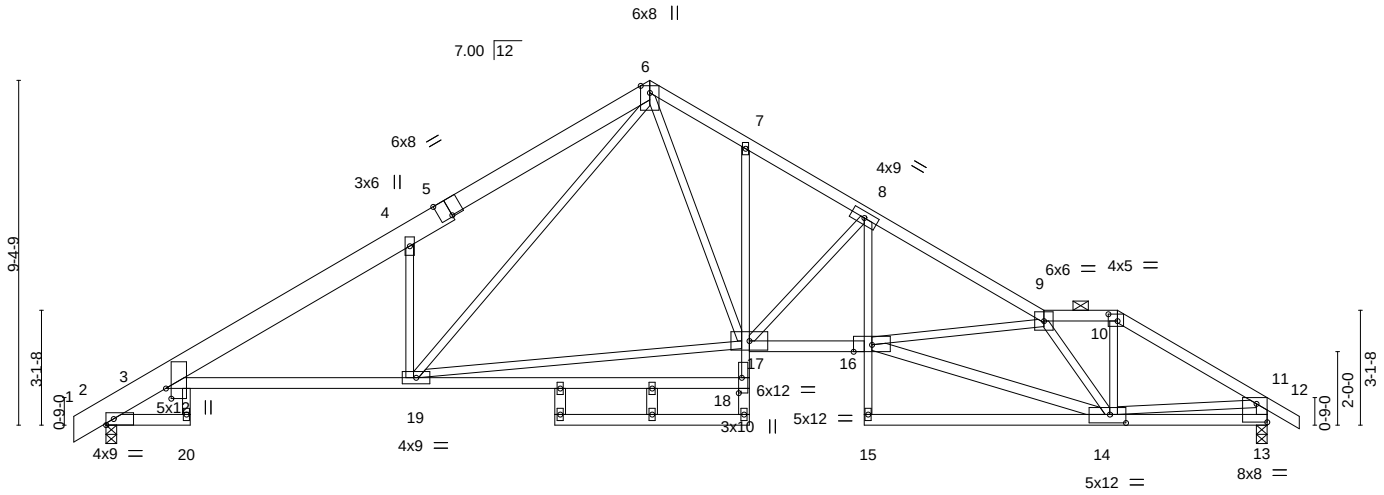
| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | E2 | Roof Special | 1 | 1 | I43839739 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:26 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-ZKfN?tYPRezAyF1jcFYNU35g8qlAq4tQX3C1shyCyBh

| -0-10-8 | 2-3-8 | 8-3-2 | 14-9-8 | 17-6-0 | 20-7-8 | 25-6-2 | 27-6-2 | 31-7-0 | 32-5-8 |
|---|---|---|---|---|---|---|---|---|---|
| 0-10-8 | 2-3-8 | 5-11-10 | 6-6-6 | 2-8-8 | 3-1-8 | 4-10-10 | 2-0-0 | 4-0-14 | 0-10-8 |

Scale = 1:62.7




| 2-3-8 | 8-6-8 | 14-9-8 | 17-6-0 | 20-7-8 | 27-6-2 | 31-7-0 |
|---|---|---|---|---|---|---|
| 2-3-8 | 6-3-0 | 6-3-0 | 2-8-8 | 3-1-8 | 6-10-10 | 4-0-14 |

Plate Offsets (X,Y)-- [3:0-3-5,0-1-12], [5:0-4-0,Edge], [10:0-3-0,0-2-4], [13:Edge,0-6-0], [14:0-5-4,0-2-12], [18:0-5-0,0-1-0]

| 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 | 0.64 | Vert(LL) | -0.24 | 18-19 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.79 | Vert(CT) | -0.57 | 18-19 | >661 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.90 | Horz(CT) | 0.33 | 13 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.16 | 3-19 | >999 | 240 | Weight: 174 lb | FT = 10% |

**LUMBER-**

TOP CHORD 2x4 SPF No.2 *Except*
5-6: 2x6 SPF No.2, 1-5: 2x8 SP DSS
BOT CHORD 2x4 SPF No.2 *Except*
7-18,8-15: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
14-16,11-13,21-23,18-22,24-25: 2x4 SPF No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 2-5-12 oc purlins, except end verticals, and 2-0-0 oc purlins (4-3-10 max.): 9-10.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 2-20.

**REACTIONS.** (size) 2=0-3-8, 13=0-3-8
Max Horz 2=252(LC 7)
Max Uplift 2=-178(LC 8), 13=-203(LC 9)
Max Grav 2=1493(LC 1), 13=1480(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-886/191, 3-4=-2524/283, 4-6=-2689/508, 6-7=-2263/336, 7-8=-2342/272, 8-9=-3378/341, 9-10=-1866/260, 10-11=-2103/256, 11-13=-1430/218
BOT CHORD 3-19=-287/2216, 16-17=-120/2877, 8-16=-68/1179, 13-14=-87/343
WEBS 4-19=-880/395, 6-19=-348/1148, 6-17=-209/1339, 8-17=-1347/238, 14-16=-301/3023, 9-14=-2152/268, 10-14=-51/855, 11-14=-58/1407, 17-19=-81/1358

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=178, 13=203.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

December 3,2020




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | E3 | Roof Special | 1 | 1 | I43839740 |

Job Reference (optional)

**RELEASE FOR CONSTRUCTION**
**AS NOTED ON PLANS REVIEW**
**DEVELOPMENT SERVICES**
**LEE'S SUMMIT, MISSOURI**
**12/30/2020**

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:27 2020 Page 1
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| -0-10-8 | 2-3-8 | 8-3-2 | 14-9-8 | 17-6-0 | 20-7-8 | 23-2-11 | 25-2-11 | 31-7-0 | 32-5-8 |
|---|---|---|---|---|---|---|---|---|---|
| 0-10-8 | 2-3-8 | 5-11-10 | 6-6-6 | 2-8-8 | 3-1-8 | 2-7-3 | 2-0-0 | 6-4-5 | 0-10-8 |

Scale = 1:62.1

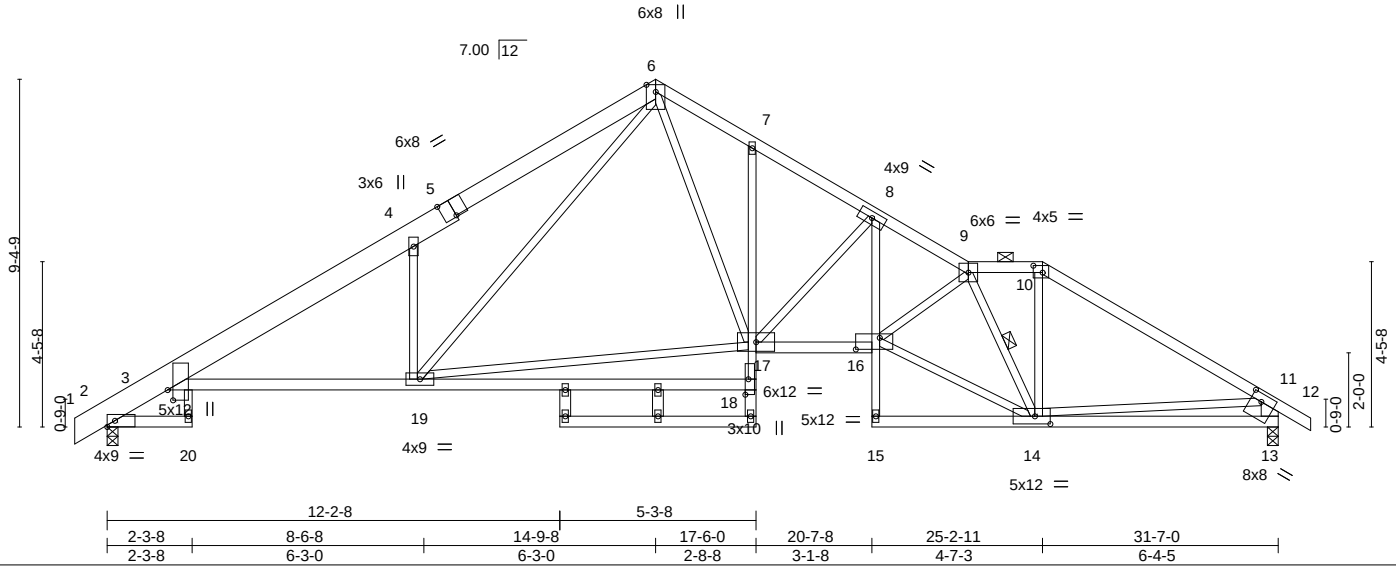



Plate Offsets (X,Y)-- [3:0-3-5,0-1-12], [5:0-4-0,Edge], [10:0-3-0,0-2-4], [13:0-3-8,0-2-8], [14:0-5-0,0-2-8], [16:0-7-12,0-3-12], [18:0-5-0,0-1-0]

| 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 | 0.58 | Vert(LL) | -0.24 | 18-19 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.78 | Vert(CT) | -0.57 | 18-19 | >661 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.97 | Horz(CT) | 0.34 | 13 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.16 | 3-19 | >999 | 240 | Weight: 173 lb | FT = 10% |

**LUMBER-**

TOP CHORD 2x4 SPF No.2 *Except*
5-6: 2x6 SPF No.2, 1-5: 2x8 SP DSS
BOT CHORD 2x4 SPF No.2 *Except*
7-18,8-15: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
11-13: 2x6 SPF No.2, 21-23,18-22,24-25: 2x4 SPF No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 3-0-1 oc purlins, except end verticals, and 2-0-0 oc purlins (4-4-1 max.): 9-10.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 2-20.
WEBS 1 Row at midpt 9-14

**REACTIONS.** (size) 2=0-3-8, 13=0-3-8
Max Horz 2=253(LC 7)
Max Uplift 2=-177(LC 8), 13=-204(LC 9)
Max Grav 2=1489(LC 1), 13=1483(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-884/190, 3-4=-2516/283, 4-6=-2681/507, 6-7=-2265/339, 7-8=-2320/268, 8-9=-3343/345, 9-10=-1734/273, 10-11=-2083/260, 11-13=-1413/241
BOT CHORD 3-19=-285/2208, 16-17=-113/2893, 8-16=-103/1290, 13-14=-192/581
WEBS 4-19=-880/395, 6-19=-348/1149, 6-17=-213/1335, 8-17=-1378/221, 14-16=-189/2831, 9-16=-6/418, 9-14=-2136/154, 10-14=-13/671, 11-14=0/1112, 17-19=-80/1349

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=177, 13=204.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 3,2020




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | E4 | Roof Special | 1 | 1 | I43839741 |

Job Reference (optional)

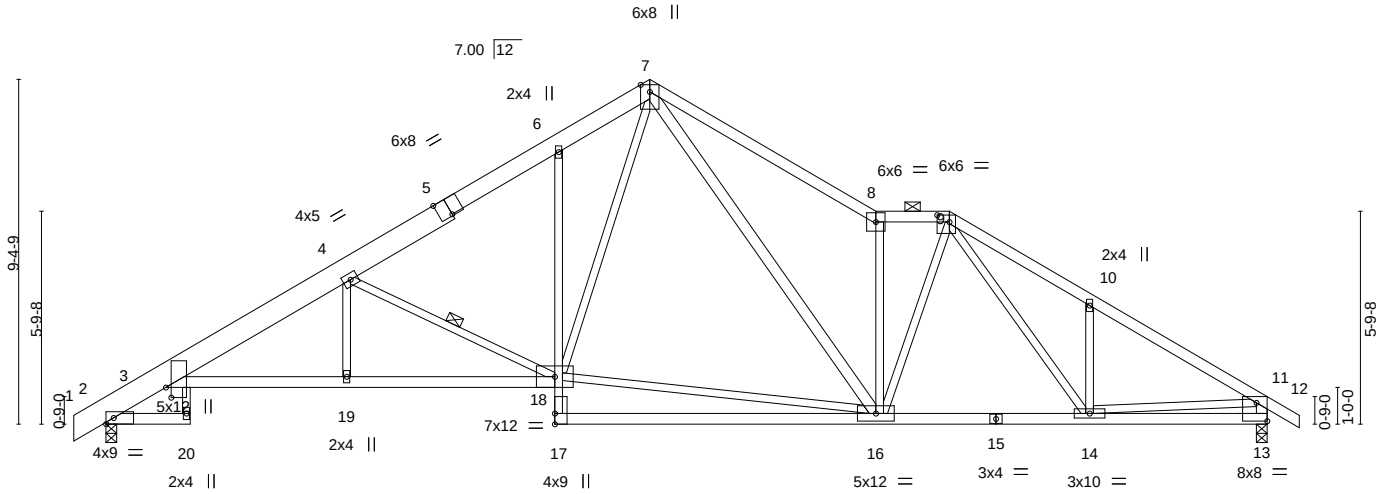
**RELEASE FOR CONSTRUCTION**
**AS NOTED ON PLANS REVIEW**
**DEVELOPMENT SERVICES**
**LEE'S SUMMIT, MISSOURI**
**12/30/2020**

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:29 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-zvKWeuaHjZMlpjIHO546ij7z1nM1P3sD1RhT0yCyBe

| -0-10-8 | 2-3-8 | 6-6-9 | 12-2-8 | 14-9-8 | 20-11-5 | 22-11-5 | 26-9-1 | 31-7-0 | 32-5-8 |
|---|---|---|---|---|---|---|---|---|---|
| 0-10-8 | 2-3-8 | 4-3-1 | 5-7-15 | 2-7-0 | 6-1-13 | 2-0-0 | 3-9-12 | 4-9-15 | 0-10-8 |

Scale = 1:62.7




| 2-3-8 | 6-6-9 | 12-2-8 | 20-11-5 | 26-9-1 | 31-7-0 |
|---|---|---|---|---|---|
| 2-3-8 | 4-3-1 | 5-7-15 | 8-8-13 | 5-9-12 | 4-9-15 |

Plate Offsets (X,Y)-- [3:0-3-5,0-1-12], [5:0-4-0,Edge], [9:0-4-0,0-2-4], [13:Edge,0-6-0]

| 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 | 0.79 | Vert(LL) | -0.20 | 16-17 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.75 | Vert(CT) | -0.46 | 16-17 | >814 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 1.00 | Horz(CT) | 0.21 | 13 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.12 | 18-19 | >999 | 240 | Weight: 168 lb | FT = 10% |

**LUMBER-**

TOP CHORD 2x4 SPF No.2 *Except*
5-7: 2x6 SPF No.2, 1-5: 2x8 SP DSS
BOT CHORD 2x4 SPF No.2 *Except*
6-17: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
7-16,11-13: 2x4 SPF No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (4-2-9 max.): 8-9.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 4-18

**REACTIONS.** (size) 2=0-3-8, 13=0-3-8
Max Horz 2=252(LC 7)
Max Uplift 2=-178(LC 8), 13=-203(LC 9)
Max Grav 2=1493(LC 1), 13=1480(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-886/191, 3-4=-2752/332, 4-6=-2005/260, 6-7=-1860/354, 7-8=-2198/424, 8-9=-1821/282, 9-10=-2087/393, 10-11=-2107/272, 11-13=-1421/228
BOT CHORD 3-19=-361/2482, 18-19=-359/2482, 14-16=-62/1591, 13-14=-91/401
WEBS 4-18=-1019/281, 16-18=-62/1222, 7-18=-226/956, 7-16=-285/914, 8-16=-1334/339, 9-16=-59/669, 9-14=-160/313, 10-14=-304/196, 11-14=-63/1346

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=178, 13=203.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

December 3,2020




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | E5 | Roof Special | 1 | 1 | I43839742 |

Job Reference (optional)

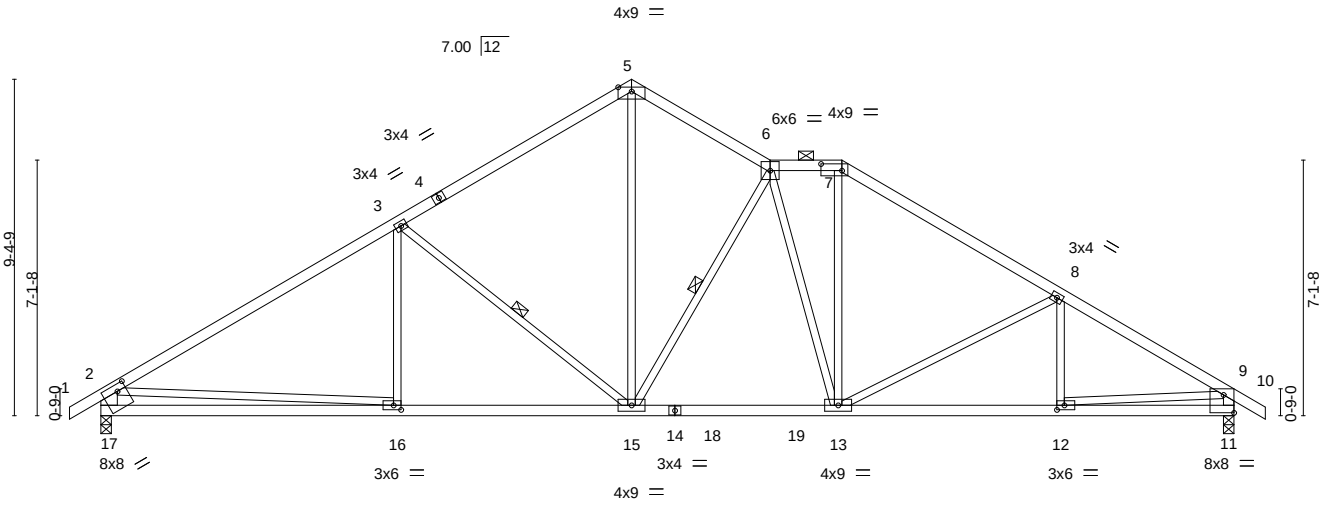
**RELEASE FOR CONSTRUCTION**
**AS NOTED ON PLANS REVIEW**
**DEVELOPMENT SERVICES**
**LEE'S SUMMIT, MISSOURI**
**12/30/2020**

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:29 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-zvKWeuaHjZMlpjIlHO546ij7C1oO1WbsD1RhT0yCyBe

| -0-10-8 | 8-3-2 | 14-9-8 | 18-7-14 | 20-7-14 | 26-9-0 | 31-7-0 | 32-5-8 |
|---|---|---|---|---|---|---|---|
| 0-10-8 | 8-3-2 | 6-6-6 | 3-10-6 | 2-0-0 | 6-1-2 | 4-10-0 | 0-10-8 |

Scale: 3/16"=1'




| 8-3-2 | 14-9-8 | 20-7-14 | 26-9-0 | 31-7-0 |
|---|---|---|---|---|
| 8-3-2 | 6-6-6 | 5-10-6 | 6-1-2 | 4-10-0 |

Plate Offsets (X,Y)-- [7:0-7-0,0-2-4], [11:Edge,0-6-0], [12:0-2-8,0-1-8], [16:0-2-8,0-1-8], [17:0-3-0,0-2-4]

| 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 | 0.78 | Vert(LL) | -0.13 | 13-15 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.69 | Vert(CT) | -0.25 | 16-17 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.52 | Horz(CT) | 0.07 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.07 | 13 | >999 | 240 | Weight: 134 lb | FT = 10% |

**LUMBER-**
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-17: 2x6 SPF No.2, 9-11: 2x4 SPF 2400F 2.0E

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 2-11-8 oc purlins, except end verticals, and 2-0-0 oc purlins (4-6-9 max.): 6-7.
BOT CHORD Rigid ceiling directly applied or 9-4-3 oc bracing.
WEBS 1 Row at midpt 3-15, 6-15

**REACTIONS.** (size) 17=0-3-8, 11=0-3-8
Max Horz 17=-260(LC 6)
Max Uplift 17=-187(LC 8), 11=-203(LC 9)
Max Grav 17=1589(LC 15), 11=1568(LC 16)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2179/234, 3-5=-1590/270, 5-6=-1539/261, 6-7=-1565/280, 7-8=-1887/265, 8-9=-2245/280, 2-17=-1454/233, 9-11=-1483/224
BOT CHORD 16-17=-387/1038, 15-16=-214/1931, 13-15=-54/1683, 12-13=-168/1854, 11-12=-57/362
WEBS 3-16=0/267, 3-15=-705/238, 5-15=-159/1191, 6-15=-751/225, 6-13=-302/93, 7-13=-36/661, 8-13=-433/179, 2-16=0/1033, 9-12=-111/1509

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=187, 11=203.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 3,2020




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | E6 | Roof Special | 1 | 1 | I43839743 |

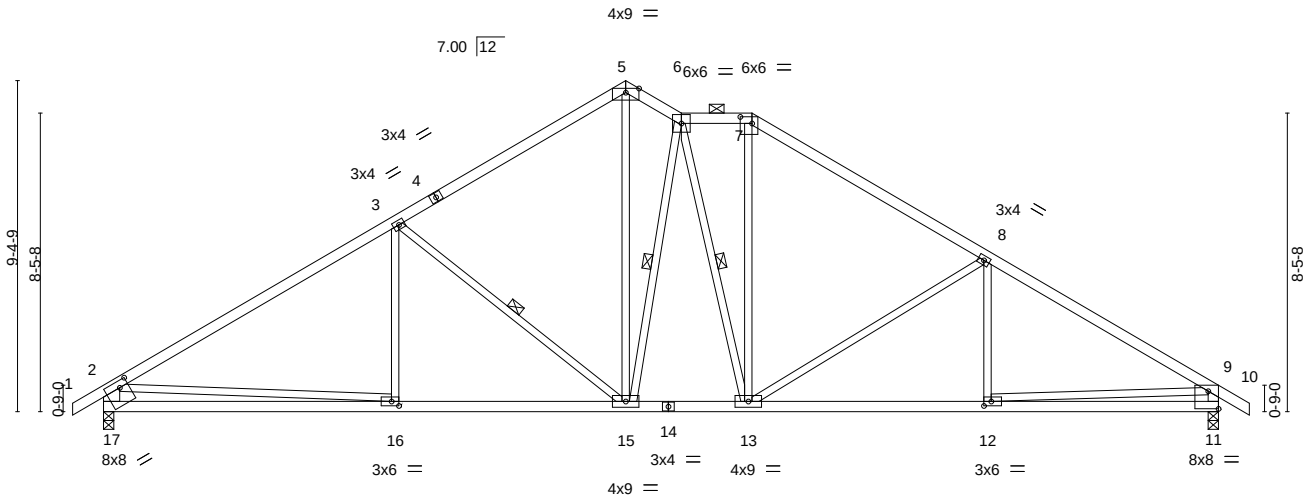
Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:30 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-R5uurEbvUtUbRtKUr5cJfvFlvR9Jmue?ShAF?SyCyBd

| -0-10-8 | 8-3-2 | 14-9-8 | 16-4-7 | 18-4-7 | 25-0-8 | 31-7-0 | 32-5-8 |
|---|---|---|---|---|---|---|---|
| 0-10-8 | 8-3-2 | 6-6-6 | 1-6-15 | 2-0-0 | 6-8-1 | 6-6-8 | 0-10-8 |

Scale = 1:65.3




| 8-3-2 | 14-9-8 | 18-4-7 | 25-0-8 | 31-7-0 |
|---|---|---|---|---|
| 8-3-2 | 6-6-6 | 3-6-15 | 6-8-1 | 6-6-8 |

Plate Offsets (X,Y)-- [7:0-4-0,0-2-4], [11:Edge,0-6-0], [12:0-2-8,0-1-8], [16:0-2-8,0-1-8], [17:0-3-0,0-2-4]

| 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 | 0.78 | Vert(LL) | -0.11 | 16-17 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.58 | Vert(CT) | -0.24 | 16-17 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.85 | Horz(CT) | 0.06 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | Wind(LL) | 0.07 | 12-13 | >999 | 240 | Weight: 139 lb | FT = 10% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x4 SPF No.2 |
| BOT CHORD | 2x4 SPF No.2 |
| WEBS | 2x3 SPF No.2 *Except* |
| | 2-17: 2x6 SPF No.2, 9-11: 2x4 SPF 2400F 2.0E |

**BRACING-**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 2-11-6 oc purlins, except end verticals, and 2-0-0 oc purlins (4-10-4 max.): 6-7. |
| BOT CHORD | Rigid ceiling directly applied or 9-4-1 oc bracing. |
| WEBS | 1 Row at midpt 3-15, 6-15, 6-13 |

**REACTIONS.** (size) 17=0-3-8, 11=0-3-8
Max Horz 17=-260(LC 6)
Max Uplift 17=-187(LC 8), 11=-203(LC 9)
Max Grav 17=1482(LC 1), 11=1476(LC 1)

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

| | |
|---|---|
| TOP CHORD | 2-3=-2075/233, 3-5=-1540/272, 5-6=-1367/266, 6-7=-1327/280, 7-8=-1659/261, 8-9=-2135/276, 2-17=-1404/233, 9-11=-1411/236 |
| BOT CHORD | 16-17=-389/936, 15-16=-214/1666, 13-15=-34/1328, 12-13=-137/1748, 11-12=-146/536 |
| WEBS | 3-16=0/275, 3-15=-614/235, 5-15=-182/1028, 6-15=-634/205, 7-13=-33/386, 8-13=-543/215, 2-16=0/896, 9-12=-10/1216 |

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=187, 11=203.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 3,2020



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | E7 | Hip | 1 | 1 | I43839744 |

Job Reference (optional)

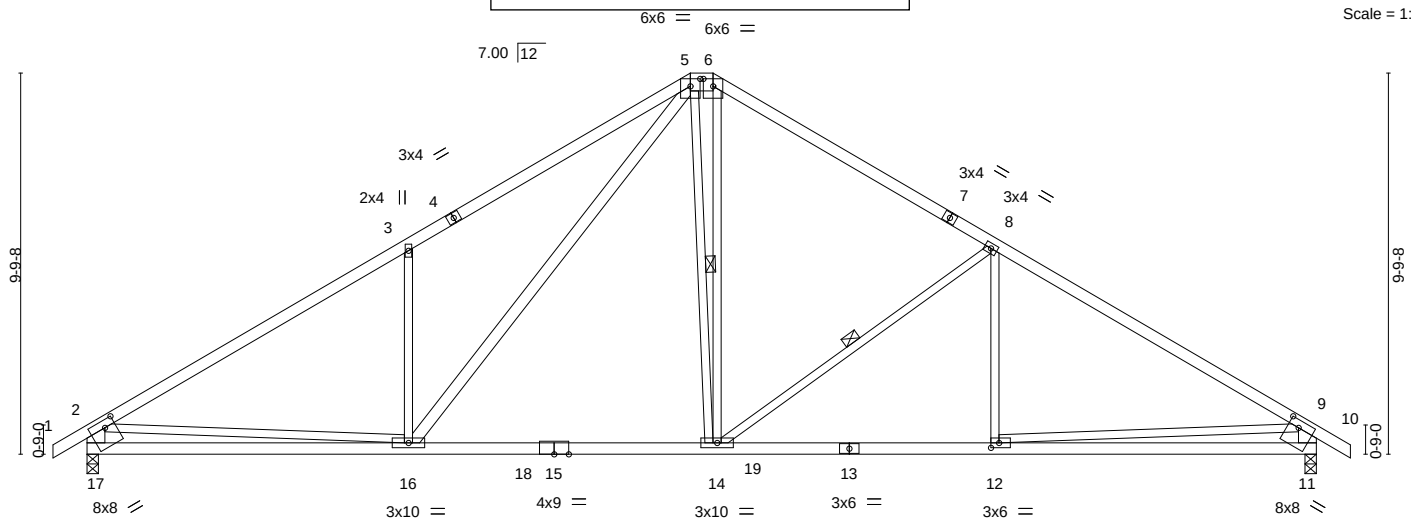
**RELEASE FOR CONSTRUCTION**
**AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI**
12/30/2020

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:31 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-vHSG3acXFAcS31vgOp7YB7oU2rTqVMF9hLwoXuyCyBc

-0-10-8 8-3-2 15-6-0 16-1-0 23-3-14 31-7-0 32-5-8
0-10-8 8-3-2 7-2-15 0-7-0 7-2-15 8-3-2 0-10-8

Scale = 1:59.2




8-3-2 15-6-0 16-1-0 23-3-14 31-7-0
8-3-2 7-2-15 0-7-0 7-2-15 8-3-2

Plate Offsets (X,Y)-- [5:0-3-0,0-2-5], [6:0-3-0,0-2-5], [11:0-3-4,0-2-4], [12:0-2-8,0-1-8], [17:0-3-4,0-2-4]

| 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 | 0.75 | Vert(LL) | -0.20 | 14-16 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.75 | Vert(CT) | -0.32 | 14-16 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.83 | Horz(CT) | 0.06 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.06 | 16 | >999 | 240 | Weight: 138 lb | FT = 10% |

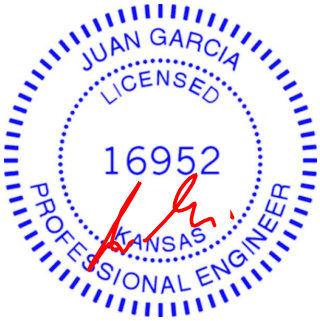
**LUMBER-**
TOP CHORD 2x4 SPF No.2 *Except* 5-6: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 5-16: 2x4 SPF No.2, 2-17,9-11: 2x6 SPF No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 9-4-6 oc bracing.
WEBS 1 Row at midpt 5-14, 8-14

**REACTIONS.** (size) 17=0-3-8, 11=0-3-8
Max Horz 17=-271(LC 6)
Max Uplift 17=-191(LC 8), 11=-191(LC 9)
Max Grav 17=1609(LC 15), 11=1600(LC 16)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2231/240, 3-5=-2290/461, 5-6=-1285/258, 6-8=-1605/253, 8-9=-2201/244, 2-17=-1483/235, 9-11=-1463/237
BOT CHORD 16-17=-389/1012, 14-16=-29/1354, 12-14=-81/1770, 11-12=-246/843
WEBS 3-16=-579/351, 5-16=-327/1042, 5-14=-202/417, 6-14=-123/581, 8-14=-726/251, 8-12=0/268, 2-16=0/1120, 9-12=0/1088

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=191, 11=191.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.


December 3,2020




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/30/2020

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | E8 | Common | 1 | 1 | I43839745 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:32 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-NT0eGwdA0UkJgAUtyWenkKLfyFpHEssIw?fM4KyCyBb

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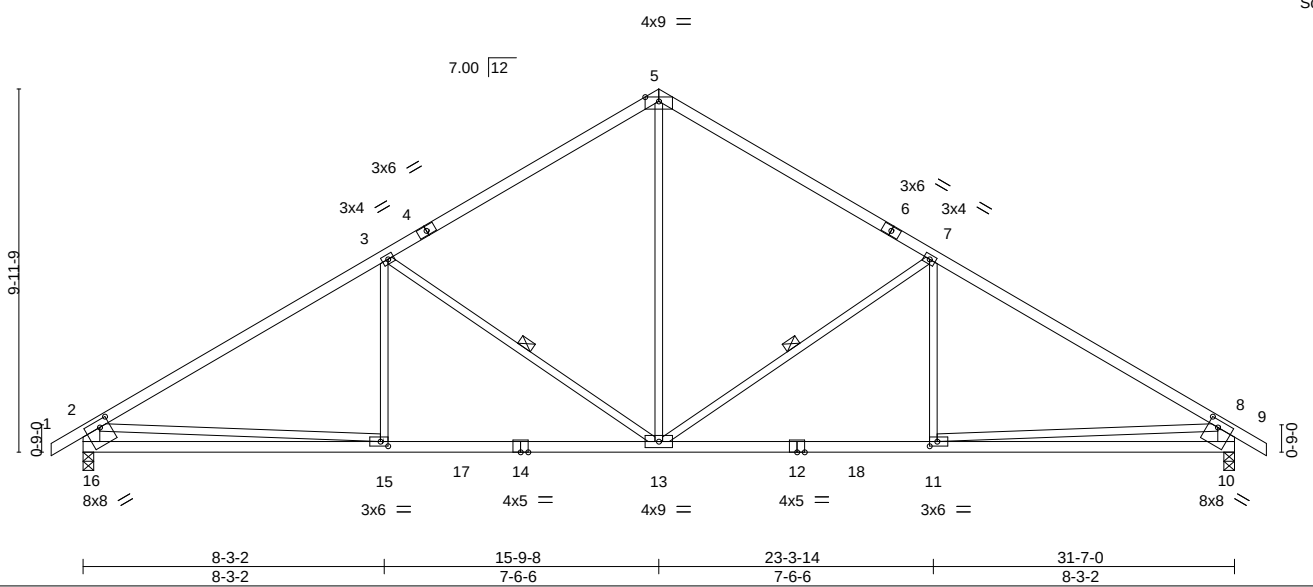



Plate Offsets (X,Y)-- [10:0-3-4,0-2-4], [11:0-2-8,0-1-8], [15:0-2-8,0-1-8], [16:0-3-4,0-2-4]

| LOADING (psf) | | SPACING- 2-0-0 | | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.74 | Vert(LL) | -0.14 | 13-15 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.74 | Vert(CT) | -0.24 | 13-15 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.61 | Horz(CT) | 0.06 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.06 | 13-15 | >999 | 240 | Weight: 125 lb | FT = 10% |

**LUMBER-**
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-16,8-10: 2x6 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 9-5-14 oc bracing.
WEBS 1 Row at midpt 7-13, 3-13

**REACTIONS.** (size) 16=0-3-8, 10=0-3-8
Max Horz 16=-276(LC 6)
Max Uplift 16=-192(LC 8), 10=-192(LC 9)
Max Grav 16=1608(LC 15), 10=1608(LC 16)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2226/247, 3-5=-1574/262, 5-7=-1574/262, 7-8=-2226/247, 2-16=-1477/238, 8-10=-1477/237
BOT CHORD 15-16=-377/1006, 13-15=-238/1988, 11-13=-86/1795, 10-11=-237/816
WEBS 5-13=-94/1046, 7-13=-798/261, 7-11=0/312, 3-13=-799/262, 3-15=0/312, 2-15=0/1111, 8-11=0/1128

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=192, 10=192.
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.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
ARKANSAS
PROFESSIONAL ENGINEER

December 3,2020




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | E9 | Roof Special | 5 | 1 | I43839746 |

**RELEASE FOR CONSTRUCTION**
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/30/2020

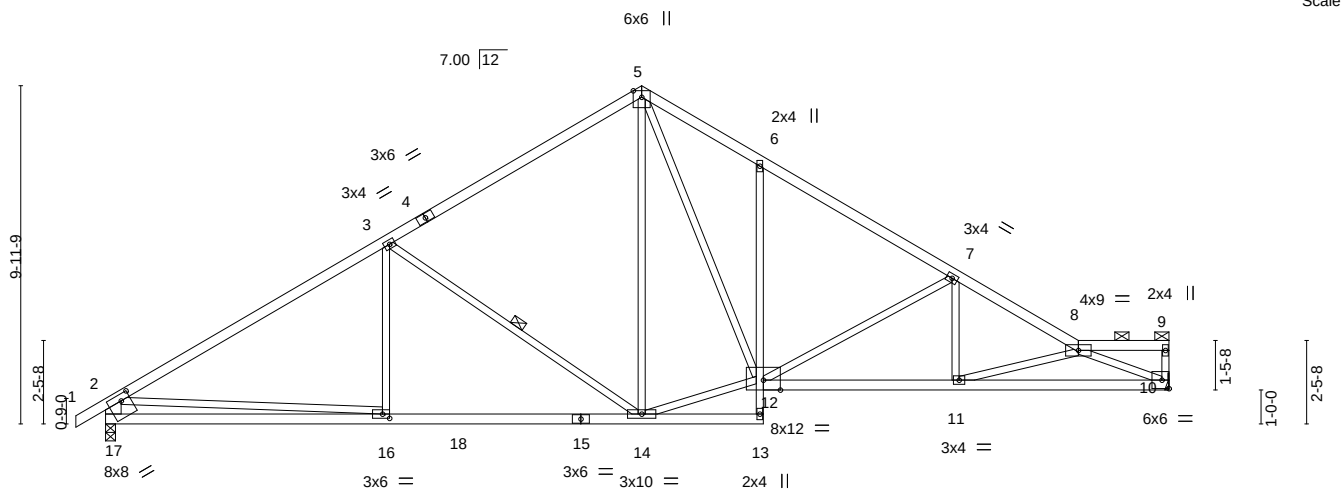
Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:33 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-sga1TGeonosAIK33WEA0GYtqne6jzF6S8fPvcnyCyBa

-0-10-8 8-3-2 15-9-8 19-4-8 25-0-7 28-7-14 31-3-14
0-10-8 8-3-2 7-6-6 3-7-0 5-7-15 3-7-7 2-8-0

Scale = 1:67.9




8-3-2 15-9-8 19-4-8 24-0-3 31-3-14
8-3-2 7-6-6 3-7-0 4-7-11 7-3-11

Plate Offsets (X,Y)-- [16:0-2-8,0-1-8], [17:0-3-4,0-2-4]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.74 | Vert(LL) | -0.17 | 11-12 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.86 | Vert(CT) | -0.31 | 11-12 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.87 | Horz(CT) | 0.10 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.07 | 11-12 | >999 | 240 | Weight: 133 lb | FT = 10% |

**LUMBER-**
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
6-13: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-17: 2x6 SPF No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 8-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 13-14.
WEBS 1 Row at midpt 3-14

**REACTIONS.** (size) 10=Mechanical, 17=0-3-8
Max Horz 17=222(LC 5)
Max Uplift 10=-14(LC 9), 17=-24(LC 8)
Max Grav 10=1450(LC 14), 17=1591(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2208/39, 3-5=-1542/91, 5-6=-1984/135, 6-7=-2008/52, 7-8=-2708/20, 2-17=-1461/69
BOT CHORD 16-17=-221/935, 14-16=-54/1923, 6-12=-340/128, 11-12=0/2301, 10-11=-52/2859
WEBS 3-16=0/322, 3-14=-793/128, 5-14=-18/348, 12-14=0/1313, 5-12=-99/1241, 7-12=-814/75, 7-11=0/410, 8-11=-594/61, 8-10=-3066/64, 2-16=0/1098

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 17.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
ARKANSAS
PROFESSIONAL ENGINEER

December 3,2020




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/30/2020

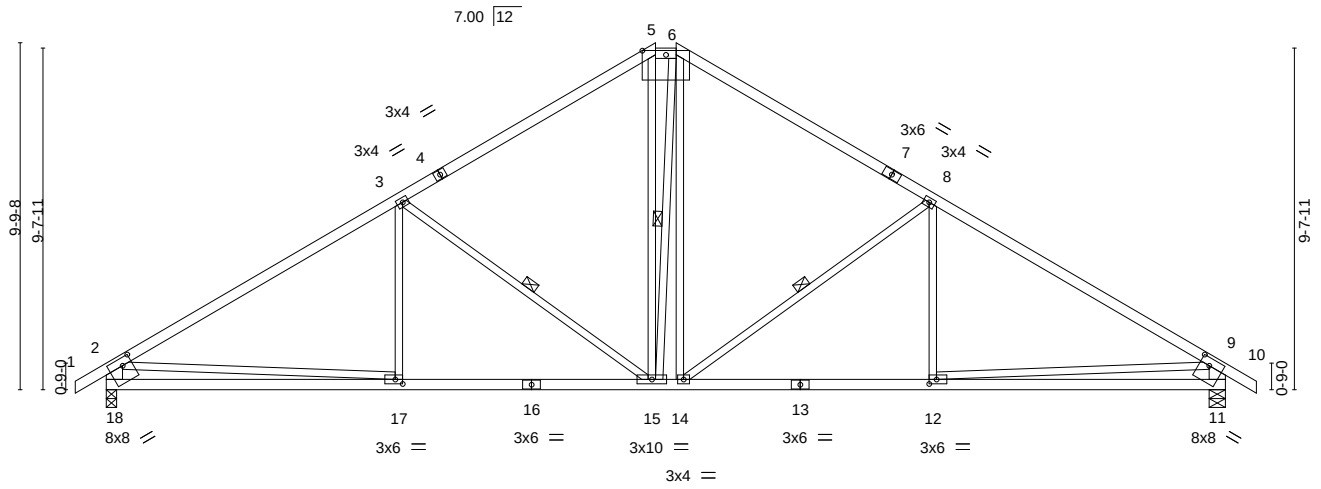
| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | G1 | Hip | 1 | 1 | I43839747 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:34 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-Ks8PhceQY5_1wUeF4xhFplQ?I2W?iokbNJ8S8DyCyBZ

| -0-10-8 | 8-3-2 | 15-6-0 | 16-1-0 | 23-3-14 | 31-7-0 | 32-5-8 |
|---|---|---|---|---|---|---|
| 0-10-8 | 8-3-2 | 7-2-15 | 0-7-0 | 7-2-15 | 8-3-2 | 0-10-8 |

Scale = 1:65.0




| 8-3-2 | 15-6-0 | 16-1-0 | 23-3-14 | 31-7-0 |
|---|---|---|---|---|
| 8-3-2 | 7-2-15 | 0-7-0 | 7-2-15 | 8-3-2 |

Plate Offsets (X,Y)-- [5:0-8-0,0-1-7], [11:0-3-4,0-2-8], [12:0-2-8,0-1-8], [17:0-2-8,0-1-8], [18:0-3-4,0-2-8]

| 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 | 0.75 | Vert(LL) | -0.11 | 17-18 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.60 | Vert(CT) | -0.23 | 17-18 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.46 | Horz(CT) | 0.06 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.07 | 12-14 | >999 | 240 | Weight: 139 lb | FT = 10% |

**LUMBER-**
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-18,9-11: 2x6 SPF No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 3-0-9 oc purlins, except end verticals, and 2-0-0 oc purlins (4-11-9 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 9-5-0 oc bracing.
WEBS 1 Row at midpt 3-15, 6-15, 8-14

**REACTIONS.** (size) 18=0-3-8, 11=0-5-8
Max Horz 18=-271(LC 6)
Max Uplift 18=-191(LC 8), 11=-191(LC 9)
Max Grav 18=1478(LC 1), 11=1478(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2072/244, 3-5=-1507/255, 5-6=-1180/251, 6-8=-1504/254, 8-9=-2075/244, 2-18=-1399/237, 9-11=-1401/237
BOT CHORD 17-18=-382/921, 15-17=-229/1665, 14-15=-20/1179, 12-14=-82/1668, 11-12=-247/745
WEBS 3-17=0/275, 3-15=-640/249, 5-15=-151/572, 6-15=-276/262, 6-14=-75/381, 8-14=-642/248, 8-12=0/282, 2-17=0/916, 9-12=0/925

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 18=191, 11=191.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

December 3,2020




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | G2 | Hip | 1 | 1 | I43839748 |

Job Reference (optional)

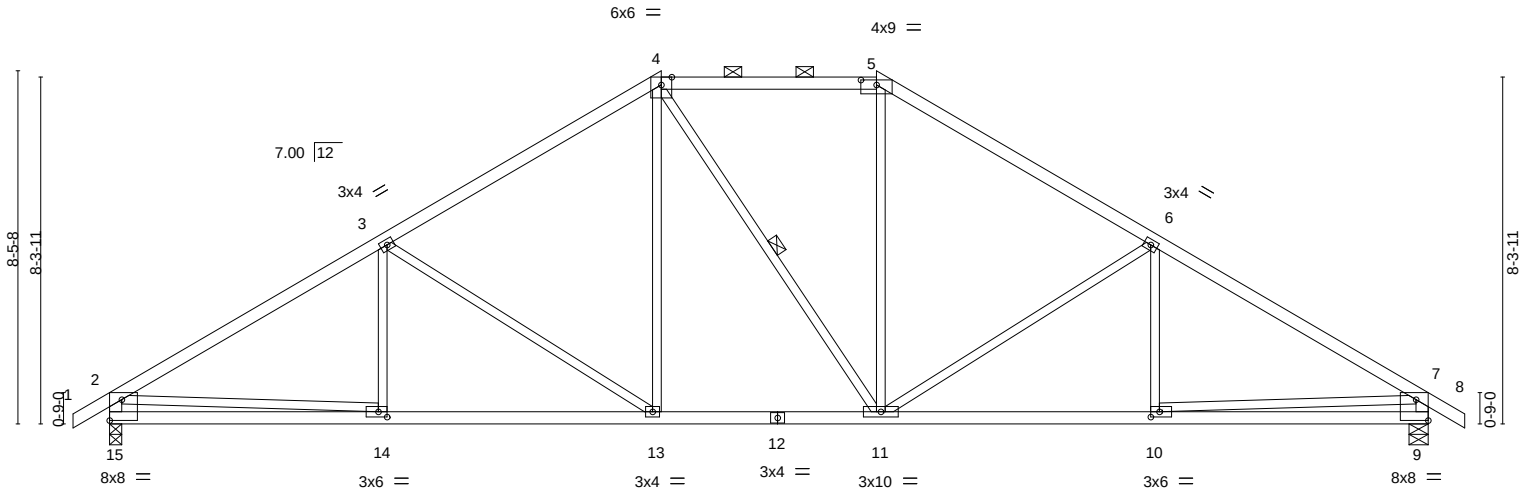
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/30/2020

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:35 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-o2hnuyf2JP6uXeDSdeCUMzyCFSstR83lczu0gfyCyBY

-0-10-8 0-10-8 | 6-6-8 6-6-8 | 13-2-9 6-8-1 | 18-4-7 5-1-14 | 25-0-8 6-8-1 | 31-7-0 6-6-8 | 32-5-8 0-10-8

Scale = 1:55.2




6-6-8 6-6-8 | 13-2-9 6-8-1 | 18-4-7 5-1-14 | 25-0-8 6-8-1 | 31-7-0 6-6-8

Plate Offsets (X,Y)-- [5:0-4-8,0-1-7], [9:Edge,0-6-0], [10:0-2-8,0-1-8], [14:0-2-8,0-1-8], [15:Edge,0-6-0]

| 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 | 0.61 | Vert(LL) | -0.11 | 13-14 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.62 | Vert(CT) | -0.22 | 13-14 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.90 | Horz(CT) | 0.06 | 9 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | Wind(LL) | 0.06 | 13-14 | >999 | 240 | Weight: 129 lb | FT = 10% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x4 SPF No.2 |
| BOT CHORD | 2x4 SPF No.2 |
| WEBS | 2x3 SPF No.2 *Except* 2-15,7-9: 2x4 SPF No.2 |

**BRACING-**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 3-3-12 oc purlins, except end verticals, and 2-0-0 oc purlins (4-8-2 max.): 4-5. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS | 1 Row at midpt 4-11 |

**REACTIONS.** (size) 15=0-3-8, 9=0-5-8
Max Horz 15=233(LC 7)
Max Uplift 15=-175(LC 8), 9=-175(LC 9)
Max Grav 15=1550(LC 15), 9=1547(LC 16)

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

| | |
|---|---|
| TOP CHORD | 2-3=-2219/228, 3-4=-1751/209, 4-5=-1418/234, 5-6=-1745/209, 6-7=-2213/228, 2-15=-1442/209, 7-9=-1438/209 |
| BOT CHORD | 14-15=-250/734, 13-14=-222/1964, 11-13=-37/1450, 10-11=-96/1831, 9-10=-134/575 |
| WEBS | 3-13=-603/219, 4-13=-50/568, 5-11=-30/533, 6-11=-603/219, 2-14=0/1306, 7-10=0/1301 |

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=175, 9=175.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 3,2020



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

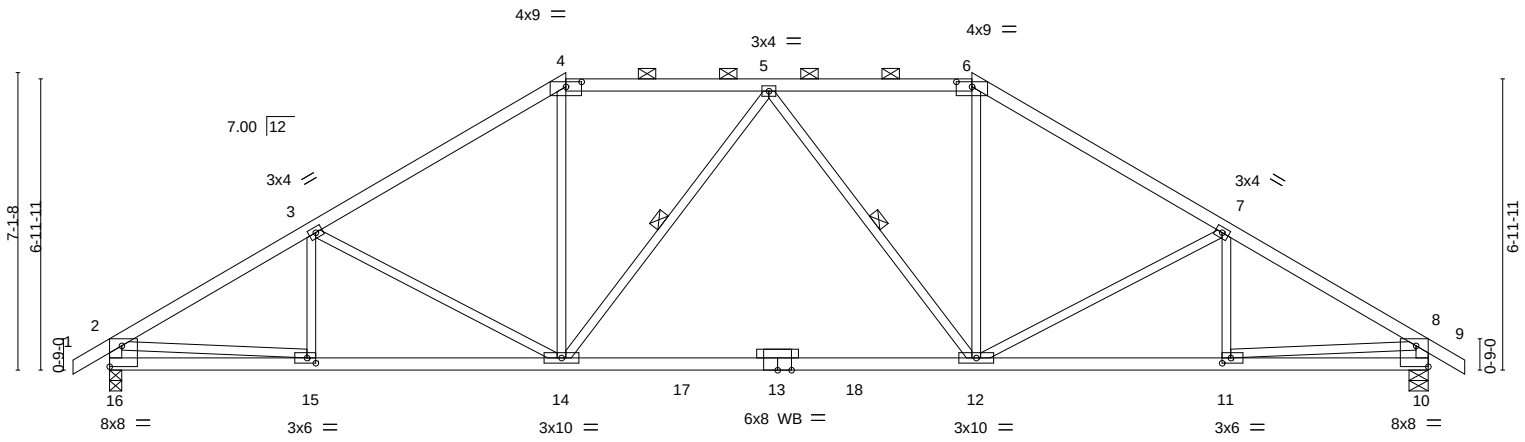
| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | G3 | Hip | 1 | 1 | I43839749 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:36 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-GFF96Hgg4jEl9ooeBMjjuAVNrsClAiWuqddZD6yCyBX

-0-10-8 4-10-0 10-11-2 15-9-8 20-7-14 26-9-0 31-7-0 32-5-8
0-10-8 4-10-0 6-1-2 4-10-6 4-10-6 6-1-2 4-10-0 0-10-8

Scale = 1:55.2




4-10-0 10-11-2 20-7-14 26-9-0 31-7-0
4-10-0 6-1-2 9-8-11 6-1-2 4-10-0

Plate Offsets (X,Y)-- [4:0-4-8,0-1-7], [6:0-4-8,0-1-7], [10:Edge,0-6-0], [11:0-2-8,0-1-8], [15:0-2-8,0-1-8], [16:Edge,0-6-0]

| 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 | 0.62 | Vert(LL) | -0.31 | 12-14 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.58 | Vert(CT) | -0.53 | 12-14 | >713 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.51 | Horz(CT) | 0.05 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.05 | 14 | >999 | 240 | Weight: 127 lb | FT = 10% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x4 SPF No.2 |
| BOT CHORD | 2x4 SPF 2100F 1.8E |
| WEBS | 2x3 SPF No.2 *Except* 2-16,8-10: 2x4 SPF No.2 |
| OTHERS | 2x3 SPF No.2 |

**BRACING-**

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

**REACTIONS.** (size) 16=0-3-8, 10=0-5-8
Max Horz 16=198(LC 7)
Max Uplift 16=-155(LC 8), 10=-155(LC 9)
Max Grav 16=1537(LC 2), 10=1537(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2210/206, 3-4=-1962/171, 4-5=-1615/198, 5-6=-1615/198, 6-7=-1962/171, 7-8=-2210/206, 2-16=-1433/181, 8-10=-1433/180
BOT CHORD 15-16=-170/520, 14-15=-208/1898, 12-14=-117/1736, 11-12=-105/1851, 10-11=-42/387
WEBS 3-14=-371/199, 4-14=0/648, 5-14=-372/192, 5-12=-372/192, 6-12=0/648, 7-12=-371/199, 2-15=-71/1474, 8-11=-64/1474

**NOTES-**

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



December 3,2020



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

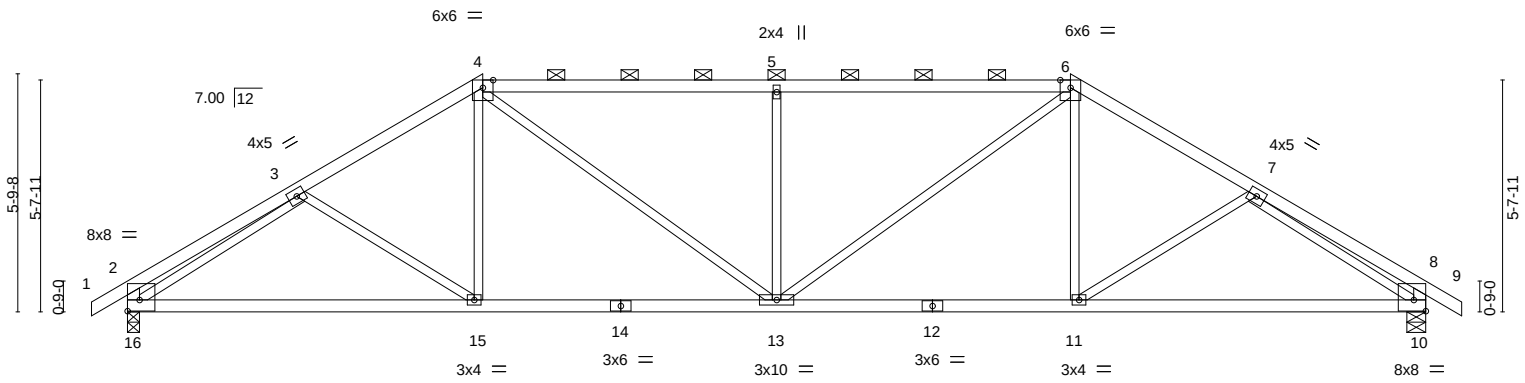
| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | G4 | Hip | 1 | 1 | I43839750 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:37 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-kRpXJdhIr0McnyNql3EyRO2UuGXuv2t13HN7lYyCyBW

| -0-10-8 | 4-2-10 | 8-7-11 | 15-9-8 | 22-11-5 | 27-4-6 | 31-7-0 | 32-5-8 |
|---|---|---|---|---|---|---|---|
| 0-10-8 | 4-2-10 | 4-5-2 | 7-1-13 | 7-1-13 | 4-5-2 | 4-2-10 | 0-10-8 |

Scale = 1:56.1




| 8-7-11 | 15-9-8 | 22-11-5 | 31-7-0 |
|---|---|---|---|
| 8-7-11 | 7-1-13 | 7-1-13 | 8-7-11 |

Plate Offsets (X,Y)-- [2:Edge,0-3-4], [10:Edge,0-3-4]

| 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 | 0.86 | Vert(LL) | -0.13 | 10-11 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.65 | Vert(CT) | -0.27 | 10-11 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.95 | Horz(CT) | 0.09 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.08 | 13 | >999 | 240 | Weight: 121 lb | FT = 10% |

**LUMBER-**
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-16,8-10: 2x4 SPF No.2

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

**REACTIONS.** (size) 16=0-3-8, 10=0-5-8
Max Horz 16=163(LC 7)
Max Uplift 16=-132(LC 8), 10=-132(LC 9)
Max Grav 16=1480(LC 1), 10=1480(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-578/63, 3-4=-1969/176, 4-5=-2136/226, 5-6=-2136/226, 6-7=-1969/176, 7-8=-578/63, 2-16=-486/100, 8-10=-486/100
BOT CHORD 15-16=-237/1702, 13-15=-191/1644, 11-13=-77/1644, 10-11=-96/1702
WEBS 4-15=0/313, 4-13=-209/711, 5-13=-610/245, 6-13=-209/711, 6-11=0/313, 3-16=-1567/140, 7-10=-1567/141

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=132, 10=132.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 3,2020



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

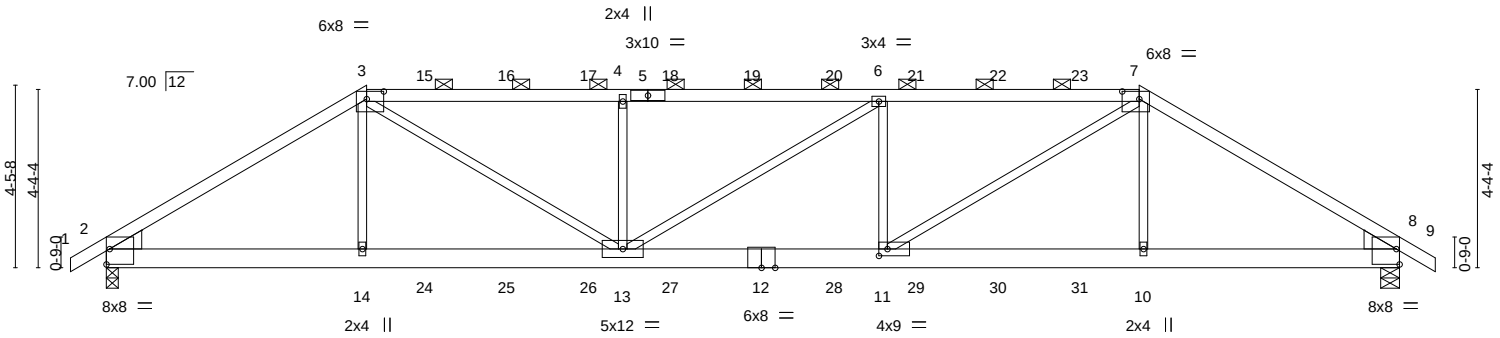
| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | G5 | Hip Girder | 1 | 1 | I43839751 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:38 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-CdNwXzhwcKUTO6y0JnlBzbaeIfqteYmBIx6gH_yCyBV

-0-10-8 6-4-5 12-7-6 18-11-10 25-2-11 31-7-0 32-5-8
0-10-8 6-4-5 6-3-1 6-4-5 6-3-1 6-4-5 0-10-8

Scale = 1:56.3




6-4-5 12-7-6 18-11-10 25-2-11 31-7-0
6-4-5 6-3-1 6-4-5 6-3-1 6-4-5

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

| 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 | 0.94 | Vert(LL) | -0.25 | 11-13 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.86 | Vert(CT) | -0.46 | 11-13 | >819 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.71 | Horz(CT) | 0.12 | 8 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.20 | 11-13 | >999 | 240 | Weight: 130 lb | FT = 10% |

**LUMBER-**
TOP CHORD 2x4 SPF 2100F 1.8E *Except* 3-5,5-7: 2x4 SPF 2400F 2.0E
BOT CHORD 2x6 SPF 1650F 1.4E
WEBS 2x3 SPF No.2
WEDGE
Left: 2x6 SPF No.2 , Right: 2x6 SPF No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 3-1-5 oc purlins, except 2-0-0 oc purlins (2-8-6 max.): 3-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 8-11-7 oc bracing: 11-13.

**REACTIONS.** (size) 2=0-3-8 (req. 0-3-15), 8=0-5-8
Max Horz 2=109(LC 7)
Max Uplift 2=-484(LC 8), 8=-487(LC 9)
Max Grav 2=2524(LC 1), 8=2537(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4194/815, 3-4=-5055/968, 4-6=-5052/967, 6-7=-5052/966, 7-8=-4170/811
BOT CHORD 2-14=-725/3422, 13-14=-722/3405, 11-13=-947/5050, 10-11=-610/3372, 8-10=-613/3389
WEBS 3-14=-128/664, 3-13=-412/2042, 4-13=-815/342, 6-11=-845/363, 7-11=-418/2076, 7-10=-127/657

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) WARNING: Required bearing size at joint(s) 2 greater than input bearing size.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=484, 8=487.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 125 lb down and 77 lb up at 7-9-7, 125 lb down and 77 lb up at 9-9-7, 125 lb down and 77 lb up at 11-9-7, 125 lb down and 77 lb up at 13-9-7, 125 lb down and 77 lb up at 15-9-8, 125 lb down and 77 lb up at 17-9-8, 125 lb down and 77 lb up at 19-9-8, and 125 lb down and 77 lb up at 21-9-8, and 125 lb down and 77 lb up at 23-9-8 on top chord, and 429 lb down and 221 lb up at 6-4-5, 60 lb down at 7-9-7, 60 lb down at 9-9-7, 60 lb down at 11-9-7, 60 lb down at 13-9-7, 60 lb down at 15-9-8, 60 lb down at 17-9-8, 60 lb down at 19-9-8, 60 lb down at 21-9-8, and 60 lb down at 23-9-8, and 429 lb down and 221 lb up at 25-2-11 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

Continued on page 2



December 3,2020



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | G5 | Hip Girder | 1 | 1 | I43839751 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:38 2020 Page 2
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-CdNwXzhwcKUTO6y0JnlBzbaeIfqteYmBIx6gH_yCyBV

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-70, 3-7=-70, 7-9=-70, 2-8=-20
   Concentrated Loads (lb)
   Vert: 12=-45(B) 14=-429(B) 10=-429(B) 15=-93(B) 16=-93(B) 17=-93(B) 18=-93(B) 19=-93(B) 20=-93(B) 21=-93(B) 22=-93(B) 23=-93(B) 24=-45(B) 25=-45(B) 26=-45(B) 27=-45(B) 28=-45(B) 29=-45(B) 30=-45(B) 31=-45(B)

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/30/2020

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | J4 | Jack-Closed Supported Gable | 2 | 1 | I43839752 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:52 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-oKDCTmsiJdFU4F0j7j?TYYAF1JoVw2NFW6VPnAyCyBH

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

Scale = 1:7.4

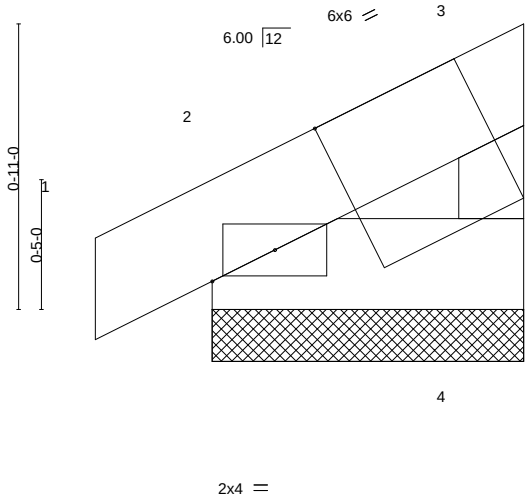



Plate Offsets (X,Y)-- [3:0-6-3,Edge]

| 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 | 0.03 | Vert(LL) | 0.00 | 1 | n/r | 120 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.00 | Vert(CT) | -0.00 | 1 | n/r | 120 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.00 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-P | | | | | | | Weight: 3 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 1-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 4=1-0-0, 2=1-0-0
Max Horz 2=25(LC 5)
Max Uplift 4=-9(LC 16), 2=-26(LC 8)
Max Grav 4=12(LC 4), 2=106(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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 2-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

December 3,2020




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | J5 | Jack-Closed | 2 | 1 | I43839753 |

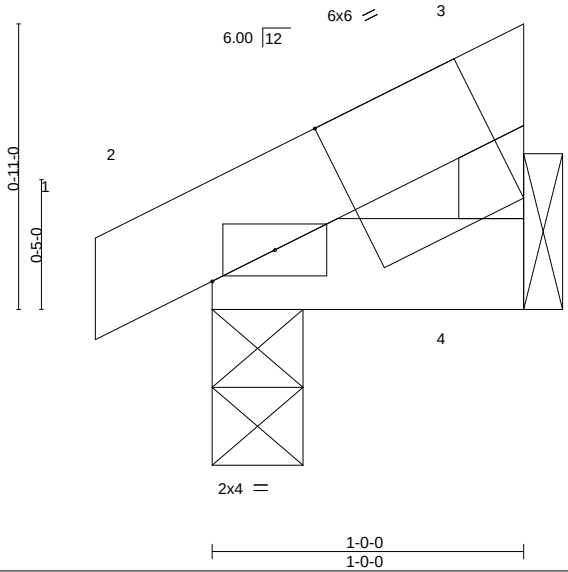
Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:53 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-GWnag5tL4xNLiPbvhQXi4miQ5i8gfVdOlmFzJdyCyBG

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/30/2020

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

Scale = 1:7.4




1-0-0
1-0-0

Plate Offsets (X,Y)-- [3:0-6-3,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 | 0.01 | Vert(LL) | -0.00 | 2 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.01 | Vert(CT) | -0.00 | 2 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.00 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-P | | Wind(LL) | 0.00 | 2 | **** | 240 | Weight: 3 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 1-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 4=Mechanical, 2=0-3-8
Max Horz 2=25(LC 5)
Max Uplift 4=-9(LC 8), 2=-15(LC 8)
Max Grav 4=32(LC 1), 2=74(LC 1)

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

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

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

December 3,2020




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | J6 | Diagonal Hip Girder | 2 | 1 | I43839754 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:55 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-CvvL5nvbcYd2xjIlorZAABnjXWpI7P7hC4k3OVyCyBE

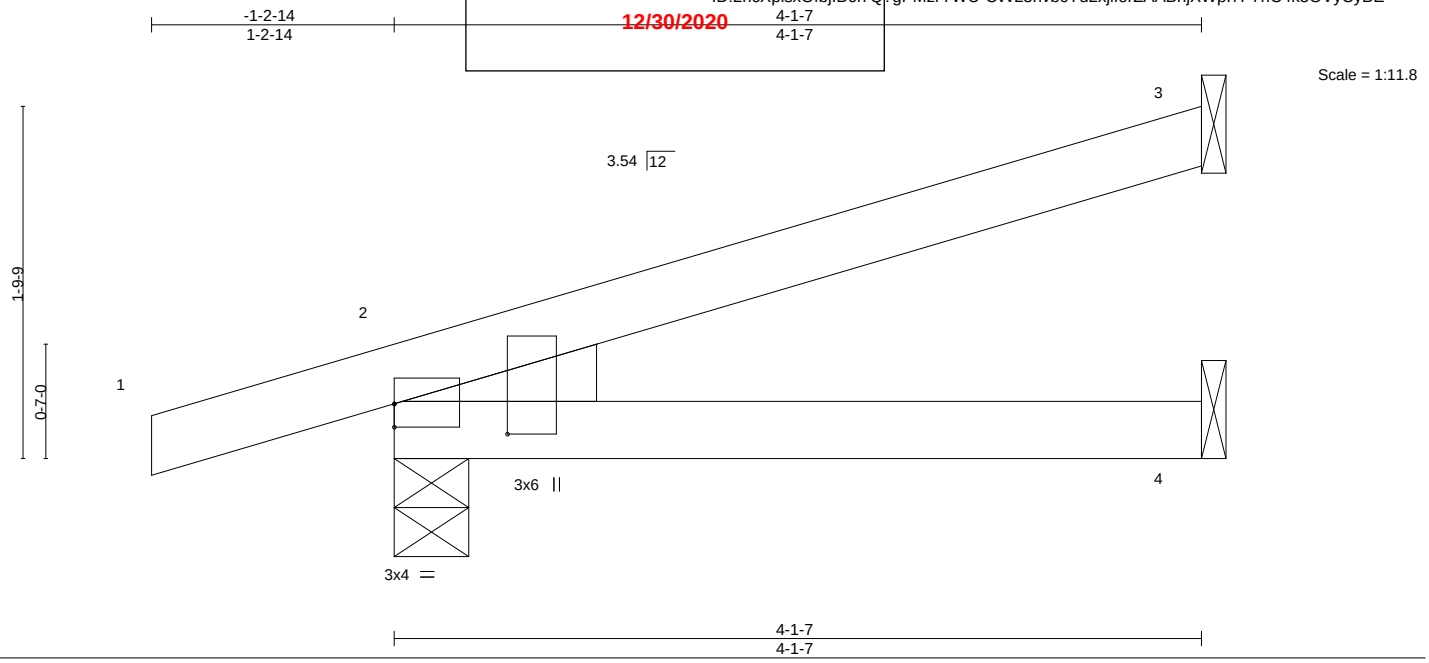



Plate Offsets (X,Y)-- [2:0-0-0,0-1-7], [2:0-1-14,0-6-15]

| 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 | 0.21 | Vert(LL) | -0.01 | 2-4 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.12 | Vert(CT) | -0.02 | 2-4 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.00 | Horz(CT) | -0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-P | | Wind(LL) | 0.00 | 2 | **** | 240 | Weight: 12 lb | FT = 10% |

**LUMBER-**
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2

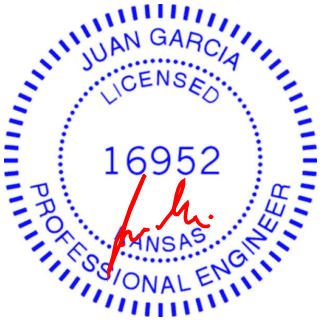
**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 4-1-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 3=Mechanical, 2=0-4-9, 4=Mechanical
Max Horz 2=69(LC 6)
Max Uplift 3=-58(LC 6), 2=-96(LC 6)
Max Grav 3=76(LC 1), 2=147(LC 1), 4=65(LC 3)

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

**NOTES-**
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 30 lb down and 11 lb up at -1-2-14, and 30 lb down and 11 lb up at -1-2-14 on top chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Concentrated Loads (lb)
Vert: 1=-46(F=-23, B=-23)
Trapezoidal Loads (plf)
Vert: 1=0(F=35, B=35)-to-2=-25(F=23, B=23), 2=-3(F=33, B=33)-to-3=-72(F=-1, B=-1), 2=-0(F=10, B=10)-to-4=-21(F=-0, B=-0)


December 3,2020



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/30/2020

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | J7 | Jack-Open | 5 | 1 | I43839755 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:56 2020 Page 1
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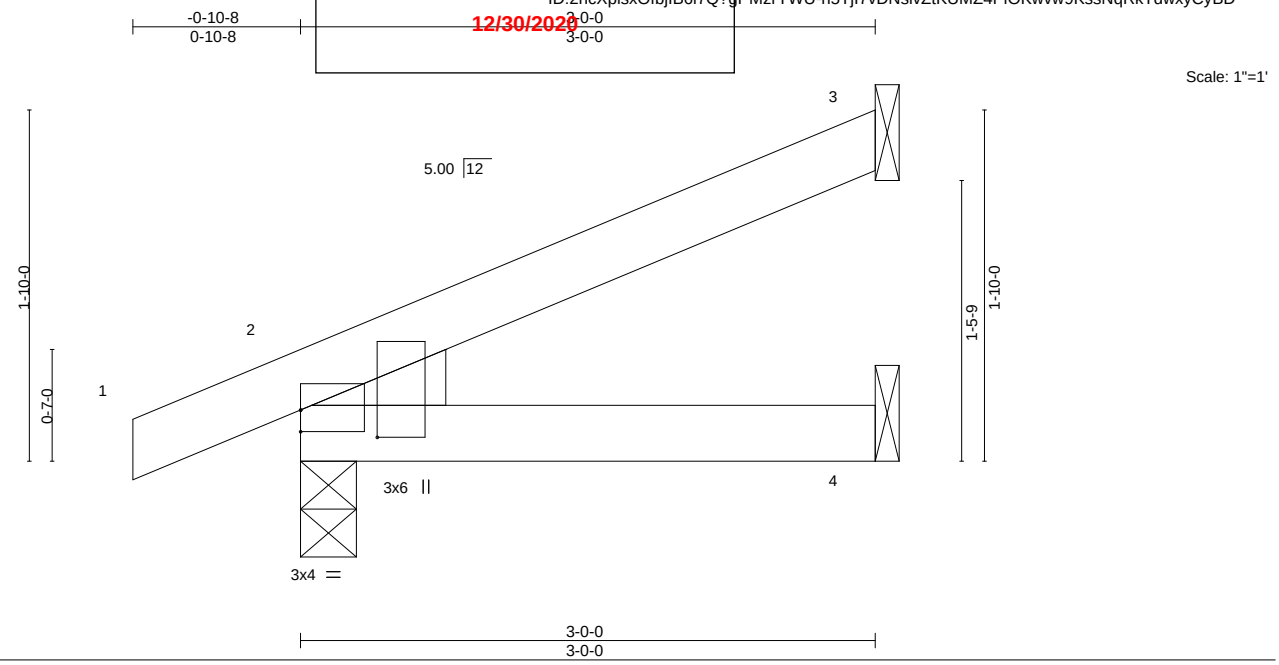



Plate Offsets (X,Y)-- [2:0-0-0,0-1-6], [2:0-1-11,0-4-13]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.10 | Vert(LL) | -0.00 | 2-4 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.07 | Vert(CT) | -0.01 | 2-4 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-P | | Wind(LL) | 0.00 | 2 | **** | 240 | Weight: 9 lb | FT = 10% |

**LUMBER-**
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 3-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=64(LC 8)
Max Uplift 3=-52(LC 8), 2=-35(LC 8)
Max Grav 3=85(LC 1), 2=210(LC 1), 4=56(LC 3)

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

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



December 3,2020



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | J8 | Diagonal Hip Girder | 1 | 1 | I43839756 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:57 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-9H15WTwr7AtmA0ugwGbeFct1qKTfbJc_fODASOyCyBC

-1-11-8 1-11-8 | 4-10-8 4-10-8

Scale = 1:14.2

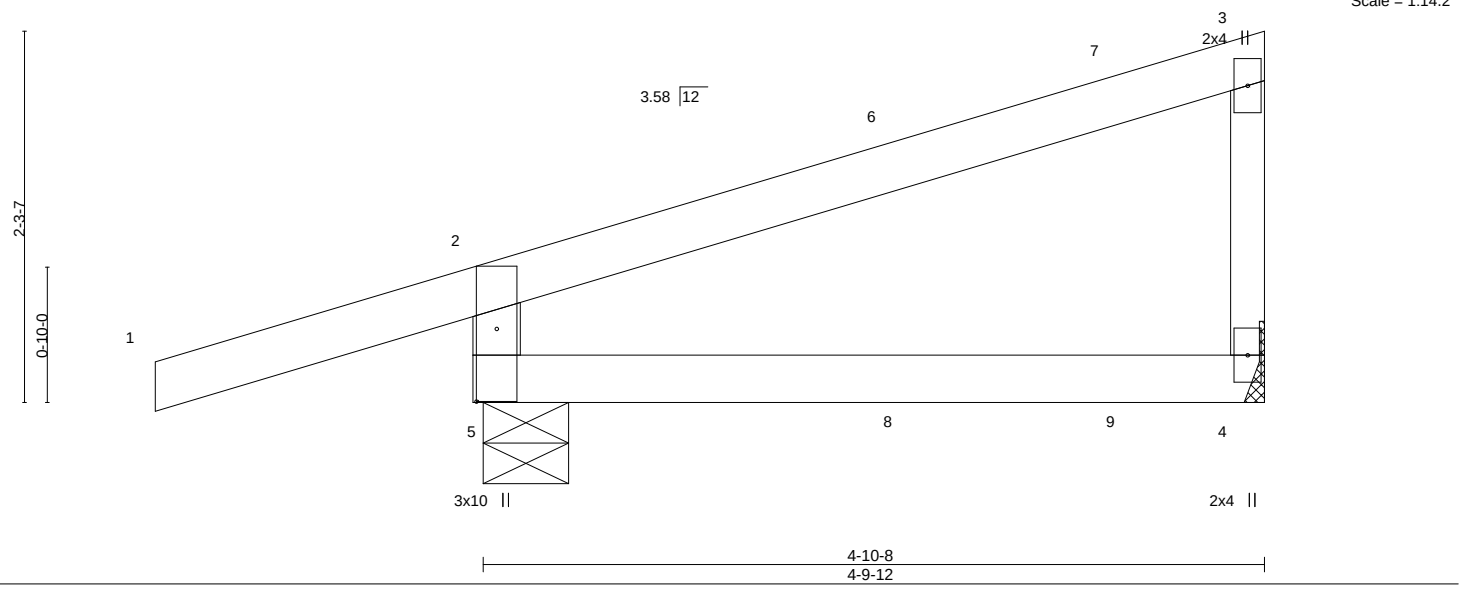



Plate Offsets (X,Y)-- [5:0-5-6,0-1-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.35 | Vert(LL) | -0.02 | 4-5 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.20 | Vert(CT) | -0.04 | 4-5 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.00 | Horz(CT) | -0.00 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-R | | Wind(LL) | 0.01 | 4-5 | >999 | 240 | Weight: 16 lb | FT = 10% |

**LUMBER-**
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except*
3-4: 2x3 SPF No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 4-10-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 5=0-6-5, 4=Mechanical
Max Horz 5=96(LC 5)
Max Uplift 5=-148(LC 4), 4=-63(LC 5)
Max Grav 5=395(LC 1), 4=222(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-351/175

**NOTES-**
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=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.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 64 lb down and 21 lb up at 2-8-8, and 105 lb down and 83 lb up at 4-1-0 on top chord, and 7 lb down and 10 lb up at 2-8-8, and 30 lb down at 4-1-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 4-5=-20
Concentrated Loads (lb)
Vert: 7=-43(F) 8=5(B) 9=-15(F)



December 3,2020



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | J9 | Jack-Open | 1 | 1 | I43839757 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:59 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-5g8sx9y5fn8UQK231hd6K1yRd7Bw3D6H7iiHXGyCyBA

**RELEASE FOR CONSTRUCTION**
**AS NOTED ON PLANS REVIEW**
**DEVELOPMENT SERVICES**
**LEE'S SUMMIT, MISSOURI**
**12/30/2020**

-0-10-8 1-2-3
0-10-8 1-2-3

Scale = 1:11.1

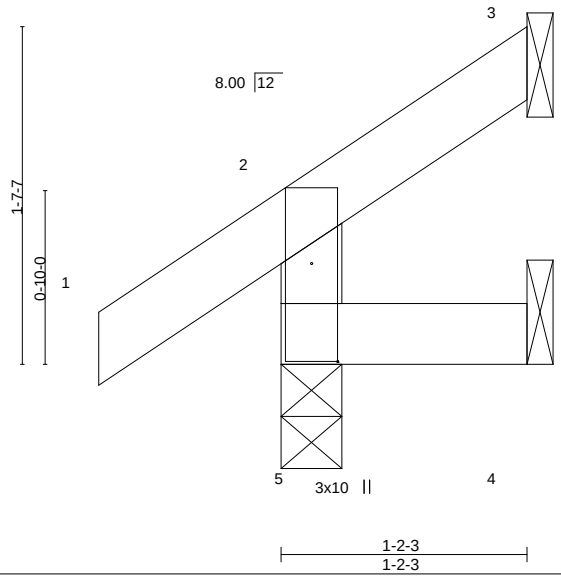



Plate Offsets (X,Y)-- [5:0-5-10,0-1-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.07 | Vert(LL) | 0.00 | 5 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.02 | Vert(CT) | -0.00 | 5 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-R | | Wind(LL) | 0.00 | 5 | >999 | 240 | Weight: 5 lb | FT = 10% |

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

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 1-2-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=43(LC 8)
Max Uplift 5=-14(LC 8), 3=-22(LC 8), 4=-5(LC 8)
Max Grav 5=153(LC 1), 3=17(LC 15), 4=17(LC 3)

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

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

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

December 3,2020




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | J10 | Jack-Open | 1 | 1 | I43839758 |

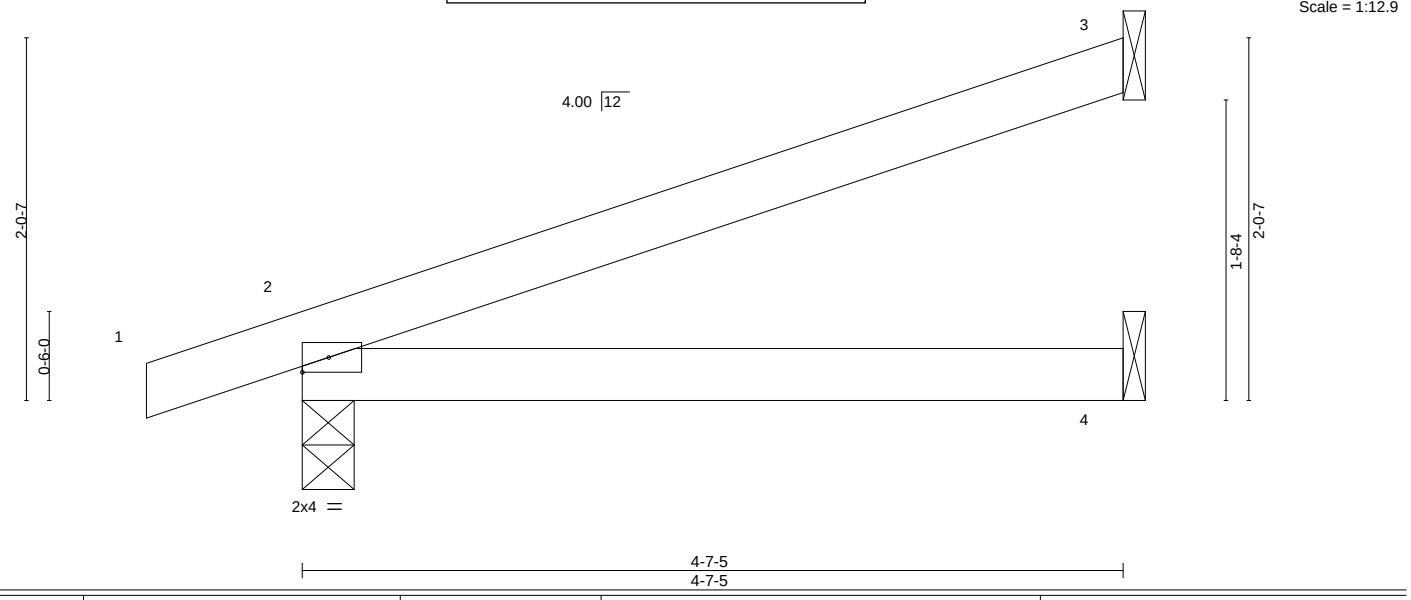
Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:39 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-gqxIkJiZNecK0FWDsUGQWp7yi3KONA9KXbsDpRyCyBU

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/30/2020

-0-10-8
0-10-8
4-7-5
4-7-5

Scale = 1:12.9




4-7-5
4-7-5

| 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 | 0.33 | Vert(LL) | -0.02 | 2-4 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.20 | Vert(CT) | -0.05 | 2-4 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-P | | Wind(LL) | 0.00 | 2 | **** | 240 | Weight: 12 lb | FT = 10% |

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

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 4-7-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=75(LC 4)
Max Uplift 3=-74(LC 8), 2=-72(LC 4)
Max Grav 3=146(LC 1), 2=278(LC 1), 4=88(LC 3)

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

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



December 3,2020



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | J11 | Jack-Open | 3 | 1 | I43839759 |

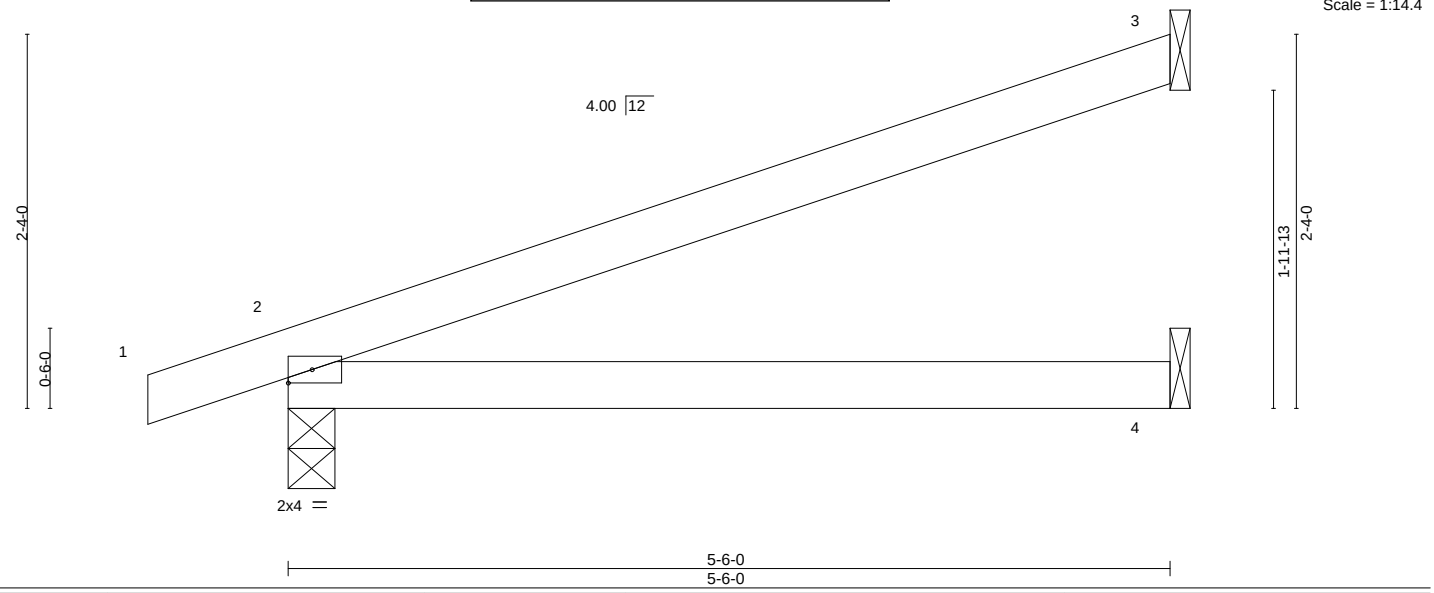
Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:39 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-gqxIkJiZNecK0FWDsUGQWp7wx3JtNA9KXbsDpRyCyBU

**RELEASE FOR CONSTRUCTION**
**AS NOTED ON PLANS REVIEW**
**DEVELOPMENT SERVICES**
**LEE'S SUMMIT, MISSOURI**
**12/30/2020**

-0-10-8
0-10-8
5-6-0
5-6-0

Scale = 1:14.4




5-6-0
5-6-0

| 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 | 0.50 | Vert(LL) | -0.05 | 2-4 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.30 | Vert(CT) | -0.09 | 2-4 | >675 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-P | | Wind(LL) | 0.00 | 2 | **** | 240 | Weight: 14 lb | FT = 10% |

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

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

**REACTIONS.** (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=87(LC 4)
Max Uplift 3=-90(LC 8), 2=-76(LC 4)
Max Grav 3=178(LC 1), 2=316(LC 1), 4=106(LC 3)

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

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

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
ARKANSAS
PROFESSIONAL ENGINEER

December 3,2020




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/3/2020

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | J12 | Jack-Closed Girder | 1 | 1 | I43839760 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:40 2020 Page 1
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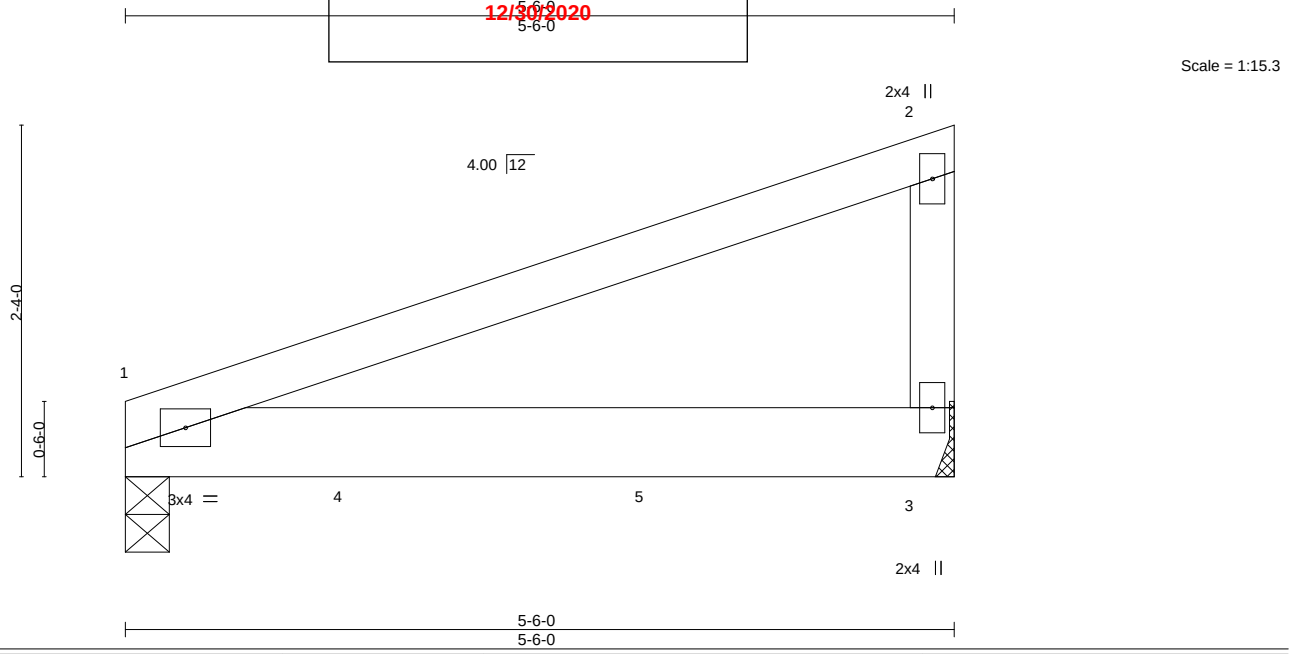


| LOADING (psf) | | SPACING- 2-0-0 | | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.60 | Vert(LL) | -0.10 | 1-3 | >616 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.77 | Vert(CT) | -0.19 | 1-3 | >334 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.00 | Horz(CT) | -0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-P | | Wind(LL) | 0.07 | 1-3 | >901 | 240 | Weight: 21 lb | FT = 10% |

**LUMBER-**
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SP DSS
WEBS 2x4 SPF No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 5-6-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-1-2 oc bracing.

**REACTIONS.** (size) 1=0-3-8, 3=Mechanical
Max Horz 1=85(LC 5)
Max Uplift 1=-157(LC 4), 3=-155(LC 8)
Max Grav 1=1162(LC 1), 3=1037(LC 1)

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

**NOTES-**
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=157, 3=155.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 865 lb down and 120 lb up at 1-6-12, and 865 lb down and 120 lb up at 3-6-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 1-3=-20
Concentrated Loads (lb)
Vert: 4=-865(F) 5=-865(F)



December 3,2020



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 | |
|---|---|---|---|---|---|---|
| W0 73 | J13 | Diagonal Hip Girder | 1 | 1 | Job Reference (optional) | I43839761 |

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/30/2020

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:41 2020 Page 1
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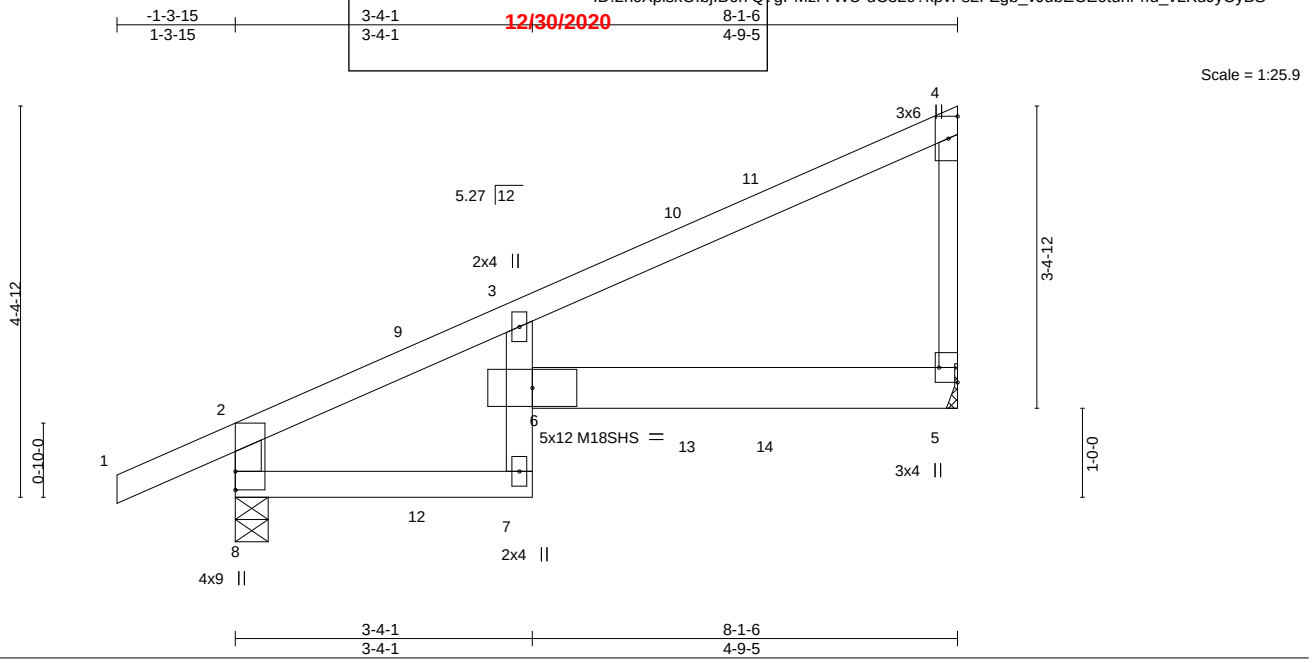


Plate Offsets (X,Y)-- [5:Edge,0-2-8]

| 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 | 0.59 | Vert(LL) | -0.13 | 6 | >723 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.66 | Vert(CT) | -0.23 | 6 | >407 | 240 | M18SHS | 197/144 |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.00 | Horz(CT) | 0.08 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-R | | Wind(LL) | 0.16 | 6 | >578 | 240 | Weight: 29 lb | FT = 10% |

**LUMBER-**
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
5-6: 2x6 SPF No.2
WEBS 2x4 SPF No.2 *Except*
4-5: 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) 8=0-4-7, 5=Mechanical
Max Horz 8=167(LC 5)
Max Uplift 8=-115(LC 8), 5=-154(LC 5)
Max Grav 8=483(LC 1), 5=383(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-435/134, 2-3=-485/109
BOT CHORD 7-8=-166/331

**NOTES-**
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) All plates are MT20 plates unless otherwise indicated.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=115, 5=154.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 81 lb down and 35 lb up at 2-1-10, 79 lb down and 50 lb up at 3-4-11, and 109 lb down and 65 lb up at 5-2-1, and 104 lb down and 63 lb up at 6-0-9 on top chord, and 6 lb down and 2 lb up at 2-1-10, 9 lb down and 12 lb up at 3-2-5, and 32 lb down and 36 lb up at 5-2-1, and 36 lb down and 32 lb up at 6-0-9 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-4=-70, 7-8=-20, 5-6=-20

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

December 3,2020

Continued on page 2



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | J13 | Diagonal Hip Girder | 1 | 1 | I43839761 |

Job Reference (optional)



**LOAD CASE(S)** Standard
Concentrated Loads (lb)
Vert: 7=0(F) 10=-7(B) 11=-8(F) 12=2(B) 13=-28(B) 14=-14(F)

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | J14 | Diagonal Hip Girder | 2 | 1 | I43839762 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:42 2020 Page 1
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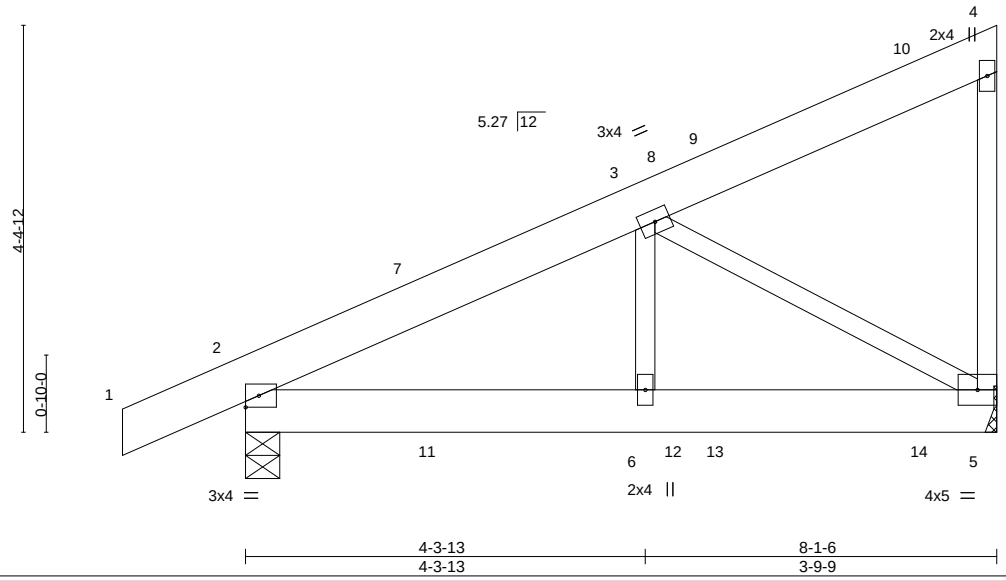
Scale = 1:24.9




4-3-13 / 4-3-13 | 8-1-6 / 3-9-9

| 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 | 0.22 | Vert(LL) | -0.00 | 6 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.13 | Vert(CT) | -0.01 | 6 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.20 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-P | | Wind(LL) | 0.01 | 6 | >999 | 240 | Weight: 41 lb | FT = 10% |

**LUMBER-**
TOP CHORD 2x6 SPF No.2
BOT CHORD 2x6 SPF No.2
WEBS 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) 5=Mechanical, 2=0-4-7
Max Horz 2=172(LC 5)
Max Uplift 5=-190(LC 5), 2=-117(LC 8)
Max Grav 5=459(LC 1), 2=483(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-582/112
BOT CHORD 2-6=-166/402, 5-6=-166/402
WEBS 3-5=-454/191

**NOTES-**
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=190, 2=117.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 73 lb down and 27 lb up at 2-0-12, 81 lb down and 35 lb up at 2-1-10, 96 lb down and 72 lb up at 4-8-10, and 115 lb down and 83 lb up at 5-2-1, and 127 lb down and 129 lb up at 7-4-8 on top chord, and 7 lb down and 9 lb up at 2-0-12, 6 lb down and 2 lb up at 2-1-10, 19 lb down at 4-8-10, and 26 lb down at 5-2-1, and 53 lb down at 7-4-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-70, 2-5=-20
Concentrated Loads (lb)
Vert: 9=-9(F) 10=-84(B) 11=6(F=2, B=4) 12=-4(B) 13=-14(F) 14=-26(B)



December 3,2020



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | J14A | Diagonal Hip Girder | 1 | 1 | I43839763 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:42 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-5PdQMLlRgZ_utjFoYdq78RlUXHMjaV1mDZ4tQlyCyBR

-1-3-15 / 1-3-15 | 4-3-13 / 4-3-13 | 8-1-6 / 3-9-9

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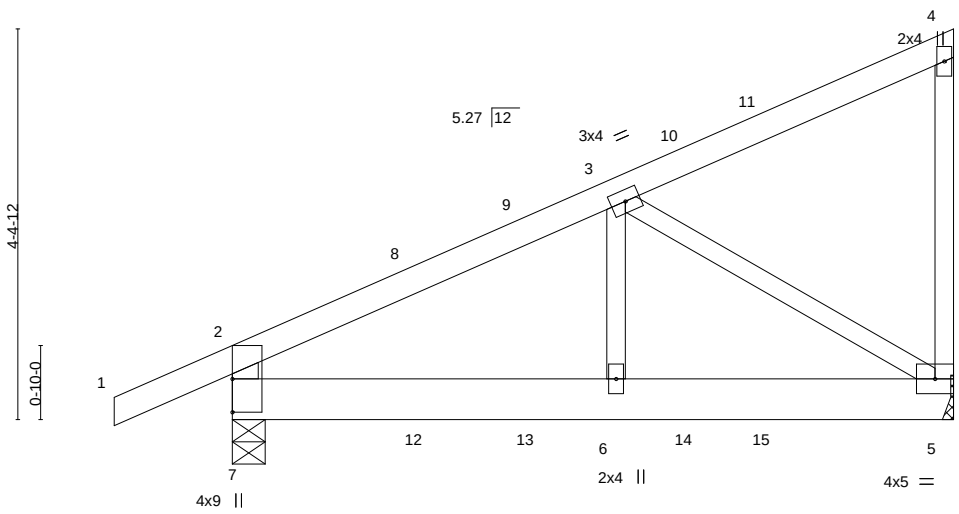



4-3-13 / 4-3-13 | 8-1-6 / 3-9-9

| 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 | 0.29 | Vert(LL) | -0.01 | 6 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.16 | Vert(CT) | -0.02 | 6 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.18 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.01 | 6 | >999 | 240 | Weight: 35 lb | FT = 10% |

**LUMBER-**
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-7: 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.** (size) 7=0-4-7, 5=Mechanical
Max Horz 7=182(LC 22)
Max Uplift 7=-109(LC 8), 5=-138(LC 5)
Max Grav 7=483(LC 1), 5=387(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-409/123, 2-3=-500/101
BOT CHORD 6-7=-164/357, 5-6=-164/357
WEBS 3-5=-399/173

**NOTES-**
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=109, 5=138.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 81 lb down and 35 lb up at 2-1-10, 79 lb down and 50 lb up at 3-4-11, and 115 lb down and 83 lb up at 5-2-1, and 112 lb down and 87 lb up at 6-0-9 on top chord, and 6 lb down and 2 lb up at 2-1-10, 9 lb down and 12 lb up at 3-4-11, and 26 lb down at 5-2-1, and 29 lb down at 6-0-9 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-4=-70, 5-7=-20
Concentrated Loads (lb)
Vert: 10=-9(F) 11=-21(B) 12=2(F) 13=0(B) 14=-14(F) 15=-17(B)



December 3,2020



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

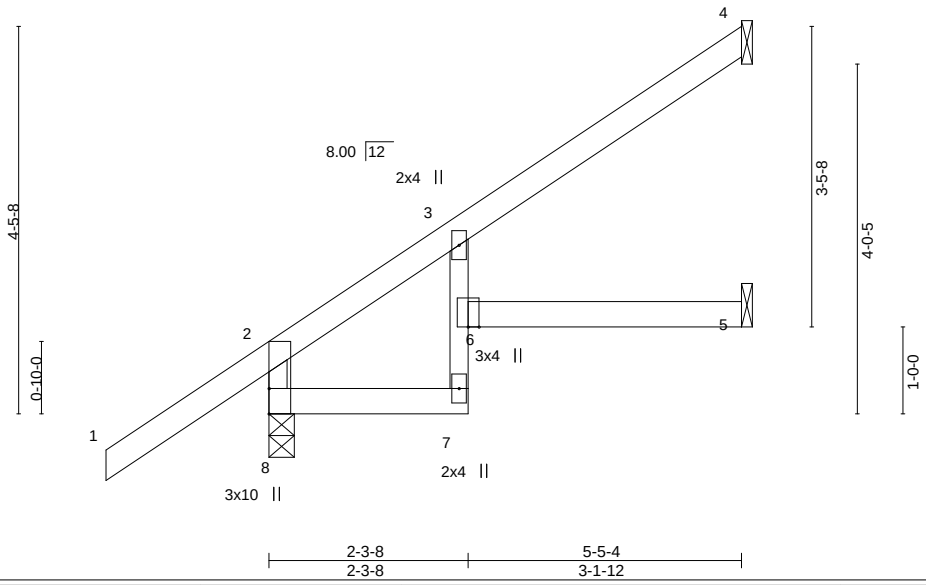
| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | J15A | Jack-Open | 1 | 1 | I43839764 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:44 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-1nkBn0mhBAFc61PAf1sbDsqpf4132RO3gtZ_VeyCyBP

-1-10-8 / 1-10-8 | 2-3-8 / 2-3-8 | 5-5-4 / 3-1-12

Scale = 1:26.5




2-3-8 / 2-3-8 | 5-5-4 / 3-1-12

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.31 | Vert(LL) | -0.04 | 6 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.23 | Vert(CT) | -0.09 | 6 | >736 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.04 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-R | | Wind(LL) | 0.07 | 6 | >873 | 240 | Weight: 18 lb | FT = 10% |

**LUMBER-**
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
3-7: 2x3 SPF No.2
WEBS 2x3 SPF No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 5-5-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 8=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 8=181(LC 8)
Max Uplift 8=-36(LC 8), 4=-90(LC 8), 5=-8(LC 8)
Max Grav 8=402(LC 1), 4=155(LC 15), 5=86(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-369/69

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



December 3,2020



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | J16 | Jack-Open | 17 | 1 | I43839765 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:44 2020 Page 1
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**RELEASE FOR CONSTRUCTION**
**AS NOTED ON PLANS REVIEW**
**DEVELOPMENT SERVICES**
**LEE'S SUMMIT, MISSOURI**
**12/30/2020**

-0-10-8
0-10-8
5-5-4
5-5-4

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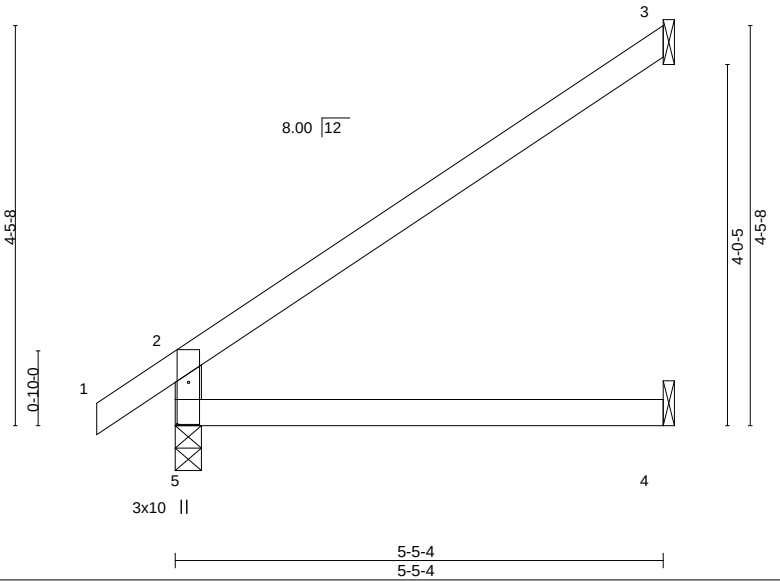



Plate Offsets (X,Y)-- [5:0-5-10,0-1-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.43 | Vert(LL) | -0.03 | 4-5 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.26 | Vert(CT) | -0.08 | 4-5 | >791 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.04 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-R | | Wind(LL) | 0.04 | 4-5 | >999 | 240 | Weight: 16 lb | FT = 10% |

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

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 5-5-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=110(LC 8)
Max Uplift 3=-69(LC 8)
Max Grav 5=314(LC 1), 3=168(LC 13), 4=100(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-275/28

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

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

December 3,2020




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | J17A | Jack-Open | 4 | 1 | I43839766 |

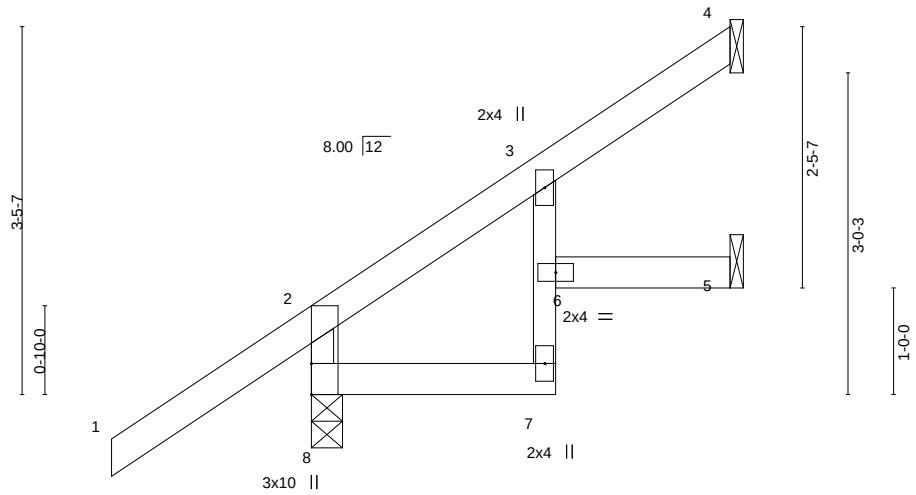
Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:45 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-V_IZ?MnJyUNTkA_NDlNqm4N_vUPXnueDvXJY14yCyBO

**RELEASE FOR CONSTRUCTION**
**AS NOTED ON PLANS REVIEW**
**DEVELOPMENT SERVICES**
**LEE'S SUMMIT, MISSOURI**
**12/30/2020**

-1-10-8 / 1-10-8 | 2-3-8 / 2-3-8 | 3-11-2 / 1-7-10

Scale = 1:21.6




2-3-8 / 2-3-8 | 3-11-2 / 1-7-10

| 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 | 0.28 | Vert(LL) | -0.01 | 6 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.09 | Vert(CT) | -0.02 | 7 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.01 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-R | | Wind(LL) | 0.01 | 6 | >999 | 240 | Weight: 14 lb | FT = 10% |

**LUMBER-**
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
3-7: 2x3 SPF No.2
WEBS 2x3 SPF No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 3-11-2 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 8=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 8=140(LC 8)
Max Uplift 8=-41(LC 8), 4=-54(LC 8), 5=-14(LC 8)
Max Grav 8=344(LC 1), 4=99(LC 15), 5=56(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-313/69

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

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

December 3,2020




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | J18 | Jack-Open | 2 | 1 | I43839767 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:45 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-V_IZ?MnJyUNTkA_NDlNqm4N19UQJnueDvXJY14yCyBO

**RELEASE FOR CONSTRUCTION**
**AS NOTED ON PLANS REVIEW**
**DEVELOPMENT SERVICES**
**LEE'S SUMMIT, MISSOURI**
**12/30/2020**

-0-10-8 2-2-2
0-10-8 2-2-2

Scale = 1:14.4

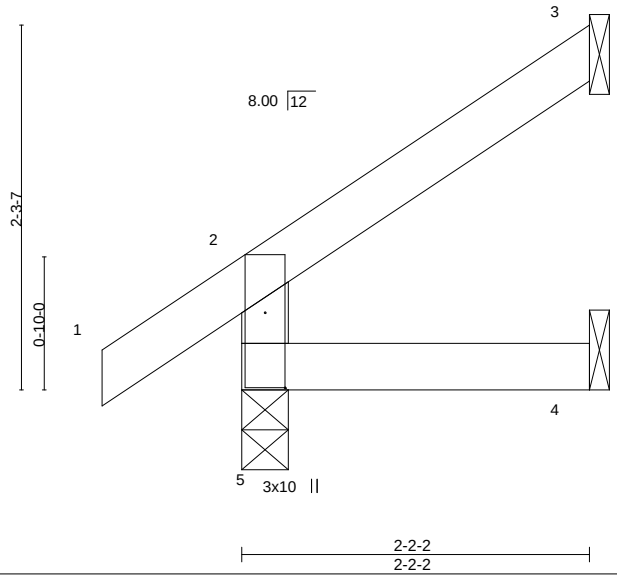



Plate Offsets (X,Y)-- [5:0-5-10,0-1-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.07 | Vert(LL) | -0.00 | 5 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.04 | Vert(CT) | -0.00 | 4-5 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-R | | Wind(LL) | 0.00 | 4-5 | >999 | 240 | Weight: 7 lb | FT = 10% |

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

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

**REACTIONS.** (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=69(LC 8)
Max Uplift 5=-10(LC 8), 3=-45(LC 8), 4=-2(LC 8)
Max Grav 5=179(LC 1), 3=60(LC 15), 4=36(LC 3)

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

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

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

December 3,2020




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

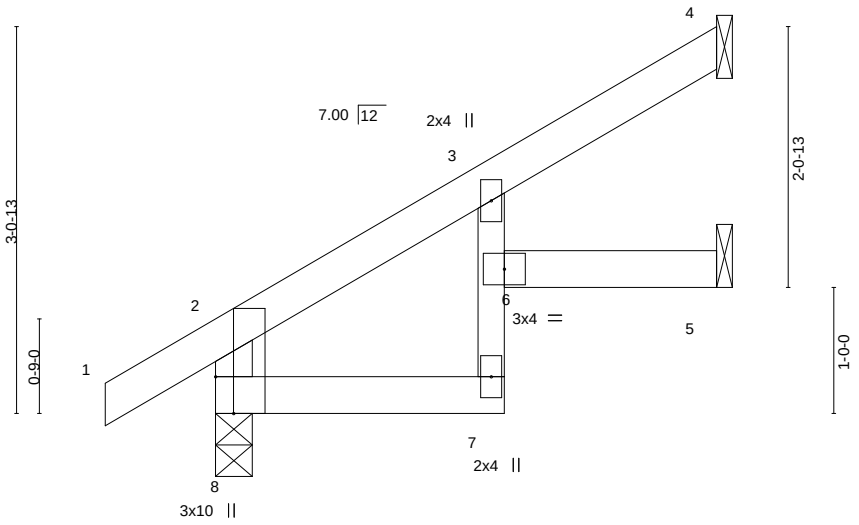
| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | J19 | Jack-Open | 1 | 1 | I43839768 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:46 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-zAsxCioyjnVKMKZZnSv3IHwBwujDWLuM8A25ZXyCyBN

-0-10-8 / 0-10-8 | 2-3-8 / 2-3-8 | 3-11-11 / 1-8-3

Scale = 1:18.3




2-3-8 / 2-3-8 | 3-11-11 / 1-8-3

Plate Offsets (X,Y)-- [8:0-3-8,Edge]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.14 | Vert(LL) | -0.01 | 6 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.19 | Vert(CT) | -0.02 | 7 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.01 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-R | | Wind(LL) | 0.02 | 7 | >999 | 240 | Weight: 13 lb | FT = 10% |

**LUMBER-**
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
3-7: 2x3 SPF No.2
WEBS 2x4 SPF No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 3-11-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 8=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 8=103(LC 8)
Max Uplift 8=-19(LC 8), 4=-52(LC 8), 5=-15(LC 8)
Max Grav 8=251(LC 1), 4=106(LC 15), 5=64(LC 15)

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

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



December 3,2020



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | J20 | Jack-Open | 4 | 1 | I43839769 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:46 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-zAsxCioyjnVKMKZZnSv3IHwCwulsWLuM8A25ZXyCyBN

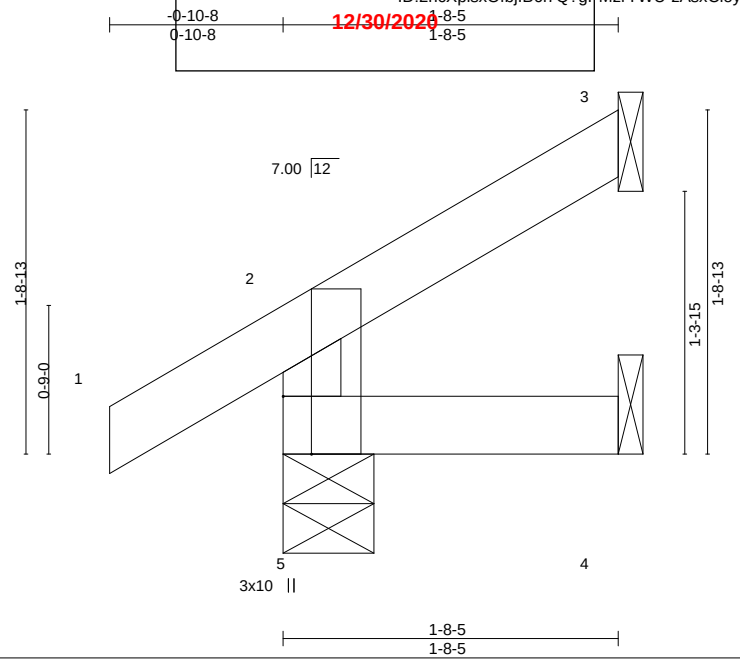



Plate Offsets (X,Y)-- [5:0-3-8,Edge]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.07 | Vert(LL) | -0.00 | 5 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.02 | Vert(CT) | -0.00 | 5 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-R | | Wind(LL) | 0.00 | 5 | >999 | 240 | Weight: 6 lb | FT = 10% |

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

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 1-8-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 5=0-5-8, 3=Mechanical, 4=Mechanical
Max Horz 5=50(LC 8)
Max Uplift 5=-19(LC 8), 3=-30(LC 8)
Max Grav 5=164(LC 1), 3=40(LC 15), 4=27(LC 3)

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

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



December 3,2020



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | J21 | Jack-Open | 1 | 1 | I43839770 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:47 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-RMQJP2oaU5dBzU8lKAQIrVSLjI4RFn8WMqoe5zyCyBM

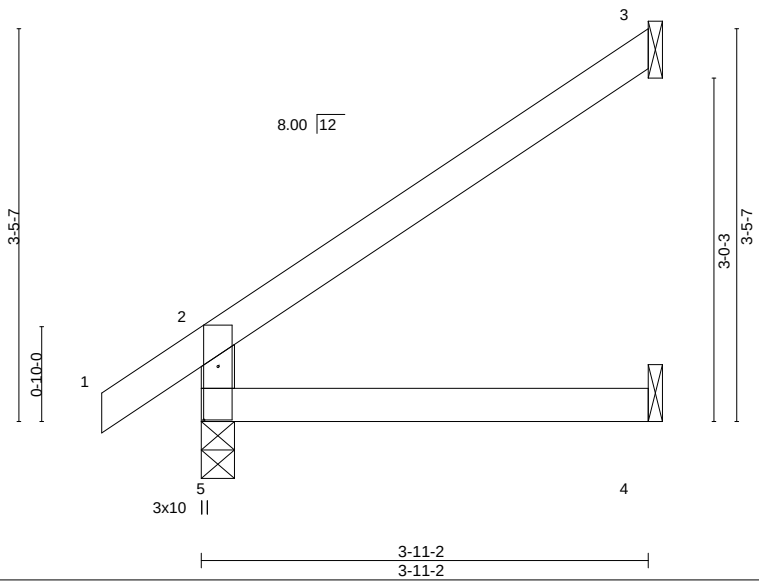



Plate Offsets (X,Y)-- [5:0-5-10,0-1-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.20 | Vert(LL) | -0.01 | 4-5 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.12 | Vert(CT) | -0.02 | 4-5 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.02 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-R | | Wind(LL) | 0.01 | 4-5 | >999 | 240 | Weight: 12 lb | FT = 10% |

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

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 3-11-2 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=116(LC 8)
Max Uplift 5=-7(LC 8), 3=-82(LC 8)
Max Grav 5=249(LC 1), 3=122(LC 15), 4=70(LC 3)

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

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



December 3,2020



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | J22 | Jack-Open | 3 | 1 | I43839771 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:47 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-RMQJP2oaU5dBzU8lKAQIrVSLeI4PFn8WMqoe5zyCyBM

-0-10-8 0-10-8 | 3-11-11 3-11-11

Scale = 1:18.3

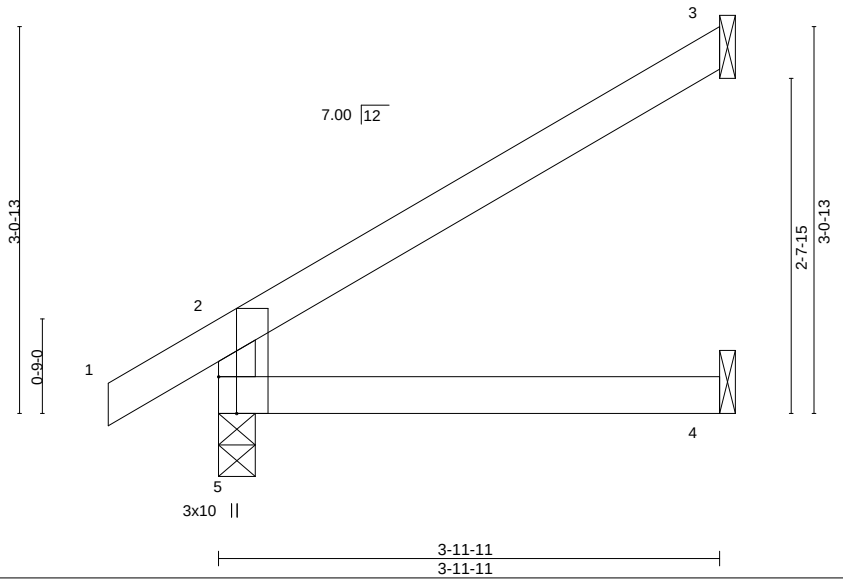



Plate Offsets (X,Y)-- [5:0-3-8,Edge]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.20 | Vert(LL) | -0.01 | 4-5 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.13 | Vert(CT) | -0.02 | 4-5 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.01 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-R | | Wind(LL) | 0.01 | 4-5 | >999 | 240 | Weight: 11 lb | FT = 10% |

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

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 3-11-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=103(LC 8)
Max Uplift 5=-19(LC 8), 3=-73(LC 8)
Max Grav 5=251(LC 1), 3=122(LC 15), 4=71(LC 3)

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

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



December 3,2020



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | J23 | Jack-Open | 2 | 1 | I43839772 |

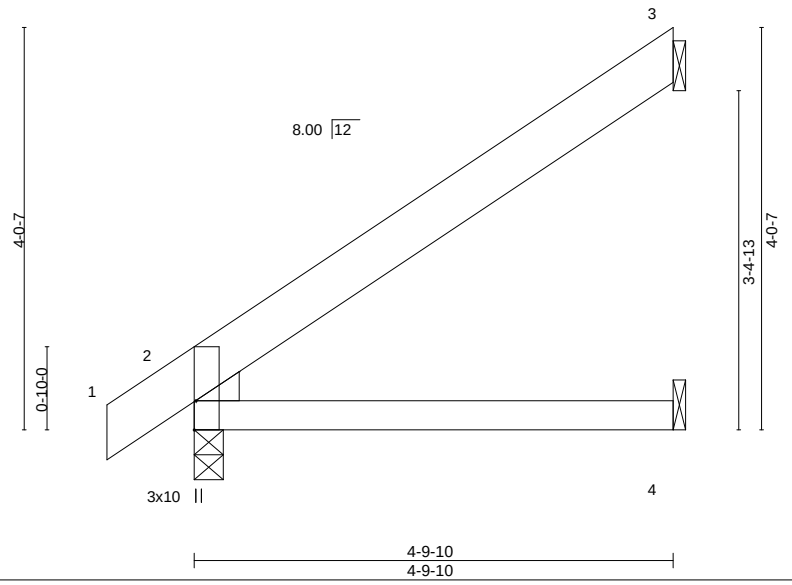
Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:48 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-vY_hdOpCFPl2beixutxXNi?X?hOC_EOfbUXCePyCyBL

**RELEASE FOR CONSTRUCTION**
**AS NOTED ON PLANS REVIEW**
**DEVELOPMENT SERVICES**
**LEE'S SUMMIT, MISSOURI**
**12/30/2020**

-0-10-8
0-10-8
4-9-10
4-9-10

Scale = 1:23.1




4-9-10
4-9-10

Plate Offsets (X,Y)-- [2:Edge,0-0-3]

| 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 | 0.16 | Vert(LL) | -0.03 | 2-4 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.22 | Vert(CT) | -0.05 | 2-4 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-P | | Wind(LL) | 0.00 | 2 | **** | 240 | Weight: 19 lb | FT = 10% |

**LUMBER-**
TOP CHORD 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 4-9-10 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=152(LC 8)
Max Uplift 3=-120(LC 8), 2=-8(LC 8)
Max Grav 3=165(LC 15), 2=286(LC 1), 4=92(LC 3)

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

**NOTES-**
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 3=120.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 3,2020



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | J24 | Jack-Open | 2 | 1 | I43839773 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:48 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-vY_hdOpCFPl2beixutxXNi?YvhQY_EOfbUXCePyCyBL

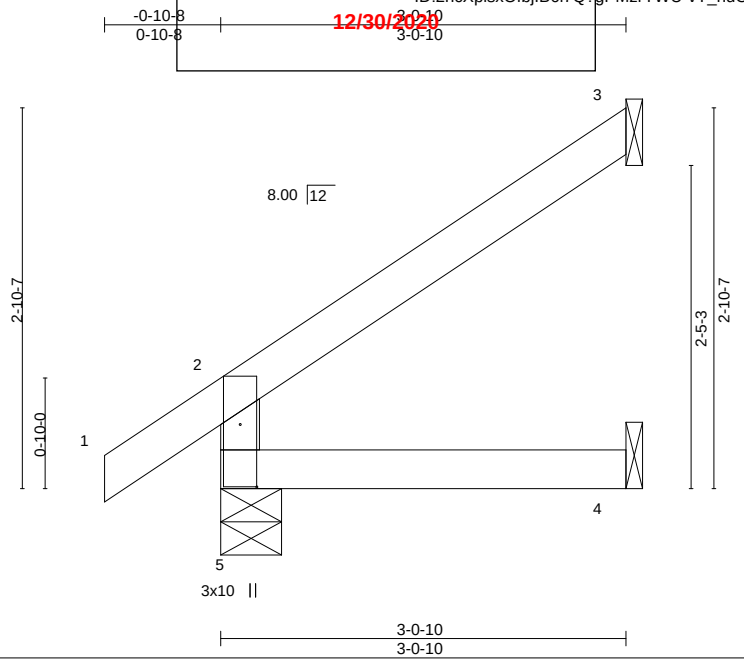



Plate Offsets (X,Y)-- [5:0-5-10,0-1-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.10 | Vert(LL) | -0.00 | 4-5 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.07 | Vert(CT) | -0.01 | 4-5 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.01 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-R | | Wind(LL) | 0.01 | 4-5 | >999 | 240 | Weight: 10 lb | FT = 10% |

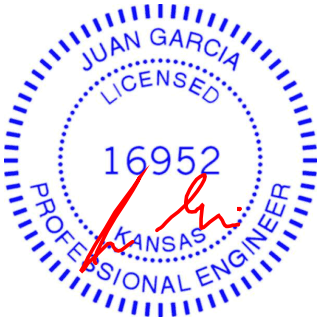
**LUMBER-**
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2

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

**REACTIONS.** (size) 5=0-5-8, 3=Mechanical, 4=Mechanical
Max Horz 5=93(LC 8)
Max Uplift 5=-8(LC 8), 3=-64(LC 8)
Max Grav 5=212(LC 1), 3=92(LC 15), 4=53(LC 3)

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

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


December 3,2020



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | J25 | Jack-Open | 2 | 1 | I43839774 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:49 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-OlY4qkqq0itvDoH8SbSmwwYj85najheoq8HlAryCyBK

**RELEASE FOR CONSTRUCTION**
**AS NOTED ON PLANS REVIEW**
**DEVELOPMENT SERVICES**
**LEE'S SUMMIT, MISSOURI**
**12/30/2020**

-0-10-8 1-3-10
0-10-8 1-3-10

Scale = 1:11.5

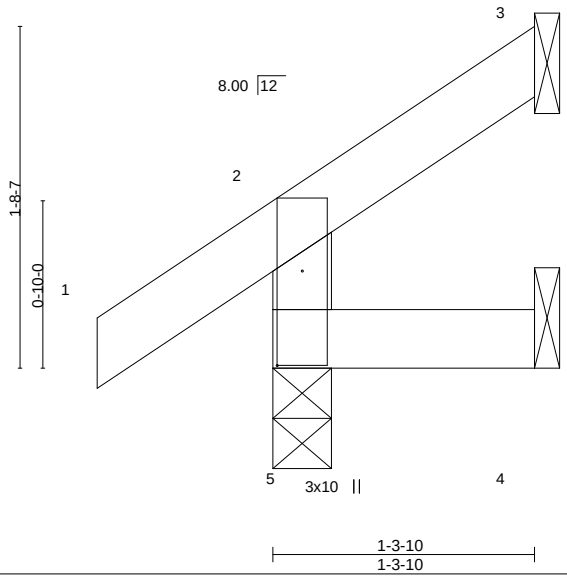



Plate Offsets (X,Y)-- [5:0-5-10,0-1-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.07 | Vert(LL) | 0.00 | 5 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.02 | Vert(CT) | -0.00 | 5 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-R | | Wind(LL) | 0.00 | 5 | >999 | 240 | Weight: 5 lb | FT = 10% |

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

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

**REACTIONS.** (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=46(LC 8)
Max Uplift 5=-13(LC 8), 3=-25(LC 8), 4=-4(LC 8)
Max Grav 5=155(LC 1), 3=24(LC 15), 4=19(LC 3)

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

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

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

December 3,2020




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | J26 | Jack-Open Girder | 1 | 1 | I43839775 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:50 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-sx5S24rSn0?mqysK0Iz?T74uaV7mS8ty2o0JilyCyBJ

**RELEASE FOR CONSTRUCTION**
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/30/2020

-1-3-15 2-0-8
1-3-15 2-0-8

Scale = 1:11.6

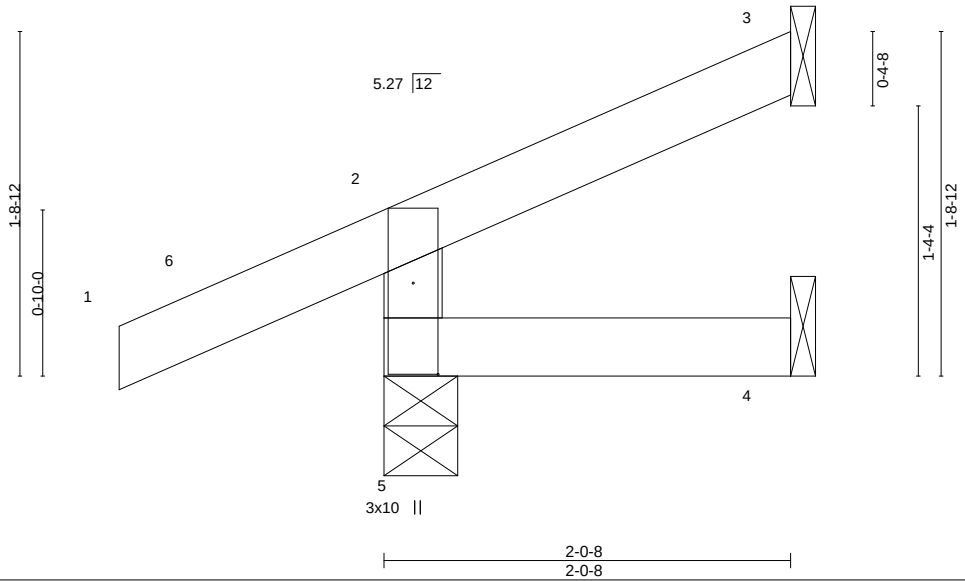



Plate Offsets (X,Y)-- [5:0-5-8,0-1-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.09 | Vert(LL) | -0.00 | 5 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.02 | Vert(CT) | -0.00 | 5 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.00 | Horz(CT) | -0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-R | | Wind(LL) | 0.00 | 5 | >999 | 240 | Weight: 7 lb | FT = 10% |

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

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 2-0-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 5=0-4-7, 3=Mechanical, 4=Mechanical
Max Horz 5=63(LC 7)
Max Uplift 5=-112(LC 12), 3=-22(LC 12)
Max Grav 5=70(LC 1), 3=25(LC 1), 4=26(LC 3)

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

**NOTES-**
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (jt=lb) 5=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.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 9 lb down and 3 lb up at -1-3-15 , and 9 lb down and 3 lb up at -1-3-15 on top chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Concentrated Loads (lb)
Vert: 1=-13(F=-7, B=-7)
Trapezoidal Loads (plf)
Vert: 1=-0(F=35, B=35)-to-6=-9(F=30, B=30), 6=0(F=35, B=35)-to-2=-17(F=27, B=27), 2=-17(F=27, B=27)-to-3=-49(F=10, B=10), 5=-5(F=8, B=8)-to-4=-14(F=3, B=3)

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

December 3,2020




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/30/2020

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | J27 | Jack-Open | 1 | 1 | I43839776 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:26:51 2020 Page 1
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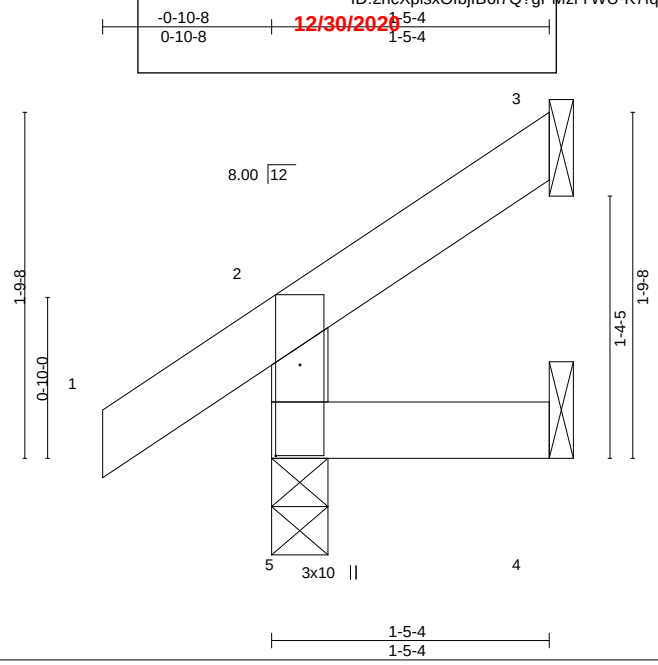


Plate Offsets (X,Y)-- [5:0-5-10,0-1-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.07 | Vert(LL) | -0.00 | 5 | >999 | 240 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.02 | Vert(CT) | -0.00 | 5 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-R | | | | | | | Weight: 5 lb | FT = 10% |

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

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 1-5-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=50(LC 8)
Max Uplift 5=-12(LC 8), 3=-29(LC 8), 4=-4(LC 8)
Max Grav 5=158(LC 1), 3=30(LC 15), 4=22(LC 3)

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

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

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

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December 3,2020




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/30/2020

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | LAY1 | GABLE | 1 | 1 | I43839777 |

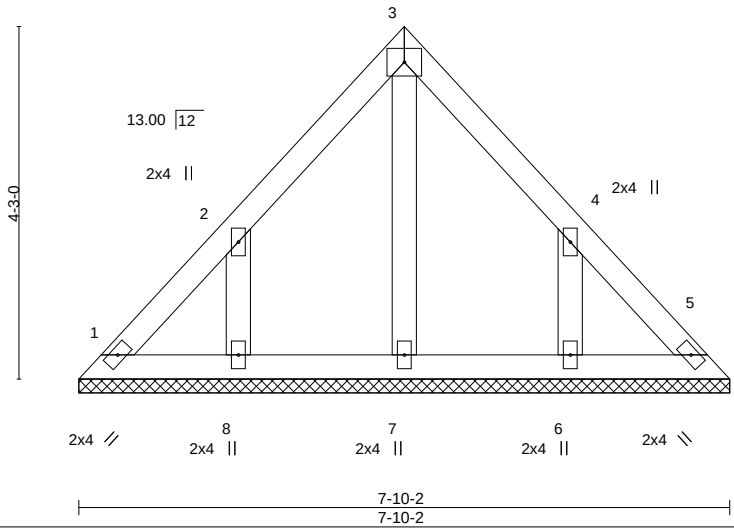
Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:27:00 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-ZsiE8VykQ5GL1UdFbO9LtEVcfXX1oguQMMRq3jyCyB9

3-11-1 7-10-2
3-11-1 3-11-1

4x5 =

Scale = 1:27.8




7-10-2
7-10-2

| 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 | 0.05 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.02 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.03 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-P | | | | | | | Weight: 29 lb | FT = 10% |

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

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

**REACTIONS.** All bearings 7-10-2.
(lb) - Max Horz 1=-104(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-147(LC 8), 6=-147(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7, 8, 6

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

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=147, 6=147.
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.

STATE OF MISSOURI
JUAN GARCIA
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PROFESSIONAL ENGINEER

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December 3,2020



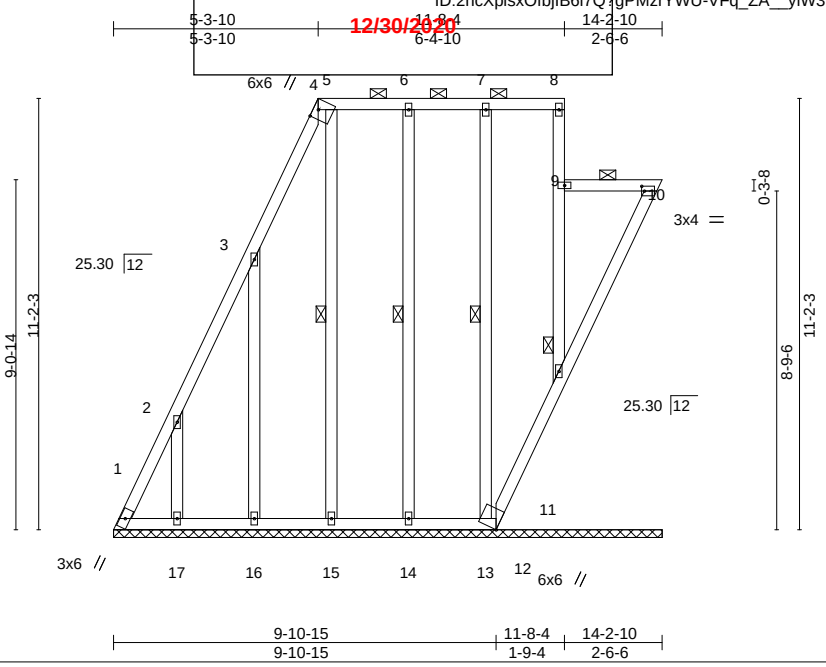

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/30/2020

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | LAY2 | GABLE | 1 | 1 | I43839778 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:27:02 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-VFq_ZA__yiW3HonejpBpyfax0LD8GXvjpgwx7byCyB7




Scale = 1:59.7

Plate Offsets (X,Y)-- [4:0-2-13,Edge], [10:0-0-13,0-1-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.13 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.05 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.25 | Horz(CT) | -0.02 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | | | | | | Weight: 102 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, and 2-0-0 oc purlins (6-0-0 max.): 4-8, 9-11, 9-10. Except: 1 Row at midpt 9-11 |
| BOT CHORD | Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 11-12. |
| WEBS | 1 Row at midpt 5-15, 6-14, 7-13 |

**REACTIONS.** All bearings 14-2-10.
(lb) - Max Horz 1=535(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 11, 12, 14, 13 except 1=-424(LC 6), 10=-277(LC 8), 17=-371(LC 8), 16=-412(LC 8), 15=-191(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 10, 12, 15, 14, 13 except 1=860(LC 8), 11=283(LC 17), 17=305(LC 15), 16=334(LC 15)

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

| | |
|---|---|
| TOP CHORD | 1-2=-953/512, 2-3=-598/333 |
| BOT CHORD | 10-11=-296/177 |
| WEBS | 2-17=-257/376, 3-16=-295/440 |

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 12, 14, 13 except (jt=lb) 1=424, 10=277, 17=371, 16=412, 15=191.
9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 11, 10.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
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PROFESSIONAL ENGINEER

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PROFESSIONAL ENGINEER

December 3,2020




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | LAY3 | GABLE | 1 | 1 | I43839779 |

Job Reference (optional)

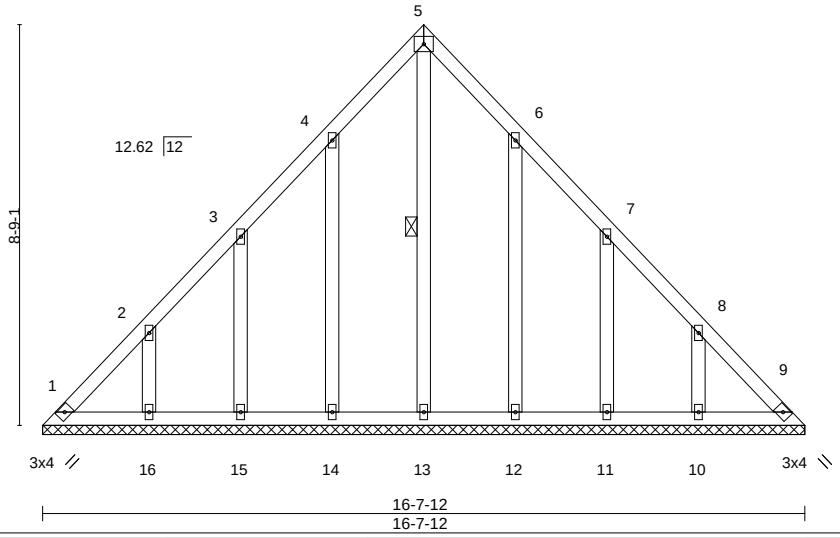
Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:27:03 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-zROMmW?cj0ewuxMqGXi2Ut76kkZO?0Gs2KgVg1yCyB6

**RELEASE FOR CONSTRUCTION**
**AS NOTED ON PLANS REVIEW**
**DEVELOPMENT SERVICES**
**LEE'S SUMMIT, MISSOURI**
**12/30/2020**

8-3-14 16-7-12
8-3-14 8-3-14

4x5

Scale = 1:50.3




| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.06 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.05 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.12 | Horz(CT) | 0.01 | 9 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | | | | | | Weight: 82 lb | FT = 10% |

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

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-13

**REACTIONS.** All bearings 16-7-12.
(lb) - Max Horz 1=222(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 1, 9 except 14=-126(LC 8), 15=-122(LC 8), 16=-139(LC 8), 12=-125(LC 9), 11=-123(LC 9), 10=-139(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 13, 14, 15, 16, 12, 11, 10

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-285/187, 8-9=-250/135

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9 except (jt=lb) 14=126, 15=122, 16=139, 12=125, 11=123, 10=139.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

December 3,2020




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

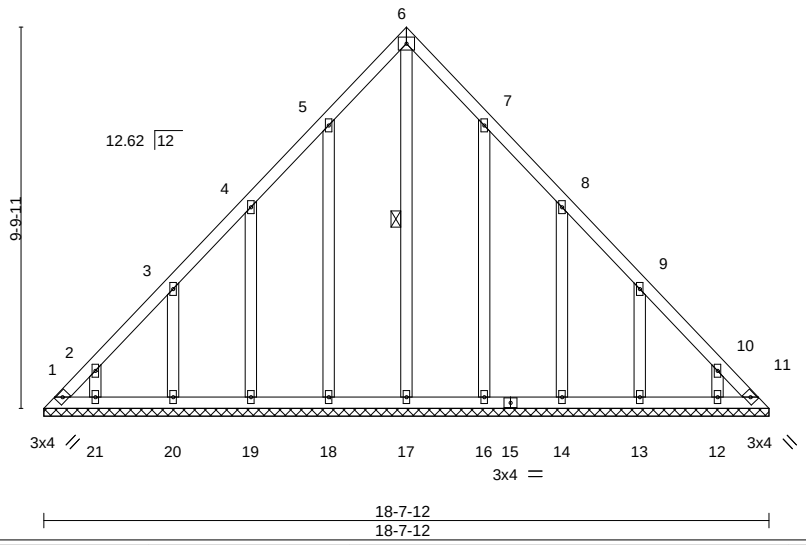
| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | LAY4 | GABLE | 1 | 1 | I43839780 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:27:05 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-wqV7BC0sFdue8FWDOykWZICTlYEvTu49Ve9bkwyCyB4

9-3-14 18-7-12
9-3-14 9-3-14

Scale = 1:59.2




18-7-12
18-7-12

| LOADING (psf) | | SPACING- 2-0-0 | | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.06 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.04 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.16 | Horz(CT) | 0.01 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | | | | | | Weight: 98 lb | FT = 10% |

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

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-17

**REACTIONS.** All bearings 18-7-12.
(lb) - Max Horz 1=-250(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 11 except 1=-139(LC 6), 18=-124(LC 8), 19=-126(LC 8), 20=-127(LC 8), 21=-106(LC 8), 16=-121(LC 9), 14=-127(LC 9), 13=-126(LC 9), 12=-106(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 11, 17, 18, 19, 20, 21, 16, 14, 13, 12 except 1=258(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-361/219, 2-3=-263/185, 10-11=-322/161

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11 except (jt=lb) 1=139, 18=124, 19=126, 20=127, 21=106, 16=121, 14=127, 13=126, 12=106.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 3,2020



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | V1 | Valley | 1 | 1 | I43839781 |

Job Reference (optional)

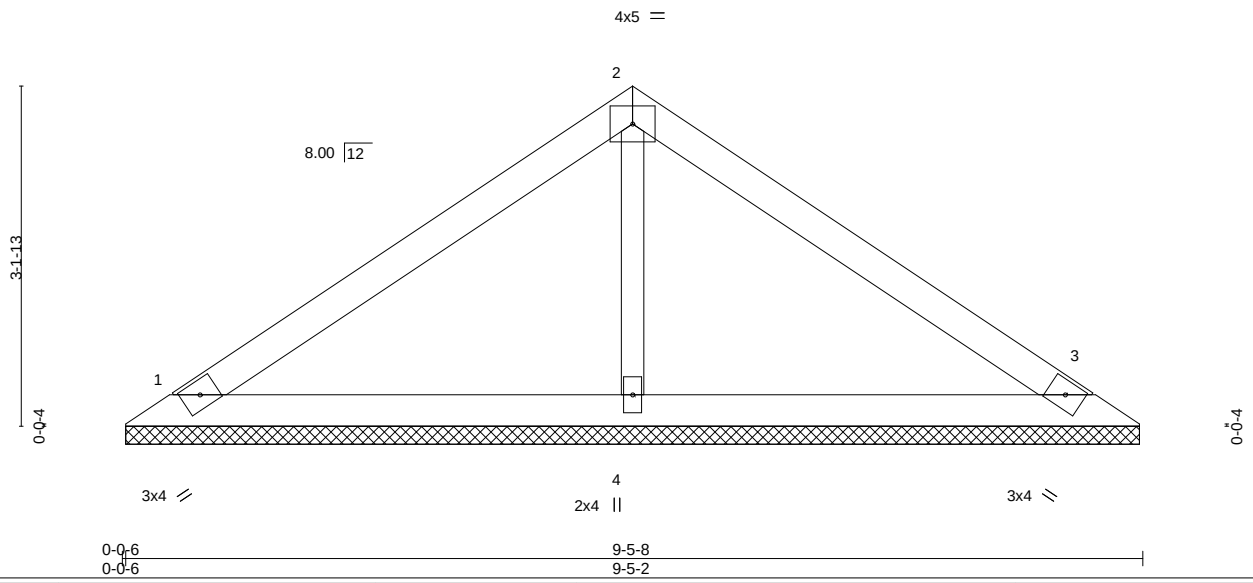
Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:27:07 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-sCdtcu27nE8LNZfbVNn_fjHmtMuexqASzyeippyCyB2

**RELEASE FOR CONSTRUCTION**
**AS NOTED ON PLANS REVIEW**
**DEVELOPMENT SERVICES**
**LEE'S SUMMIT, MISSOURI**
**12/30/2020**

4-8-12
4-8-12

9-5-8
4-8-12

Scale = 1:21.4




| 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 | 0.25 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.15 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.06 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 24 lb | FT = 10% |

**LUMBER-**
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x3 SPF No.2

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

**REACTIONS.** (size) 1=9-4-12, 3=9-4-12, 4=9-4-12
Max Horz 1=74(LC 5)
Max Uplift 1=-37(LC 8), 3=-46(LC 9), 4=-14(LC 8)
Max Grav 1=197(LC 1), 3=197(LC 1), 4=371(LC 1)

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

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

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

December 3,2020



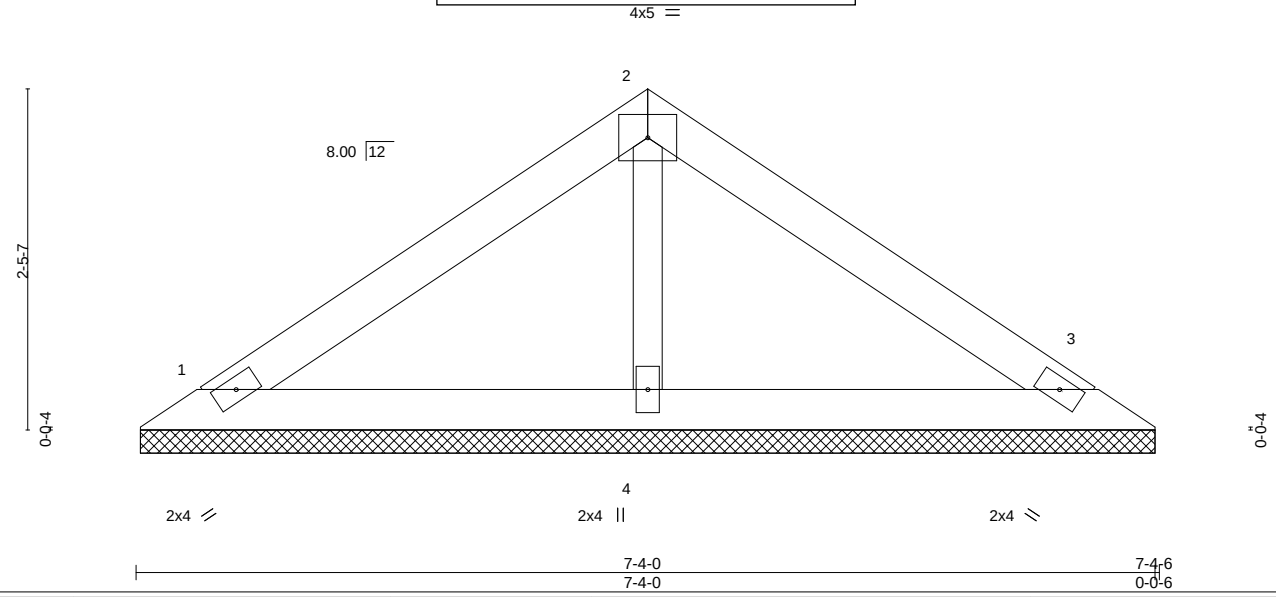

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/30/2020

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | V2 | Valley | 1 | 1 | I43839782 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:27:07 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-sCdtcu27nE8LNZfbVNn_fjHnqMvgxqZSzyeippyCyB2




| 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 | 0.09 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.03 | Horz(CT) | 0.00 | 3 | 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
OTHERS 2x3 SPF No.2

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

**REACTIONS.** (size) 1=7-3-10, 3=7-3-10, 4=7-3-10
Max Horz 1=-56(LC 4)
Max Uplift 1=-36(LC 8), 3=-43(LC 9)
Max Grav 1=162(LC 1), 3=162(LC 1), 4=252(LC 1)

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

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

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

December 3,2020




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 73 W0 |
|---|---|---|---|---|---|
| W0 73 | V3 | Valley | 1 | 1 | I43839783 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 2 16:27:08 2020 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-KPBFqE3lYYGC?jEn34IDBwq_ylFygHLbBcNGLFyCyB1

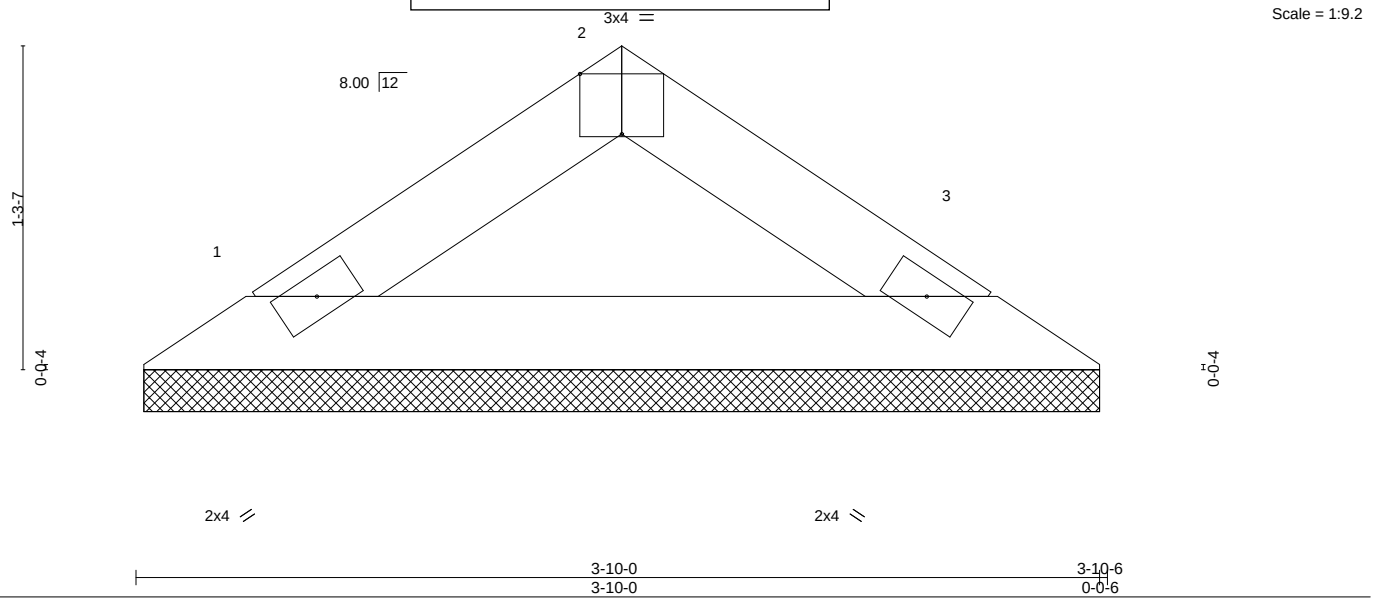



Plate Offsets (X,Y)-- [2:0-2-0,Edge]

| 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 | 0.03 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.08 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-P | | | | | | | Weight: 8 lb | FT = 10% |

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

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 3-10-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=3-9-10, 3=3-9-10
Max Horz 1=-25(LC 4)
Max Uplift 1=-15(LC 8), 3=-15(LC 9)
Max Grav 1=131(LC 1), 3=131(LC 1)

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

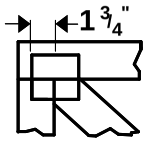
**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed;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



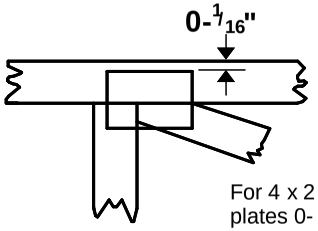
December 3,2020

# 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- 1/16" from outside edge of truss.

This symbol indicates the required direction of slots in connector plates.

***Plate location details available in MiTek 20/20 software or upon request.**

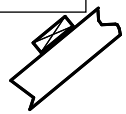


## PLATE SIZE

4 X 4

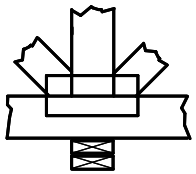
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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

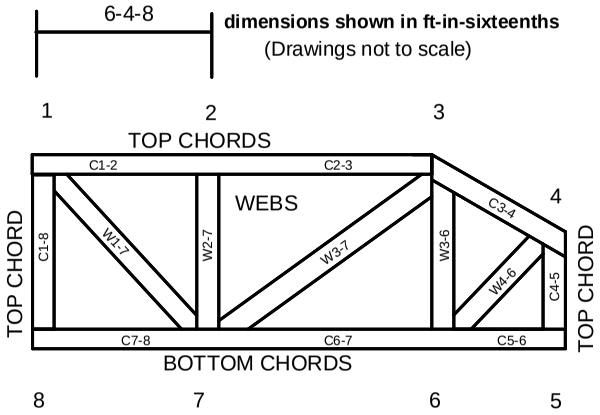


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

**Industry Standards:**

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System




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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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



MiTek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

# 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/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 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/TPI 1 Quality Criteria.

21.The design does not take into account any dynamic or other loads other than those expressly stated.