RE: CB1
Lot 1 CB

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

**Site Information:**

Customer: Project Name: CB1
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: ASCE 7 - 16[Low Rise] Wind Speed: 115 mph
Roof Load: 45.0 psf Floor Load: N/A psf

This package includes 64 individual, dated Truss Design Drawings and 0 Additional Drawings.

| No. | Seal# | Truss Name | Date | No. | Seal# | Truss Name | Date |
|---|---|---|---|---|---|---|---|
| 1 | I46397084 | A1 | 6/3/2021 | 21 | I46397104 | C11 | 6/3/2021 |
| 2 | I46397085 | A2 | 6/3/2021 | 22 | I46397105 | D1 | 6/3/2021 |
| 3 | I46397086 | B1 | 6/3/2021 | 23 | I46397106 | D2 | 6/3/2021 |
| 4 | I46397087 | B2 | 6/3/2021 | 24 | I46397107 | D3 | 6/3/2021 |
| 5 | I46397088 | B3 | 6/3/2021 | 25 | I46397108 | J1 | 6/3/2021 |
| 6 | I46397089 | B4 | 6/3/2021 | 26 | I46397109 | J2 | 6/3/2021 |
| 7 | I46397090 | B5 | 6/3/2021 | 27 | I46397110 | J3 | 6/3/2021 |
| 8 | I46397091 | B6 | 6/3/2021 | 28 | I46397111 | J4 | 6/3/2021 |
| 9 | I46397092 | B7 | 6/3/2021 | 29 | I46397112 | J5 | 6/3/2021 |
| 10 | I46397093 | B8 | 6/3/2021 | 30 | I46397113 | J6 | 6/3/2021 |
| 11 | I46397094 | C1 | 6/3/2021 | 31 | I46397114 | J7 | 6/3/2021 |
| 12 | I46397095 | C2 | 6/3/2021 | 32 | I46397115 | J8 | 6/3/2021 |
| 13 | I46397096 | C3 | 6/3/2021 | 33 | I46397116 | J9 | 6/3/2021 |
| 14 | I46397097 | C4 | 6/3/2021 | 34 | I46397117 | J9A | 6/3/2021 |
| 15 | I46397098 | C5 | 6/3/2021 | 35 | I46397118 | J10 | 6/3/2021 |
| 16 | I46397099 | C6 | 6/3/2021 | 36 | I46397119 | J11 | 6/3/2021 |
| 17 | I46397100 | C7 | 6/3/2021 | 37 | I46397120 | J11A | 6/3/2021 |
| 18 | I46397101 | C8 | 6/3/2021 | 38 | I46397121 | J12 | 6/3/2021 |
| 19 | I46397102 | C9 | 6/3/2021 | 39 | I46397122 | J12A | 6/3/2021 |
| 20 | I46397103 | C10 | 6/3/2021 | 40 | I46397123 | J13 | 6/3/2021 |

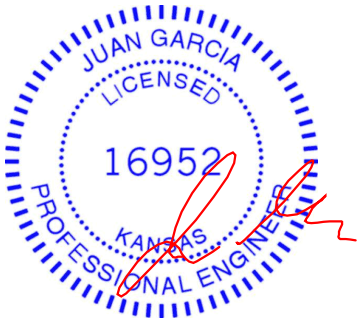
The truss drawing(s) referenced above have been prepared by MiTek USA, Inc under my direct supervision based on the parameters provided by Wheeler - Waverly.

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.




**RELEASE FOR CONSTRUCTION**
**AS NOTED ON PLANS REVI**
**Development Services**
**LEE'S SUMMIT, MISSOUR**

June 03, 2021

Garcia, Juan

RE: CB1 - Lot 1 CB

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

**Site Information:**

Project Customer: Project Name: CB1
Lot/Block: Subdivision:
Address:
City, County: State:

| No. | Seal# | Truss Name | Date |
|---|---|---|---|
| 41 | I46397124 | J13A | 6/3/2021 |
| 42 | I46397125 | J14 | 6/3/2021 |
| 43 | I46397126 | J15 | 6/3/2021 |
| 44 | I46397127 | J16 | 6/3/2021 |
| 45 | I46397128 | J18 | 6/3/2021 |
| 46 | I46397129 | J19 | 6/3/2021 |
| 47 | I46397130 | J20 | 6/3/2021 |
| 48 | I46397131 | J21 | 6/3/2021 |
| 49 | I46397132 | J22 | 6/3/2021 |
| 50 | I46397133 | J23 | 6/3/2021 |
| 51 | I46397134 | J24 | 6/3/2021 |
| 52 | I46397135 | J25 | 6/3/2021 |
| 53 | I46397136 | J26 | 6/3/2021 |
| 54 | I46397137 | J27 | 6/3/2021 |
| 55 | I46397138 | J28 | 6/3/2021 |
| 56 | I46397139 | LAY1 | 6/3/2021 |
| 57 | I46397140 | LAY2 | 6/3/2021 |
| 58 | I46397141 | LAY3 | 6/3/2021 |
| 59 | I46397142 | LAY4 | 6/3/2021 |
| 60 | I46397143 | LAY5 | 6/3/2021 |
| 61 | I46397144 | V1 | 6/3/2021 |
| 62 | I46397145 | V2 | 6/3/2021 |
| 63 | I46397146 | V3 | 6/3/2021 |
| 64 | I46397147 | V4 | 6/3/2021 |

RE: CB1
Lot 1 CB

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

**Site Information:**

Customer: Project Name: CB1
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: ASCE 7 - 16[Low Rise] Wind Speed: 115 mph
Roof Load: 45.0 psf Floor Load: N/A psf

This package includes 64 individual, dated Truss Design Drawings and 0 Additional Drawings.

| No. | Seal# | Truss Name | Date | No. | Seal# | Truss Name | Date |
|---|---|---|---|---|---|---|---|
| 1 | I46397084 | A1 | 6/3/2021 | 21 | I46397104 | C11 | 6/3/2021 |
| 2 | I46397085 | A2 | 6/3/2021 | 22 | I46397105 | D1 | 6/3/2021 |
| 3 | I46397086 | B1 | 6/3/2021 | 23 | I46397106 | D2 | 6/3/2021 |
| 4 | I46397087 | B2 | 6/3/2021 | 24 | I46397107 | D3 | 6/3/2021 |
| 5 | I46397088 | B3 | 6/3/2021 | 25 | I46397108 | J1 | 6/3/2021 |
| 6 | I46397089 | B4 | 6/3/2021 | 26 | I46397109 | J2 | 6/3/2021 |
| 7 | I46397090 | B5 | 6/3/2021 | 27 | I46397110 | J3 | 6/3/2021 |
| 8 | I46397091 | B6 | 6/3/2021 | 28 | I46397111 | J4 | 6/3/2021 |
| 9 | I46397092 | B7 | 6/3/2021 | 29 | I46397112 | J5 | 6/3/2021 |
| 10 | I46397093 | B8 | 6/3/2021 | 30 | I46397113 | J6 | 6/3/2021 |
| 11 | I46397094 | C1 | 6/3/2021 | 31 | I46397114 | J7 | 6/3/2021 |
| 12 | I46397095 | C2 | 6/3/2021 | 32 | I46397115 | J8 | 6/3/2021 |
| 13 | I46397096 | C3 | 6/3/2021 | 33 | I46397116 | J9 | 6/3/2021 |
| 14 | I46397097 | C4 | 6/3/2021 | 34 | I46397117 | J9A | 6/3/2021 |
| 15 | I46397098 | C5 | 6/3/2021 | 35 | I46397118 | J10 | 6/3/2021 |
| 16 | I46397099 | C6 | 6/3/2021 | 36 | I46397119 | J11 | 6/3/2021 |
| 17 | I46397100 | C7 | 6/3/2021 | 37 | I46397120 | J11A | 6/3/2021 |
| 18 | I46397101 | C8 | 6/3/2021 | 38 | I46397121 | J12 | 6/3/2021 |
| 19 | I46397102 | C9 | 6/3/2021 | 39 | I46397122 | J12A | 6/3/2021 |
| 20 | I46397103 | C10 | 6/3/2021 | 40 | I46397123 | J13 | 6/3/2021 |

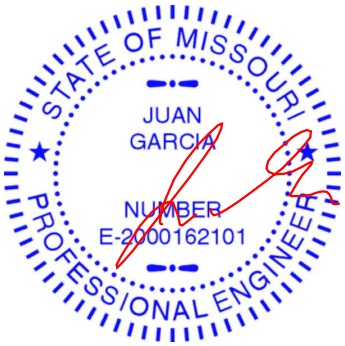
The truss drawing(s) referenced above have been prepared by MiTek USA, Inc under my direct supervision based on the parameters provided by Wheeler - Waverly.

Truss Design Engineer's Name: Garcia, Juan

My license renewal date for the state of Missouri is December 31, 2022.

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.




June 03, 2021

Garcia, Juan

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI

RE: CB1 - Lot 1 CB

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

**Site Information:**

Project Customer: Project Name: CB1
Lot/Block: Subdivision:
Address:
City, County: State:

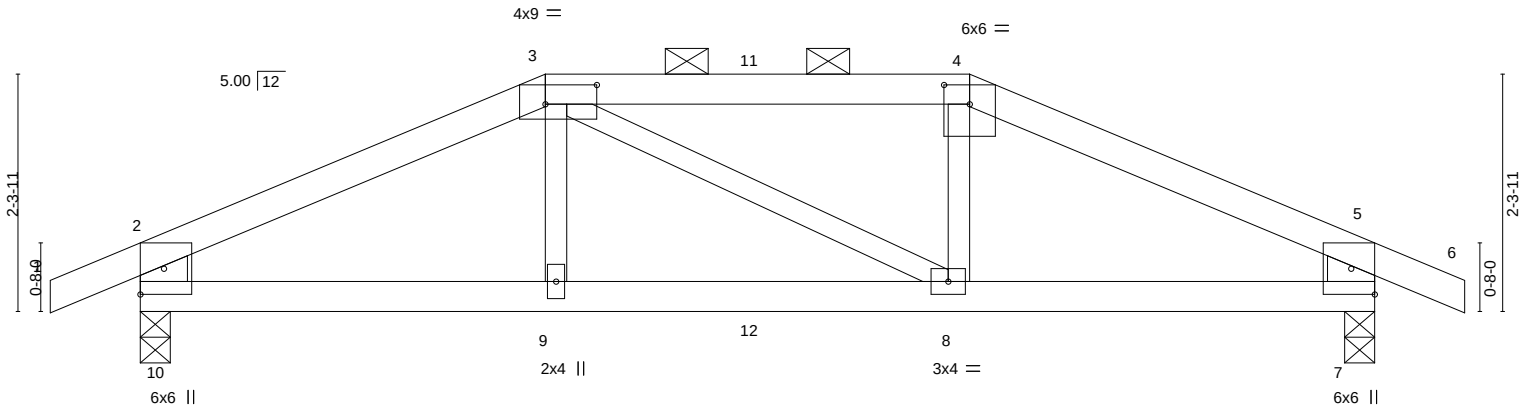
| No. | Seal# | Truss Name | Date |
|---|---|---|---|
| 41 | I46397124 | J13A | 6/3/2021 |
| 42 | I46397125 | J14 | 6/3/2021 |
| 43 | I46397126 | J15 | 6/3/2021 |
| 44 | I46397127 | J16 | 6/3/2021 |
| 45 | I46397128 | J18 | 6/3/2021 |
| 46 | I46397129 | J19 | 6/3/2021 |
| 47 | I46397130 | J20 | 6/3/2021 |
| 48 | I46397131 | J21 | 6/3/2021 |
| 49 | I46397132 | J22 | 6/3/2021 |
| 50 | I46397133 | J23 | 6/3/2021 |
| 51 | I46397134 | J24 | 6/3/2021 |
| 52 | I46397135 | J25 | 6/3/2021 |
| 53 | I46397136 | J26 | 6/3/2021 |
| 54 | I46397137 | J27 | 6/3/2021 |
| 55 | I46397138 | J28 | 6/3/2021 |
| 56 | I46397139 | LAY1 | 6/3/2021 |
| 57 | I46397140 | LAY2 | 6/3/2021 |
| 58 | I46397141 | LAY3 | 6/3/2021 |
| 59 | I46397142 | LAY4 | 6/3/2021 |
| 60 | I46397143 | LAY5 | 6/3/2021 |
| 61 | I46397144 | V1 | 6/3/2021 |
| 62 | I46397145 | V2 | 6/3/2021 |
| 63 | I46397146 | V3 | 6/3/2021 |
| 64 | I46397147 | V4 | 6/3/2021 |

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | A1 | Hip Girder | 1 | 1 | I46397084 |
| | | | | | Job Reference (optional) |

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:47:43 2021 Page 1
ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-pNa_pBJUIxFJpFAxTlkI9i2Z?XTODnqDZ05N7bzAGC_

-0-10-8 | 3-11-4 | 8-0-12 | 12-0-0 | 12-10-8
0-10-8 | 3-11-4 | 4-1-8 | 3-11-4 | 0-10-8

Scale = 1:22.4




3-11-4 | 8-0-12 | 12-0-0
3-11-4 | 4-1-8 | 3-11-4

Plate Offsets (X,Y)-- [3:0-6-0,0-2-4], [4:0-3-0,0-2-4]

| 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) | -0.09 | 8-9 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.75 | Vert(CT) | -0.16 | 8-9 | >883 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.09 | Horz(CT) | 0.02 | 7 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.07 | 8-9 | >999 | 240 | Weight: 38 lb | FT = 10% |

**LUMBER-**
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-10,5-7: 2x6 SP 2400F 2.0E

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

**REACTIONS.** (size) 10=0-3-8, 7=0-3-8
Max Horz 10=-20(LC 9)
Max Uplift 10=-189(LC 8), 7=-189(LC 9)
Max Grav 10=890(LC 1), 7=890(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1338/294, 3-4=-1166/277, 4-5=-1339/294, 2-10=-789/199, 5-7=-790/198
BOT CHORD 9-10=-220/1153, 8-9=-220/1165, 7-8=-219/1153
WEBS 3-9=0/263, 4-8=0/265

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=189, 7=189.
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) 77 lb down and 68 lb up at 3-11-4, and 83 lb down and 68 lb up at 6-0-0, and 77 lb down and 68 lb up at 8-0-12 on top chord, and 215 lb down and 73 lb up at 3-11-4, and 30 lb down at 6-0-0, and 215 lb down and 73 lb up at 8-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-5=-70, 5-6=-70, 7-10=-20



June 3,2021

Continued on page 2





MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | A1 | Hip Girder | 1 | 1 | I46397084 |

Job Reference (optional)



**LOAD CASE(S)** Standard

Concentrated Loads (lb)

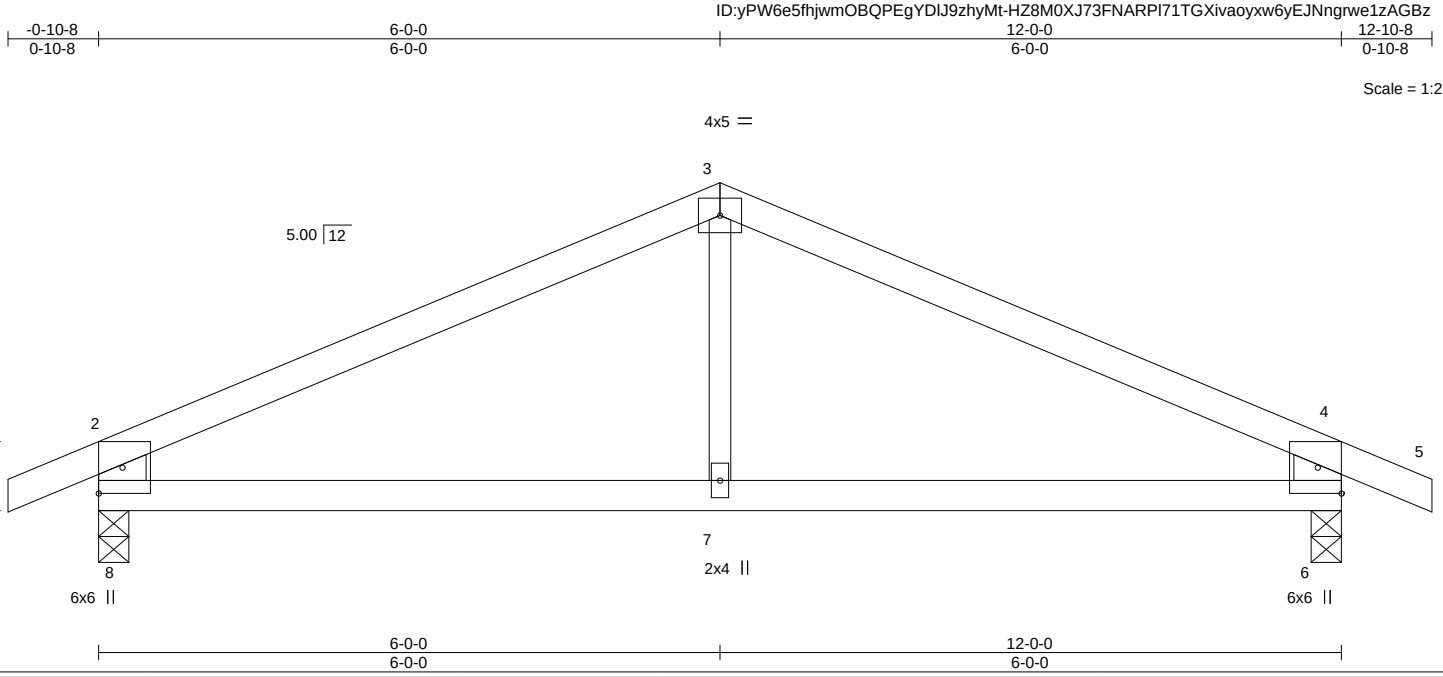
Vert: 3=-44(B) 4=-44(B) 9=-215(B) 8=-215(B) 11=-44(B) 12=-24(B)

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | A2 | Common | 4 | 1 | I46397085 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:47:44 2021 Page 1

ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-HZ8M0XJ73FNARPl71TGXivaoyxw6yEJNngrwe1zAGBz




| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.45 | Vert(LL) | -0.03 | 6-7 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.27 | Vert(CT) | -0.06 | 6-7 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.08 | Horz(CT) | 0.01 | 6 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-R | | Wind(LL) | 0.01 | 7-8 | >999 | 240 | Weight: 34 lb | FT = 10% |

**LUMBER-**

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x6 SPF No.2 *Except*
3-7: 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=0-3-8, 6=0-3-8
Max Horz 8=35(LC 8)
Max Uplift 8=-92(LC 8), 6=-92(LC 9)
Max Grav 8=597(LC 1), 6=597(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-692/87, 3-4=-692/87, 2-8=-540/131, 4-6=-540/131
BOT CHORD 7-8=-24/556, 6-7=-24/556

**NOTES-**

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



June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

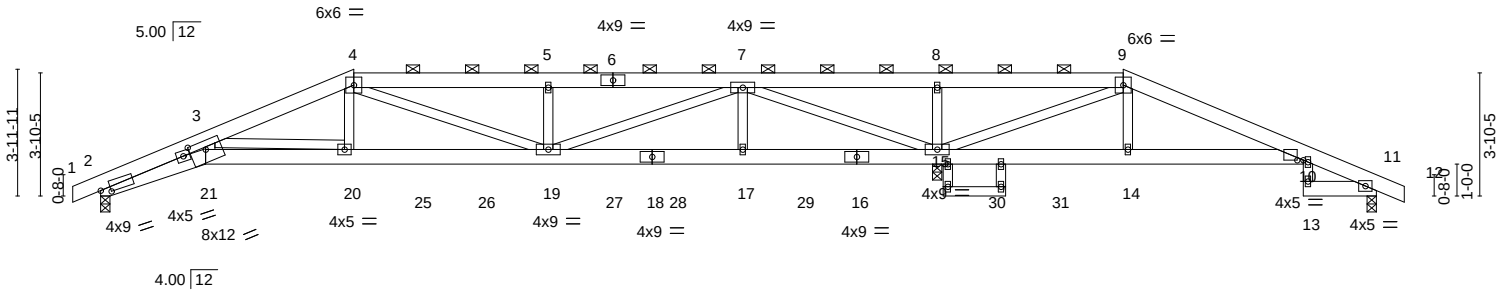
| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | B1 | HIP GIRDER | 1 | 3 | I46397086 |
| | | | | | Job Reference (optional) |

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:47:46 2021 Page 1

ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-DyG6RDLNbsdugivV8tI?nKg7xlaQQ2JgF_K1jwzAGBx

| -0-10-8 | 3-3-8 | 7-11-4 | 14-0-7 | 20-1-9 | 26-2-12 | 32-0-12 | 37-8-8 | 40-0-0 | 40-10-8 |
|---|---|---|---|---|---|---|---|---|---|
| 0-10-8 | 3-3-8 | 4-7-12 | 6-1-3 | 6-1-3 | 6-1-3 | 5-10-0 | 5-7-12 | 2-3-8 | 0-10-8 |

Scale = 1:72.2




| 3-3-8 | 7-11-4 | 14-0-7 | 20-1-9 | 26-2-12 | 32-0-12 | 37-8-8 | 40-0-0 |
|---|---|---|---|---|---|---|---|
| 3-3-8 | 4-7-12 | 6-1-3 | 6-1-3 | 6-1-3 | 5-10-0 | 5-7-12 | 2-3-8 |

Plate Offsets (X,Y)-- [2:0-3-13,0-1-9], [10:0-2-5,0-0-0], [21:0-6-0,0-3-4]

| 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 | 0.54 | Vert(LL) | -0.17 | 19-20 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.34 | Vert(CT) | -0.29 | 19-20 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.49 | Horz(CT) | 0.12 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.11 | 19-20 | >999 | 240 | Weight: 663 lb | FT = 10% |

**LUMBER-**

TOP CHORD 2x6 SPF No.2
BOT CHORD 2x6 SP 2400F 2.0E *Except*
22-23: 2x4 SPF No.2
WEBS 2x4 SPF No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 14-15,10-14.

**REACTIONS.** (size) 2=0-3-8, 11=0-3-8, 15=0-3-8 (req. 0-3-10)
Max Horz 2=38(LC 27)
Max Uplift 2=-285(LC 4), 11=-71(LC 28), 15=-825(LC 4)
Max Grav 2=2436(LC 19), 11=236(LC 20), 15=6930(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-10279/1235, 3-4=-7175/966, 4-5=-6366/757, 5-7=-6365/757, 7-8=-622/5555, 8-9=-621/5556, 9-10=0/832
BOT CHORD 2-21=-1107/9397, 20-21=-1002/8439, 19-20=-819/6562, 17-19=-145/2243, 15-17=-145/2243, 14-15=-841/36, 10-14=-762/23
WEBS 3-21=-244/2475, 3-20=-1766/244, 4-20=-333/2168, 4-19=-321/253, 5-19=-452/111, 7-19=-577/4551, 7-17=-33/943, 7-15=-8003/894, 8-15=-600/122, 9-15=-5157/717, 9-14=-247/1388

**NOTES-**

1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-6-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) WARNING: Required bearing size at joint(s) 15 greater than input bearing size.
10) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11 except (jt=lb) 2=285, 15=825.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Continued on page 2

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

**NOTES-**

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

14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1152 lb down and 315 lb up at 7-11-4, 326 lb down and 49 lb up at 10-0-0, 326 lb down and 49 lb up at 12-0-0, 321 lb down and 48 lb up at 14-0-0, 321 lb down and 48 lb up at 16-0-0, 321 lb down and 48 lb up at 18-0-0, 321 lb down and 48 lb up at 20-0-0, 321 lb down and 48 lb up at 22-0-0, 321 lb down and 48 lb up at 24-0-0, 321 lb down and 48 lb up at 26-0-0, 283 lb down and 55 lb up at 28-0-0 , and 324 lb down and 46 lb up at 30-0-0, and 1146 lb down and 312 lb up at 32-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

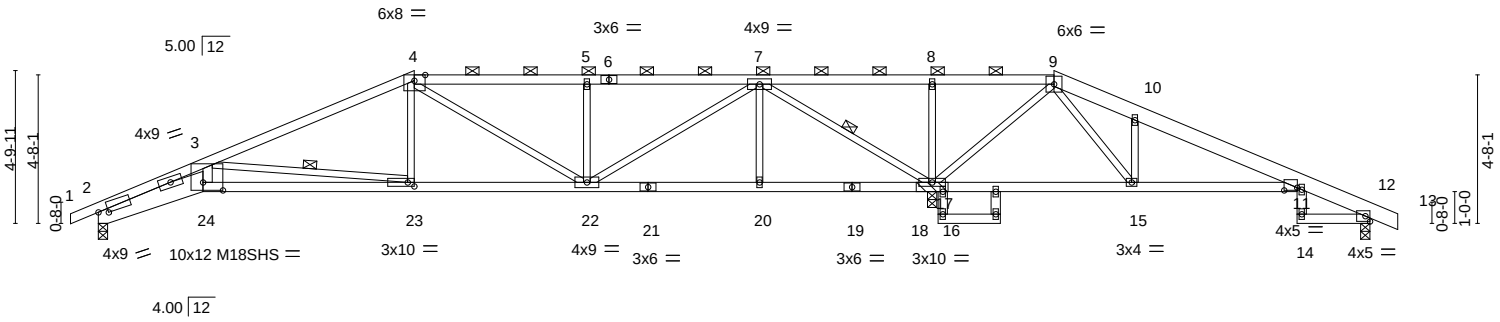
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-70, 4-9=-70, 9-12=-70, 2-21=-20, 10-21=-20, 11-13=-20
   Concentrated Loads (lb)
   Vert: 20=-1152(B) 19=-321(B) 17=-321(B) 15=-321(B) 14=-1146(B) 16=-321(B) 25=-326(B) 26=-326(B) 27=-321(B) 28=-321(B) 29=-321(B) 30=-283(B) 31=-324(B)

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | B2 | HIP | 1 | 1 | I46397087 |
| | | | | | Job Reference (optional) |

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:47:48 2021 Page 1
ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-ALNtsvNd7Utcv03uGIKTsllNtYCourNyiIp8npzAGBv

| -0-10-8 | 3-3-8 | 9-11-4 | 15-4-7 | 20-9-9 | 26-2-12 | 30-0-12 | 32-7-5 | 37-8-8 | 40-0-0 | 40-10-8 |
|---|---|---|---|---|---|---|---|---|---|---|
| 0-10-8 | 3-3-8 | 6-7-12 | 5-5-3 | 5-5-3 | 5-5-3 | 3-10-0 | 2-6-8 | 5-1-4 | 2-3-8 | 0-10-8 |

Scale = 1:72.5




| 3-3-8 | 9-11-4 | 15-4-7 | 20-9-9 | 26-2-12 | 32-7-5 | 37-8-8 | 40-0-0 |
|---|---|---|---|---|---|---|---|
| 3-3-8 | 6-7-12 | 5-5-3 | 5-5-3 | 5-5-3 | 6-4-9 | 5-1-4 | 2-3-8 |

Plate Offsets (X,Y)-- [2:0-3-11,0-1-4], [4:0-4-2,Edge], [11:0-4-14,0-1-0], [23:0-2-8,0-1-8], [24:0-7-8,0-3-0]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.90 | Vert(LL) | -0.28 | 23-24 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.60 | Vert(CT) | -0.50 | 23-24 | >624 | 240 | M18SHS | 197/144 |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.90 | Horz(CT) | 0.18 | 17 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.19 | 23-24 | >999 | 240 | Weight: 156 lb | FT = 10% |

**LUMBER-**

TOP CHORD 2x4 SPF No.2 *Except*
9-13: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
2-24: 2x8 SP DSS, 21-24,11-19: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
11-14,3-24,17-25,26-27: 2x4 SPF No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (4-11-5 max.): 4-9.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 3-23, 7-17

**REACTIONS.** (size) 2=0-3-8, 12=0-3-8, 17=(0-3-8 + bearing block) (req. 0-4-1)
Max Horz 2=-81(LC 9)
Max Uplift 2=-135(LC 8), 12=-101(LC 9), 17=-339(LC 4)
Max Grav 2=1026(LC 21), 12=217(LC 22), 17=2609(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4268/559, 3-4=-1730/257, 4-5=-1261/283, 5-7=-1259/281, 7-8=-148/2100, 8-9=-147/2101, 9-10=-75/890, 10-11=-127/876
BOT CHORD 2-24=-563/3926, 23-24=-522/3516, 22-23=-142/1532, 15-17=-1071/174, 11-15=-812/174
WEBS 3-24=-89/1218, 3-23=-1987/458, 4-23=0/415, 4-22=-444/106, 5-22=-413/166, 7-22=-164/1362, 7-17=-2262/341, 8-17=-366/146, 9-17=-1375/144, 9-15=-164/659, 10-15=-386/199

**NOTES-**

1) 2x4 SPF 2100F 1.8E bearing block 12" long at jt. 17 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF No.2.
2) Unbalanced roof live loads have been considered for this design.
3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=135, 12=101, 17=339.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI



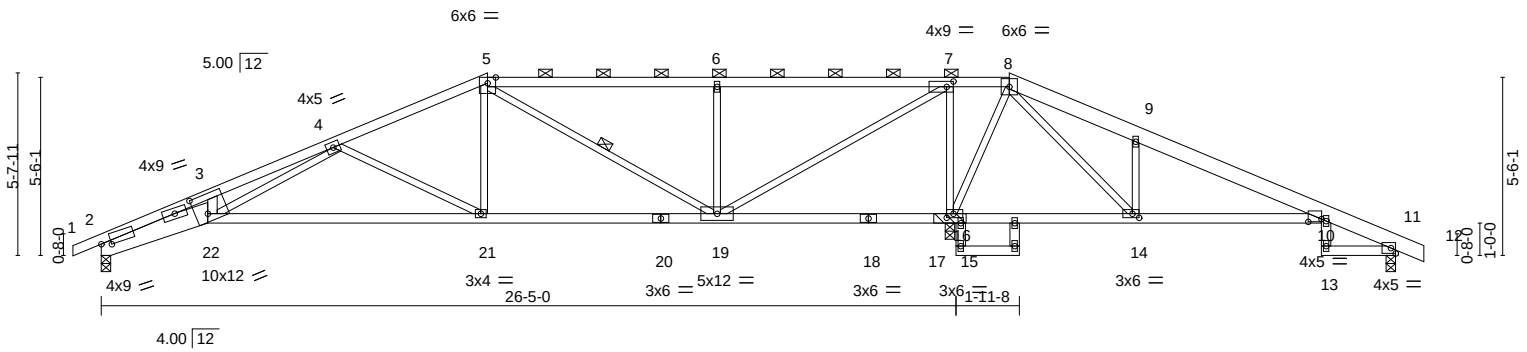

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | B3 | HIP | 1 | 1 | I46397088 |
| | | | | | Job Reference (optional) |

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:47:49 2021 Page 1
ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-eXxF4FNFun?TXAe4p0riPzIZuyVvdJU6xyYhKFzAGBu

| -0-10-8 | 3-3-8 | 7-3-9 | 11-11-4 | 19-0-6 | 26-2-12 | 28-0-12 | 31-11-10 | 37-8-8 | 40-0-0 | 40-10-8 |
|---|---|---|---|---|---|---|---|---|---|---|
| 0-10-8 | 3-3-8 | 4-0-1 | 4-7-11 | 7-1-2 | 7-2-6 | 1-10-0 | 3-10-14 | 5-8-14 | 2-3-8 | 0-10-8 |

Scale = 1:71.2




| 3-3-8 | 11-11-4 | 19-0-6 | 26-2-12 | 31-11-10 | 37-8-8 | 40-0-0 |
|---|---|---|---|---|---|---|
| 3-3-8 | 8-7-12 | 7-1-2 | 7-2-6 | 5-8-14 | 5-8-14 | 2-3-8 |

Plate Offsets (X,Y)-- [2:0-3-11,0-1-4], [7:0-2-8,0-2-0], [10:0-4-14,0-1-0], [14:0-2-8,0-1-8], [16:0-2-8,0-1-8], [22:0-4-8,0-7-0]

| 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 | 0.88 | Vert(LL) | -0.28 | 21-22 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.80 | Vert(CT) | -0.60 | 21-22 | >521 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.78 | Horz(CT) | 0.16 | 16 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.19 | 21-22 | >999 | 240 | Weight: 159 lb | FT = 10% |

**LUMBER-**

TOP CHORD 2x4 SPF No.2 *Except*
8-12: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
2-22: 2x8 SP DSS
WEBS 2x3 SPF No.2 *Except*
10-13,3-22,16-23,24-25: 2x4 SPF No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-8.
BOT CHORD Rigid ceiling directly applied or 4-3-6 oc bracing.
WEBS 1 Row at midpt 5-19

**REACTIONS.** (size) 2=0-3-8, 11=0-3-8, 16=(0-3-8 + bearing block) (req. 0-4-3)
Max Horz 2=-96(LC 9)
Max Uplift 2=-152(LC 8), 11=-113(LC 21), 16=-292(LC 5)
Max Grav 2=1031(LC 21), 11=198(LC 22), 16=2657(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4147/531, 3-4=-3841/581, 4-5=-1413/224, 5-6=-582/209, 6-7=-579/208, 7-8=-53/1770, 8-9=-52/948, 9-10=-105/1014
BOT CHORD 2-22=-540/3787, 21-22=-292/1971, 19-21=-83/1235, 16-19=-1770/258, 14-16=-1368/203, 10-14=-860/149
WEBS 3-22=0/320, 4-22=-269/1824, 4-21=-807/271, 5-21=-19/532, 5-19=-934/118, 6-19=-553/229, 7-19=-303/2284, 7-16=-1584/330, 8-16=-1011/138, 8-14=-226/804, 9-14=-455/231

**NOTES-**

1) 2x4 SPF No.2 bearing block 12" long at jt. 16 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF No.2.
2) Unbalanced roof live loads have been considered for this design.
3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=152, 11=113, 16=292.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | B4 | HIP | 1 | 1 | I46397089 |

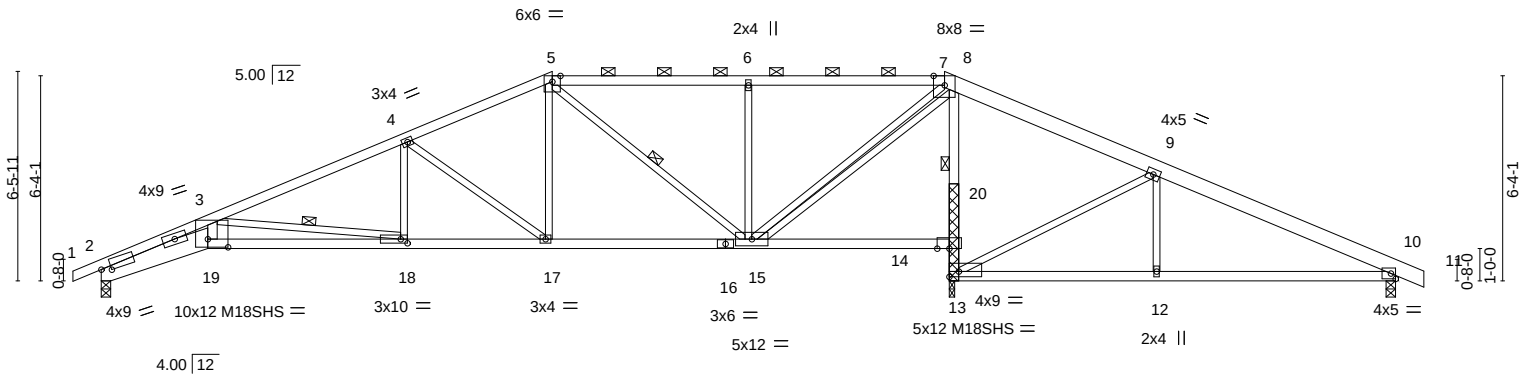
Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:47:50 2021 Page 1

ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-6jVdHbOtf57J9KDHNjMxxAqIBMsiMjjFAcIFshzAGBt

| -0-10-8 | 3-3-8 | 9-4-4 | 13-11-4 | 20-0-0 | 26-0-12 | 32-7-6 | 40-0-0 | 40-10-8 |
|---|---|---|---|---|---|---|---|---|
| 0-10-8 | 3-3-8 | 6-0-12 | 4-6-15 | 6-0-12 | 6-0-12 | 6-6-10 | 7-4-10 | 0-10-8 |

Scale = 1:71.2




| 3-3-8 | 9-4-4 | 13-11-4 | 20-0-0 | 26-0-12 | 26-2-8 | 32-7-6 | 40-0-0 |
|---|---|---|---|---|---|---|---|
| 3-3-8 | 6-0-12 | 4-6-15 | 6-0-12 | 6-0-12 | 0-1-12 | 6-4-14 | 7-4-10 |

APPLY 2 X 4 X 3' SPF/DF/SP NO.2 SCAB(S) TO EACH FACE OF TRUSS CENTERED ON DAMAGE/SPLICE OR AS SHOWN. ATTACH WITH (0.131" X 3") NAILS PER THE FOLLOWING NAIL SCHEDULE: 2 x 3'S - 1 ROW, 2 x 4'S - 2 ROWS, 2 x 6'S AND LARGER - 3 ROWS: SPACED @ 4" O.C. STAGGER NAIL SPACING FROM FRONT FACE AND BACK FACE FOR A NET 2" O.C SPACING IN THE TRUSS. USE 2" MEMBER END DISTANCE.

Plate Offsets (X,Y)-- [2:0-3-11,0-1-4], [7:0-4-2,Edge], [13:Edge,0-1-15], [18:0-2-8,0-1-8], [19:0-7-8,0-3-0]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.78 | Vert(LL) | -0.27 | 18-19 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.77 | Vert(CT) | -0.51 | 18-19 | >615 | 240 | M18SHS | 197/144 |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.98 | Horz(CT) | 0.10 | 13 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | Wind(LL) | 0.21 | 18-19 | >999 | 240 | Weight: 174 lb | FT = 10% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x4 SPF No.2 *Except* 7-11: 2x6 SPF No.2 |
| BOT CHORD | 2x4 SPF No.2 *Except* 2-19: 2x8 SP DSS, 16-19: 2x4 SPF 2100F 1.8E |
| WEBS | 2x3 SPF No.2 *Except* 3-19: 2x4 SPF No.2 |
| OTHERS | 2x4 SPF No.2 |
| LBR SCAB | 13-20 2x4 SPF No.2 both sides |

**BRACING-**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 2-3-12 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-7. |
| BOT CHORD | Rigid ceiling directly applied or 3-2-6 oc bracing. Except: 1 Row at midpt 8-11 |
| WEBS | 1 Row at midpt 3-18, 5-15 |

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8, 13=0-2-0 (0-2-0 + bearing block)
Max Horz 2=-111(LC 9)
Max Uplift 2=-176(LC 8), 10=-174(LC 9), 13=-191(LC 4)
Max Grav 2=1141(LC 21), 10=520(LC 22), 13=2142(LC 1)

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

| | |
|---|---|
| TOP CHORD | 2-3=-4730/755, 3-4=-2153/307, 4-5=-1408/259, 5-6=-736/249, 6-7=-717/241, 7-8=-387/209, 8-9=0/620, 9-10=-490/262 |
| BOT CHORD | 2-19=-770/4342, 18-19=-704/3886, 17-18=-258/1946, 15-17=-88/1225, 14-15=-554/99, 13-14=-1735/194, 8-14=-1656/223, 12-13=-156/381, 10-12=-156/381 |
| WEBS | 3-19=-159/1348, 3-18=-1958/450, 4-18=0/394, 4-17=-876/229, 5-17=-72/607, 5-15=-656/118, 6-15=-498/203, 7-15=-92/790, 9-13=-805/220, 9-12=0/330, 8-15=-101/876 |

**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) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) N/A

Continued on page 2

STATE OF MISSOURI JUAN GARCIA NUMBER E-2000162101 PROFESSIONAL ENGINEER

JUAN GARCIA LICENSED 16952 KANSAS PROFESSIONAL ENGINEER

June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

**NOTES-**

8) Bearing at joint(s) 2, 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=176, 10=174, 13=191.
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.

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | B5 | HIP | 1 | 1 | I46397090 |

Job Reference (optional)

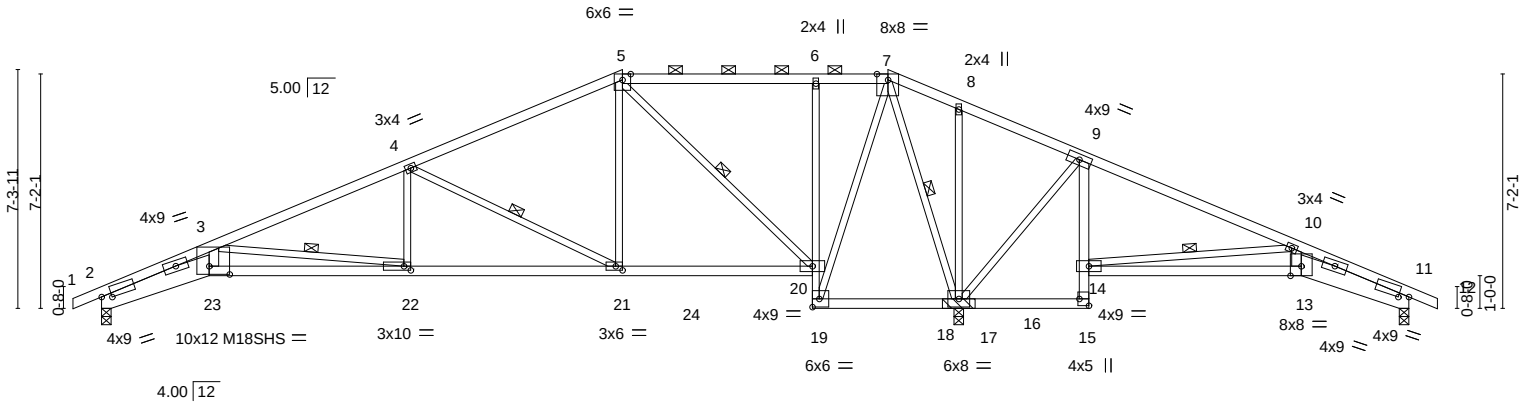
Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:47:52 2021 Page 1

ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-26dOiGQ8BiN1OdMfV8PP1bw6V9ZDqfqYdwnMwazAGBr

-0-10-8 3-3-8 9-4-4 15-11-4 21-9-0 24-0-12 26-2-12 30-2-8 36-8-8 40-0-0 40-10-8

0-10-8 3-3-8 6-0-12 6-7-0 5-9-12 2-3-12 2-2-0 3-11-12 6-6-0 3-3-8 0-10-8

Scale = 1:70.5




3-3-8 9-4-4 15-11-4 21-9-0 26-2-12 30-2-8 36-8-8 40-0-0

3-3-8 6-0-12 6-7-0 5-9-12 4-5-12 3-11-12 6-6-0 3-3-8

Plate Offsets (X,Y)-- [2:0-3-11,0-1-4], [7:0-4-2,Edge], [11:0-3-11,0-1-4], [15:Edge,0-3-8], [21:0-2-8,0-1-8], [22:0-2-8,0-1-8], [23:0-7-8,0-3-0]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.73 | Vert(LL) | -0.30 | 22-23 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.64 | Vert(CT) | -0.51 | 22-23 | >613 | 240 | M18SHS | 197/144 |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.87 | Horz(CT) | 0.23 | 17 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.21 | 22-23 | >999 | 240 | Weight: 174 lb | FT = 10% |

**LUMBER-**

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except*
2-23,11-13: 2x8 SP DSS, 20-23,9-15: 2x4 SPF 2100F 1.8E
6-19: 2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except*
3-23,10-13: 2x4 SPF No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 2-4-13 oc purlins, except
2-0-0 oc purlins (6-0-0 max.): 5-7.

BOT CHORD Rigid ceiling directly applied or 4-4-6 oc bracing.

WEBS 1 Row at midpt 3-22, 4-21, 5-20, 7-17, 10-14

**REACTIONS.** (size) 2=0-3-8, 11=0-3-8, 17=(0-3-8 + bearing block) (req. 0-4-0)
Max Horz 2=-122(LC 13)
Max Uplift 2=-189(LC 8), 11=-159(LC 9), 17=-163(LC 4)
Max Grav 2=1077(LC 23), 11=345(LC 22), 17=2537(LC 2)

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

TOP CHORD 2-3=-4434/829, 3-4=-1974/358, 4-5=-956/201, 7-8=0/1052, 8-9=0/1079, 9-10=-20/829, 10-11=-876/547

BOT CHORD 2-23=-853/4078, 22-23=-777/3627, 21-22=-325/1794, 20-21=-61/796, 19-20=-1179/166, 6-20=-391/165, 17-19=-461/108, 15-17=-595/61, 9-14=0/266, 13-14=-455/686, 11-13=-493/787

WEBS 3-23=-190/1345, 3-22=-1848/456, 4-22=0/472, 4-21=-1103/295, 5-21=-46/753, 5-20=-1094/130, 7-19=-147/1280, 7-17=-1717/117, 9-17=-619/185, 10-14=-1063/369, 10-13=-61/363

**NOTES-**

1) 2x4 SPF No.2 bearing block 12" long at jt. 17 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF No.2.
2) Unbalanced roof live loads have been considered for this design.
3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Bearing at joint(s) 2, 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=189, 11=159, 17=163.
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
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | B6 | HIP | 1 | 1 | I46397091 |

Job Reference (optional)

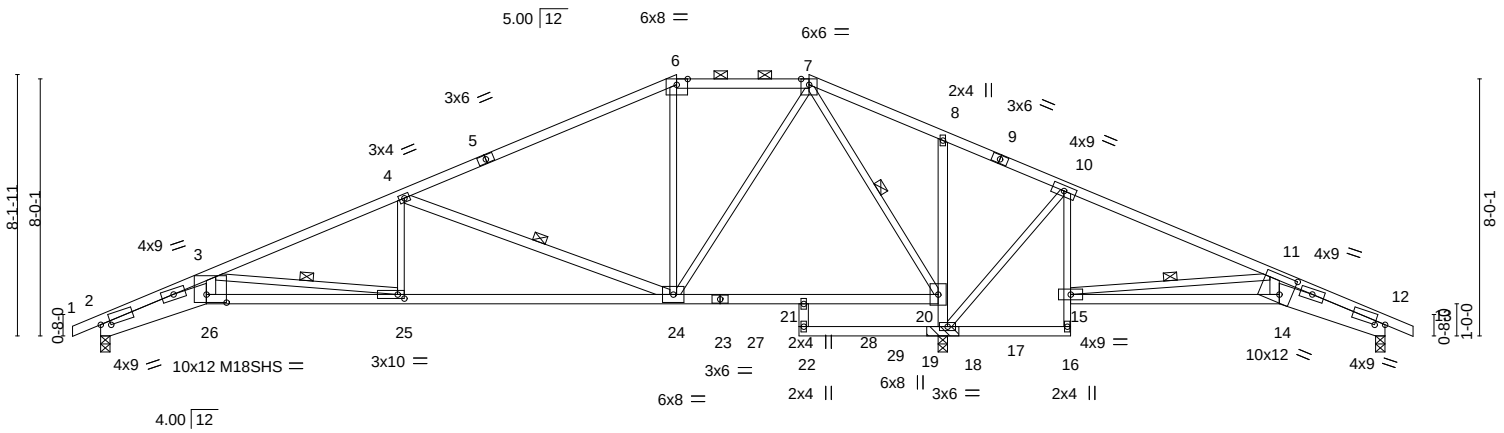
Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:47:53 2021 Page 1

ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-WIBmvcQmy0Vu0nxs2sweZpSFtZudZ4bisaWvT0zAGBq

-0-10-8 3-3-8 9-4-3 17-11-4 21-9-0 22-0-12 26-2-12 30-2-8 36-8-8 40-0-0 40-10-8

0-10-8 3-3-8 6-0-11 8-7-0 3-9-12 0-3-12 4-2-0 3-11-12 6-6-0 3-3-8 0-10-8

Scale = 1:71.8




3-3-8 9-4-3 17-11-4 21-9-0 22-0-12 26-2-12 30-2-8 36-8-8 40-0-0

3-3-8 6-0-11 8-7-0 3-9-12 0-3-12 4-2-0 3-11-12 6-6-0 3-3-8

Plate Offsets (X,Y)-- [2:0-3-11,0-1-4], [6:0-4-2,Edge], [12:0-3-11,0-1-4], [14:0-4-8,0-7-0], [25:0-2-8,0-1-8], [26:0-7-8,0-3-0]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.88 | Vert(LL) | -0.34 | 20-21 | >913 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.69 | Vert(CT) | -0.54 | 25-26 | >577 | 240 | M18SHS | 197/144 |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.97 | Horz(CT) | 0.12 | 12 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.23 | 25-26 | >999 | 240 | Weight: 175 lb | FT = 10% |

**LUMBER-**

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except*
2-26,12-14: 2x8 SP DSS, 23-26: 2x4 SPF 2100F 1.8E
10-16: 2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except*
21-22,3-26,4-24,11-14: 2x4 SPF No.2, 8-18: 2x4 SPF 2100F 1.8E

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 6-7.

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

WEBS 1 Row at midpt 3-25, 4-24, 7-20, 11-15

**REACTIONS.** (size) 2=0-3-8, 12=0-3-8, 18=(0-3-8 + bearing block) (req. 0-3-10)
Max Horz 2=137(LC 8)
Max Uplift 2=-207(LC 8), 12=-155(LC 9), 18=-126(LC 9)
Max Grav 2=1180(LC 23), 12=502(LC 22), 18=2320(LC 2)

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

TOP CHORD 2-3=-4892/916, 3-4=-2324/430, 4-6=-1032/210, 6-7=-858/243, 7-8=0/662, 8-10=0/555, 10-11=-132/254, 11-12=-1683/520

BOT CHORD 2-26=-947/4495, 25-26=-858/4001, 24-25=-412/2128, 21-24=0/316, 20-21=0/316, 10-15=0/272, 14-15=-415/1353, 12-14=-445/1534

WEBS 3-26=-226/1469, 3-25=-1889/450, 4-25=0/492, 4-24=-1360/374, 7-24=-123/1054, 7-20=-1527/94, 18-20=-1610/125, 8-20=-265/130, 10-18=-599/188, 11-15=-1314/373, 11-14=-56/627

**NOTES-**

1) 2x4 SPF No.2 bearing block 12" long at jt. 18 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF No.2.
2) Unbalanced roof live loads have been considered for this design.
3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Bearing at joint(s) 2, 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=207, 12=155, 18=126.
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 JUAN GARCIA NUMBER E-2000162101 PROFESSIONAL ENGINEER

JUAN GARCIA LICENSED 16952 KANSAS PROFESSIONAL ENGINEER

June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI



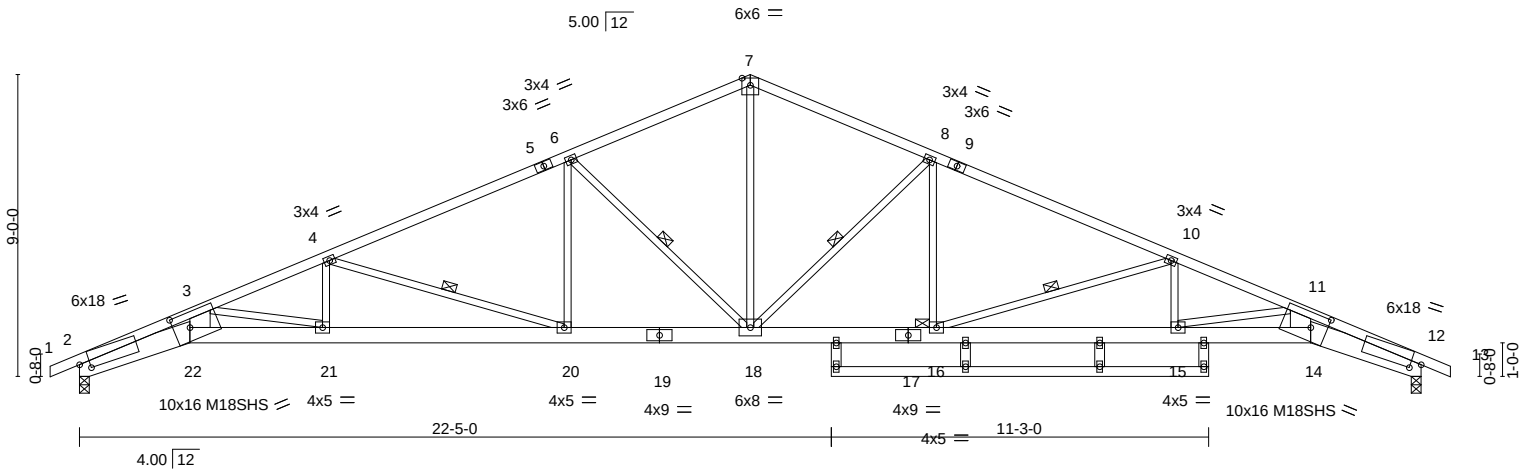

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | B7 | Roof Special | 2 | 1 | I46397092 |
| | | | | | Job Reference (optional) |

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:47:55 2021 Page 1
ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-ThIWKIS0UdmcF55EAGy6eEYazNYZ10l_Ju?0XvzAGBo

| -0-10-8 | 3-3-8 | 7-4-3 | 14-6-10 | 20-0-0 | 25-5-6 | 32-7-13 | 36-8-8 | 40-0-0 | 40-10-8 |
|---|---|---|---|---|---|---|---|---|---|
| 0-10-8 | 3-3-8 | 4-0-11 | 7-2-7 | 5-5-6 | 5-5-6 | 7-2-7 | 4-0-11 | 3-3-8 | 0-10-8 |

Scale = 1:68.7




| 3-3-8 | 7-4-3 | 14-6-10 | 20-0-0 | 25-5-6 | 32-7-13 | 36-8-8 | 40-0-0 |
|---|---|---|---|---|---|---|---|
| 3-3-8 | 4-0-11 | 7-2-7 | 5-5-6 | 5-5-6 | 7-2-7 | 4-0-11 | 3-3-8 |

Plate Offsets (X,Y)-- [2:0-3-11,0-2-5], [12:0-3-11,0-2-5], [14:0-5-12,0-5-4], [22:0-5-12,0-5-4]

| 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 | 0.91 | Vert(LL) | -0.46 | 16-18 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.79 | Vert(CT) | -0.84 | 16-18 | >567 | 240 | M18SHS | 197/144 |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.86 | Horz(CT) | 0.51 | 12 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.32 | 20 | >999 | 240 | Weight: 214 lb | FT = 10% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x4 SPF No.2 *Except* |
| | 1-5,9-13: 2x4 SPF 2100F 1.8E |
| BOT CHORD | 2x8 SP DSS *Except* |
| | 17-19: 2x6 SPF No.2, 14-17,19-22: 2x6 SP DSS, 23-24: 2x4 SPF No.2 |
| WEBS | 2x3 SPF No.2 *Except* |
| | 11-14,3-22: 2x8 SP DSS, 23-25,24-26,27-28,29-30: 2x4 SPF No.2 |

**BRACING-**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 2-2-0 oc purlins. |
| BOT CHORD | Rigid ceiling directly applied or 8-7-1 oc bracing. |
| WEBS | 1 Row at midpt 8-18, 10-16, 6-18, 4-20 |
| JOINTS | 1 Brace at Jt(s): 16 |

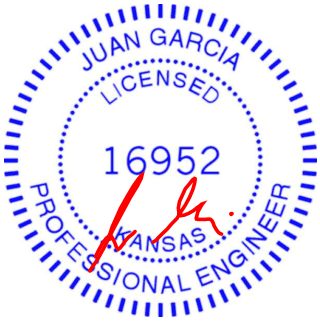
**REACTIONS.** (size) 2=0-3-8, 12=0-3-8
Max Horz 2=-153(LC 13)
Max Uplift 2=-253(LC 8), 12=-253(LC 9)
Max Grav 2=1858(LC 1), 12=1858(LC 1)

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

| | |
|---|---|
| TOP CHORD | 2-3=-7653/1086, 3-4=-5005/664, 4-6=-3470/426, 6-7=-2625/334, 7-8=-2625/350, 8-10=-3470/397, 10-11=-5005/596, 11-12=-7653/882 |
| BOT CHORD | 2-22=-1114/7002, 21-22=-967/6021, 20-21=-666/4622, 18-20=-332/3113, 16-18=-163/3113, 15-16=-448/4622, 14-15=-669/6021, 12-14=-767/7002 |
| WEBS | 7-18=-166/1633, 8-18=-1077/265, 8-16=-15/603, 10-16=-1586/312, 10-15=0/597, 11-15=-1431/226, 11-14=-169/1893, 6-18=-1076/275, 6-20=-26/602, 4-20=-1587/352, 4-21=-12/598, 3-21=-1431/308, 3-22=-265/1892 |

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates unless otherwise indicated.
4) 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) Bearing at joint(s) 2, 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=253, 12=253.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.


June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI



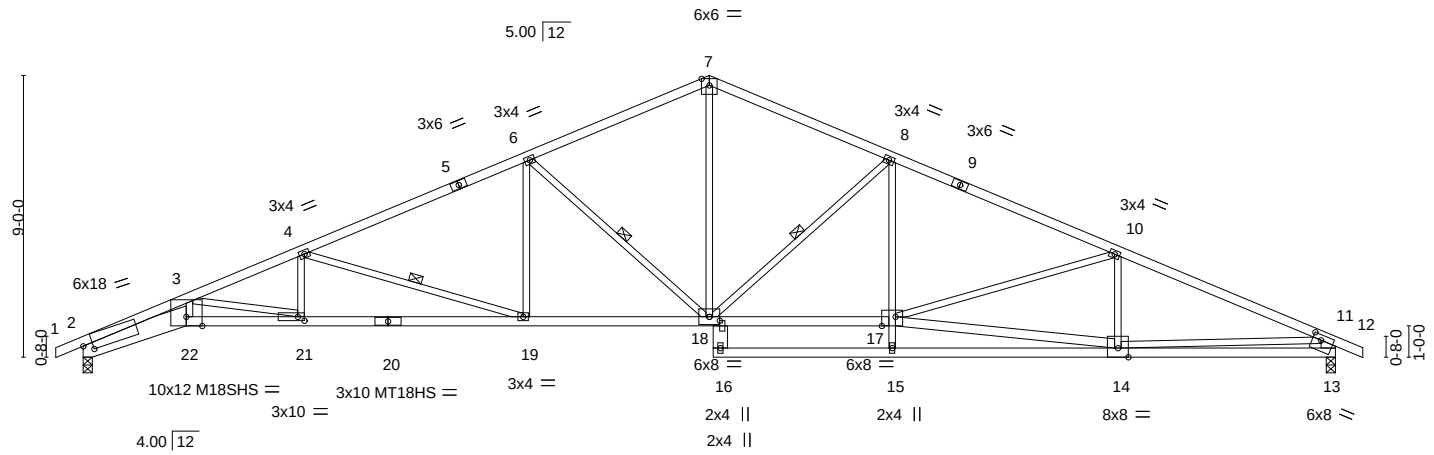

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | B8 | Roof Special | 6 | 1 | I46397093 |
| | | | | | Job Reference (optional) |

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:47:56 2021 Page 1
ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-xtsuYeTeExuTtFgQk_TLBR4lRnrhmUW8YYlZ3LzAGBn

| -0-10-8 | 3-3-8 | 6-11-8 | 14-1-14 | 20-0-0 | 25-10-2 | 33-0-10 | 40-0-0 | 40-10-8 |
|---|---|---|---|---|---|---|---|---|
| 0-10-8 | 3-3-8 | 3-8-0 | 7-2-6 | 5-10-2 | 5-10-2 | 7-2-8 | 6-11-6 | 0-10-8 |

Scale = 1:73.6




| 3-3-8 | 6-11-8 | 14-1-14 | 20-0-0 | 20-1-8 | 25-10-2 | 33-0-10 | 40-0-0 |
|---|---|---|---|---|---|---|---|
| 3-3-8 | 3-8-0 | 7-2-6 | 5-10-2 | 0-1-8 | 5-8-10 | 7-2-8 | 6-11-6 |

Plate Offsets (X,Y)-- [2:0-3-11,0-2-5], [13:0-3-4,0-2-0], [17:0-5-4,Edge], [18:0-1-8,0-4-0], [21:0-2-8,0-1-8], [22:0-6-2,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 | 0.93 | Vert(LL) | -0.42 | 19 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.99 | Vert(CT) | -0.79 | 19-21 | >603 | 240 | M18SHS | 197/144 |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.83 | Horz(CT) | 0.39 | 13 | n/a | n/a | MT18HS | 197/144 |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.30 | 21 | >999 | 240 | Weight: 173 lb | FT = 10% |

**LUMBER-**

TOP CHORD 2x4 SPF No.2 *Except*
1-5,9-12: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except*
2-22: 2x8 SP DSS, 20-22: 2x4 SPF 2400F 2.0E
17-20: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
16-18: 2x6 SPF No.2, 11-13: 2x6 SP DSS, 14-17: 2x4 SPF No.2

**BRACING-**

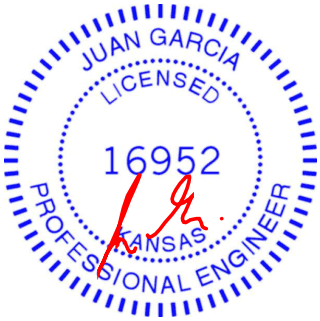
TOP CHORD Structural wood sheathing directly applied or 1-11-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 4-19, 6-18, 8-18

**REACTIONS.** (size) 2=0-3-8, 13=0-3-8
Max Horz 2=148(LC 12)
Max Uplift 2=-254(LC 8), 13=-256(LC 9)
Max Grav 2=1853(LC 1), 13=1859(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-7834/1124, 3-4=-4941/661, 4-6=-3476/431, 6-7=-2565/332, 7-8=-2601/350, 8-10=-3446/405, 10-11=-3481/437, 11-13=-1783/290
BOT CHORD 2-22=-1144/7172, 21-22=-1045/6556, 19-21=-663/4576, 18-19=-336/3119, 17-18=-179/3103, 13-14=-192/973
WEBS 3-22=-309/2130, 3-21=-2027/390, 4-21=-2/522, 4-19=-1527/343, 6-19=-15/593, 6-18=-1108/279, 8-18=-1080/267, 15-17=0/286, 8-17=-11/567, 10-14=-438/145, 11-14=-132/2154, 7-18=-154/1566, 14-17=-336/3093

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=254, 13=256.
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.


June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI



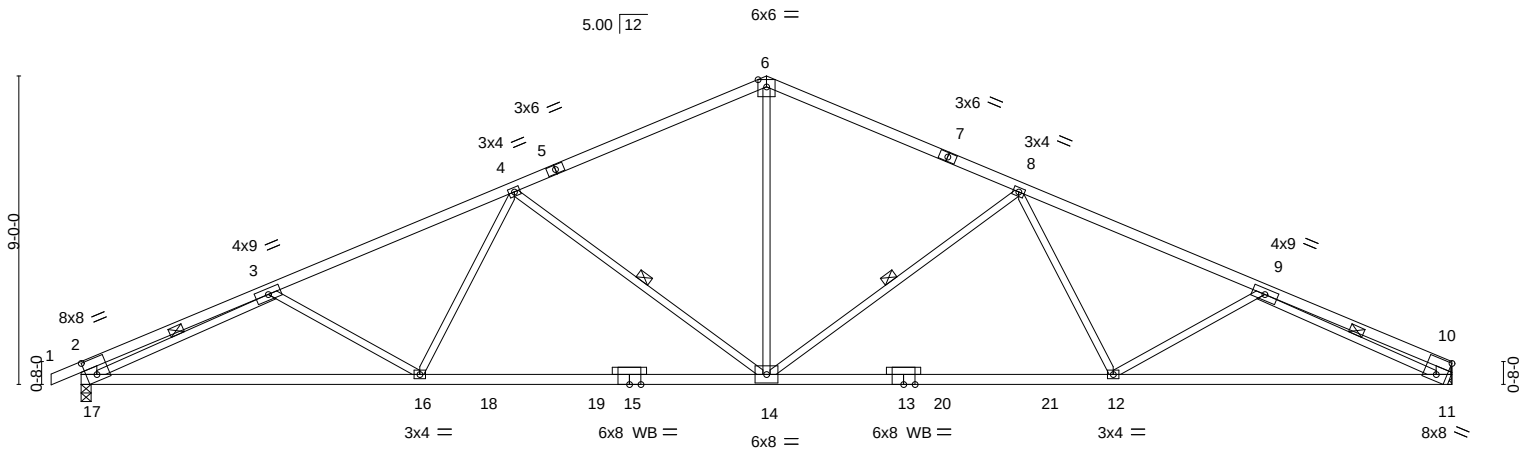

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | C1 | Common | 1 | 1 | I46397094 |
| | | | | | Job Reference (optional) |

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:47:57 2021 Page 1
ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-P3QHI_TG?F0KVOFdHh_akfdwUAEFVufHnCU7cnzAGBm

| -0-10-8 | 5-7-0 | 12-7-11 | 20-0-0 | 27-4-5 | 34-5-0 | 40-0-0 |
|---|---|---|---|---|---|---|
| 0-10-8 | 5-7-0 | 7-0-11 | 7-4-5 | 7-4-5 | 7-0-11 | 5-7-0 |

Scale = 1:67.2




| 9-10-10 | 20-0-0 | 30-1-7 | 40-0-0 |
|---|---|---|---|
| 9-10-10 | 10-1-6 | 10-1-7 | 9-10-10 |

Plate Offsets (X,Y)-- [2:0-3-9,0-5-11], [11:Edge,0-5-11]

| 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 | 12-14 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.71 | Vert(CT) | -0.67 | 12-14 | >709 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.96 | Horz(CT) | 0.15 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.12 | 14-16 | >999 | 240 | Weight: 148 lb | FT = 10% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x4 SPF No.2 |
| BOT CHORD | 2x4 SPF 2100F 1.8E |
| WEBS | 2x3 SPF No.2 *Except* 2-17,10-11: 2x6 SP DSS |
| OTHERS | 2x3 SPF No.2 |

**BRACING-**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied, except end verticals. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS | 1 Row at midpt 8-14, 4-14, 3-17, 9-11 |

**REACTIONS.** (size) 17=0-3-8, 11=Mechanical
Max Horz 17=86(LC 8)
Max Uplift 17=-37(LC 8), 11=-25(LC 9)
Max Grav 17=1940(LC 2), 11=1875(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1073/23, 3-4=-3444/45, 4-6=-2479/69, 6-8=-2479/68, 8-9=-3450/46, 9-10=-913/0, 2-17=-634/54, 10-11=-481/28
BOT CHORD 16-17=-128/3215, 14-16=-30/2898, 12-14=0/2899, 11-12=-55/3234
WEBS 6-14=0/1458, 8-14=-899/139, 8-12=0/523, 9-12=-279/146, 4-14=-898/139, 4-16=0/515, 3-16=-261/144, 3-17=-2562/76, 9-11=-2740/107

**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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17, 11.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | C2 | Hip | 1 | 1 | I46397095 |

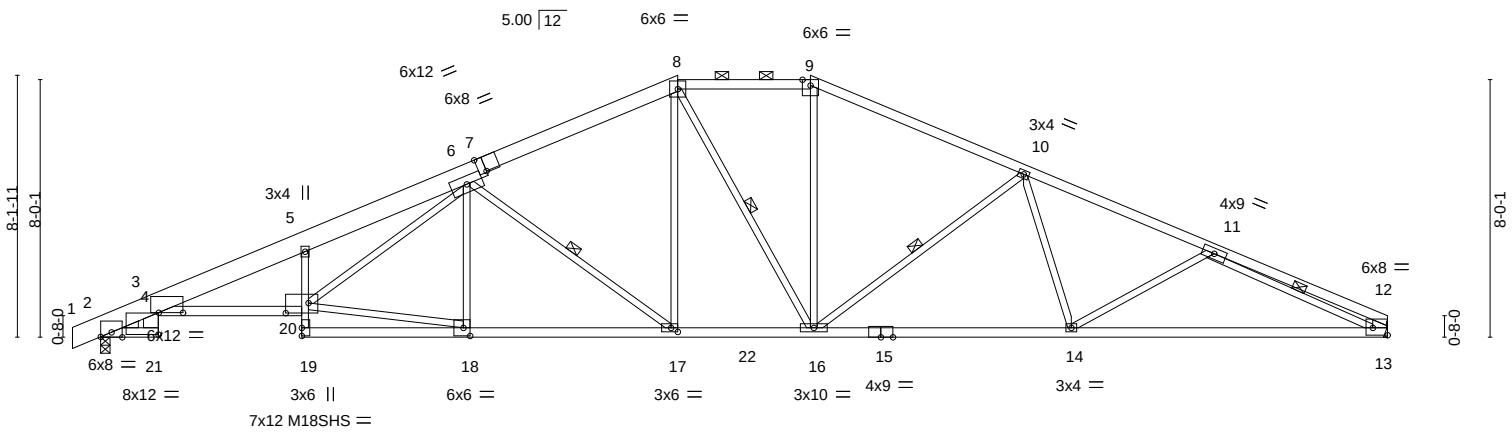
Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 — 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Jun 3 09:33:11 2021 Page 1

ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-mR2G?usPwYBP61l6zOPTp9eBO7I5A28_ytpgXuzA1TM

| -0-10-8 | 1-9-8 | 6-3-0 | 11-4-8 | 17-11-4 | 22-0-12 | 28-8-4 | 34-5-14 | 40-0-0 |
|---|---|---|---|---|---|---|---|---|
| 0-10-8 | 1-9-8 | 4-5-8 | 5-1-8 | 6-6-11 | 4-1-8 | 6-7-8 | 5-9-9 | 5-6-2 |

Scale = 1:71.6




| 1-9-8 | 6-3-0 | 11-4-8 | 17-11-4 | 22-0-12 | 30-2-1 | 40-0-0 |
|---|---|---|---|---|---|---|
| 1-9-8 | 4-5-8 | 5-1-8 | 6-6-11 | 4-1-8 | 8-1-5 | 9-9-15 |

Plate Offsets (X,Y)-- [4:0-9-1,0-0-0], [7:0-2-12,Edge], [12:Edge,0-2-12], [17:0-2-8,0-1-8], [18:0-2-8,0-3-0], [20:0-8-8,0-3-12], [21:Edge,0-0-14]

| 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) | -0.36 | 17-18 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.89 | Vert(CT) | -0.64 | 17-18 | >739 | 240 | M18SHS | 197/144 |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.96 | Horz(CT) | 0.31 | 13 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.16 | 17-18 | >999 | 240 | Weight: 188 lb | FT = 10% |

**LUMBER-**

TOP CHORD 2x4 SPF No.2 *Except*
7-8: 2x6 SPF No.2, 1-7: 2x8 SP DSS
BOT CHORD 2x4 SPF No.2 *Except*
3-21: 2x6 SPF No.2, 4-20,13-15: 2x4 SPF 2100F 1.8E
5-19: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
12-13: 2x6 SPF No.2
WEDGE
Left: 2x3 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 (3-8-7 max.): 8-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-17, 8-16, 10-16, 11-13

**REACTIONS.** (lb/size) 2=1851/0-3-8, 13=1782/Mechanical
Max Horz 2=86(LC 8)
Max Uplift 2=-30(LC 8), 13=-16(LC 9)
Max Grav 2=1901(LC 2), 13=1847(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1549/0, 3-4=-56/1020, 4-5=-5116/51, 5-6=-5134/116, 6-7=-2659/16, 7-8=-2657/36, 8-9=-2368/58, 9-10=-2645/39, 10-11=-3386/26, 11-12=-953/0, 12-13=-505/31
BOT CHORD 2-21=-23/697, 4-20=-75/4814, 5-20=-586/100, 18-19=-4/313, 17-18=-6/3060, 17-22=0/2378, 16-22=0/2378, 15-16=0/2966, 14-15=0/2966, 13-14=-32/3146
WEBS 18-20=-3/2784, 6-20=-87/2124, 6-18=-322/78, 6-17=-854/111, 8-17=-5/724, 8-16=-254/225, 9-16=0/695, 10-16=-766/106, 10-14=0/402, 11-13=-2627/82

**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) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 2 and 16 lb uplift at joint 13.
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.

STATE OF MISSOURI — JUAN GARCIA — NUMBER E-2000162101 — PROFESSIONAL ENGINEER

JUAN GARCIA — LICENSED — 16952 — KANSAS — PROFESSIONAL ENGINEER

June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | C3 | HIP | 1 | 1 | I46397096 |
| | | | | | Job Reference (optional) |

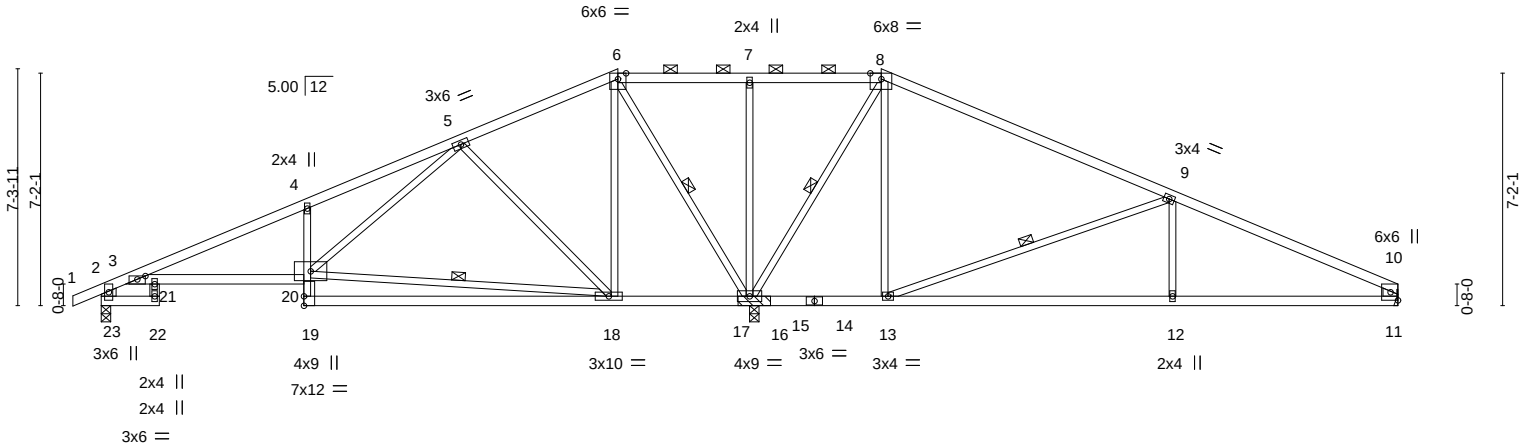
Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:03 2021 Page 1

ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-EDnY01Y1b5mTDJiney5_zwt0BbLmveGA98xRpRzAGBg

-0-10-8 1-9-8 | 6-3-0 | 11-1-2 | 15-11-4 | 20-0-0 | 20-1-12 | 24-0-12 | 33-0-9 | 40-0-0

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

Scale = 1:71.1




1-9-8 | 6-3-0 | 15-11-4 | 20-1-12 | 24-0-12 | 33-0-9 | 40-0-0

1-9-8 | 4-5-8 | 9-8-4 | 4-2-8 | 3-11-0 | 8-11-13 | 6-11-7

Plate Offsets (X,Y)-- [8:0-4-2,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 | 0.64 | Vert(LL) | -0.21 | 18-19 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.57 | Vert(CT) | -0.44 | 18-19 | >535 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.89 | Horz(CT) | 0.08 | 16 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.06 | 20-21 | >999 | 240 | Weight: 158 lb | FT = 10% |

**LUMBER-**

TOP CHORD 2x4 SPF 2100F 1.8E *Except*
6-8: 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except*
4-19: 2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except*
21-22: 2x4 SPF No.2, 2-23,10-11: 2x6 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 (10-0-0 max.): 6-8.

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

WEBS 1 Row at midpt 18-20, 6-16, 8-16, 9-13

**REACTIONS.** (size) 23=0-3-8, 16=(0-3-8 + bearing block) (req. 0-4-2), 11=Mechanical
Max Horz 23=68(LC 8)
Max Uplift 23=-39(LC 8), 11=-46(LC 9)
Max Grav 23=657(LC 19), 16=2647(LC 1), 11=562(LC 20)

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

TOP CHORD 3-4=-1078/97, 4-5=-1047/160, 5-6=0/617, 6-7=0/1234, 7-8=0/1235, 8-9=-22/670, 9-10=-831/108, 2-23=-689/69, 10-11=-488/76

BOT CHORD 3-21=-101/958, 20-21=-102/961, 4-20=-398/116, 16-18=-547/111, 13-16=-528/93, 12-13=-55/697, 11-12=-55/697

WEBS 18-20=-360/110, 5-20=-79/934, 5-18=-661/131, 6-18=0/659, 6-16=-1357/13, 7-16=-291/68, 8-16=-1394/8, 8-13=0/552, 9-13=-1073/120, 9-12=0/334

**NOTES-**

1) 2x4 SPF No.2 bearing block 12" long at jt. 16 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF No.2.
2) Unbalanced roof live loads have been considered for this design.
3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 39 lb uplift at joint 23 and 46 lb uplift at joint 11.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | C4 | HIP | 1 | 1 | I46397097 |

Job Reference (optional)

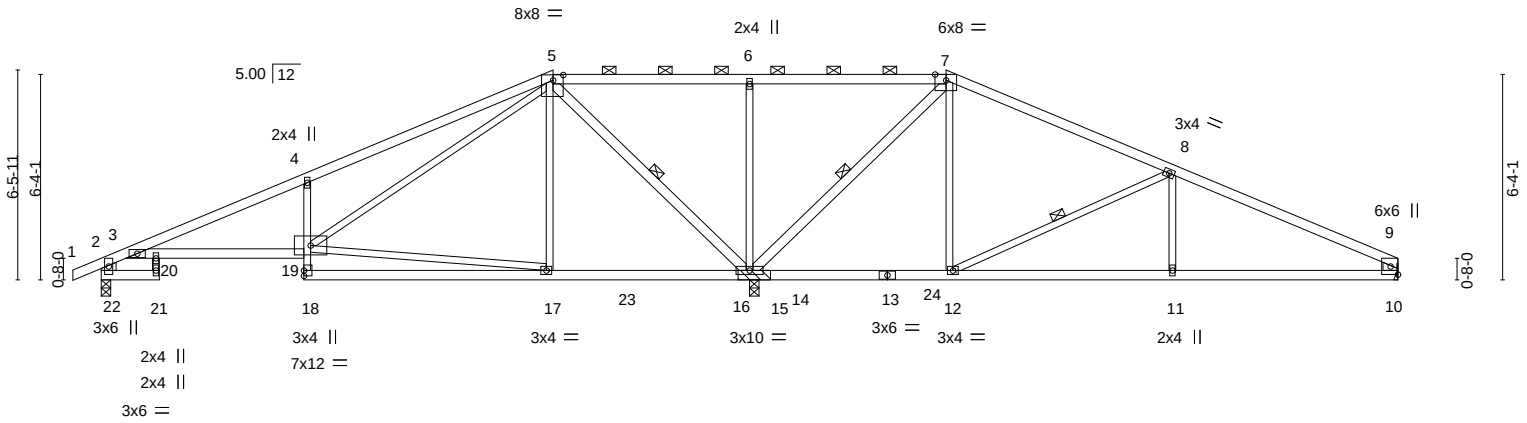
Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:05 2021 Page 1

ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-AcvIRjaI7i0BSds9lN8S2LyKmP0INdMTdRQYuJzAGBe

-0-10-8 1-9-8 | 6-3-0 | 13-11-4 | 20-0-0 | 26-0-12 | 33-0-9 | 40-0-0

0-10-8 1-9-8 | 4-5-8 | 7-8-4 | 6-0-12 | 6-0-12 | 6-11-13 | 6-11-8

Scale = 1:71.1




1-9-8 | 6-3-0 | 13-11-4 | 20-0-0 | 20-1-12 | 26-0-12 | 33-0-9 | 40-0-0

1-9-8 | 4-5-8 | 7-8-4 | 6-0-12 | 0-1-12 | 5-11-0 | 6-11-13 | 6-11-8

Plate Offsets (X,Y)-- [5:0-3-12,0-2-0], [7:0-4-2,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 | 0.76 | Vert(LL) | -0.12 | 19-20 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.57 | Vert(CT) | -0.22 | 17-18 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.53 | Horz(CT) | 0.09 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.06 | 19-20 | >999 | 240 | Weight: 156 lb | FT = 10% |

**LUMBER-**

TOP CHORD 2x4 SPF No.2 *Except*
1-5: 2x4 SPF 2100F 1.8E

BOT CHORD 2x4 SPF No.2 *Except*
4-18: 2x3 SPF No.2, 13-18: 2x4 SPF 2100F 1.8E

WEBS 2x3 SPF No.2 *Except*
5-15,7-15: 2x4 SPF No.2, 2-22,9-10: 2x6 SPF No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-10-1 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 5-7.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 15-17,12-15.

WEBS 1 Row at midpt 5-15, 7-15, 8-12

**REACTIONS.** (size) 22=0-3-8, 15=(0-3-8 + bearing block) (req. 0-4-4), 10=Mechanical
Max Horz 22=58(LC 10)
Max Uplift 22=-40(LC 8), 15=-3(LC 5), 10=-45(LC 9)
Max Grav 22=663(LC 19), 15=2723(LC 2), 10=577(LC 20)

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

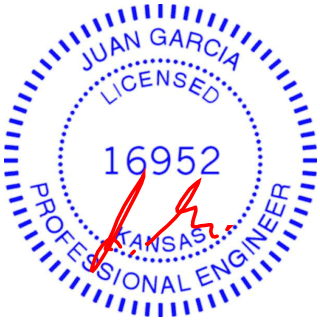
TOP CHORD 3-4=-1142/111, 4-5=-1196/214, 5-6=0/1322, 6-7=0/1324, 7-8=-49/361, 8-9=-816/102, 2-22=-689/66, 9-10=-500/80

BOT CHORD 3-20=-108/1027, 19-20=-109/1030, 4-19=-548/165, 15-17=-302/102, 12-15=-290/89, 11-12=-46/676, 10-11=-46/676

WEBS 17-19=-308/79, 5-19=-177/1269, 5-17=0/360, 5-15=-1507/19, 6-15=-471/111, 7-15=-1505/0, 7-12=0/618, 8-12=-846/95, 8-11=0/285

**NOTES-**

1) 2x4 SPF 2100F 1.8E bearing block 12" long at jt. 15 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF No.2.
2) Unbalanced roof live loads have been considered for this design.
3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 40 lb uplift at joint 22, 3 lb uplift at joint 15 and 45 lb uplift at joint 10.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.


June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI



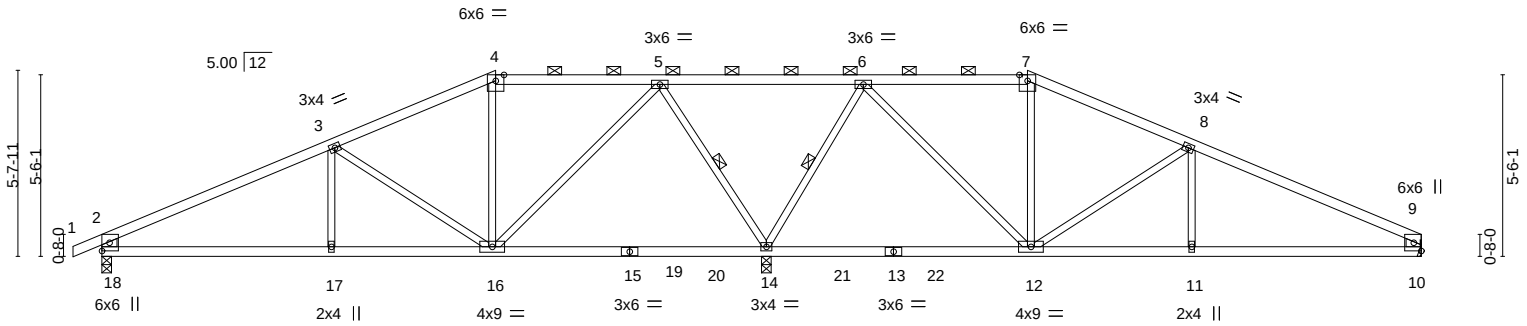

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | C5 | Hip | 1 | 1 | I46397098 |
| | | | | | Job Reference (optional) |

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:06 2021 Page 1
ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-eoTge3awu0824nRLJ4fhbYVXVpMy651cr5A5QmzAGBd

| -0-10-8 | 6-11-8 | 11-11-4 | 16-11-0 | 23-1-0 | 28-0-12 | 33-0-8 | 40-0-0 |
|---|---|---|---|---|---|---|---|
| 0-10-8 | 6-11-8 | 4-11-12 | 4-11-12 | 6-2-1 | 4-11-12 | 4-11-12 | 6-11-8 |

Scale = 1:69.9




| 6-11-8 | 11-11-4 | 20-1-12 | 28-0-12 | 33-0-8 | 40-0-0 |
|---|---|---|---|---|---|
| 6-11-8 | 4-11-12 | 8-2-8 | 7-11-0 | 4-11-12 | 6-11-8 |

| 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 | 0.63 | Vert(LL) | -0.12 | 14-16 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.54 | Vert(CT) | -0.21 | 14-16 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.51 | Horz(CT) | 0.02 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | Wind(LL) | 0.03 | 11-12 | >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* 2-18,9-10: 2x6 SPF No.2 |

**BRACING-**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 5-2-3 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-7. |
| BOT CHORD | Rigid ceiling directly applied or 6-0-0 oc bracing. |
| WEBS | 1 Row at midpt 5-14, 6-14 |

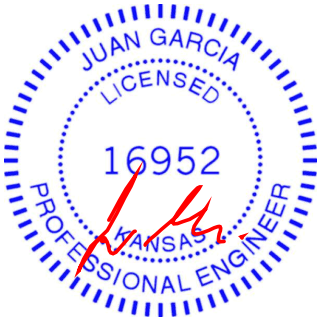
**REACTIONS.** (size) 18=0-3-8, 14=0-3-8 (req. 0-3-14), 10=Mechanical
Max Horz 18=50(LC 8)
Max Uplift 18=-54(LC 8), 14=-12(LC 5), 10=-43(LC 9)
Max Grav 18=756(LC 19), 14=2473(LC 2), 10=643(LC 22)

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

| | |
|---|---|
| TOP CHORD | 2-3=-999/96, 3-4=-466/97, 4-5=-367/104, 5-6=0/1092, 6-7=-286/106, 7-8=-380/100, 8-9=-920/96, 2-18=-680/96, 9-10=-554/81 |
| BOT CHORD | 17-18=-79/831, 16-17=-79/831, 14-16=-440/33, 12-14=-492/6, 11-12=-40/766, 10-11=-40/766 |
| WEBS | 3-16=-586/82, 5-16=0/983, 5-14=-1263/69, 6-14=-1251/70, 6-12=0/998, 8-12=-600/81 |

**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) WARNING: Required bearing size at joint(s) 14 greater than input bearing size.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 54 lb uplift at joint 18, 12 lb uplift at joint 14 and 43 lb uplift at joint 10.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.


June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | C6 | Hip | 1 | 1 | I46397099 |

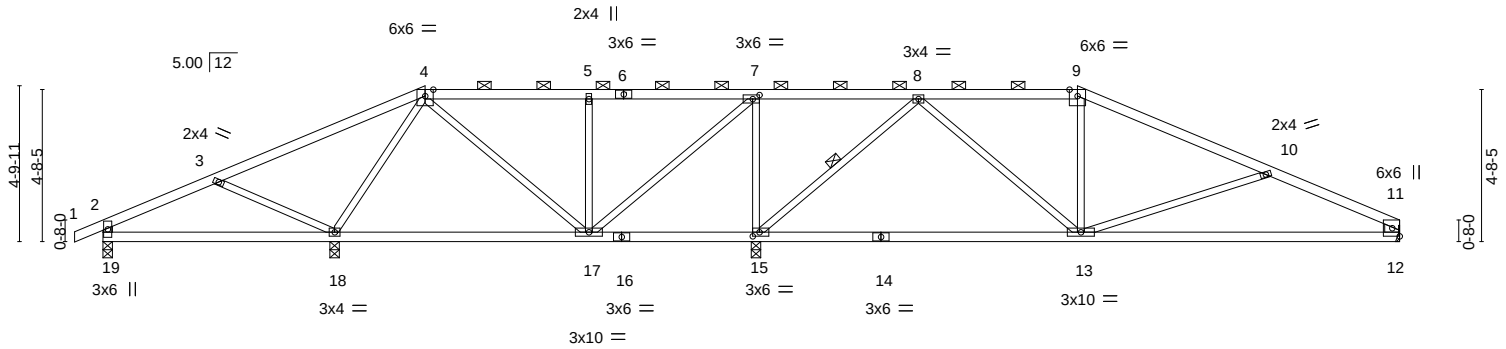
Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:07 2021 Page 1

ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-6?12rPbYfJGvhx0YtoAw7m1jcCfprXfl4lveyCzAGBc

| -0-10-8 | 3-6-13 | 9-11-4 | 14-11-14 | 20-1-12 | 25-1-14 | 30-0-12 | 35-10-7 | 40-0-0 |
|---|---|---|---|---|---|---|---|---|
| 0-10-8 | 3-6-13 | 6-4-7 | 5-0-10 | 5-1-14 | 5-0-2 | 4-10-14 | 5-9-11 | 4-1-9 |

Scale = 1:71.1




| 7-1-12 | 14-11-14 | 20-1-12 | 30-0-12 | 40-0-0 |
|---|---|---|---|---|
| 7-1-12 | 7-10-2 | 5-1-14 | 9-11-0 | 9-11-4 |

Plate Offsets (X,Y)-- [7:0-2-8,0-1-8], [15:0-2-8,0-1-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.55 | Vert(LL) | -0.17 | 13-15 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.76 | Vert(CT) | -0.36 | 13-15 | >660 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.55 | Horz(CT) | -0.01 | 15 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.04 | 13-15 | >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* 2-19: 2x4 SPF 2400F 2.0E, 11-12: 2x6 SP DSS |

**BRACING-**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 4-10-3 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-9. |
| BOT CHORD | Rigid ceiling directly applied or 5-9-3 oc bracing. |
| WEBS | 1 Row at midpt 8-15 |

**REACTIONS.** All bearings 0-3-8 except (jt=length) 12=Mechanical.
(lb) - Max Horz 19=42(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 18, 15, 12
Max Grav All reactions 250 lb or less at joint(s) 19 except 18=946(LC 19), 15=1949(LC 20), 12=666(LC 20)

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

| | |
|---|---|
| TOP CHORD | 3-4=-94/534, 4-5=-29/262, 5-7=-29/260, 7-8=-29/926, 8-9=-569/4, 9-10=-688/0, 10-11=-1090/60, 11-12=-568/49 |
| BOT CHORD | 15-17=-926/132, 12-13=-29/944 |
| WEBS | 3-18=-534/159, 4-18=-654/99, 5-17=-377/87, 7-17=-49/922, 7-15=-957/115, 8-15=-1253/81, 8-13=0/718, 10-13=-404/152 |

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18, 15, 12.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | C7 | Roof Special | 1 | 1 | I46397100 |

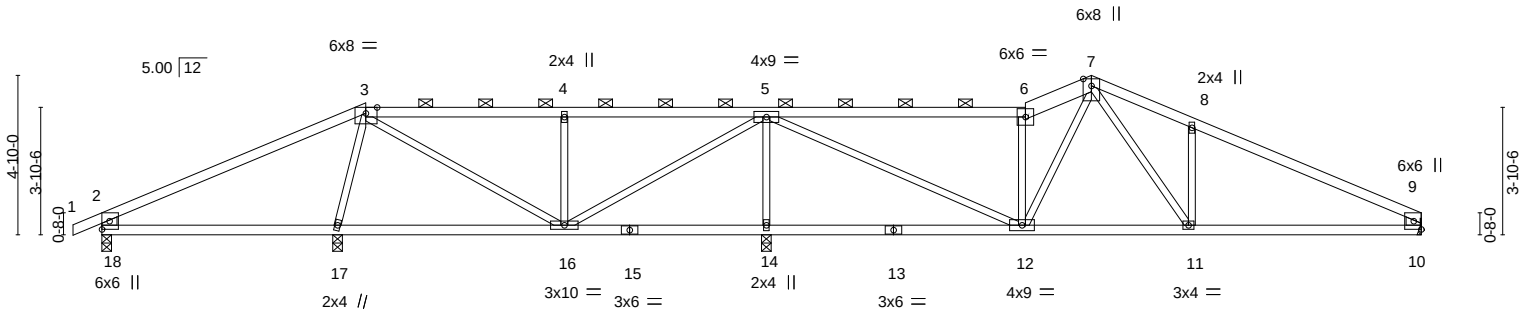
Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:08 2021 Page 1

ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-aBbR3kcAQdOmJ5bkRVh9gzar8c2may1vJPfCUezAGBb

| -0-10-8 | 8-0-0 | 14-0-4 | 20-1-12 | 28-0-0 | 30-0-0 | 33-0-9 | 40-0-0 |
|---|---|---|---|---|---|---|---|
| 0-10-8 | 8-0-0 | 6-0-4 | 6-1-8 | 7-10-4 | 2-0-0 | 3-0-9 | 6-11-7 |

Scale = 1:69.9




| 7-1-12 | 14-0-4 | 20-1-12 | 28-0-0 | 33-0-9 | 40-0-0 |
|---|---|---|---|---|---|
| 7-1-12 | 6-10-8 | 6-1-8 | 7-10-4 | 5-0-9 | 6-11-7 |

Plate Offsets (X,Y)-- [3:0-4-2,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 | 0.75 | Vert(LL) | -0.10 | 11-12 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.52 | Vert(CT) | -0.18 | 12-14 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.60 | Horz(CT) | 0.01 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.04 | 11-12 | >999 | 240 | Weight: 136 lb | FT = 10% |

**LUMBER-**

TOP CHORD 2x4 SPF No.2 *Except* 6-7: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 2-18,9-10: 2x6 SP DSS

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-8-11 oc purlins, except end verticals, and 2-0-0 oc purlins (5-0-8 max.): 3-6.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS.** All bearings 0-3-8 except (jt=length) 10=Mechanical.
(lb) - Max Horz 18=42(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 14, 10 except 18=-107(LC 8)
Max Grav All reactions 250 lb or less at joint(s) except 18=614(LC 19), 17=393(LC 19), 14=1930(LC 1), 10=745(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-646/194, 3-4=-484/150, 4-5=-481/149, 5-6=-755/49, 6-7=-915/81, 7-8=-1105/118, 8-9=-1141/52, 2-18=-570/148, 9-10=-653/64
BOT CHORD 17-18=-151/497, 16-17=-152/550, 14-16=-620/9, 12-14=-620/9, 11-12=0/657, 10-11=0/964
WEBS 4-16=-396/97, 5-16=-102/1161, 5-14=-1770/168, 5-12=0/1513, 6-12=-751/124, 7-12=-61/362, 7-11=-84/584, 8-11=-394/138

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 10 except (jt=lb) 18=107.
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

June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI



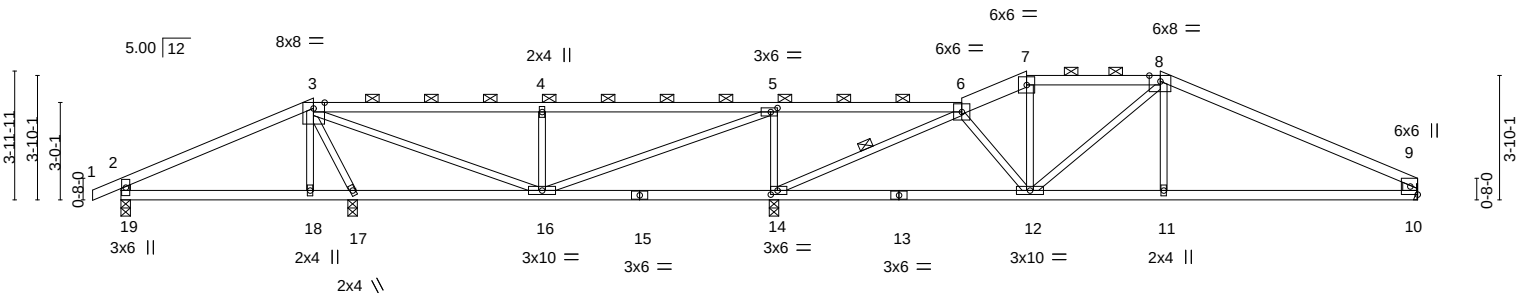

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | C8 | Roof Special | 1 | 1 | I46397101 |
| | | | | | Job Reference (optional) |

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:09 2021 Page 1
ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-2N9pG4doBxWdxE9w_DCODB7_q0PcJOU2X3Ol15zAGBa

| -0-10-8 | 5-11-4 | 12-11-14 | 20-1-12 | 25-11-4 | 27-11-4 | 32-0-12 | 40-0-0 |
|---|---|---|---|---|---|---|---|
| 0-10-8 | 5-11-4 | 7-0-10 | 7-1-14 | 5-9-8 | 2-0-0 | 4-1-8 | 7-11-4 |

Scale = 1:71.1




| 5-11-4 | 7-1-12 | 12-11-14 | 20-1-12 | 27-11-4 | 32-0-12 | 40-0-0 |
|---|---|---|---|---|---|---|
| 5-11-4 | 1-2-8 | 5-10-2 | 7-1-14 | 7-9-8 | 4-1-8 | 7-11-4 |

Plate Offsets (X,Y)-- [3:0-4-2,Edge], [5:0-2-8,0-1-8], [8:0-4-2,Edge], [14:0-2-8,0-1-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.88 | Vert(LL) | -0.09 | 10-11 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.48 | Vert(CT) | -0.20 | 10-11 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.65 | Horz(CT) | 0.02 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.03 | 11-12 | >999 | 240 | Weight: 134 lb | FT = 10% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x4 SPF No.2 *Except* 6-7: 2x6 SPF No.2 |
| BOT CHORD | 2x4 SPF No.2 |
| WEBS | 2x3 SPF No.2 *Except* 2-19: 2x4 SPF No.2, 9-10: 2x6 SP DSS |

**BRACING-**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-6, 7-8. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 16-17,14-16. |
| WEBS | 1 Row at midpt 6-14 |

**REACTIONS.** All bearings 0-3-8 except (jt=length) 10=Mechanical.
(lb) - Max Horz 19=33(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 19, 17, 14, 10
Max Grav All reactions 250 lb or less at joint(s) except 19=387(LC 19), 17=720(LC 19), 14=1775(LC 1), 10=758(LC 1)

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

| | |
|---|---|
| TOP CHORD | 2-3=-273/76, 3-4=-403/120, 4-5=-403/120, 5-6=0/744, 6-7=-871/46, 7-8=-780/46, 8-9=-1118/31, 2-19=-344/83, 9-10=-670/68 |
| BOT CHORD | 14-16=-743/21, 12-14=-13/692, 11-12=0/931, 10-11=0/934 |
| WEBS | 3-17=-712/55, 3-16=-70/562, 4-16=-522/126, 5-16=-70/1219, 5-14=-923/137, 6-14=-1587/37, 8-12=-261/32 |

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19, 17, 14, 10.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI



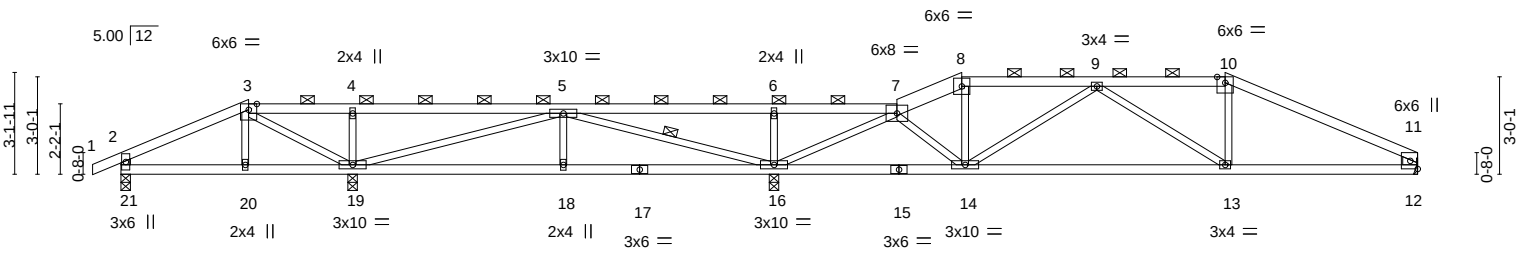

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | C9 | Roof Special | 1 | 1 | I46397102 |
| | | | | | Job Reference (optional) |

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:10 2021 Page 1
ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-XZiBUQeQxEfUYOk7YwjdlOfCTQi92pcCmj8JZXzAGBZ

| -0-10-8 | 3-11-4 | 7-1-12 | 13-7-12 | 20-1-12 | 23-11-4 | 25-11-4 | 30-1-4 | 34-0-12 | 40-0-0 |
|---|---|---|---|---|---|---|---|---|---|
| 0-10-8 | 3-11-4 | 3-2-8 | 6-6-0 | 6-6-0 | 3-9-8 | 2-0-0 | 4-2-0 | 3-11-8 | 5-11-4 |

Scale = 1:71.1




| 3-11-4 | 7-1-12 | 13-7-12 | 20-1-12 | 25-11-4 | 34-0-12 | 40-0-0 |
|---|---|---|---|---|---|---|
| 3-11-4 | 3-2-8 | 6-6-0 | 6-6-0 | 5-9-8 | 8-1-8 | 5-11-4 |

| **LOADING** (psf) | | **SPACING-** | 2-0-0 | **CSI.** | | **DEFL.** | in | (loc) | l/defl | L/d | **PLATES** | **GRIP** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.70 | Vert(LL) | -0.13 | 13-14 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.59 | Vert(CT) | -0.31 | 13-14 | >769 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.79 | Horz(CT) | 0.03 | 12 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | Wind(LL) | 0.08 | 13-14 | >999 | 240 | Weight: 132 lb | FT = 10% |

**LUMBER-**

TOP CHORD 2x4 SPF No.2 *Except* 7-8: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 2-21: 2x4 SPF 2400F 2.0E, 11-12: 2x6 SP DSS

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-8-7 oc purlins, except end verticals, and 2-0-0 oc purlins (5-6-15 max.): 3-7, 8-10.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 18-19,16-18.
WEBS 1 Row at midpt 5-16

**REACTIONS.** All bearings 0-3-8 except (jt=length) 12=Mechanical.
(lb) - Max Horz 21=41(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 21, 12 except 19=-182(LC 8), 16=-278(LC 4)
Max Grav All reactions 250 lb or less at joint(s) except 21=265(LC 21), 19=909(LC 21), 16=1713(LC 1), 12=758(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-18/326, 4-5=-20/325, 5-6=-122/1121, 6-7=-122/1121, 7-8=-823/140, 8-9=-755/139, 9-10=-1056/172, 10-11=-1235/163, 11-12=-673/109
BOT CHORD 18-19=-143/299, 16-18=-143/299, 14-16=-65/382, 13-14=-193/1153, 12-13=-111/1060
WEBS 3-19=-432/72, 4-19=-385/156, 5-19=-645/183, 5-18=0/262, 5-16=-1448/248, 6-16=-426/167, 7-16=-1681/239, 7-14=-23/497, 9-14=-500/136, 10-13=0/253

**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) 21, 12 except (jt=lb) 19=182, 16=278.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI



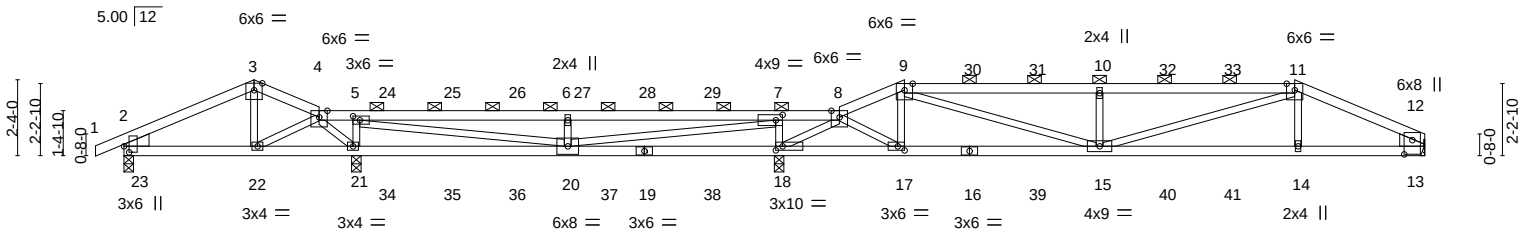

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | C10 | Roof Special Girder | 1 | 1 | I46397103 |
| | | | | | Job Reference (optional) |

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:00 2021 Page 1
ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-pe6PN?W9IAOvMszCzqYHLHFRtODyiKWjTAjnC6zAGBj

-0-10-8 4-0-0 6-0-0 7-1-12 13-7-12 20-1-12 22-0-0 24-0-0 30-0-0 36-0-0 40-0-0
0-10-8 4-0-0 2-0-0 1-1-12 6-6-0 6-6-0 1-10-4 2-0-0 6-0-0 6-0-0 4-0-0

Scale = 1:70.8




4-0-0 7-1-12 13-7-12 20-1-12 24-0-0 30-0-0 36-0-0 40-0-0
4-0-0 3-1-12 6-6-0 6-6-0 3-10-4 6-0-0 6-0-0 4-0-0

Plate Offsets (X,Y)-- [5:0-2-8,0-1-8], [7:0-2-8,0-2-0], [12:0-5-4,0-3-0], [17:0-2-8,0-1-8], [18:0-2-8,0-1-8], [23:0-2-4,0-1-14]

| 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 | 0.83 | Vert(LL) | -0.21 | 14-15 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.90 | Vert(CT) | -0.39 | 14-15 | >594 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.70 | Horz(CT) | -0.03 | 18 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.18 | 14-15 | >999 | 240 | Weight: 131 lb | FT = 10% |

**LUMBER-**

TOP CHORD 2x4 SPF No.2 *Except*
4-8,9-11: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except*
13-16: 2x4 SPF 2400F 2.0E
WEBS 2x3 SPF No.2 *Except*
2-23,12-13: 2x10 SP DSS

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 2-9-12 oc purlins, except end verticals, and 2-0-0 oc purlins (3-9-3 max.): 4-8, 9-11.
BOT CHORD Rigid ceiling directly applied or 4-3-11 oc bracing.

**REACTIONS.** All bearings 0-3-8 except (jt=length) 13=Mechanical.
(lb) - Max Horz 23=28(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) except 23=-108(LC 29), 21=-149(LC 9), 18=-504(LC 9), 13=-277(LC 9)
Max Grav All reactions 250 lb or less at joint(s) except 23=269(LC 21), 21=926(LC 1), 18=2166(LC 22), 13=1209(LC 22)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 4-5=-73/528, 5-6=-506/86, 6-7=-506/86, 7-8=-346/1655, 8-9=-1432/356, 9-10=-3017/729, 10-11=-3017/729, 11-12=-2067/477, 12-13=-969/242
BOT CHORD 21-22=-459/106, 20-21=-537/93, 18-20=-1659/364, 15-17=-309/1347, 14-15=-411/1833, 13-14=-407/1838
WEBS 4-22=-79/500, 5-21=-672/221, 5-20=-135/896, 6-20=-400/184, 7-20=-409/2040, 7-18=-839/252, 8-18=-2148/486, 8-17=-297/1351, 9-17=-394/170, 9-15=-388/1756, 10-15=-693/319, 11-15=-288/1244

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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 108 lb uplift at joint 23, 149 lb uplift at joint 21, 504 lb uplift at joint 18 and 277 lb uplift at joint 13.
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

June 3,2021

Continued on page 2

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

**NOTES-**

10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 56 lb down and 37 lb up at 8-0-0, 54 lb down and 31 lb up at 10-0-0, 54 lb down and 31 lb up at 12-0-0, 54 lb down and 31 lb up at 14-0-0, 54 lb down and 31 lb up at 16-0-0, 54 lb down and 31 lb up at 18-0-0, 96 lb down and 69 lb up at 24-0-0, 96 lb down and 69 lb up at 26-0-0, 96 lb down and 69 lb up at 28-0-0, 96 lb down and 69 lb up at 30-0-0, 96 lb down and 69 lb up at 32-0-0, and 96 lb down and 69 lb up at 34-0-0, and 96 lb down and 69 lb up at 36-0-0 on top chord, and 8 lb down at 8-0-0, 7 lb down and 1 lb up at 10-0-0, 7 lb down and 1 lb up at 12-0-0, 7 lb down and 1 lb up at 14-0-0, 7 lb down and 1 lb up at 16-0-0, 7 lb down and 1 lb up at 18-0-0, 44 lb down and 43 lb up at 20-0-0, 222 lb down and 74 lb up at 24-0-0, 31 lb down at 26-0-0, 31 lb down at 28-0-0, 31 lb down at 30-0-0, 31 lb down at 32-0-0, and 31 lb down at 34-0-0, and 222 lb down and 74 lb up at 35-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-8=-70, 8-9=-70, 9-11=-70, 11-12=-70, 13-23=-20
   Concentrated Loads (lb)
   Vert: 9=-46(F) 11=-46(F) 19=1(F) 18=-44(F) 17=-222(F) 10=-46(F) 15=-25(F) 14=-222(F) 16=-25(F) 30=-46(F) 31=-46(F) 32=-46(F) 33=-46(F) 34=-3(F) 35=1(F) 36=1(F) 37=1(F) 38=1(F) 39=-25(F) 40=-25(F) 41=-25(F)



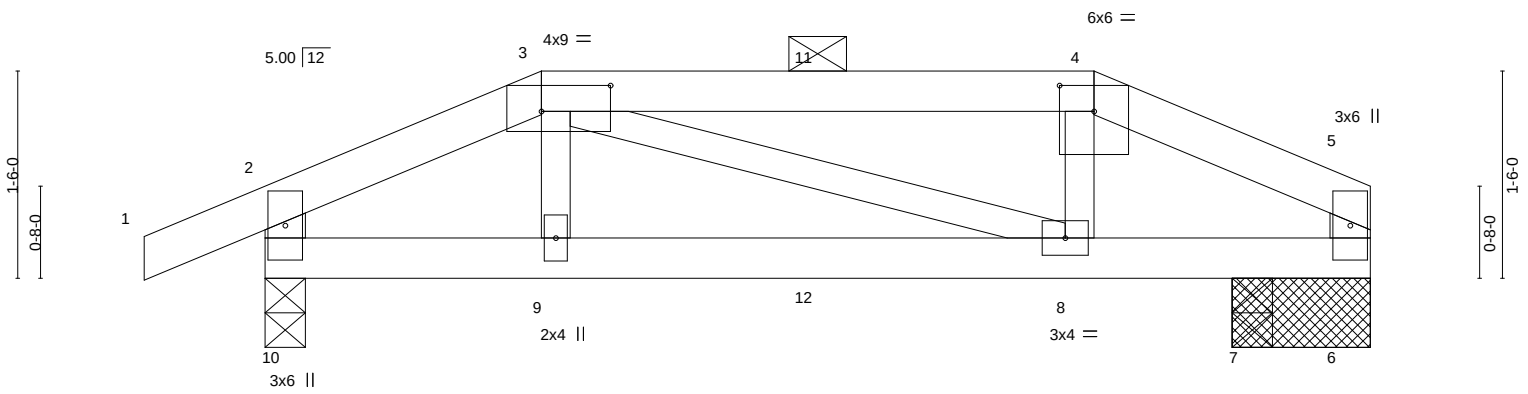

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | C11 | Hip Girder | 1 | 1 | I46397104 |
| | | | | | Job Reference (optional) |

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:01 2021 Page 1
ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-HrgnbLXn3TWmz0YOWX3WuVolNojcRxAtiqSKlYzAGBi

-0-10-8 2-0-0 6-0-0 8-0-0
0-10-8 2-0-0 4-0-0 2-0-0

Scale = 1:16.7




2-0-0 6-0-0 7-3-8 8-0-0
2-0-0 4-0-0 1-3-8 0-8-8

Plate Offsets (X,Y)-- [3:0-6-0,0-2-4], [4:0-3-0,0-2-4]

| 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 | 0.27 | Vert(LL) | -0.02 | 8-9 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.30 | Vert(CT) | -0.04 | 8-9 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.03 | Horz(CT) | 0.00 | 6 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.02 | 8-9 | >999 | 240 | Weight: 25 lb | FT = 10% |

**LUMBER-**
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-10,5-6: 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.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 10=0-3-8, 6=1-0-0, 7=0-3-8
Max Horz 10=23(LC 5)
Max Uplift 10=-95(LC 4), 6=-30(LC 9), 7=-49(LC 4)
Max Grav 10=401(LC 1), 6=156(LC 1), 7=201(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-447/107, 3-4=-313/80, 4-5=-378/85, 2-10=-343/91
BOT CHORD 9-10=-88/371, 8-9=-84/373, 7-8=-70/318, 6-7=-70/318

**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 95 lb uplift at joint 10, 30 lb uplift at joint 6 and 49 lb uplift at joint 7.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 108 lb down and 94 lb up at 2-0-0, and 54 lb down and 31 lb up at 4-0-0, and 108 lb down and 94 lb up at 6-0-0 on top chord, and 12 lb down and 3 lb up at 2-0-0, and 7 lb down and 1 lb up at 4-0-0, and 12 lb down and 3 lb up at 5-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-5=-70, 6-10=-20

STATE OF MISSOURI JUAN GARCIA NUMBER E-2000162101 PROFESSIONAL ENGINEER

JUAN GARCIA LICENSED 16952 KANSAS PROFESSIONAL ENGINEER

June 3,2021

Continued on page 2



RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | C11 | Hip Girder | 1 | 1 | I46397104 |
| | | | | | Job Reference (optional) |



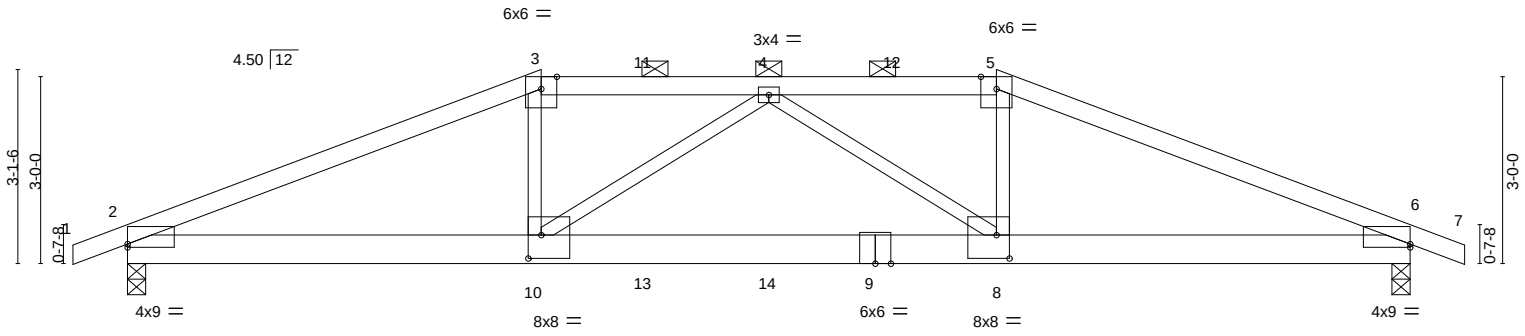
**LOAD CASE(S)** Standard
Concentrated Loads (lb)
Vert: 9=3(F) 8=3(F) 12=1(F)

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | D1 | Hip Girder | 1 | 1 | I46397105 |
| | | | | | Job Reference (optional) |

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:12 2021 Page 1
ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-Tyqxv6fhTsvCoiuVgLm5qplX1DQeWpFUE1dPeQzAGBX

| 0-10-8 | 6-7-11 | 10-3-8 | 13-11-5 | 20-7-0 | 21-5-8 |
|---|---|---|---|---|---|
| 0-10-8 | 6-7-11 | 3-7-13 | 3-7-13 | 6-7-11 | 0-10-8 |

Scale = 1:37.0




| 6-7-11 | 13-11-5 | 20-7-0 |
|---|---|---|
| 6-7-11 | 7-3-11 | 6-7-11 |

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

| 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 | 0.76 | Vert(LL) | -0.14 | 8-10 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.46 | Vert(CT) | -0.28 | 8-10 | >885 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.40 | Horz(CT) | 0.06 | 6 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.11 | 8-10 | >999 | 240 | Weight: 86 lb | FT = 10% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x4 SPF 2100F 1.8E *Except* 3-5: 2x4 SPF No.2 |
| BOT CHORD | 2x6 SP DSS |
| WEBS | 2x3 SPF No.2 |

**BRACING-**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 3-2-10 oc purlins, except 2-0-0 oc purlins (2-8-13 max.): 3-5. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing. |

**REACTIONS.** (size) 2=0-3-8, 6=0-3-8
Max Horz 2=-49(LC 30)
Max Uplift 2=-355(LC 4), 6=-356(LC 5)
Max Grav 2=1796(LC 1), 6=1794(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3913/691, 3-4=-3490/667, 4-5=-3487/669, 5-6=-3909/693
BOT CHORD 2-10=-596/3531, 8-10=-690/3889, 6-8=-567/3527
WEBS 3-10=-144/1152, 4-10=-615/170, 4-8=-619/168, 5-8=-145/1151

**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=355, 6=356.
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) 111 lb down and 60 lb up at 8-3-8, and 111 lb down and 60 lb up at 10-3-8, and 111 lb down and 60 lb up at 12-3-8 on top chord, and 573 lb down and 182 lb up at 6-7-11, 67 lb down at 8-3-8, 67 lb down at 10-3-8, and 67 lb down at 12-3-8, and 573 lb down and 182 lb up at 13-11-5 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 3-5=-70, 5-7=-70, 2-6=-20



June 3,2021

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RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | D1 | Hip Girder | 1 | 1 | I46397105 |
| | | | | | Job Reference (optional) |



**LOAD CASE(S)** Standard

Concentrated Loads (lb)

Vert: 9=-51(B) 10=-573(B) 4=-108(B) 8=-573(B) 11=-108(B) 12=-108(B) 13=-51(B) 14=-51(B)

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | D2 | Hip | 1 | 1 | I46397106 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:12 2021 Page 1

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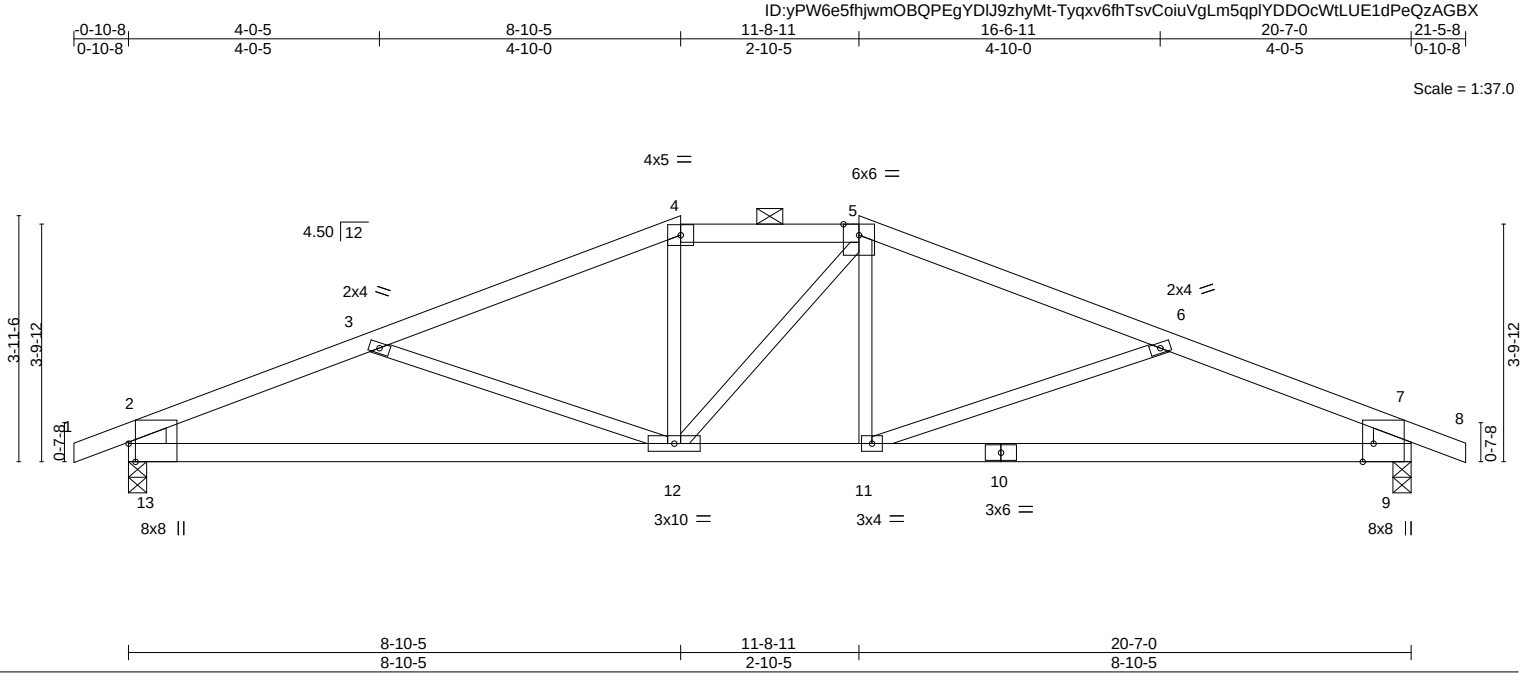


Plate Offsets (X,Y)-- [9:0-3-8,Edge], [13:0-3-8,Edge]

| 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 | 0.68 | Vert(LL) | -0.14 | 9-11 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.59 | Vert(CT) | -0.30 | 9-11 | >796 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.13 | Horz(CT) | 0.05 | 9 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.08 | 11-12 | >999 | 240 | Weight: 69 lb | FT = 10% |

**LUMBER-**

TOP CHORD 2x4 SPF 2100F 1.8E *Except*
4-5: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-13,7-9: 2x8 SP DSS

**BRACING-**

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

**REACTIONS.** (size) 13=0-3-8, 9=0-3-8
Max Horz 13=-48(LC 9)
Max Uplift 13=-173(LC 4), 9=-173(LC 5)
Max Grav 13=981(LC 1), 9=981(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1596/278, 3-4=-1377/190, 4-5=-1252/207, 5-6=-1376/191, 6-7=-1596/278, 2-13=-886/219, 7-9=-886/219
BOT CHORD 12-13=-230/1403, 11-12=-79/1251, 9-11=-201/1403

**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) 13=173, 9=173.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | D3 | COMMON GIRDER | 1 | 3 | I46397107 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:14 2021 Page 1

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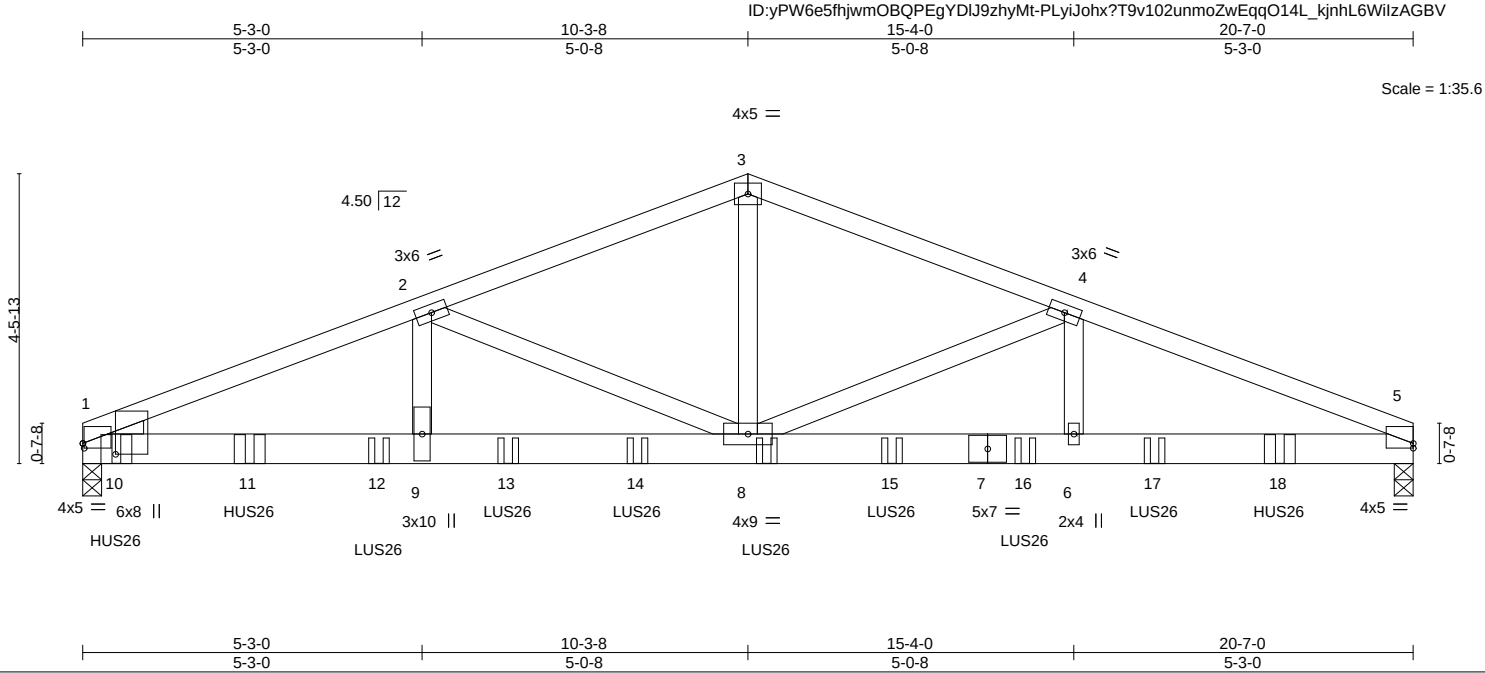


Plate Offsets (X,Y)-- [1:0-2-0,0-6-1], [1:0-0-4,0-0-14], [5:0-0-0,0-0-14]

| 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 | 0.96 | Vert(LL) | -0.11 | 6-8 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL 1.15 | BC | 0.64 | Vert(CT) | -0.18 | 6-8 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr NO | WB | 0.33 | Horz(CT) | 0.04 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | Matrix-S | | Wind(LL) | 0.06 | 6-8 | >999 | 240 | Weight: 282 lb | FT = 10% |

**LUMBER-**

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x4 SPF No.2
WEDGE
Left: 2x3 SPF No.2

**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) 5=0-3-8, 1=0-3-8
Max Horz 1=-43(LC 28)
Max Uplift 5=-463(LC 9), 1=-263(LC 8)
Max Grav 5=4674(LC 1), 1=6432(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-9547/543, 2-3=-6363/398, 3-4=-6362/398, 4-5=-9292/708
BOT CHORD 1-9=-496/8726, 8-9=-496/8726, 6-8=-613/8486, 5-6=-613/8486
WEBS 3-8=-217/4079, 4-8=-2870/389, 4-6=-202/2216, 2-8=-3132/220, 2-9=-74/2406

**NOTES-**

1) N/A
2) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
   Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.
   Bottom chords connected as follows: 2x6 - 3 rows staggered at 0-4-0 oc.
   Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
3) 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.
4) Unbalanced roof live loads have been considered for this design.
5) Wind: ASCE 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
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) 5=463, 1=263.
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) Use Simpson Strong-Tie HUS26 (14-10d Girder, 6-10d Truss) or equivalent spaced at 2-0-12 oc max. starting at 0-6-4 from the left end to 2-7-0 to connect truss(es) to front face of bottom chord.
11) Use Simpson Strong-Tie LUS26 (4-SD9112 Girder, 4-SD9212 Truss, Single Ply Girder) or equivalent spaced at 2-0-12 oc max. starting at 4-7-0 from the left end to 16-7-0 to connect truss(es) to front face of bottom chord.
12) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent at 18-6-4 from the left end to connect truss(es) to front face of bottom chord.
13) Fill all nail holes where hanger is in contact with lumber.

Continued on page 2

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-70, 3-5=-70, 1-5=-20
   Concentrated Loads (lb)
   Vert: 8=-646(F) 10=-1765(F) 11=-1762(F) 12=-544(F) 13=-557(F) 14=-618(F) 15=-724(F) 16=-738(F) 17=-738(F) 18=-1189(F)

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | J1 | Diagonal Hip Girder | 2 | 1 | I46397108 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:15 2021 Page 1
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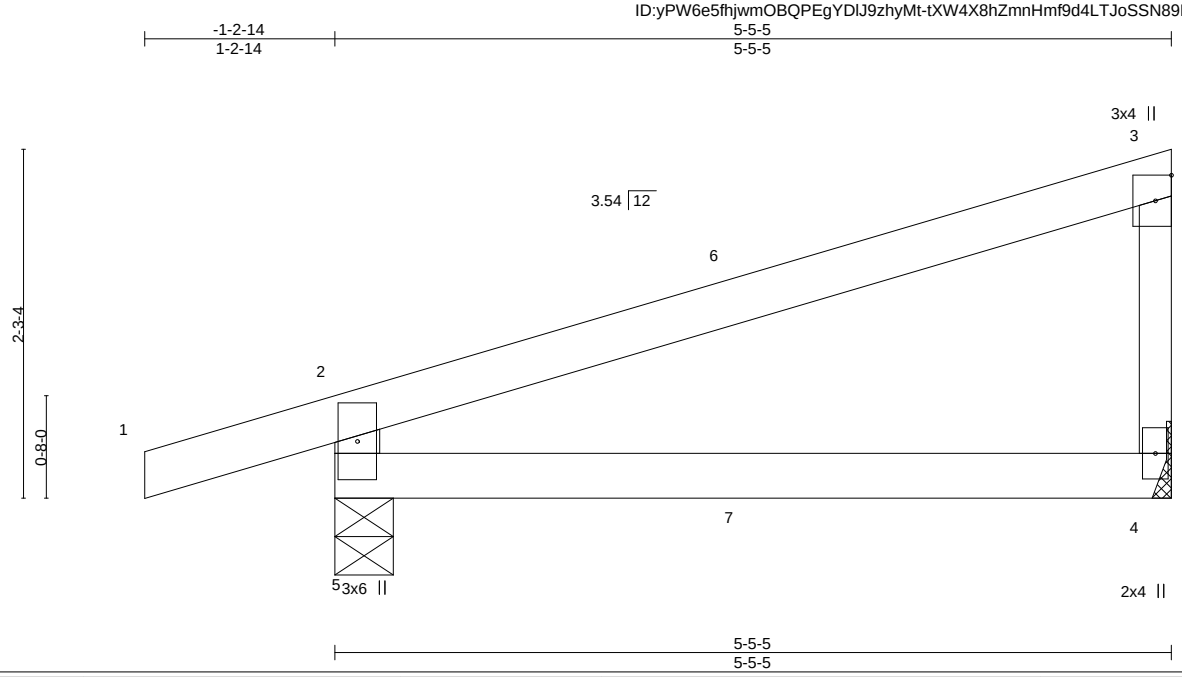


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.38 | Vert(LL) | -0.03 | 4-5 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.24 | Vert(CT) | -0.06 | 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 5-5-5 oc purlins, except end verticals. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing. |

**REACTIONS.** (size) 5=0-4-9, 4=Mechanical
Max Horz 5=91(LC 5)
Max Uplift 5=-103(LC 4), 4=-47(LC 8)
Max Grav 5=342(LC 1), 4=219(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-303/141

**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=103.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 67 lb down and 31 lb up at 2-8-7, and 67 lb down and 31 lb up at 2-8-7 on top chord, and 2 lb down and 1 lb up at 2-8-7, and 2 lb down and 1 lb up at 2-8-7 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | J2 | Jack-Open | 6 | 1 | I46397109 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:24 2021 Page 1

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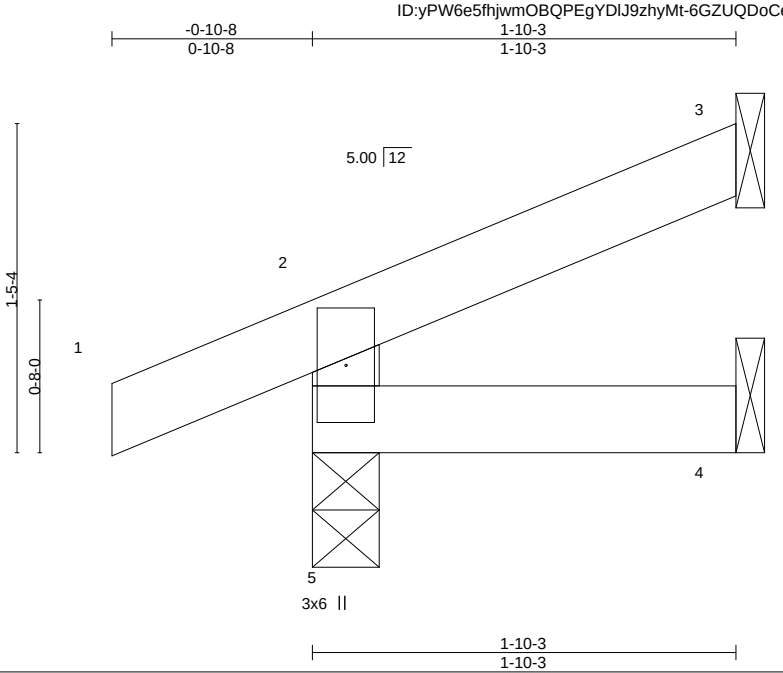


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.07 | Vert(LL) | -0.00 | 5 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.02 | 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 1-10-3 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=38(LC 8)
Max Uplift 5=-35(LC 4), 3=-26(LC 8)
Max Grav 5=169(LC 1), 3=42(LC 1), 4=30(LC 3)

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

**NOTES-**

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



June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | J3 | Jack-Open | 3 | 1 | I46397110 |
| | | | | | Job Reference (optional) |

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:31 2021 Page 1
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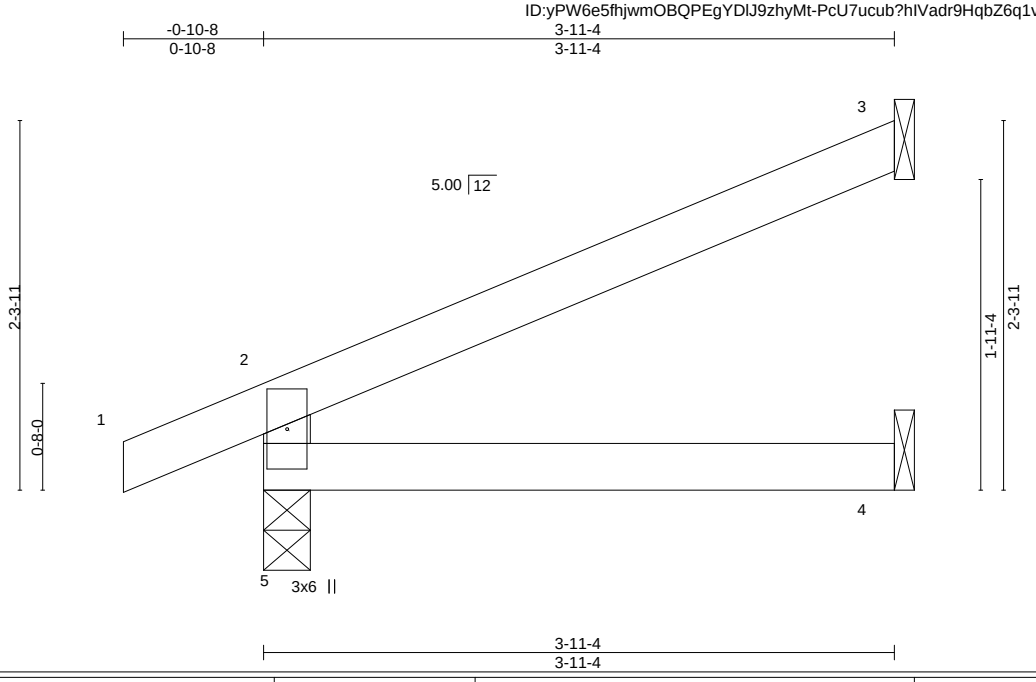


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.20 | Vert(LL) | -0.01 | 4-5 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.12 | Vert(CT) | -0.02 | 4-5 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.01 | 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 3-11-4 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=72(LC 8)
Max Uplift 5=-37(LC 8), 3=-59(LC 8)
Max Grav 5=249(LC 1), 3=114(LC 1), 4=70(LC 3)

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

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



June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | J4 | Diagonal Hip Girder | 1 | 1 | I46397111 |
| | | | | | Job Reference (optional) |

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:32 2021 Page 1

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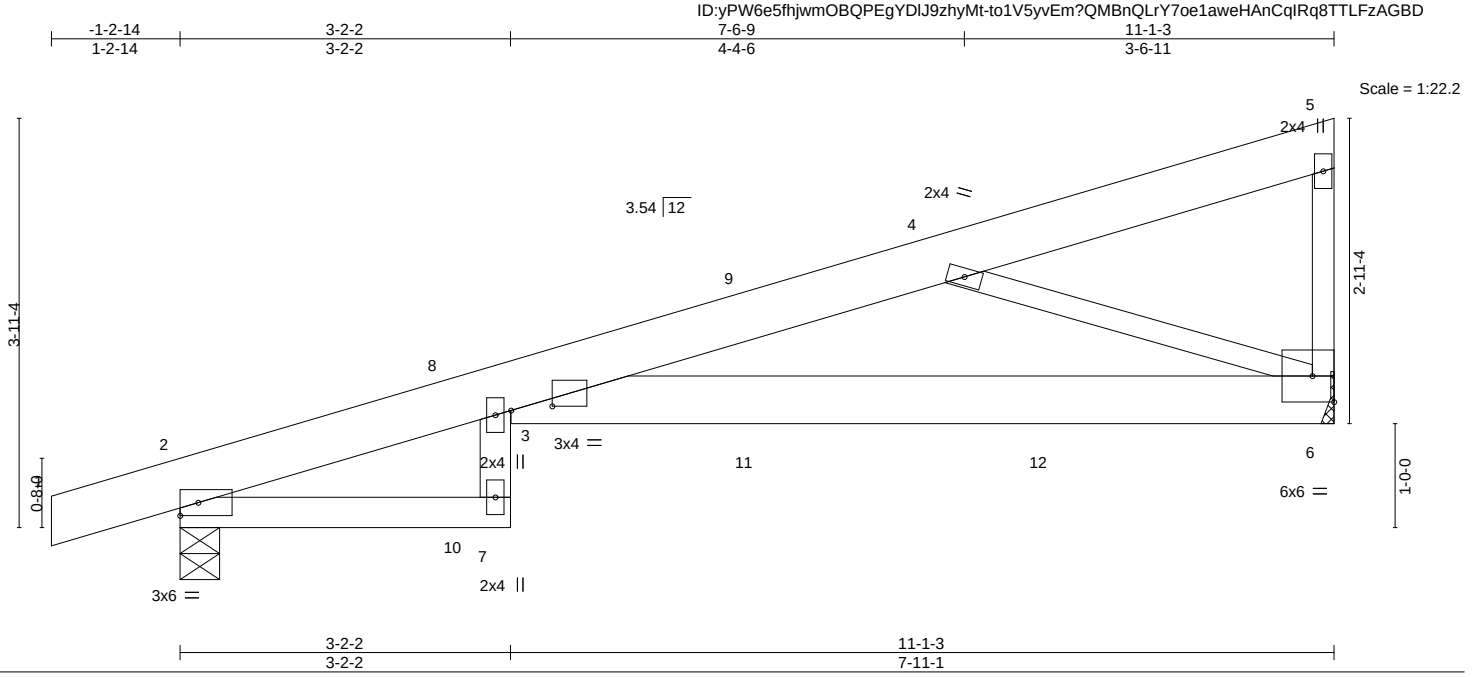


Plate Offsets (X,Y)-- [3:0-4-12,0-0-8]

| 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 | 0.78 | Vert(LL) | -0.27 | 3-6 | >476 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.82 | Vert(CT) | -0.49 | 3-6 | >264 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.52 | Horz(CT) | 0.20 | 6 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | Wind(LL) | 0.26 | 3-6 | >492 | 240 | Weight: 54 lb | FT = 10% |

**LUMBER-**

TOP CHORD 2x6 SP DSS
BOT CHORD 2x4 SPF No.2 *Except*
3-6: 2x6 SPF 1650F 1.4E
WEBS 2x3 SPF No.2 *Except*
3-7: 2x4 SPF No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-10-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 6=Mechanical, 2=0-4-9
Max Horz 2=138(LC 5)
Max Uplift 6=-238(LC 8), 2=-206(LC 4)
Max Grav 6=850(LC 1), 2=731(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-316/25, 3-4=-1312/385
BOT CHORD 3-6=-422/1373
WEBS 4-6=-1392/459

**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) 6=238, 2=206.
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) 67 lb down and 31 lb up at 2-8-7, 67 lb down and 31 lb up at 2-8-7, and 93 lb down and 52 lb up at 5-6-6, and 93 lb down and 52 lb up at 5-6-6 on top chord, and 2 lb down and 1 lb up at 2-8-7, 2 lb down and 1 lb up at 2-8-7, 32 lb down and 26 lb up at 5-6-6, 32 lb down and 26 lb up at 5-6-6, and 221 lb down and 86 lb up at 8-4-5, and 221 lb down and 86 lb up at 8-4-5 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-5=-70, 2-7=-20, 3-6=-20



June 3,2021

Continued on page 2





MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

**LOAD CASE(S)** Standard

Concentrated Loads (lb)

Vert: 9=-18(F=-9, B=-9) 10=3(F=1, B=1) 11=-64(F=-32, B=-32) 12=-442(F=-221, B=-221)

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | J5 | Jack-Open | 2 | 1 | I46397112 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:32 2021 Page 1

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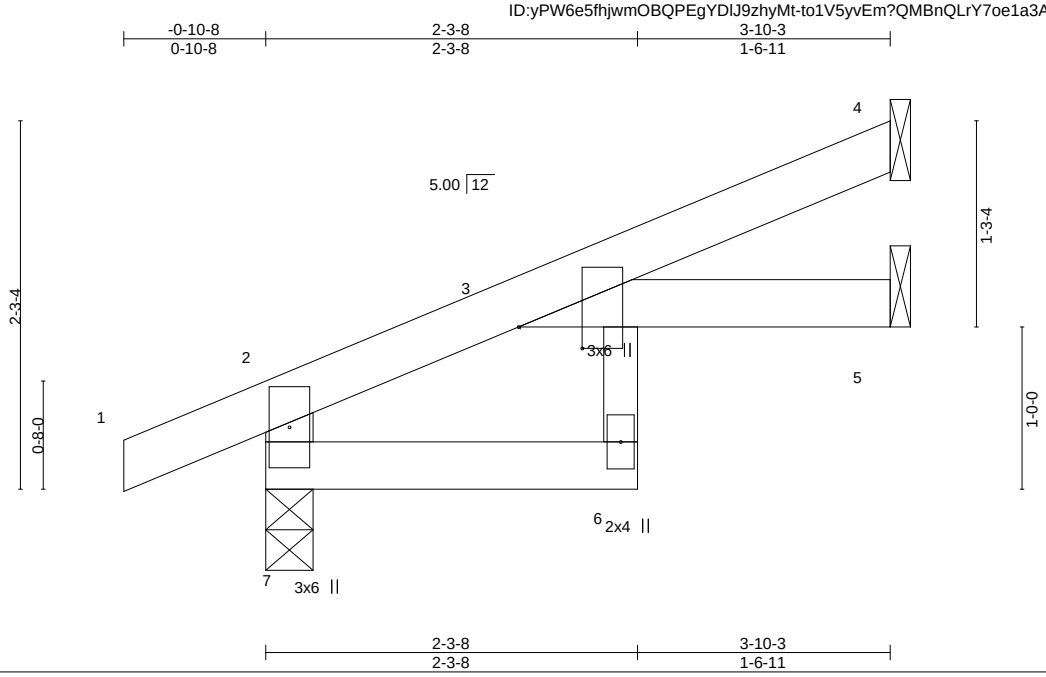


Plate Offsets (X,Y)-- [3:0-1-9,0-4-11]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.23 | Vert(LL) | -0.02 | 6 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.17 | Vert(CT) | -0.04 | 6 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.02 | Horz(CT) | 0.02 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-P | | Wind(LL) | 0.03 | 6 | >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 *Except*
3-6: 2x3 SPF No.2

**BRACING-**

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

**REACTIONS.** (size) 7=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 7=71(LC 8)
Max Uplift 7=-32(LC 8), 4=-42(LC 8), 5=-2(LC 8)
Max Grav 7=252(LC 1), 4=99(LC 1), 5=69(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) 7, 4, 5.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | J6 | Jack-Closed | 2 | 1 | I46397113 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:33 2021 Page 1
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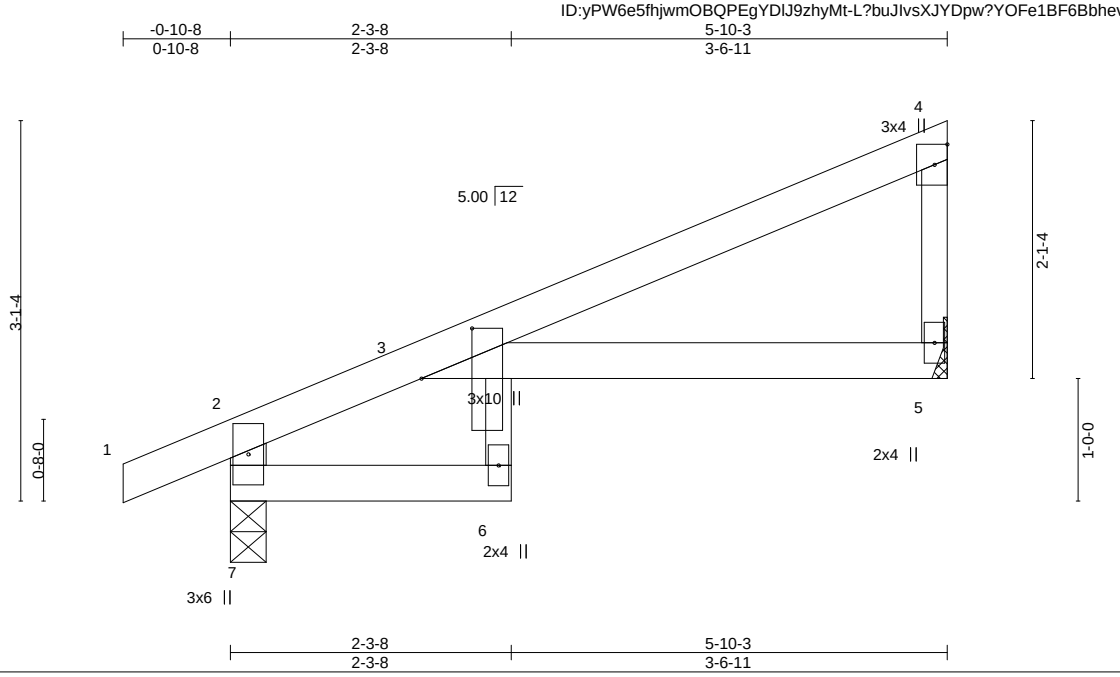


Plate Offsets (X,Y)-- [3:0-4-15,0-4-15]

| 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 | 0.45 | Vert(LL) | -0.09 | 6 | >718 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.31 | Vert(CT) | -0.18 | 6 | >382 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.02 | Horz(CT) | 0.09 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-R | | Wind(LL) | 0.10 | 6 | >661 | 240 | Weight: 18 lb | FT = 10% |

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

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 5-10-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS.** (size) 7=0-3-8, 5=Mechanical
Max Horz 7=110(LC 5)
Max Uplift 7=-51(LC 8), 5=-58(LC 8)
Max Grav 7=339(LC 1), 5=249(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-328/72

**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) 7, 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

June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | J7 | Jack-Closed | 2 | 1 | I46397114 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:34 2021 Page 1

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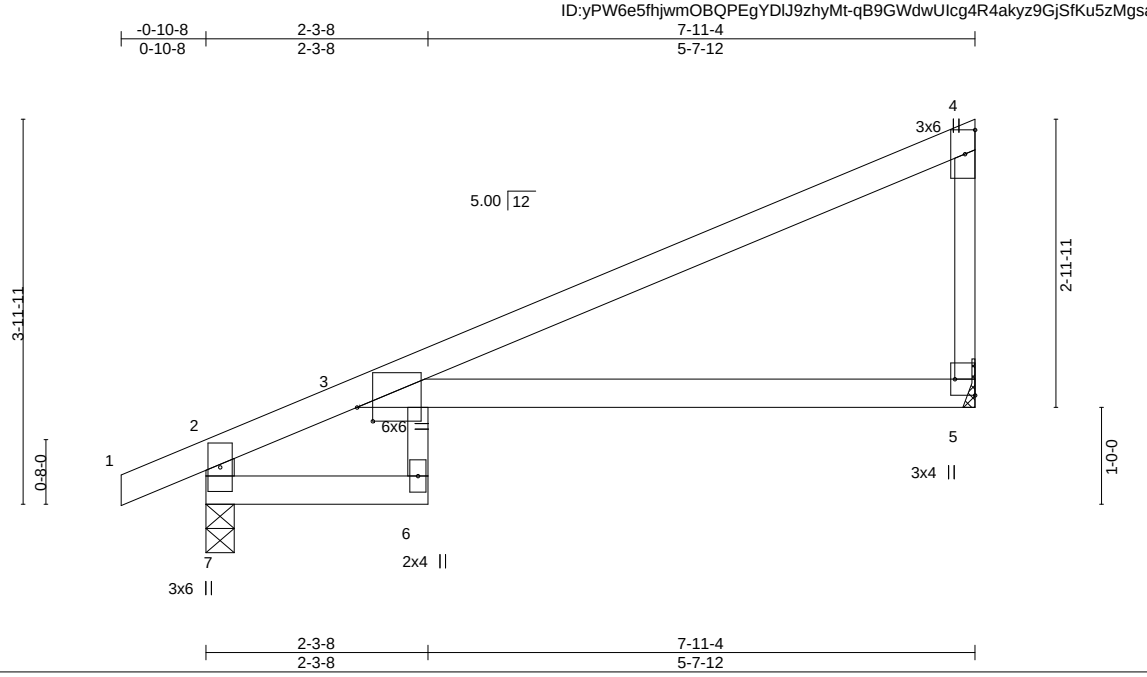


Plate Offsets (X,Y)-- [3:0-1-15,0-1-11], [5:Edge,0-2-8]

| 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 | 0.54 | Vert(LL) | -0.20 | 6 | >463 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.36 | Vert(CT) | -0.36 | 6 | >258 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.02 | Horz(CT) | 0.18 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-R | | Wind(LL) | 0.14 | 6 | >648 | 240 | Weight: 24 lb | FT = 10% |

**LUMBER-**

TOP CHORD 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF 2100F 1.8E
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 6-0-0 oc bracing.

**REACTIONS.** (size) 7=0-3-8, 5=Mechanical
Max Horz 7=114(LC 5)
Max Uplift 7=-10(LC 8), 5=-26(LC 8)
Max Grav 7=432(LC 1), 5=344(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-427/28

**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) 7, 5.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | J8 | Jack-Closed | 1 | 1 | I46397115 |
| | | | | | Job Reference (optional) |

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:34 2021 Page 1

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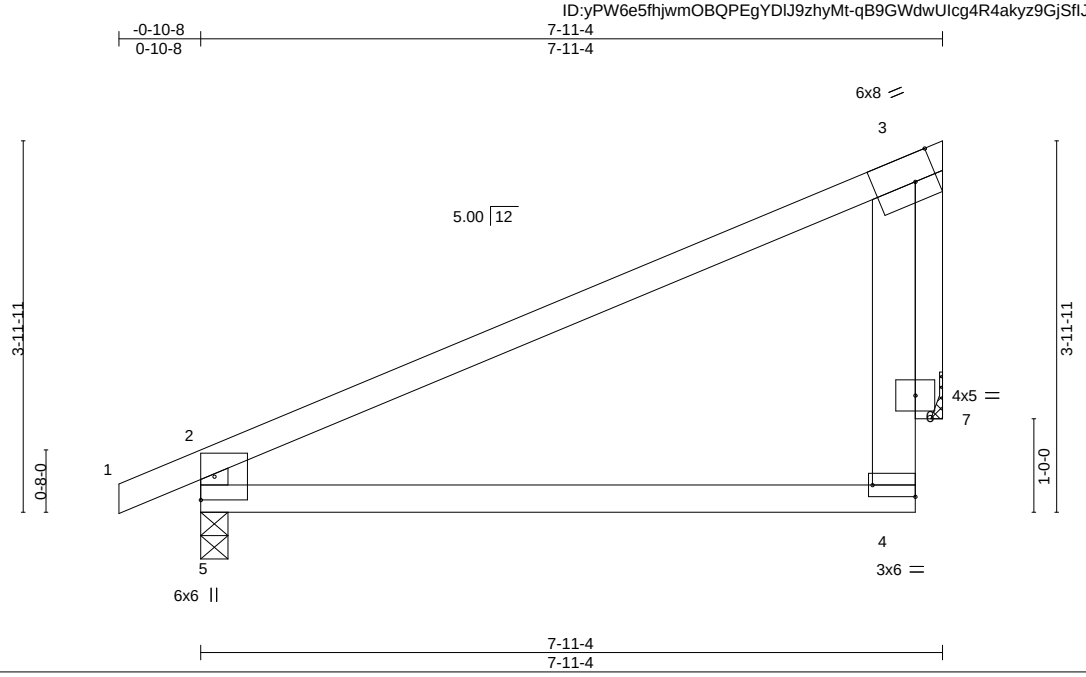



Plate Offsets (X,Y)-- [3:0-2-12,Edge], [4:Edge,0-1-8]

| 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 | 0.64 | Vert(LL) | -0.05 | 4-5 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.39 | Vert(CT) | -0.11 | 4-5 | >810 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.18 | Horz(CT) | 0.01 | 7 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-R | | Wind(LL) | 0.03 | 4-5 | >999 | 240 | Weight: 29 lb | FT = 10% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x4 SPF No.2 |
| BOT CHORD | 2x4 SPF No.2 |
| WEBS | 2x4 SPF No.2 *Except* 3-4: 2x6 SPF No.2 |
| OTHERS | 2x4 SPF No.2 |

**BRACING-**

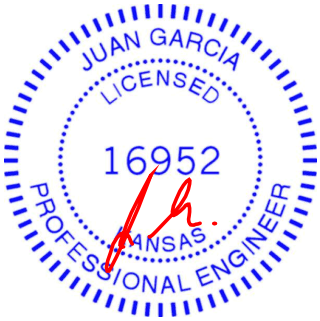
| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing. |

**REACTIONS.** (size) 5=0-3-8, 7=Mechanical
Max Horz 5=89(LC 5)
Max Uplift 5=-7(LC 8), 7=-35(LC 8)
Max Grav 5=423(LC 1), 7=303(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-380/58, 2-3=-298/0

**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) The Fabrication Tolerance at joint 2 = 6%
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) 5, 7.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.


June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | J9 | Jack-Closed | 7 | 1 | I46397116 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:35 2021 Page 1
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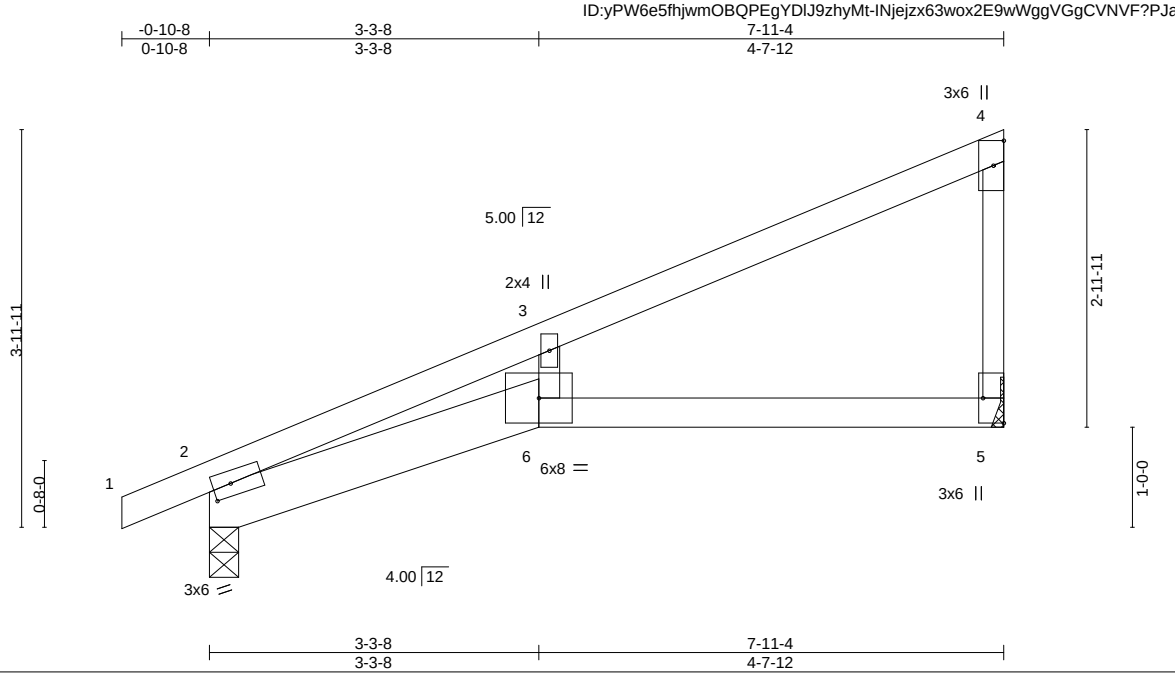


Plate Offsets (X,Y)-- [2:0-2-3,0-1-8], [5:Edge,0-2-8]

| 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 | 0.56 | Vert(LL) | -0.20 | 6 | >457 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.59 | Vert(CT) | -0.36 | 5-6 | >256 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.04 | Horz(CT) | 0.12 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.14 | 6 | >665 | 240 | Weight: 25 lb | FT = 10% |

**LUMBER-**
TOP CHORD 2x4 SPF 2100F 1.8E
BOT CHORD 2x6 SPF No.2 *Except*
5-6: 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.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 5=Mechanical, 2=0-3-8
Max Horz 2=109(LC 5)
Max Uplift 5=-28(LC 8), 2=-17(LC 8)
Max Grav 5=341(LC 1), 2=422(LC 1)

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

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

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
ARKANSAS
PROFESSIONAL ENGINEER

June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | J9A | Jack-Closed | 3 | 1 | I46397117 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:35 2021 Page 1

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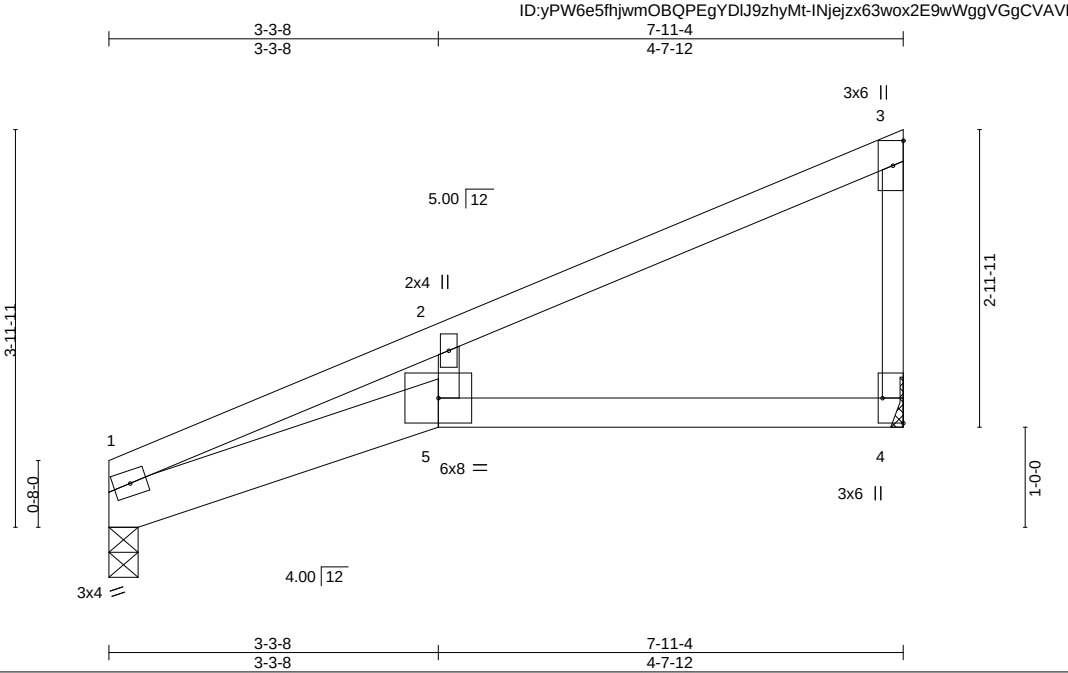


Plate Offsets (X,Y)-- [4:Edge,0-2-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.57 | Vert(LL) | -0.21 | 5 | >434 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.62 | Vert(CT) | -0.38 | 4-5 | >245 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.03 | Horz(CT) | 0.12 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.14 | 5 | >639 | 240 | Weight: 24 lb | FT = 10% |

**LUMBER-**

TOP CHORD 2x4 SPF 2100F 1.8E
BOT CHORD 2x6 SPF No.2 *Except*
4-5: 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.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=0-3-8, 4=Mechanical
Max Horz 1=108(LC 5)
Max Uplift 1=-5(LC 8), 4=-29(LC 8)
Max Grav 1=346(LC 1), 4=346(LC 1)

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

**NOTES-**

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

June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | J10 | Diagonal Hip Girder | 1 | 1 | I46397118 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:16 2021 Page 1

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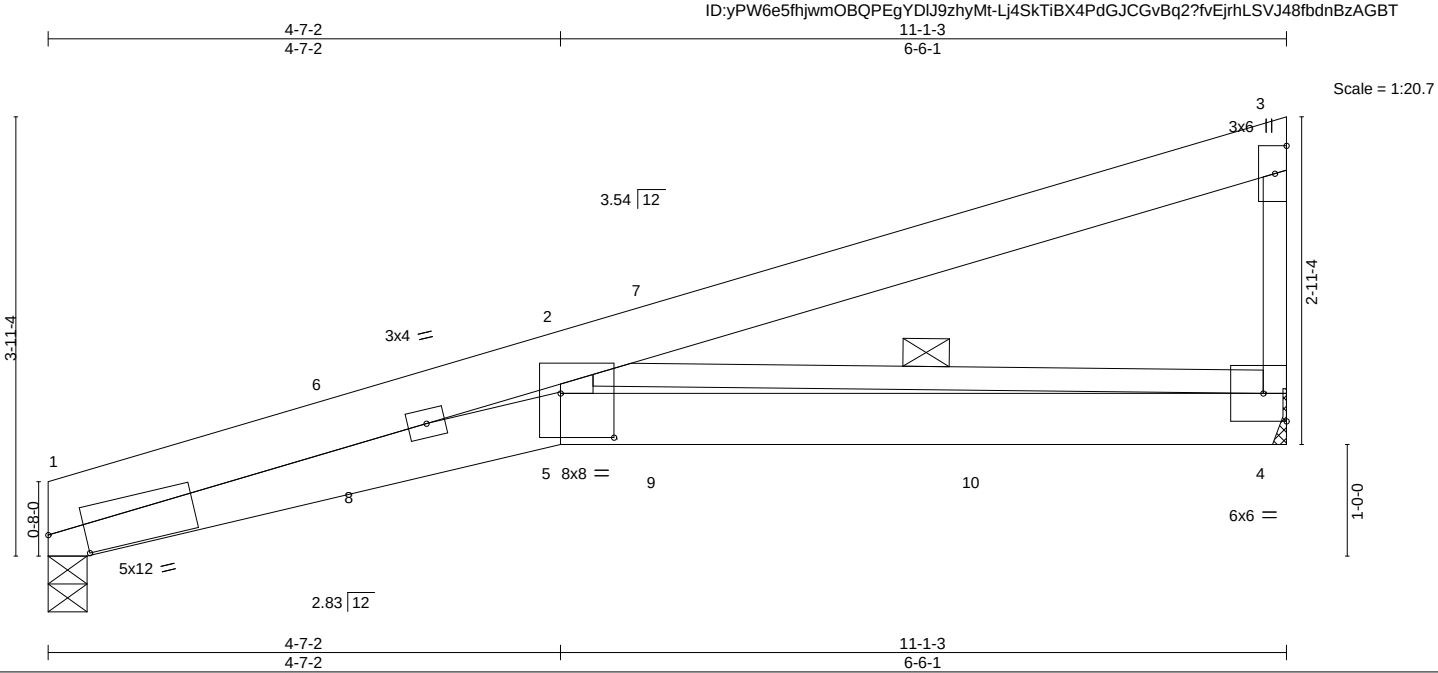


Plate Offsets (X,Y)-- [1:0-3-15,0-2-15], [5:0-5-12,0-4-12]

| 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 | 0.59 | Vert(LL) | -0.22 | 4-5 | >596 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.86 | Vert(CT) | -0.38 | 4-5 | >339 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.90 | Horz(CT) | 0.11 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | Wind(LL) | 0.20 | 4-5 | >645 | 240 | Weight: 48 lb | FT = 10% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x6 SPF No.2 |
| BOT CHORD | 2x6 SPF No.2 *Except* |
| | 4-5: 2x6 SPF 1650F 1.4E |
| WEBS | 2x3 SPF No.2 *Except* |
| | 2-5: 2x4 SPF No.2 |

**BRACING-**

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

**REACTIONS.** (size) 1=0-4-3, 4=Mechanical
Max Horz 1=135(LC 22)
Max Uplift 1=-133(LC 4), 4=-238(LC 8)
Max Grav 1=629(LC 1), 4=854(LC 1)

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

| | |
|---|---|
| TOP CHORD | 1-2=-2834/719, 3-4=-267/104 |
| BOT CHORD | 1-5=-749/2665, 4-5=-691/2378 |
| WEBS | 2-5=-141/890, 2-4=-2300/693 |

**NOTES-**

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=133, 4=238.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 68 lb down and 39 lb up at 2-8-7, 67 lb down and 32 lb up at 2-8-7, and 96 lb down and 70 lb up at 5-6-6, and 94 lb down and 67 lb up at 5-6-6 on top chord, and 3 lb down at 2-8-7, 2 lb down and 1 lb up at 2-8-7, 23 lb down at 5-6-6, 22 lb down at 5-6-6, and 226 lb down and 91 lb up at 8-4-5, and 217 lb down and 89 lb up at 8-4-5 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



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Continued on page 2

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LEE'S SUMMIT, MISSOURI



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

**LOAD CASE(S)** Standard

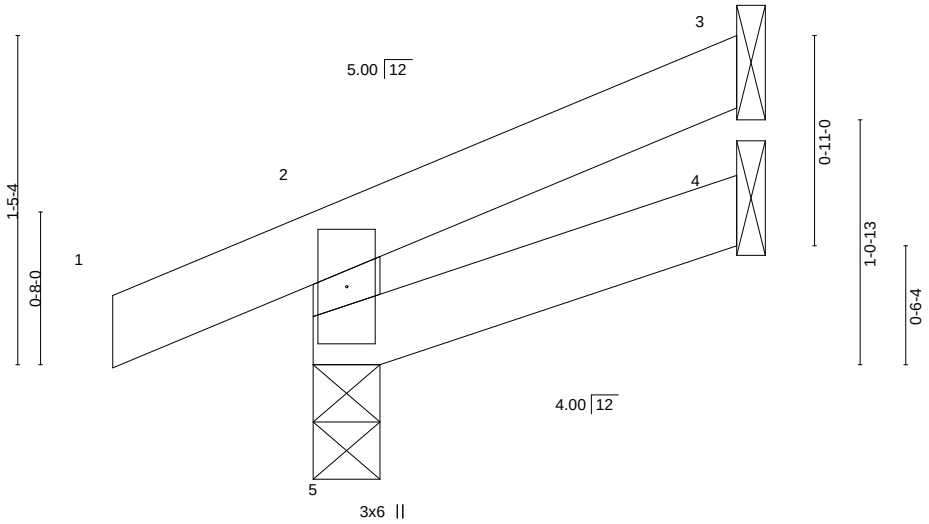
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-70, 1-5=-20, 4-5=-20
   Concentrated Loads (lb)
   Vert: 7=-35(F=-13, B=-22) 8=-1(F=1, B=-3) 9=-30(F=-14, B=-16) 10=-443(F=-217, B=-226)

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | J11 | Jack-Open | 1 | 1 | I46397119 |
| | | | | | Job Reference (optional) |

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:16 2021 Page 1
ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-Lj4SkTiBX4PdGJCGvBq2?fvMoruUSjQ48fbdnBzAGBT

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

Scale = 1:10.1




| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.07 | 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 1-10-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS.** (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=38(LC 5)
Max Uplift 5=-34(LC 4), 3=-27(LC 8)
Max Grav 5=169(LC 1), 3=42(LC 1), 4=30(LC 3)

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

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



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LEE'S SUMMIT, MISSOURI




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | J11A | Jack-Open | 1 | 1 | I46397120 |
| | | | | | Job Reference (optional) |

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:17 2021 Page 1

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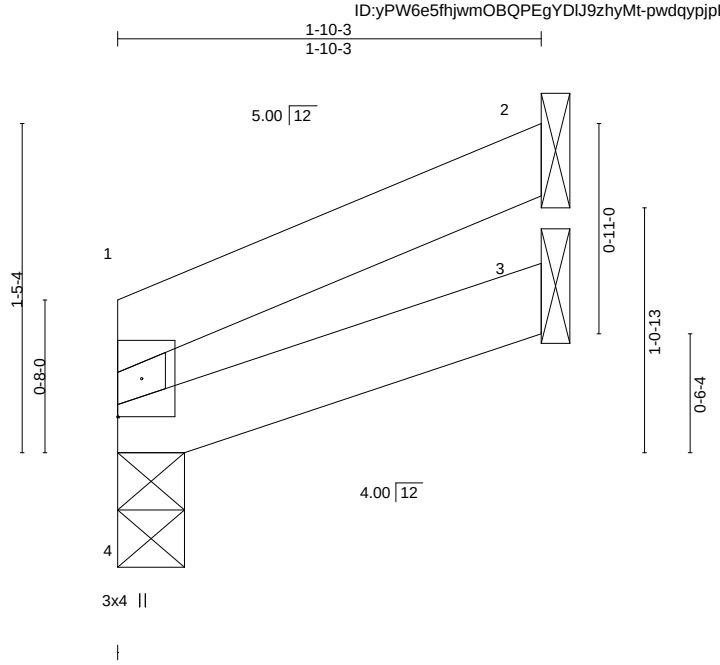


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.04 | Vert(LL) | -0.00 | 4 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.02 | Vert(CT) | -0.00 | 3-4 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.00 | 2 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-R | | Wind(LL) | 0.00 | 4 | >999 | 240 | Weight: 5 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 1-10-3 oc purlins, except end verticals. |
| BOT CHORD | Rigid ceiling directly applied or 6-0-0 oc bracing. |

**REACTIONS.** (size) 4=0-3-8, 2=Mechanical, 3=Mechanical
Max Horz 4=29(LC 5)
Max Uplift 4=-1(LC 8), 2=-32(LC 8)
Max Grav 4=78(LC 1), 2=58(LC 1), 3=34(LC 3)

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

**NOTES-**

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



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LEE'S SUMMIT, MISSOURI




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | J12 | Jack-Open | 1 | 1 | I46397121 |
| | | | | | Job Reference (optional) |

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:18 2021 Page 1
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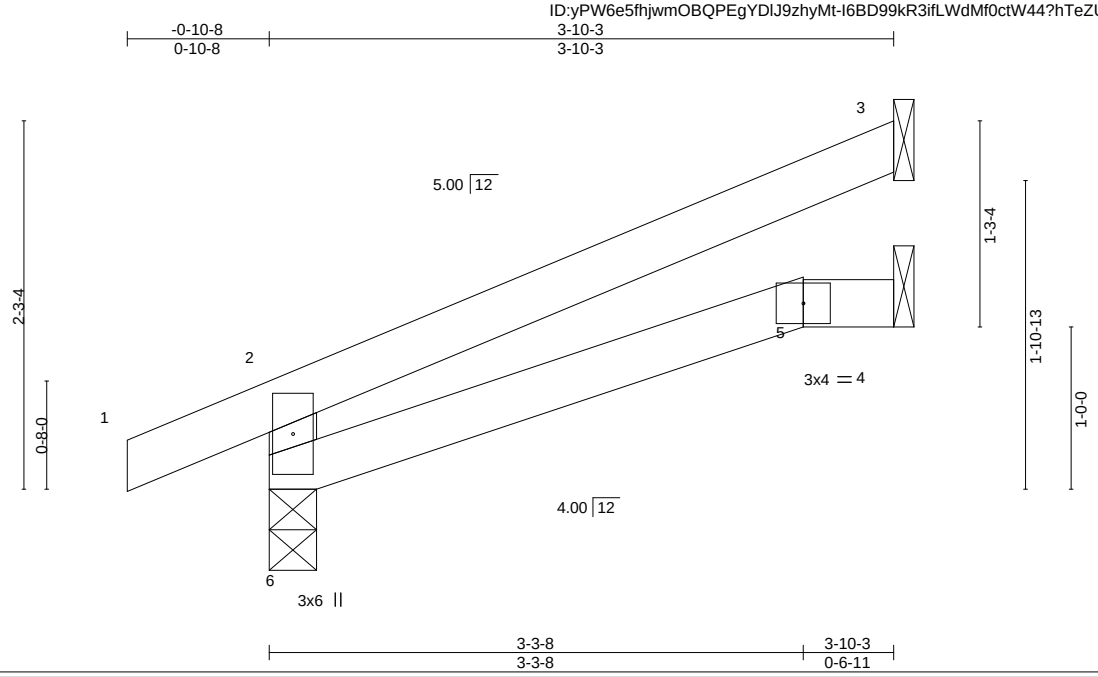


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.19 | Vert(LL) | -0.01 | 5-6 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.11 | Vert(CT) | -0.02 | 5-6 | >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 | 5-6 | >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 3-10-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS.** (size) 6=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 6=70(LC 8)
Max Uplift 6=-36(LC 8), 3=-58(LC 8)
Max Grav 6=245(LC 1), 3=112(LC 1), 4=68(LC 3)

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

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



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LEE'S SUMMIT, MISSOURI



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | J12A | Jack-Open | 1 | 1 | I46397122 |
| | | | | | Job Reference (optional) |

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:18 2021 Page 1
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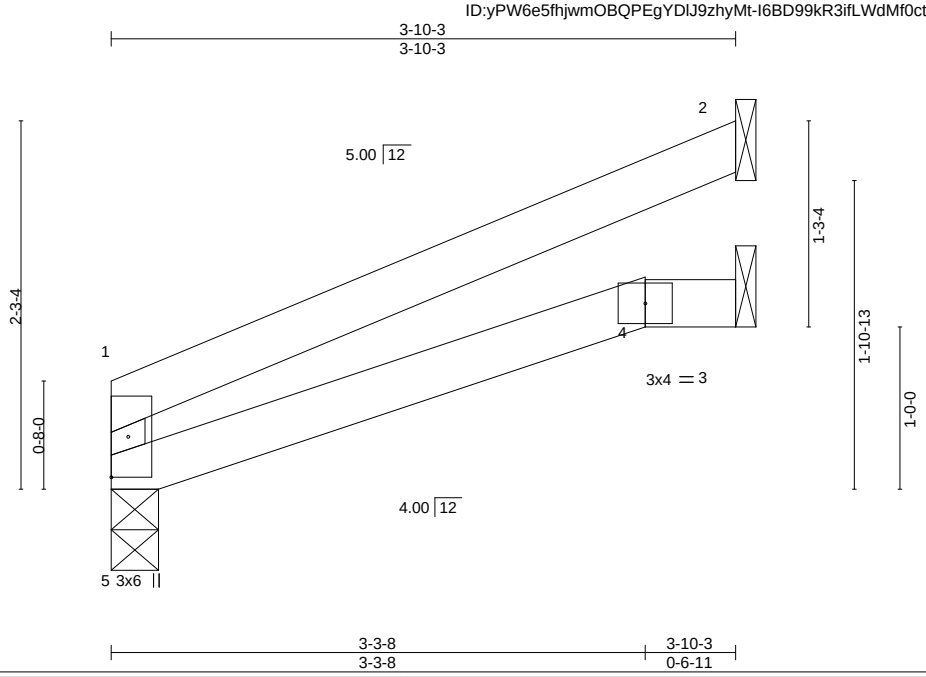


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.22 | Vert(LL) | -0.01 | 4-5 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.12 | Vert(CT) | -0.02 | 4-5 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.01 | 2 | 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 2x3 SPF No.2

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

**REACTIONS.** (size) 5=0-3-8, 2=Mechanical, 3=Mechanical
Max Horz 5=56(LC 8)
Max Uplift 5=-10(LC 8), 2=-62(LC 8)
Max Grav 5=166(LC 1), 2=121(LC 1), 3=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) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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LEE'S SUMMIT, MISSOURI




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | J13 | Jack-Closed | 1 | 1 | I46397123 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:19 2021 Page 1

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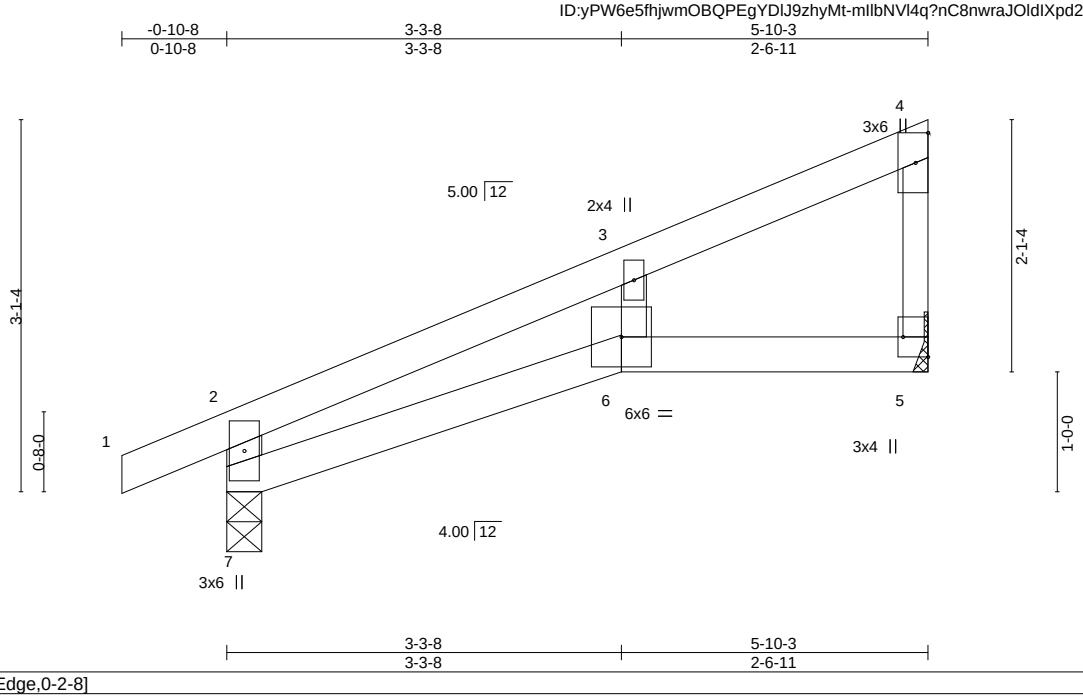


Plate Offsets (X,Y)-- [5:Edge,0-2-8]

| 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 | 0.35 | Vert(LL) | -0.07 | 6 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.25 | Vert(CT) | -0.12 | 6 | >572 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.02 | Horz(CT) | 0.04 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-R | | Wind(LL) | 0.07 | 6 | >981 | 240 | Weight: 17 lb | FT = 10% |

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.** (size) 7=0-3-8, 5=Mechanical
Max Horz 7=111(LC 5)
Max Uplift 7=-56(LC 8), 5=-61(LC 8)
Max Grav 7=330(LC 1), 5=245(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-294/72

**NOTES-**

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



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Development Services
LEE'S SUMMIT, MISSOURI




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | J13A | Jack-Closed | 1 | 1 | I46397124 |
| | | | | | Job Reference (optional) |

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:20 2021 Page 1
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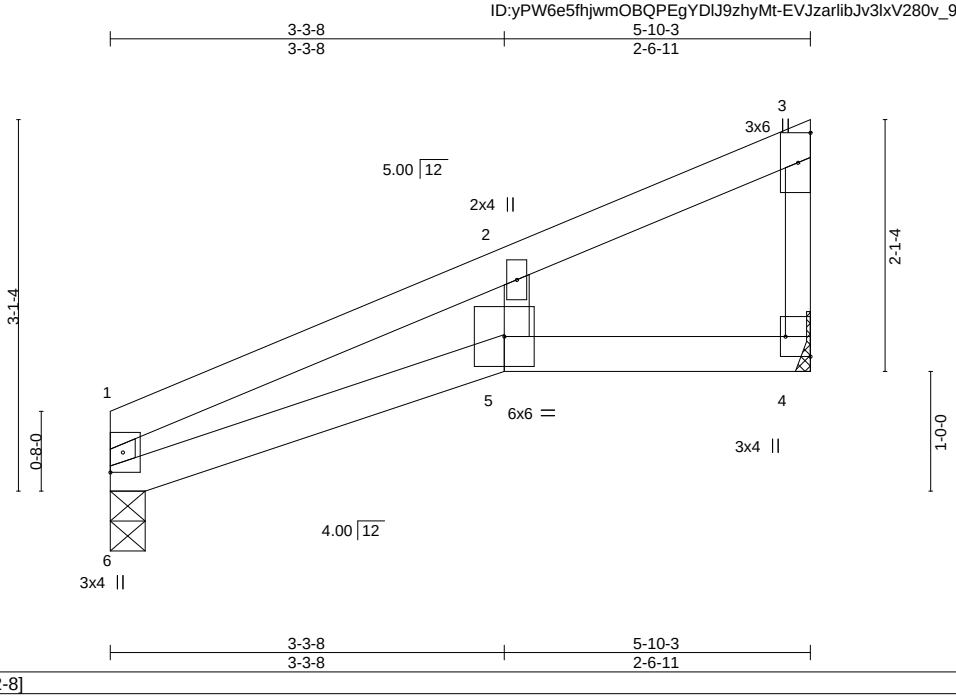


Plate Offsets (X,Y)-- [4:Edge,0-2-8]

| 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 | 0.38 | Vert(LL) | -0.07 | 5 | >914 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.27 | Vert(CT) | -0.13 | 5 | >523 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.02 | Horz(CT) | 0.04 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-R | | Wind(LL) | 0.07 | 5 | >920 | 240 | Weight: 16 lb | FT = 10% |

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

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

**REACTIONS.** (size) 6=0-3-8, 4=Mechanical
Max Horz 6=103(LC 5)
Max Uplift 6=-32(LC 8), 4=-63(LC 8)
Max Grav 6=254(LC 1), 4=254(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) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 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

June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | J14 | Diagonal Hip Girder | 2 | 1 | I46397125 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:21 2021 Page 1

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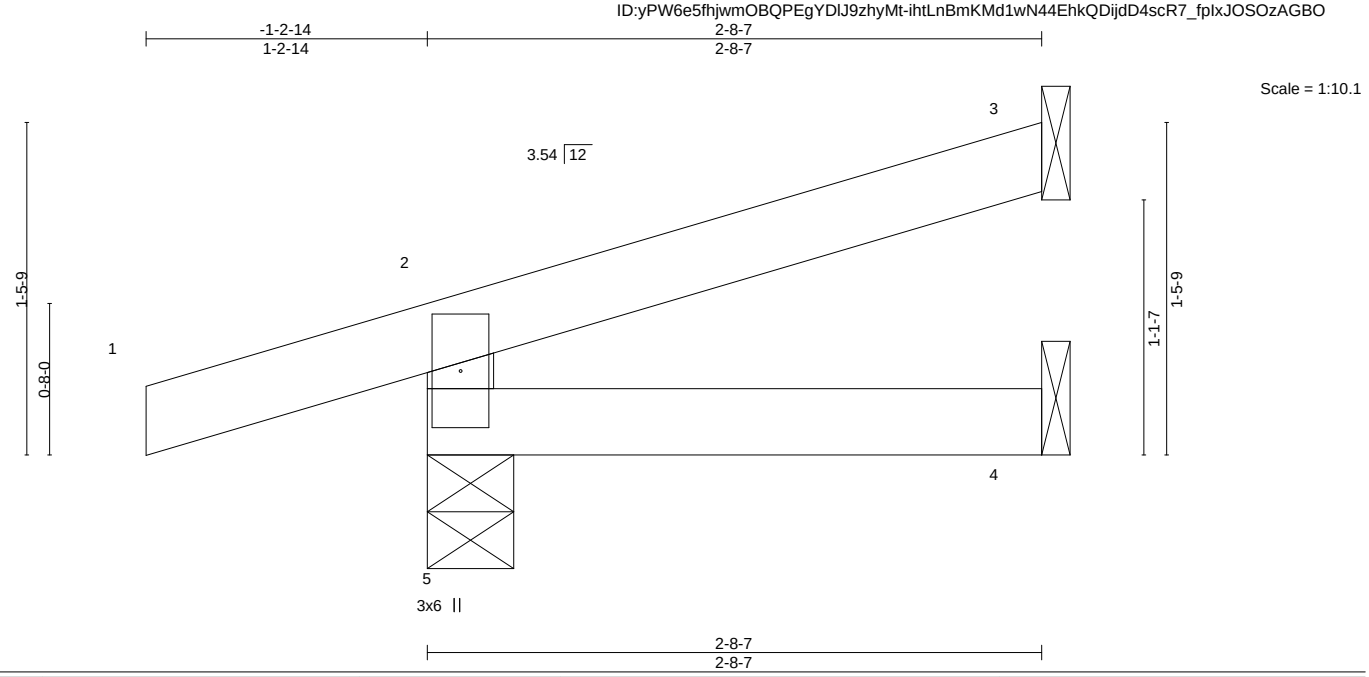


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.10 | Vert(LL) | -0.00 | 4-5 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.03 | Vert(CT) | -0.00 | 4-5 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.00 | Horz(CT) | -0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-R | | Wind(LL) | 0.00 | 4-5 | >999 | 240 | Weight: 8 lb | FT = 10% |

**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 2-8-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 5=0-4-9, 3=Mechanical, 4=Mechanical
Max Horz 5=50(LC 12)
Max Uplift 5=-102(LC 6), 3=-40(LC 12), 4=-2(LC 19)
Max Grav 5=95(LC 1), 3=30(LC 1), 4=32(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, 4 except (jt=lb) 5=102.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 19 lb down and 7 lb up at -1-2-14, and 19 lb down and 7 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=-29(F=-14, B=-14)
   Trapezoidal Loads (plf)
   Vert: 1=0(F=35, B=35)-to-2=-24(F=23, B=23), 2=-5(F=33, B=33)-to-3=-49(F=10, B=10), 5=0(F=10, B=10)-to-4=-14(F=3, B=3)



June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | J15 | Jack-Open | 8 | 1 | I46397126 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:21 2021 Page 1

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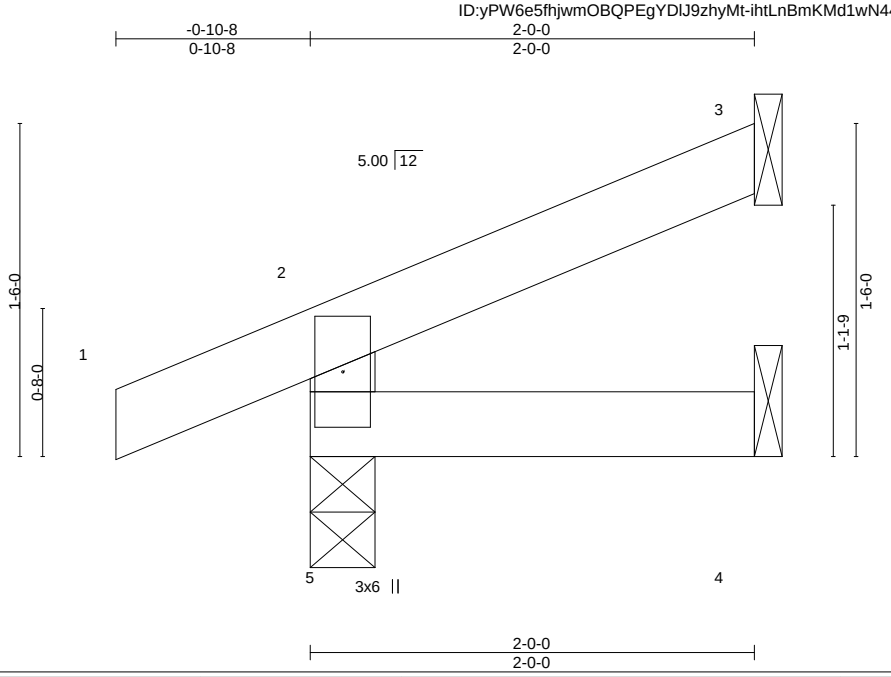


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.07 | Vert(LL) | -0.00 | 5 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.02 | Vert(CT) | -0.00 | 4-5 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-R | | Wind(LL) | 0.00 | 5 | >999 | 240 | Weight: 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 2-0-0 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=40(LC 8)
Max Uplift 5=-34(LC 4), 3=-29(LC 8)
Max Grav 5=174(LC 1), 3=48(LC 1), 4=33(LC 3)

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

**NOTES-**

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



June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | J16 | Jack-Open | 2 | 1 | I46397127 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:22 2021 Page 1

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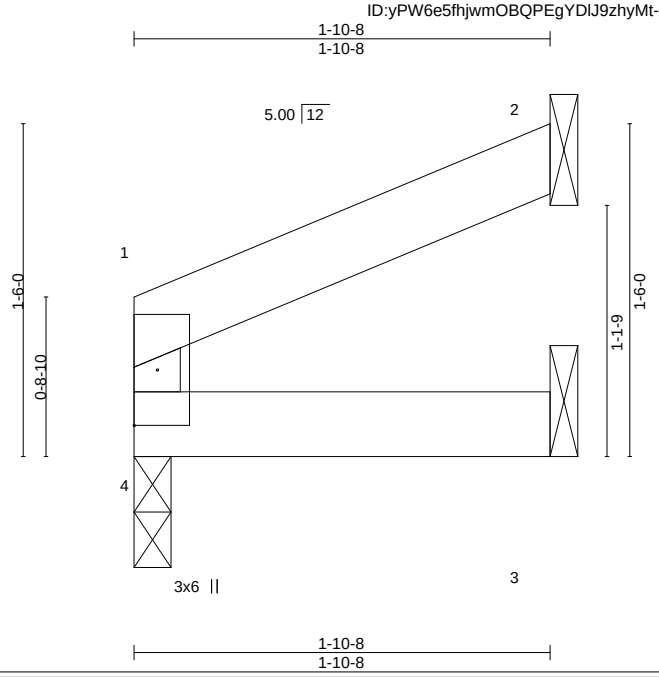


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.05 | Vert(LL) | -0.00 | 4 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.03 | Vert(CT) | -0.00 | 3-4 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.00 | 2 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-R | | Wind(LL) | 0.00 | 4 | >999 | 240 | Weight: 5 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 1-10-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 4=0-2-0, 2=Mechanical, 3=Mechanical
Max Horz 4=30(LC 5)
Max Uplift 4=-2(LC 8), 2=-32(LC 8)
Max Grav 4=79(LC 1), 2=59(LC 1), 3=34(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 at joint(s) 4.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | J18 | Diagonal Hip Girder | 2 | 1 | I46397128 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:23 2021 Page 1

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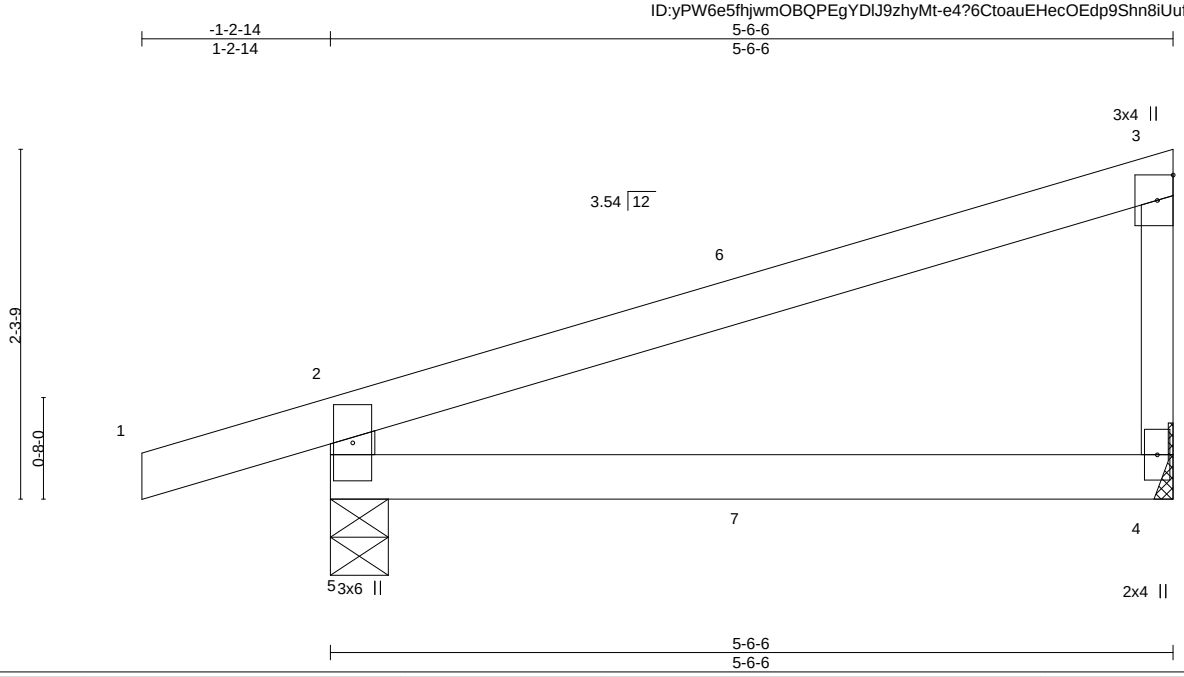


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.40 | Vert(LL) | -0.03 | 4-5 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.25 | Vert(CT) | -0.06 | 4-5 | >992 | 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 5-6-6 oc purlins, except end verticals. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing. |

**REACTIONS.** (size) 5=0-4-9, 4=Mechanical
Max Horz 5=93(LC 5)
Max Uplift 5=-104(LC 4), 4=-48(LC 8)
Max Grav 5=348(LC 1), 4=226(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-306/142

**NOTES-**

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) 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=104.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 69 lb down and 40 lb up at 2-9-8, and 67 lb down and 33 lb up at 2-9-8 on top chord, and 3 lb down at 2-9-8, and 2 lb down and 1 lb up at 2-9-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-70, 2-3=-70, 4-5=-20
   Concentrated Loads (lb)
   Vert: 7=-2(F=1, B=-3)

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | J19 | Jack-Open | 2 | 1 | I46397129 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:23 2021 Page 1

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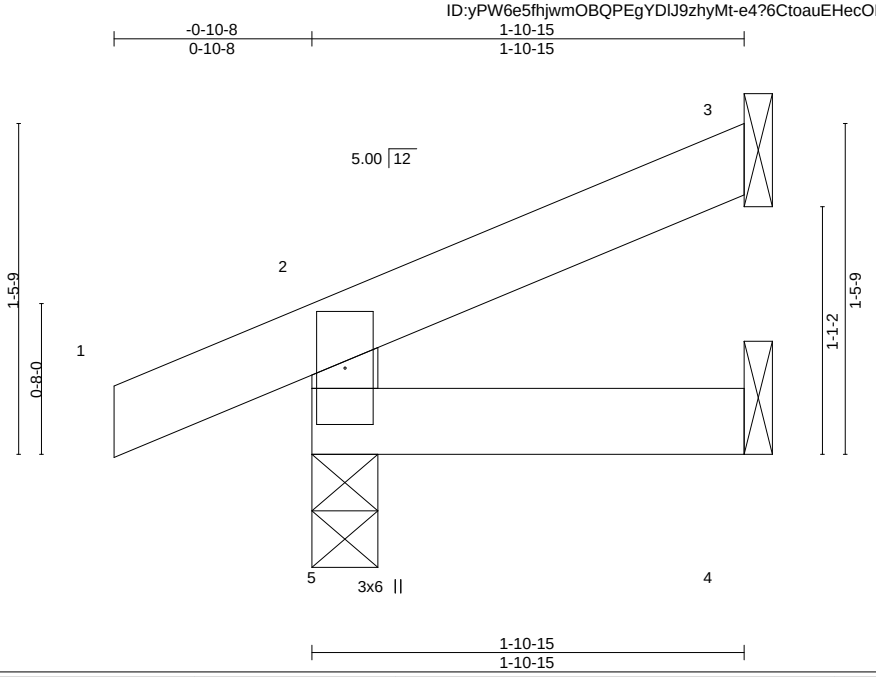


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.07 | Vert(LL) | -0.00 | 5 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.02 | 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 1-10-15 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=39(LC 8)
Max Uplift 5=-34(LC 4), 3=-27(LC 8)
Max Grav 5=171(LC 1), 3=44(LC 1), 4=31(LC 3)

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

**NOTES-**

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



June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | J20 | Jack-Open | 2 | 1 | I46397130 |
| | | | | | Job Reference (optional) |

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:25 2021 Page 1

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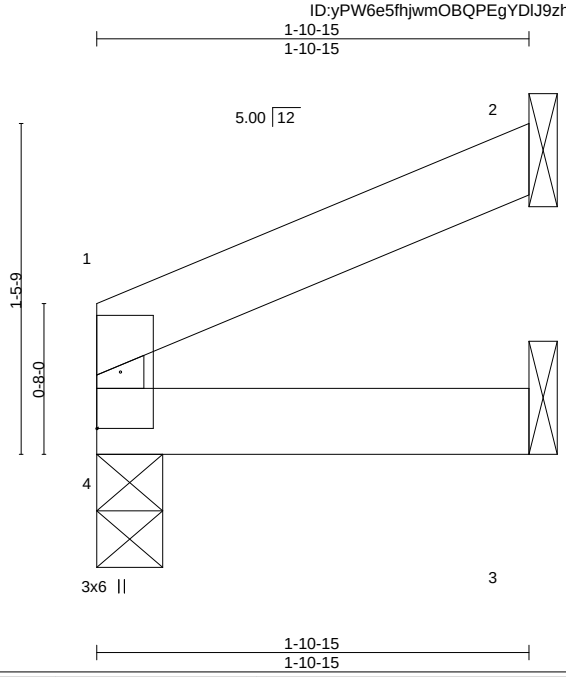


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.05 | Vert(LL) | -0.00 | 4 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.03 | Vert(CT) | -0.00 | 3-4 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.00 | 2 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-R | | Wind(LL) | 0.00 | 4 | >999 | 240 | Weight: 5 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 1-10-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 4=0-3-8, 2=Mechanical, 3=Mechanical
Max Horz 4=29(LC 5)
Max Uplift 4=-2(LC 8), 2=-32(LC 8)
Max Grav 4=81(LC 1), 2=60(LC 1), 3=35(LC 3)

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

**NOTES-**

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



June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | J21 | Jack-Open | 7 | 1 | I46397131 |
| | | | | | Job Reference (optional) |

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:25 2021 Page 1
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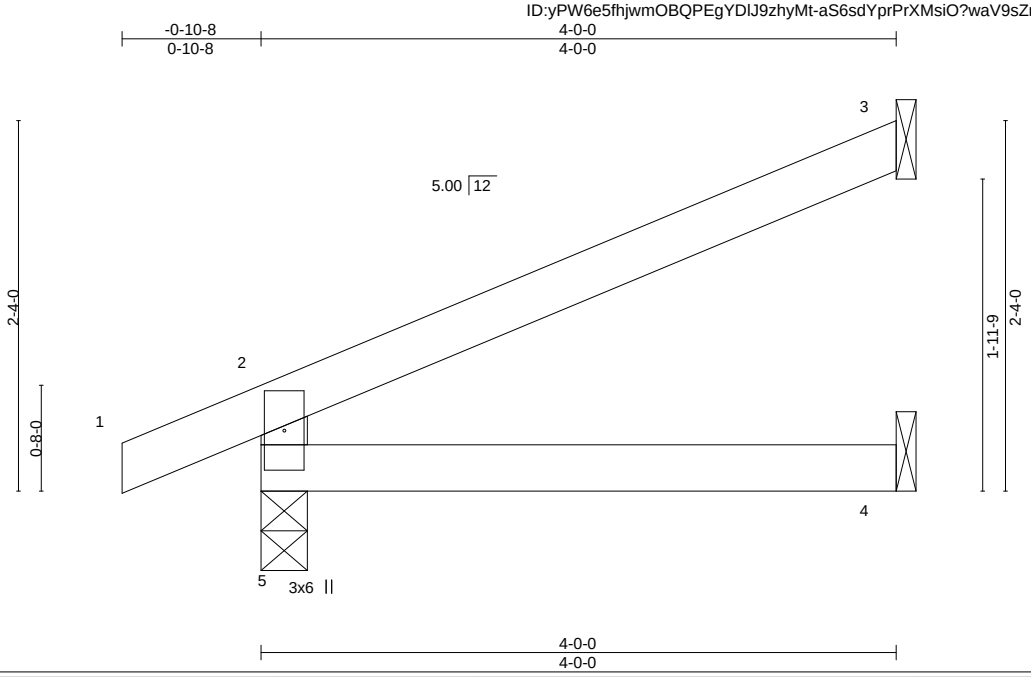


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.20 | Vert(LL) | -0.01 | 4-5 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 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 4-0-0 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=73(LC 8)
Max Uplift 5=-37(LC 8), 3=-60(LC 8)
Max Grav 5=252(LC 1), 3=116(LC 1), 4=71(LC 3)

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

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



June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | J22 | Diagonal Hip Girder | 2 | 1 | I46397132 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:26 2021 Page 1

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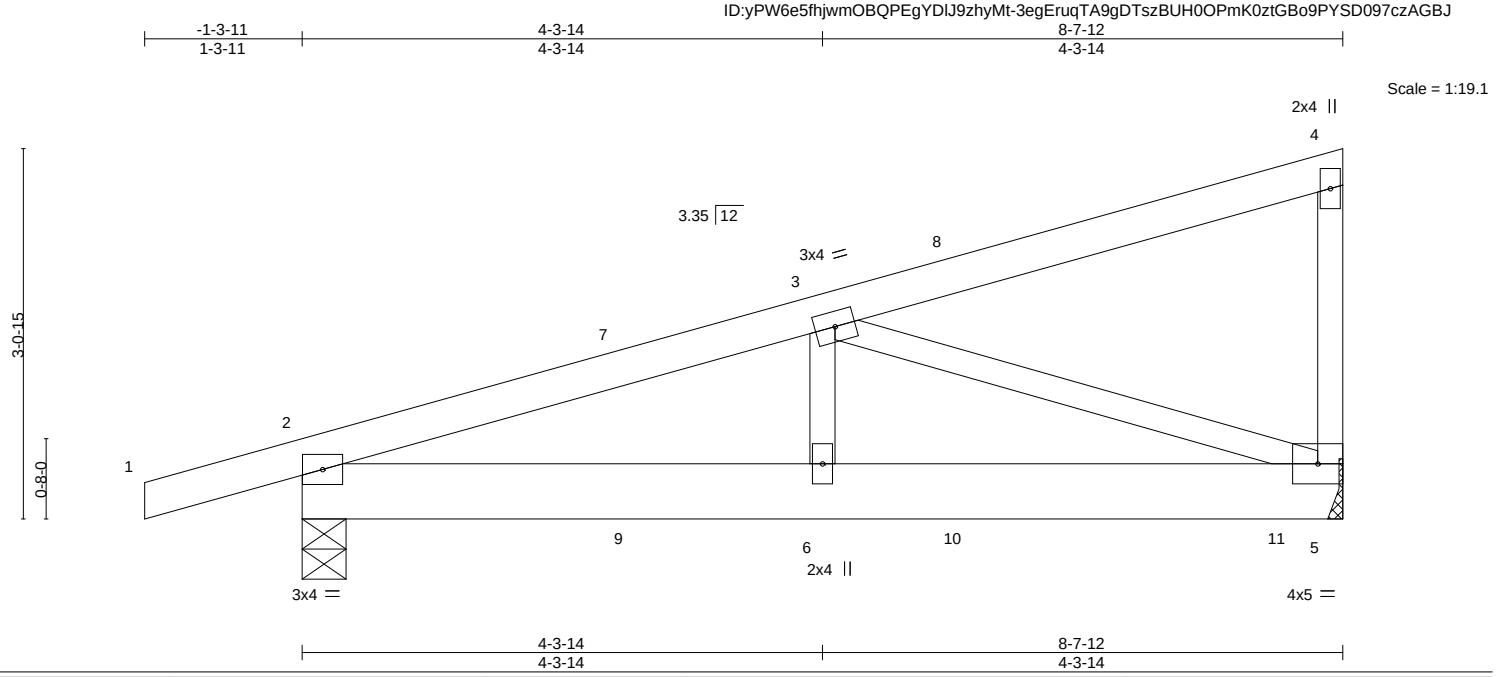


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.34 | Vert(LL) | -0.01 | 6 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.25 | Vert(CT) | -0.03 | 5-6 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.35 | Horz(CT) | 0.01 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-P | | Wind(LL) | 0.01 | 6 | >999 | 240 | Weight: 34 lb | FT = 10% |

**LUMBER-**

TOP CHORD 2x4 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=0-4-6
Max Horz 2=118(LC 5)
Max Uplift 5=-152(LC 8), 2=-142(LC 4)
Max Grav 5=602(LC 1), 2=517(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-748/130
BOT CHORD 2-6=-144/662, 5-6=-144/662
WEBS 3-5=-702/180

**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=152, 2=142.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 70 lb down and 32 lb up at 2-9-1, 64 lb down and 30 lb up at 2-9-11, and 88 lb down and 62 lb up at 5-5-15, and 100 lb down and 69 lb up at 5-8-15 on top chord, and 2 lb down and 2 lb up at 2-9-1, 2 lb down and 2 lb up at 2-9-11, 20 lb down at 5-5-15, and 25 lb down at 5-8-15, and 209 lb down and 71 lb up at 8-2-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-70, 2-5=-20
   Concentrated Loads (lb)
   Vert: 8=-28(F=-18, B=-10) 9=4(F=2, B=2) 10=-30(F=-18, B=-12) 11=-209(B)



June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | J23 | Jack-Closed | 2 | 1 | I46397133 |
| | | | | | Job Reference (optional) |

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:27 2021 Page 1
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-0-10-8 5-5-1
0-10-8 5-5-1

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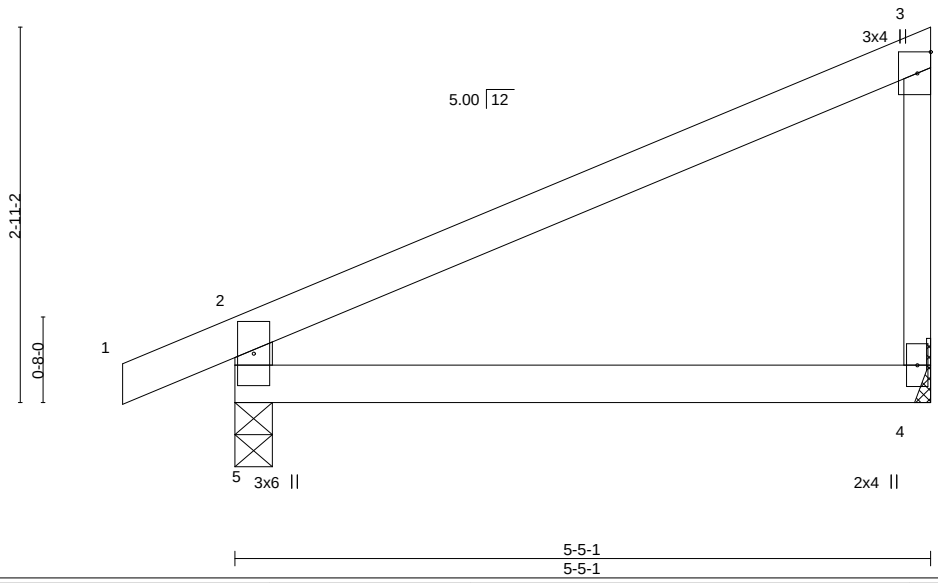


5-5-1
5-5-1

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.36 | Vert(LL) | -0.03 | 4-5 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.22 | Vert(CT) | -0.06 | 4-5 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.00 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-R | | Wind(LL) | 0.02 | 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 5-5-1 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 5=0-3-8, 4=Mechanical
Max Horz 5=119(LC 5)
Max Uplift 5=-56(LC 8), 4=-54(LC 8)
Max Grav 5=311(LC 1), 4=226(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-273/97

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

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | J24 | Jack-Open | 3 | 1 | I46397134 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:27 2021 Page 1

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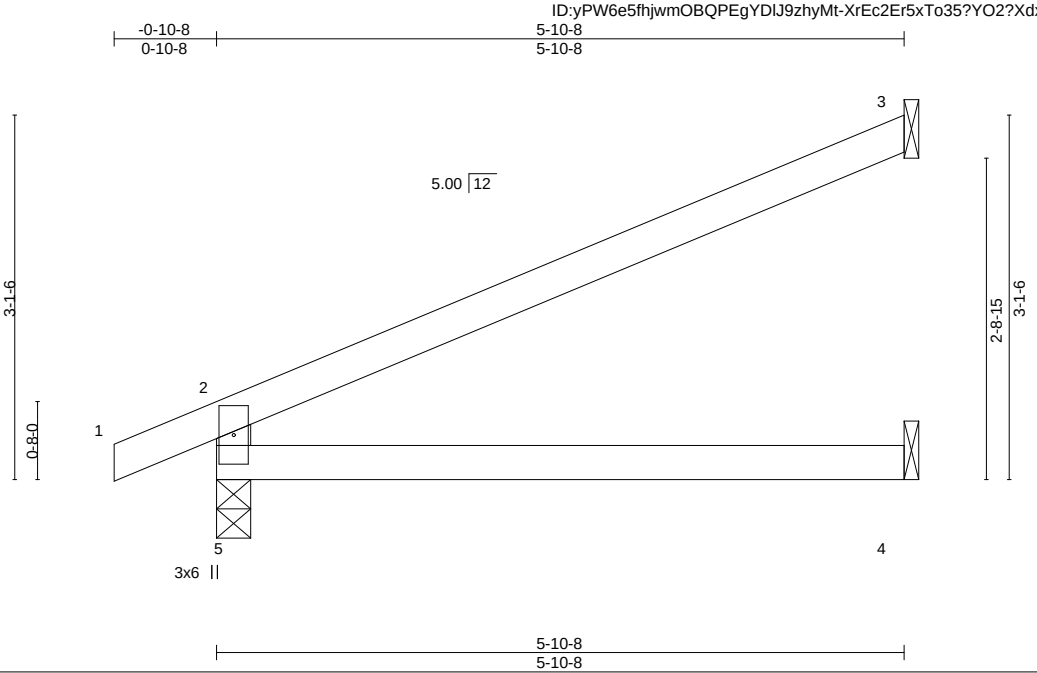


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.51 | Vert(LL) | -0.05 | 4-5 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.30 | Vert(CT) | -0.11 | 4-5 | >637 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.03 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-R | | Wind(LL) | 0.03 | 4-5 | >999 | 240 | Weight: 15 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 5-10-8 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=74(LC 8)
Max Uplift 5=-5(LC 8), 3=-52(LC 8)
Max Grav 5=333(LC 1), 3=178(LC 1), 4=107(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-290/52

**NOTES-**

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



June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | J25 | Jack-Open | 2 | 1 | I46397135 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:28 2021 Page 1

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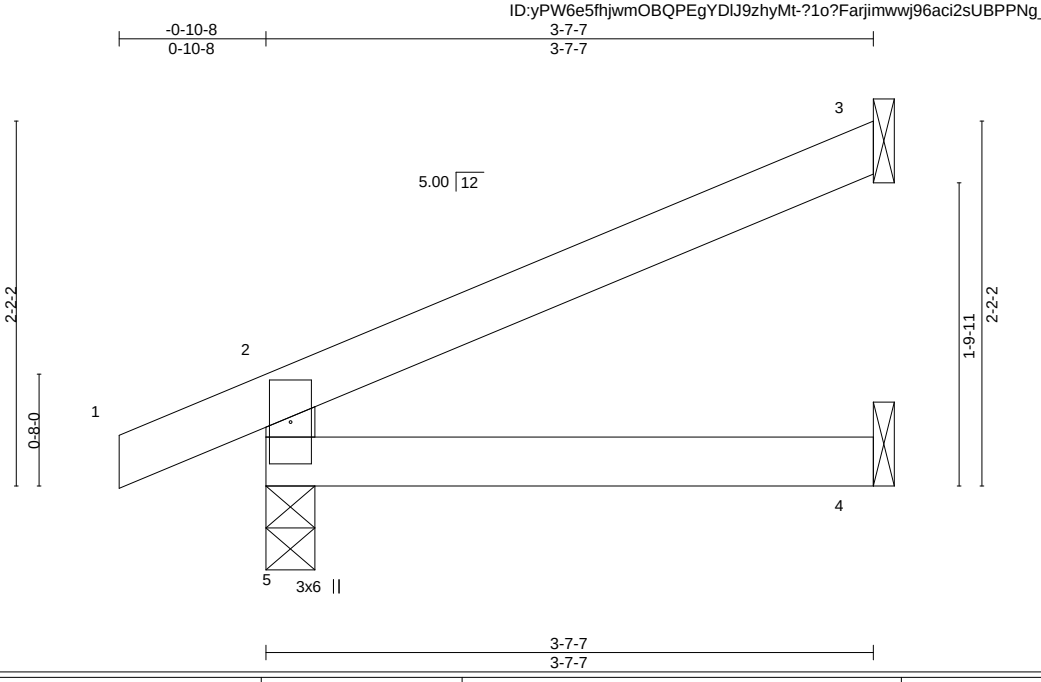



| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.16 | Vert(LL) | -0.01 | 4-5 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.10 | 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-**

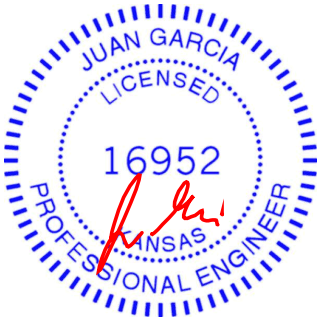
| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 3-7-7 oc purlins, except end verticals. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing. |

**REACTIONS.** (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=67(LC 8)
Max Uplift 5=-36(LC 8), 3=-54(LC 8)
Max Grav 5=236(LC 1), 3=104(LC 1), 4=64(LC 3)

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

**NOTES-**

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


June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | J26 | Jack-Open | 2 | 1 | I46397136 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:29 2021 Page 1

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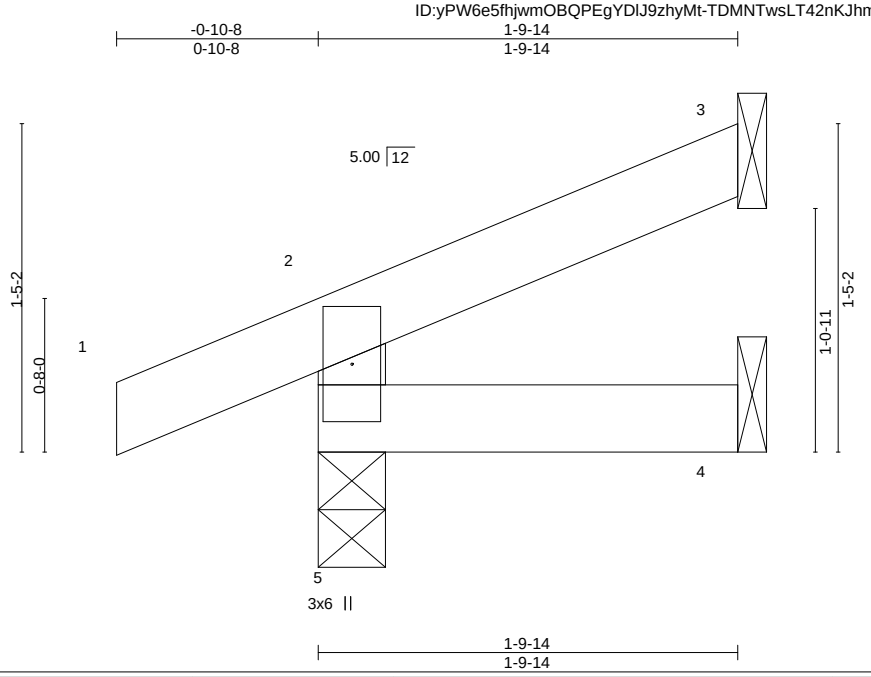


| LOADING (psf) | | SPACING- 2-0-0 | | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.07 | Vert(LL) | -0.00 | 5 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.02 | 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 1-9-14 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=37(LC 8)
Max Uplift 5=-35(LC 4), 3=-26(LC 8)
Max Grav 5=168(LC 1), 3=41(LC 1), 4=29(LC 3)

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

**NOTES-**

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



June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | J27 | Jack-Open | 2 | 1 | I46397137 |
| | | | | | Job Reference (optional) |

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:29 2021 Page 1
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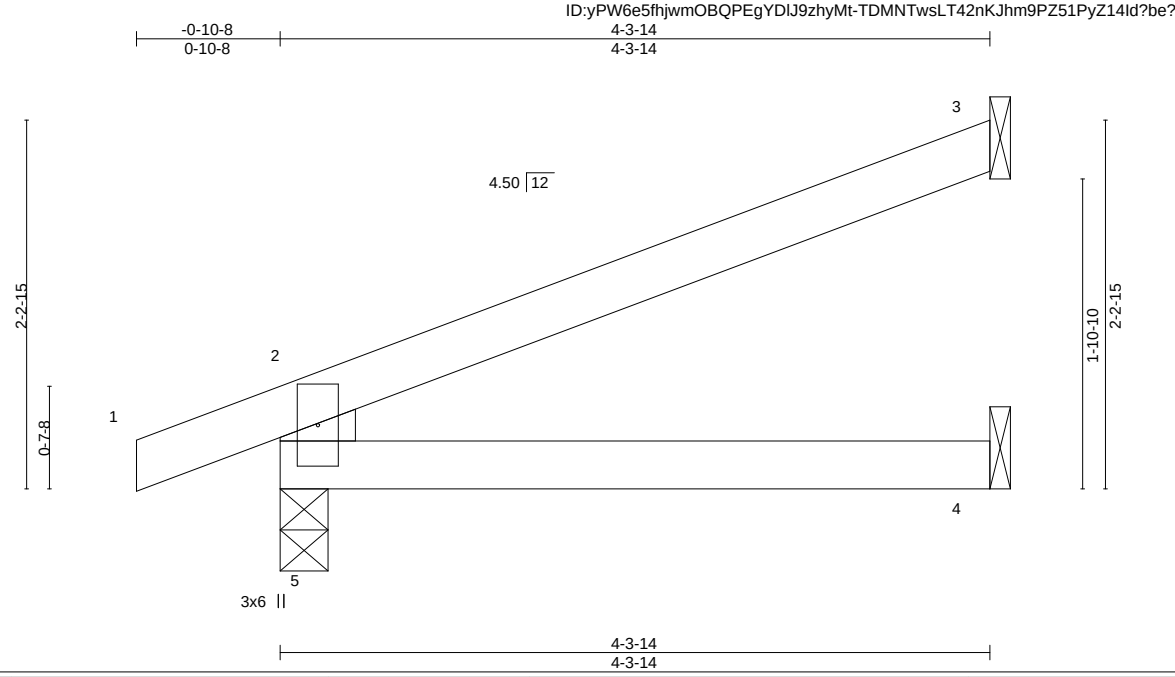


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.23 | Vert(LL) | -0.01 | 4-5 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.14 | Vert(CT) | -0.03 | 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: 12 lb | FT = 10% |

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

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 4-3-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=73(LC 4)
Max Uplift 5=-62(LC 4), 3=-60(LC 8)
Max Grav 5=269(LC 1), 3=123(LC 1), 4=75(LC 3)

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

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



June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | J28 | Jack-Open | 2 | 1 | I46397138 |
| | | | | | Job Reference (optional) |

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:30 2021 Page 1
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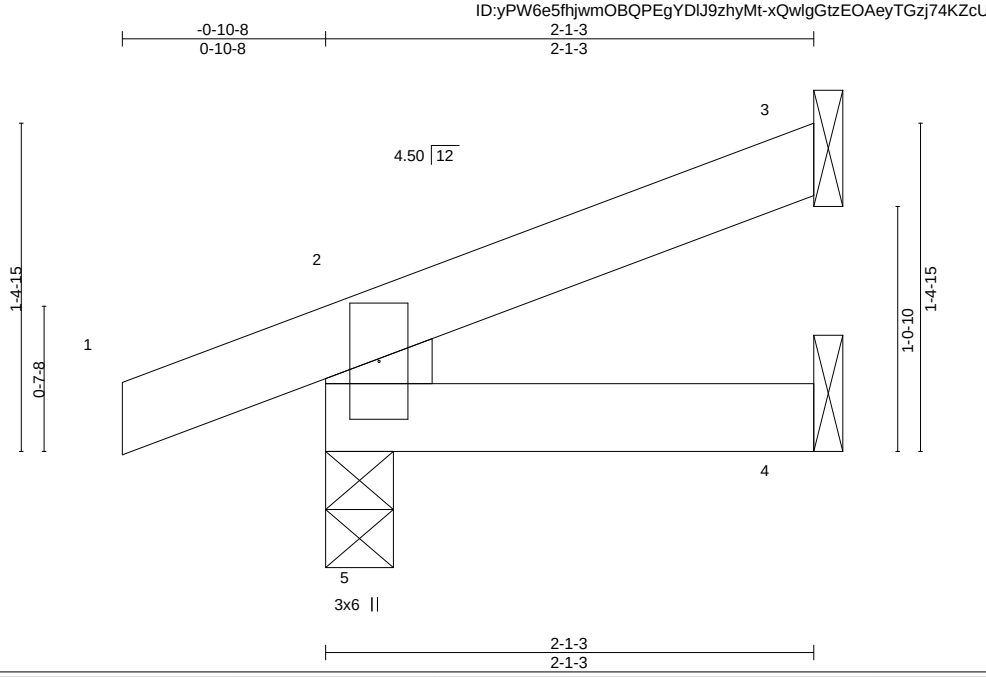


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.08 | Vert(LL) | -0.00 | 5 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.02 | 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 2x6 SPF No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 2-1-3 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=41(LC 4)
Max Uplift 5=-58(LC 4), 3=-26(LC 8)
Max Grav 5=182(LC 1), 3=46(LC 1), 4=31(LC 3)

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

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



June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | LAY1 | GABLE | 2 | 1 | I46397139 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:36 2021 Page 1

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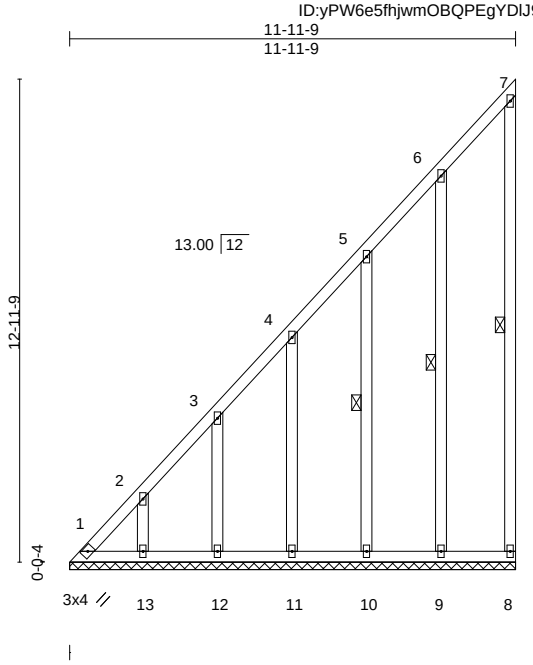


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.07 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.03 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.10 | Horz(CT) | -0.00 | 8 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | | | | | | Weight: 81 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. |
| WEBS | 1 Row at midpt 7-8, 6-9, 5-10 |

**REACTIONS.** All bearings 11-11-9.

(lb) - Max Horz 1=508(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 8 except 1=-162(LC 6), 9=-132(LC 8), 10=-130(LC 8), 11=-129(LC 8), 12=-129(LC 8), 13=-130(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 8, 9, 10, 11, 12, 13 except 1=510(LC 8)

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

TOP CHORD 1-2=-709/280, 2-3=-586/232, 3-4=-455/183, 4-5=-325/134

**NOTES-**

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) All plates are 2x4 MT20 unless otherwise indicated.
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8 except (jt=lb) 1=162, 9=132, 10=130, 11=129, 12=129, 13=130.
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

June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | LAY2 | GABLE | 1 | 1 | I46397140 |
| | | | | | Job Reference (optional) |

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:37 2021 Page 1
ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-EmrO8fyMaX2flYIJd5izL5HzqI39tB8AzQBE0TzAGB8

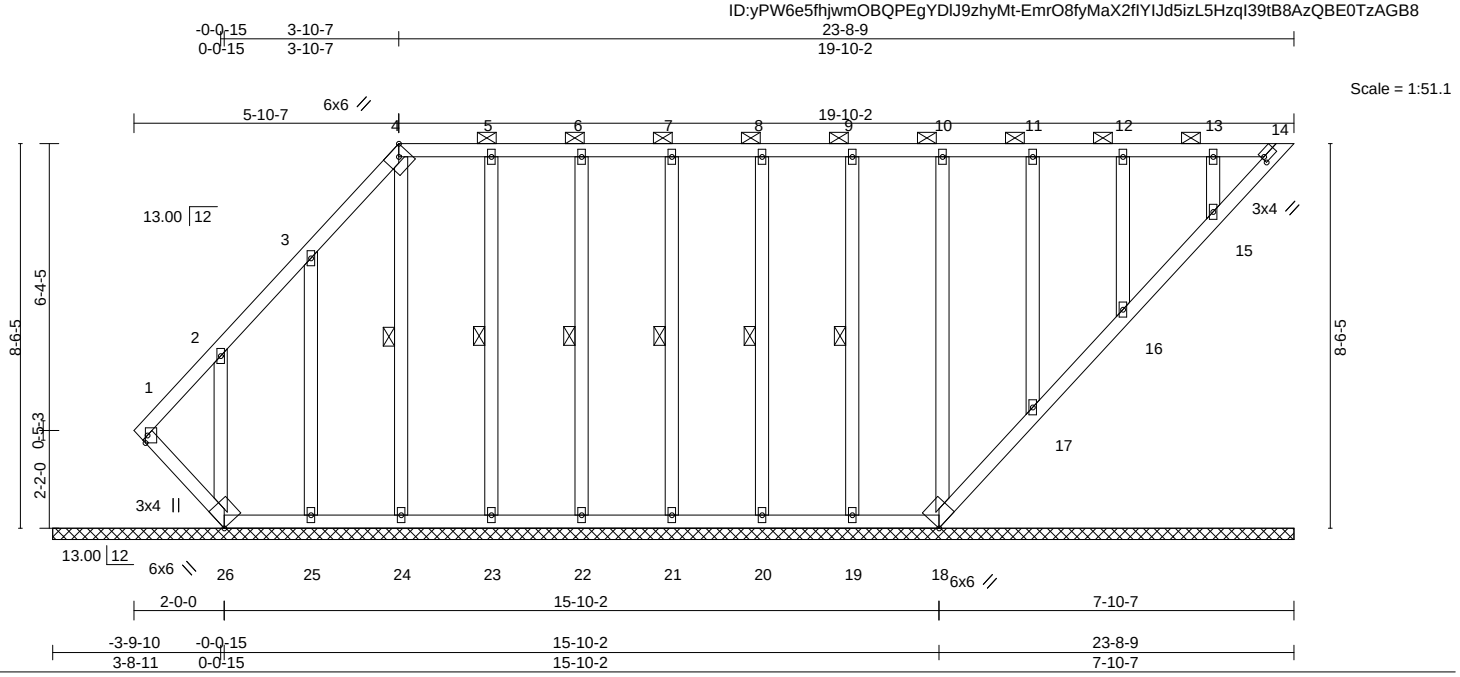


Plate Offsets (X,Y)-- [4:0-2-9,Edge], [14:0-0-10,0-1-8], [26:0-0-0,Edge]

| 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 | 0.05 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.03 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.16 | Horz(CT) | -0.00 | 14 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 153 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, except 2-0-0 oc purlins (6-0-0 max.): 4-14.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-24, 5-23, 6-22, 7-21, 8-20, 9-19

**REACTIONS.** All bearings 27-6-3.
(lb) - Max Horz 1=262(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 14, 18, 24, 23, 22, 21, 20, 19, 17, 16, 15 except 25=-136(LC 8), 26=-137(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 1, 14, 18, 25, 24, 23, 22, 21, 20, 19, 17, 16, 15, 26

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-314/126

**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) 1, 14, 18, 24, 23, 22, 21, 20, 19, 17, 16, 15 except (jt=lb) 25=136, 26=137.
9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 14, 17, 16, 15.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | LAY3 | GABLE | 1 | 1 | I46397141 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:39 2021 Page 1

ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-A9z9ZL_d69IMXrShlWlRQWMJ46lML6JTRkgL5LzAGB6

9-11-13 / 9-11-13 | 19-11-10 / 9-11-13

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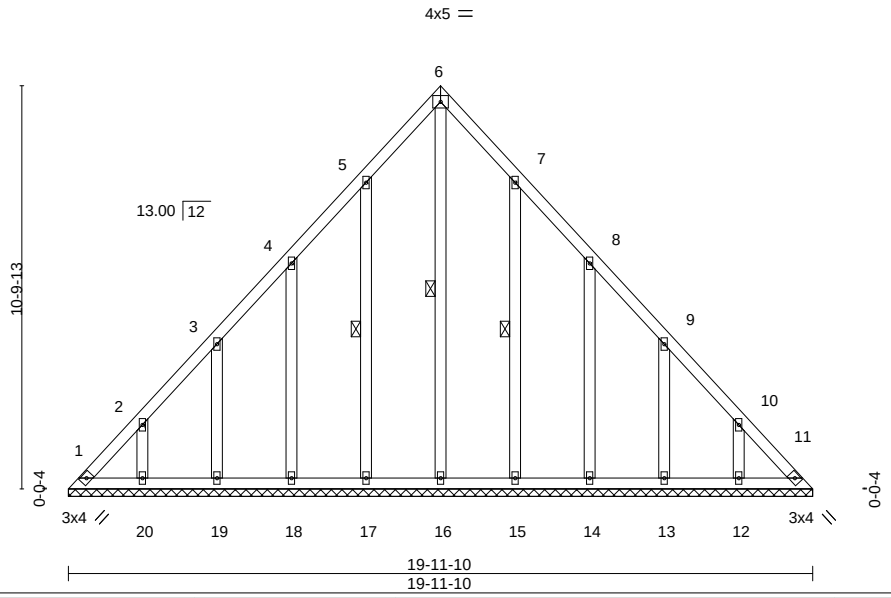



| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.06 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.05 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.12 | Horz(CT) | 0.01 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 111 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 6-16, 5-17, 7-15 |

**REACTIONS.** All bearings 19-11-10.

(lb) - Max Horz 1=-279(LC 4)

Max Uplift All uplift 100 lb or less at joint(s) 11 except 1=-134(LC 6), 17=-127(LC 8), 18=-133(LC 8), 19=-128(LC 8), 20=-131(LC 8), 15=-125(LC 9), 14=-134(LC 9), 13=-128(LC 9), 12=-131(LC 9)

Max Grav All reactions 250 lb or less at joint(s) 11, 17, 18, 19, 20, 15, 14, 13, 12 except 1=274(LC 8), 16=257(LC 9)

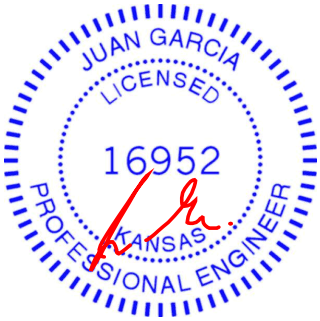
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 1-2=-388/242, 2-3=-264/194, 10-11=-347/180

BOT CHORD 1-20=-123/262, 19-20=-123/262, 18-19=-123/262, 17-18=-123/262, 16-17=-123/262, 15-16=-123/262, 14-15=-123/262, 13-14=-123/262, 12-13=-123/262, 11-12=-123/262

**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=134, 17=127, 18=133, 19=128, 20=131, 15=125, 14=134, 13=128, 12=131.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.


June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | LAY4 | GABLE | 1 | 1 | I46397142 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:40 2021 Page 1

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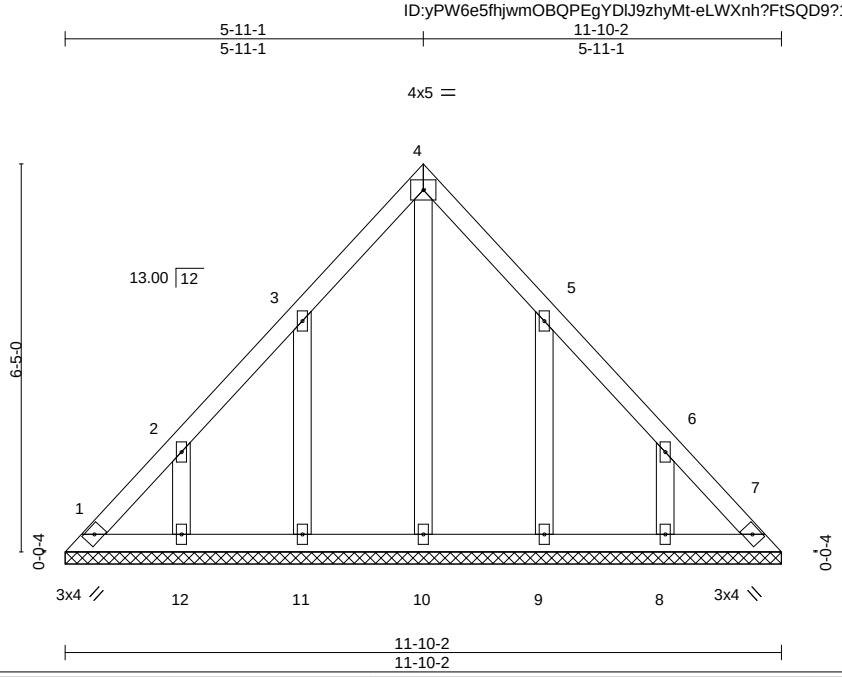


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.05 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.03 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.07 | Horz(CT) | 0.00 | 7 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 51 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 11-10-2.
(lb) - Max Horz 1=162(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 11=-136(LC 8), 12=-129(LC 8), 9=-135(LC 9), 8=-129(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 10, 11, 12, 9, 8

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

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) 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, 7 except (jt=lb) 11=136, 12=129, 9=135, 8=129.
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.



June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | LAY5 | GABLE | 1 | 1 | I46397143 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:41 2021 Page 1

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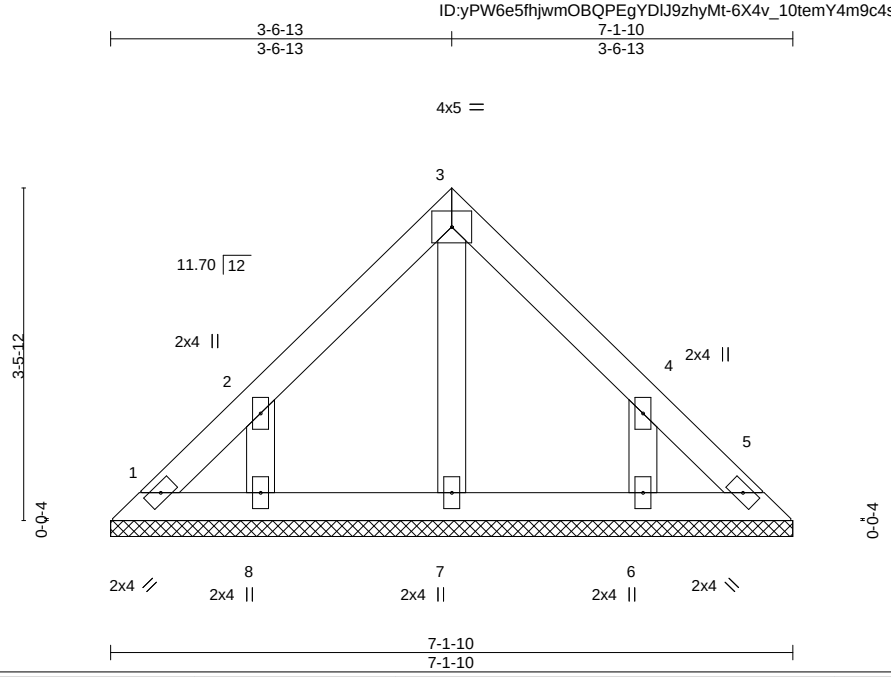


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.05 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.03 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.02 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-P | | | | | | | Weight: 24 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 7-1-10.
(lb) - Max Horz 1=-82(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-119(LC 8), 6=-119(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=119, 6=119.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | V1 | Valley | 1 | 1 | I46397144 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:42 2021 Page 1

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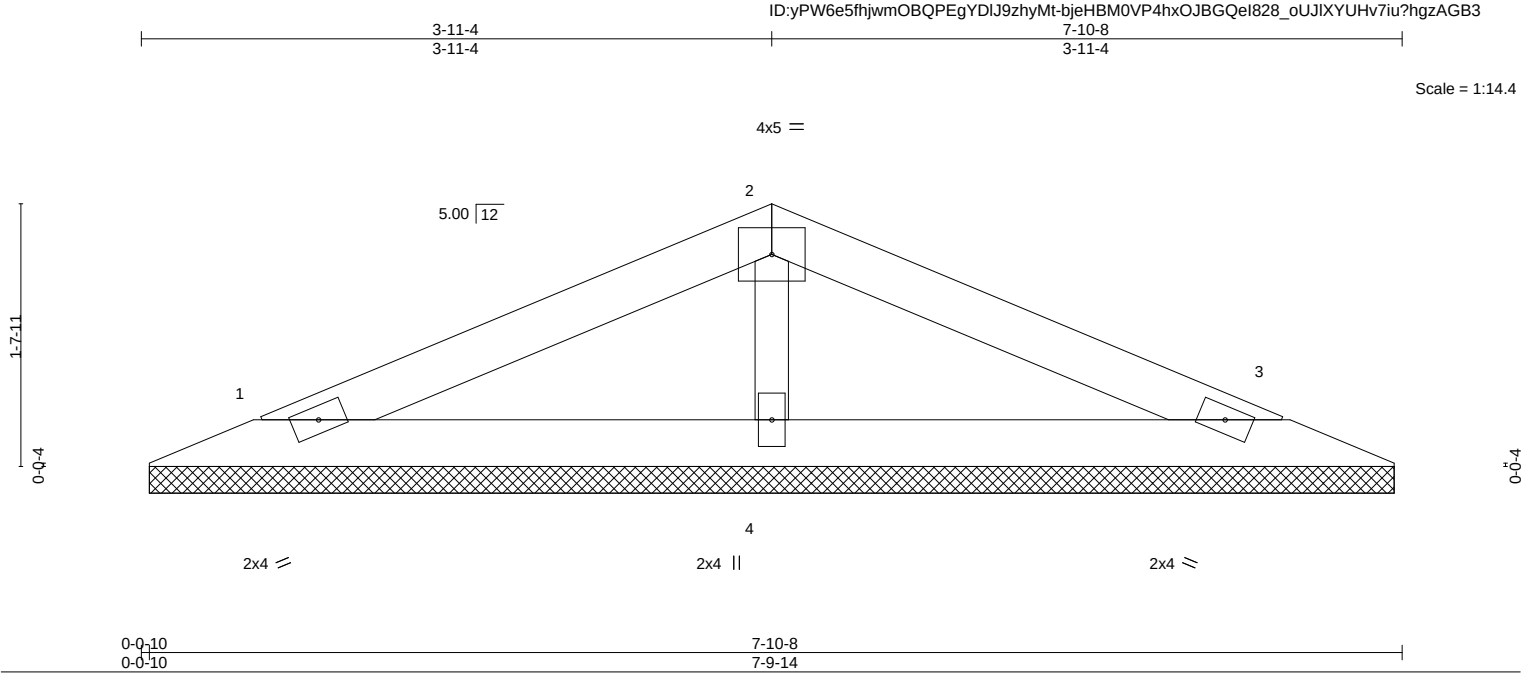



| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.18 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.09 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.04 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-P | | | | | | | Weight: 18 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=7-9-5, 3=7-9-5, 4=7-9-5
Max Horz 1=-24(LC 9)
Max Uplift 1=-33(LC 8), 3=-37(LC 9), 4=-7(LC 8)
Max Grav 1=145(LC 1), 3=145(LC 1), 4=284(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.



June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI



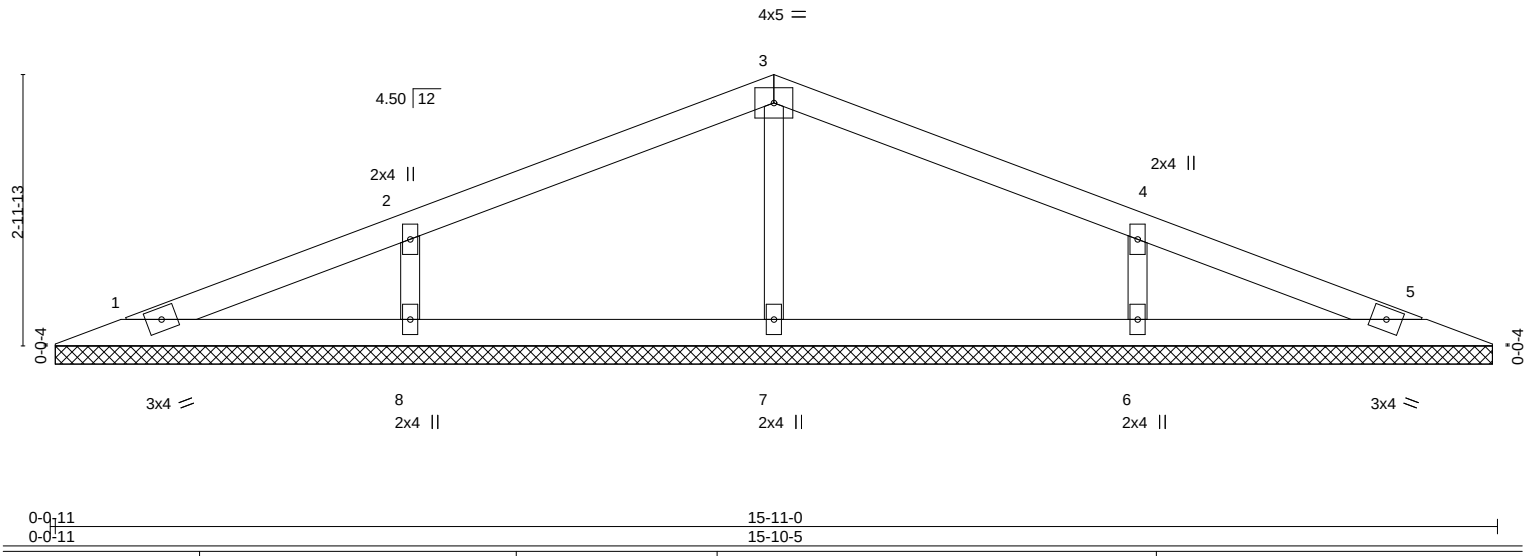

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | V2 | Valley | 1 | 1 | I46397145 |
| | | | | | Job Reference (optional) |

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:42 2021 Page 1
ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-bjeHBM0VP4hxOJBGQeI828_oTJlPYU_v7iu?hgzAGB3

7-11-8 | 15-11-0
7-11-8 | 7-11-8

Scale = 1:25.3




0-0-11 | 15-11-0
0-0-11 | 15-10-5

| 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 | 0.18 | 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 | 0.06 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 39 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.** All bearings 15-9-11.
(lb) - Max Horz 1=47(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-101(LC 8), 6=-101(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=318(LC 1), 8=381(LC 21), 6=381(LC 22)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-299/145, 4-6=-299/145

**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=101, 6=101.
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

June 3,2021

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI



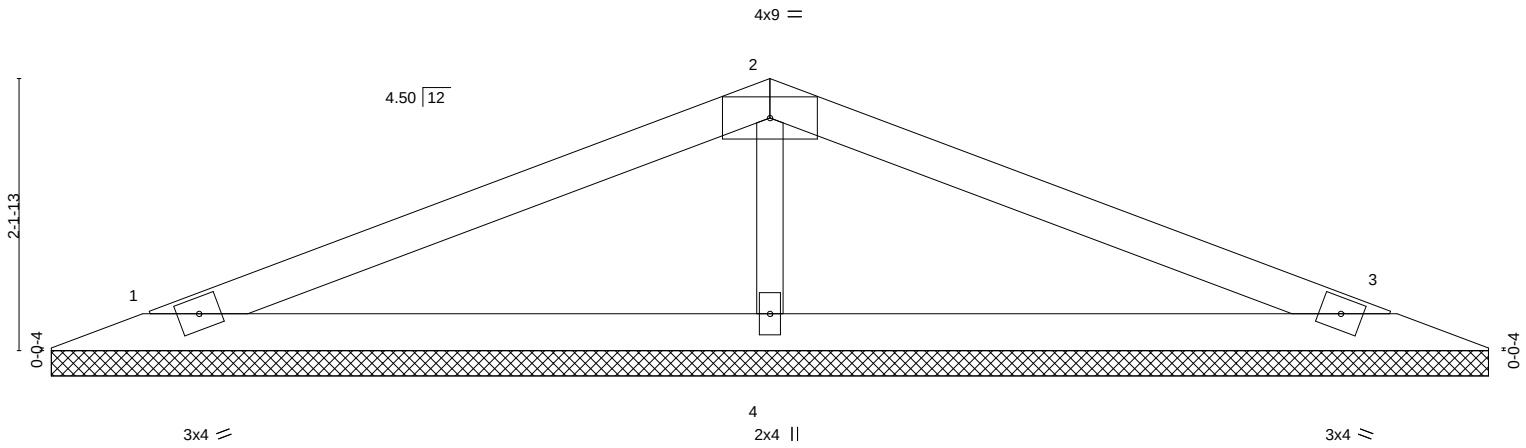

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | V3 | Valley | 1 | 1 | I46397146 |
| | | | | | Job Reference (optional) |

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:43 2021 Page 1
ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-3wCfPi17ANpo0TmT_MpNbMXwsj3_Hw43MMeYE7zAGB2

5-8-13 / 5-8-13 | 11-5-11 / 5-8-13

Scale = 1:18.2




0-0-11 / 0-0-11 | 11-5-11 / 11-5-0

| 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 | 0.33 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.20 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.07 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 26 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=11-4-5, 3=11-4-5, 4=11-4-5
Max Horz 1=-33(LC 9)
Max Uplift 1=-41(LC 8), 3=-47(LC 9), 4=-37(LC 4)
Max Grav 1=200(LC 21), 3=200(LC 22), 4=493(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-345/96

**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.



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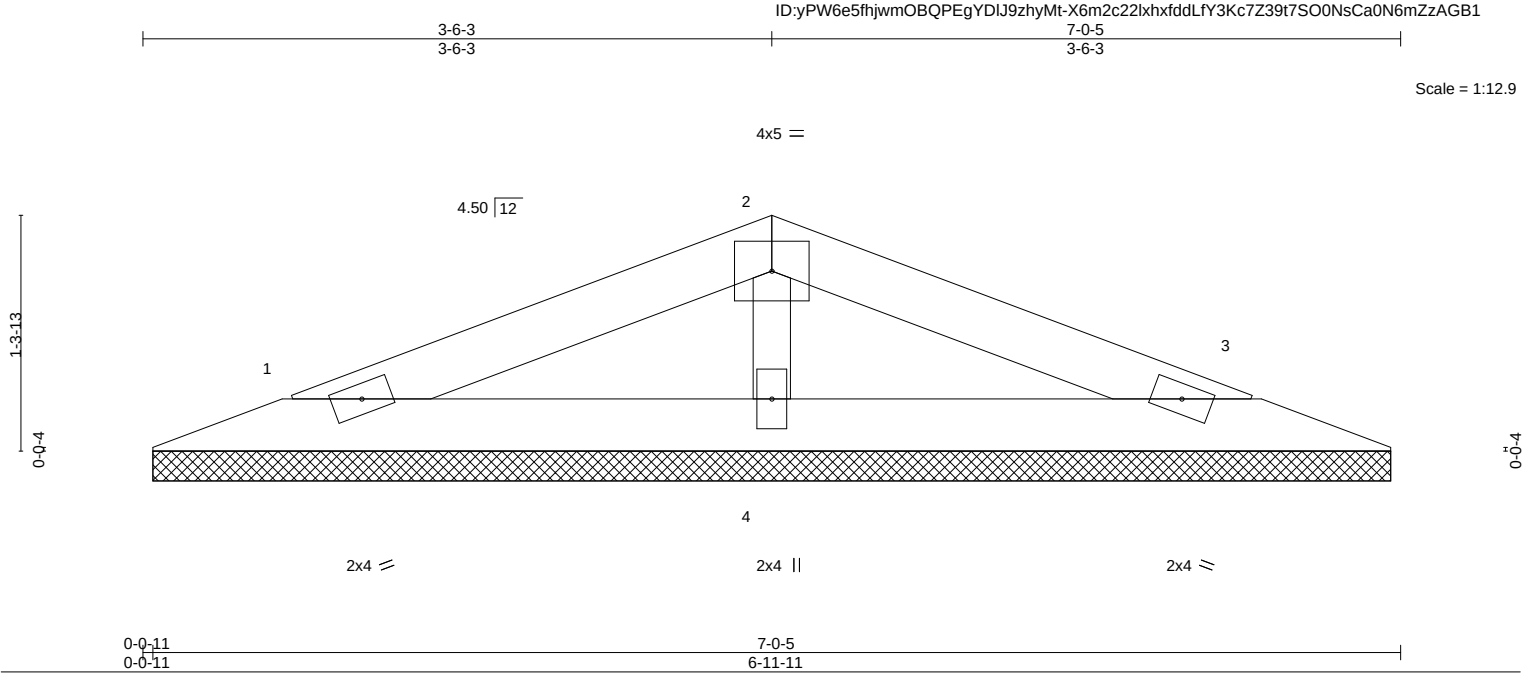
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | Lot 1 CB |
|---|---|---|---|---|---|
| CB1 | V4 | Valley | 1 | 1 | I46397147 |

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s May 12 2021 MiTek Industries, Inc. Wed Jun 2 16:48:44 2021 Page 1

ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-X6m2c22lxhxfddLfY3Kc7Z39t7SO0NsCa0N6mZzAGB1




| 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 | 0.12 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.06 | 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: 15 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=6-11-0, 3=6-11-0, 4=6-11-0
Max Horz 1=18(LC 12)
Max Uplift 1=-28(LC 8), 3=-31(LC 9), 4=-9(LC 4)
Max Grav 1=120(LC 1), 3=120(LC 1), 4=242(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.



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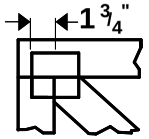
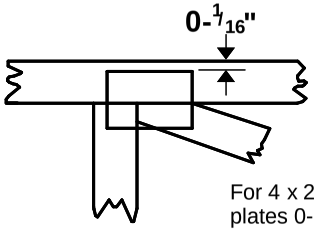
# Symbols

## PLATE LOCATION AND ORIENTATION




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




For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.

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

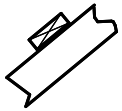
*** Plate location details available in MiTek 20/20 software or upon request.**

## PLATE SIZE

4 x 4

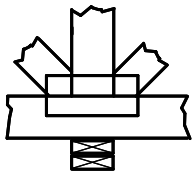
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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

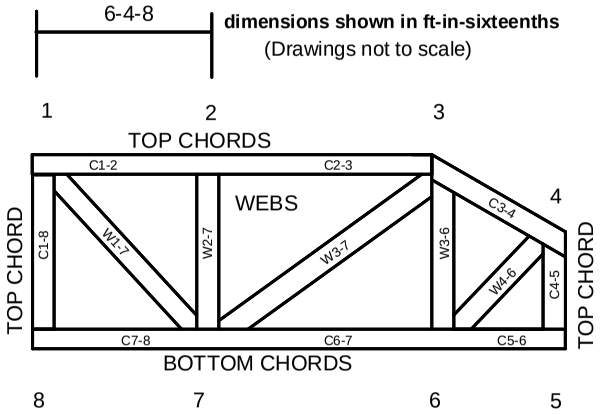


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

**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.