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

RE: 3235278 - IC CONST. - KNOLL RES.

MiTek USA, Inc.
16023 Swingley Ridge Rd
Chesterfield, MO 63017

**Site Information:**

Customer Info: IC CONSTRUCTION Project Name: Knoll Res. Model: Custom
Lot/Block: N/A Subdivision: THE OAKS
Address: TBD SW Upstage Glen, TBD
City: Columbia Cty State: FL

**Name Address and License # of Structural Engineer of Record, If there is one, for the building.**

Name: License #:
Address:
City: State:

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

Design Code: FBC2020/TPI2014 Design Program: MiTek 20/20 8.5
Wind Code: ASCE 7-16 Wind Speed: 130 mph
Roof Load: 37.0 psf Floor Load: N/A psf

This package includes 78 individual, Truss Design Drawings and 0 Additional Drawings.
With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

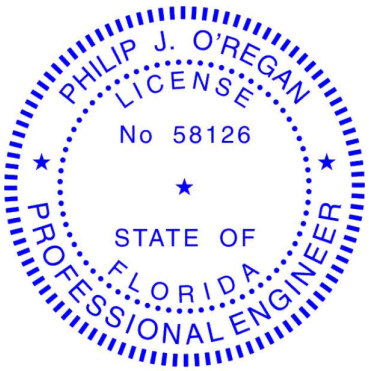
| No. | Seal# | Truss Name | Date | No. | Seal# | Truss Name | Date |
|---|---|---|---|---|---|---|---|
| 1 | T28641018 | CJ01 | 8/29/22 | 15 | T28641032 | EJ01 | 8/29/22 |
| 2 | T28641019 | CJ01B | 8/29/22 | 16 | T28641033 | EJ02 | 8/29/22 |
| 3 | T28641020 | CJ02 | 8/29/22 | 17 | T28641034 | EJ03 | 8/29/22 |
| 4 | T28641021 | CJ03 | 8/29/22 | 18 | T28641035 | HJ02 | 8/29/22 |
| 5 | T28641022 | CJ03A | 8/29/22 | 19 | T28641036 | HJ03 | 8/29/22 |
| 6 | T28641023 | CJ03B | 8/29/22 | 20 | T28641037 | HJ10 | 8/29/22 |
| 7 | T28641024 | CJ03C | 8/29/22 | 21 | T28641038 | HJ10B | 8/29/22 |
| 8 | T28641025 | CJ04 | 8/29/22 | 22 | T28641039 | HJ10C | 8/29/22 |
| 9 | T28641026 | CJ05 | 8/29/22 | 23 | T28641040 | PB01 | 8/29/22 |
| 10 | T28641027 | CJ05A | 8/29/22 | 24 | T28641041 | PB02 | 8/29/22 |
| 11 | T28641028 | CJ05B | 8/29/22 | 25 | T28641042 | PB03 | 8/29/22 |
| 12 | T28641029 | CJ05C | 8/29/22 | 26 | T28641043 | T01 | 8/29/22 |
| 13 | T28641030 | CJ06 | 8/29/22 | 27 | T28641044 | T01G | 8/29/22 |
| 14 | T28641031 | CJ08 | 8/29/22 | 28 | T28641045 | T02 | 8/29/22 |

This item has been electronically signed and sealed by ORegan, Philip, PE using a Digital Signature.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies

The truss drawing(s) referenced above have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Builders FirstSource-Lake City, FL.

Truss Design Engineer's Name: ORegan, Philip
My license renewal date for the state of Florida is February 28, 2023.

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




Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022

RE: 3235278 - IC CONST. - KNOLL RES.

MiTek USA, Inc.
16023 Swingley Ridge Rd
Chesterfield, MO 63017

**Site Information:**

Customer Info: IC CONSTRUCTION Project Name: Knoll Res. Model: Custom
Lot/Block: N/A Subdivision: THE OAKS
Address: TBD SW Upstage Glen, TBD
City: Columbia Cty State: FL

| No. | Seal# | Truss Name | Date |
|---|---|---|---|
| 29 | T28641046 | T02G | 8/29/22 |
| 30 | T28641047 | T03 | 8/29/22 |
| 31 | T28641048 | T04 | 8/29/22 |
| 32 | T28641049 | T04G | 8/29/22 |
| 33 | T28641050 | T05 | 8/29/22 |
| 34 | T28641051 | T06 | 8/29/22 |
| 35 | T28641052 | T07 | 8/29/22 |
| 36 | T28641053 | T08 | 8/29/22 |
| 37 | T28641054 | T09 | 8/29/22 |
| 38 | T28641055 | T10 | 8/29/22 |
| 39 | T28641056 | T11 | 8/29/22 |
| 40 | T28641057 | T12 | 8/29/22 |
| 41 | T28641058 | T13 | 8/29/22 |
| 42 | T28641059 | T14 | 8/29/22 |
| 43 | T28641060 | T15 | 8/29/22 |
| 44 | T28641061 | T16 | 8/29/22 |
| 45 | T28641062 | T17 | 8/29/22 |
| 46 | T28641063 | T18 | 8/29/22 |
| 47 | T28641064 | T19 | 8/29/22 |
| 48 | T28641065 | T20 | 8/29/22 |
| 49 | T28641066 | T21 | 8/29/22 |
| 50 | T28641067 | T22 | 8/29/22 |
| 51 | T28641068 | T23 | 8/29/22 |
| 52 | T28641069 | T24 | 8/29/22 |
| 53 | T28641070 | T25 | 8/29/22 |
| 54 | T28641071 | T26 | 8/29/22 |
| 55 | T28641072 | T27 | 8/29/22 |
| 56 | T28641073 | T28 | 8/29/22 |
| 57 | T28641074 | T28G | 8/29/22 |
| 58 | T28641075 | T29 | 8/29/22 |
| 59 | T28641076 | T30 | 8/29/22 |
| 60 | T28641077 | T31 | 8/29/22 |
| 61 | T28641078 | T32 | 8/29/22 |
| 62 | T28641079 | T33 | 8/29/22 |
| 63 | T28641080 | T34 | 8/29/22 |
| 64 | T28641081 | T35 | 8/29/22 |
| 65 | T28641082 | T36 | 8/29/22 |
| 66 | T28641083 | T37 | 8/29/22 |
| 67 | T28641084 | T38 | 8/29/22 |
| 68 | T28641085 | T39 | 8/29/22 |
| 69 | T28641086 | T40 | 8/29/22 |
| 70 | T28641087 | T41 | 8/29/22 |
| 71 | T28641088 | T42 | 8/29/22 |
| 72 | T28641089 | T42G | 8/29/22 |
| 73 | T28641090 | T43 | 8/29/22 |
| 74 | T28641091 | T44 | 8/29/22 |
| 75 | T28641092 | T45 | 8/29/22 |
| 76 | T28641093 | TG01 | 8/29/22 |
| 77 | T28641094 | TG02 | 8/29/22 |
| 78 | T28641095 | V01 | 8/29/22 |

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | CJ01 | Jack-Open | 4 | 1 | T28641018 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:05:15 2022 Page 1
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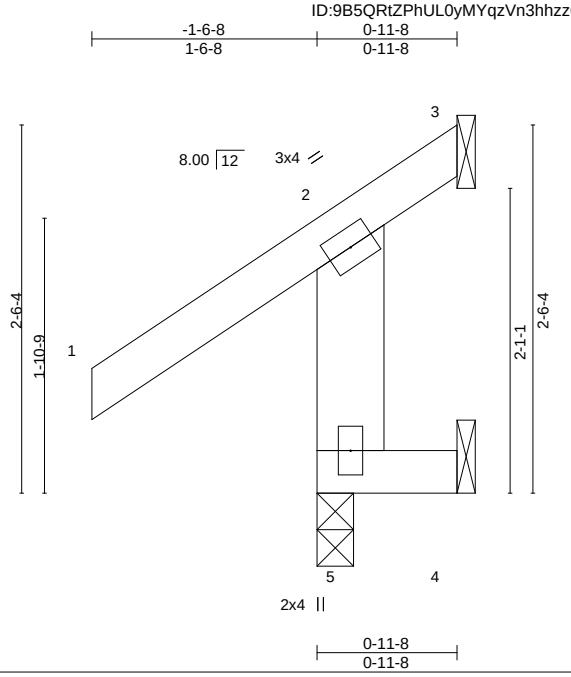


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.27 | Vert(LL) | -0.00 | 5 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.10 | Vert(CT) | 0.00 | 5 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.01 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MR | | | | | | | Weight: 10 lb | FT = 20% |

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

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 0-11-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 5=0-3-0, 3=Mechanical, 4=Mechanical
Max Horz 5=58(LC 9)
Max Uplift 5=-16(LC 16), 3=-61(LC 1), 4=-46(LC 9)
Max Grav 5=240(LC 1), 3=12(LC 8), 4=39(LC 10)

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

**NOTES-**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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 16 lb uplift at joint 5, 61 lb uplift at joint 3 and 46 lb uplift at joint 4.

This item has been electronically signed and sealed by ORegan, Philip, PE using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | CJ01B | Jack-Open | 4 | 1 | T28641019 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:05:16 2022 Page 1
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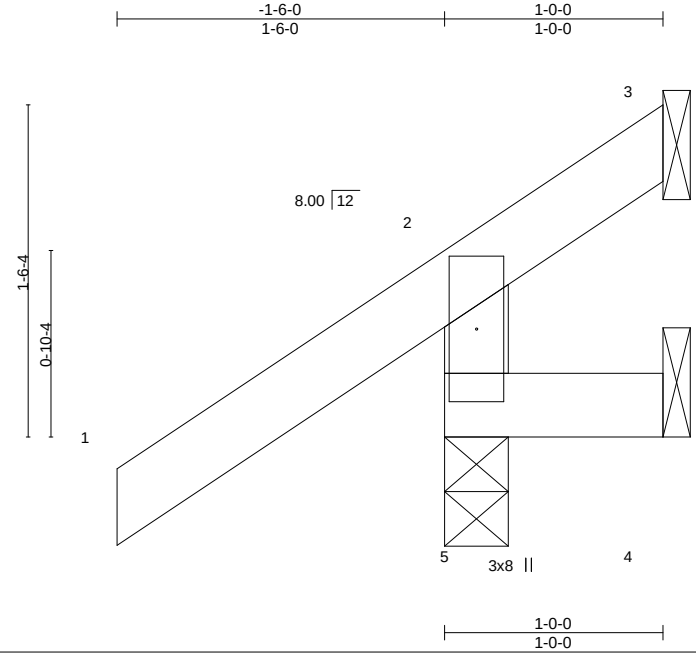


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.25 | Vert(LL) | 0.00 | 5 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.04 | Vert(CT) | 0.00 | 5 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MR | | | | | | | Weight: 7 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

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

**REACTIONS.** (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=52(LC 12)
Max Uplift 5=-53(LC 12), 3=-42(LC 1), 4=-15(LC 20)
Max Grav 5=207(LC 1), 3=9(LC 16), 4=10(LC 3)

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

**NOTES-**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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 53 lb uplift at joint 5, 42 lb uplift at joint 3 and 15 lb uplift at joint 4.

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | CJ02 | Jack-Open | 1 | 1 | T28641020 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:05:17 2022 Page 1
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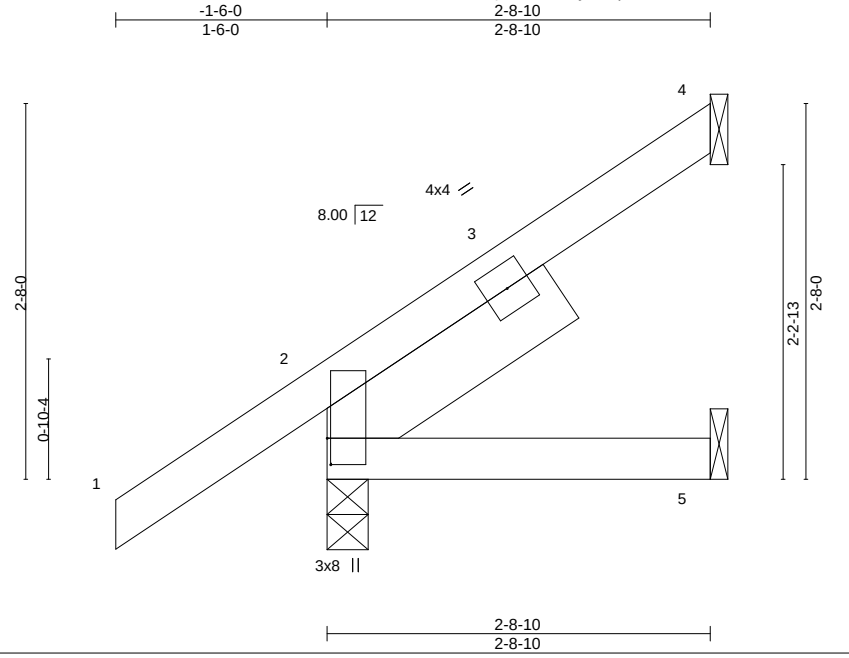


Plate Offsets (X,Y)-- [2:0-2-4,0-0-5]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.17 | Vert(LL) | -0.00 | 8 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.06 | Vert(CT) | -0.00 | 5-8 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | 2 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MP | | | | | | | Weight: 16 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
SLIDER Left 2x6 SP No.2 1-11-8

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

**REACTIONS.** (size) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=90(LC 12)
Max Uplift 4=-46(LC 12), 2=-34(LC 12), 5=-5(LC 12)
Max Grav 4=57(LC 19), 2=202(LC 1), 5=42(LC 3)

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

**NOTES-**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 2-7-14 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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 46 lb uplift at joint 4, 34 lb uplift at joint 2 and 5 lb uplift at joint 5.

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | CJ03 | Jack-Open | 3 | 1 | T28641021 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:05:18 2022 Page 1
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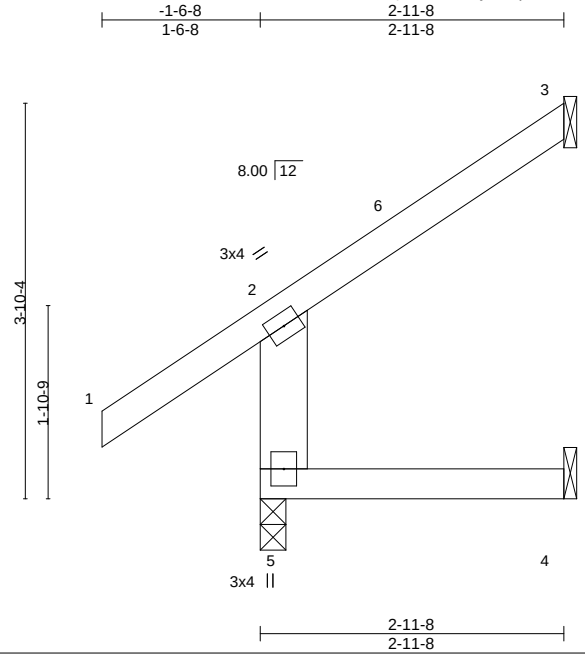


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.23 | Vert(LL) | 0.01 | 4-5 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.27 | Vert(CT) | -0.01 | 4-5 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.04 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MR | | | | | | | Weight: 16 lb | FT = 20% |

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

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 2-11-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 5=0-3-0, 3=Mechanical, 4=Mechanical
Max Horz 5=83(LC 9)
Max Uplift 5=-9(LC 12), 3=-63(LC 12), 4=-19(LC 12)
Max Grav 5=226(LC 1), 3=65(LC 19), 4=47(LC 3)

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

**NOTES-**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-8 to 1-5-8, Interior(1) 1-5-8 to 2-10-12 zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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 9 lb uplift at joint 5, 63 lb uplift at joint 3 and 19 lb uplift at joint 4.

This item has been electronically signed and sealed by ORegan, Philip, PE using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | CJ03A | Jack-Open | 1 | 1 | T28641022 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:05:19 2022 Page 1
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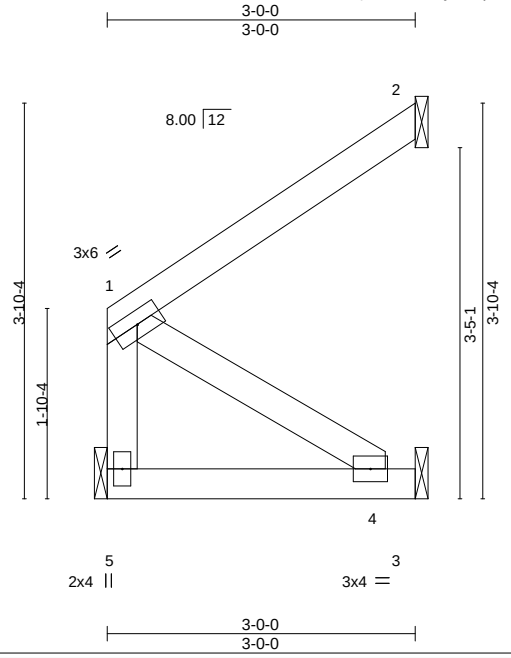


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.12 | Vert(LL) | -0.00 | 4-5 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.09 | Vert(CT) | -0.01 | 4-5 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.03 | Horz(CT) | -0.00 | 2 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MP | | | | | | | Weight: 16 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

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

**REACTIONS.** (size) 5=Mechanical, 2=Mechanical, 3=Mechanical
Max Horz 5=64(LC 12)
Max Uplift 2=-58(LC 12), 3=-29(LC 12)
Max Grav 5=103(LC 1), 2=80(LC 19), 3=56(LC 3)

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

**NOTES-**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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 58 lb uplift at joint 2 and 29 lb uplift at joint 3.

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | CJ03B | Jack-Open | 2 | 1 | T28641023 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:05:20 2022 Page 1
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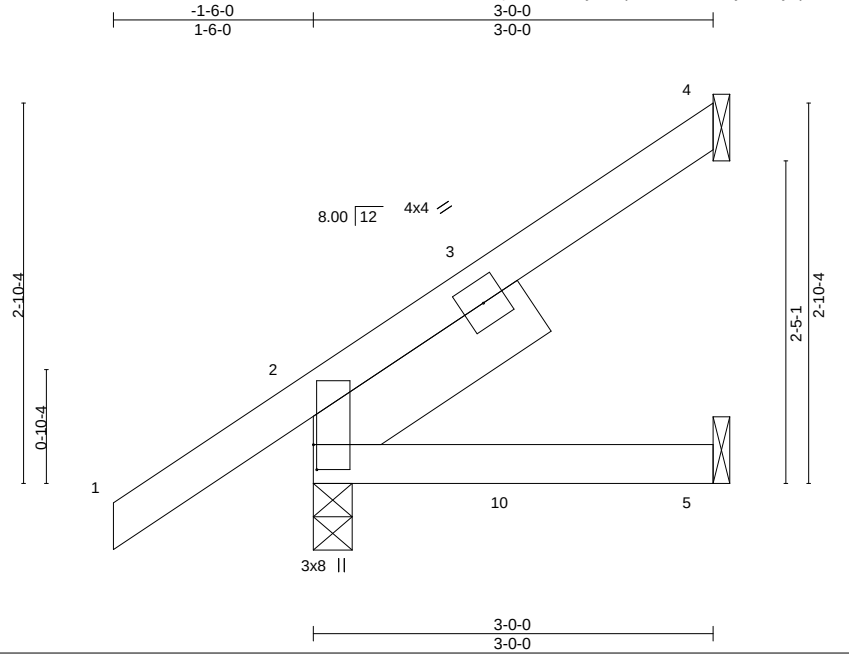


Plate Offsets (X,Y)-- [2:0-2-4,0-0-5]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.16 | Vert(LL) | 0.01 | 5-8 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.12 | Vert(CT) | -0.01 | 5-8 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.01 | 2 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MP | | | | | | | Weight: 17 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
SLIDER Left 2x6 SP No.2 1-11-8

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

**REACTIONS.** (size) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=97(LC 12)
Max Uplift 4=-51(LC 12), 2=-34(LC 12), 5=-19(LC 9)
Max Grav 4=62(LC 19), 2=210(LC 1), 5=48(LC 3)

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

**NOTES-**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 2-11-4 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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 51 lb uplift at joint 4, 34 lb uplift at joint 2 and 19 lb uplift at joint 5.

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Date:

August 29,2022



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. T28641024 |
|---|---|---|---|---|---|
| 3235278 | CJ03C | Jack-Open | 2 | 1 | Job Reference (optional) |

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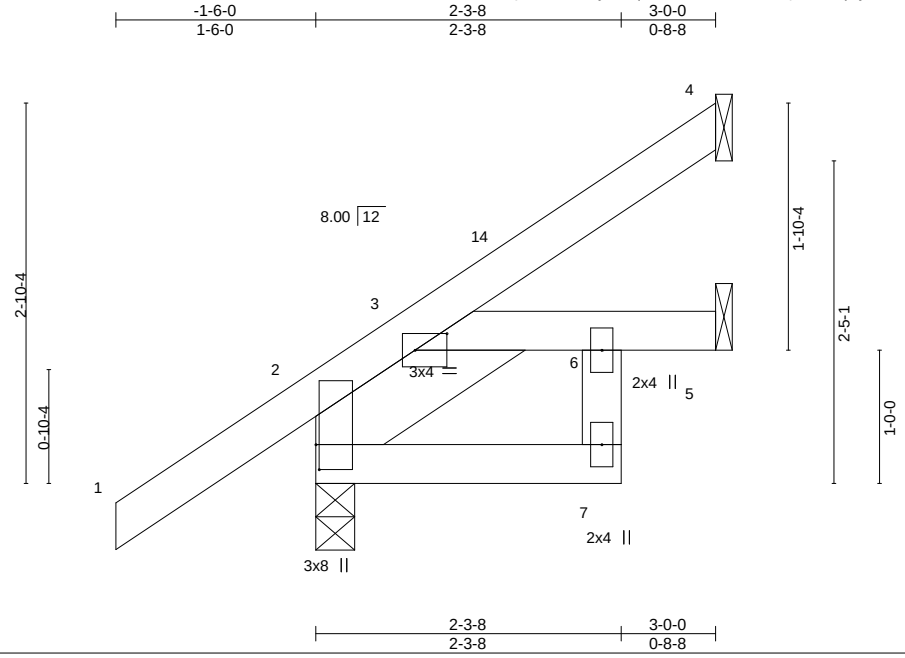


Plate Offsets (X,Y)-- [2:0-2-4,0-0-5], [3:0-2-14,0-1-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.16 | Vert(LL) | -0.00 | 7 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.15 | Vert(CT) | -0.00 | 12 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MR | | | | | | | Weight: 20 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
6-7: 2x4 SP No.3
SLIDER Left 2x6 SP No.2 1-8-6

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

**REACTIONS.** (size) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=97(LC 12)
Max Uplift 4=-34(LC 12), 2=-30(LC 12), 5=-18(LC 12)
Max Grav 4=51(LC 19), 2=225(LC 1), 5=81(LC 3)

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

**NOTES-**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 2-11-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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 34 lb uplift at joint 4, 30 lb uplift at joint 2 and 18 lb uplift at joint 5.

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Date:

August 29,2022



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | CJ04 | Jack-Open | 1 | 1 | T28641025 |
| | | | | | Job Reference (optional) |

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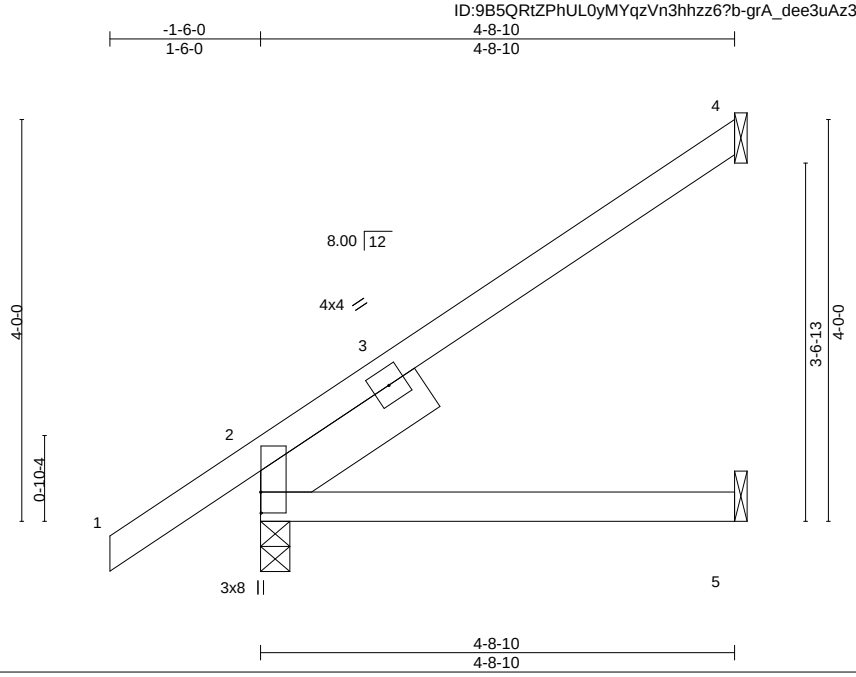


Plate Offsets (X,Y)-- [2:0-2-8,0-0-1]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.24 | Vert(LL) | 0.03 | 5-8 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.24 | Vert(CT) | -0.04 | 5-8 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.02 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MP | | | | | | | Weight: 23 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
SLIDER Left 2x6 SP No.2 1-11-8

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

**REACTIONS.** (size) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=136(LC 12)
Max Uplift 4=-81(LC 12), 2=-35(LC 12), 5=-9(LC 12)
Max Grav 4=113(LC 19), 2=266(LC 1), 5=82(LC 3)

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

**NOTES-**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 4-7-14 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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 81 lb uplift at joint 4, 35 lb uplift at joint 2 and 9 lb uplift at joint 5.

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Date:

August 29,2022



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. T28641026 |
|---|---|---|---|---|---|
| 3235278 | CJ05 | Jack-Open | 3 | 1 | Job Reference (optional) |

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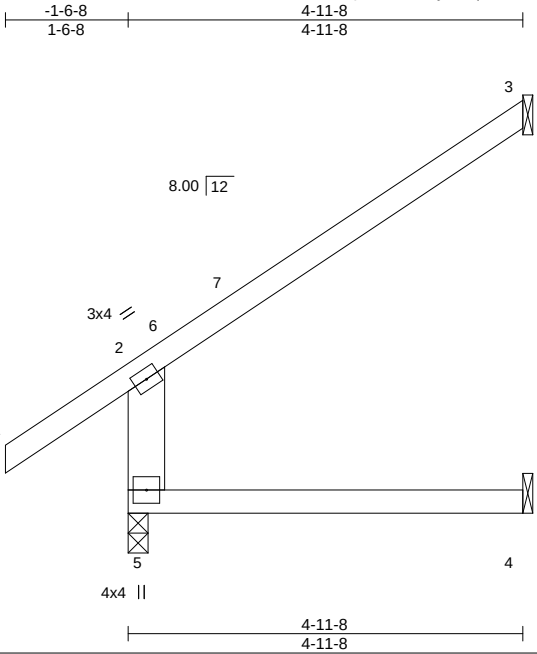


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.39 | Vert(LL) | 0.06 | 4-5 | >958 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.50 | Vert(CT) | -0.05 | 4-5 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.12 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MR | | | | | | | Weight: 23 lb | FT = 20% |

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

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 4-11-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 5=0-3-0, 3=Mechanical, 4=Mechanical
Max Horz 5=122(LC 12)
Max Uplift 5=-11(LC 12), 3=-100(LC 12), 4=-20(LC 12)
Max Grav 5=286(LC 1), 3=122(LC 19), 4=86(LC 3)

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

**NOTES-**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-8 to 1-5-8, Interior(1) 1-5-8 to 4-10-12 zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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 11 lb uplift at joint 5, 100 lb uplift at joint 3 and 20 lb uplift at joint 4.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. T28641027 |
|---|---|---|---|---|---|
| 3235278 | CJ05A | Jack-Open | 1 | 1 | Job Reference (optional) |

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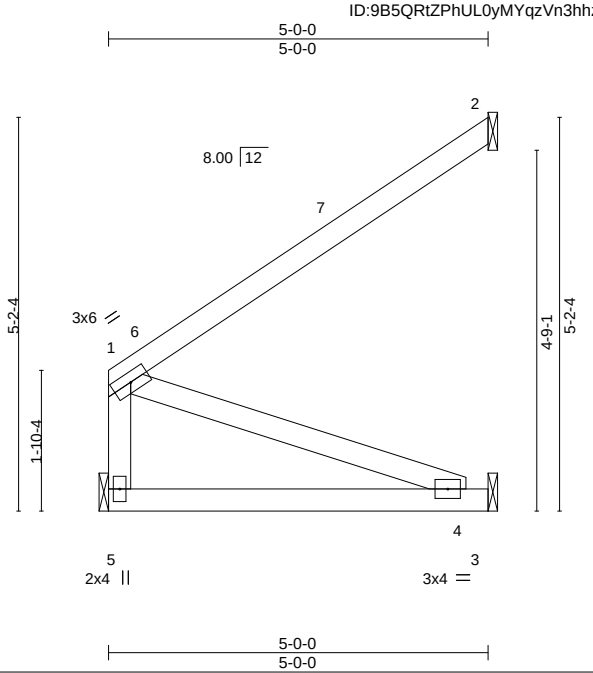


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.38 | Vert(LL) | -0.03 | 4-5 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.28 | Vert(CT) | -0.06 | 4-5 | >909 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.05 | Horz(CT) | 0.00 | 2 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MP | | | | | | | Weight: 26 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

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

**REACTIONS.** (size) 5=Mechanical, 2=Mechanical, 3=Mechanical
Max Horz 5=110(LC 12)
Max Uplift 2=-99(LC 12), 3=-23(LC 12)
Max Grav 5=177(LC 1), 2=138(LC 19), 3=96(LC 3)

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

**NOTES-**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 4-11-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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 99 lb uplift at joint 2 and 23 lb uplift at joint 3.

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Date:

August 29,2022



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | CJ05B | Jack-Open | 2 | 1 | T28641028 |
| | | | | | Job Reference (optional) |

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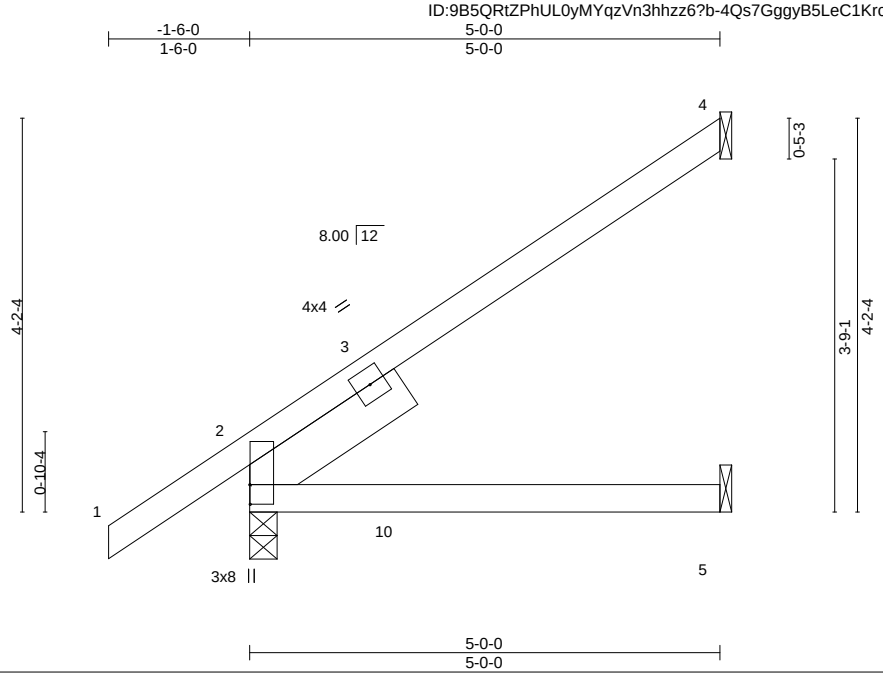


Plate Offsets (X,Y)-- [2:0-2-8,0-0-1]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.39 | Vert(LL) | 0.09 | 5-8 | >657 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.38 | Vert(CT) | 0.08 | 5-8 | >749 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.03 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MP | | | | | | | Weight: 24 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
SLIDER Left 2x6 SP No.2 1-11-8

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

**REACTIONS.** (size) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=143(LC 12)
Max Uplift 4=-86(LC 12), 2=-36(LC 12), 5=-32(LC 9)
Max Grav 4=116(LC 19), 2=276(LC 1), 5=87(LC 3)

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

**NOTES-**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 4-11-4 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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 86 lb uplift at joint 4, 36 lb uplift at joint 2 and 32 lb uplift at joint 5.

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. T28641029 |
|---|---|---|---|---|---|
| 3235278 | CJ05C | Jack-Open | 2 | 1 | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:05:26 2022 Page 1
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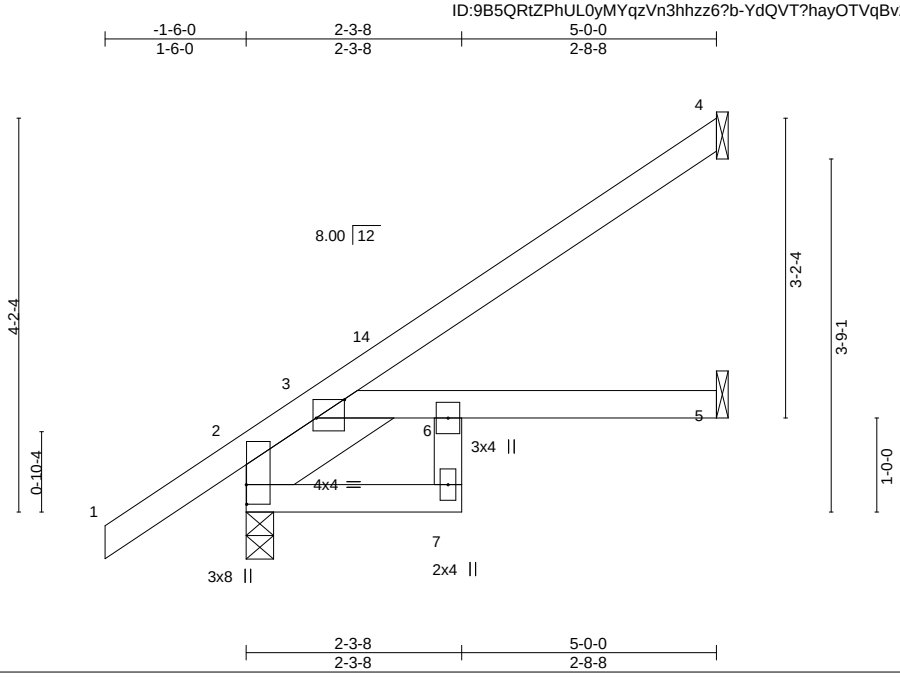


Plate Offsets (X,Y)-- [2:0-2-8,0-0-1], [3:0-3-10,Edge]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.22 | Vert(LL) | 0.04 | 5-6 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.31 | Vert(CT) | -0.06 | 5-6 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.02 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MR | | | | | | | Weight: 27 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
6-7: 2x4 SP No.3
SLIDER Left 2x6 SP No.2 1-8-6

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

**REACTIONS.** (size) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=143(LC 12)
Max Uplift 4=-72(LC 12), 2=-30(LC 12), 5=-20(LC 12)
Max Grav 4=109(LC 19), 2=296(LC 1), 5=103(LC 3)

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

**NOTES-**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 4-11-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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 72 lb uplift at joint 4, 30 lb uplift at joint 2 and 20 lb uplift at joint 5.

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Date:

August 29,2022



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | CJ06 | Jack-Open | 1 | 1 | T28641030 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:05:27 2022 Page 1
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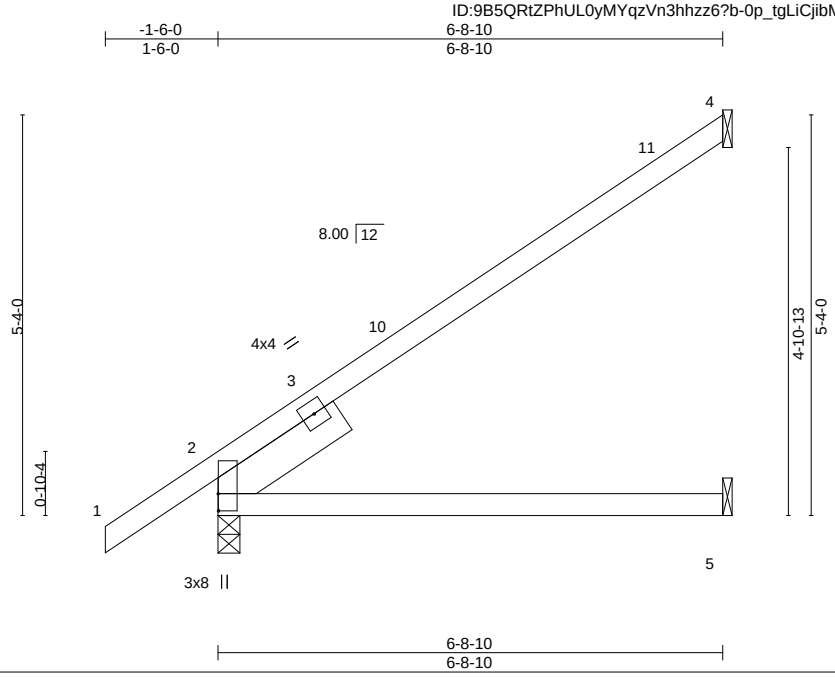


Plate Offsets (X,Y)-- [2:0-2-12,0-0-1]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.56 | Vert(LL) | 0.13 | 5-8 | >600 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.46 | Vert(CT) | -0.18 | 5-8 | >432 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.05 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MP | | | | | | | Weight: 30 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
SLIDER Left 2x6 SP No.2 1-11-8

**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) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=178(LC 12)
Max Uplift 4=-106(LC 12), 2=-41(LC 12), 5=-10(LC 12)
Max Grav 4=166(LC 19), 2=336(LC 1), 5=120(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-308/77

**NOTES-**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 6-7-14 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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 106 lb uplift at joint 4, 41 lb uplift at joint 2 and 10 lb uplift at joint 5.

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Date:

August 29,2022



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | CJ08 | Jack-Open | 1 | 1 | T28641031 |
| | | | | | Job Reference (optional) |

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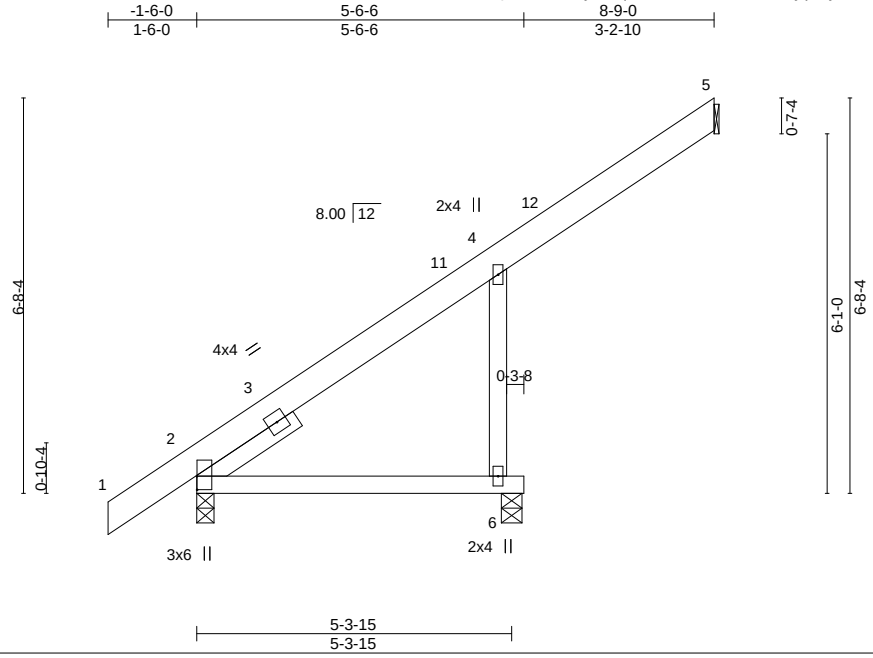


Plate Offsets (X,Y)-- [2:0-2-12,0-0-1]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.13 | Vert(LL) | -0.02 | 6-9 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.18 | Vert(CT) | -0.04 | 6-9 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.09 | Horz(CT) | -0.01 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MP | | | | | | | Weight: 46 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x4 SP No.3 1-11-8

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

**REACTIONS.** (size) 5=Mechanical, 2=0-3-8, 6=0-4-3
Max Horz 2=210(LC 12)
Max Uplift 5=-29(LC 14), 6=-204(LC 12)
Max Grav 5=64(LC 19), 2=256(LC 1), 6=362(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 4-6=-319/309

**NOTES-**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 8-8-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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 29 lb uplift at joint 5 and 204 lb uplift at joint 6.

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Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. T28641032 |
|---|---|---|---|---|---|
| 3235278 | EJ01 | Jack-Partial | 8 | 1 | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:05:29 2022 Page 1
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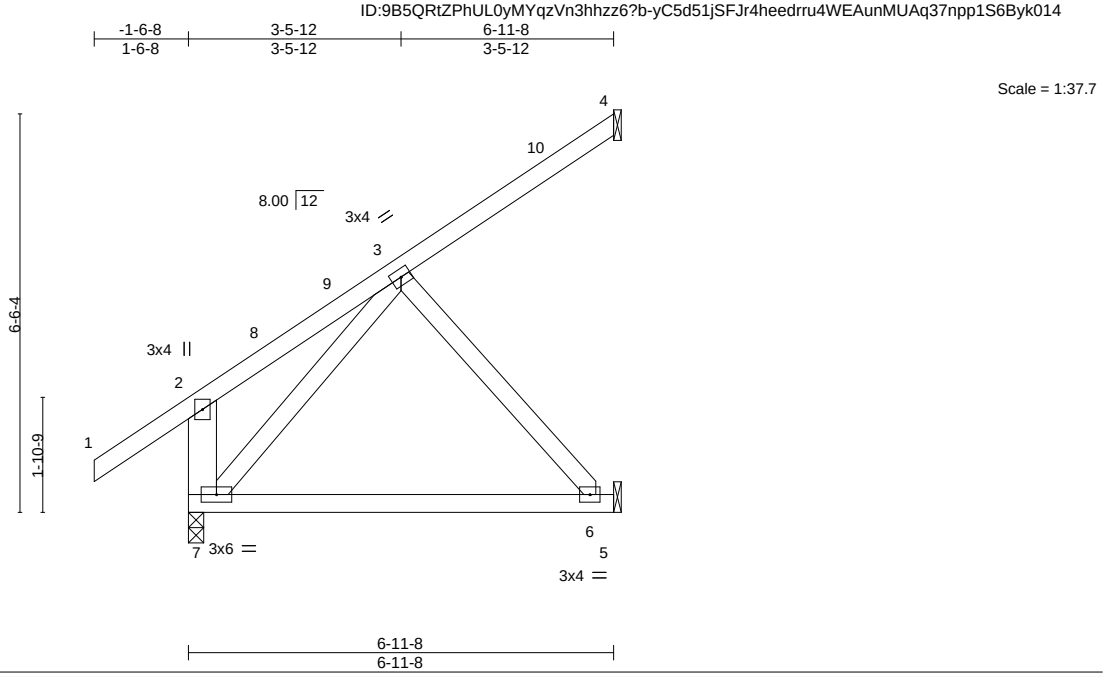


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.20 | Vert(LL) | -0.08 | 6-7 | >971 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.45 | Vert(CT) | -0.17 | 6-7 | >477 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.08 | Horz(CT) | 0.01 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 43 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
2-7: 2x6 SP 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) 4=Mechanical, 5=Mechanical, 7=0-3-0
Max Horz 7=161(LC 12)
Max Uplift 4=-45(LC 12), 5=-96(LC 12), 7=-20(LC 12)
Max Grav 4=81(LC 19), 5=181(LC 19), 7=355(LC 1)

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

**NOTES-**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-8 to 1-5-8, Interior(1) 1-5-8 to 6-10-12 zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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 45 lb uplift at joint 4, 96 lb uplift at joint 5 and 20 lb uplift at joint 7.

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Date:

August 29,2022



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | EJ02 | Jack-Partial | 6 | 1 | T28641033 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:05:30 2022 Page 1
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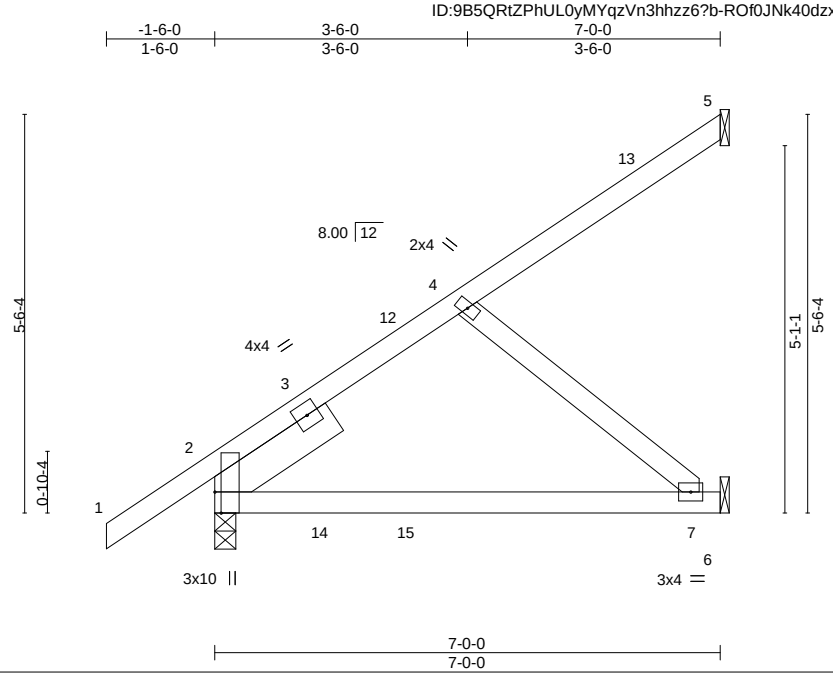


Plate Offsets (X,Y)-- [2:0-3-8,Edge]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.44 | Vert(LL) | 0.15 | 7-10 | >565 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.44 | Vert(CT) | -0.13 | 7-10 | >649 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.09 | Horz(CT) | -0.01 | 2 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 37 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 1-11-8

**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=Mechanical, 2=0-3-8, 6=Mechanical
Max Horz 2=182(LC 12)
Max Uplift 5=-47(LC 12), 2=-48(LC 9), 6=-87(LC 9)
Max Grav 5=82(LC 19), 2=346(LC 1), 6=175(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-519/765
WEBS 4-7=-199/296

**NOTES-**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 6-11-4 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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 47 lb uplift at joint 5, 48 lb uplift at joint 2 and 87 lb uplift at joint 6.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. T28641034 |
|---|---|---|---|---|---|
| 3235278 | EJ03 | Jack-Partial | 4 | 1 | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:05:31 2022 Page 1
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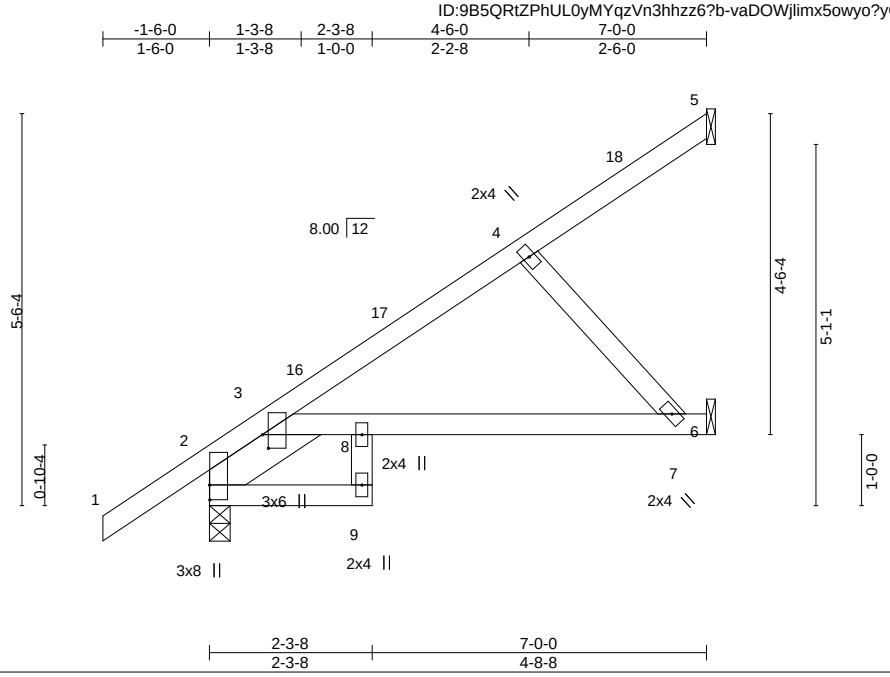


Plate Offsets (X,Y)-- [2:0-2-8,0-0-1], [3:0-2-5,0-1-0]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.40 | Vert(LL) | 0.08 | 7-8 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.42 | Vert(CT) | -0.16 | 7-8 | >527 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.06 | Horz(CT) | 0.05 | 6 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 38 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
8-9: 2x4 SP No.3
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 1-8-6

**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=Mechanical, 2=0-3-8, 6=Mechanical
Max Horz 2=182(LC 12)
Max Uplift 5=-19(LC 14), 2=-43(LC 12), 6=-99(LC 12)
Max Grav 5=35(LC 19), 2=346(LC 1), 6=229(LC 19)

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

**NOTES-**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 6-11-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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 19 lb uplift at joint 5, 43 lb uplift at joint 2 and 99 lb uplift at joint 6.

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Date:

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Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. T28641035 |
|---|---|---|---|---|---|
| 3235278 | HJ02 | Diagonal Hip Girder | 1 | 1 | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:05:32 2022 Page 1
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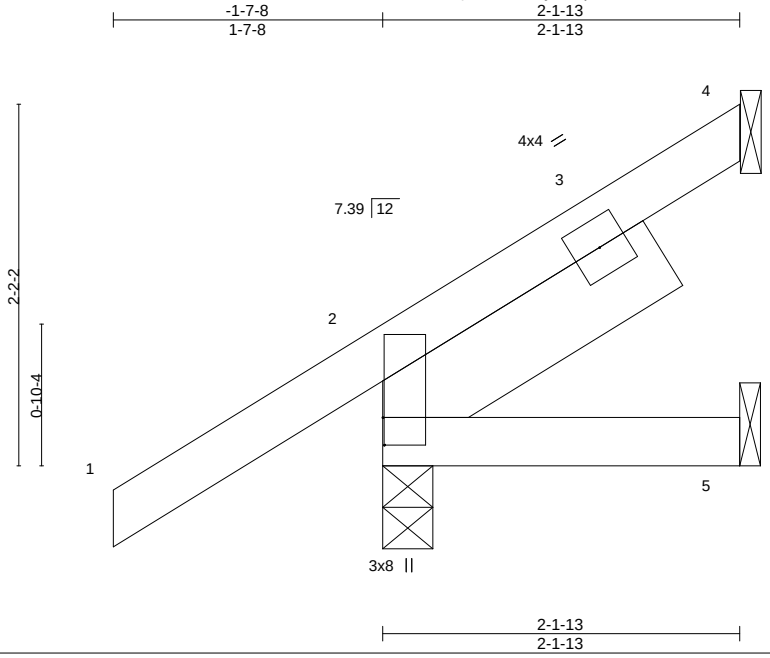


Plate Offsets (X,Y)-- [2:0-2-0,0-0-2]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.25 | Vert(LL) | -0.00 | 8 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.03 | Vert(CT) | -0.00 | 8 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.00 | Horz(CT) | 0.00 | 2 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MP | | | | | | | Weight: 15 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
SLIDER Left 2x6 SP No.2 1-11-8

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 2-1-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 4=Mechanical, 2=0-3-10, 5=Mechanical
Max Horz 2=74(LC 12)
Max Uplift 4=-32(LC 12), 2=-43(LC 12), 5=-1(LC 12)
Max Grav 4=36(LC 19), 2=199(LC 1), 5=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=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Corner(3) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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 32 lb uplift at joint 4, 43 lb uplift at joint 2 and 1 lb uplift at joint 5.

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. T28641036 |
|---|---|---|---|---|---|
| 3235278 | HJ03 | Jack-Open Girder | 1 | 1 | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:05:33 2022 Page 1
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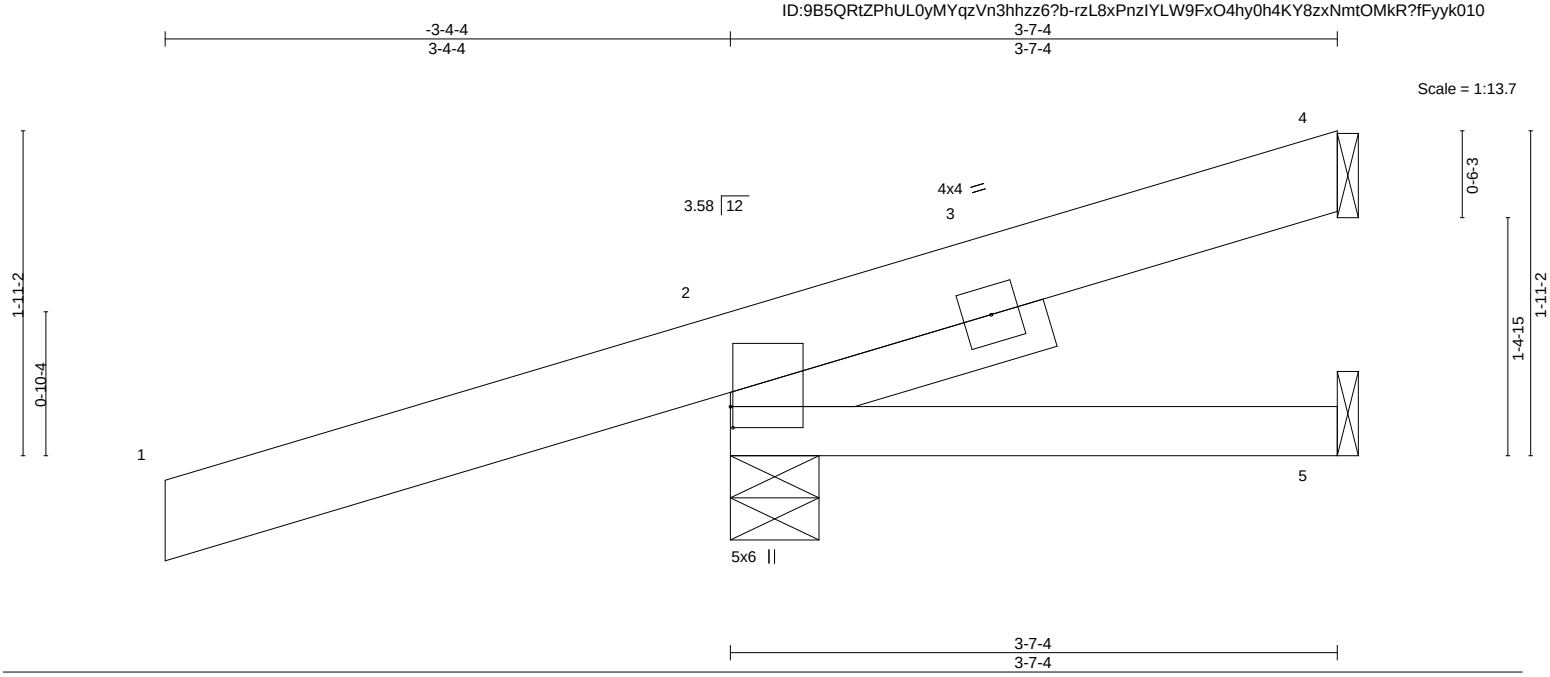


Plate Offsets (X,Y)-- [2:0-1-8,0-0-3]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.37 | Vert(LL) | 0.01 | 5-8 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.12 | Vert(CT) | 0.01 | 5-8 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.00 | Horz(CT) | -0.00 | 2 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MP | | | | | | | Weight: 26 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2
SLIDER Left 2x4 SP No.3 1-11-8

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 3-7-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 4=Mechanical, 2=0-6-5, 5=Mechanical
Max Horz 2=82(LC 8)
Max Uplift 4=-23(LC 9), 2=-240(LC 8), 5=-13(LC 9)
Max Grav 4=29(LC 1), 2=398(LC 1), 5=46(LC 3)

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

**NOTES-**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Corner(3) -3-4-4 to 0-8-14, Exterior(2R) 0-8-14 to 3-6-8 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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 23 lb uplift at joint 4, 240 lb uplift at joint 2 and 13 lb uplift at joint 5.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | HJ10 | Diagonal Hip Girder | 2 | 1 | T28641037 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:05:34 2022 Page 1
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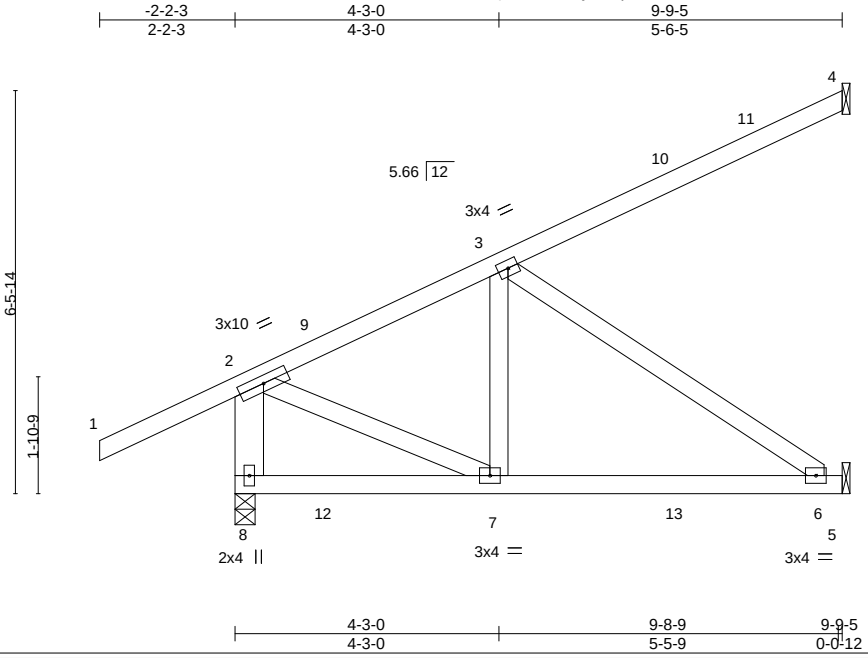


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.65 | Vert(LL) | -0.06 | 6-7 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.57 | Vert(CT) | -0.12 | 6-7 | >963 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.32 | Horz(CT) | -0.00 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code | FBC2020/TPI2014 | Matrix-MS | | | | | | | Weight: 58 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
2-8: 2x6 SP 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) 8=0-3-14, 4=Mechanical, 5=Mechanical
Max Horz 8=161(LC 8)
Max Uplift 8=-348(LC 8), 4=-112(LC 8), 5=-227(LC 8)
Max Grav 8=472(LC 35), 4=156(LC 1), 5=292(LC 32)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-478/290, 2-3=-454/271
BOT CHORD 6-7=-337/341
WEBS 2-7=-246/467, 3-6=-413/409

**NOTES-**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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 348 lb uplift at joint 8, 112 lb uplift at joint 4 and 227 lb uplift at joint 5.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 66 lb down and 138 lb up at 1-5-5, 66 lb down and 138 lb up at 1-5-5, 81 lb down and 62 lb up at 4-3-4, 86 lb down and 63 lb up at 4-3-4, and 113 lb down and 111 lb up at 7-1-3, and 115 lb down and 110 lb up at 7-1-3 on top chord, and 31 lb down and 77 lb up at 1-5-5, 31 lb down and 77 lb up at 1-5-5, 33 lb down and 37 lb up at 4-3-4, 32 lb down and 26 lb up at 4-3-4, and 53 lb down and 37 lb up at 7-1-3, and 52 lb down and 33 lb up at 7-1-3 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=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-2=-54, 2-4=-54, 5-8=-20
Concentrated Loads (lb)
Vert: 7=3(B) 9=71(F=35, B=35) 10=-83(F=-53, B=-30) 12=58(F=29, B=29) 13=-40(F=-20, B=-20)

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | HJ10B | DIAGONAL HIP GIRDER | 1 | 1 | T28641038 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:05:35 2022 Page 1
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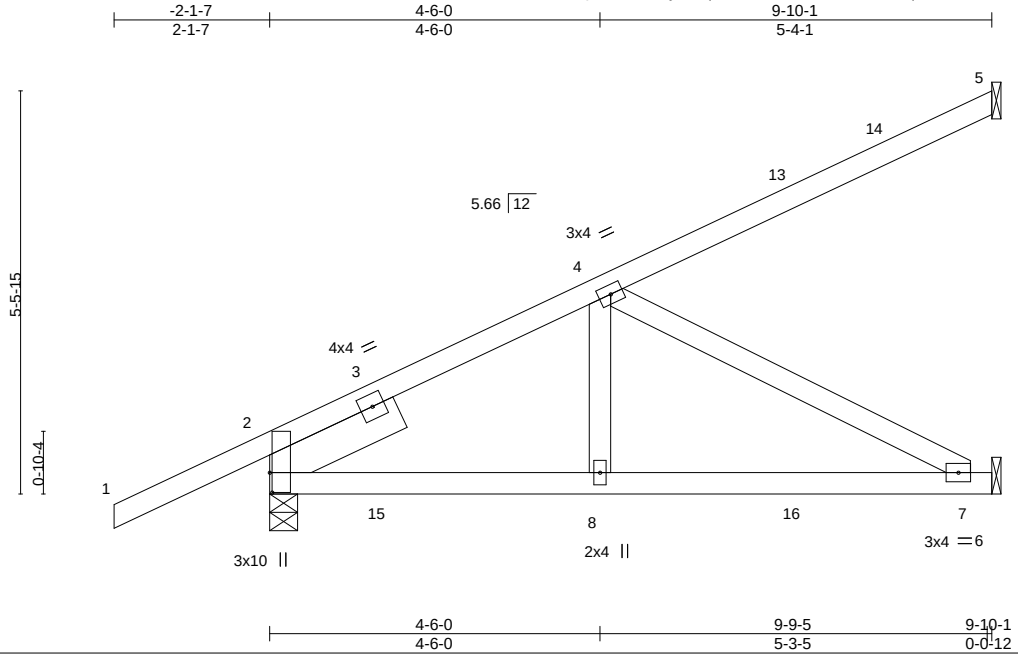


Plate Offsets (X,Y)-- [2:0-3-4,0-0-6]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.62 | Vert(LL) | 0.09 | 7-8 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.57 | Vert(CT) | -0.12 | 7-8 | >989 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.31 | Horz(CT) | -0.02 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 51 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 1-11-8

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-2-5 oc bracing.

**REACTIONS.** (size) 5=Mechanical, 2=0-4-9, 6=Mechanical
Max Horz 2=182(LC 8)
Max Uplift 5=-100(LC 8), 2=-263(LC 8), 6=-214(LC 5)
Max Grav 5=154(LC 1), 2=478(LC 1), 6=287(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-501/304
BOT CHORD 2-8=-366/422, 7-8=-366/422
WEBS 4-8=-94/253, 4-7=-478/415

**NOTES-**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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 5, 263 lb uplift at joint 2 and 214 lb uplift at joint 6.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 51 lb down and 118 lb up at 1-6-1, 51 lb down and 118 lb up at 1-6-1, 78 lb down and 53 lb up at 4-4-0, 78 lb down and 53 lb up at 4-4-0, and 105 lb down and 97 lb up at 7-1-15, and 105 lb down and 97 lb up at 7-1-15 on top chord, and 1 lb down and 45 lb up at 1-6-1, 1 lb down and 45 lb up at 1-6-1, 19 lb down and 27 lb up at 4-4-0, 19 lb down and 27 lb up at 4-4-0, and 41 lb down and 48 lb up at 7-1-15, and 41 lb down and 48 lb up at 7-1-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-5=-54, 6-9=-20
Concentrated Loads (lb)
Vert: 8=-9(F=-5, B=-5) 3=60(F=30, B=30) 13=-70(F=-35, B=-35) 16=-61(F=-31, B=-31)

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. T28641039 |
|---|---|---|---|---|---|
| 3235278 | HJ10C | Diagonal Hip Girder | 1 | 1 | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:05:37 2022 Page 1
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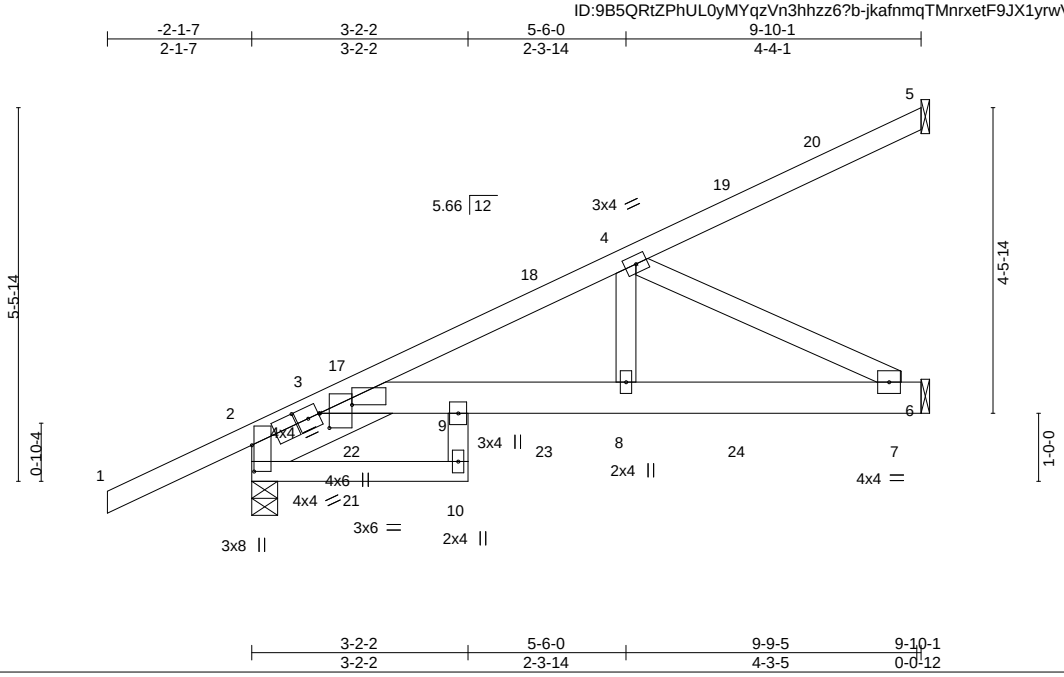


Plate Offsets (X,Y)-- [2:0-4-10,0-0-6], [3:0-2-9,0-1-12], [3:0-4-8,0-2-0], [3:0-5-12,0-1-8]

| LOADING (psf) | | SPACING- 2-0-0 | | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.30 | Vert(LL) | 0.04 | 9 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.34 | Vert(CT) | -0.04 | 9 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.31 | Horz(CT) | -0.02 | 6 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 60 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
9-10: 2x4 SP No.3, 3-6: 2x6 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 2-2-1

**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=Mechanical, 2=0-4-9, 6=Mechanical
Max Horz 2=182(LC 8)
Max Uplift 5=-63(LC 8), 2=-236(LC 8), 6=-192(LC 8)
Max Grav 5=106(LC 1), 2=506(LC 1), 6=379(LC 32)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-12=-348/106, 3-4=-799/350
BOT CHORD 3-9=-290/554, 8-9=-417/682, 7-8=-417/682
WEBS 4-8=-176/400, 4-7=-765/467

**NOTES-**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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 63 lb uplift at joint 5, 236 lb uplift at joint 2 and 192 lb uplift at joint 6.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 51 lb down and 118 lb up at 1-6-1, 51 lb down and 118 lb up at 1-6-1, 69 lb down and 35 lb up at 4-4-0, 69 lb down and 35 lb up at 4-4-0, and 103 lb down and 82 lb up at 7-1-15, and 103 lb down and 82 lb up at 7-1-15 on top chord, and 1 lb down and 45 lb up at 1-6-1, 1 lb down and 45 lb up at 1-6-1, 52 lb down and 32 lb up at 4-4-0, 52 lb down and 32 lb up at 4-4-0, and 64 lb down and 39 lb up at 7-1-15, and 64 lb down and 39 lb up at 7-1-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-5=-54, 10-11=-20, 6-9=-20

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022

Continued on page 2



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

**LOAD CASE(S)** Standard

Concentrated Loads (lb)

Vert: 17=60(F=30, B=30) 19=-50(F=-25, B=-25) 23=-52(F=-26, B=-26) 24=-98(F=-49, B=-49)

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | PB01 | Piggyback | 2 | 1 | T28641040 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:05:38 2022 Page 1
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6-8-14
6-8-14

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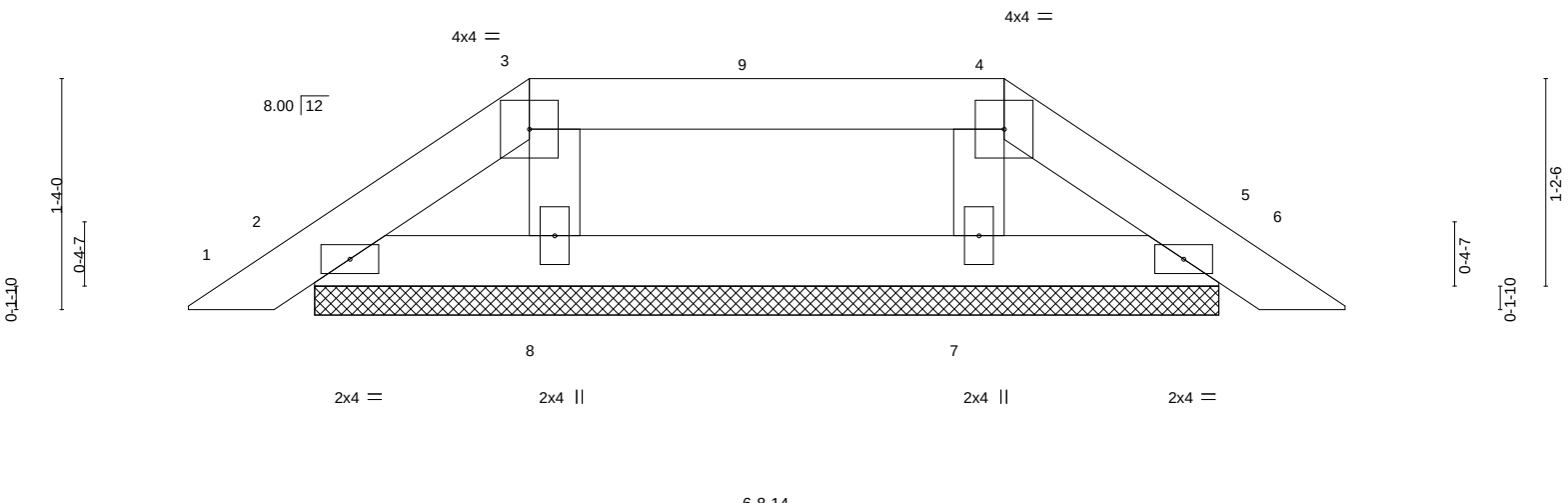


6-8-14
6-8-14

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.11 | Vert(LL) | 0.00 | 5 | n/r | 120 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.04 | Vert(CT) | 0.00 | 5 | n/r | 120 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.02 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code | FBC2020/TPI2014 | Matrix-P | | | | | | | Weight: 21 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

**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 5-2-11.
(lb) - Max Horz 2=26(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 5, 8, 7
Max Grav All reactions 250 lb or less at joint(s) 2, 5, 8, 7

**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=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
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) 2, 5, 8, 7.
9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | PB02 | Piggyback | 10 | 1 | T28641041 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:05:39 2022 Page 1
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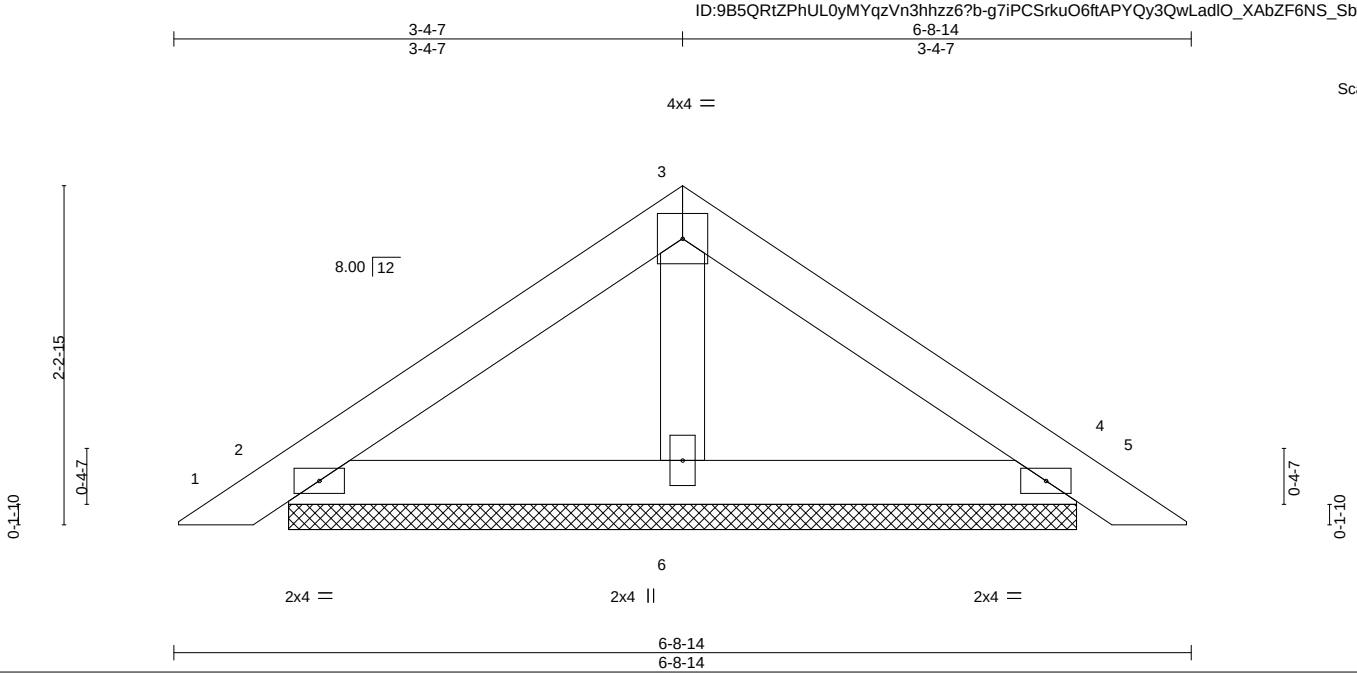


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.11 | Vert(LL) | 0.00 | 5 | n/r | 120 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.07 | Vert(CT) | 0.00 | 5 | n/r | 120 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.02 | Horz(CT) | 0.00 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code | FBC2020/TPI2014 | Matrix-P | | | | | | | Weight: 22 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3

**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) 2=5-2-11, 4=5-2-11, 6=5-2-11
Max Horz 2=-45(LC 10)
Max Uplift 2=-42(LC 12), 4=-48(LC 13), 6=-12(LC 12)
Max Grav 2=132(LC 1), 4=132(LC 1), 6=175(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=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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) 2, 4, 6.
8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | PB03 | Piggyback | 2 | 2 | T28641042 |
| | | | | | Job Reference (optional) |

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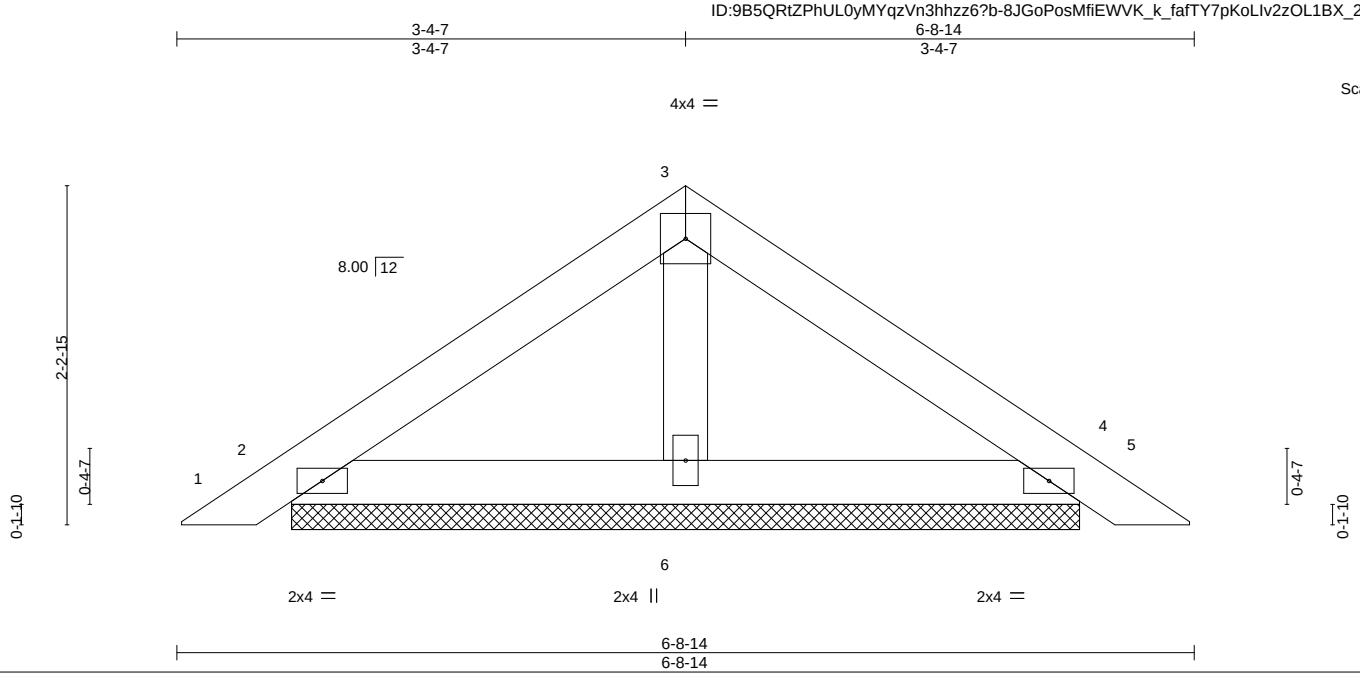


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.05 | Vert(LL) | 0.00 | 5 | n/r | 120 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.03 | Vert(CT) | 0.00 | 5 | n/r | 120 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.01 | Horz(CT) | 0.00 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code | FBC2020/TPI2014 | Matrix-P | | | | | | | Weight: 44 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3

**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.

THIS TRUSS IS DESIGNED TO SUPPORT ONLY 2'-0" OF UNIFORM LOAD AS SHOWN.

**REACTIONS.** (size) 2=5-2-11, 4=5-2-11, 6=5-2-11
Max Horz 2=-45(LC 10)
Max Uplift 2=-42(LC 12), 4=-48(LC 13), 6=-12(LC 12)
Max Grav 2=132(LC 1), 4=132(LC 1), 6=175(LC 1)

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

**NOTES-**
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 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=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
6) Gable requires continuous bottom chord bearing.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4, 6.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | T01 | Attic | 12 | 1 | T28641043 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:05:41 2022 Page 1
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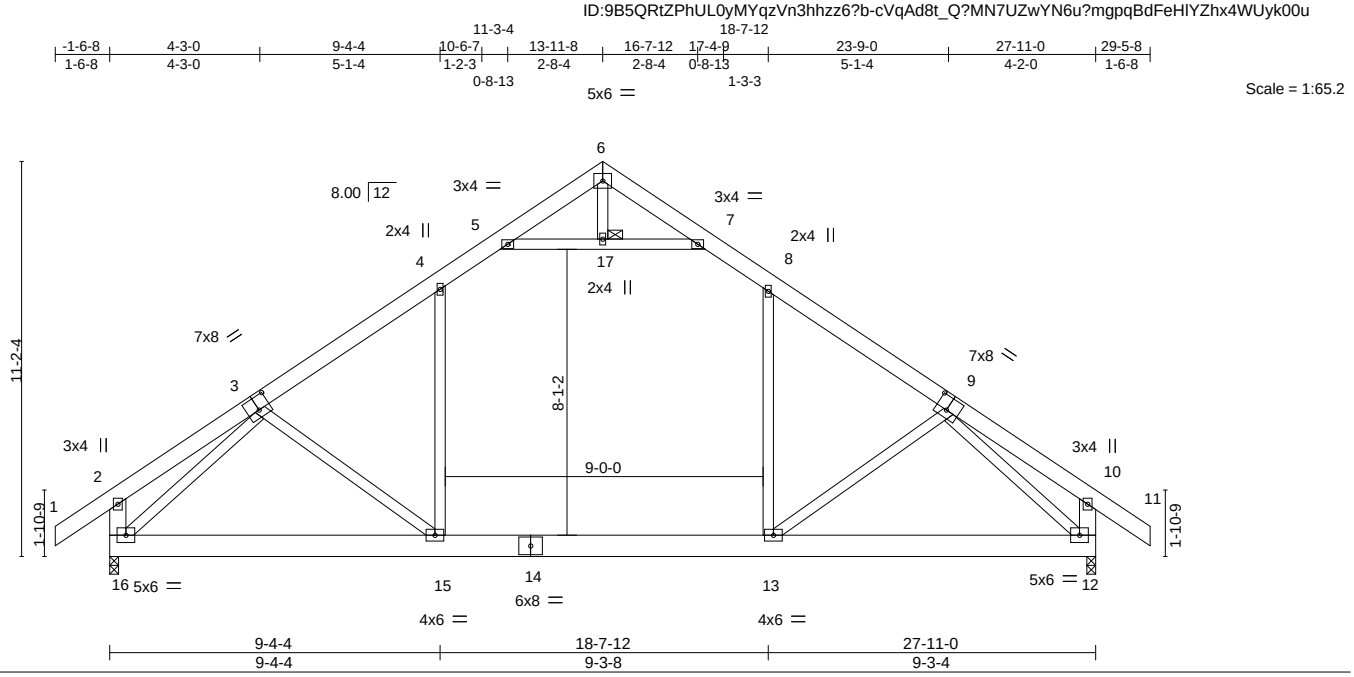


Plate Offsets (X,Y)-- [3:0-4-0,0-4-8], [9:0-3-12,0-4-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.71 | Vert(LL) | -0.14 | 13-15 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.31 | Vert(CT) | -0.24 | 13-15 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.94 | Horz(CT) | 0.02 | 12 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | Attic | -0.08 | 13-15 | 1362 | 360 | Weight: 245 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x6 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except*
2-16,10-12: 2x6 SP No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 4-8-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 17

**REACTIONS.** (size) 16=0-3-0, 12=0-3-0
Max Horz 16=-275(LC 10)
Max Uplift 16=-74(LC 12), 12=-73(LC 13)
Max Grav 16=1495(LC 20), 12=1498(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-1735/39, 4-5=-1250/97, 7-8=-1256/96, 8-9=-1737/37, 2-16=-273/118, 10-12=-274/119
BOT CHORD 15-16=-73/1405, 13-15=0/1400, 12-13=0/1269
WEBS 4-15=0/613, 5-17=-1511/78, 7-17=-1511/78, 8-13=0/610, 3-16=-1686/1, 9-12=-1690/0

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-8 to 1-5-8, Interior(1) 1-5-8 to 13-11-8, Exterior(2R) 13-11-8 to 16-11-15, Interior(1) 16-11-15 to 29-5-8 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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) Ceiling dead load (5.0 psf) on member(s). 4-5, 7-8, 5-17, 7-17; Wall dead load (5.0psf) on member(s).4-15, 8-13
7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 13-15
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 12.
9) Attic room checked for L/360 deflection.

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. T28641044 |
|---|---|---|---|---|---|
| 3235278 | T01G | GABLE | 1 | 1 | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:05:43 2022 Page 1
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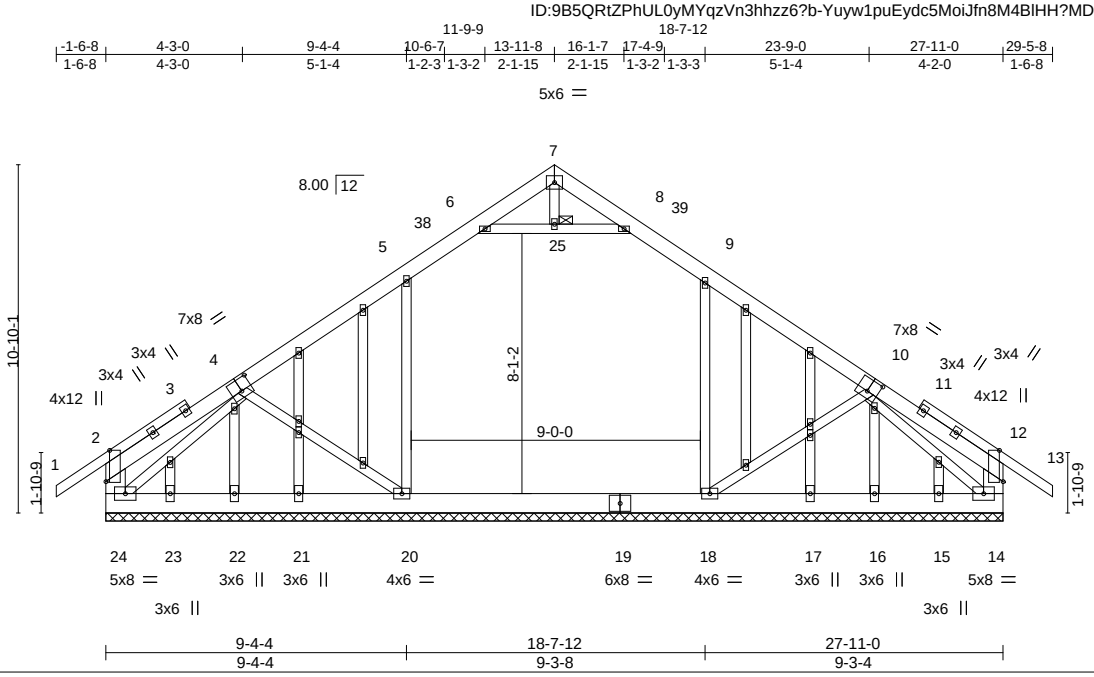


Plate Offsets (X,Y)-- [2:0-11-11,0-1-6], [4:0-4-0,0-4-8], [10:0-4-0,0-4-8], [12:0-11-11,0-1-6]

| LOADING (psf) | | SPACING- 2-0-0 | | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.20 | Vert(LL) | -0.01 | 13 | n/r | 120 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.08 | Vert(CT) | -0.02 | 13 | n/r | 120 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.37 | Horz(CT) | 0.00 | 14 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-S | | | | | | | Weight: 285 lb | FT = 20% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x6 SP No.2 *Except* 1-3,11-13: 2x4 SP No.2 |
| BOT CHORD | 2x8 SP 2400F 2.0E |
| WEBS | 2x4 SP No.3 *Except* 2-24,12-14: 2x8 SP 2400F 2.0E |
| OTHERS | 2x4 SP No.3 |

**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. |
| JOINTS | 1 Brace at Jt(s): 25 |

**REACTIONS.** All bearings 27-11-0.
(lb) - Max Horz 24=-264(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 24, 14, 15, 17, 23, 21 except 20=-166(LC 12), 18=-161(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 15, 16, 23, 22 except 20=898(LC 20), 18=891(LC 21), 24=565(LC 1), 14=563(LC 1)

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

| | |
|---|---|
| TOP CHORD | 4-5=-343/38, 5-6=-347/90, 8-9=-348/87, 9-10=-334/27, 2-24=-260/107, 12-14=-261/107 |
| BOT CHORD | 23-24=-112/411, 22-23=-112/411, 21-22=-112/411, 20-21=-112/411, 18-20=-44/273, 17-18=0/323, 16-17=0/323, 15-16=0/323, 14-15=0/323 |
| WEBS | 5-20=-400/109, 9-18=-391/104, 4-24=-354/7, 10-14=-349/2 |

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-8 to 1-5-8, Interior(1) 1-5-8 to 13-11-8, Exterior(2R) 13-11-8 to 16-11-8, Interior(1) 16-11-8 to 29-5-8 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
10) Ceiling dead load (5.0 psf) on member(s). 5-6, 8-9, 6-25, 8-25; Wall dead load (5.0psf) on member(s).5-20, 9-18
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 24, 14, 15, 17, 23, 21 except (jt=lb) 20=166, 18=161.
12) Attic room checked for L/360 deflection.

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | T02 | ATTIC GIRDER | 2 | 2 | T28641045 |
| | | | | | Job Reference (optional) |

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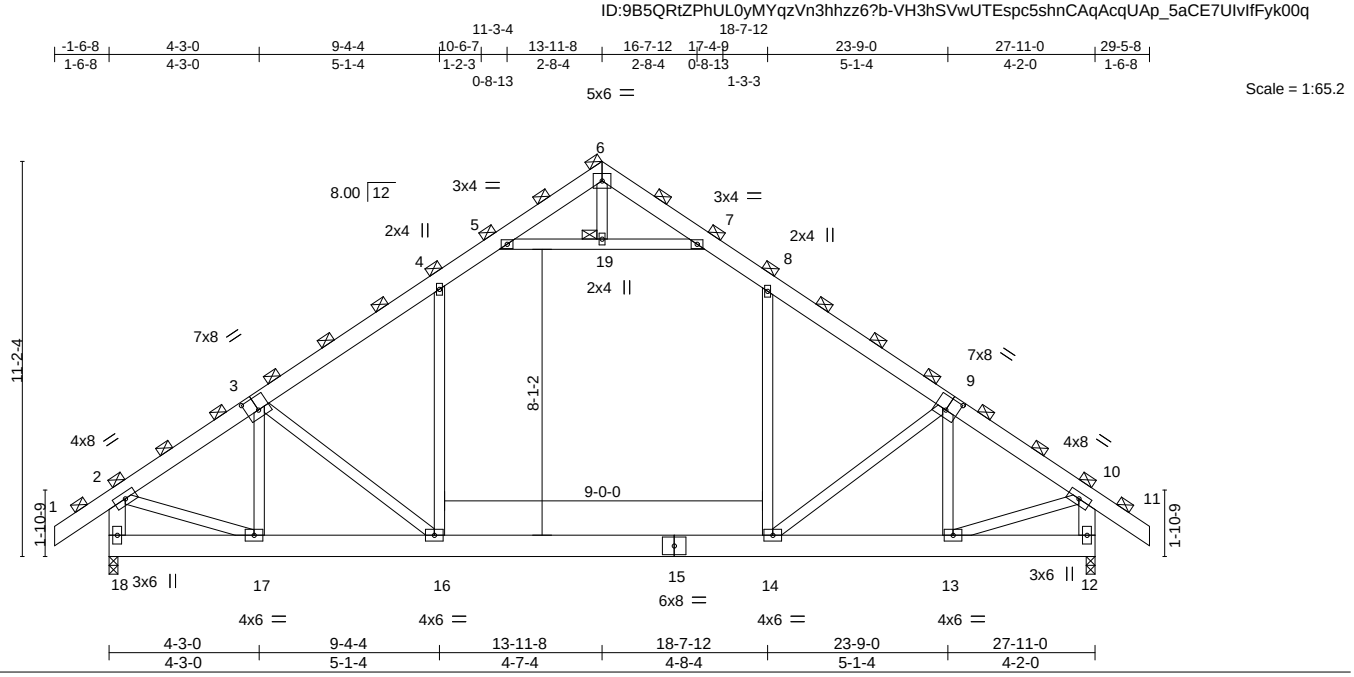


Plate Offsets (X,Y)-- [3:0-4-0,0-4-8], [9:0-4-0,0-4-8]

| LOADING (psf) | | SPACING- | 4-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.81 | Vert(LL) | -0.12 | 14-16 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.31 | Vert(CT) | -0.22 | 14-16 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.46 | Horz(CT) | 0.01 | 12 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | Attic | -0.07 | 14-16 | 1698 | 360 | Weight: 502 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x6 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except*
2-18,10-12: 2x6 SP No.2

**BRACING-**
TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals
(Switched from sheeted: Spacing > 2-8-0).
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 6, 19, 2, 10

**REACTIONS.** (size) 18=0-3-0, 12=0-3-0
Max Horz 18=-549(LC 10)
Max Uplift 18=-148(LC 12), 12=-147(LC 13)
Max Grav 18=2991(LC 20), 12=2996(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3059/115, 3-4=-3501/82, 4-5=-2506/191, 5-6=-87/366, 6-7=-92/357,
7-8=-2518/190, 8-9=-3505/80, 9-10=-3047/115, 2-18=-2807/209, 10-12=-2813/208
BOT CHORD 17-18=-413/560, 16-17=-201/2797, 14-16=0/2814, 13-14=0/2394
WEBS 3-17=-1165/99, 3-16=-274/559, 4-16=-1/1249, 8-14=-0/1245, 9-14=-275/545,
9-13=-1180/98, 5-19=-3033/156, 7-19=-3033/156, 2-17=-3/2468, 10-13=0/2461

**NOTES-**
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
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=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-8 to 1-5-8, Interior(1) 1-5-8 to 13-11-8, Exterior(2R) 13-11-8 to 16-11-15, Interior(1) 16-11-15 to 29-5-8 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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) Ceiling dead load (5.0 psf) on member(s). 4-5, 7-8, 5-19, 7-19; Wall dead load (5.0psf) on member(s).4-16, 8-14
9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 14-16
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 18=148, 12=147.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Attic room checked for L/360 deflection.

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | T02G | GABLE | 1 | 1 | T28641046 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:05:46 2022 Page 1
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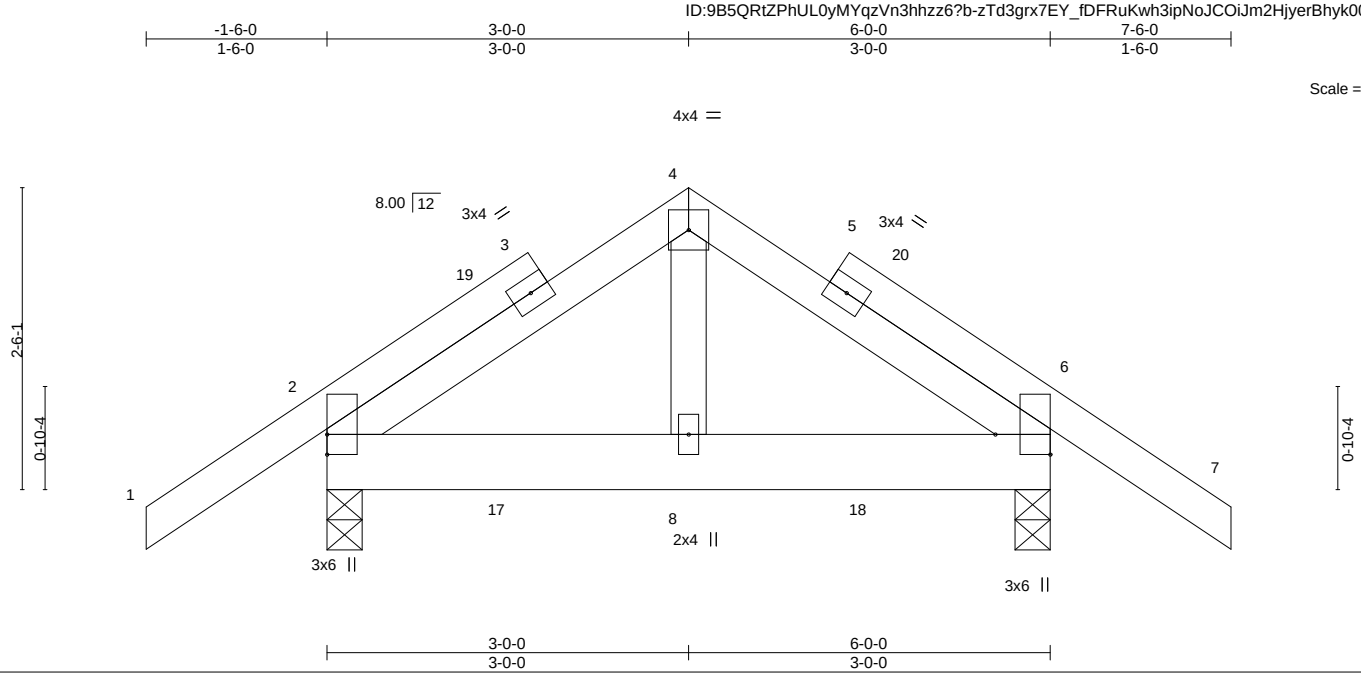


Plate Offsets (X,Y)-- [6:Edge,0-5-7]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.21 | Vert(LL) | -0.00 | 8 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.03 | Vert(CT) | -0.00 | 8 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.04 | Horz(CT) | -0.00 | 2 | n/a | n/a | | |
| BCDL | 10.0 | Code | FBC2020/TPI2014 | Matrix-MP | | | | | | | Weight: 39 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

**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) 2=0-3-8, 6=0-3-8
Max Horz 2=-58(LC 10)
Max Uplift 2=-78(LC 12), 6=-78(LC 13)
Max Grav 2=303(LC 1), 6=303(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-173/280, 4-6=-173/280

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-6-0 to 1-6-0, Exterior(2N) 1-6-0 to 3-0-0, Corner(3R) 3-0-0 to 6-0-0, Exterior(2N) 6-0-0 to 7-6-0 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) Gable studs spaced at 2-0-0 oc.
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) 2, 6.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | T03 | Attic Girder | 1 | 2 | T28641047 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:05:48 2022 Page 1
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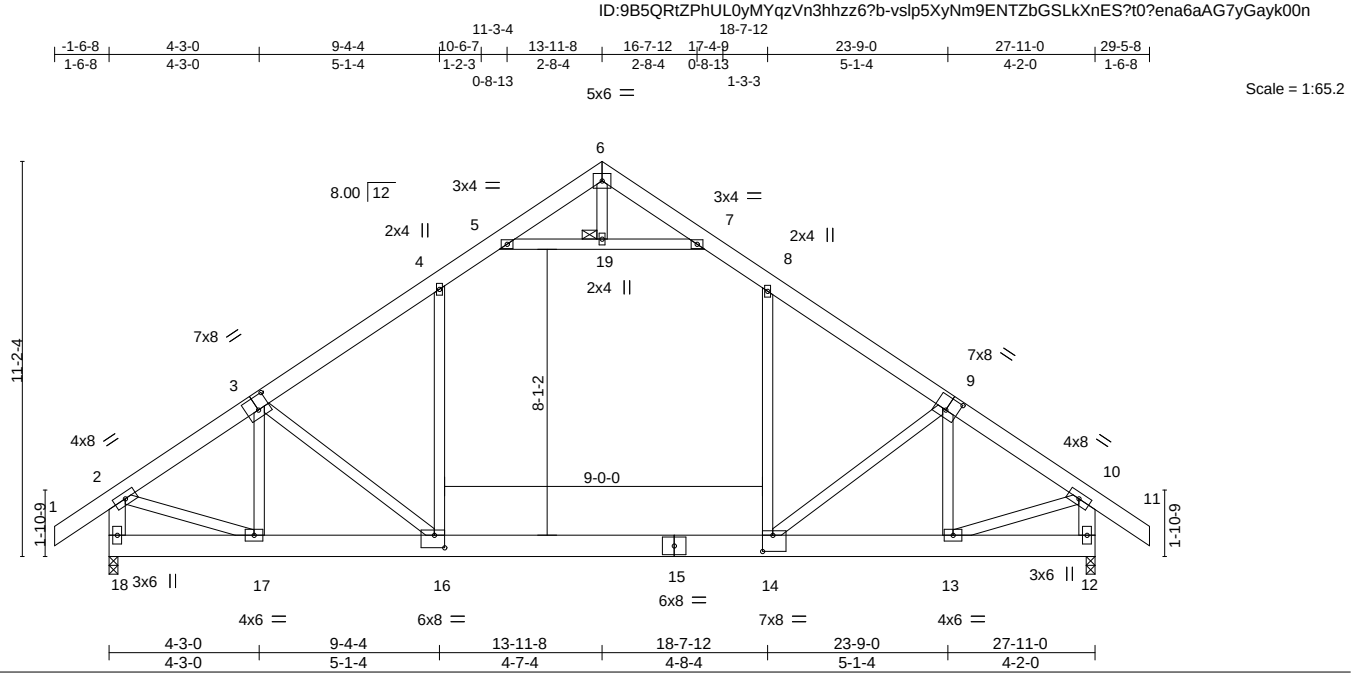


Plate Offsets (X,Y)-- [3:0-4-0,0-4-8], [9:0-4-0,0-4-8], [14:0-3-8,0-5-8], [16:0-3-8,0-4-4]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.78 | Vert(LL) | -0.14 | 14-16 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.32 | Vert(CT) | -0.24 | 14-16 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.38 | Horz(CT) | 0.01 | 12 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | Attic | -0.07 | 14-16 | 1677 | 360 | Weight: 502 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x6 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except*
2-18,10-12: 2x6 SP 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.
JOINTS 1 Brace at Jt(s): 19

**REACTIONS.** (size) 18=0-3-0, 12=0-3-0
Max Horz 18=-275(LC 26)
Max Uplift 18=-268(LC 8), 12=-268(LC 9)
Max Grav 18=2437(LC 34), 12=2446(LC 35)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2577/278, 3-4=-3227/329, 4-5=-2221/286, 5-6=-64/452, 6-7=-64/443, 7-8=-2232/286, 8-9=-3233/329, 9-10=-2569/278, 2-18=-2259/285, 10-12=-2267/285
BOT CHORD 17-18=-217/315, 16-17=-284/2265, 14-16=-131/2573, 13-14=-172/2074
WEBS 3-17=-1169/147, 3-16=-166/656, 4-16=-181/1507, 8-14=-180/1502, 9-14=-163/638, 9-13=-1182/147, 5-19=-3050/375, 7-19=-3050/375, 2-17=-189/2114, 10-13=-186/2114

**NOTES-**
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
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=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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) Ceiling dead load (5.0 psf) on member(s). 4-5, 7-8, 5-19, 7-19; Wall dead load (5.0psf) on member(s).4-16, 8-14
9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 14-16
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 18=268, 12=268.
11) Girder carries tie-in span(s): 6-0-0 from 9-4-4 to 18-7-12
12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 240 lb down and 124 lb up at 9-0-12, and 240 lb down and 124 lb up at 18-10-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
13) Attic room checked for L/360 deflection.

Continued on page 2

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-2=-54, 2-4=-54, 4-5=-64, 5-6=-54, 6-7=-54, 7-8=-64, 8-10=-54, 10-11=-54, 16-18=-20, 14-16=-134(F=-94), 12-14=-20, 5-7=-10
   Drag: 4-16=-10, 8-14=-10
   Concentrated Loads (lb)
   Vert: 16=-240(F) 14=-240(F)




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. T28641048 |
|---|---|---|---|---|---|
| 3235278 | T04 | Jack-Partial | 2 | 1 | Job Reference (optional) |

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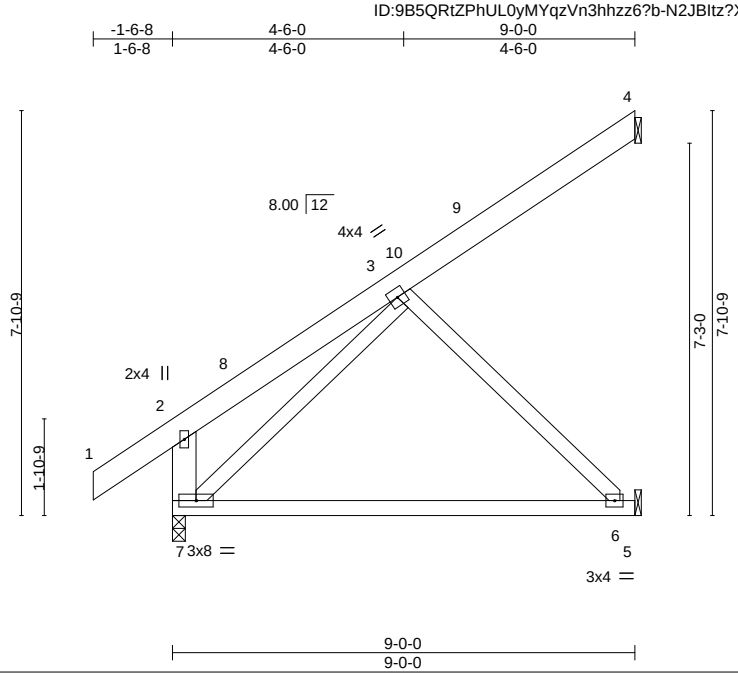


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.18 | Vert(LL) | -0.24 | 6-7 | >442 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.80 | Vert(CT) | -0.48 | 6-7 | >218 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.16 | Horz(CT) | 0.01 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 64 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
2-7: 2x6 SP 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) 4=Mechanical, 5=Mechanical, 7=0-3-0
Max Horz 7=195(LC 12)
Max Uplift 4=-49(LC 12), 5=-100(LC 12), 7=-32(LC 12)
Max Grav 4=114(LC 19), 5=227(LC 19), 7=428(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-269/170

**NOTES-**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-8 to 1-5-8, Interior(1) 1-5-8 to 8-11-4 zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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) 4, 5, 7.

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MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | T04G | GABLE | 2 | 1 | T28641049 |
| | | | | | Job Reference (optional) |

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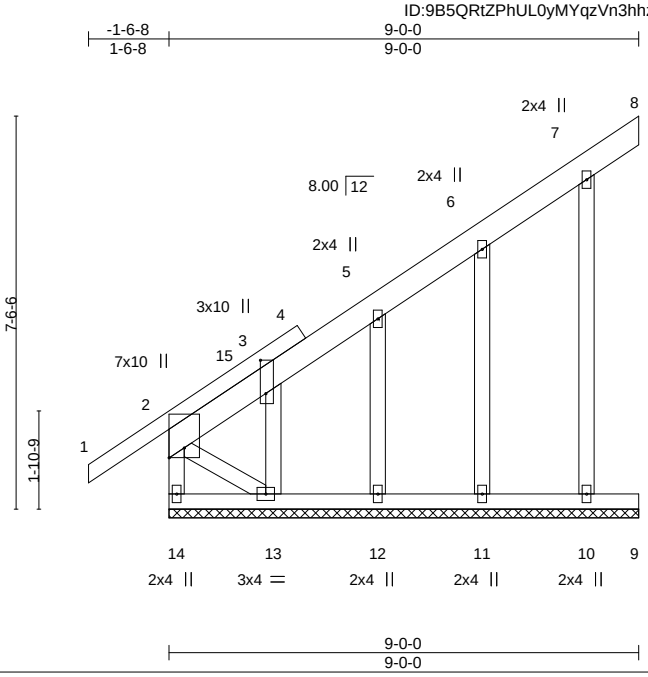


Plate Offsets (X,Y)-- [2:Edge,0-3-8], [3:0-7-11,0-1-4]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.19 | Vert(LL) | 0.00 | 1 | n/r | 120 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.04 | Vert(CT) | -0.00 | 1 | n/r | 120 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.14 | Horz(CT) | -0.01 | 8 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-S | | | | | | | Weight: 75 lb | FT = 20% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x6 SP No.2 *Except* 1-4: 2x4 SP No.2 |
| BOT CHORD | 2x4 SP No.2 |
| WEBS | 2x4 SP No.3 |
| OTHERS | 2x4 SP No.3 |

**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, Except: 6-0-0 oc bracing: 13-14. |

**REACTIONS.** All bearings 9-0-0.
(lb) - Max Horz 14=205(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 14, 8, 12, 11, 10 except 13=-210(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 14, 8, 9, 13, 12, 11, 10

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

| | |
|---|---|
| TOP CHORD | 2-14=-325/145, 2-3=-315/161, 3-5=-264/126 |
| BOT CHORD | 13-14=-389/183 |
| WEBS | 2-13=-222/474 |

**NOTES-**

1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-6-8 to 1-5-8, Exterior(2N) 1-5-8 to 9-0-0 zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Gable requires continuous bottom chord bearing.
5) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 8, 12, 11, 10 except (jt=lb) 13=210.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | T05 | MONOPITCH | 3 | 1 | T28641050 |
| | | | | | Job Reference (optional) |

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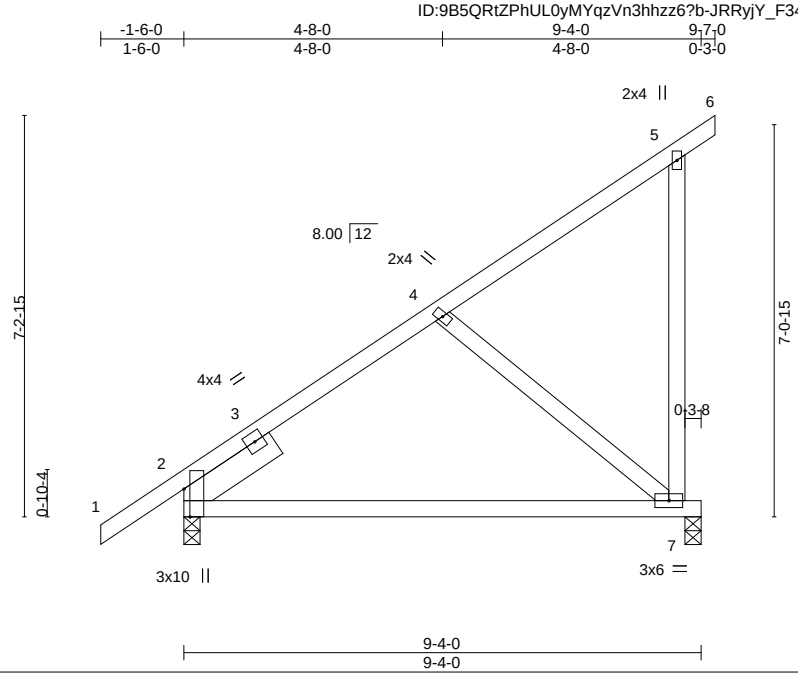


Plate Offsets (X,Y)-- [2:0-6-1,Edge]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.44 | Vert(LL) | -0.15 | 7-10 | >715 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.57 | Vert(CT) | -0.30 | 7-10 | >358 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.16 | Horz(CT) | 0.03 | 2 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 56 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 1-11-8

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 5-8-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 7=0-3-8
Max Horz 2=247(LC 12)
Max Uplift 2=-32(LC 12), 7=-192(LC 12)
Max Grav 2=416(LC 1), 7=379(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-766/0
WEBS 4-7=-270/224

**NOTES-**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 9-7-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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) 2 except (jt=lb) 7=192.

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | T06 | Roof Special | 1 | 1 | T28641051 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:05:52 2022 Page 1
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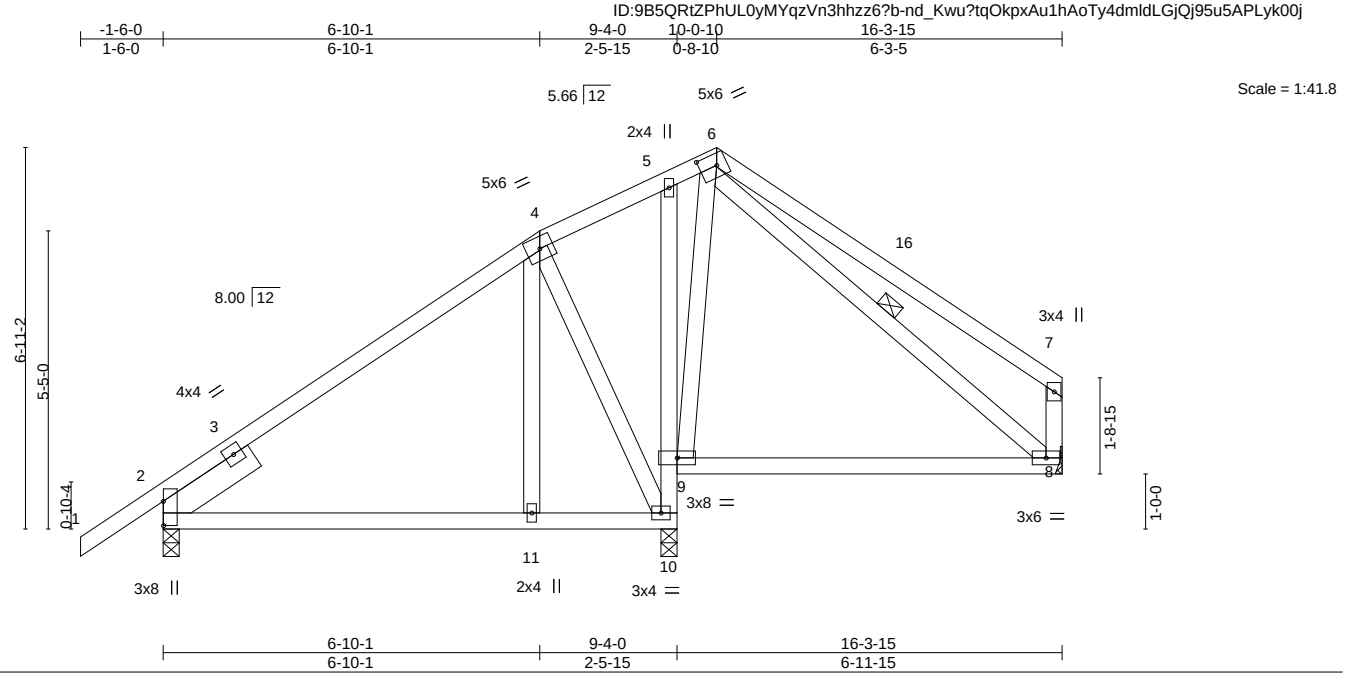


Plate Offsets (X,Y)-- [2:0-5-5,0-0-1], [6:0-3-12,0-2-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.41 | Vert(LL) | -0.08 | 8-9 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.41 | Vert(CT) | -0.16 | 8-9 | >528 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.22 | Horz(CT) | 0.03 | 2 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 107 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
5-10: 2x4 SP No.3
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 1-11-8

**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, Except: 6-0-0 oc bracing: 9-10.
WEBS 1 Row at midpt 6-8

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8, 8=Mechanical
Max Horz 2=159(LC 12)
Max Uplift 2=-149(LC 12), 10=-12(LC 12), 8=-128(LC 13)
Max Grav 2=468(LC 1), 10=499(LC 1), 8=312(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-253/210
WEBS 4-10=-363/165

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 10-0-10, Exterior(2R) 10-0-10 to 13-0-10, Interior(1) 13-0-10 to 16-2-3 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10 except (jt=lb) 2=149, 8=128.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | T07 | Roof Special Girder | 1 | 1 | T28641052 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:05:54 2022 Page 1
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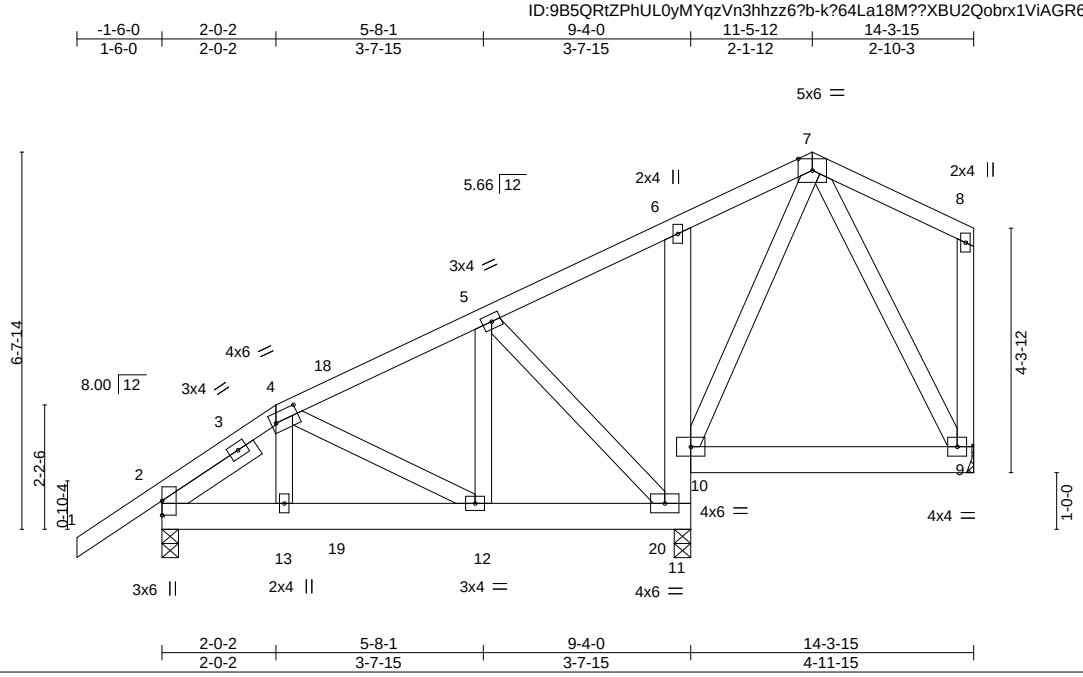


Plate Offsets (X,Y)-- [4:0-5-0,0-2-0]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.15 | Vert(LL) | -0.01 | 9-10 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.10 | Vert(CT) | -0.01 | 9-10 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.16 | Horz(CT) | 0.00 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 115 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x4 SP No.3 1-11-8

**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) 2=0-3-8, 11=0-3-8, 9=Mechanical
Max Horz 2=205(LC 8)
Max Uplift 2=-105(LC 8), 11=-326(LC 8), 9=-33(LC 9)
Max Grav 2=427(LC 1), 11=746(LC 1), 9=150(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-341/91, 4-5=-294/80
BOT CHORD 2-13=-207/273, 12-13=-206/274, 10-11=-407/174
WEBS 5-11=-359/199

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9 except (jt=lb) 2=105, 11=326.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 79 lb down and 50 lb up at 3-1-4, 108 lb down and 91 lb up at 5-11-3, and 137 lb down and 119 lb up at 8-9-2, and 58 lb down and 26 lb up at 11-5-12 on top chord, and 7 lb down and 6 lb up at 2-0-2, 20 lb down and 12 lb up at 3-1-4, and 45 lb down and 23 lb up at 5-11-3, and 68 lb down and 31 lb up at 8-9-2 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-4=-54, 4-7=-54, 7-8=-54, 11-14=-20, 9-10=-20
Concentrated Loads (lb)
Vert: 6=-78(B) 13=1(B) 12=-27(B) 5=-28(B) 19=-3(B) 20=-54(B)

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | T08 | Monopitch | 2 | 1 | T28641053 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:05:55 2022 Page 1
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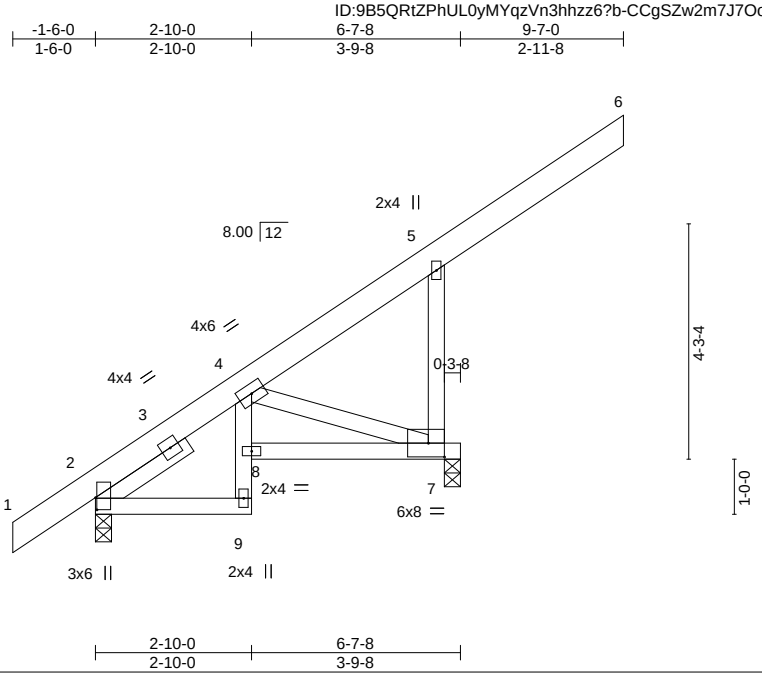


Plate Offsets (X,Y)-- [2:0-2-10,0-0-5], [7:0-3-8,0-3-0]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.38 | Vert(LL) | -0.02 | 9 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.53 | Vert(CT) | -0.02 | 7-8 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.09 | Horz(CT) | 0.02 | 7 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MP | | | | | | | Weight: 57 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
4-9: 2x4 SP No.3
WEBS 2x4 SP No.3
SLIDER Left 2x4 SP No.3 1-11-8

**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) 2=0-3-8, 7=0-3-8
Max Horz 2=238(LC 12)
Max Uplift 7=-268(LC 12)
Max Grav 2=269(LC 1), 7=459(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-348/64, 4-5=-351/168, 5-7=-385/574
BOT CHORD 7-8=-113/319
WEBS 4-7=-338/119

**NOTES-**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 9-7-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=268.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. T28641054 |
|---|---|---|---|---|---|
| 3235278 | T09 | Jack-Closed | 1 | 1 | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:05:56 2022 Page 1
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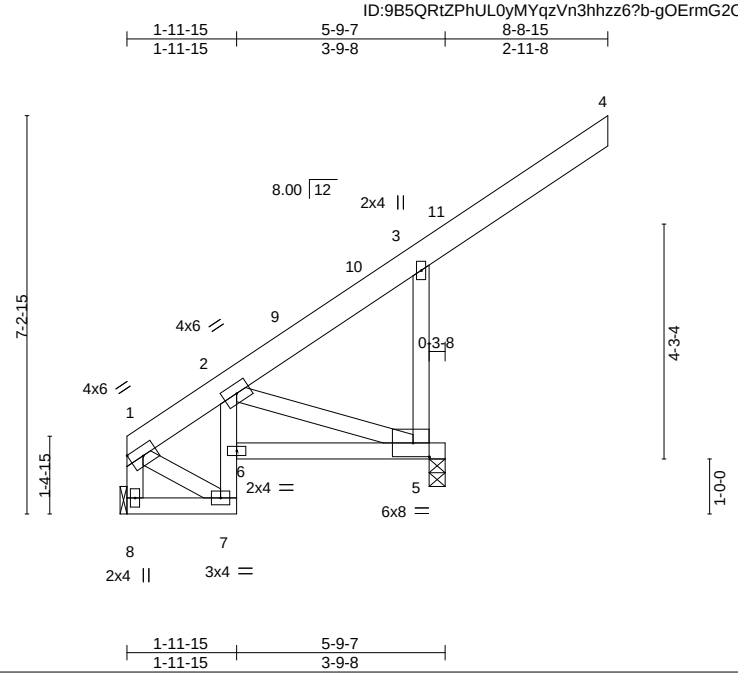


Plate Offsets (X,Y)-- [5:0-3-8,0-3-0]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.31 | Vert(LL) | -0.01 | 5-6 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.24 | Vert(CT) | -0.01 | 5-6 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.07 | Horz(CT) | -0.01 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 50 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
2-7: 2x4 SP No.3
WEBS 2x4 SP No.3

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 5-9-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 8=Mechanical, 5=0-3-8
Max Horz 8=167(LC 12)
Max Uplift 5=-229(LC 9)
Max Grav 8=159(LC 21), 5=445(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-309/136, 3-5=-378/479
BOT CHORD 7-8=-273/120

**NOTES-**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 8-8-15 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=229.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | T10 | Roof Special Girder | 1 | 1 | T28641055 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:05:57 2022 Page 1
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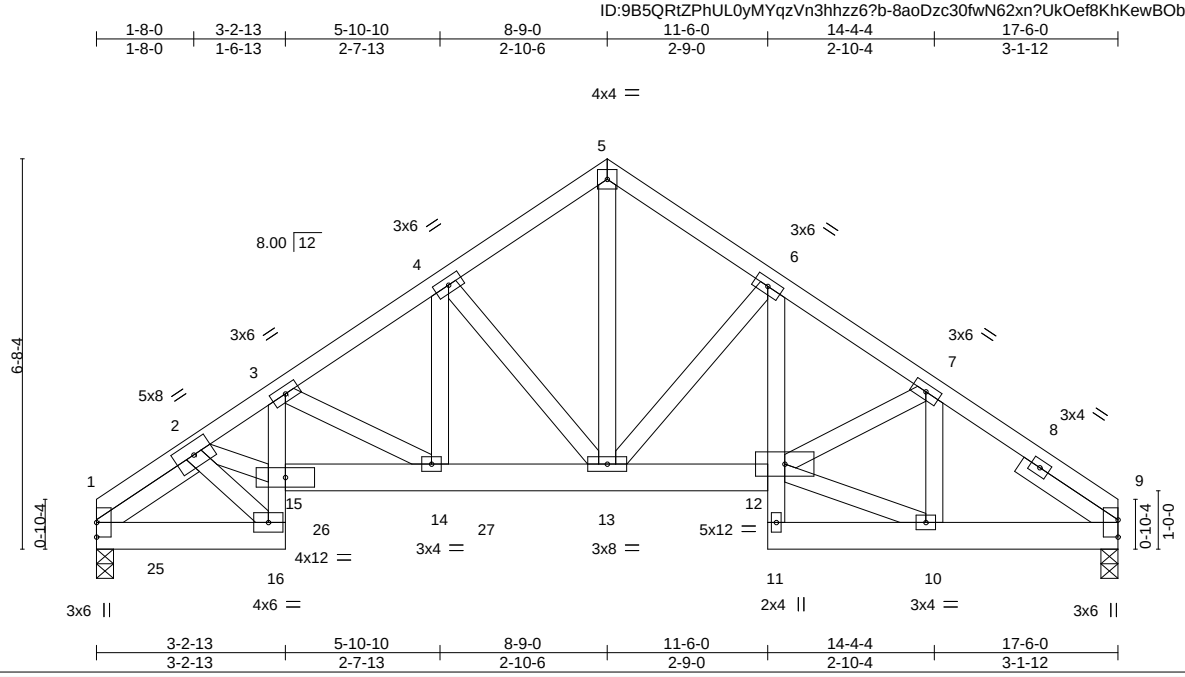


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.16 | Vert(LL) | -0.05 | 14-15 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 1.00 | Vert(CT) | -0.09 | 14-15 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.59 | Horz(CT) | 0.06 | 9 | n/a | n/a | | |
| BCDL | 10.0 | Code | FBC2020/TPI2014 | Matrix-MS | | | | | | | Weight: 131 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2 *Except*
3-16,6-11: 2x4 SP No.3
WEBS 2x4 SP No.3
SLIDER Left 2x4 SP No.3 1-11-7, Right 2x4 SP No.3 1-11-8

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 4-1-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-9-11 oc bracing.

**REACTIONS.** (size) 1=0-3-8, 9=0-3-8
Max Horz 1=128(LC 5)
Max Uplift 1=-239(LC 8), 9=-171(LC 9)
Max Grav 1=1045(LC 1), 9=763(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-525/118, 2-3=-1985/586, 3-4=-1404/397, 4-5=-934/268, 5-6=-934/281, 6-7=-1205/291, 7-9=-969/235
BOT CHORD 1-16=-320/975, 15-16=-299/954, 3-15=-174/514, 14-15=-548/1719, 13-14=-311/1145, 12-13=-180/984, 6-12=-53/276, 9-10=-146/773
WEBS 2-16=-1150/390, 2-15=-497/1547, 3-14=-651/268, 4-14=-198/582, 4-13=-625/274, 5-13=-247/834, 6-13=-371/149, 10-12=-138/741, 7-10=-331/88

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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) 1=239, 9=171.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 170 lb down at 1-0-7, and 283 lb down and 156 lb up at 3-10-6, and 121 lb down and 61 lb up at 6-8-5 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=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-5=-54, 5-9=-54, 16-17=-20, 12-15=-20, 11-21=-20

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022

Continued on page 2



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

**LOAD CASE(S)** Standard
Concentrated Loads (lb)
Vert: 25=-108(B) 26=-283(B) 27=-121(B)

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. T28641056 |
|---|---|---|---|---|---|
| 3235278 | T11 | ROOF SPECIAL | 1 | 1 | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:05:59 2022 Page 1
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| -1-6-0 | 3-1-7 | 5-11-5 | 8-9-0 | 11-6-0 | 14-4-4 | 17-6-0 |
|---|---|---|---|---|---|---|
| 1-6-0 | 3-1-7 | 2-9-15 | 2-9-11 | 2-9-0 | 2-10-4 | 3-1-12 |

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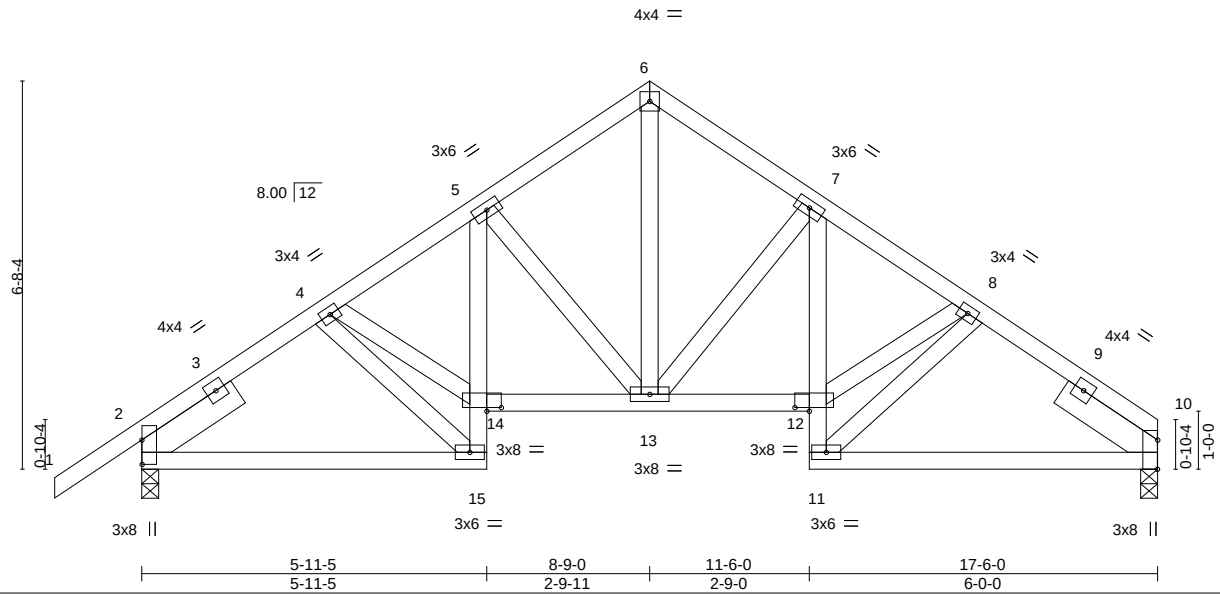


Plate Offsets (X,Y)-- [2:0-5-1,0-0-1], [10:0-6-1,Edge], [12:0-3-0,0-0-12], [14:0-3-0,0-0-12]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.19 | Vert(LL) | -0.04 | 13-14 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.43 | Vert(CT) | -0.07 | 13-14 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.28 | Horz(CT) | 0.05 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 121 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
5-15,7-11: 2x4 SP No.3
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 1-11-8, Right 2x6 SP No.2 1-11-8

**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) 10=0-3-8, 2=0-3-8
Max Horz 2=143(LC 9)
Max Uplift 10=-125(LC 13), 2=-158(LC 12)
Max Grav 10=644(LC 1), 2=732(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-779/170, 4-5=-888/203, 5-6=-689/186, 6-7=-687/192, 7-8=-891/203, 8-10=-791/180
BOT CHORD 2-15=-172/620, 14-15=-139/557, 13-14=-155/741, 12-13=-93/736, 11-12=-80/551, 10-11=-104/616
WEBS 4-15=-729/218, 4-14=-157/733, 5-13=-333/152, 6-13=-145/565, 7-13=-324/141, 8-12=-101/726, 8-11=-721/135

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 8-9-0, Exterior(2R) 8-9-0 to 11-7-12, Interior(1) 11-7-12 to 17-6-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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=125, 2=158.

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | T12 | ROOF SPECIAL | 2 | 1 | T28641057 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:06:00 2022 Page 1
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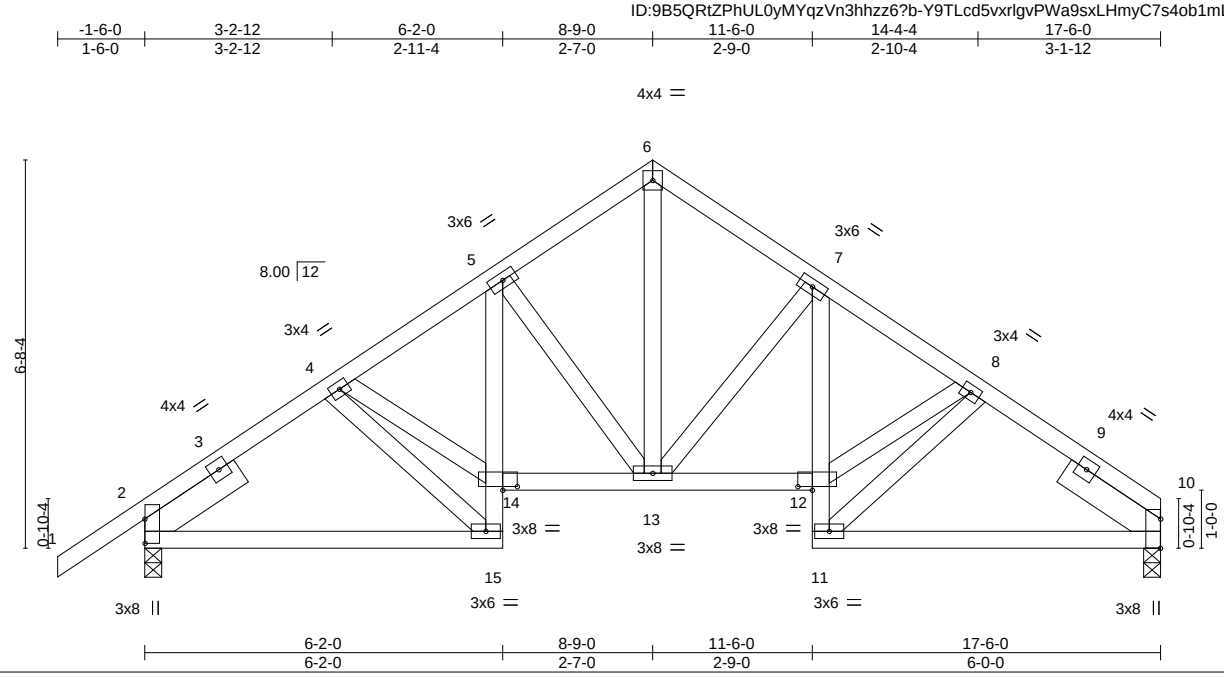


Plate Offsets (X,Y)-- [2:0-5-1,0-0-1], [10:0-6-1,Edge], [12:0-3-0,0-0-12], [14:0-3-0,0-0-12]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.19 | Vert(LL) | -0.04 | 13-14 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.43 | Vert(CT) | -0.07 | 12-13 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.28 | Horz(CT) | 0.05 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 121 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
5-15,7-11: 2x4 SP No.3
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 1-11-8, Right 2x6 SP No.2 1-11-8

**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) 10=0-3-8, 2=0-3-8
Max Horz 2=143(LC 9)
Max Uplift 10=-125(LC 13), 2=-158(LC 12)
Max Grav 10=644(LC 1), 2=732(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-779/170, 4-5=-870/199, 5-6=-685/188, 6-7=-687/191, 7-8=-891/202, 8-10=-791/179
BOT CHORD 2-15=-172/621, 14-15=-138/550, 13-14=-146/720, 12-13=-93/736, 11-12=-80/551, 10-11=-103/616
WEBS 4-15=-722/218, 4-14=-149/710, 5-13=-323/148, 6-13=-148/570, 7-13=-324/141, 8-12=-101/727, 8-11=-721/134

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 8-9-0, Exterior(2R) 8-9-0 to 11-7-12, Interior(1) 11-7-12 to 17-6-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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=125, 2=158.

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | T13 | Half Hip Girder | 1 | 1 | T28641058 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:06:02 2022 Page 1
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-VYb61J79TS?O8jfyGH_pMB1TBfh?3oDeOSWhmmyk00Z

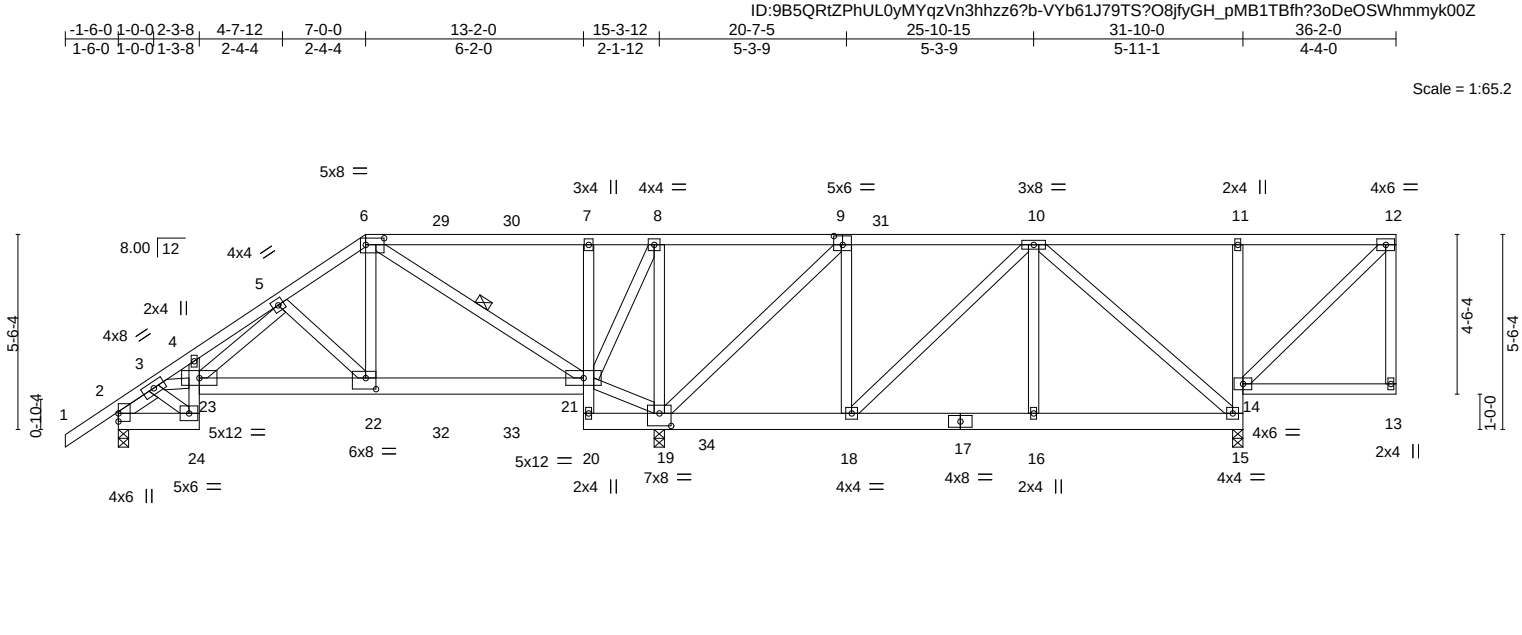


Plate Offsets (X,Y)-- [6:0-6-4,0-2-4], [9:0-3-0,0-3-0], [19:0-4-0,0-4-4], [22:0-3-8,0-3-12]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.47 | Vert(LL) | 0.07 | 21-22 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.77 | Vert(CT) | -0.11 | 21-22 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.86 | Horz(CT) | 0.05 | 15 | n/a | n/a | | |
| BCDL | 10.0 | Code | FBC2020/TPI2014 | Matrix-MS | | | | | | | Weight: 262 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2 *Except*
4-24,7-20,11-15: 2x4 SP No.3, 13-14: 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x4 SP No.3 1-2-3

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 4-5-1 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 6-21

**REACTIONS.** (size) 2=0-3-8, 19=0-3-8, 15=0-3-8
Max Horz 2=191(LC 8)
Max Uplift 2=-297(LC 8), 19=-997(LC 8), 15=-361(LC 23)
Max Grav 2=839(LC 1), 19=2480(LC 1), 15=738(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-281/96, 3-4=-1649/754, 4-5=-1674/801, 5-6=-1105/517, 8-9=-327/751, 9-10=-225/325
BOT CHORD 2-24=-354/604, 23-24=-301/525, 22-23=-571/1061, 21-22=-473/930, 7-21=-263/128, 18-19=-328/223, 14-15=-480/163, 11-14=-303/146
WEBS 3-24=-615/367, 3-23=-648/1193, 5-23=-266/484, 5-22=-258/160, 6-22=-523/1093, 6-21=-1313/628, 19-21=-648/292, 8-21=-566/1204, 9-18=-58/365, 10-18=-354/149, 10-16=0/257, 10-15=-448/322, 8-19=-1271/617, 9-19=-849/269

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=297, 19=997, 15=361.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 46 lb down and 16 lb up at 7-0-0, 46 lb down and 14 lb up at 9-0-12, 46 lb down and 14 lb up at 11-0-12, and 46 lb down and 14 lb up at 13-0-12, and 71 lb down and 48 lb up at 15-0-12 on top chord, and 531 lb down and 339 lb up at 7-0-0, 194 lb down and 119 lb up at 9-0-12, 194 lb down and 119 lb up at 11-0-12, and 194 lb down and 119 lb up at 13-3-12, and 153 lb down and 107 lb up at 15-0-12 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

Continued on page 2

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Philip J. O'Regan PE No.58126
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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-6=-54, 6-12=-54, 24-25=-20, 21-23=-20, 15-20=-20, 13-14=-20
   Concentrated Loads (lb)
   Vert: 21=-194(B) 22=-531(B) 8=-21(B) 32=-194(B) 33=-194(B) 34=-153(B)

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | T14 | Hip | 1 | 1 | T28641059 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:06:04 2022 Page 1
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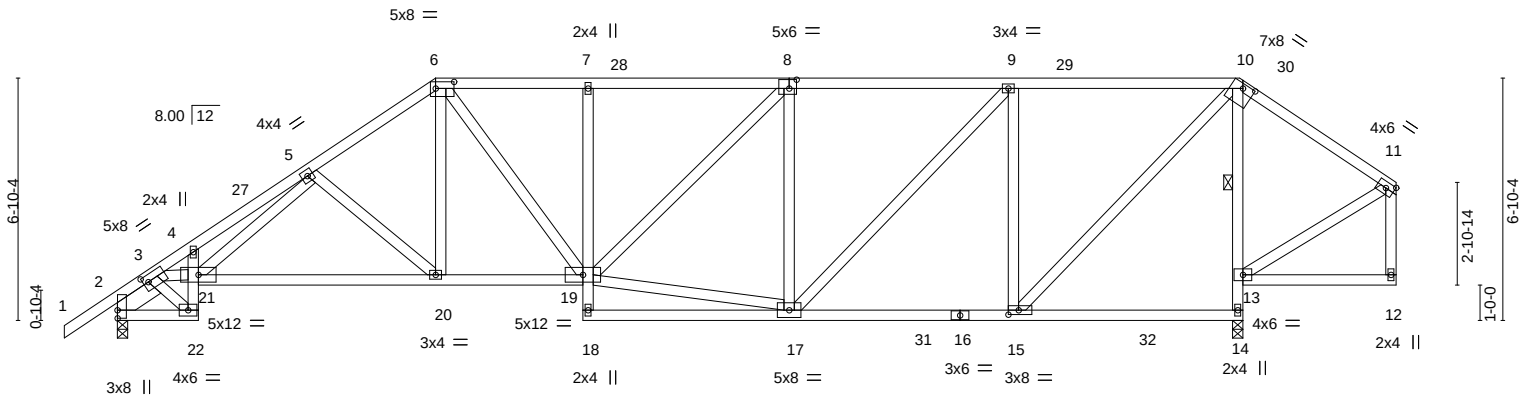
-1-6-0 1-0-0 2-3-8 5-6-0 9-0-0 13-2-0 19-0-0 25-4-2 31-8-15 36-2-0
1-6-0 1-0-0 1-3-8 3-2-8 3-6-0 4-2-0 5-10-0 6-4-2 6-4-13 4-5-2

Scale = 1:65.2




2-3-8 9-0-0 13-2-0 19-0-0 25-4-2 31-10-0 36-2-0
2-3-8 6-8-8 4-2-0 5-10-0 6-4-2 6-5-14 4-4-0

Plate Offsets (X,Y)-- [2:0-2-12,0-0-1], [3:0-1-11,0-2-4], [6:0-6-4,0-2-4], [8:0-2-8,0-3-0], [10:0-4-0,0-1-8], [15:0-3-8,0-1-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.42 | Vert(LL) | -0.15 | 20-21 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.86 | Vert(CT) | -0.29 | 20-21 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.82 | Horz(CT) | 0.13 | 14 | n/a | n/a | | |
| BCDL | 10.0 | Code | FBC2020/TPI2014 | Matrix-MS | | | | | | | Weight: 248 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
4-22,7-18,10-14: 2x4 SP No.3
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 1-3-8

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 3-1-9 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 3-7-12 oc bracing. Except:
1 Row at midpt 10-13

**REACTIONS.** (size) 2=0-3-8, 14=0-3-8
Max Horz 2=181(LC 12)
Max Uplift 2=-213(LC 12), 14=-285(LC 8)
Max Grav 2=1316(LC 25), 14=1683(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-498/88, 3-4=-2773/568, 4-5=-2982/634, 5-6=-1814/402, 6-7=-1735/440, 7-8=-1728/439, 8-9=-1468/374, 9-10=-996/267
BOT CHORD 2-22=-268/965, 21-22=-265/1032, 20-21=-444/1755, 19-20=-355/1474, 7-19=-285/140, 15-17=-273/995, 13-14=-1561/302, 10-13=-1394/303
WEBS 3-22=-1232/327, 3-21=-527/2153, 5-21=-289/1056, 5-20=-440/205, 6-20=-94/536, 6-19=-211/466, 17-19=-373/1367, 8-19=-86/359, 8-17=-571/214, 9-17=-155/700, 9-15=-842/294, 10-15=-354/1534

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 2-0-12, Interior(1) 2-0-12 to 9-0-0, Exterior(2R) 9-0-0 to 14-1-6, Interior(1) 14-1-6 to 31-10-0, Exterior(2E) 31-10-0 to 36-0-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=213, 14=285.

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Philip J. O'Regan PE No.58126
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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | T15 | Hip | 1 | 1 | T28641060 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:06:06 2022 Page 1
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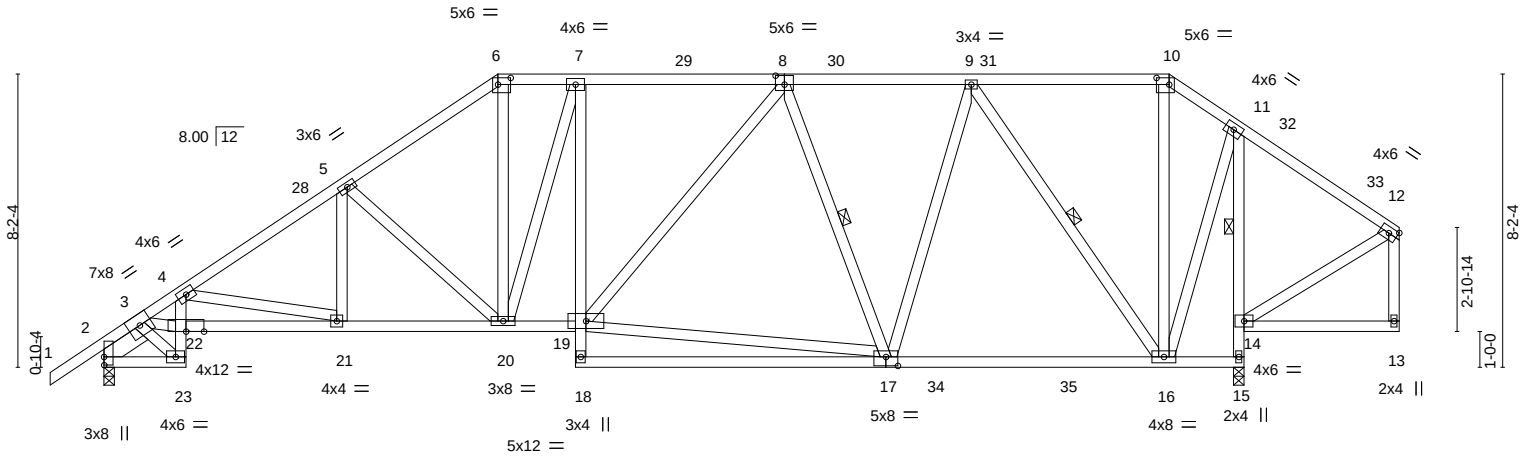
| -1-6-0 | 1-0-0 | 2-3-8 | 6-7-12 | 11-0-0 | 13-2-0 | 19-0-0 | 24-2-10 | 29-8-15 | 31-10-0 | 36-2-0 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1-6-0 | 1-0-0 | 1-3-8 | 4-4-4 | 4-4-4 | 2-2-0 | 5-10-0 | 5-2-10 | 5-6-5 | 2-1-2 | 4-4-0 |

Scale: 3/16"=1'




| 2-3-8 | 6-7-12 | 11-0-0 | 13-2-0 | 21-10-0 | 29-8-15 | 31-10-0 | 36-2-0 |
|---|---|---|---|---|---|---|---|
| 2-3-8 | 4-4-4 | 4-4-4 | 2-2-0 | 8-8-0 | 7-10-15 | 2-1-2 | 4-4-0 |

Plate Offsets (X,Y)-- [2:0-2-12,0-0-1], [6:0-4-4,0-2-4], [8:0-3-0,0-3-0], [10:0-4-4,0-2-4], [17:0-4-0,0-3-0]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.29 | Vert(LL) | -0.15 | 17-18 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.92 | Vert(CT) | -0.33 | 17-18 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.81 | Horz(CT) | 0.13 | 15 | n/a | n/a | | |
| BCDL | 10.0 | Code | FBC2020/TPI2014 | Matrix-MS | | | | | | | Weight: 281 lb | FT = 20% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x4 SP No.2 |
| BOT CHORD | 2x4 SP No.2 *Except* 4-23,7-18,11-15: 2x4 SP No.3 |
| WEBS | 2x4 SP No.3 |
| SLIDER | Left 2x6 SP No.2 1-3-8 |

**BRACING-**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 3-4-12 oc purlins, except end verticals. |
| BOT CHORD | Rigid ceiling directly applied or 2-2-0 oc bracing. Except: 1 Row at midpt 11-14 |
| WEBS | 1 Row at midpt 8-17, 9-16 |

**REACTIONS.** (size) 2=0-3-8, 15=0-3-8
Max Horz 2=200(LC 12)
Max Uplift 2=-299(LC 12), 15=-305(LC 13)
Max Grav 2=1315(LC 25), 15=1660(LC 2)

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

| | |
|---|---|
| TOP CHORD | 2-3=-536/122, 3-4=-2747/746, 4-5=-2053/496, 5-6=-1622/428, 6-7=-1311/394, 7-8=-1390/406, 8-9=-1090/264, 9-10=-282/134, 10-11=-344/150 |
| BOT CHORD | 2-23=-344/973, 22-23=-325/963, 4-22=-130/474, 21-22=-837/2531, 20-21=-479/1681, 19-20=-349/1391, 16-17=-243/895, 14-15=-1706/309, 11-14=-1542/286 |
| WEBS | 3-23=-1152/404, 3-22=-706/2159, 4-21=-913/366, 5-21=-54/382, 5-20=-590/228, 6-20=-167/757, 7-20=-344/190, 17-19=-323/1058, 8-19=-105/292, 8-17=-503/220, 9-17=-127/683, 9-16=-1097/273, 11-16=-214/1184 |

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 2-1-12, Interior(1) 2-1-12 to 11-0-0, Exterior(2R) 11-0-0 to 16-1-6, Interior(1) 16-1-6 to 29-8-15, Exterior(2R) 29-8-15 to 34-10-5, Interior(1) 34-10-5 to 36-0-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=299, 15=305.

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. T28641061 |
|---|---|---|---|---|---|
| 3235278 | T16 | Hip | 1 | 1 | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:06:08 2022 Page 1
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-JiyNHNCw3lIYse76dX5DbSHNc4g0TacWnNz0zQyk00T

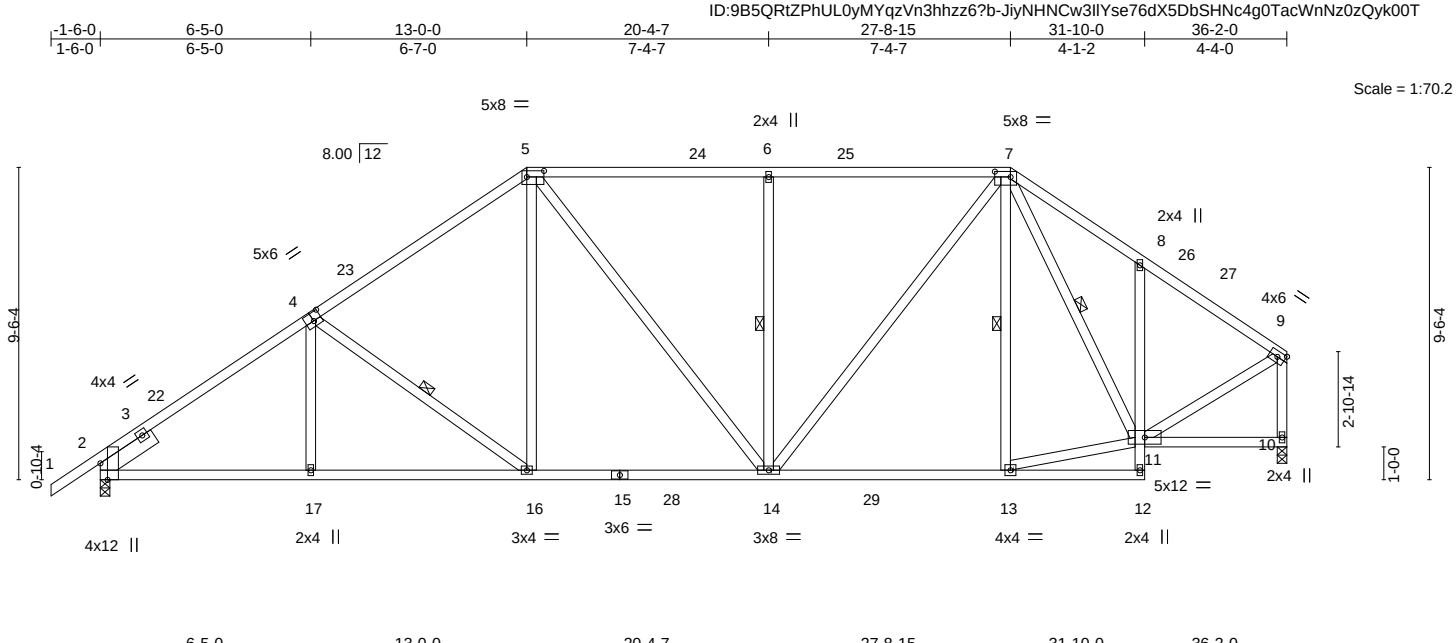


Plate Offsets (X,Y)-- [2:0-6-1,Edge], [4:0-3-0,0-3-0], [5:0-6-4,0-2-4], [7:0-5-12,0-2-0]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.93 | Vert(LL) | -0.15 | 14-16 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.98 | Vert(CT) | -0.25 | 16-17 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.54 | Horz(CT) | 0.06 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 253 lb | FT = 20% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x4 SP No.2 |
| BOT CHORD | 2x4 SP No.2 *Except* 8-12: 2x4 SP No.3 |
| WEBS | 2x4 SP No.3 |
| SLIDER | Left 2x6 SP No.2 1-11-8 |

**BRACING-**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied, except end verticals. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 2-17 8-10-3 oc bracing: 16-17. |
| WEBS | 1 Row at midpt 4-16, 6-14, 7-13, 7-11 |

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8
Max Horz 2=220(LC 12)
Max Uplift 2=-321(LC 12), 10=-264(LC 13)
Max Grav 2=1545(LC 2), 10=1492(LC 2)

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

| | |
|---|---|
| TOP CHORD | 2-4=-2058/415, 4-5=-1740/393, 5-6=-1495/353, 6-7=-1495/353, 7-8=-1292/368, 8-9=-1301/252, 9-10=-1411/274 |
| BOT CHORD | 2-17=-448/1664, 16-17=-448/1663, 14-16=-277/1389, 13-14=-140/1073, 8-11=-260/183 |
| WEBS | 4-16=-429/211, 5-16=-82/560, 5-14=-179/282, 6-14=-460/227, 7-14=-207/715, 11-13=-136/1077, 9-11=-175/1197 |

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 2-1-6, Interior(1) 2-1-6 to 13-0-0, Exterior(2R) 13-0-0 to 18-1-6, Interior(1) 18-1-6 to 27-8-15, Exterior(2R) 27-8-15 to 32-10-5, Interior(1) 32-10-5 to 36-0-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=321, 10=264.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



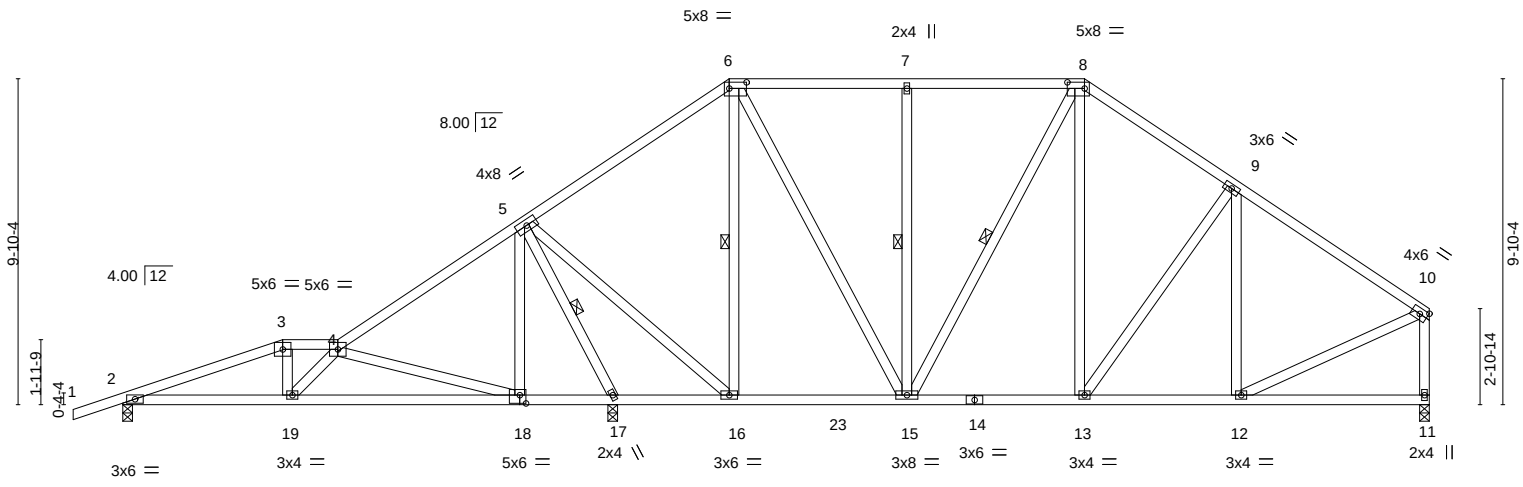
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | T17 | Roof Special Girder | 1 | 1 | T28641062 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:06:10 2022 Page 1
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-G447i2DAbw0G5xHVky7hgtMq3uUExUIpEhS72Iyk00R

-1-6-0 | 4-10-0 | 6-6-0 | 12-0-0 | 18-4-0 | 23-8-7 | 29-0-15 | 33-8-0 | 39-6-0
1-6-0 | 4-10-0 | 1-8-0 | 5-6-0 | 6-4-0 | 5-4-7 | 5-4-7 | 4-7-2 | 5-10-0

Scale = 1:69.7




4-10-0 | 12-0-0 | 14-9-12 | 18-4-0 | 23-8-7 | 29-0-15 | 33-8-0 | 39-6-0
4-10-0 | 7-2-0 | 2-9-12 | 3-6-4 | 5-4-7 | 5-4-7 | 4-7-2 | 5-10-0

Plate Offsets (X,Y)-- [6:0-6-4,0-2-4], [8:0-6-4,0-2-4], [18:0-2-4,0-3-0]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.48 | Vert(LL) | -0.07 | 18-19 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.49 | Vert(CT) | -0.15 | 18-19 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.53 | Horz(CT) | 0.02 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code | FBC2020/TPI2014 | Matrix-MS | | | | | | | Weight: 275 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 5-10-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 17-18,16-17.
WEBS 1 Row at midpt 5-17, 6-16, 7-15, 8-15

**REACTIONS.** (size) 2=0-3-8, 17=0-3-8, 11=0-3-8
Max Horz 2=219(LC 5)
Max Uplift 2=-236(LC 4), 17=-370(LC 5), 11=-167(LC 28)
Max Grav 2=531(LC 2), 17=1810(LC 2), 11=951(LC 22)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-917/299, 3-4=-856/301, 5-6=-340/147, 6-7=-553/191, 7-8=-553/191, 8-9=-784/223, 9-10=-869/173, 10-11=-859/180
BOT CHORD 2-19=-312/843, 18-19=-243/781, 16-17=-890/238, 13-15=-40/600, 12-13=-74/671
WEBS 4-18=-789/222, 5-18=-125/411, 5-17=-1934/417, 5-16=-217/1388, 6-16=-720/171, 6-15=-178/693, 7-15=-334/168, 8-13=-100/373, 10-12=-65/701

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=236, 17=370, 11=167.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 21 lb down and 21 lb up at 4-10-0 on top chord, and 50 lb down and 18 lb up at 4-10-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-3=-54, 3-4=-54, 4-6=-54, 6-8=-54, 8-10=-54, 11-20=-20

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MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022

Continued on page 2



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

**LOAD CASE(S)** Standard
Concentrated Loads (lb)
Vert: 19=5(B)

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. T28641063 |
|---|---|---|---|---|---|
| 3235278 | T18 | Hip | 1 | 1 | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:06:11 2022 Page 1
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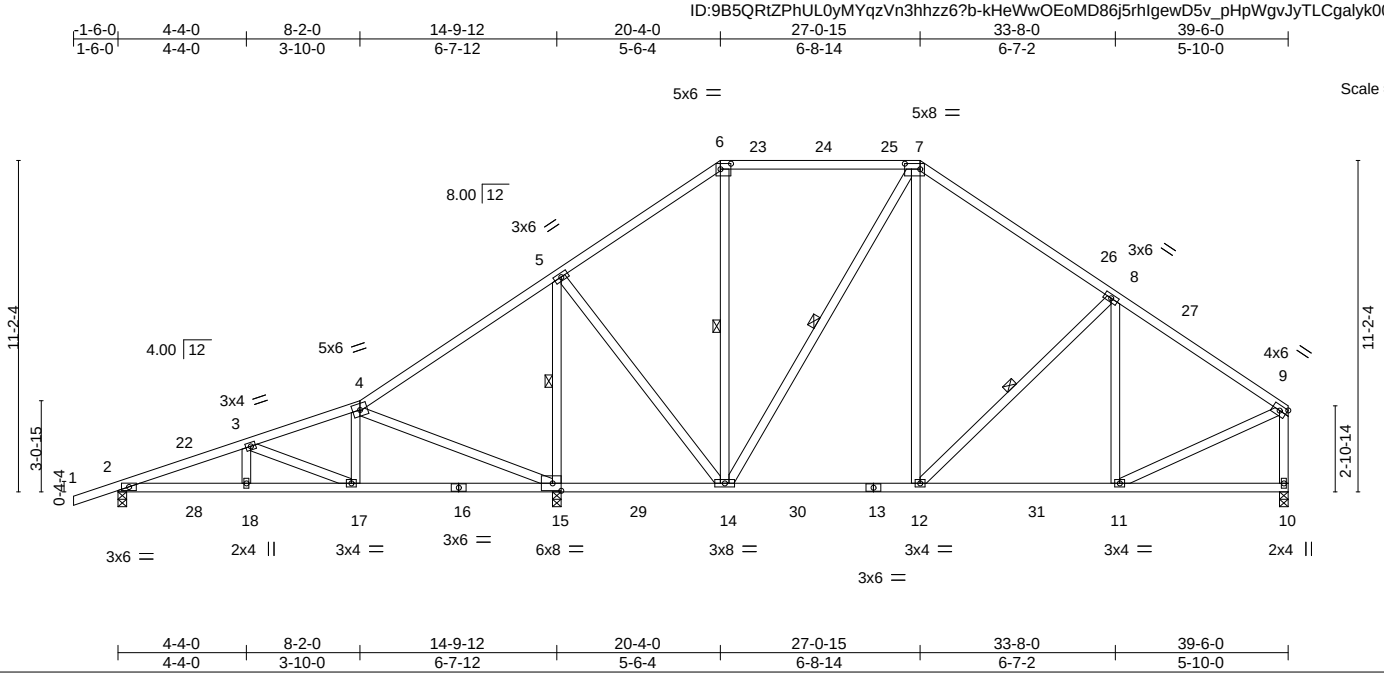


Plate Offsets (X,Y)-- [6:0-4-4,0-2-4], [7:0-6-4,0-2-4], [15:0-3-8,0-3-0]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.55 | Vert(LL) | 0.11 | 15-17 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.48 | Vert(CT) | -0.11 | 12-14 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.67 | Horz(CT) | 0.02 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 258 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
7-14: 2x4 SP 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.
WEBS 1 Row at midpt 5-15, 6-14, 7-14, 8-12

**REACTIONS.** (size) 2=0-3-8, 15=0-3-8, 10=0-3-8
Max Horz 2=252(LC 9)
Max Uplift 2=-237(LC 8), 15=-424(LC 12), 10=-188(LC 13)
Max Grav 2=470(LC 25), 15=1939(LC 2), 10=958(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-739/584, 3-4=-334/255, 4-5=-445/504, 5-6=-411/194, 6-7=-272/183, 7-8=-696/237, 8-9=-875/198, 9-10=-876/201
BOT CHORD 2-18=-616/687, 17-18=-616/687, 15-17=-224/289, 14-15=-343/434, 12-14=0/513, 11-12=-100/670
WEBS 3-17=-425/398, 4-17=-450/356, 4-15=-662/689, 5-15=-1424/722, 5-14=-359/938, 7-14=-498/259, 7-12=-108/511, 8-12=-317/202, 9-11=-97/708

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 2-5-6, Interior(1) 2-5-6 to 20-4-0, Exterior(2R) 20-4-0 to 25-11-1, Interior(1) 25-11-1 to 27-0-15, Exterior(2R) 27-0-15 to 32-7-15, Interior(1) 32-7-15 to 39-4-4 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=237, 15=424, 10=188.

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. T28641064 |
|---|---|---|---|---|---|
| 3235278 | T19 | Piggyback Base | 5 | 1 | Job Reference (optional) |

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ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-gfmGK4F2trOqzP?4Q5gOIW_Jm5Vx8puFwfhnfdyk00O

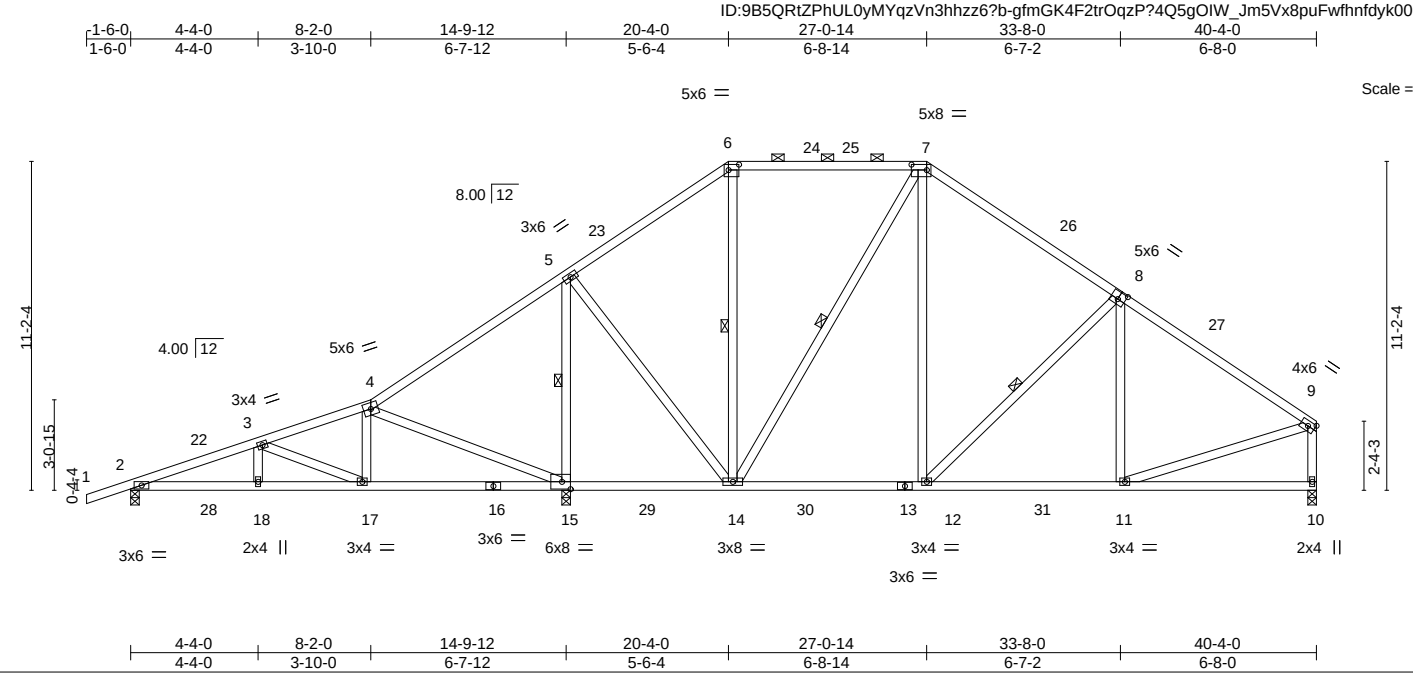


Plate Offsets (X,Y)-- [6:0-4-4,0-2-4], [7:0-6-4,0-2-4], [8:0-3-0,0-3-0], [15:0-3-8,0-3-0]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.58 | Vert(LL) | 0.11 | 15-17 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.49 | Vert(CT) | -0.12 | 12-14 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.67 | Horz(CT) | 0.02 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 261 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
7-14: 2x4 SP No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 5-4-13 oc purlins, except end verticals, and 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 5-15, 6-14, 7-14, 8-12

**REACTIONS.** (size) 2=0-3-8, 15=0-3-8, 10=0-3-8
Max Horz 2=254(LC 9)
Max Uplift 2=-239(LC 8), 15=-391(LC 12), 10=-177(LC 13)
Max Grav 2=464(LC 25), 15=1981(LC 2), 10=995(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-722/585, 3-4=-319/255, 4-5=-438/523, 5-6=-424/183, 6-7=-281/173, 7-8=-733/220, 8-9=-1004/198, 9-10=-895/192
BOT CHORD 2-18=-598/671, 17-18=-598/671, 15-17=-207/278, 14-15=-359/443, 12-14=0/543, 11-12=-87/763
WEBS 3-17=-426/397, 4-17=-450/356, 4-15=-657/690, 5-15=-1470/703, 5-14=-352/976, 7-14=-539/252, 7-12=-117/573, 8-12=-412/213, 9-11=-66/741

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 2-6-6, Interior(1) 2-6-6 to 20-4-0, Exterior(2R) 20-4-0 to 24-4-6, Interior(1) 24-4-6 to 27-0-14, Exterior(2R) 27-0-14 to 31-1-5, Interior(1) 31-1-5 to 40-2-4 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=239, 15=391, 10=177.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | T20 | Piggyback Base | 1 | 1 | T28641065 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:06:14 2022 Page 1
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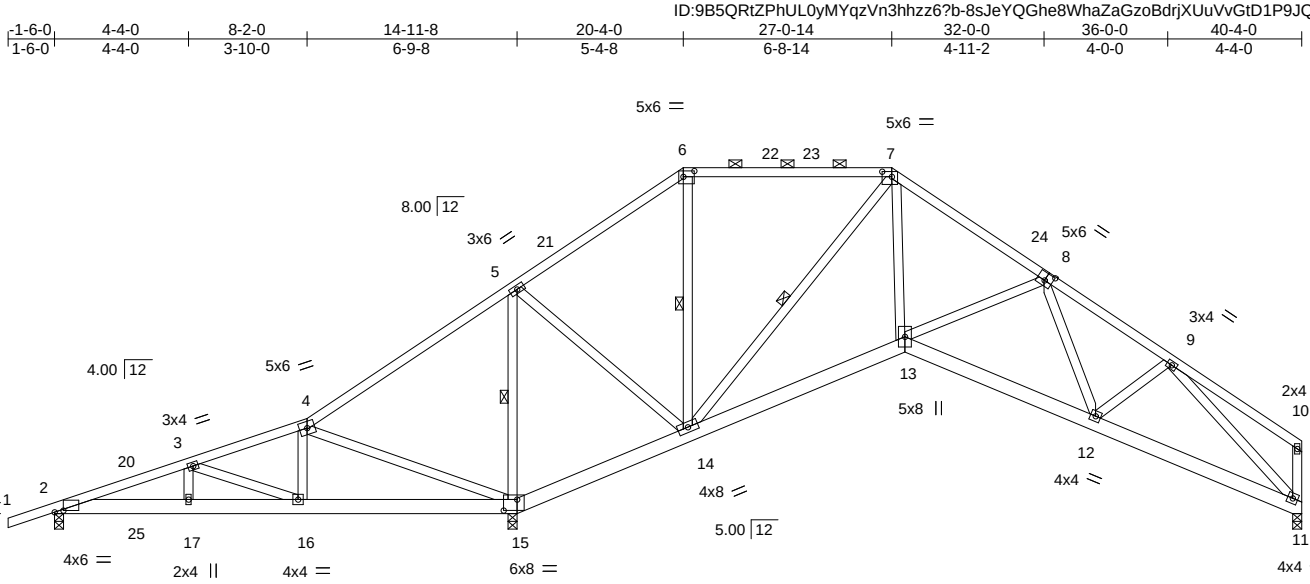


Plate Offsets (X,Y)-- [2:0-3-6,0-0-11], [6:0-4-4,0-2-4], [7:0-3-12,0-2-0], [8:0-3-0,0-3-0], [15:0-5-4,0-4-4]

| LOADING (psf) | | SPACING- 2-0-0 | | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.62 | Vert(LL) | -0.06 | 12-13 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.23 | Vert(CT) | -0.11 | 12-13 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.87 | Horz(CT) | 0.10 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 278 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 5-4-1 oc purlins, except end verticals, and 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 5-15, 6-14, 7-14

**REACTIONS.** (size) 2=0-3-8, 15=0-3-8, 11=0-3-8
Max Horz 2=254(LC 9)
Max Uplift 2=-232(LC 8), 15=-403(LC 12), 11=-164(LC 13)
Max Grav 2=355(LC 23), 15=2026(LC 1), 11=766(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-381/513, 3-4=-64/376, 4-5=-528/910, 7-8=-949/134, 8-9=-1171/263
BOT CHORD 2-17=-529/346, 16-17=-529/346, 15-16=-358/131, 14-15=-775/591, 13-14=-13/737, 12-13=-75/1034, 11-12=-157/903
WEBS 3-16=-419/394, 4-16=-462/356, 4-15=-531/689, 5-15=-1441/570, 5-14=-252/949, 6-14=-301/226, 7-14=-908/177, 7-13=-30/883, 8-13=-310/245, 9-11=-1189/200

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 2-6-6, Interior(1) 2-6-6 to 20-4-0, Exterior(2R) 20-4-0 to 24-4-6, Interior(1) 24-4-6 to 27-0-14, Exterior(2R) 27-0-14 to 31-1-5, Interior(1) 31-1-5 to 40-2-4 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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) Bearing at joint(s) 11 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=232, 15=403, 11=164.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



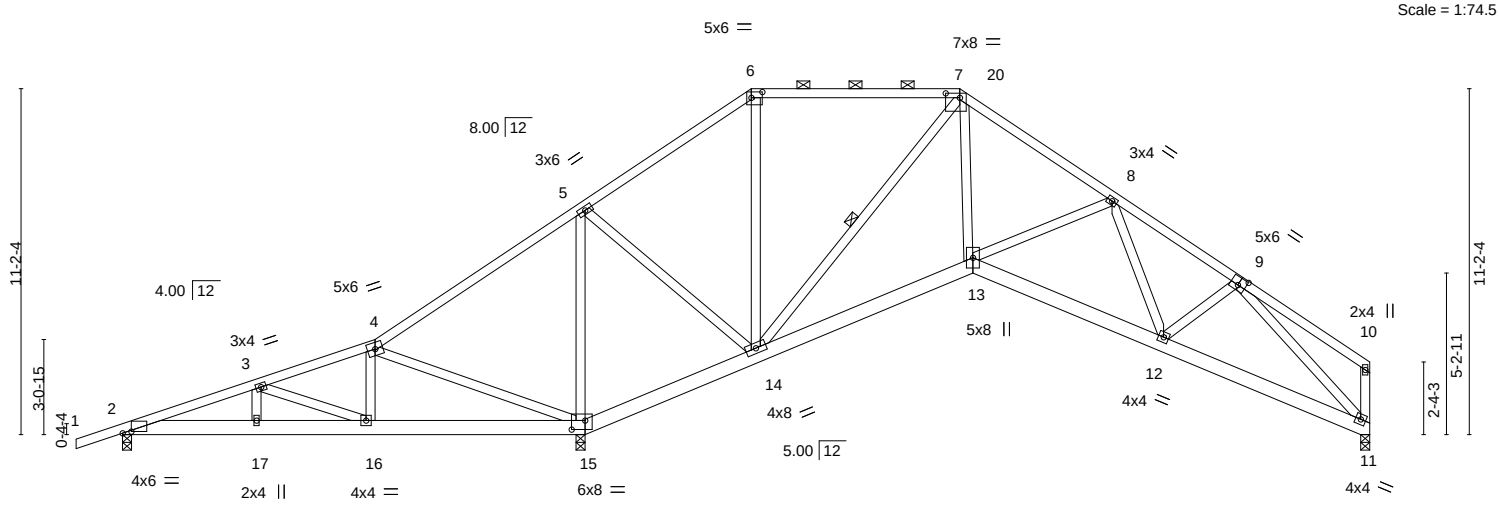
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | T21 | Piggyback Base Girder | 1 | 2 | T28641066 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:06:16 2022 Page 1
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-4ERPz6IxAmmPqskf5DE5w8cs?IXxLA3hcdvRFyyk00L

| 1-6-0 | 4-4-0 | 8-2-0 | 14-11-8 | 20-4-0 | 27-0-14 | 32-0-0 | 36-0-0 | 40-4-0 |
|---|---|---|---|---|---|---|---|---|
| 1-6-0 | 4-4-0 | 3-10-0 | 6-9-8 | 5-4-8 | 6-8-14 | 4-11-2 | 4-0-0 | 4-4-0 |

Scale = 1:74.5




| 4-4-0 | 8-2-0 | 14-9-12 | 14-11-8 | 20-4-0 | 27-6-0 | 33-8-0 | 40-4-0 |
|---|---|---|---|---|---|---|---|
| 4-4-0 | 3-10-0 | 6-7-12 | 0-1-12 | 5-4-8 | 7-2-0 | 6-2-0 | 6-8-0 |

Plate Offsets (X,Y)-- [2:0-3-7,0-0-11], [6:0-4-4,0-2-4], [7:0-5-8,0-1-12], [9:0-3-0,0-3-0], [15:0-5-4,0-3-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.45 | Vert(LL) | -0.11 | 12-13 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.47 | Vert(CT) | -0.20 | 12-13 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.70 | Horz(CT) | 0.16 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code | FBC2020/TPI2014 | Matrix-MS | | | | | | | Weight: 555 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

**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.): 6-7.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 7-14

**REACTIONS.** (size) 2=0-3-8, 15=0-3-8, 11=0-3-8
Max Horz 2=-675(LC 9)
Max Uplift 2=-329(LC 20), 15=-718(LC 8), 11=-620(LC 9)
Max Grav 2=17(LC 18), 15=3531(LC 1), 11=2644(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=0/1291, 3-4=0/1518, 4-5=-127/1808, 5-6=-307/244, 7-8=-3127/493, 8-9=-4052/992, 9-10=-370/211, 10-11=-437/176
BOT CHORD 2-17=-1216/582, 16-17=-1216/582, 15-16=-1470/631, 14-15=-1616/875, 13-14=0/2341, 12-13=-230/3526, 11-12=-537/3118
WEBS 3-16=-459/245, 4-16=-158/358, 4-15=-198/318, 5-15=-2756/400, 5-14=-153/2105, 7-14=-3144/368, 7-13=-416/3631, 8-13=-1296/698, 8-12=-465/668, 9-12=-26/662, 9-11=-4013/748

**NOTES-**
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
6) Provide adequate drainage to prevent water ponding.
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) 11 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=329, 15=718, 11=620.
11) Girder carries tie-in span(s): 7-0-0 from 27-6-0 to 40-4-0; 7-0-0 from 27-6-0 to 40-4-0
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

This item has been electronically signed and sealed by ORegan, Philip, PE using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022

Continued on page 2



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

**NOTES-**

13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 675 lb down and 210 lb up at 27-6-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-4=-54, 4-6=-54, 6-7=-54, 7-20=-54, 10-20=-146(F=-92), 2-15=-20, 13-15=-20, 11-13=-113(F=-92)
   Concentrated Loads (lb)
   Vert: 13=-675(F)

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | T22 | Piggyback Base Girder | 1 | 2 | T28641067 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:06:19 2022 Page 1
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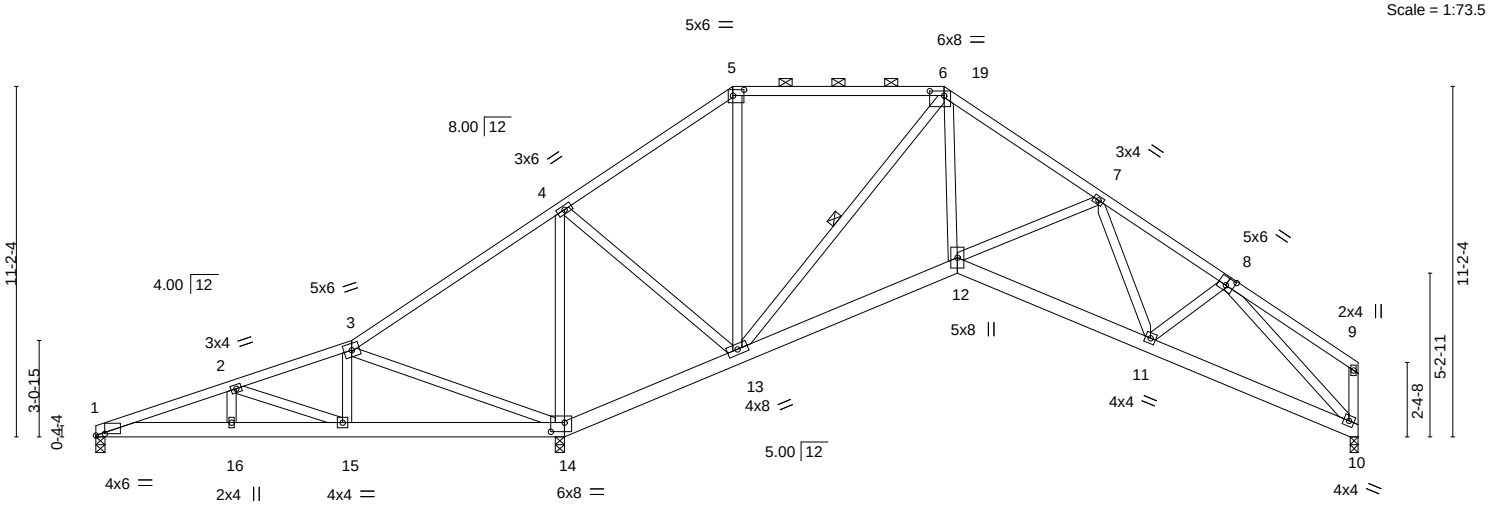
| 4-4-0 | 8-2-0 | 14-11-8 | 20-4-0 | 27-0-14 | 32-0-0 | 36-0-0 | 40-3-8 |
|---|---|---|---|---|---|---|---|
| 4-4-0 | 3-10-0 | 6-9-8 | 5-4-8 | 6-8-14 | 4-11-2 | 4-0-0 | 4-3-8 |

Scale = 1:73.5




| 4-4-0 | 8-2-0 | 14-8-0 | 14-11-8 | 20-4-0 | 27-6-0 | 33-8-0 | 40-3-8 |
|---|---|---|---|---|---|---|---|
| 4-4-0 | 3-10-0 | 6-6-0 | 0-3-8 | 5-4-8 | 7-2-0 | 6-2-0 | 6-7-8 |

Plate Offsets (X,Y)-- [1:0-3-7,0-0-11], [5:0-4-4,0-2-4], [6:0-5-8,0-1-12], [8:0-3-0,0-3-0], [14:0-5-4,0-3-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.45 | Vert(LL) | -0.11 | 11-12 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.46 | Vert(CT) | -0.19 | 11-12 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.68 | Horz(CT) | 0.16 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 550 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

**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.): 5-6.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 6-13

**REACTIONS.** (size) 1=0-3-8, 14=0-3-8, 10=0-3-0
Max Horz 1=-687(LC 4)
Max Uplift 1=-336(LC 20), 14=-706(LC 8), 10=-609(LC 9)
Max Grav 14=3475(LC 1), 10=2610(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=0/1234, 2-3=0/1467, 3-4=-122/1778, 4-5=-303/241, 6-7=-3036/469, 7-8=-3966/969, 8-9=-363/208, 9-10=-430/173
BOT CHORD 1-16=-1163/565, 15-16=-1163/565, 14-15=-1440/618, 13-14=-1596/872, 12-13=0/2270, 11-12=-213/3448, 10-11=-520/3046
WEBS 2-15=-488/270, 3-15=-164/360, 3-14=-207/315, 4-14=-2702/388, 4-13=-145/2057, 6-13=-3046/344, 6-12=-384/3502, 7-12=-1284/691, 7-11=-454/650, 8-11=-23/655, 8-10=-3935/729

**NOTES-**
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
6) Provide adequate drainage to prevent water ponding.
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) 10 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) 1=336, 14=706, 10=609.
11) Girder carries tie-in span(s): 7-0-0 from 27-6-0 to 40-3-8; 7-0-0 from 27-6-0 to 40-3-8
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022

Continued on page 2



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

**NOTES-**

13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 601 lb down and 189 lb up at 27-6-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-3=-54, 3-5=-54, 5-6=-54, 6-19=-54, 9-19=-147(F=-93), 1-14=-20, 12-14=-20, 10-12=-113(F=-93)
   Concentrated Loads (lb)
   Vert: 12=-601(B)

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | T23 | Hip | 1 | 1 | T28641068 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:06:20 2022 Page 1
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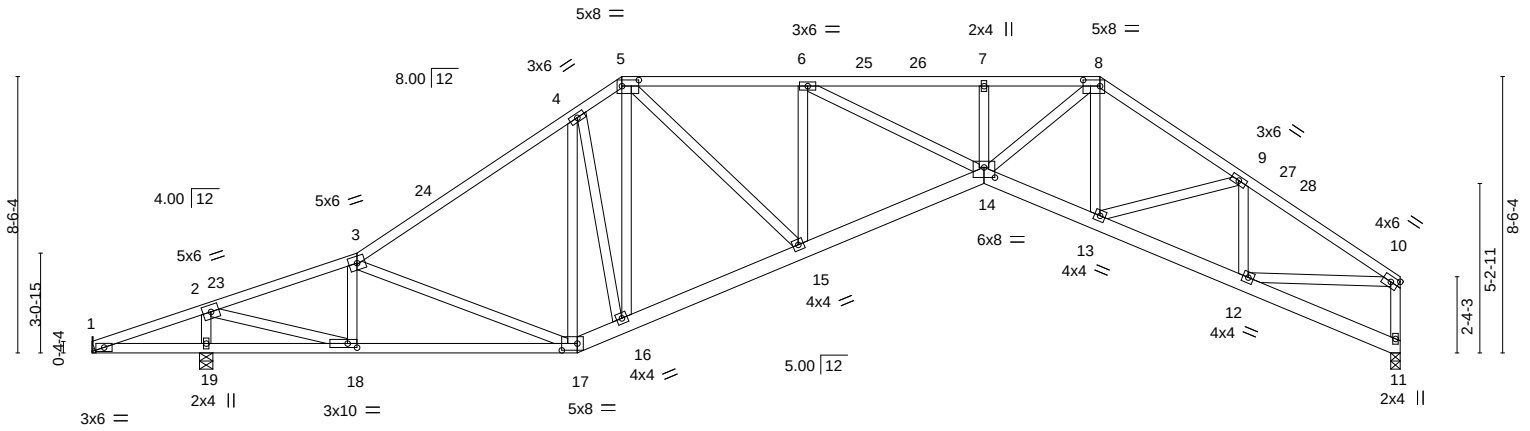
| 3-6-4 | 8-2-0 | 14-11-8 | 16-4-0 | 21-11-0 | 27-6-0 | 31-0-14 | 35-6-0 | 40-4-0 |
|---|---|---|---|---|---|---|---|---|
| 3-6-4 | 4-7-12 | 6-9-8 | 1-4-8 | 5-7-0 | 5-7-0 | 3-6-14 | 4-5-2 | 4-10-0 |

Scale = 1:71.0




| 3-6-4 | 8-2-0 | 14-11-8 | 16-4-0 | 21-11-0 | 27-6-0 | 31-0-14 | 35-6-0 | 40-4-0 |
|---|---|---|---|---|---|---|---|---|
| 3-6-4 | 4-7-12 | 6-9-8 | 1-4-8 | 5-7-0 | 5-7-0 | 3-6-14 | 4-5-2 | 4-10-0 |

Plate Offsets (X,Y)-- [5:0-6-4,0-2-4], [8:0-6-4,0-2-4], [14:0-4-0,0-3-12], [17:0-5-12,0-2-8], [18:0-3-8,0-1-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.59 | Vert(LL) | -0.24 | 14 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.57 | Vert(CT) | -0.45 | 14-15 | >979 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.79 | Horz(CT) | 0.30 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 269 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2 *Except*
1-17: 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
2-18: 2x4 SP No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 2-8-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 5-1-10 oc bracing.

**REACTIONS.** (size) 1=Mechanical, 11=0-3-8, 19=0-4-15
Max Horz 1=186(LC 9)
Max Uplift 1=-359(LC 1), 11=-267(LC 13), 19=-483(LC 12)
Max Grav 1=103(LC 12), 11=1310(LC 1), 19=2024(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-425/1305, 2-3=-1567/423, 3-4=-1700/528, 4-5=-1730/677, 5-6=-2262/745, 6-7=-3661/1075, 7-8=-3661/1075, 8-9=-2541/755, 9-10=-2058/597, 10-11=-1266/390
BOT CHORD 1-19=-1197/319, 18-19=-1197/319, 17-18=-428/1477, 16-17=-394/1475, 15-16=-351/1495, 14-15=-589/2457, 13-14=-490/2208, 12-13=-488/1821
WEBS 2-19=-1880/588, 2-18=-760/2737, 3-18=-626/259, 4-17=-469/160, 4-16=-128/274, 5-15=-303/1243, 6-15=-1073/330, 6-14=-372/1576, 8-14=-536/2086, 9-13=-166/467, 10-12=-426/1620, 9-12=-657/234

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 4-0-6, Interior(1) 4-0-6 to 16-4-0, Exterior(2R) 16-4-0 to 21-11-0, Interior(1) 21-11-0 to 31-0-14, Exterior(2R) 31-0-14 to 36-9-6, Interior(1) 36-9-6 to 40-2-4 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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) Bearing at joint(s) 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) 1=359, 11=267, 19=483.

This item has been electronically signed and sealed by ORegan, Philip, PE using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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Date:

August 29,2022




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. T28641069 |
|---|---|---|---|---|---|
| 3235278 | T24 | Hip | 1 | 1 | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:06:22 2022 Page 1
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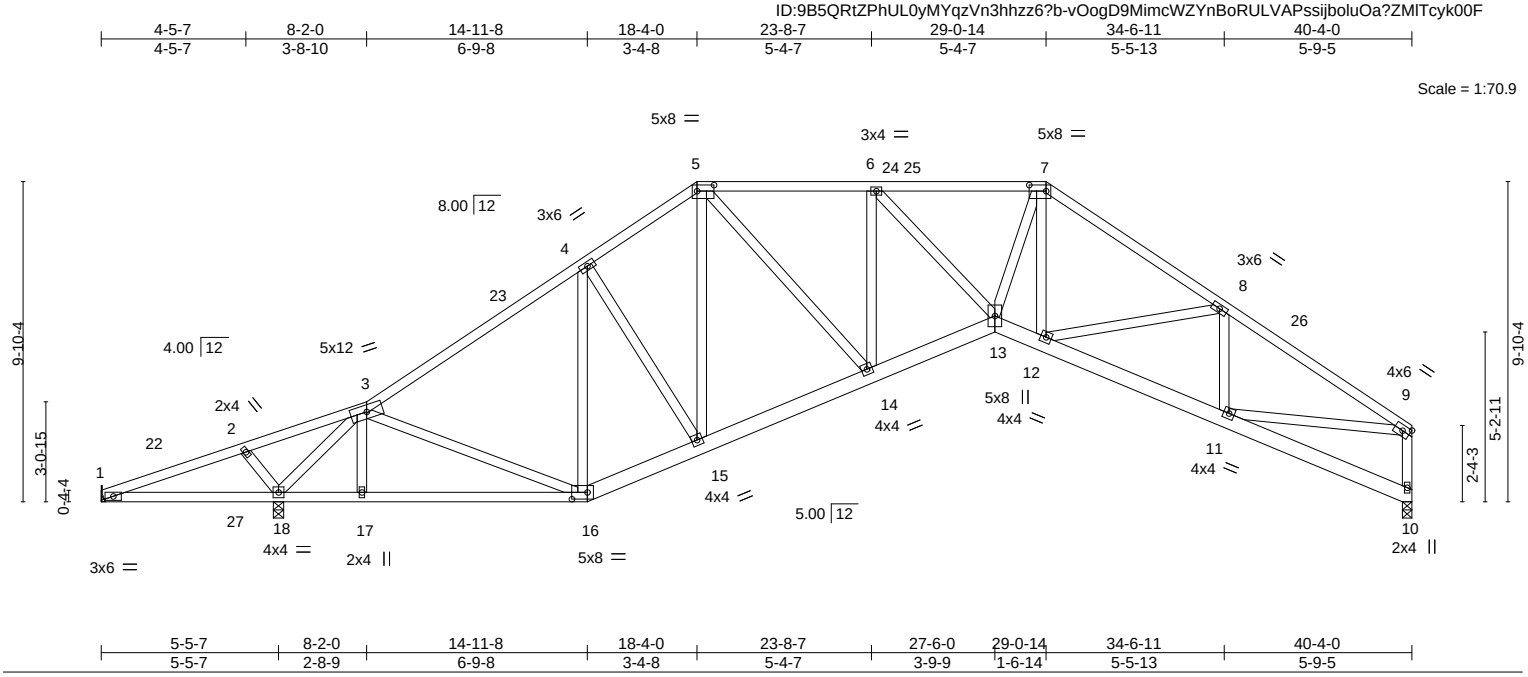


Plate Offsets (X,Y)-- [5:0-6-4,0-2-4], [7:0-6-4,0-2-4], [16:0-5-12,0-2-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.57 | Vert(LL) | -0.14 | 13 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.44 | Vert(CT) | -0.25 | 13 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.65 | Horz(CT) | 0.19 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 271 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2 *Except*
1-16: 2x4 SP No.2
WEBS 2x4 SP No.3

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 3-5-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 1-18.

**REACTIONS.** (size) 1=Mechanical, 10=0-3-8, 18=0-3-13
Max Horz 1=215(LC 9)
Max Uplift 1=-176(LC 19), 10=-253(LC 13), 18=-444(LC 12)
Max Grav 1=49(LC 12), 10=1233(LC 1), 18=1871(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-246/833, 2-3=-273/977, 3-4=-1379/432, 4-5=-1477/555, 5-6=-1800/634, 6-7=-2251/700, 7-8=-2374/696, 8-9=-2114/606, 9-10=-1189/373
BOT CHORD 1-18=-746/165, 17-18=-195/604, 16-17=-197/600, 15-16=-307/1174, 14-15=-261/1278, 13-14=-420/1951, 12-13=-400/2021, 11-12=-487/1864
WEBS 2-18=-260/162, 3-18=-2152/541, 3-16=-140/512, 4-16=-555/201, 4-15=-71/280, 6-14=-832/250, 6-13=-107/676, 7-13=-228/1022, 8-12=-161/313, 8-11=-516/204, 9-11=-421/1646, 5-14=-221/945

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 4-0-6, Interior(1) 4-0-6 to 18-4-0, Exterior(2R) 18-4-0 to 24-0-7, Interior(1) 24-0-7 to 29-0-14, Exterior(2R) 29-0-14 to 34-6-11, Interior(1) 34-6-11 to 40-2-4 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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) Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=176, 10=253, 18=444.

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | T25 | Hip | 1 | 1 | T28641070 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:06:24 2022 Page 1
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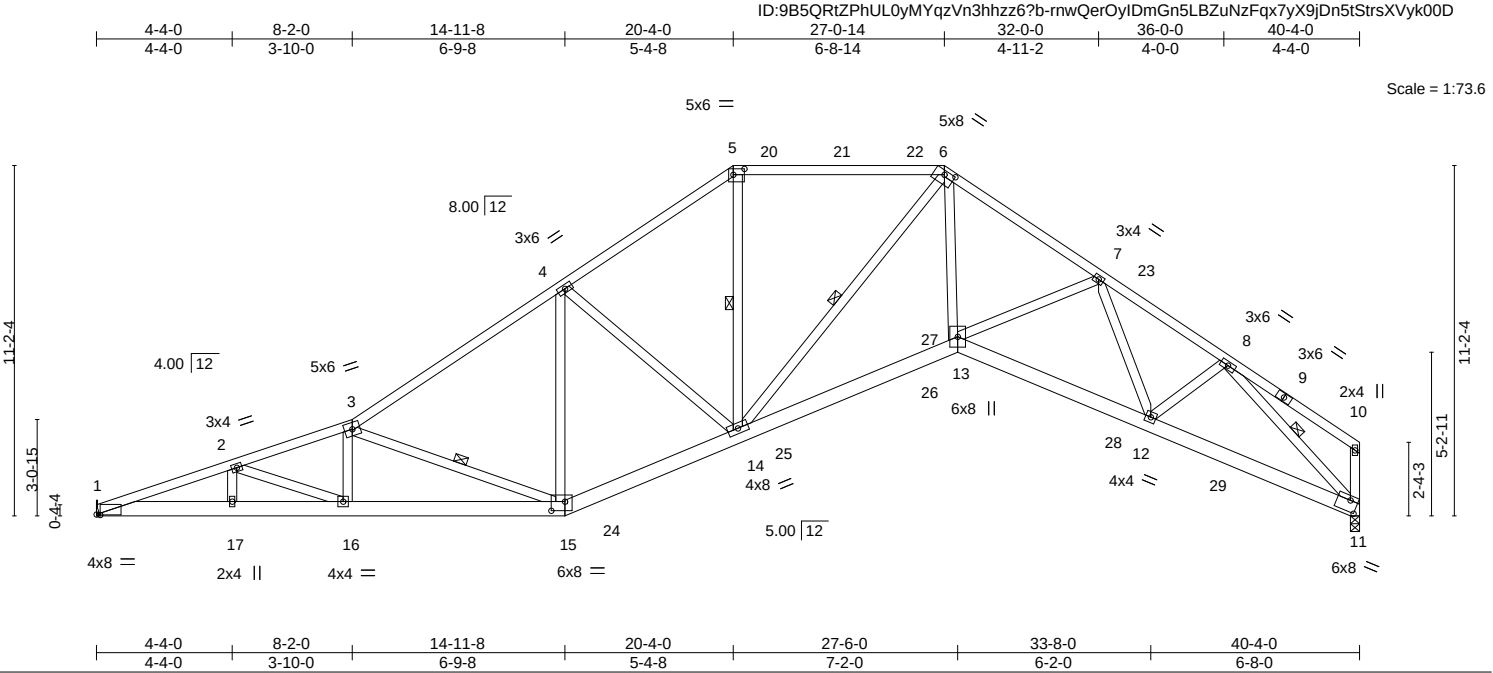


Plate Offsets (X,Y)-- [1:0-1-7,0-0-3], [5:0-4-4,0-2-4], [6:0-4-0,0-1-9], [11:0-3-0,0-4-4], [15:0-5-4,0-3-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.84 | Vert(LL) | 0.36 | 15-16 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.86 | Vert(CT) | -0.48 | 15-16 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.76 | Horz(CT) | 0.31 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 275 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

**BRACING-**
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 3-10-6 oc bracing.
WEBS 1 Row at midpt 3-15, 5-14, 6-14, 8-11

**REACTIONS.** (size) 1=Mechanical, 11=0-3-8
Max Horz 1=243(LC 9)
Max Uplift 1=-436(LC 8), 11=-381(LC 8)
Max Grav 1=1485(LC 1), 11=1485(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-4113/3462, 2-3=-3808/3197, 3-4=-2452/1911, 4-5=-2212/1710, 5-6=-1773/1490, 6-7=-3021/2083, 7-8=-2671/1869
BOT CHORD 1-17=-3350/3881, 16-17=-3350/3881, 15-16=-3048/3581, 14-15=-1642/2160, 13-14=-1412/2504, 12-13=-1535/2560, 11-12=-1212/1904
WEBS 2-16=-316/319, 3-16=-442/334, 3-15=-1733/1636, 4-14=-311/443, 5-14=-769/868, 6-14=-869/373, 6-13=-1270/2005, 7-12=-525/259, 8-12=-365/566, 8-11=-2601/1699

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-12 to 4-4-0, Interior(1) 4-4-0 to 20-4-0, Exterior(2R) 20-4-0 to 26-0-7, Interior(1) 26-0-7 to 27-0-14, Exterior(2R) 27-0-14 to 32-9-6, Interior(1) 32-9-6 to 40-2-4 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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) Bearing at joint(s) 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) 1=436, 11=381.

This item has been electronically signed and sealed by ORegan, Philip, PE using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | T26 | Piggyback Base | 3 | 1 | T28641071 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:06:25 2022 Page 1
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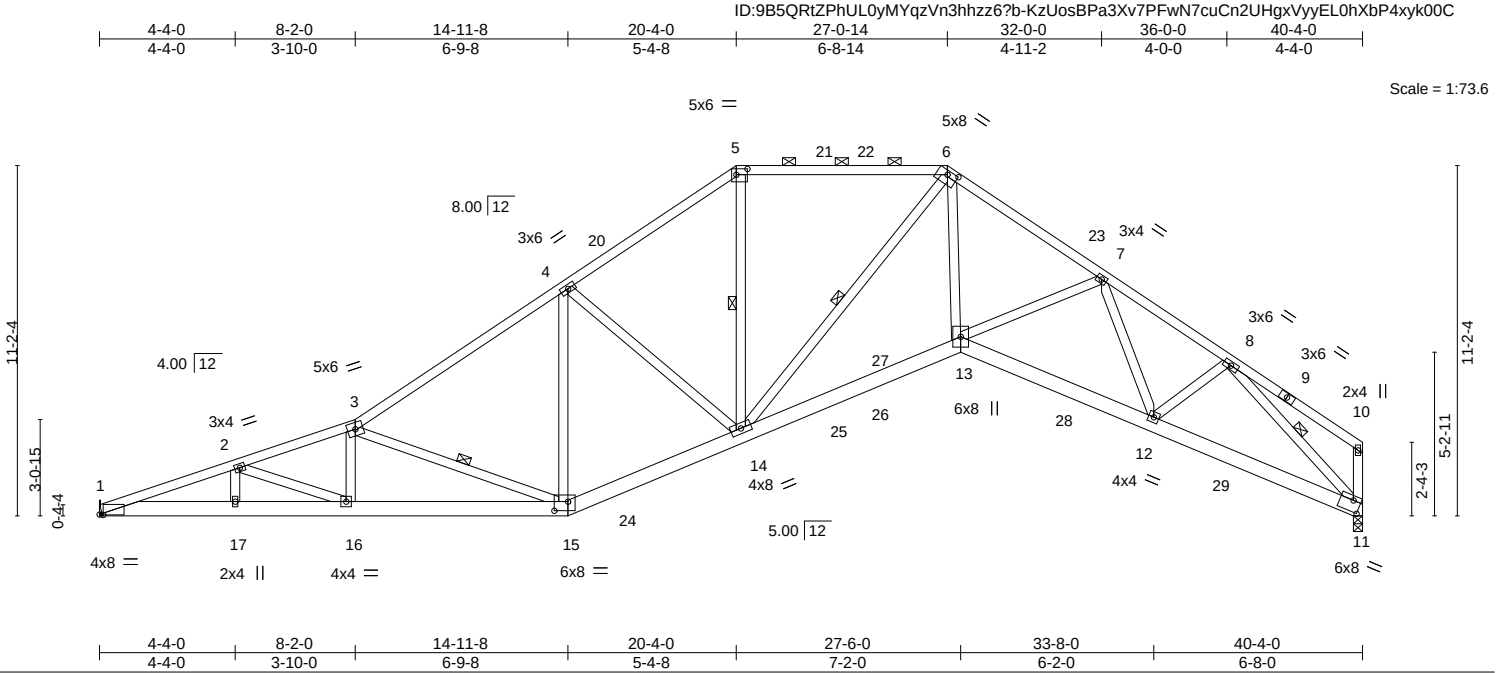


Plate Offsets (X,Y)-- [1:0-1-7,0-0-3], [5:0-4-4,0-2-4], [6:0-4-0,0-1-9], [11:0-3-0,0-4-4], [15:0-5-4,0-3-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.90 | Vert(LL) | 0.36 | 15-16 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.86 | Vert(CT) | -0.48 | 15-16 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.76 | Horz(CT) | 0.31 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 275 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

**BRACING-**
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-2-0 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 3-10-6 oc bracing.
WEBS 1 Row at midpt 3-15, 5-14, 6-14, 8-11

**REACTIONS.** (size) 1=Mechanical, 11=0-3-8
Max Horz 1=243(LC 9)
Max Uplift 1=-436(LC 8), 11=-381(LC 8)
Max Grav 1=1485(LC 1), 11=1485(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-4113/3464, 2-3=-3808/3188, 3-4=-2452/1904, 4-5=-2212/1709, 5-6=-1773/1488, 6-7=-3021/2091, 7-8=-2671/1871
BOT CHORD 1-17=-3346/3881, 16-17=-3346/3881, 15-16=-3043/3581, 14-15=-1639/2160, 13-14=-1422/2504, 12-13=-1531/2560, 11-12=-1208/1904
WEBS 2-16=-316/319, 3-16=-442/334, 3-15=-1733/1637, 4-14=-311/427, 5-14=-778/868, 6-14=-869/366, 6-13=-1277/2005, 7-12=-525/259, 8-12=-364/566, 8-11=-2601/1696

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-12 to 4-4-0, Interior(1) 4-4-0 to 20-4-0, Exterior(2R) 20-4-0 to 24-4-6, Interior(1) 24-4-6 to 27-0-14, Exterior(2R) 27-0-14 to 31-1-5, Interior(1) 31-1-5 to 40-2-4 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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) Bearing at joint(s) 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) 1=436, 11=381.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

This item has been electronically signed and sealed by ORegan, Philip, PE using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. T28641072 |
|---|---|---|---|---|---|
| 3235278 | T27 | Piggyback Base | 3 | 1 | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:06:27 2022 Page 1
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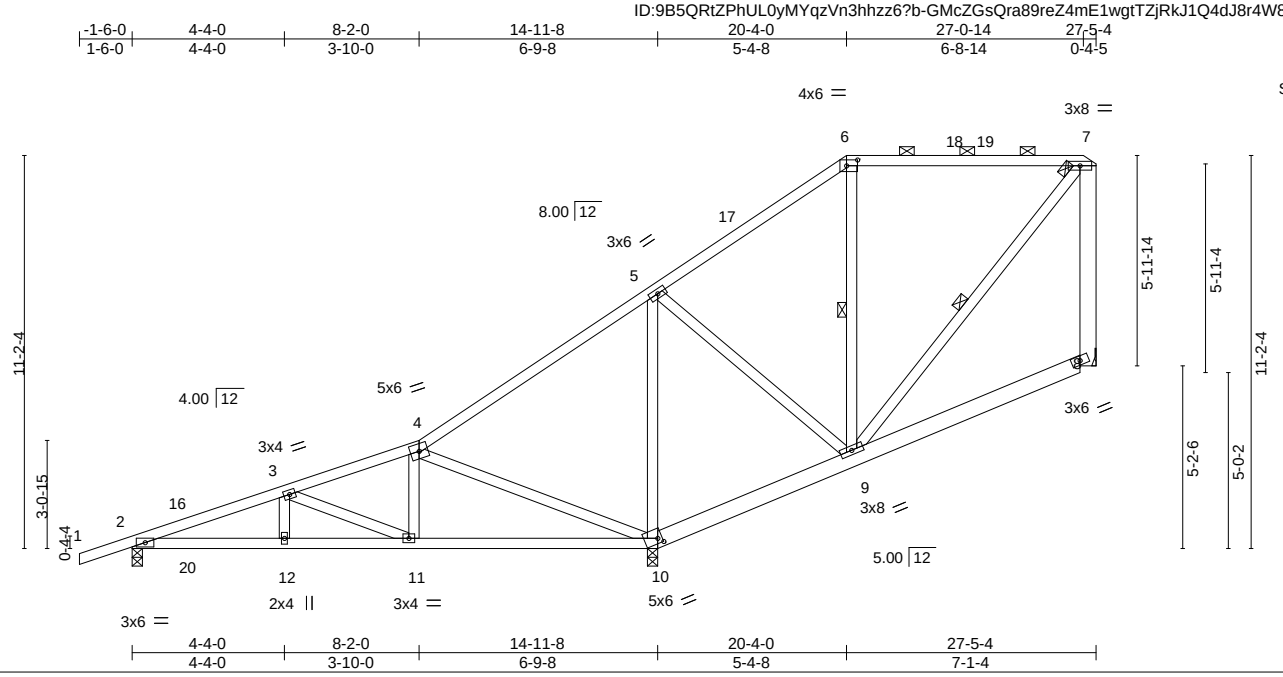


Plate Offsets (X,Y)-- [6:0-3-12,0-2-0], [10:0-1-8,0-1-12]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.57 | Vert(LL) | 0.13 | 10-11 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.37 | Vert(CT) | -0.13 | 10-11 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.91 | Horz(CT) | -0.01 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 184 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
8-10: 2x6 SP No.2
WEBS 2x4 SP No.3 *Except*
7-8: 2x6 SP 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.): 6-7.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 6-9, 7-9

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8, 8=Mechanical
Max Horz 2=388(LC 12)
Max Uplift 2=-206(LC 8), 10=-373(LC 9), 8=-69(LC 9)
Max Grav 2=448(LC 1), 10=1426(LC 1), 8=293(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-654/393, 3-4=-289/70, 4-5=-594/531
BOT CHORD 2-12=-716/601, 11-12=-716/601, 10-11=-328/221, 9-10=-424/327
WEBS 3-11=-395/393, 4-11=-461/355, 4-10=-618/644, 5-10=-912/573, 5-9=-262/483, 6-9=-311/251

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 20-4-0, Exterior(2R) 20-4-0 to 23-4-0, Interior(1) 23-4-0 to 27-2-8 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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 100 lb uplift at joint(s) 8 except (jt=lb) 2=206, 10=373.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

This item has been electronically signed and sealed by ORegan, Philip, PE using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | T28 | Common | 3 | 1 | T28641073 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:06:29 2022 Page 1
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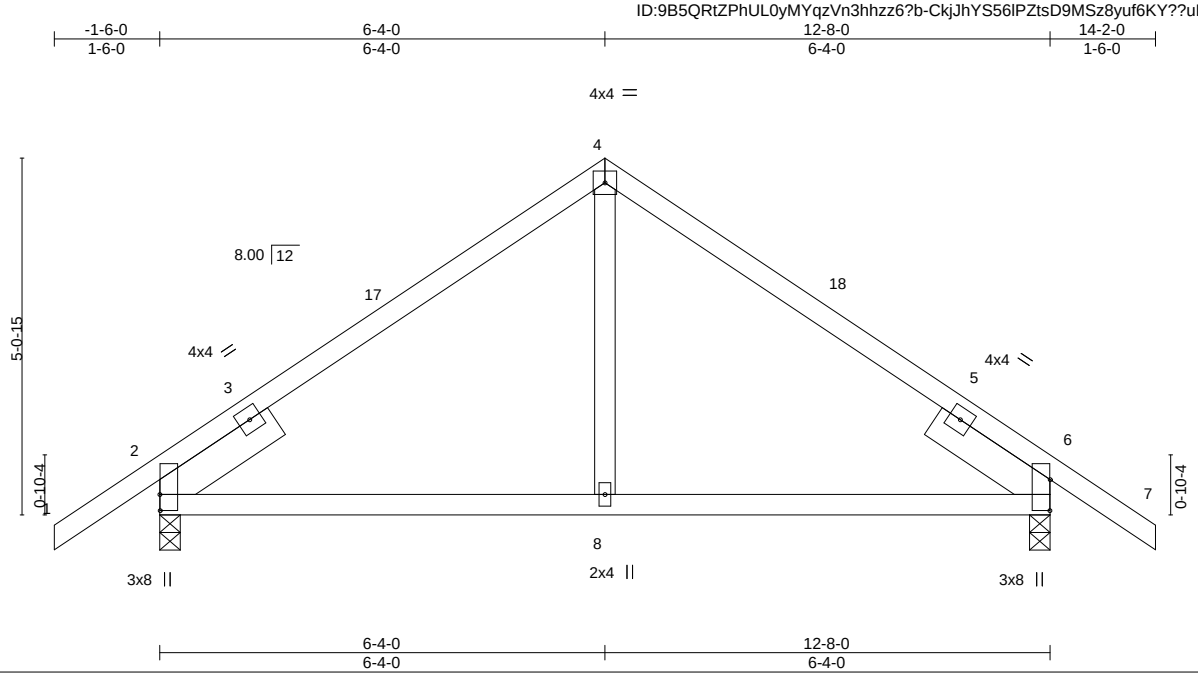


Plate Offsets (X,Y)-- [2:0-2-12,0-0-1], [6:0-5-5,0-0-1]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.35 | Vert(LL) | 0.05 | 8-11 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.34 | Vert(CT) | -0.07 | 8-11 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.10 | Horz(CT) | 0.02 | 2 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 63 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 1-11-8, Right 2x6 SP No.2 1-11-8

**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) 2=0-3-8, 6=0-3-8
Max Horz 2=-115(LC 10)
Max Uplift 2=-123(LC 12), 6=-123(LC 13)
Max Grav 2=550(LC 1), 6=550(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-419/161, 4-6=-419/161
BOT CHORD 2-8=-33/346, 6-8=-33/346
WEBS 4-8=-10/262

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 6-4-0, Exterior(2R) 6-4-0 to 9-4-0, Interior(1) 9-4-0 to 14-2-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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=123, 6=123.

This item has been electronically signed and sealed by ORegan, Philip, PE using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | T28G | Common Supported Gable | 1 | 1 | T28641074 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:06:30 2022 Page 1
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-gxHhvuTjt3XQV0oLv9UNU5BLbyPydfzlqoIAl8yk007

-1-6-0 6-4-0 12-8-0 14-2-0
1-6-0 6-4-0 6-4-0 1-6-0

Scale: 3/8"=1'

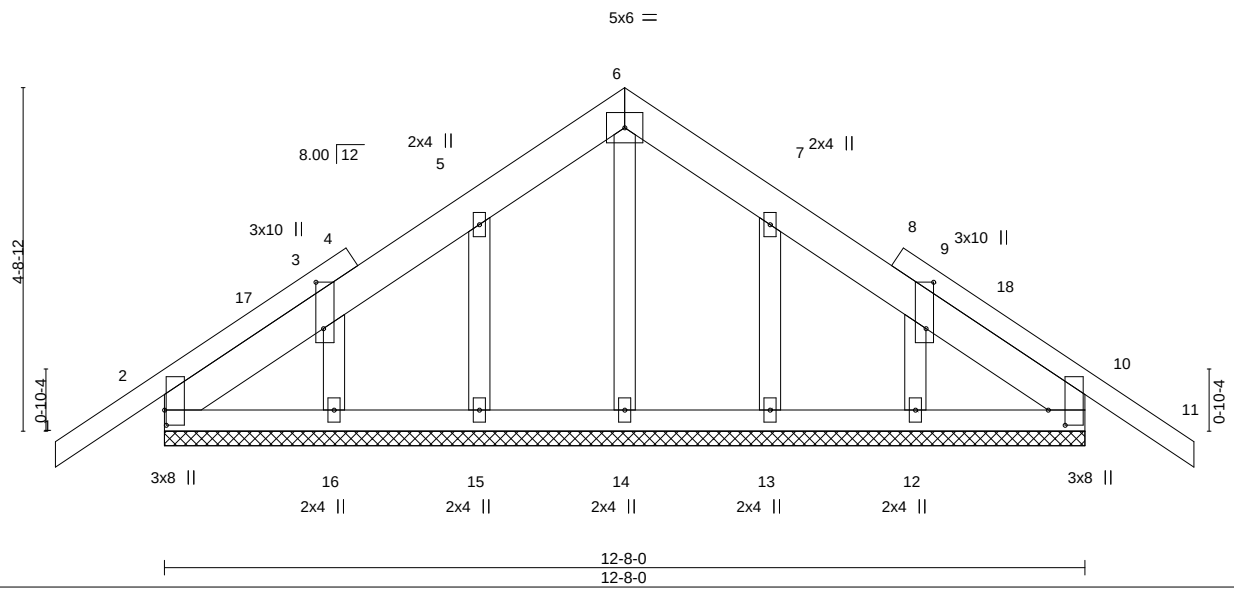


Plate Offsets (X,Y)-- [2:0-2-8,0-0-5], [3:0-7-11,0-1-4], [9:0-7-11,0-1-4], [10:0-2-8,0-2-13]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.12 | Vert(LL) | -0.01 | 11 | n/r | 120 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.04 | Vert(CT) | -0.01 | 11 | n/r | 120 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.03 | Horz(CT) | 0.00 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-S | | | | | | | Weight: 87 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x6 SP No.2 *Except*
1-4,8-11: 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3

**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 12-8-0.
(lb) - Max Horz 2=-105(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 10, 15, 16, 13, 12
Max Grav All reactions 250 lb or less at joint(s) 2, 10, 14, 15, 16, 13, 12

**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=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-6-0 to 1-6-0, Exterior(2N) 1-6-0 to 6-4-0, Corner(3R) 6-4-0 to 9-4-0, Exterior(2N) 9-4-0 to 14-2-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10, 15, 16, 13, 12.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | T29 | Common | 4 | 1 | T28641075 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:06:32 2022 Page 1
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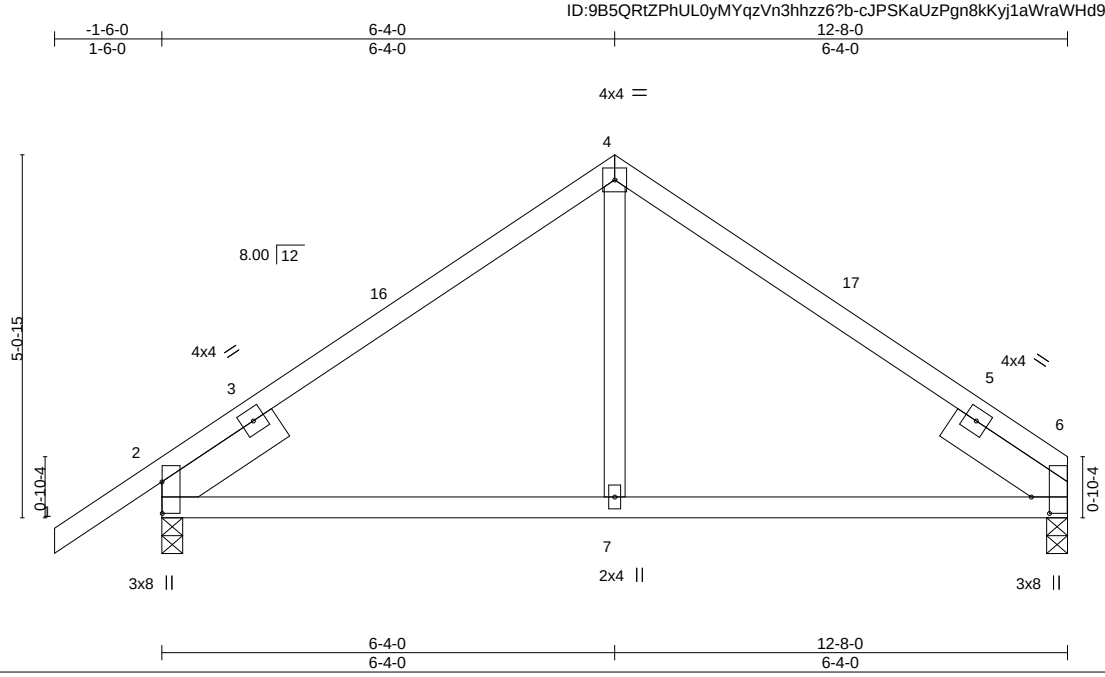


Plate Offsets (X,Y)-- [2:0-5-5,0-0-1], [6:0-2-12,0-3-1]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.38 | Vert(LL) | -0.05 | 7-10 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.34 | Vert(CT) | -0.08 | 7-10 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.10 | Horz(CT) | 0.02 | 6 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 60 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 1-11-8, Right 2x6 SP No.2 1-11-8

**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) 6=0-3-8, 2=0-3-8
Max Horz 2=108(LC 11)
Max Uplift 6=-90(LC 13), 2=-124(LC 12)
Max Grav 6=464(LC 1), 2=554(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-447/165, 4-6=-426/167
BOT CHORD 2-7=-49/350, 6-7=-49/350
WEBS 4-7=-15/264

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 6-4-0, Exterior(2R) 6-4-0 to 9-4-0, Interior(1) 9-4-0 to 12-8-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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) 6 except (jt=lb) 2=124.

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Philip J. O'Regan PE No.58126
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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | T30 | Roof Special | 1 | 1 | T28641076 |
| | | | | | Job Reference (optional) |

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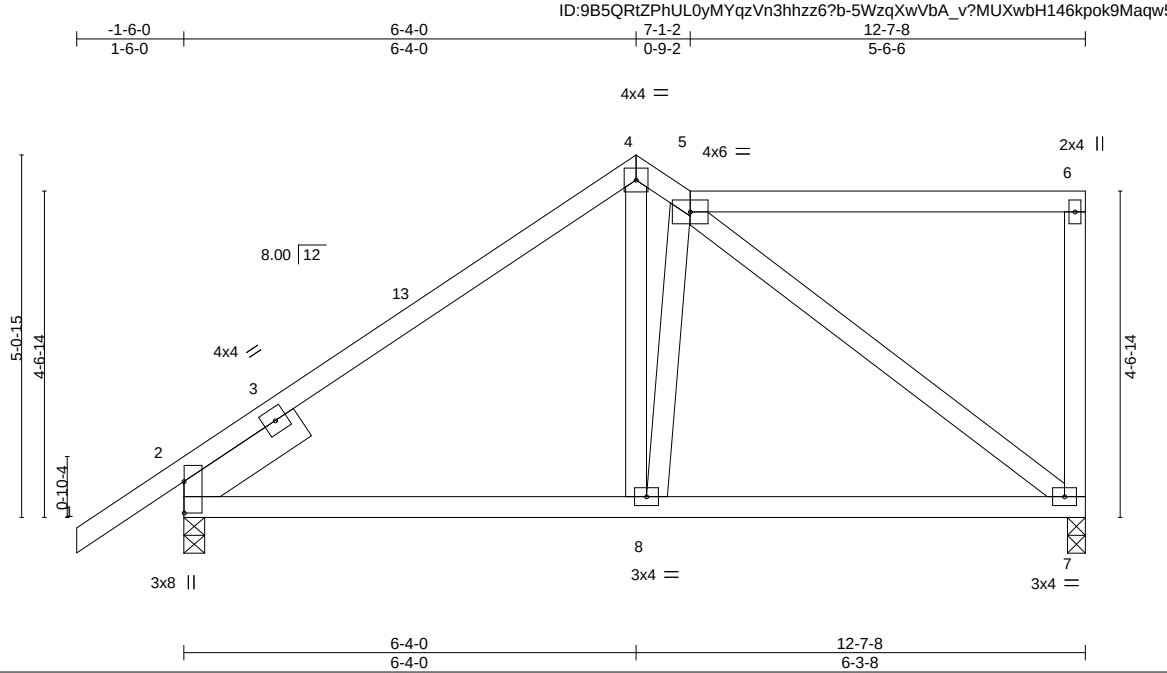


Plate Offsets (X,Y)-- [2:0-5-5,0-0-1]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.32 | Vert(LL) | 0.05 | 8-11 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.36 | Vert(CT) | -0.06 | 8-11 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.39 | Horz(CT) | -0.02 | 2 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 76 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 1-11-8

**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) 2=0-3-8, 7=0-3-0
Max Horz 2=165(LC 12)
Max Uplift 2=-108(LC 12), 7=-112(LC 13)
Max Grav 2=548(LC 1), 7=457(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-407/111, 4-5=-403/142
BOT CHORD 2-8=-135/331, 7-8=-137/353
WEBS 4-8=-45/323, 5-7=-429/170

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 6-4-0, Exterior(2E) 6-4-0 to 7-1-2, Interior(1) 7-1-2 to 12-5-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=108, 7=112.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. T28641077 |
|---|---|---|---|---|---|
| 3235278 | T31 | Half Hip | 1 | 1 | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:06:34 2022 Page 1
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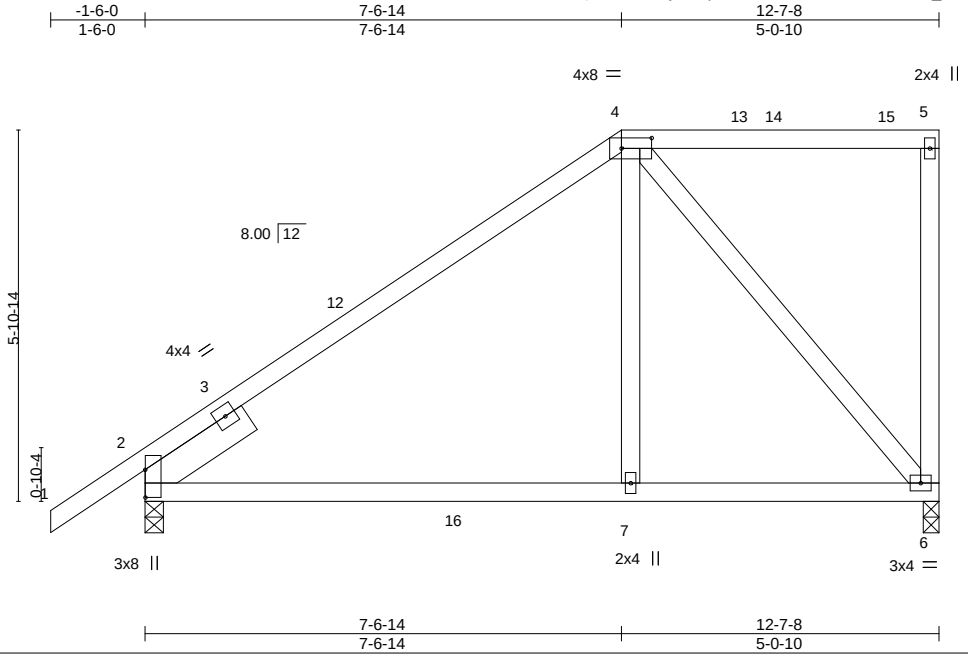


Plate Offsets (X,Y)-- [2:0-5-5,0-0-1], [4:0-5-12,0-2-0]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.53 | Vert(LL) | 0.12 | 7-10 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.53 | Vert(CT) | -0.20 | 7-10 | >763 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.54 | Horz(CT) | 0.04 | 2 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 74 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 1-11-8

**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) 2=0-3-8, 6=0-3-0
Max Horz 2=204(LC 12)
Max Uplift 2=-112(LC 12), 6=-133(LC 12)
Max Grav 2=612(LC 19), 6=510(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-413/75
BOT CHORD 2-7=-123/341, 6-7=-123/350
WEBS 4-7=-3/347, 4-6=-532/187

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 7-6-14, Exterior(2R) 7-6-14 to 11-9-13, Interior(1) 11-9-13 to 12-5-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=112, 6=133.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. T28641078 |
|---|---|---|---|---|---|
| 3235278 | T32 | Half Hip | 1 | 1 | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:06:35 2022 Page 1
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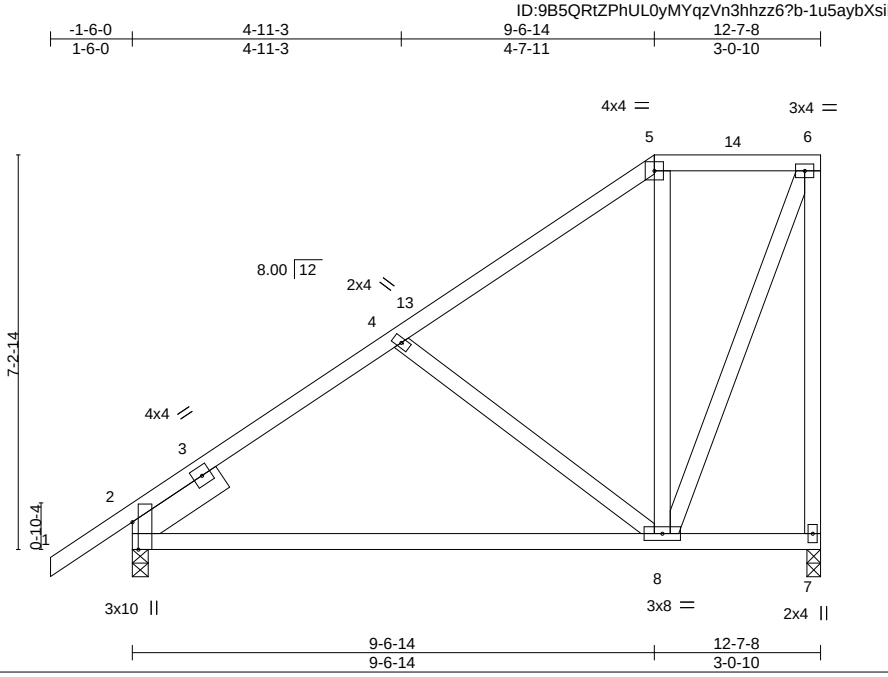


Plate Offsets (X,Y)-- [2:0-6-1,Edge]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.36 | Vert(LL) | -0.15 | 8-11 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.60 | Vert(CT) | -0.29 | 8-11 | >509 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.20 | Horz(CT) | 0.02 | 2 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 87 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 1-11-8

**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=0-3-0, 2=0-3-8
Max Horz 2=250(LC 12)
Max Uplift 7=-169(LC 12), 2=-91(LC 12)
Max Grav 7=457(LC 1), 2=548(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-743/66, 4-5=-279/28, 6-7=-472/182
BOT CHORD 2-8=-211/377
WEBS 4-8=-276/186, 6-8=-169/436

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 9-6-14, Exterior(2E) 9-6-14 to 12-5-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 7=169.

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Date:

August 29,2022



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. T28641079 |
|---|---|---|---|---|---|
| 3235278 | T33 | Half Hip | 1 | 1 | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:06:36 2022 Page 1
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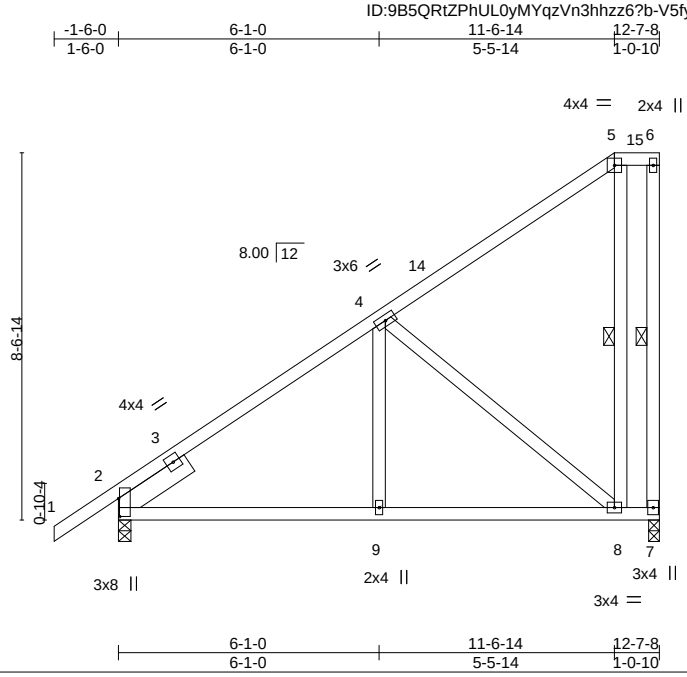


Plate Offsets (X,Y)-- [2:0-5-1,0-0-5]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.46 | Vert(LL) | 0.07 | 8-9 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.48 | Vert(CT) | -0.14 | 8-9 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.48 | Horz(CT) | -0.01 | 2 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 89 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 1-11-8

**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 6-7, 5-8

**REACTIONS.** (size) 7=0-3-0, 2=0-3-8
Max Horz 2=296(LC 12)
Max Uplift 7=-211(LC 12), 2=-64(LC 12)
Max Grav 7=457(LC 1), 2=548(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-384/14
BOT CHORD 2-9=-201/392, 8-9=-201/392
WEBS 4-9=-11/282, 4-8=-478/247

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 11-6-14, Exterior(2E) 11-6-14 to 12-5-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 7=211.

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | T34 | Monopitch | 6 | 1 | T28641080 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:06:37 2022 Page 1
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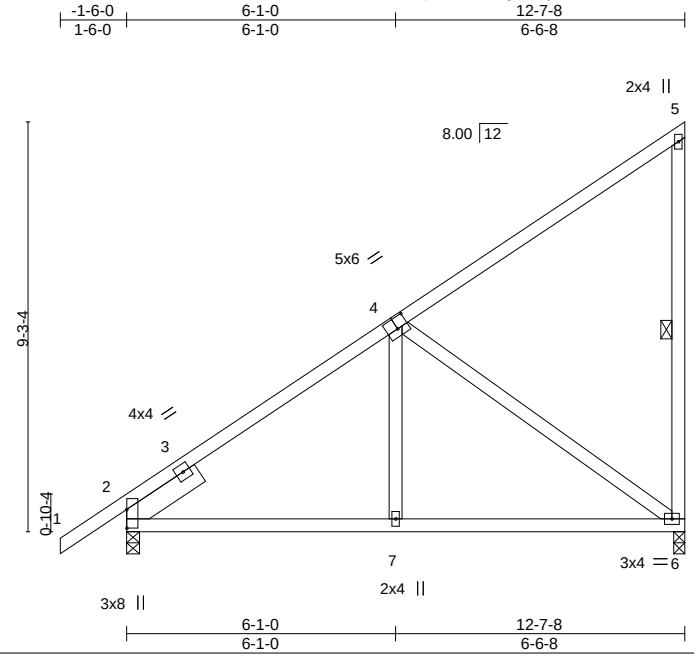


Plate Offsets (X,Y)-- [2:0-5-1,0-0-1], [4:0-3-0,0-3-0]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.43 | Vert(LL) | -0.05 | 6-7 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.38 | Vert(CT) | -0.10 | 6-7 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.55 | Horz(CT) | -0.01 | 2 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 79 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 1-11-8

**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 5-6

**REACTIONS.** (size) 2=0-3-8, 6=0-3-0
Max Horz 2=316(LC 12)
Max Uplift 2=-51(LC 12), 6=-231(LC 12)
Max Grav 2=548(LC 1), 6=482(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-394/0
BOT CHORD 2-7=-204/393, 6-7=-204/394
WEBS 4-7=0/275, 4-6=-473/245

**NOTES-**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 12-5-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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) 2 except (jt=lb) 6=231.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | T35 | Monopitch Girder | 1 | 2 | T28641081 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:06:39 2022 Page 1
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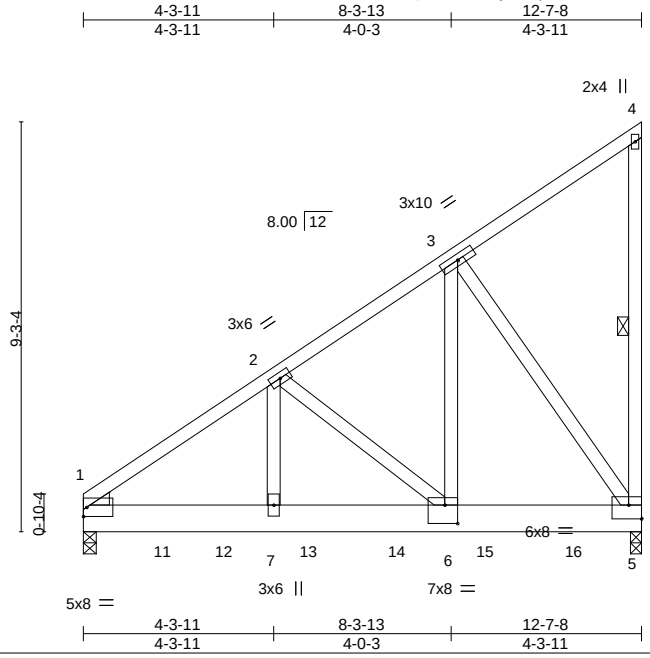


Plate Offsets (X,Y)-- [5:Edge,0-3-12], [6:0-3-8,0-5-0]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.24 | Vert(LL) | -0.04 | 6-7 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.22 | Vert(CT) | -0.07 | 6-7 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.68 | Horz(CT) | 0.01 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 209 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SP No.3
WEDGE
Left: 2x4 SP No.3

**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 4-5

**REACTIONS.** (size) 1=0-3-8, 5=0-3-0
Max Horz 1=286(LC 23)
Max Uplift 1=-704(LC 8), 5=-1001(LC 8)
Max Grav 1=2458(LC 1), 5=3141(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-3562/1106, 2-3=-2192/553
BOT CHORD 1-7=-1140/2899, 6-7=-1140/2899, 5-6=-599/1803
WEBS 2-7=-656/1543, 2-6=-1474/697, 3-6=-1052/3536, 3-5=-3127/1037

**NOTES-**
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 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) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=704, 5=1001.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 83 lb down at 1-1-13, 157 lb down at 3-1-13, 1798 lb down and 960 lb up at 5-0-12, 1034 lb down and 198 lb up at 7-0-12, and 1064 lb down and 221 lb up at 9-0-12, and 700 lb down and 175 lb up at 11-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

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MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022

Continued on page 2



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-4=-54, 5-8=-20
   Concentrated Loads (lb)
   Vert: 11=-83(B) 12=-157(B) 13=-1798(B) 14=-940(B) 15=-940(B) 16=-608(B)

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. T28641082 |
|---|---|---|---|---|---|
| 3235278 | T36 | Hip Girder | 1 | 1 | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:06:41 2022 Page 1
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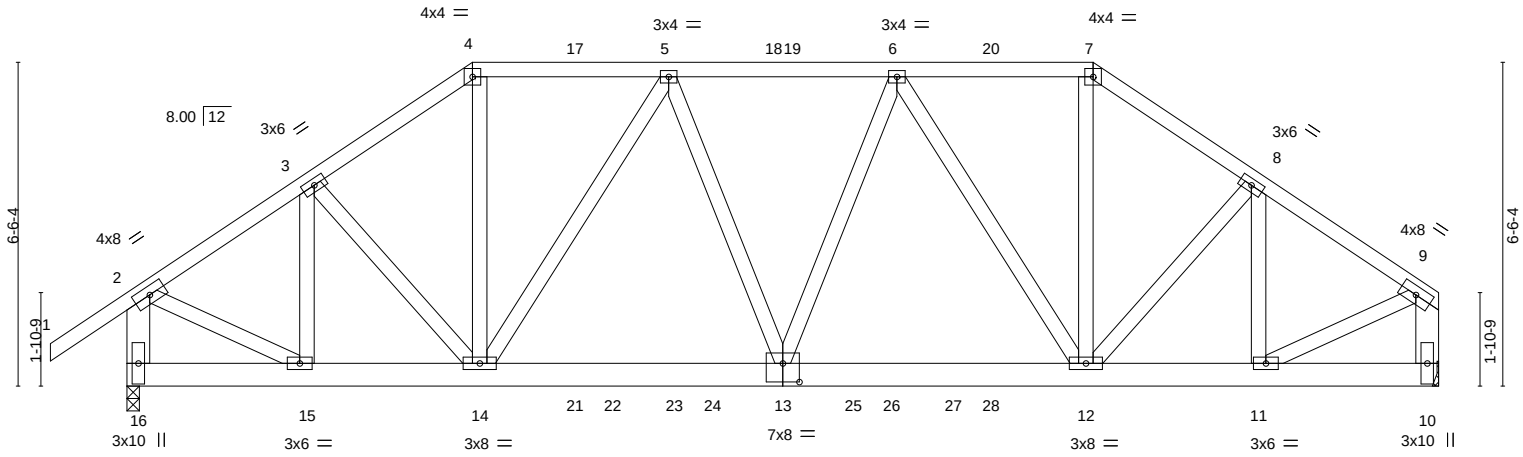
| -1-6-8 | 3-7-8 | 6-11-8 | 10-10-15 | 15-6-1 | 19-5-8 | 22-9-8 | 26-5-0 |
|---|---|---|---|---|---|---|---|
| 1-6-8 | 3-7-8 | 3-4-0 | 3-11-7 | 4-7-2 | 3-11-7 | 3-4-0 | 3-7-8 |

Scale = 1:46.4




| 3-7-8 | 6-11-8 | 13-2-8 | 19-5-8 | 22-9-8 | 26-5-0 |
|---|---|---|---|---|---|
| 3-7-8 | 3-4-0 | 6-3-0 | 6-3-0 | 3-4-0 | 3-7-8 |

Plate Offsets (X,Y)-- [13:0-4-0,0-4-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.36 | Vert(LL) | 0.11 | 13-14 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.64 | Vert(CT) | -0.15 | 12-13 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.81 | Horz(CT) | 0.04 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 206 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except*
2-16,9-10: 2x6 SP No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 3-6-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-7-7 oc bracing.

**REACTIONS.** (size) 16=0-3-0, 10=Mechanical
Max Horz 16=117(LC 5)
Max Uplift 16=-980(LC 8), 10=-946(LC 9)
Max Grav 16=2083(LC 33), 10=1990(LC 34)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1959/978, 3-4=-2342/1259, 4-5=-1944/1089, 5-6=-2505/1350, 6-7=-1949/1092, 7-8=-2350/1264, 8-9=-1969/977, 2-16=-1982/966, 9-10=-1887/931
BOT CHORD 14-15=-832/1651, 13-14=-1219/2380, 12-13=-1196/2365, 11-12=-768/1593
WEBS 3-15=-725/418, 3-14=-403/554, 4-14=-591/1104, 5-14=-830/462, 5-13=-244/503, 6-13=-244/497, 6-12=-822/463, 7-12=-592/1112, 8-12=-408/541, 8-11=-726/429, 2-15=-789/1681, 9-11=-811/1680

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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 100 lb uplift at joint(s) except (jt=lb) 16=980, 10=946.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 71 lb down and 50 lb up at 6-11-8, 71 lb down and 47 lb up at 9-0-4, 71 lb down and 47 lb up at 11-0-4, 71 lb down and 41 lb up at 13-0-4, 71 lb down and 41 lb up at 13-4-12, 71 lb down and 47 lb up at 15-4-12, and 71 lb down and 47 lb up at 17-4-12, and 71 lb down and 50 lb up at 19-5-8 on top chord, and 399 lb down and 372 lb up at 6-11-8, 149 lb down and 116 lb up at 9-0-4, 149 lb down and 116 lb up at 11-0-4, 149 lb down and 116 lb up at 13-0-4, 149 lb down and 116 lb up at 13-4-12, 149 lb down and 116 lb up at 15-4-12, and 149 lb down and 116 lb up at 17-4-12, and 399 lb down and 372 lb up at 19-4-12 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).

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Philip J. O'Regan PE No.58126
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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022

Continued on page 2



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-2=-54, 2-4=-54, 4-7=-54, 7-9=-54, 10-16=-20
   Concentrated Loads (lb)
   Vert: 4=-22(F) 7=-22(F) 13=-275(F) 14=-358(F) 5=-22(F) 6=-22(F) 12=-358(F) 17=-22(F) 18=-22(F) 19=-22(F) 20=-22(F) 21=-138(F) 23=-138(F) 26=-138(F) 28=-138(F)

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | T37 | Roof Special | 1 | 1 | T28641083 |
| | | | | | Job Reference (optional) |

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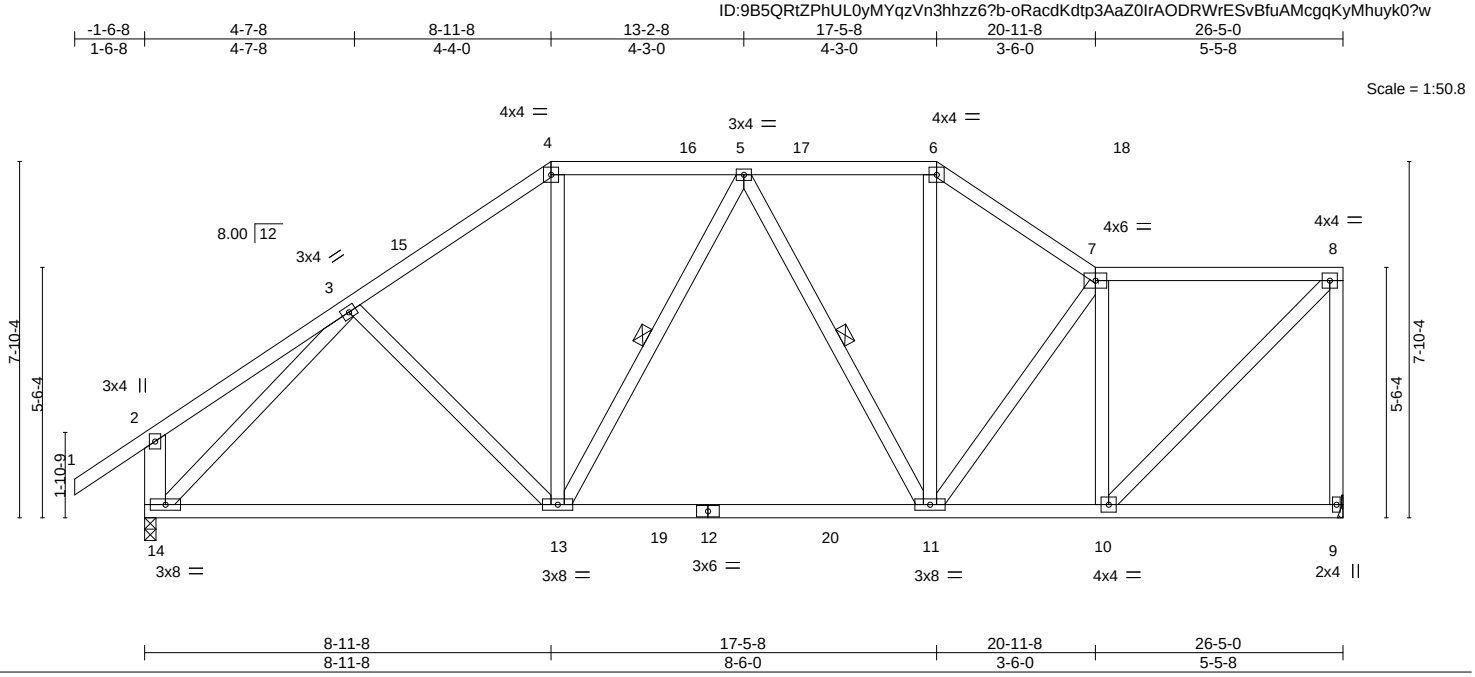


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.53 | Vert(LL) | -0.17 | 11-13 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.81 | Vert(CT) | -0.28 | 13-14 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.78 | Horz(CT) | 0.03 | 9 | n/a | n/a | | |
| BCDL | 10.0 | Code | FBC2020/TPI2014 | Matrix-MS | | | | | | | Weight: 187 lb | FT = 20% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x4 SP No.2 |
| BOT CHORD | 2x4 SP No.2 |
| WEBS | 2x4 SP No.3 *Except* |
| | 2-14: 2x6 SP 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. |
| WEBS | 1 Row at midpt 5-13, 5-11 |

**REACTIONS.** (size) 9=Mechanical, 14=0-3-0
Max Horz 14=170(LC 12)
Max Uplift 9=-178(LC 13), 14=-188(LC 12)
Max Grav 9=1054(LC 2), 14=1138(LC 2)

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

| | |
|---|---|
| TOP CHORD | 3-4=-1090/239, 4-5=-865/234, 5-6=-855/218, 6-7=-1063/231, 7-8=-853/162, 8-9=-964/209, 2-14=-284/133 |
| BOT CHORD | 13-14=-246/823, 11-13=-187/915, 10-11=-168/873 |
| WEBS | 4-13=-43/398, 6-11=-60/408, 7-10=-725/189, 8-10=-227/1191, 3-14=-1051/170 |

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-8 to 1-5-8, Interior(1) 1-5-8 to 8-11-8, Exterior(2R) 8-11-8 to 11-11-8, Interior(1) 11-11-8 to 17-5-8, Exterior(2R) 17-5-8 to 20-5-8, Interior(1) 20-5-8 to 26-3-4 zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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 100 lb uplift at joint(s) except (jt=lb) 9=178, 14=188.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | T38 | Roof Special | 1 | 1 | T28641084 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:06:44 2022 Page 1
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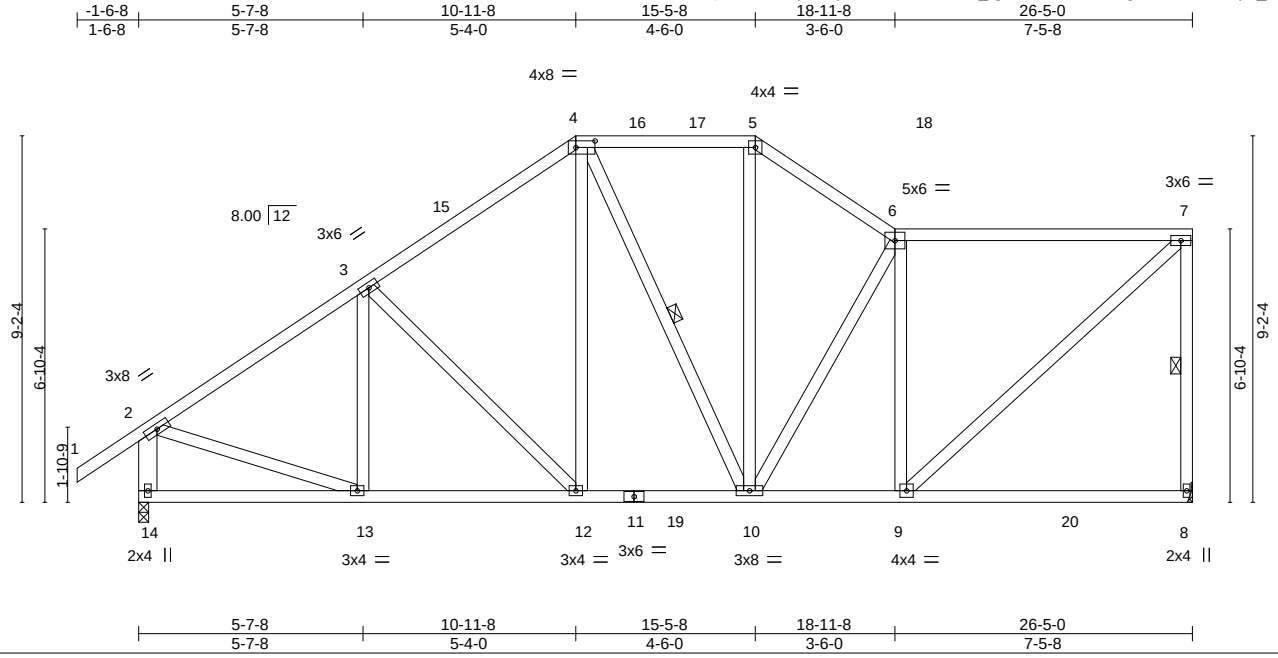


Plate Offsets (X,Y)-- [4:0-5-12,0-2-0]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.76 | Vert(LL) | -0.12 | 8-9 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.50 | Vert(CT) | -0.21 | 8-9 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.48 | Horz(CT) | 0.02 | 8 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 199 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
2-14: 2x6 SP No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 3-8-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 7-8, 4-10

**REACTIONS.** (size) 8=Mechanical, 14=0-3-0
Max Horz 14=216(LC 12)
Max Uplift 8=-201(LC 13), 14=-195(LC 12)
Max Grav 8=1084(LC 2), 14=1142(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1120/205, 3-4=-990/236, 4-5=-759/223, 5-6=-958/241, 6-7=-870/175, 7-8=-935/222, 2-14=-1055/239
BOT CHORD 12-13=-281/938, 10-12=-175/770, 9-10=-180/882
WEBS 4-12=-85/378, 5-10=-67/382, 6-10=-279/95, 6-9=-568/200, 7-9=-232/1149, 2-13=-84/863

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-8 to 1-5-8, Interior(1) 1-5-8 to 10-11-8, Exterior(2R) 10-11-8 to 13-11-8, Interior(1) 13-11-8 to 15-5-8, Exterior(2R) 15-5-8 to 18-5-8, Interior(1) 18-5-8 to 26-3-4 zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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 100 lb uplift at joint(s) except (jt=lb) 8=201, 14=195.

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | T39 | Roof Special | 1 | 1 | T28641085 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:06:45 2022 Page 1
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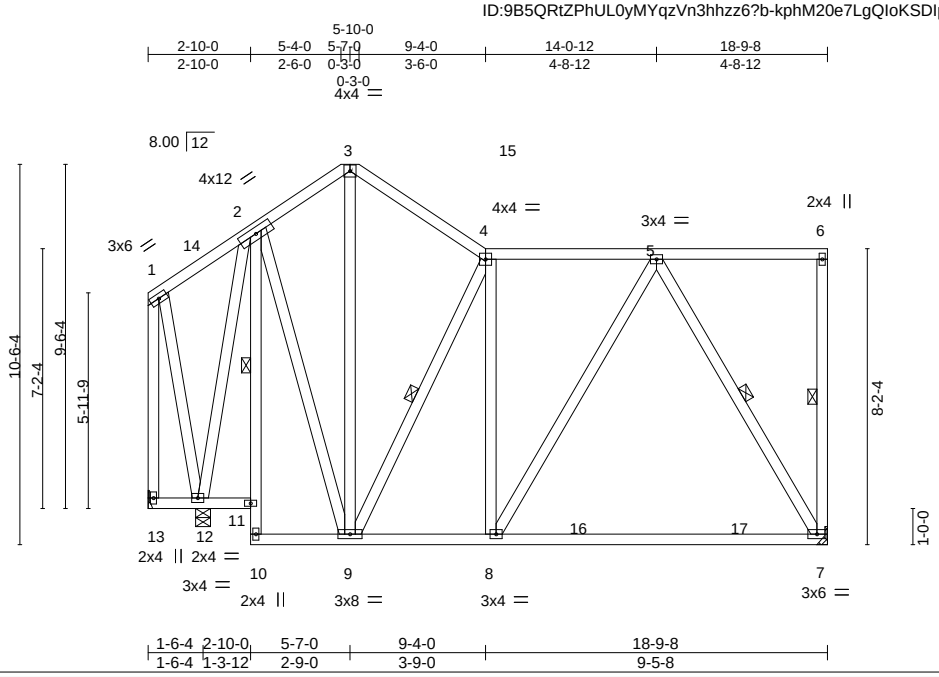


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.58 | Vert(LL) | -0.35 | 7-8 | >584 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.97 | Vert(CT) | -0.56 | 7-8 | >370 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.68 | Horz(CT) | 0.01 | 7 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 188 lb | FT = 20% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x4 SP No.2 |
| BOT CHORD | 2x4 SP No.2 *Except* |
| | 2-10: 2x4 SP No.3 |
| WEBS | 2x4 SP No.3 |

**BRACING-**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. |
| BOT CHORD | Rigid ceiling directly applied or 2-2-0 oc bracing. Except: |
| | 1 Row at midpt 2-11 |
| WEBS | 1 Row at midpt 6-7, 4-9, 5-7 |

**REACTIONS.** (size) 7=Mechanical, 13=Mechanical, 12=0-4-15
Max Horz 13=75(LC 12)
Max Uplift 7=-155(LC 13), 13=-85(LC 10), 12=-188(LC 12)
Max Grav 7=720(LC 2), 13=87(LC 12), 12=867(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-269/110, 3-4=-293/99, 4-5=-420/71
BOT CHORD 8-9=-72/417, 7-8=-76/286
WEBS 2-12=-622/119, 2-9=-64/334, 4-9=-507/110, 5-8=-21/287, 5-7=-537/152

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 2-11-12, Interior(1) 2-11-12 to 5-7-0, Exterior(2R) 5-7-0 to 8-7-0, Interior(1) 8-7-0 to 18-7-12 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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 100 lb uplift at joint(s) 13 except (jt=lb) 7=155, 12=188.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | T40 | Half Hip Girder | 1 | 1 | T28641086 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:06:47 2022 Page 1
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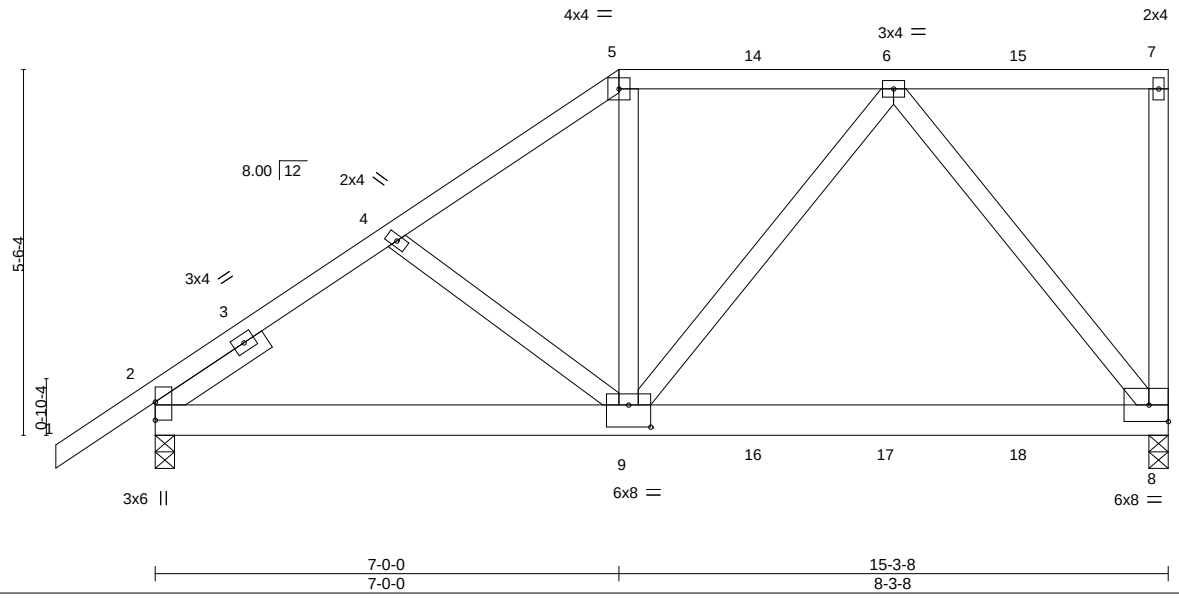


Plate Offsets (X,Y)-- [9:0-4-0,0-4-0]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.46 | Vert(LL) | 0.15 | 8-9 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.77 | Vert(CT) | -0.21 | 8-9 | >856 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.78 | Horz(CT) | 0.01 | 8 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 105 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x4 SP No.3 1-11-8

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 4-7-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-3-6 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 8=0-3-8
Max Horz 2=191(LC 8)
Max Uplift 2=-428(LC 5), 8=-736(LC 5)
Max Grav 2=1015(LC 1), 8=1345(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1302/627, 4-5=-1212/641, 5-6=-992/560
BOT CHORD 2-9=-596/1019, 8-9=-351/622
WEBS 5-9=-243/467, 6-9=-347/603, 6-8=-972/550

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=428, 8=736.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 71 lb down and 50 lb up at 7-0-0, 71 lb down and 48 lb up at 9-0-12, 71 lb down and 41 lb up at 11-0-12, and 71 lb down and 48 lb up at 13-0-12, and 60 lb down and 49 lb up at 15-1-12 on top chord, and 411 lb down and 349 lb up at 7-0-0, 153 lb down and 107 lb up at 9-0-12, 153 lb down and 107 lb up at 11-0-12, and 153 lb down and 107 lb up at 13-0-12, and 161 lb down and 99 lb up at 15-1-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-5=-54, 5-7=-54, 8-10=-20

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Date:

August 29,2022

Continued on page 2



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

**LOAD CASE(S)** Standard

Concentrated Loads (lb)

Vert: 5=-21(F) 7=-42(F) 9=-411(F) 8=-161(F) 6=-21(F) 14=-21(F) 15=-21(F) 16=-153(F) 17=-153(F) 18=-153(F)

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | T41 | Half Hip Girder | 1 | 2 | T28641087 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:06:49 2022 Page 1
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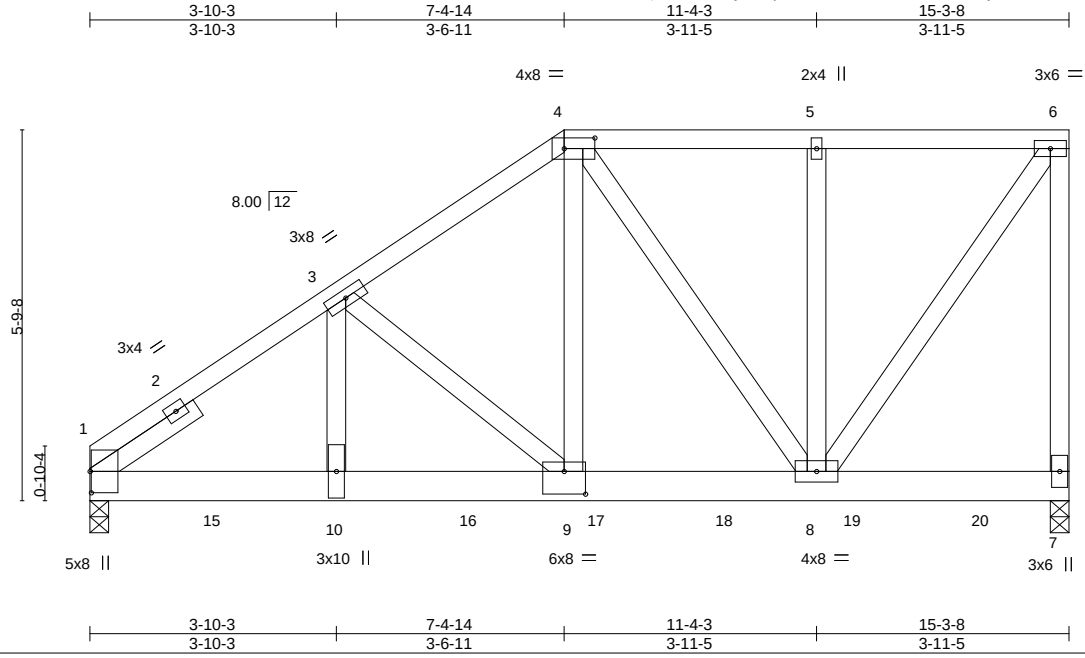


Plate Offsets (X,Y)-- [1:0-4-0,0-0-4], [4:0-5-12,0-2-0], [9:0-4-0,0-4-4]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.41 | Vert(LL) | -0.07 | 9-10 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.89 | Vert(CT) | -0.12 | 9-10 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.73 | Horz(CT) | 0.02 | 7 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 230 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x4 SP No.3 1-11-8

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

**REACTIONS.** (size) 1=0-3-8, 7=0-3-8
Max Horz 1=171(LC 8)
Max Uplift 1=-1410(LC 5), 7=-1106(LC 5)
Max Grav 1=4450(LC 1), 7=2252(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-5640/1824, 3-4=-3547/1260, 4-5=-1512/695, 5-6=-1512/695, 6-7=-2234/1028
BOT CHORD 1-10=-1605/4603, 9-10=-1605/4603, 8-9=-1104/3028
WEBS 3-10=-711/2481, 3-9=-2163/687, 4-9=-1180/3814, 4-8=-2577/734, 6-8=-1201/2618

**NOTES-**
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=1410, 7=1106.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1465 lb down and 456 lb up at 1-11-4, 1465 lb down and 456 lb up at 3-11-4, 1465 lb down and 456 lb up at 5-11-4, 1465 lb down and 456 lb up at 7-11-4, 60 lb down and 185 lb up at 9-11-4, and 113 lb down and 379 lb up at 11-11-4, and 95 lb down and 100 lb up at 13-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-4=-54, 4-6=-54, 7-11=-20
   Concentrated Loads (lb)
   Vert: 10=-1465(B) 15=-1465(B) 16=-1465(B) 17=-1465(B) 18=80(B) 19=185(B) 20=13(B)




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | T42 | Common | 2 | 1 | T28641088 |
| | | | | | Job Reference (optional) |

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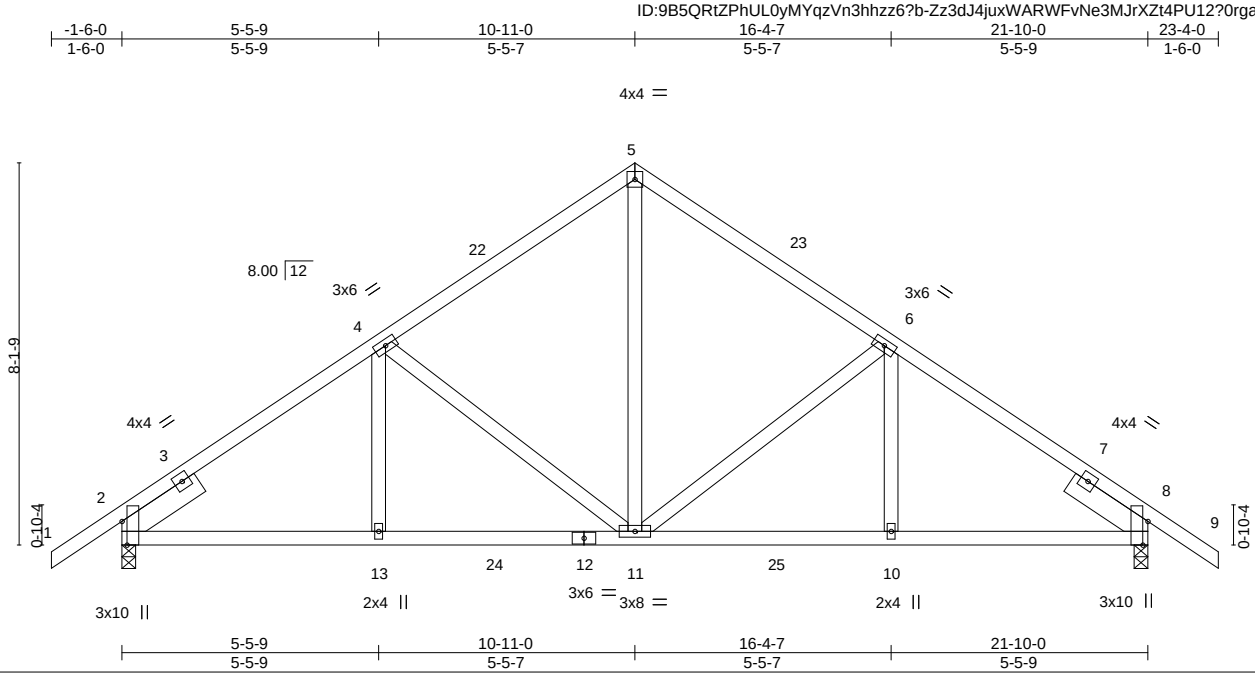


Plate Offsets (X,Y)-- [2:0-6-1,Edge], [8:0-6-1,Edge]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.33 | Vert(LL) | 0.07 | 10-11 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.41 | Vert(CT) | -0.09 | 11-13 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.68 | Horz(CT) | 0.03 | 8 | n/a | n/a | | |
| BCDL | 10.0 | Code | FBC2020/TPI2014 | Matrix-MS | | | | | | | Weight: 129 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 1-11-8, Right 2x6 SP No.2 1-11-8

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 5-2-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 7-6-6 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 8=0-3-8
Max Horz 2=182(LC 11)
Max Uplift 2=-190(LC 12), 8=-190(LC 13)
Max Grav 2=889(LC 1), 8=889(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1029/816, 4-5=-775/650, 5-6=-775/650, 6-8=-1029/816
BOT CHORD 2-13=-576/801, 11-13=-576/801, 10-11=-587/801, 8-10=-587/801
WEBS 5-11=-588/486, 6-11=-310/298, 4-11=-310/298

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 10-11-0, Exterior(2R) 10-11-0 to 13-11-0, Interior(1) 13-11-0 to 23-4-0 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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=190, 8=190.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | T42G | GABLE | 1 | 1 | T28641089 |
| | | | | | Job Reference (optional) |

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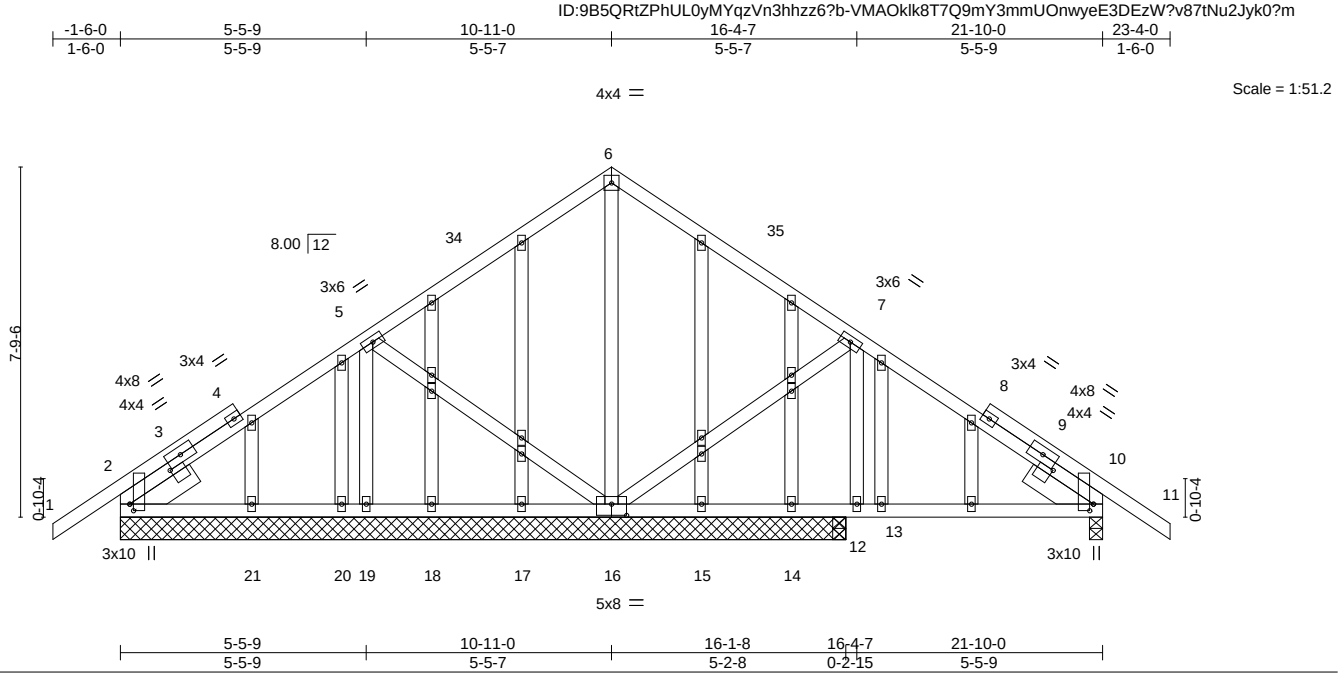


Plate Offsets (X,Y)-- [2:0-1-12,0-1-0], [2:1-1-15,0-1-8], [10:0-1-12,0-1-0], [10:1-1-15,0-1-8], [16:0-4-0,0-3-0]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.30 | Vert(LL) | 0.03 | 10-12 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.19 | Vert(CT) | -0.03 | 10-12 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.28 | Horz(CT) | 0.00 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 180 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 1-7-2, Right 2x6 SP No.2 1-7-2

**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 16-1-8 except (jt=length) 10=0-3-8, 13=0-3-8.
(lb) - Max Horz 2=180(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 21, 14, 13 except 10=-109(LC 13), 16=-128(LC 13), 19=-125(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 17, 18, 20, 21, 15, 14, 13 except 2=298(LC 1), 10=394(LC 1), 16=436(LC 1), 19=270(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 7-10=-271/148
WEBS 6-16=-257/56

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 10-11-0, Exterior(2R) 10-11-0 to 13-11-0, Interior(1) 13-11-0 to 23-4-0 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 21, 14, 13 except (jt=lb) 10=109, 16=128, 19=125.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | T43 | Common | 1 | 1 | T28641090 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:06:55 2022 Page 1
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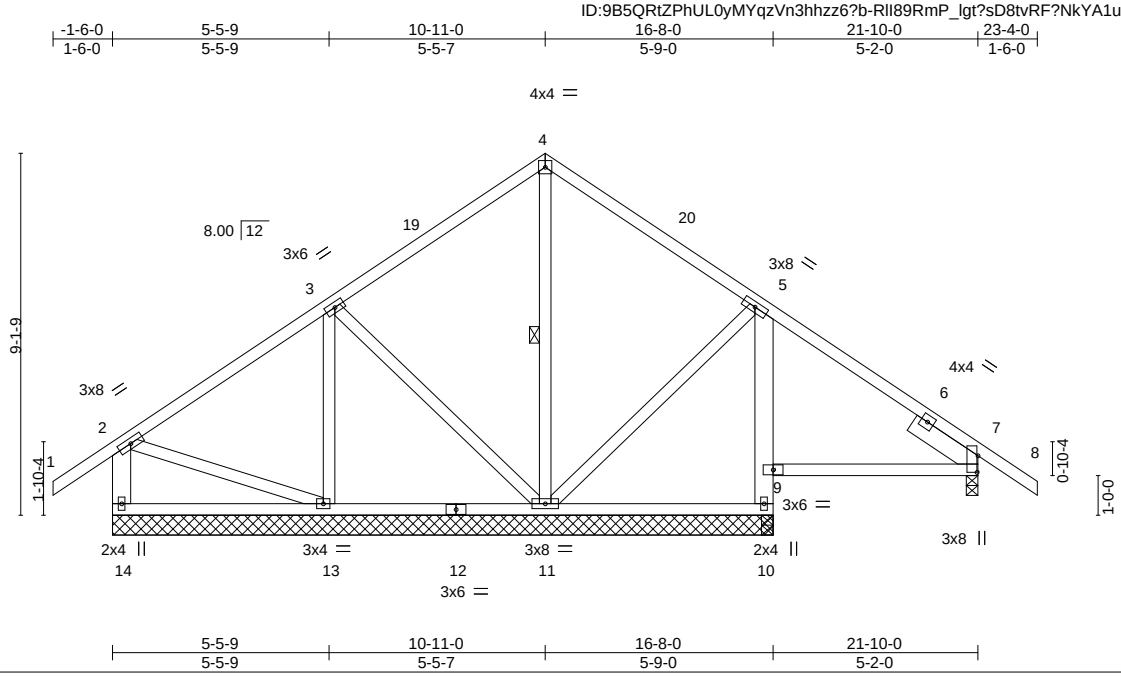


Plate Offsets (X,Y)-- [7:0-5-1,0-0-5]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.32 | Vert(LL) | 0.04 | 9-17 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.24 | Vert(CT) | -0.04 | 9-17 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.15 | Horz(CT) | 0.01 | 7 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 146 lb | FT = 20% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x4 SP No.2 |
| BOT CHORD | 2x4 SP No.2 *Except* 5-10: 2x6 SP No.2 |
| WEBS | 2x4 SP No.3 *Except* 2-14: 2x6 SP No.2 |
| SLIDER | Right 2x6 SP No.2 1-11-8 |

**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, Except: 6-0-0 oc bracing: 9-10. |
| WEBS | 1 Row at midpt 4-11 |

**REACTIONS.** All bearings 16-8-0 except (jt=length) 7=0-3-8.
(lb) - Max Horz 14=-222(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 14 except 7=-133(LC 13), 13=-103(LC 12), 11=-104(LC 12)
Max Grav All reactions 250 lb or less at joint(s) except 14=339(LC 1), 10=322(LC 24), 10=317(LC 1), 7=349(LC 1), 13=354(LC 19), 11=421(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-14=-292/126
BOT CHORD 9-10=-270/81

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 10-11-0, Exterior(2R) 10-11-0 to 13-11-0, Interior(1) 13-11-0 to 23-4-0 zone; end vertical left exposed; porch right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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) 14 except (jt=lb) 7=133, 13=103, 11=104.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | T44 | Roof Special | 4 | 1 | T28641091 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:06:56 2022 Page 1
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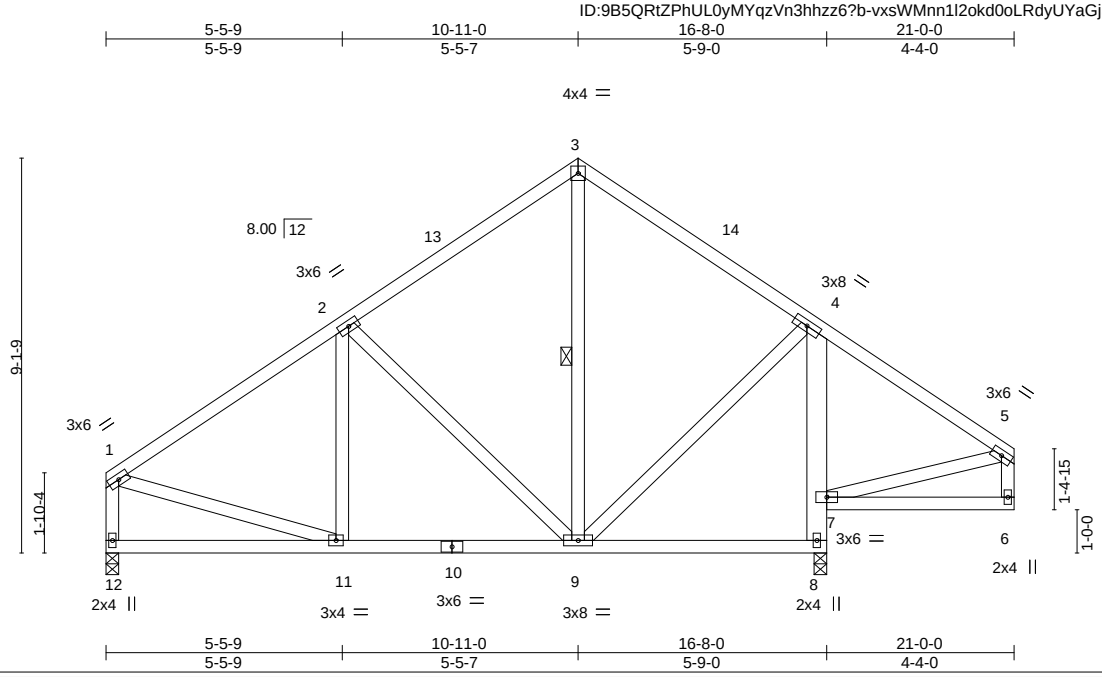


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.35 | Vert(LL) | -0.02 | 8-9 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.28 | Vert(CT) | -0.05 | 8-9 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.34 | Horz(CT) | 0.00 | 8 | n/a | n/a | | |
| BCDL | 10.0 | Code | FBC2020/TPI2014 | Matrix-MS | | | | | | | Weight: 140 lb | FT = 20% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x4 SP No.2 |
| BOT CHORD | 2x4 SP No.2 *Except* |
| | 4-8: 2x6 SP No.2 |
| WEBS | 2x4 SP No.3 |

**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. |
| WEBS | 1 Row at midpt 3-9 |

**REACTIONS.** (size) 12=0-3-8, 8=0-3-8
Max Horz 12=157(LC 9)
Max Uplift 12=-111(LC 12), 8=-179(LC 13)
Max Grav 12=558(LC 1), 8=974(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-563/126, 2-3=-343/151, 3-4=-345/154, 1-12=-509/124
BOT CHORD 9-11=-156/471, 7-8=-925/197, 4-7=-829/196
WEBS 2-9=-316/184, 4-9=-55/436, 1-11=-40/380

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 10-11-0, Exterior(2R) 10-11-0 to 13-11-0, Interior(1) 13-11-0 to 20-10-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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) 12=111, 8=179.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022




MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. T28641092 |
|---|---|---|---|---|---|
| 3235278 | T45 | Monopitch | 16 | 1 | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:06:57 2022 Page 1
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-O7QvZ7ofWMxbEAMX?KTj4opqpqVISquk2VL6B4yk0?i

-1-6-0 | 4-5-14 | 8-3-8
1-6-0 | 4-5-14 | 3-9-10

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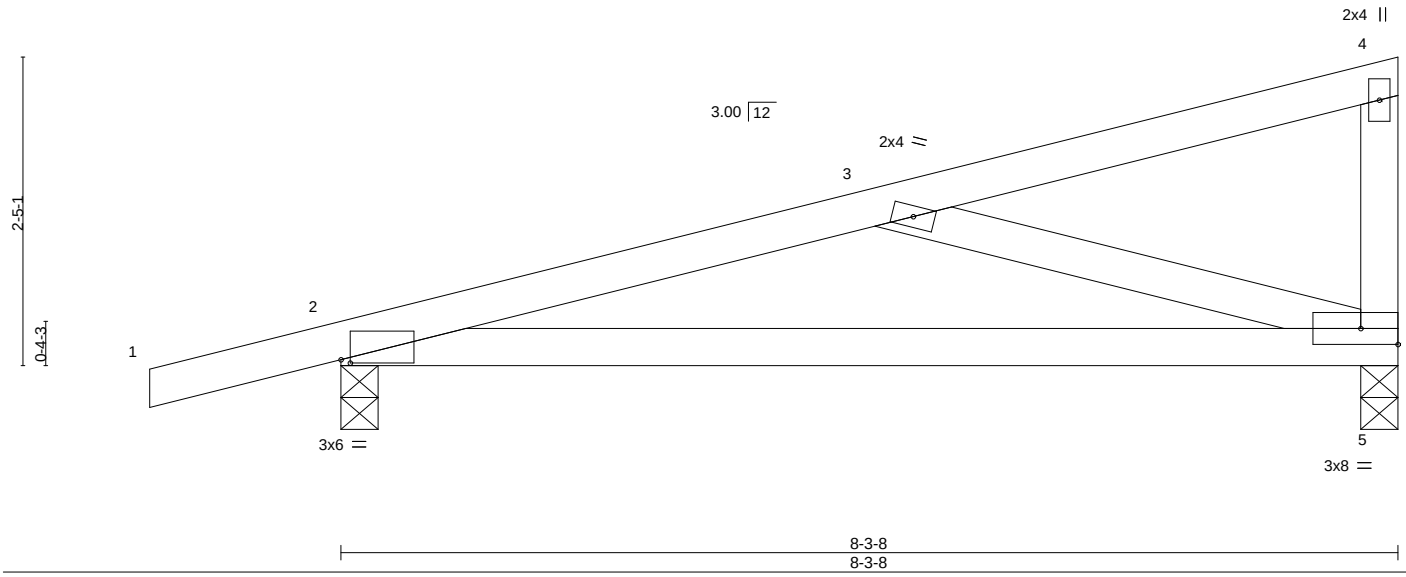


8-3-8
8-3-8

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

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.63 | Vert(LL) | 0.22 | 5-8 | >448 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.55 | Vert(CT) | 0.19 | 5-8 | >517 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.21 | Horz(CT) | -0.01 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 36 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 5-4-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 5=0-3-8
Max Horz 2=87(LC 8)
Max Uplift 2=-201(LC 8), 5=-152(LC 8)
Max Grav 2=390(LC 1), 5=294(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-564/673
BOT CHORD 2-5=-762/544
WEBS 3-5=-527/710

**NOTES-**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 8-1-12 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=201, 5=152.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. T28641093 |
|---|---|---|---|---|---|
| 3235278 | TG01 | Flat Girder | 2 | 1 | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Aug 26 10:06:58 2022 Page 1
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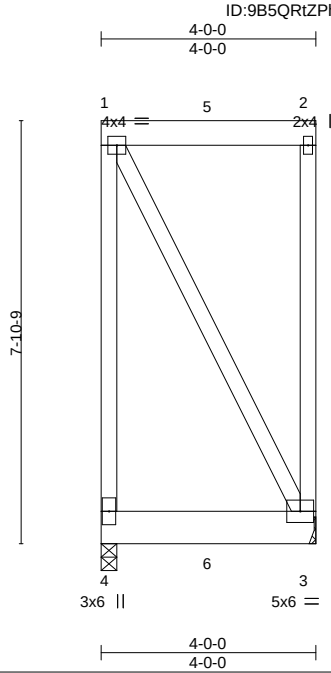


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.15 | Vert(LL) | -0.00 | 3-4 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.05 | Vert(CT) | -0.00 | 3-4 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.00 | Horz(CT) | -0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | FBC2020/TPI2014 | Matrix-MP | | | | | | | Weight: 53 lb | FT = 20% |

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

**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) 4=0-3-8, 3=Mechanical
Max Uplift 4=-99(LC 4), 3=-104(LC 4)
Max Grav 4=252(LC 1), 3=261(LC 1)

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

**NOTES-**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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) 4 except (jt=lb) 3=104.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 91 lb down and 38 lb up at 2-0-12 on top chord, and 191 lb down and 120 lb up at 2-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-2=-54, 3-4=-20
Concentrated Loads (lb)
Vert: 5=-54(B) 6=-184(B)

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Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. T28641094 |
|---|---|---|---|---|---|
| 3235278 | TG02 | FLAT GIRDER | 1 | 1 | Job Reference (optional) |

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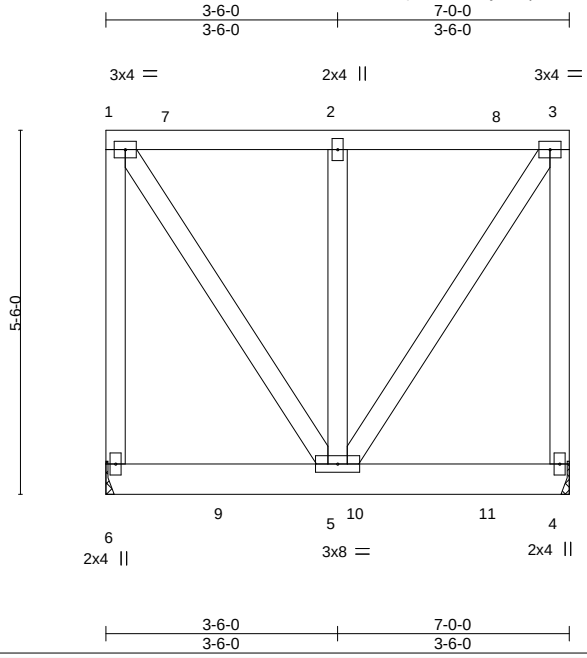


Scale = 1:34.8

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.16 | Vert(LL) | -0.01 | 4-5 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.20 | Vert(CT) | -0.01 | 4-5 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.19 | Horz(CT) | 0.00 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code | FBC2020/TPI2014 | Matrix-MS | | | | | | | Weight: 65 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

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

**REACTIONS.** (size) 6=Mechanical, 4=Mechanical
Max Uplift 6=-169(LC 4), 4=-190(LC 4)
Max Grav 6=621(LC 1), 4=695(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-6=-490/148, 1-2=-276/75, 2-3=-276/75, 3-4=-489/148
WEBS 1-5=-133/492, 3-5=-133/491

**NOTES-**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=169, 4=190.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 273 lb down and 89 lb up at 1-9-10, and 273 lb down and 89 lb up at 3-9-10, and 273 lb down and 89 lb up at 5-9-10 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-3=-54, 4-6=-20
Concentrated Loads (lb)
Vert: 9=-273(B) 10=-273(B) 11=-273(B)

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 29,2022



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - KNOLL RES. |
|---|---|---|---|---|---|
| 3235278 | V01 | GABLE | 1 | 1 | T28641095 |
| | | | | | Job Reference (optional) |

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10-10-15 | 21-9-15
10-10-15 | 10-10-15

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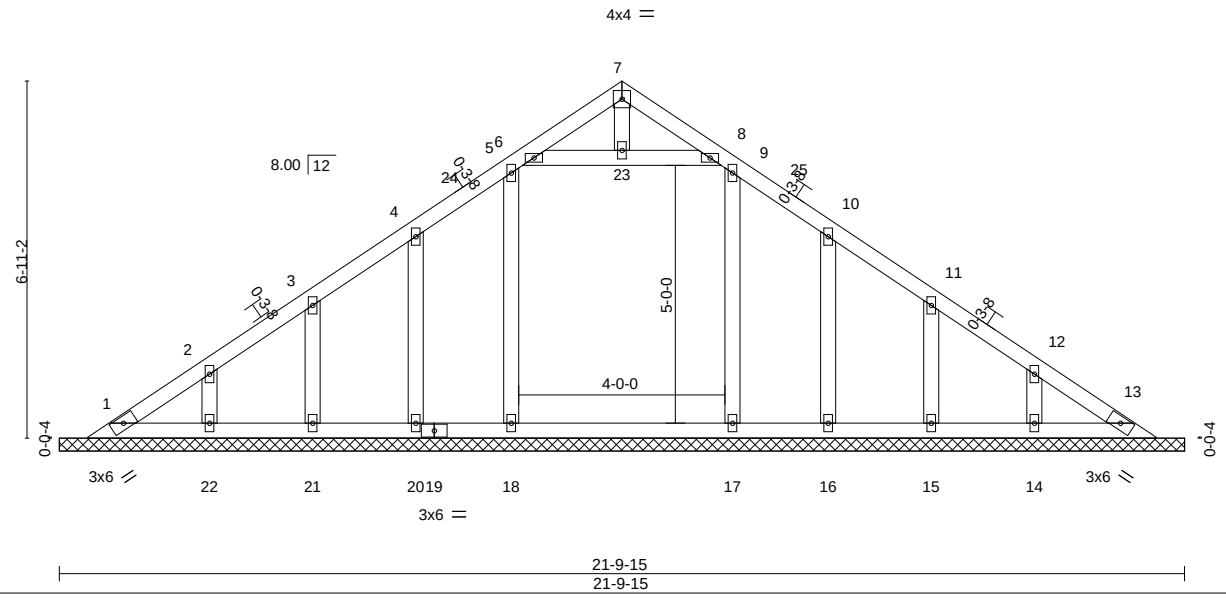



21-9-15
21-9-15

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

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.05 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.16 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.08 | Horz(CT) | 0.00 | 13 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-S | | | | | | | Weight: 109 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3

**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.

TRUSS DESIGNED FOR WIND LOADS IN THE PLANE OF THE TRUSS ONLY. FOR STUDS EXPOSED TO WIND (NORMAL TO THE FACE), SEE STANDARD INDUSTRY GABLE END DETAILS AS APPLICABLE, OR CONSULT QUALIFIED BUILDING DESIGNER AS PER ANSI/TPI 1.

**REACTIONS.** All bearings 21-9-15.
(lb) - Max Horz 1=-146(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 13, 18, 20, 21, 22, 16, 15, 14
Max Grav All reactions 250 lb or less at joint(s) 1, 13, 20, 21, 22, 16, 15, 14 except 18=336(LC 19), 17=311(LC 20)

**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=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 1-0-1 to 4-0-1, Interior(1) 4-0-1 to 10-10-15, Exterior(2R) 10-10-15 to 13-10-15, Interior(1) 13-10-15 to 20-9-14 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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, with BCDL = 10.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 13, 18, 20, 21, 22, 16, 15, 14.

This item has been electronically signed and sealed by ORegan, Philip, PE using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

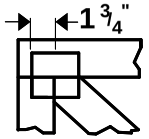
August 29,2022



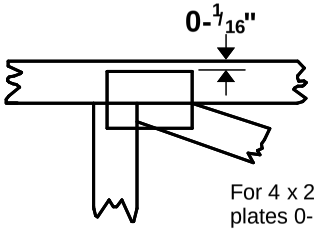

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

# 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.

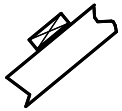
*** Plate location details available in MiTek 20/20 software or upon request.**

## PLATE SIZE

4 x 4

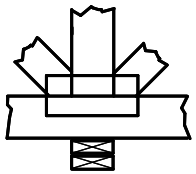
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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

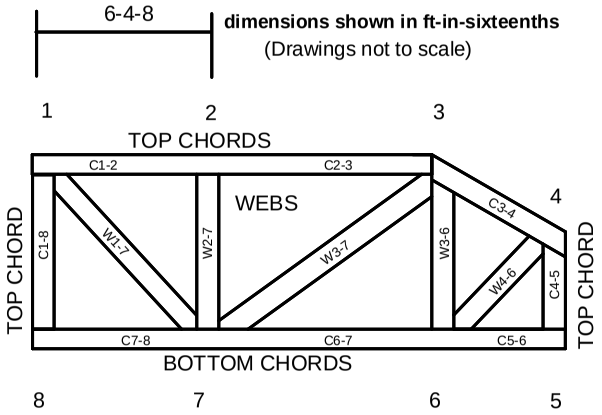


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

**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.