MiTek®

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

RE: 3606718 - IC CONST. - STALLING RES.

MiTek, Inc.
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200

**Site Information:**

Customer Info: IC CONSTRUCTION Project Name: Stallings Res. Model: Custom
Lot/Block: N/A Subdivision: N/A
Address: 860 Evergreen Drive, N/A
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 17 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 | T31235556 | T01 | 8/7/23 | 15 | T31235570 | T10G | 8/7/23 |
| 2 | T31235557 | T01G | 8/7/23 | 16 | T31235571 | T11 | 8/7/23 |
| 3 | T31235558 | T02 | 8/7/23 | 17 | T31235572 | TG01 | 8/7/23 |
| 4 | T31235559 | T03 | 8/7/23 | | | | |
| 5 | T31235560 | T03G | 8/7/23 | | | | |
| 6 | T31235561 | T04 | 8/7/23 | | | | |
| 7 | T31235562 | T05 | 8/7/23 | | | | |
| 8 | T31235563 | T06 | 8/7/23 | | | | |
| 9 | T31235564 | T06G | 8/7/23 | | | | |
| 10 | T31235565 | T07 | 8/7/23 | | | | |
| 11 | T31235566 | T08 | 8/7/23 | | | | |
| 12 | T31235567 | T09 | 8/7/23 | | | | |
| 13 | T31235568 | T09G | 8/7/23 | | | | |
| 14 | T31235569 | T10 | 8/7/23 | | | | |

This item has been electronically signed and sealed by ORegan, Philip, PE using a Digital Signature.
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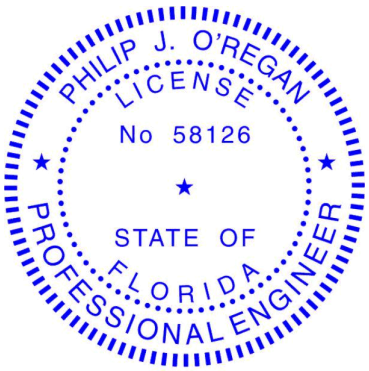
The truss drawing(s) referenced above have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Builders FirstSource-Lake City, FL.

Truss Design Engineer's Name: ORegan, Philip
My license renewal date for the state of Florida is February 28, 2025.




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

**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.

August 7,2023

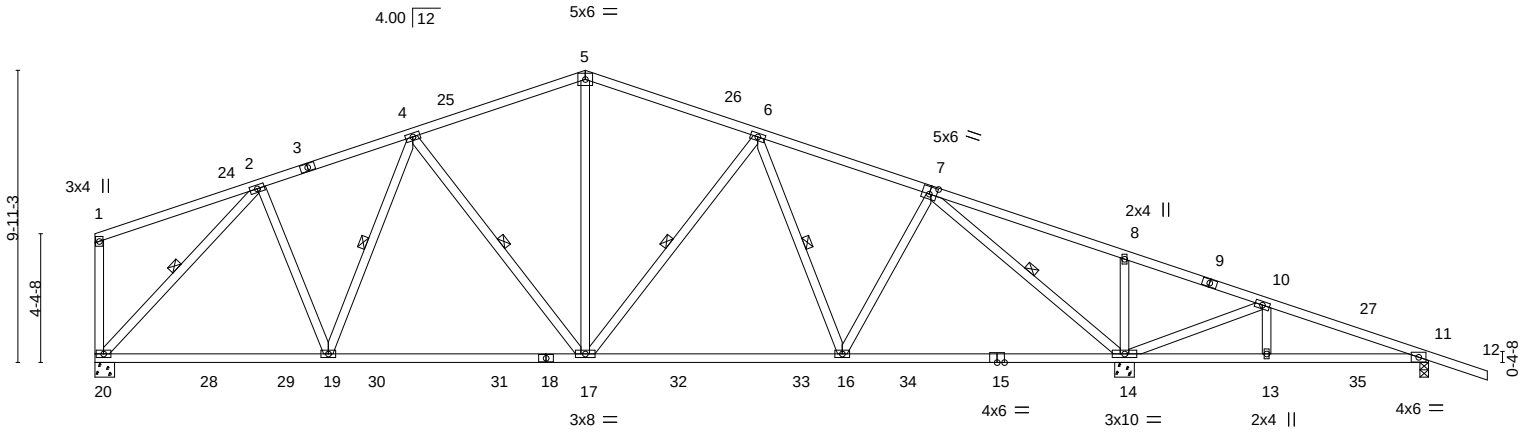
ORegan, Philip

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - STALLING RES. T31235556 |
|---|---|---|---|---|---|
| 3606718 | T01 | Common | 28 | 1 | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 2 2023 MiTek Industries, Inc. Fri Aug 4 14:13:16 2023 Page 1
ID:MhjvkyN7TyaoaH4v5JFBrNyV43X-j3fJcU5C5kPj7YedkFnuib1I7J7Q2PXxBL4NODyrCSn

| 5-7-13 | 10-9-11 | 16-8-0 | 22-6-6 | 28-5-0 | 35-0-0 | 39-9-15 | 45-4-0 | 47-4-0 |
|---|---|---|---|---|---|---|---|---|
| 5-7-13 | 5-1-13 | 5-10-6 | 5-10-6 | 5-10-10 | 6-7-0 | 4-9-15 | 5-6-1 | 2-0-0 |

Scale = 1:78.3




| 7-11-3 | 16-8-0 | 25-4-14 | 35-0-0 | 39-9-15 | 45-4-0 |
|---|---|---|---|---|---|
| 7-11-3 | 8-8-13 | 8-8-13 | 9-7-3 | 4-9-15 | 5-6-1 |

Plate Offsets (X,Y)-- [7:0-3-0,0-3-0]

| 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 | 0.45 | Vert(LL) | -0.24 | 14-16 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.98 | Vert(CT) | -0.41 | 14-16 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.87 | Horz(CT) | 0.07 | 14 | n/a | n/a | | |
| BCDL | 10.0 | Code | FBC2020/TPI2014 | Matrix-MS | | | | | | | Weight: 270 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 4-8-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 4-19, 4-17, 6-17, 6-16, 7-14, 2-20

**REACTIONS.** (size) 14=0-8-0, 20=0-8-0, 11=0-3-8
Max Horz 20=-241(LC 13)
Max Uplift 14=-542(LC 9), 20=-276(LC 8), 11=-212(LC 9)
Max Grav 14=2146(LC 2), 20=1424(LC 2), 11=344(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1420/375, 4-5=-1389/411, 5-6=-1390/411, 6-7=-1474/352, 7-8=-204/560, 8-10=-268/552, 10-11=-153/330
BOT CHORD 19-20=-185/1113, 17-19=-188/1362, 16-17=-129/1392, 14-16=-76/1102, 13-14=-261/110, 11-13=-261/110
WEBS 2-19=-34/548, 5-17=-99/610, 6-17=-279/172, 7-16=-50/553, 7-14=-2105/551, 8-14=-325/178, 10-14=-541/658, 10-13=-298/164, 2-20=-1602/363

**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 4-8-2, Interior(1) 4-8-2 to 16-8-0, Exterior(2R) 16-8-0 to 21-2-6, Interior(1) 21-2-6 to 47-4-0 zone; 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) All plates are 3x6 MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 542 lb uplift at joint 14, 276 lb uplift at joint 20 and 212 lb uplift at joint 11.

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 7,2023

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16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - STALLING RES. T31235557 |
|---|---|---|---|---|---|
| 3606718 | T01G | GABLE | 1 | 1 | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 2 2023 MiTek Industries, Inc. Fri Aug 4 14:13:18 2023 Page 1
ID:MhjvkyN7TyaoaH4v5JFBrNyV43X-fSn3197ScLfRMso0rgpMn06ht600WUWEefZUT6yrCSl

16-8-0 / 16-8-0 | 45-4-0 / 28-8-0 | 47-4-0 / 2-0-0

Scale = 1:79.4

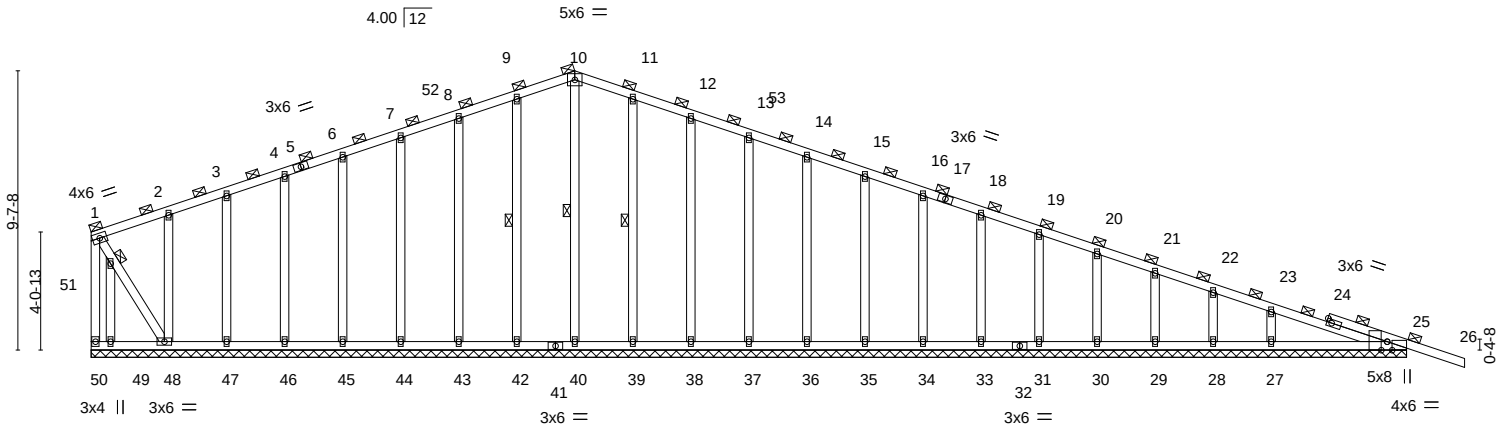


Plate Offsets (X,Y)-- [25:0-3-8,Edge], [25:0-2-1,Edge]

| 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 | 0.24 | Vert(LL) | -0.01 | 26 | n/r | 120 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.14 | Vert(CT) | -0.01 | 26 | n/r | 120 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.13 | Horz(CT) | 0.01 | 25 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-S | | | | | | | Weight: 326 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 | 2-0-0 oc purlins (6-0-0 max.), except end verticals. |
| BOT CHORD | Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 49-50,48-49. |
| WEBS | 1 Row at midpt 10-40, 9-42, 11-39 |
| JOINTS | 1 Brace at Jt(s): 1, 10, 51 |

**REACTIONS.** All bearings 45-4-0.
(lb) - Max Horz 50=-231(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 42, 43, 44, 45, 46, 47, 49, 39, 38, 37, 36, 35, 34, 33, 31, 30, 29, 28, 27 except 50=-145(LC 13), 48=-138(LC 12), 25=-108(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 50, 40, 42, 43, 44, 45, 46, 47, 48, 49, 39, 38, 37, 36, 35, 34, 33, 31, 30, 29, 28 except 27=291(LC 1), 25=282(LC 24)

**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) 0-1-12 to 4-8-0, Exterior(2N) 4-8-0 to 16-8-0, Corner(3R) 16-8-0 to 21-2-6, Exterior(2N) 21-2-6 to 47-4-0 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) 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.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 42, 43, 44, 45, 46, 47, 49, 39, 38, 37, 36, 35, 34, 33, 31, 30, 29, 28, 27 except (jt=lb) 50=145, 48=138, 25=108.
11) 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 7,2023



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Chesterfield, MO 63017
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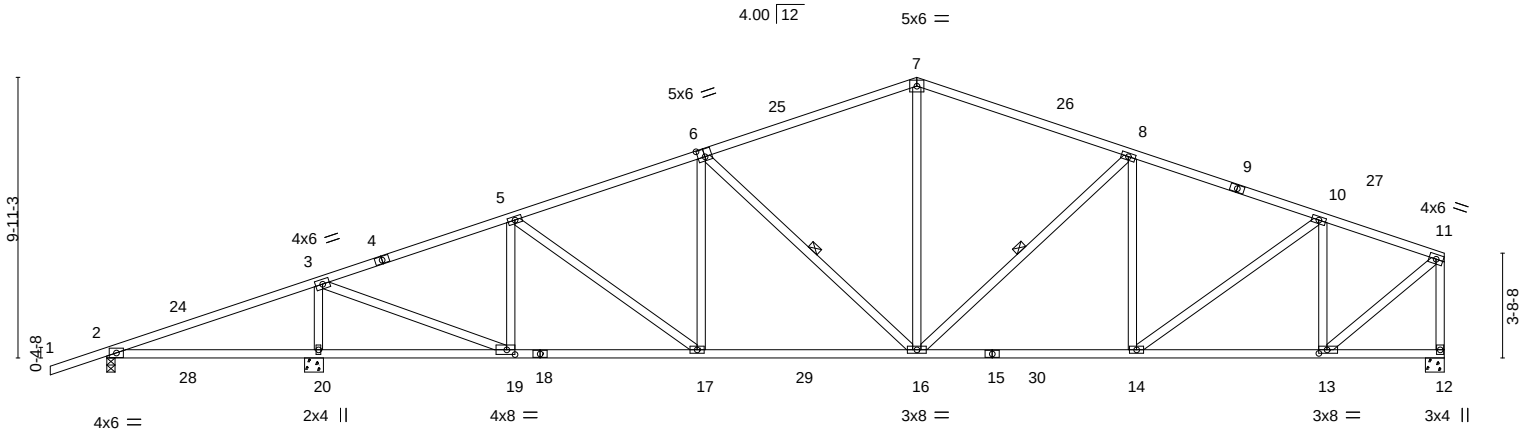
| Job | Truss | Truss Type | Qty | Ply | IC CONST. - STALLING RES. T31235558 |
|---|---|---|---|---|---|
| 3606718 | T02 | Common | 6 | 1 | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 2 2023 MiTek Industries, Inc. Fri Aug 4 14:13:20 2023 Page 1
ID:MhjvkyN7TyaoaH4v5JFBrNyV43X-crvpSr8i8yv9bAyPz5sqsRCwzwY?_DYX5z2aX_yrCSj

| -2-0-0 | 7-5-14 | 14-3-9 | 21-0-7 | 28-8-0 | 36-3-9 | 43-0-7 | 47-4-0 |
|---|---|---|---|---|---|---|---|
| 2-0-0 | 7-5-14 | 6-9-11 | 6-8-14 | 7-7-9 | 7-7-9 | 6-8-14 | 4-3-9 |

Scale = 1:81.5




| 7-4-0 | 7-5-14 | 14-3-9 | 21-0-7 | 28-8-0 | 36-3-9 | 43-0-7 | 47-4-0 |
|---|---|---|---|---|---|---|---|
| 7-4-0 | 0-1-14 | 6-9-11 | 6-8-14 | 7-7-9 | 7-7-9 | 6-8-14 | 4-3-9 |

Plate Offsets (X,Y)-- [6:0-3-0,0-3-4], [13:0-3-8,0-1-8], [19:0-3-8,0-2-0]

| 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 | 0.65 | Vert(LL) | 0.19 | 20-23 | >470 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.82 | Vert(CT) | -0.33 | 16-17 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.87 | Horz(CT) | 0.07 | 12 | 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 3-5-6 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 6-16, 8-16

**REACTIONS.** (size) 2=0-3-8, 20=0-8-0, 12=0-8-0
Max Horz 2=228(LC 12)
Max Uplift 2=-144(LC 8), 20=-552(LC 8), 12=-322(LC 9)
Max Grav 2=236(LC 23), 20=2173(LC 2), 12=1581(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-200/563, 3-5=-1790/441, 5-6=-2112/568, 6-7=-1781/538, 7-8=-1781/539, 8-10=-1965/528, 10-11=-1346/340, 11-12=-1524/393
BOT CHORD 2-20=-477/99, 19-20=-477/99, 17-19=-401/1648, 16-17=-462/1961, 14-16=-411/1824, 13-14=-298/1256
WEBS 3-20=-1870/513, 3-19=-426/2271, 5-19=-610/222, 5-17=-74/388, 6-16=-520/204, 7-16=-137/783, 8-16=-356/172, 10-14=-148/700, 10-13=-843/282, 11-13=-383/1618

**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) -2-0-0 to 2-8-13, Interior(1) 2-8-13 to 28-8-0, Exterior(2R) 28-8-0 to 33-4-13, Interior(1) 33-4-13 to 47-2-4 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) All plates are 3x6 MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, 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=144, 20=552, 12=322.

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 7,2023




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| Job | Truss | Truss Type | Qty | Ply | IC CONST. - STALLING RES. T31235559 |
|---|---|---|---|---|---|
| 3606718 | T03 | Jack-Closed | 8 | 1 | Job Reference (optional) |

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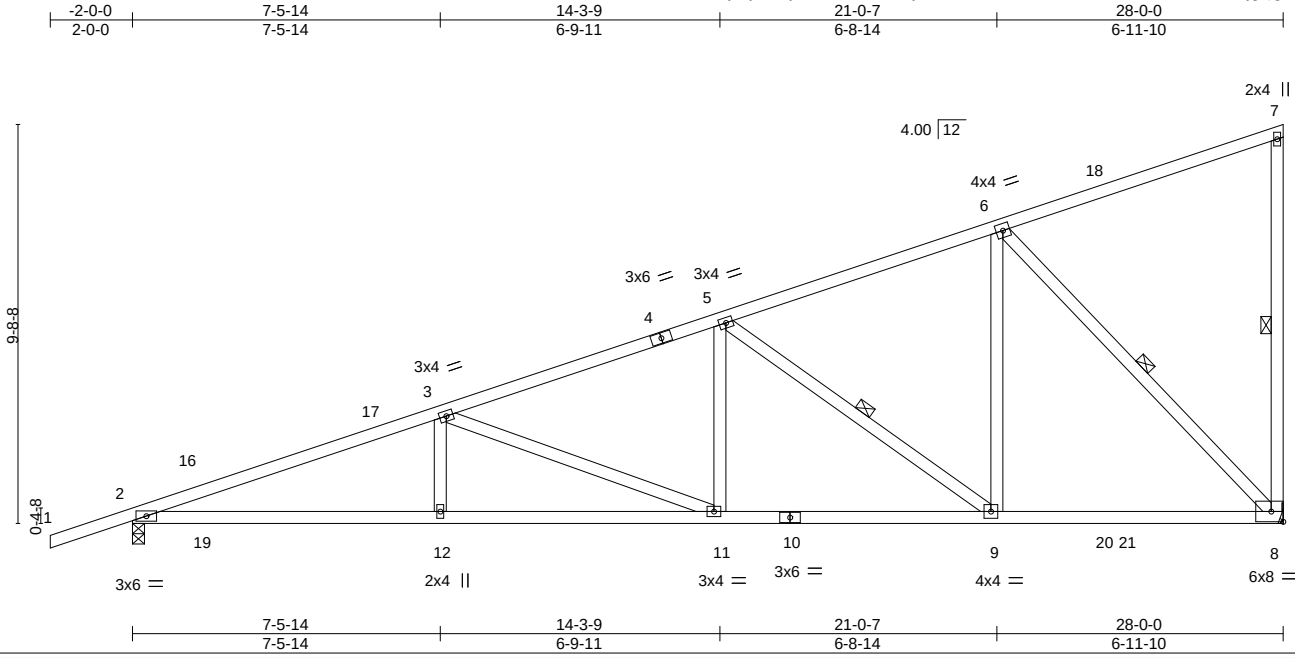
ID:MhjvkyN7TyaoaH4v5JFBrNyV43X-41TCfB9LvG1?DKXbXoN3Pek6XKu1jgQgKcn84QyrCSi




| 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 | 0.60 | Vert(LL) | 0.25 | 11-12 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.83 | Vert(CT) | -0.30 | 11-12 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.89 | Horz(CT) | 0.08 | 8 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 159 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 3-1-2 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 3-4-7 oc bracing.
WEBS 1 Row at midpt 7-8, 5-9, 6-8

**REACTIONS.** (size) 8=Mechanical, 2=0-3-8
Max Horz 2=350(LC 8)
Max Uplift 8=-558(LC 8), 2=-531(LC 8)
Max Grav 8=1135(LC 2), 2=1200(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2639/2261, 3-5=-1791/1494, 5-6=-968/770
BOT CHORD 2-12=-2411/2463, 11-12=-2411/2463, 9-11=-1603/1653, 8-9=-847/876
WEBS 3-12=-361/291, 3-11=-866/864, 5-11=-621/530, 5-9=-956/935, 6-9=-924/861, 6-8=-1250/1206

**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) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 27-10-4 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, with BCDL = 10.0psf.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=558, 2=531.

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 7,2023



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| Job | Truss | Truss Type | Qty | Ply | IC CONST. - STALLING RES. T31235560 |
|---|---|---|---|---|---|
| 3606718 | T03G | Monopitch Supported Gable | 2 | 1 | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 2 2023 MiTek Industries, Inc. Fri Aug 4 14:13:22 2023 Page 1
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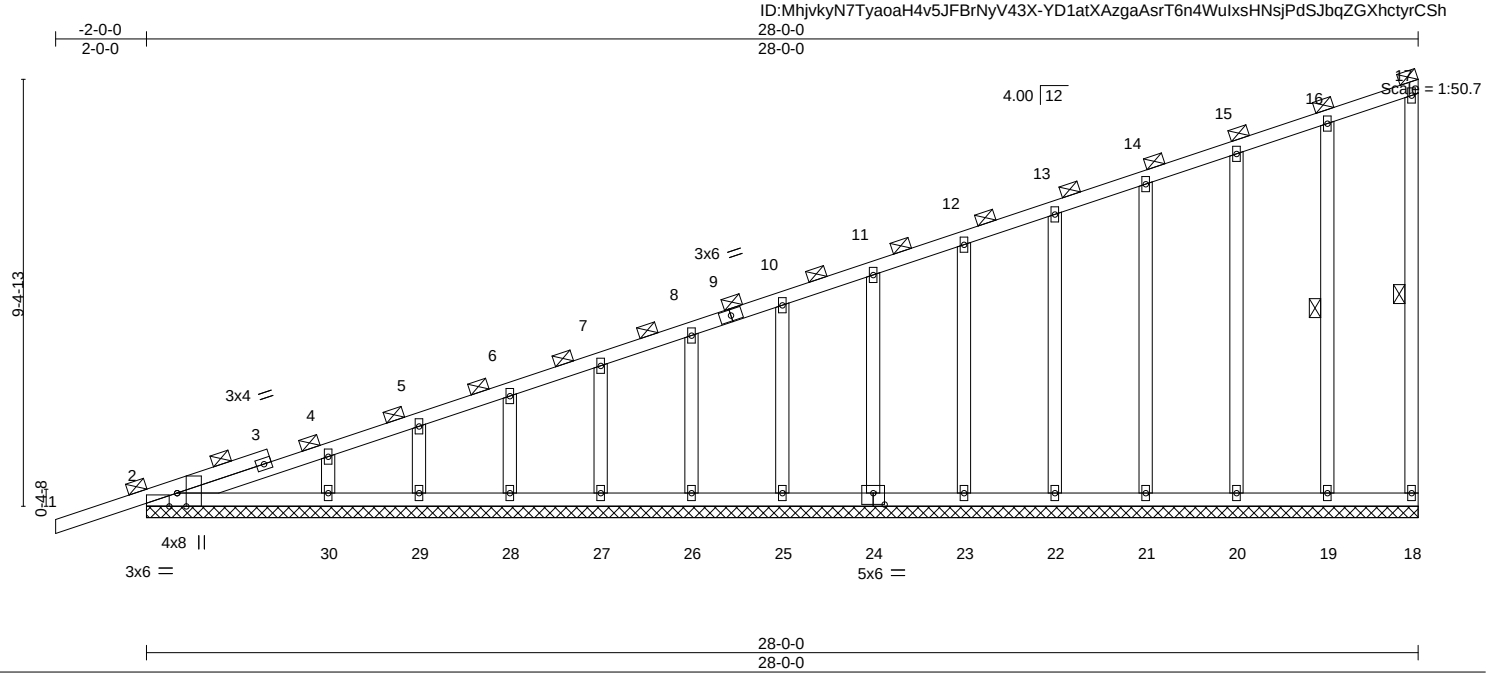


Plate Offsets (X,Y)-- [2:0-3-8,Edge], [2:0-2-1,Edge], [24:0-3-0,0-3-0]

| 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 | 0.24 | Vert(LL) | 0.01 | 1 | n/r | 120 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.10 | Vert(CT) | 0.00 | 1 | n/r | 120 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.13 | Horz(CT) | -0.00 | 18 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-S | | | | | | | Weight: 186 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 2-0-0 oc purlins (6-0-0 max.), except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 17-18, 16-19

**REACTIONS.** All bearings 28-0-0.
(lb) - Max Horz 2=339(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 18, 2, 25, 26, 27, 28, 29, 30, 24, 23, 22, 21, 20, 19
Max Grav All reactions 250 lb or less at joint(s) 18, 25, 26, 27, 28, 29, 30, 24, 23, 22, 21, 20, 19 except 2=268(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-307/128, 4-5=-279/108, 5-6=-255/102

**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) -2-0-0 to 1-0-0, Exterior(2N) 1-0-0 to 27-10-4 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) 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) All plates are 2x4 MT20 unless otherwise indicated.
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) 18, 2, 25, 26, 27, 28, 29, 30, 24, 23, 22, 21, 20, 19.
10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
11) 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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Date:

August 7,2023



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| Job | Truss | Truss Type | Qty | Ply | IC CONST. - STALLING RES. T31235561 |
|---|---|---|---|---|---|
| 3606718 | T04 | Monopitch Structural Gable | 1 | 1 | Job Reference (optional) |

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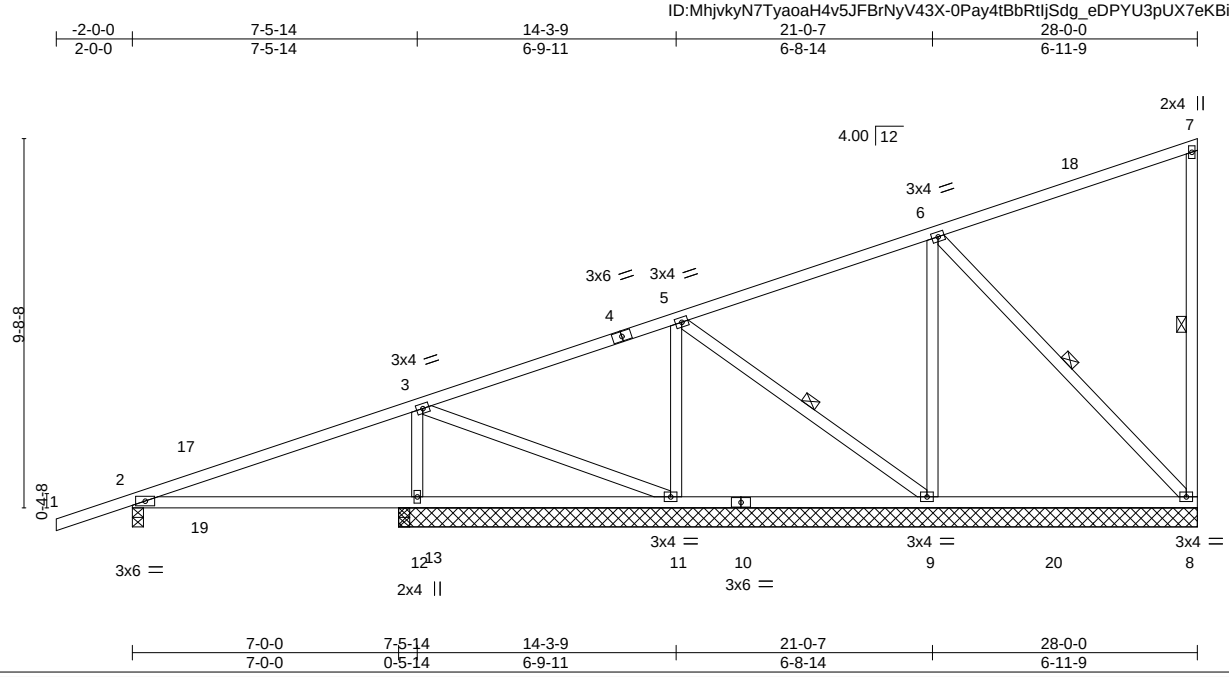


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.50 | Vert(LL) | 0.12 | 13-16 | >716 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.46 | Vert(CT) | -0.14 | 8-9 | >565 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.32 | Horz(CT) | -0.01 | 8 | n/a | n/a | | |
| BCDL | 10.0 | Code | FBC2020/TPI2014 | Matrix-MS | | | | | | | Weight: 159 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 10-0-0 oc bracing.
WEBS 1 Row at midpt 7-8, 5-9, 6-8

**REACTIONS.** All bearings 21-0-0 except (jt=length) 2=0-3-8, 13=0-3-8.
(lb) - Max Horz 2=350(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 12 except 8=-132(LC 8), 2=-151(LC 8), 11=-118(LC 8), 9=-129(LC 8), 13=-364(LC 8)
Max Grav All reactions 250 lb or less at joint(s) except 8=278(LC 2), 2=386(LC 1), 12=318(LC 20), 11=508(LC 2), 9=589(LC 2), 13=410(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-12=-368/192, 5-11=-323/143, 6-9=-334/141

**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) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 27-10-4 zone; porch 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, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12 except (jt=lb) 8=132, 2=151, 11=118, 9=129, 13=364.

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Date:

August 7,2023




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| Job | Truss | Truss Type | Qty | Ply | IC CONST. - STALLING RES. T31235562 |
|---|---|---|---|---|---|
| 3606718 | T05 | Monopitch Structural Gable | 1 | 1 | Job Reference (optional) |

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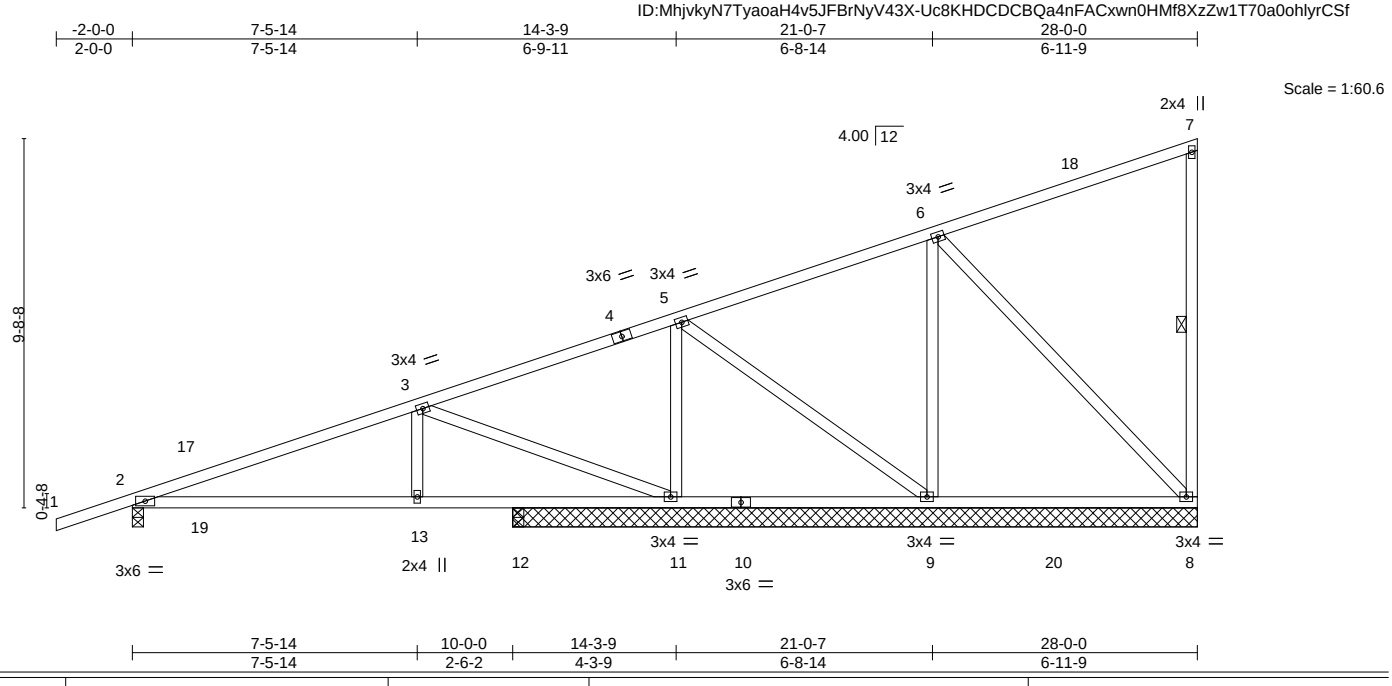


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.51 | Vert(LL) | 0.19 | 13-16 | >654 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.52 | Vert(CT) | -0.20 | 13-16 | >619 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.87 | Horz(CT) | 0.01 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code | FBC2020/TPI2014 | Matrix-MS | | | | | | | Weight: 159 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 6-0-0 oc bracing.
WEBS 1 Row at midpt 7-8

**REACTIONS.** All bearings 18-0-0 except (jt=length) 2=0-3-8, 12=0-3-8.
(lb) - Max Horz 2=350(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) except 8=-103(LC 12), 2=-233(LC 8), 11=-381(LC 8), 9=-114(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 8, 12 except 2=545(LC 2), 11=986(LC 2), 9=552(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-638/397, 3-5=-376/291
BOT CHORD 2-13=-640/574, 12-13=-640/574, 11-12=-640/574
WEBS 3-13=-337/258, 3-11=-864/860, 5-11=-553/332, 6-9=-445/233

**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) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 27-10-4 zone; porch 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, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 103 lb uplift at joint 8, 233 lb uplift at joint 2, 381 lb uplift at joint 11 and 114 lb uplift at joint 9.

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Date:

August 7,2023



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| Job | Truss | Truss Type | Qty | Ply | IC CONST. - STALLING RES. T31235563 |
|---|---|---|---|---|---|
| 3606718 | T06 | ROOF SPECIAL | 5 | 1 | Job Reference (optional) |

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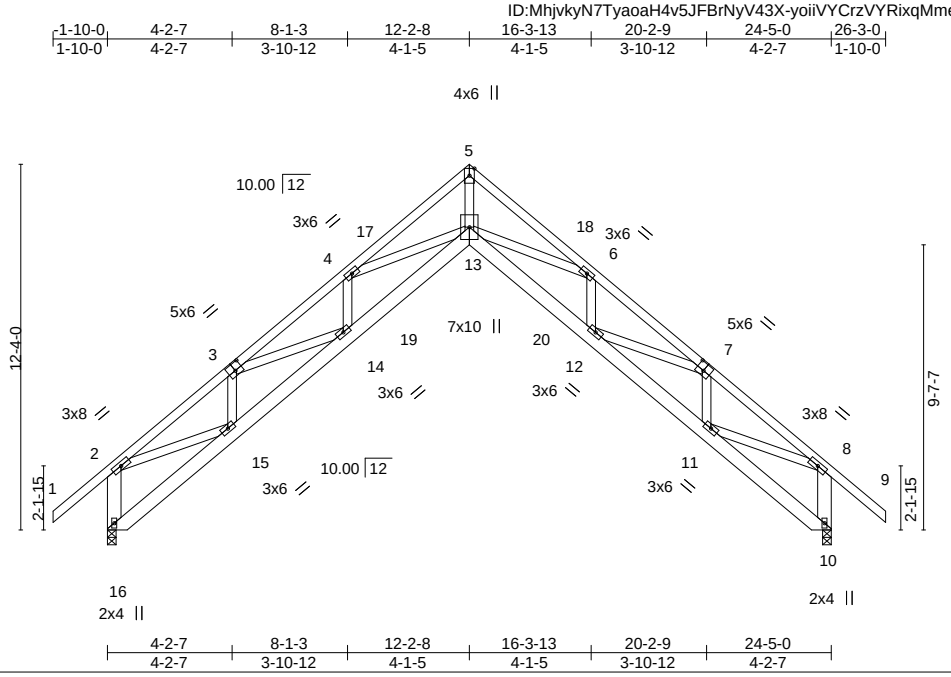


Plate Offsets (X,Y)-- [3:0-3-0,0-3-0], [7:0-3-0,0-3-0]

| 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 | 0.40 | Vert(LL) | -0.27 | 13 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.51 | Vert(CT) | -0.50 | 13 | >572 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.82 | Horz(CT) | 0.90 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 190 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except*
2-16,8-10: 2x6 SP No.2, 5-13: 2x4 SP No.2

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

**REACTIONS.** (size) 16=0-3-8, 10=0-3-8
Max Horz 16=-330(LC 10)
Max Uplift 16=-197(LC 12), 10=-197(LC 13)
Max Grav 16=998(LC 1), 10=998(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-16=-948/455, 2-3=-1736/820, 3-4=-2743/966, 4-5=-3161/548, 5-6=-3191/588, 6-7=-2743/912, 7-8=-1736/759, 8-10=-948/461
BOT CHORD 15-16=-392/449, 14-15=-788/1905, 13-14=-821/2960, 12-13=-471/2691, 11-12=-516/1683
WEBS 5-13=-715/3813, 6-13=-208/749, 6-12=-464/14, 7-12=-155/854, 7-11=-648/154, 8-11=-513/1314, 4-13=0/670, 4-14=-437/1, 3-14=-82/804, 3-15=-668/155, 2-15=-503/1314

**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) -1-10-0 to 1-2-0, Interior(1) 1-2-0 to 12-2-8, Exterior(2R) 12-2-8 to 15-2-8, Interior(1) 15-2-8 to 26-3-0 zone; end vertical left and right exposed; 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) Bearing at joint(s) 16, 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 197 lb uplift at joint 16 and 197 lb uplift at joint 10.

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Date:

August 7,2023



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| Job | Truss | Truss Type | Qty | Ply | IC CONST. - STALLING RES. |
|---|---|---|---|---|---|
| 3606718 | T06G | GABLE | 1 | 2 | T31235564 Job Reference (optional) |

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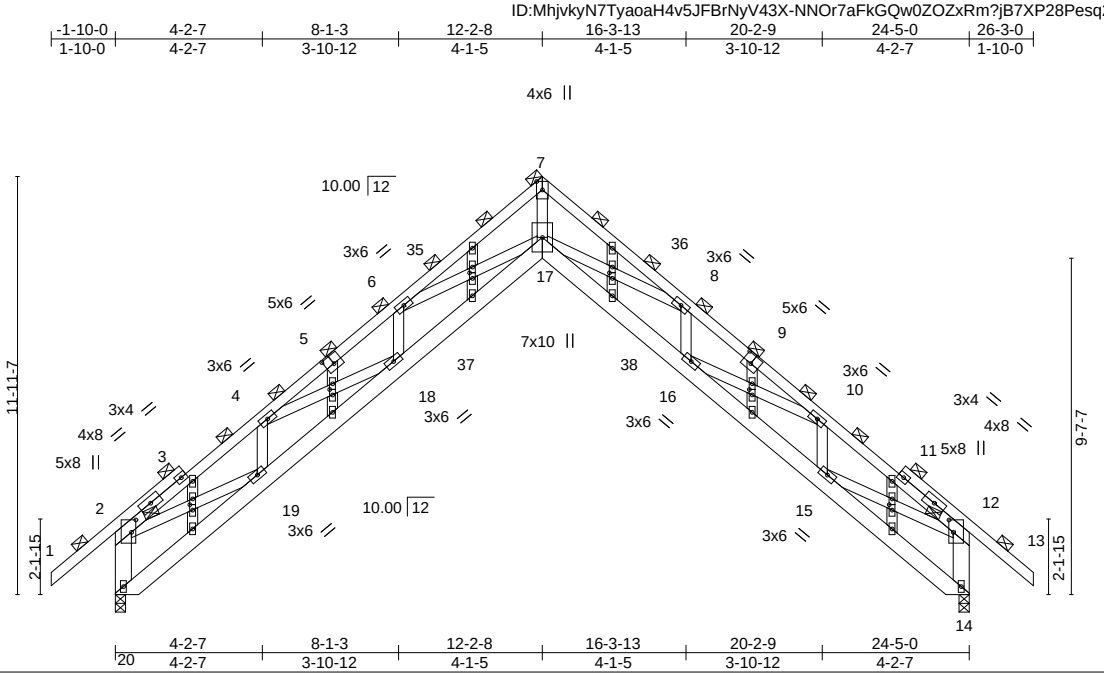


Plate Offsets (X,Y)-- [2:0-4-4,0-1-8], [5:0-3-0,0-3-0], [9:0-3-0,0-3-0], [12:0-4-4,0-1-8], [21:0-1-14,0-1-0], [24:0-1-14,0-1-0], [26:0-1-14,0-1-0], [30:0-1-14,0-1-0], [32:0-1-14,0-1-0], [34:0-1-14,0-1-0]

| 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 | 0.19 | Vert(LL) | -0.19 | 17 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.32 | Vert(CT) | -0.35 | 17 | >814 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.83 | Horz(CT) | 0.63 | 14 | n/a | n/a | | |
| BCDL | 10.0 | Code | FBC2020/TPI2014 | Matrix-MS | | | | | | | Weight: 401 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except*
2-20,12-14: 2x6 SP No.2
OTHERS 2x4 SP No.3

**BRACING-**
TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals.
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) 20=0-3-8, 14=0-3-8
Max Horz 20=315(LC 11)
Max Uplift 20=-199(LC 12), 14=-199(LC 13)
Max Grav 20=998(LC 1), 14=998(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-20=-1009/483, 2-4=-2043/959, 4-6=-3264/1136, 6-7=-3729/624, 7-8=-3747/664, 8-10=-3264/1072, 10-12=-2043/894, 12-14=-1009/493
BOT CHORD 19-20=-376/486, 18-19=-897/2196, 17-18=-953/3434, 16-17=-644/3205, 15-16=-668/2015
WEBS 7-17=-812/4539, 8-17=-228/883, 8-16=-446/22, 10-16=-174/1023, 10-15=-680/170, 12-15=-597/1517, 6-17=0/782, 6-18=-428/14, 4-18=-101/973, 4-19=-698/175, 2-19=-599/1517

**NOTES-**
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
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) -1-10-0 to 1-2-0, Interior(1) 1-2-0 to 12-2-8, Exterior(2R) 12-2-8 to 15-2-8, Interior(1) 15-2-8 to 26-3-0 zone; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) 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.
6) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

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August 7,2023

Continued on page 2



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**NOTES-**

11) Bearing at joint(s) 20, 14 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 199 lb uplift at joint 20 and 199 lb uplift at joint 14.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Studding applied to ply: 1(Front)

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - STALLING RES. T31235565 |
|---|---|---|---|---|---|
| 3606718 | T07 | Roof Special | 4 | 1 | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 2 2023 MiTek Industries, Inc. Fri Aug 4 14:13:30 2023 Page 1
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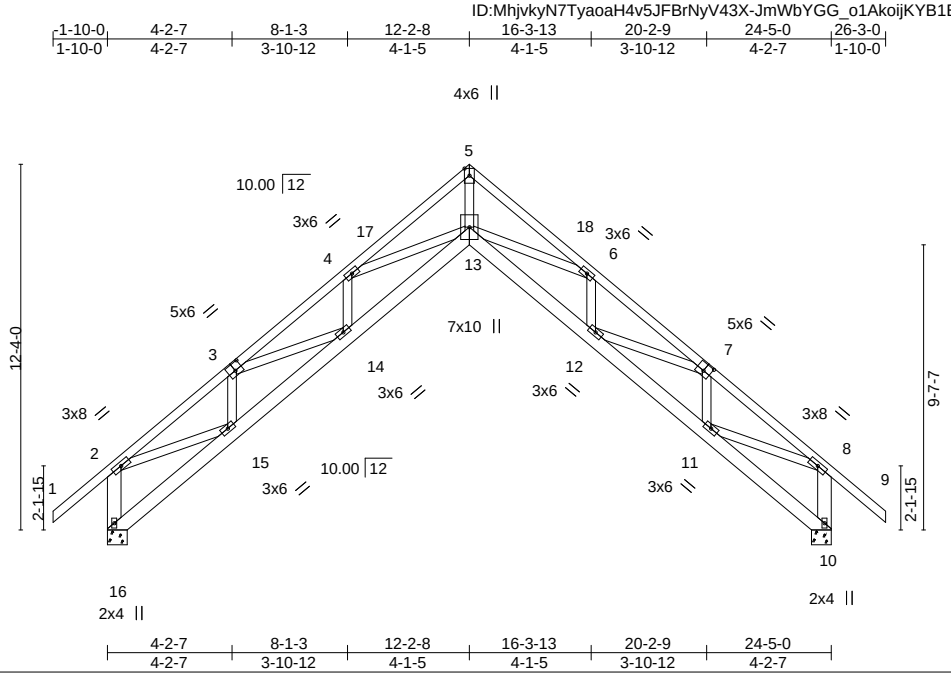


Plate Offsets (X,Y)-- [3:0-3-0,0-3-0], [7:0-3-0,0-3-0]

| 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 | 0.40 | Vert(LL) | -0.27 | 13 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.51 | Vert(CT) | -0.50 | 13 | >572 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.82 | Horz(CT) | 0.90 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 190 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except*
2-16,8-10: 2x6 SP No.2, 5-13: 2x4 SP No.2

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

**REACTIONS.** (size) 16=0-8-0, 10=0-8-0
Max Horz 16=-330(LC 10)
Max Uplift 16=-197(LC 12), 10=-197(LC 13)
Max Grav 16=998(LC 1), 10=998(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-16=-1019/300, 2-3=-1880/421, 3-4=-2975/491, 4-5=-3327/327, 5-6=-3356/367, 6-7=-2743/301, 7-8=-1736/271, 8-10=-948/244
BOT CHORD 15-16=-418/424, 14-15=-554/2077, 13-14=-587/3132, 12-13=-99/2761, 11-12=-171/1683
WEBS 5-13=-433/4025, 6-13=-362/596, 6-12=-403/75, 7-12=-98/897, 7-11=-649/102, 8-11=-140/1313, 4-13=-124/467, 4-14=-377/40, 3-14=-25/842, 3-15=-691/156, 2-15=-232/1388

**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) -1-10-0 to 1-2-0, Interior(1) 1-2-0 to 12-2-8, Exterior(2R) 12-2-8 to 15-2-8, Interior(1) 15-2-8 to 26-3-0 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) Bearing at joint(s) 16, 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 197 lb uplift at joint 16 and 197 lb uplift at joint 10.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 7,2023



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314.434.1200 / MiTek-US.com

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - STALLING RES. T31235566 |
|---|---|---|---|---|---|
| 3606718 | T08 | Roof Special | 14 | 1 | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 2 2023 MiTek Industries, Inc. Fri Aug 4 14:13:31 2023 Page 1
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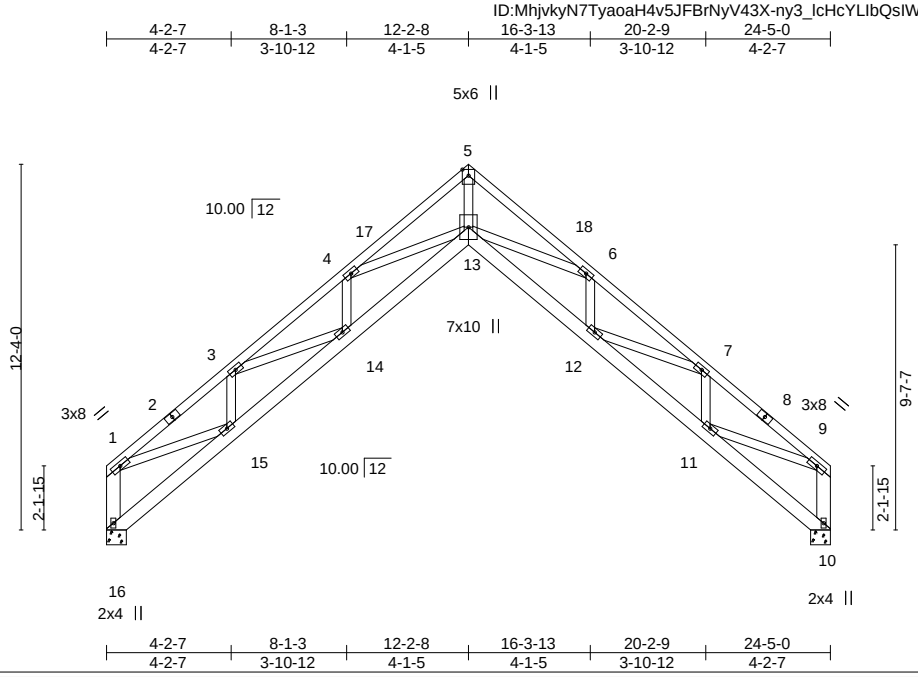


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.41 | Vert(LL) | -0.28 | 13 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.52 | Vert(CT) | -0.51 | 13 | >558 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.84 | Horz(CT) | 0.92 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code | FBC2020/TPI2014 | Matrix-MS | | | | | | | Weight: 182 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except*
1-16,9-10: 2x6 SP No.2, 5-13: 2x4 SP No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 3-0-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-11-2 oc bracing.

**REACTIONS.** (size) 16=0-8-0, 10=0-8-0
Max Horz 16=-220(LC 10)
Max Uplift 16=-151(LC 13), 10=-151(LC 12)
Max Grav 16=886(LC 1), 10=886(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-16=-890/292, 1-3=-1849/533, 3-4=-2893/717, 4-5=-3187/474, 5-6=-3217/501, 6-7=-2811/495, 7-9=-1798/322, 9-10=-860/181
BOT CHORD 15-16=-300/333, 14-15=-653/2009, 13-14=-690/3005, 12-13=-368/2755, 11-12=-279/1750
WEBS 5-13=-539/3845, 6-13=-253/547, 6-12=-373/65, 7-12=-69/844, 7-11=-662/140, 9-11=-207/1339, 4-13=-59/354, 4-14=-353/44, 3-14=-26/802, 3-15=-681/217, 1-15=-342/1373

**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) 0-2-12 to 3-2-12, Interior(1) 3-2-12 to 12-2-8, Exterior(2R) 12-2-8 to 15-2-8, Interior(1) 15-2-8 to 24-2-4 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) All plates are 3x6 MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Bearing at joint(s) 16, 10 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 151 lb uplift at joint 16 and 151 lb uplift at joint 10.

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 7,2023



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| Job | Truss | Truss Type | Qty | Ply | IC CONST. - STALLING RES. T31235567 |
|---|---|---|---|---|---|
| 3606718 | T09 | ROOF SPECIAL | 5 | 1 | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 2 2023 MiTek Industries, Inc. Fri Aug 4 14:13:32 2023 Page 1
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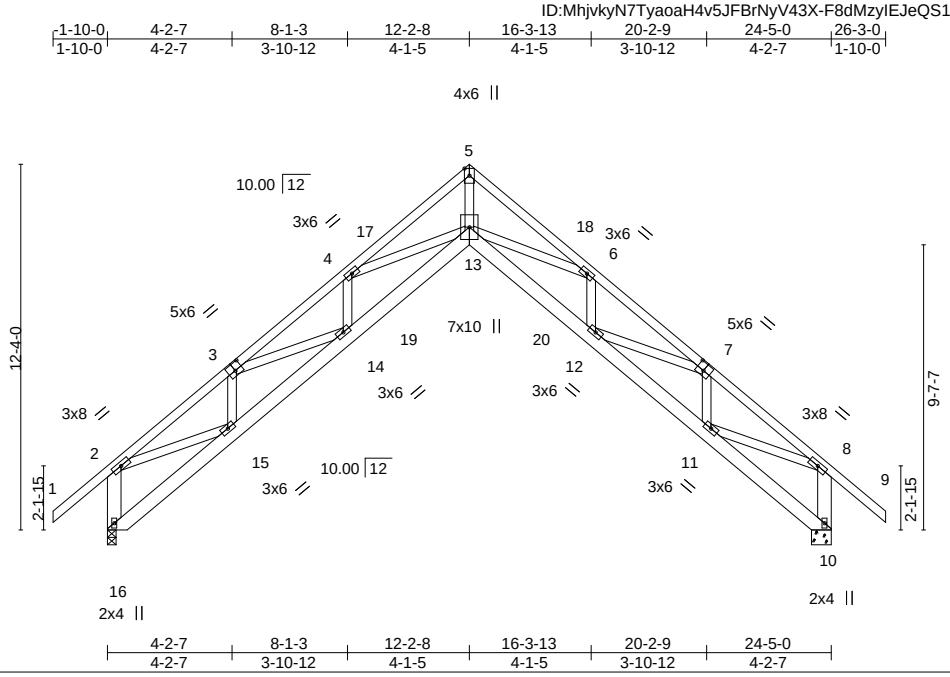


Plate Offsets (X,Y)-- [3:0-3-0,0-3-0], [7:0-3-0,0-3-0]

| 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 | 0.40 | Vert(LL) | -0.27 | 13 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.51 | Vert(CT) | -0.50 | 13 | >572 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.82 | Horz(CT) | 0.90 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 190 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except*
2-16,8-10: 2x6 SP No.2, 5-13: 2x4 SP No.2

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

**REACTIONS.** (size) 16=0-3-8, 10=0-8-0
Max Horz 16=-330(LC 10)
Max Uplift 16=-197(LC 12), 10=-197(LC 13)
Max Grav 16=998(LC 1), 10=998(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-16=-948/455, 2-3=-1736/819, 3-4=-2743/966, 4-5=-3161/548, 5-6=-3191/588, 6-7=-2743/912, 7-8=-1736/759, 8-10=-948/461
BOT CHORD 15-16=-392/449, 14-15=-788/1905, 13-14=-821/2960, 12-13=-471/2691, 11-12=-516/1683
WEBS 5-13=-715/3813, 6-13=-208/749, 6-12=-464/14, 7-12=-155/854, 7-11=-649/154, 8-11=-512/1313, 4-13=0/670, 4-14=-437/1, 3-14=-82/804, 3-15=-669/156, 2-15=-503/1313

**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) -1-10-0 to 1-2-0, Interior(1) 1-2-0 to 12-2-8, Exterior(2R) 12-2-8 to 15-2-8, Interior(1) 15-2-8 to 26-3-0 zone; end vertical left and right exposed; 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) Bearing at joint(s) 16, 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 197 lb uplift at joint 16 and 197 lb uplift at joint 10.

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Date:

August 7,2023



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| Job | Truss | Truss Type | Qty | Ply | IC CONST. - STALLING RES. |
|---|---|---|---|---|---|
| 3606718 | T09G | GABLE | 1 | 2 | T31235568 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 2 2023 MiTek Industries, Inc. Fri Aug 4 14:13:35 2023 Page 1
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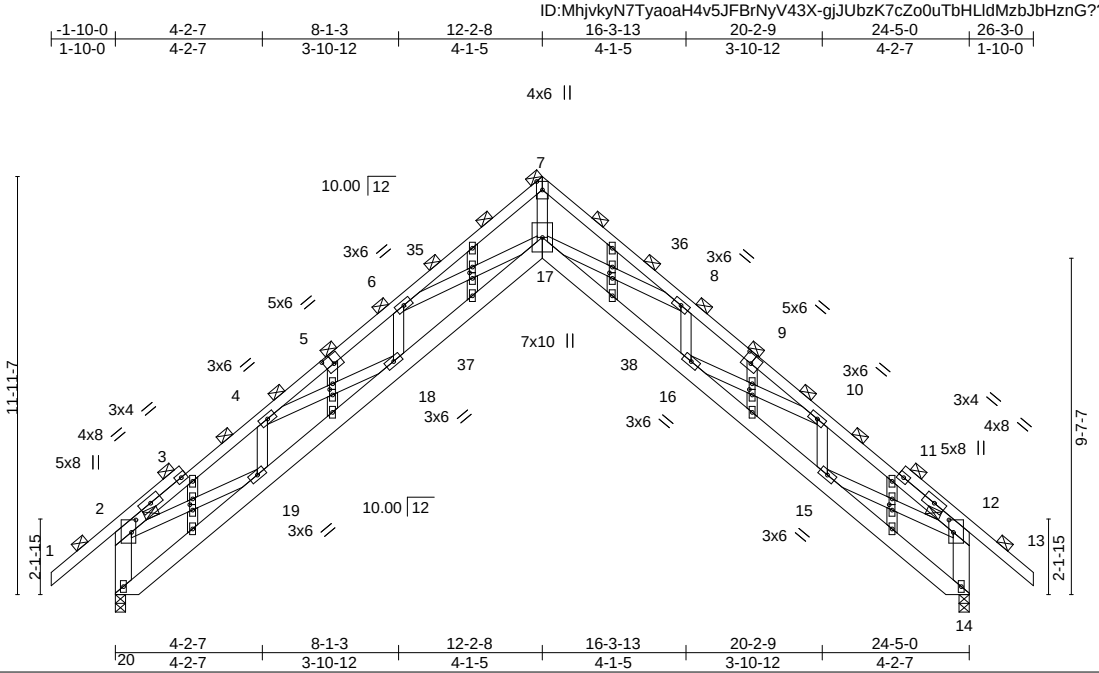


Plate Offsets (X,Y)-- [2:0-4-4,0-1-8], [5:0-3-0,0-3-0], [9:0-3-0,0-3-0], [12:0-4-4,0-1-8], [21:0-1-14,0-1-0], [24:0-1-14,0-1-0], [26:0-1-14,0-1-0], [30:0-1-14,0-1-0], [32:0-1-14,0-1-0], [34:0-1-14,0-1-0]

| 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 | 0.19 | Vert(LL) | -0.19 | 17 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.32 | Vert(CT) | -0.35 | 17 | >814 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.83 | Horz(CT) | 0.63 | 14 | n/a | n/a | | |
| BCDL | 10.0 | Code | FBC2020/TPI2014 | Matrix-MS | | | | | | | Weight: 401 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except*
2-20,12-14: 2x6 SP No.2
OTHERS 2x4 SP No.3

**BRACING-**
TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals.
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) 20=0-3-8, 14=0-3-8
Max Horz 20=-315(LC 10)
Max Uplift 20=-199(LC 12), 14=-199(LC 13)
Max Grav 20=998(LC 1), 14=998(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-20=-1009/483, 2-4=-2043/959, 4-6=-3264/1136, 6-7=-3729/624, 7-8=-3747/664, 8-10=-3264/1072, 10-12=-2043/894, 12-14=-1009/493
BOT CHORD 19-20=-376/486, 18-19=-897/2196, 17-18=-953/3434, 16-17=-644/3205, 15-16=-668/2015
WEBS 7-17=-812/4539, 8-17=-228/883, 8-16=-446/22, 10-16=-174/1023, 10-15=-680/170, 12-15=-597/1517, 6-17=0/782, 6-18=-428/14, 4-18=-101/973, 4-19=-698/175, 2-19=-599/1517

**NOTES-**
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
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) -1-10-0 to 1-2-0, Interior(1) 1-2-0 to 12-2-8, Exterior(2R) 12-2-8 to 15-2-8, Interior(1) 15-2-8 to 26-3-0 zone; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) 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.
6) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

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 7,2023

Continued on page 2



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**NOTES-**

11) Bearing at joint(s) 20, 14 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 199 lb uplift at joint 20 and 199 lb uplift at joint 14.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Studding applied to ply: 1(Front)

| Job | Truss | Truss Type | Qty | Ply | IC CONST. - STALLING RES. T31235569 |
|---|---|---|---|---|---|
| 3606718 | T10 | Monopitch | 28 | 1 | Job Reference (optional) |

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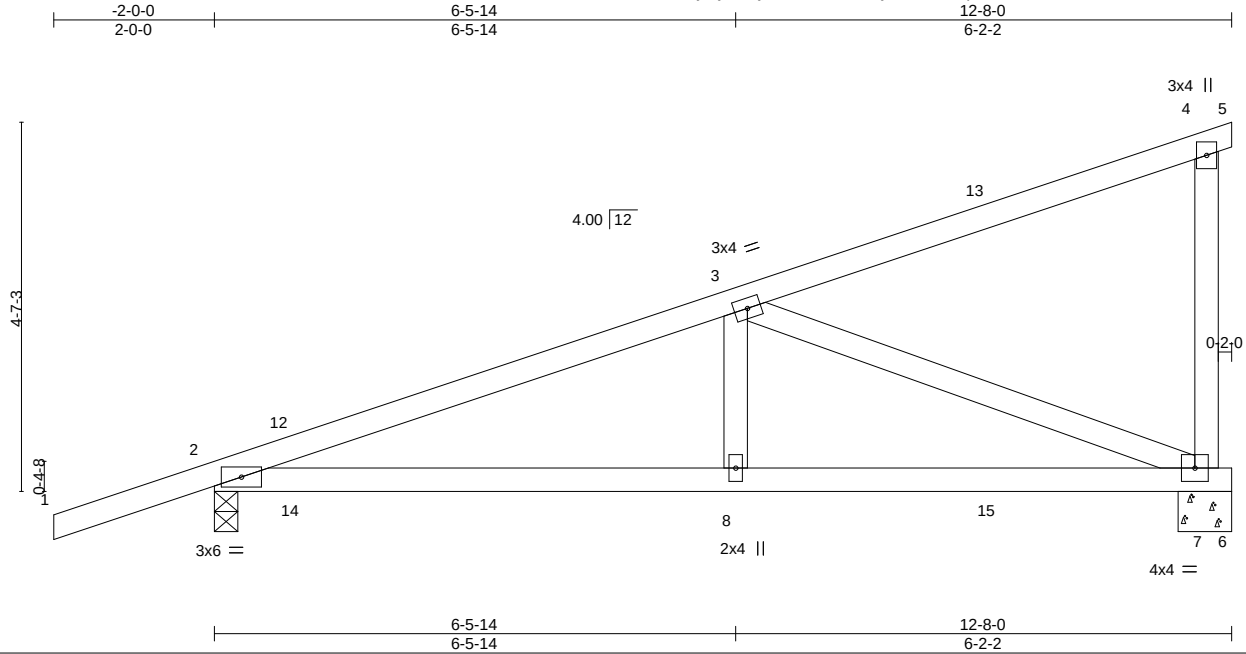


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.37 | Vert(LL) | 0.09 | 8-11 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.40 | Vert(CT) | -0.08 | 8-11 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.56 | Horz(CT) | 0.01 | 7 | 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

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-2-13 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 7=0-8-0
Max Horz 2=175(LC 8)
Max Uplift 2=-281(LC 8), 7=-248(LC 8)
Max Grav 2=574(LC 1), 7=472(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-804/728
BOT CHORD 2-8=-807/723, 7-8=-807/723
WEBS 3-8=-329/272, 3-7=-748/834

**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) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 12-8-0 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
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 281 lb uplift at joint 2 and 248 lb uplift at joint 7.

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 7,2023



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| Job | Truss | Truss Type | Qty | Ply | IC CONST. - STALLING RES. T31235570 |
|---|---|---|---|---|---|
| 3606718 | T10G | Monopitch Supported Gable | 1 | 1 | Job Reference (optional) |

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 2 2023 MiTek Industries, Inc. Fri Aug 4 14:13:37 2023 Page 1
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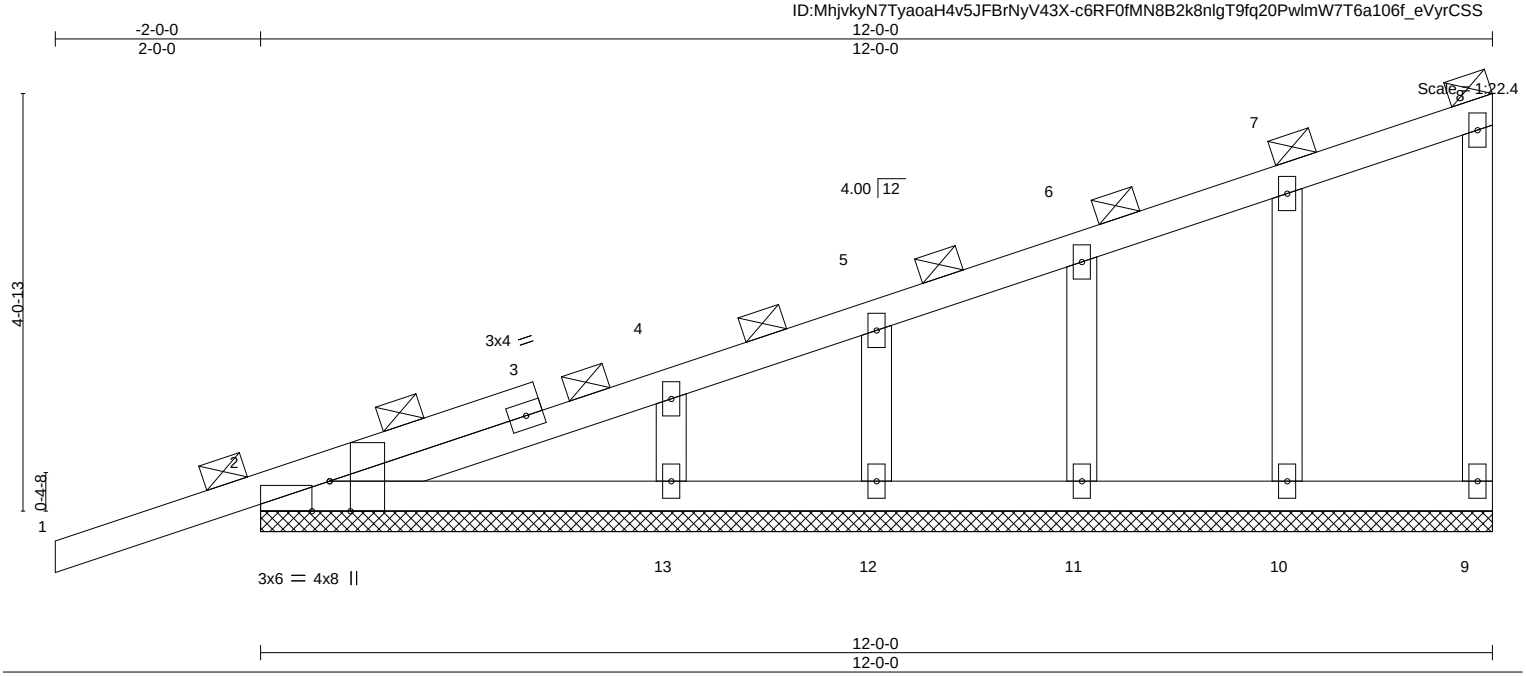


Plate Offsets (X,Y)-- [2:0-3-8,Edge], [2:0-2-1,Edge]

| 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 | 0.26 | Vert(LL) | 0.01 | 1 | n/r | 120 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.10 | Vert(CT) | 0.00 | 1 | n/r | 120 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.05 | Horz(CT) | 0.00 | 9 | n/a | n/a | | |
| BCDL | 10.0 | Code | FBC2020/TPI2014 | Matrix-S | | | | | | | Weight: 59 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 2-0-0 oc purlins (6-0-0 max.), except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 12-0-0.
(lb) - Max Horz 2=155(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 9, 12, 13, 11, 10 except 2=-105(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 9, 12, 13, 11, 10 except 2=268(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 Corner(3E) -2-0-0 to 1-0-0, Exterior(2N) 1-0-0 to 11-10-4 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) 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) All plates are 2x4 MT20 unless otherwise indicated.
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) 9, 12, 13, 11, 10 except (jt=lb) 2=105.
10) 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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August 7,2023



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| Job | Truss | Truss Type | Qty | Ply | IC CONST. - STALLING RES. T31235571 |
|---|---|---|---|---|---|
| 3606718 | T11 | Monopitch | 6 | 1 | Job Reference (optional) |

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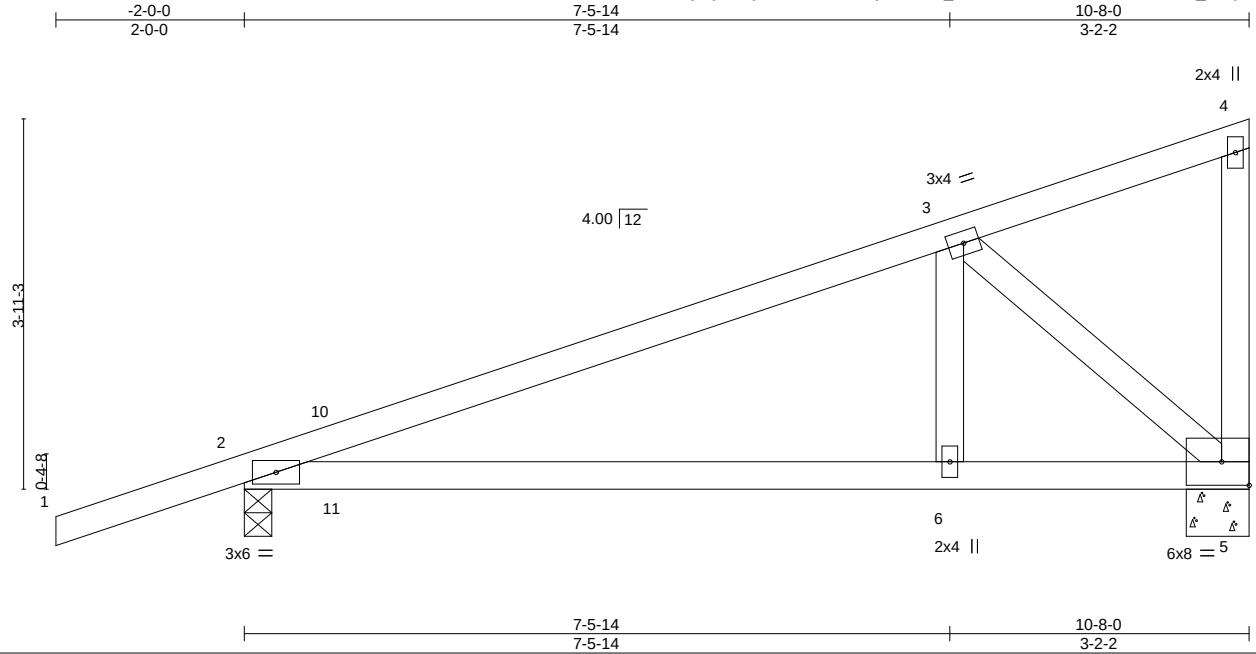


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.46 | Vert(LL) | 0.19 | 6-9 | >674 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.45 | Vert(CT) | -0.16 | 6-9 | >809 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.23 | 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 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 6-8-13 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 5=0-8-0
Max Horz 2=151(LC 8)
Max Uplift 2=-253(LC 8), 5=-205(LC 8)
Max Grav 2=508(LC 1), 5=379(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-520/506
BOT CHORD 2-6=-579/444, 5-6=-579/444
WEBS 3-6=-382/277, 3-5=-590/770

**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) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 10-6-4 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=253, 5=205.

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August 7,2023



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| Job | Truss | Truss Type | Qty | Ply | IC CONST. - STALLING RES. |
|---|---|---|---|---|---|
| 3606718 | TG01 | FLAT GIRDER | 2 | 2 | T31235572 |
| | | | | | Job Reference (optional) |

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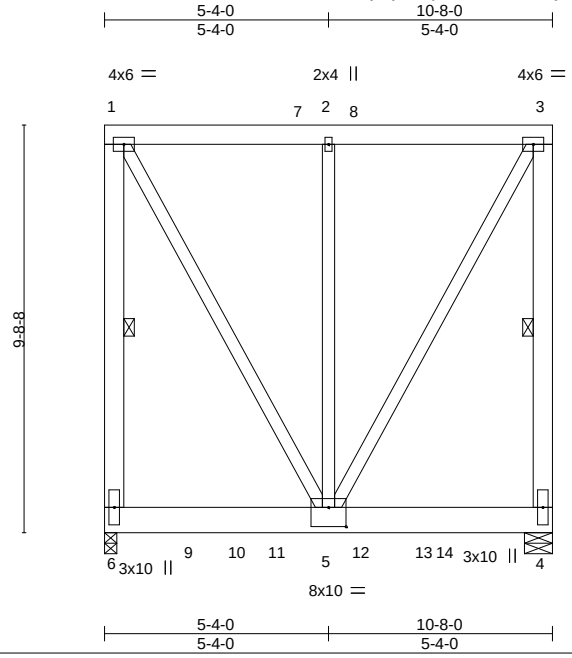


Scale = 1:54.9

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

| 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 | 0.13 | Vert(LL) | 0.03 | 5-6 | >999 | 240 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.17 | Vert(CT) | -0.04 | 5-6 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.46 | Horz(CT) | -0.00 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | Weight: 281 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x6 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except*
1-6,3-4: 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.
WEBS 1 Row at midpt 1-6, 3-4

**REACTIONS.** (size) 6=0-3-8, 4=0-8-0
Max Horz 6=220(LC 7)
Max Uplift 6=-1417(LC 4), 4=-1283(LC 5)
Max Grav 6=2748(LC 2), 4=2519(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-6=-1901/1021, 1-2=-1012/539, 2-3=-1012/539, 3-4=-1905/988
WEBS 1-5=-1085/2033, 2-5=-268/190, 3-5=-1063/2039

**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) 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 right exposed; porch left and right exposed; 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) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=1417, 4=1283.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1085 lb down and 579 lb up at 2-0-12, 1100 lb down and 579 lb up at 4-0-12, and 1100 lb down and 579 lb up at 6-0-12, and 1089 lb down and 579 lb up at 8-0-12 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

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Continued on page 2



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**LOAD CASE(S)** Standard

Uniform Loads (plf)

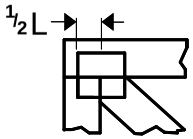
Vert: 1-3=-54, 4-6=-20

Concentrated Loads (lb)

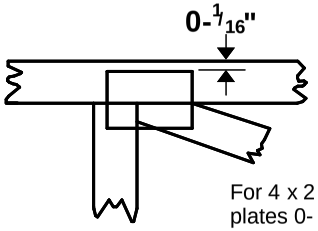
Vert: 9=-1007(F) 11=-1007(F) 12=-1007(F) 14=-1007(F)

# 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.

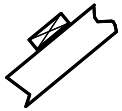
* Plate location details available in MiTek software or upon request.

## PLATE SIZE

4 x 4

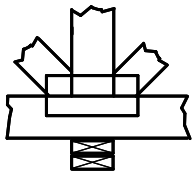
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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

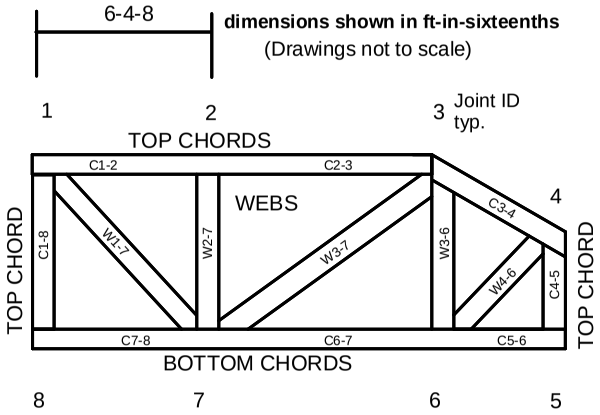


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

**Industry Standards:**

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & 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-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

# Design General Notes

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®



# 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.