MiTek®

RE: P240988-01
Roof - HT Lot 180

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

**Site Information:**

Customer: Clayton Properties Project Name: P240988-01
Lot/Block: 180 Model:
Address: 1625 SW Arborway Terr Subdivision: Hawthorne Ridge
City: Lee's Summit State: MO

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

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.6
Wind Code: ASCE 7-16 Wind Speed: 115 mph
Roof Load: 45.0 psf Floor Load: N/A psf

This package includes 53 individual, dated Truss Design Drawings and 0 Additional Drawings.

| No. | Seal# | Truss Name | Date | No. | Seal# | Truss Name | Date |
|---|---|---|---|---|---|---|---|
| 1 | I68602407 | A01 | 10/2/2024 | 21 | I68602427 | B12 | 10/2/2024 |
| 2 | I68602408 | A02 | 10/2/2024 | 22 | I68602428 | B13 | 10/2/2024 |
| 3 | I68602409 | A03 | 10/2/2024 | 23 | I68602429 | C01 | 10/2/2024 |
| 4 | I68602410 | A04 | 10/2/2024 | 24 | I68602430 | C02 | 10/2/2024 |
| 5 | I68602411 | A05 | 10/2/2024 | 25 | I68602431 | C03 | 10/2/2024 |
| 6 | I68602412 | A06 | 10/2/2024 | 26 | I68602432 | C04 | 10/2/2024 |
| 7 | I68602413 | A07 | 10/2/2024 | 27 | I68602433 | CJ1 | 10/2/2024 |
| 8 | I68602414 | A08 | 10/2/2024 | 28 | I68602434 | CJ02 | 10/2/2024 |
| 9 | I68602415 | A09 | 10/2/2024 | 29 | I68602435 | CJ03 | 10/2/2024 |
| 10 | I68602416 | B01 | 10/2/2024 | 30 | I68602436 | CJ04 | 10/2/2024 |
| 11 | I68602417 | B02 | 10/2/2024 | 31 | I68602437 | HG1 | 10/2/2024 |
| 12 | I68602418 | B03 | 10/2/2024 | 32 | I68602438 | HG2 | 10/2/2024 |
| 13 | I68602419 | B04 | 10/2/2024 | 33 | I68602439 | HG3 | 10/2/2024 |
| 14 | I68602420 | B05 | 10/2/2024 | 34 | I68602440 | HG4 | 10/2/2024 |
| 15 | I68602421 | B06 | 10/2/2024 | 35 | I68602441 | HG5 | 10/2/2024 |
| 16 | I68602422 | B07 | 10/2/2024 | 36 | I68602442 | J01 | 10/2/2024 |
| 17 | I68602423 | B08 | 10/2/2024 | 37 | I68602443 | J02 | 10/2/2024 |
| 18 | I68602424 | B09 | 10/2/2024 | 38 | I68602444 | J03 | 10/2/2024 |
| 19 | I68602425 | B10 | 10/2/2024 | 39 | I68602445 | J04 | 10/2/2024 |
| 20 | I68602426 | B11 | 10/2/2024 | 40 | I68602446 | J05 | 10/2/2024 |

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

Truss Design Engineer's Name: Sevier, Scott

My license renewal date for the state of Missouri is December 31, 2025.

Missouri COA: 001193

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


October 02, 2024

Sevier, Scott

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/28/2024 10:57:46

RE: P240988-01 - Roof - HT Lot 180

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

**Site Information:**

Project Customer: Clayton Properties Project Name: P240988-01
Lot/Block: 180 Subdivision: Hawthorne Ridge
Address: 1625 SW Arborway Terr
City, County: Lee's Summit State: MO

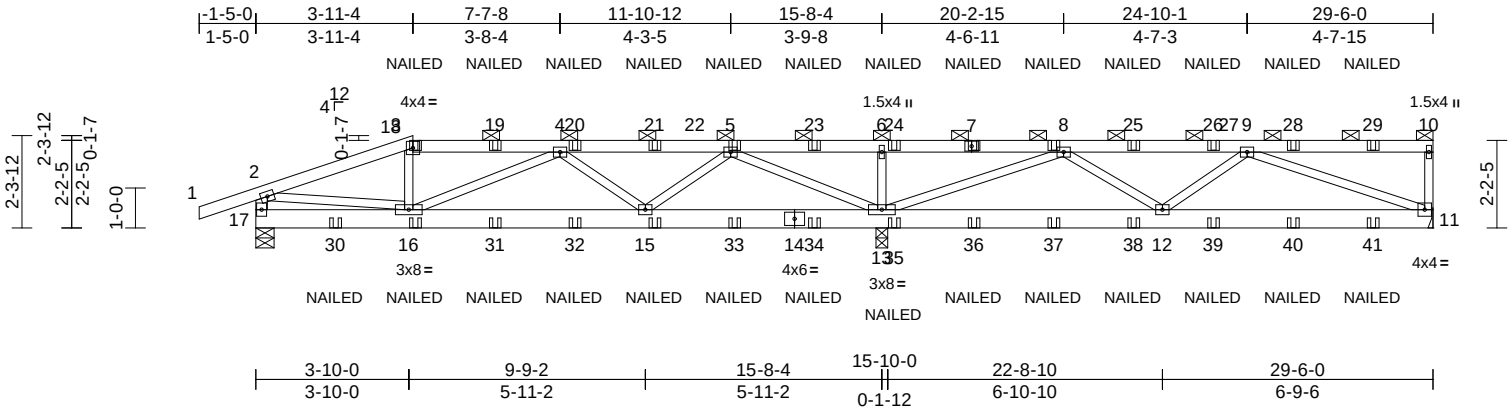
| No. | Seal# | Truss Name | Date |
|---|---|---|---|
| 41 | I68602447 | J06 | 10/2/2024 |
| 42 | I68602448 | J07 | 10/2/2024 |
| 43 | I68602449 | J08 | 10/2/2024 |
| 44 | I68602450 | J10 | 10/2/2024 |
| 45 | I68602451 | J11 | 10/2/2024 |
| 46 | I68602452 | J13 | 10/2/2024 |
| 47 | I68602453 | J14 | 10/2/2024 |
| 48 | I68602454 | J15 | 10/2/2024 |
| 49 | I68602455 | J16 | 10/2/2024 |
| 50 | I68602456 | J18 | 10/2/2024 |
| 51 | I68602457 | J19 | 10/2/2024 |
| 52 | I68602458 | M01 | 10/2/2024 |
| 53 | I68602459 | M02 | 10/2/2024 |

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | A01 | Half Hip Girder | 1 | 2 | I68602407 Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:26 ID:4_M9To87?QSqmdKZ76eMvozeBhO-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1




Scale = 1:57.7

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.45 | Vert(LL) | -0.02 | 15-16 | >999 | 240 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.19 | Vert(CT) | -0.05 | 15-16 | >999 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.26 | Horz(CT) | 0.01 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 258 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SPF No.2
WEBS 2x3 SPF No.2 *Except* 17-2:2x4 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.): 3-10.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 11= Mechanical, 13=0-3-8, 17=0-5-8
Max Horiz 17=94 (LC 9)
Max Uplift 11=-148 (LC 9), 13=-482 (LC 8), 17=-275 (LC 8)
Max Grav 11=623 (LC 26), 13=2055 (LC 1), 17=906 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-1234/324, 3-4=-1125/331, 4-5=-960/243, 5-6=-287/1072, 6-8=-287/1072, 8-9=-871/160, 9-10=-56/50, 10-11=-172/98, 2-17=-796/345
BOT CHORD 16-17=-205/214, 15-16=-418/1330, 13-15=-169/444, 12-13=-208/546, 11-12=-317/944
WEBS 2-16=-215/930, 3-16=0/207, 6-13=-440/214, 4-15=-485/259, 4-16=-272/124, 5-15=-79/678, 5-13=-1681/474, 8-13=-1727/481, 9-11=-965/298, 9-12=-101/185, 8-12=0/519

**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, 2x3 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Web connected as follows: 2x3 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 3-11-4, Exterior(2R) 3-11-4 to 11-0-2, Interior (1) 11-0-2 to 29-4-12 zone; cantilever left and right exposed ; 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) Provide adequate drainage to prevent water ponding.
6) All plates are 3x4 MT20 unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Bearings are assumed to be: Joint 17 SPF No.2 crushing capacity of 425 psi, Joint 13 SPF No.2 crushing capacity of 425 psi.
10) Refer to girder(s) for truss to truss connections.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 148 lb uplift at joint 11.
12) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 17 and 13. This connection is for uplift only and does not consider lateral forces.
13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
15) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-70, 2-3=-70, 3-10=-70, 11-17=-20
Concentrated Loads (lb)
Vert: 3=-38 (B), 7=-38 (B), 16=-18 (B), 15=-18 (B), 5=-38 (B), 8=-38 (B), 19=-38 (B), 20=-38 (B), 21=-38 (B), 23=-38 (B), 24=-38 (B), 25=-38 (B), 26=-38 (B), 28=-38 (B), 29=-38 (B), 30=-117 (B), 31=-18 (B), 32=-18 (B), 33=-18 (B), 34=-18 (B), 35=-18 (B), 36=-18 (B), 37=-18 (B), 38=-18 (B), 39=-18 (B), 40=-18 (B), 41=-18 (B)

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

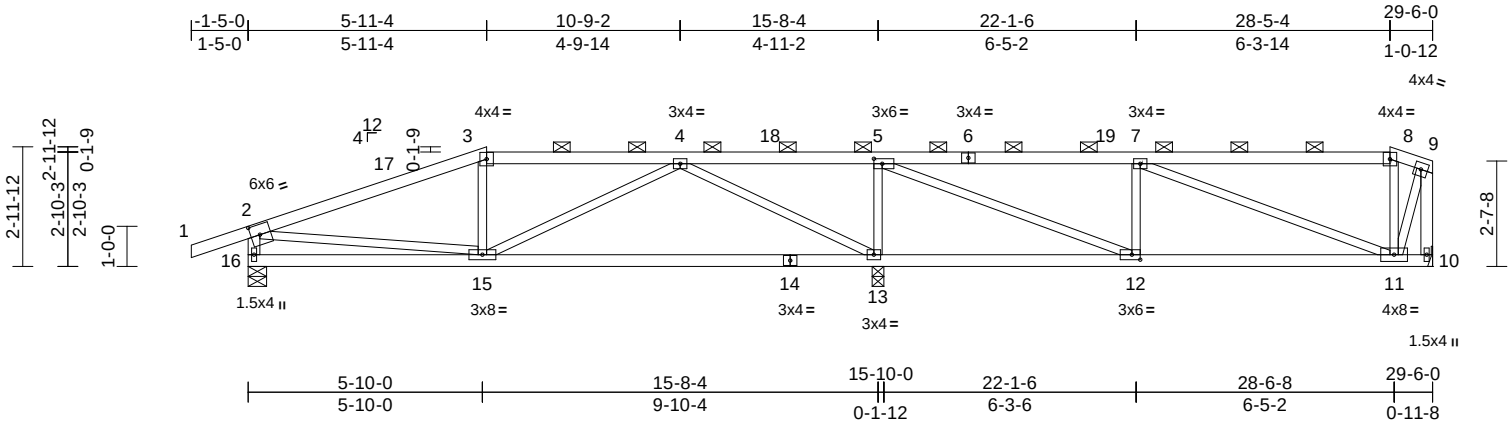
October 2,2024



RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/28/2024 10:57:47

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | A02 | Hip | 1 | 1 | I68602408 Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:28 ID:53Ttk2zm_J0Bw4Xd6OsIg8zeBgK-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1




Scale = 1:57.4

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

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.94 | Vert(LL) | -0.20 | 13-15 | >954 | 240 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.77 | Vert(CT) | -0.39 | 13-15 | >473 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.80 | Horz(CT) | 0.01 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 128 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 14-10:2x4 SP 1650F 1.5E
WEBS 2x3 SPF No.2 *Except* 16-2,10-9:2x4 SP No.2

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 5-6-11 oc purlins, except end verticals, and 2-0-0 oc purlins (5-10-10 max.): 3-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 12-13.

**REACTIONS** (size) 10= Mechanical, 13=0-3-8, 16=0-5-8
Max Horiz 16=117 (LC 9)
Max Uplift 10=-113 (LC 9), 13=-326 (LC 8), 16=-206 (LC 8)
Max Grav 10=501 (LC 26), 13=1534 (LC 1), 16=709 (LC 25)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-905/236, 3-4=-800/256, 4-5=-135/434, 5-7=-622/192, 7-8=-219/92, 8-9=-195/78, 2-16=-668/323, 9-10=-563/90
BOT CHORD 15-16=-300/280, 13-15=-207/471, 12-13=-434/163, 11-12=-233/622, 10-11=-44/51
WEBS 3-15=-80/125, 8-11=-263/197, 2-15=-63/569, 9-11=-144/605, 5-13=-871/307, 4-15=-56/387, 4-13=-1019/356, 7-11=-437/152, 7-12=-316/187, 5-12=-334/1116

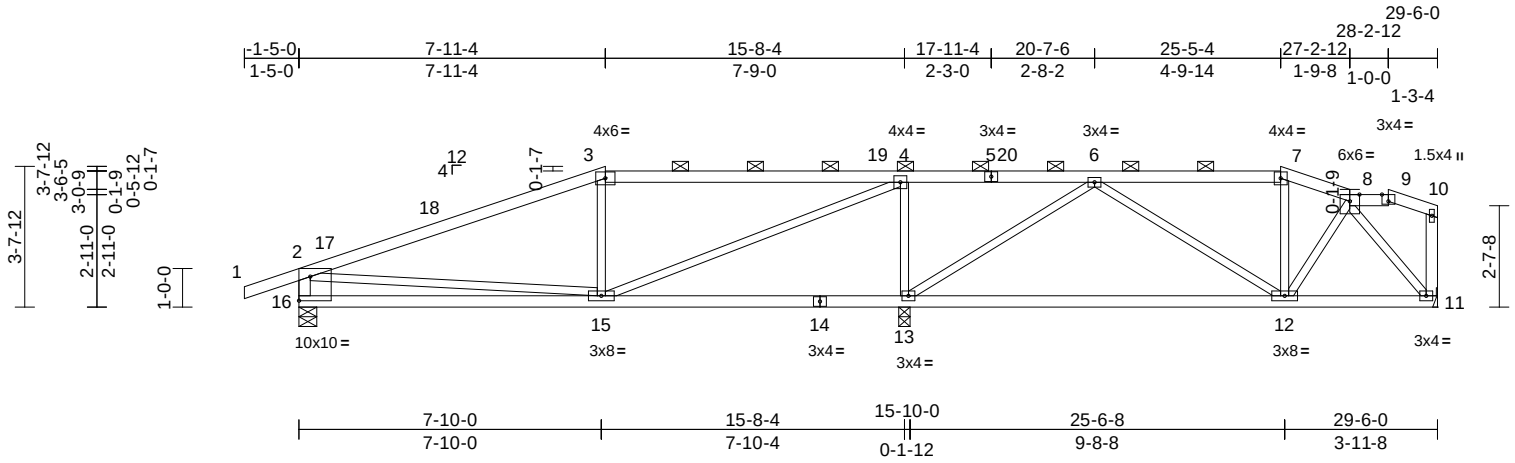
**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 5-11-4, Exterior(2R) 5-11-4 to 13-0-2, Interior (1) 13-0-2 to 28-5-4, Exterior(2E) 28-5-4 to 29-4-4 zone; cantilever left and right exposed ; 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) 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Bearings are assumed to be: Joint 16 SP No.2 crushing capacity of 565 psi, Joint 13 SP 1650F 1.5E crushing capacity of 565 psi.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 113 lb uplift at joint 10.
9) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 16 and 13. This connection is for uplift only and does not consider lateral forces.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard


October 2,2024

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | A03 | Roof Special | 1 | 1 | I68602409 Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:28 Page: 1
ID:Srs1UCfvoW4EehpOO9sRxxzeBfS-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f




Scale = 1:59.7

Plate Offsets (X, Y): [9:0-2-0,Edge], [16:Edge,0-7-8]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.97 | Vert(LL) | -0.19 | 12-13 | >868 | 240 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.80 | Vert(CT) | -0.38 | 12-13 | >431 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.58 | Horz(CT) | 0.01 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 129 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2 *Except* 3-5:2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 16-2,11-10:2x4 SP No.2

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 4-7-5 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-7, 8-9.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS** (size) 11= Mechanical, 13=0-3-8, 16=0-5-8
Max Horiz 16=107 (LC 9)
Max Uplift 11=-122 (LC 9), 13=-292 (LC 8), 16=-217 (LC 8)
Max Grav 11=545 (LC 1), 13=1441 (LC 1), 16=755 (LC 25)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-888/253, 3-4=-767/283, 4-6=-15/162, 6-7=-499/175, 7-8=-531/163, 8-9=-55/78, 9-10=-63/77, 2-16=-680/350, 10-11=-81/59
BOT CHORD 15-16=-416/484, 13-15=-162/86, 12-13=-222/402, 11-12=-138/370
WEBS 3-15=-253/189, 7-12=-94/90, 8-12=-29/256, 8-11=-588/154, 2-15=0/338, 4-13=-889/343, 4-15=-283/990, 6-13=-667/250, 6-12=0/210

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 7-11-4, Exterior(2R) 7-11-4 to 15-0-2, Interior (1) 15-0-2 to 25-5-4, Exterior(2E) 25-5-4 to 27-2-12, Interior (1) 27-2-12 to 28-2-12, Exterior(2E) 28-2-12 to 29-4-4 zone; cantilever left and right exposed ; 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) 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Bearings are assumed to be: Joint 16 SP No.2 crushing capacity of 565 psi, Joint 13 SP No.2 crushing capacity of 565 psi.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 122 lb uplift at joint 11.
9) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 16 and 13. This connection is for uplift only and does not consider lateral forces.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

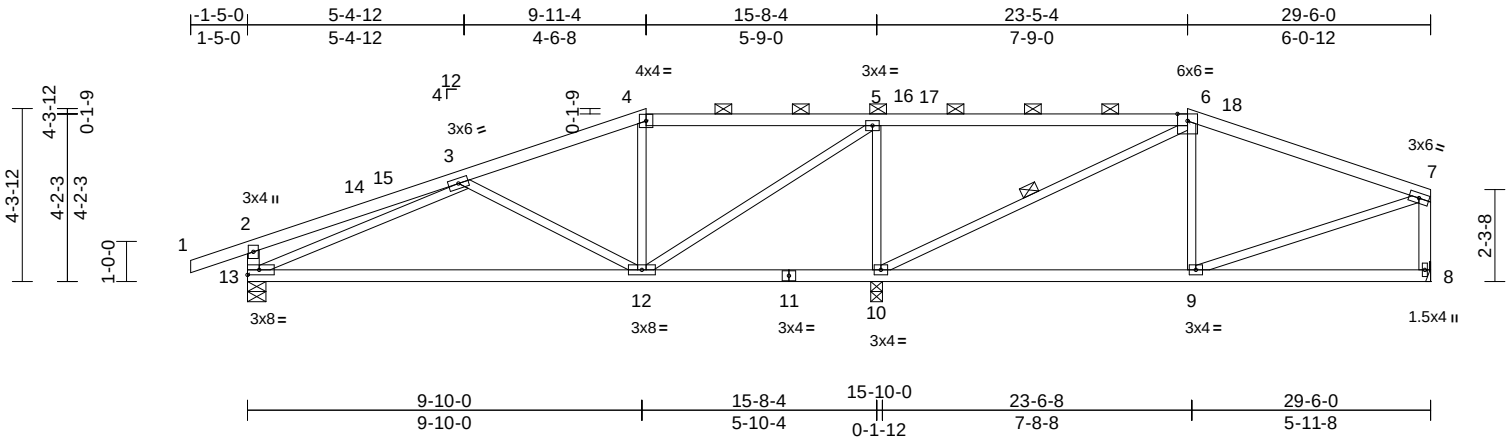

October 2,2024

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | A04 | Hip | 1 | 1 | I68602410 Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:28
ID:EkzC0?nEu5n2I_QGKB1ECZzeBe?-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f






Scale = 1:57.4

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.69 | Vert(LL) | -0.24 | 12-13 | >790 | 240 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.87 | Vert(CT) | -0.48 | 12-13 | >389 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.53 | Horz(CT) | 0.02 | 8 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 130 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2 *Except* 4-6:2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 13-2:2x4 SP 2400F 2.0E, 8-7:2x4 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.): 4-6.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 6-10

**REACTIONS** (size) 8= Mechanical, 10=0-3-8, 13=0-5-8
Max Horiz 13=78 (LC 11)
Max Uplift 8=-109 (LC 9), 10=-325 (LC 8), 13=-196 (LC 8)
Max Grav 8=553 (LC 26), 10=1489 (LC 1), 13=731 (LC 25)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-313/69, 3-4=-556/160, 4-5=-483/175, 5-6=-47/227, 6-7=-578/165, 2-13=-372/236, 7-8=-506/178
BOT CHORD 12-13=-326/788, 10-12=-225/157, 9-10=-125/493, 8-9=-62/70
WEBS 4-12=-138/105, 6-9=0/209, 3-13=-607/238, 7-9=-64/457, 3-12=-351/265, 5-10=-1032/391, 5-12=-219/846, 6-10=-750/239

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 9-11-4, Exterior(2R) 9-11-4 to 17-0-2, Interior (1) 17-0-2 to 23-5-4, Exterior(2E) 23-5-4 to 29-4-4 zone; cantilever left and right exposed ; 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) 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Bearings are assumed to be: Joint 13 SP No.2 crushing capacity of 565 psi, Joint 10 SP No.2 crushing capacity of 565 psi.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 109 lb uplift at joint 8.
9) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 13 and 10. This connection is for uplift only and does not consider lateral forces.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

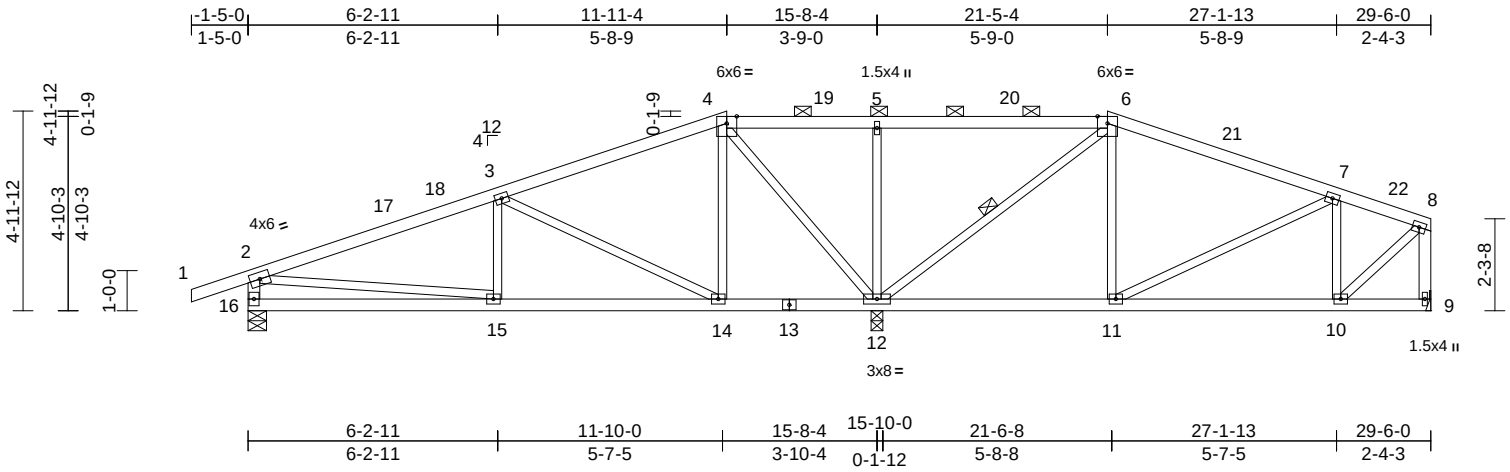
**LOAD CASE(S)** Standard


October 2,2024

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | A05 | Hip | 1 | 1 | I68602411 |
| | | | | | Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:28 Page: 1

ID:X90YlehHE7EPoVfgERtqlNzeBcq-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:57.5

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.60 | Vert(LL) | -0.04 | 15-16 | >999 | 240 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.40 | Vert(CT) | -0.08 | 15-16 | >999 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.70 | Horz(CT) | 0.01 | 9 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 137 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 16-2,9-8:2x4 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 (10-0-0 max.): 4-6.
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 6-12

**REACTIONS** (size) 9= Mechanical, 12=0-3-8, 16=0-5-8
Max Horiz 16=70 (LC 12)
Max Uplift 9=-105 (LC 9), 12=-327 (LC 8), 16=-188 (LC 8)
Max Grav 9=516 (LC 26), 12=1611 (LC 1), 16=681 (LC 25)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-828/186, 3-4=-190/93, 4-5=-72/432, 5-6=-72/432, 6-7=-392/140, 7-8=-424/158, 2-16=-622/297, 8-9=-506/133
BOT CHORD 15-16=-186/266, 14-15=-239/723, 12-14=-21/110, 11-12=-49/308, 10-11=-138/404, 9-10=-44/48
WEBS 3-15=0/216, 3-14=-683/253, 4-14=-59/384, 6-12=-811/234, 6-11=0/282, 7-11=-165/120, 7-10=-289/161, 2-15=-54/511, 8-10=-150/553, 5-12=-385/205, 4-12=-815/242

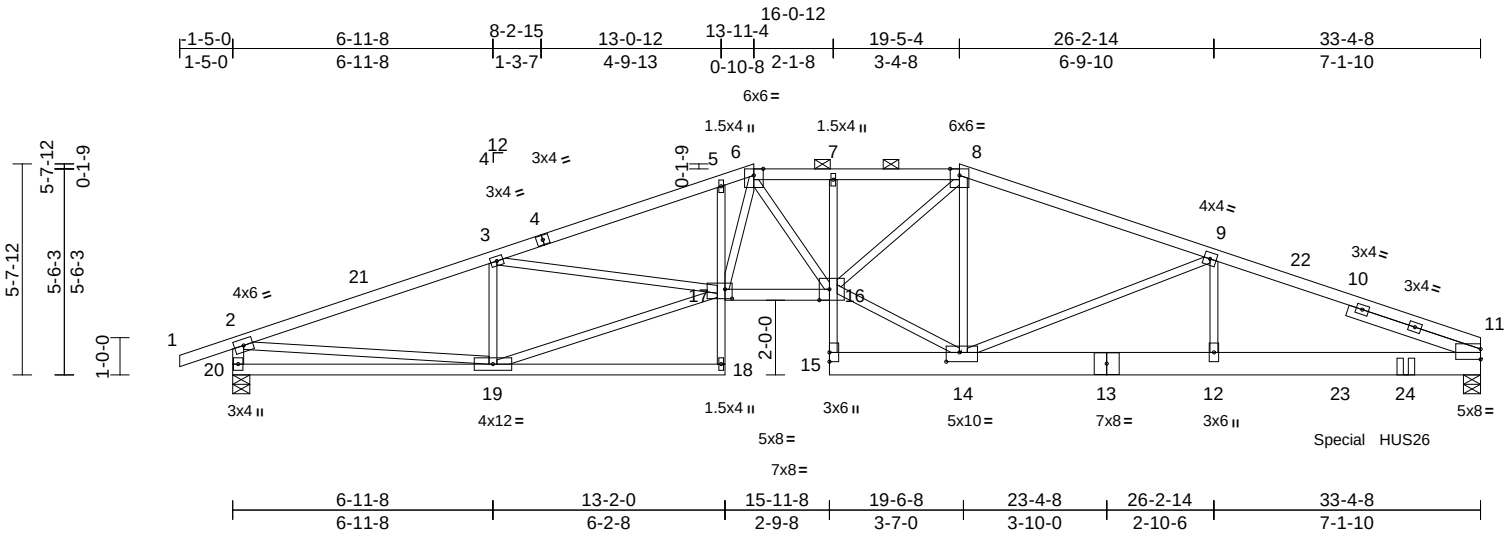
**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 11-11-4, Exterior(2R) 11-11-4 to 19-0-2, Interior (1) 19-0-2 to 21-5-4, Exterior(2R) 21-5-4 to 28-6-2, Interior (1) 28-6-2 to 29-4-4 zone; cantilever left and right exposed ; 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) Provide adequate drainage to prevent water ponding.
4) All plates are 3x4 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Bearings are assumed to be: Joint 16 SP No.2 crushing capacity of 565 psi, Joint 12 SP No.2 crushing capacity of 565 psi.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 105 lb uplift at joint 9.
10) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 16 and 12. This connection is for uplift only and does not consider lateral forces.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard


October 2,2024

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | A06 | Hip Girder | 1 | 2 | I68602412 |
| | | | | | Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:28 Page: 1
ID:MsQg8KANpQHkbfiMarbCMpzeBcC-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:61.6

Plate Offsets (X, Y): [11:Edge,0-3-5], [14:0-4-4,0-3-0], [16:0-3-4,Edge], [17:0-2-4,0-3-0]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.78 | Vert(LL) | -0.23 | 16-17 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.70 | Vert(CT) | -0.42 | 16-17 | >957 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.67 | Horz(CT) | 0.15 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 363 lb | FT = 20% |

**LUMBER**

TOP CHORD 2x4 SP No.2 *Except* 8-11:2x4 SP 1650F 1.5E

BOT CHORD 2x4 SP No.2 *Except* 18-5,7-15:2x3 SPF No.2, 15-13:2x8 SPF No.2, 13-11:2x8 SP 2400F 2.0E

WEBS 2x3 SPF No.2 *Except* 20-2:2x4 SP 2400F 2.0E

SLIDER Right 2x4 SP 2400F 2.0E -- 3-8-13

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 4-6-4 oc purlins, except end verticals, and 2-0-0 oc purlins (5-4-7 max.): 6-8.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 11=0-5-8, 20=0-5-8
Max Horiz 20=-88 (LC 17)
Max Uplift 11=-934 (LC 9), 20=-423 (LC 8)
Max Grav 11=3942 (LC 1), 20=1878 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/35, 2-3=-3622/953, 3-5=-5349/1426, 5-6=-5216/1469, 6-7=-5144/1413, 7-8=-5126/1410, 8-9=-3573/1012, 9-11=-5912/1534, 2-20=-1796/610

BOT CHORD 19-20=-207/503, 18-19=-12/75, 17-18=0/108, 5-17=-36/230, 16-17=-1076/4783, 15-16=-55/175, 7-16=-343/152, 14-15=-22/78, 12-14=-1354/5443, 11-12=-1354/5443

WEBS 3-19=-1280/438, 17-19=-845/3457, 3-17=-371/1668, 6-17=-321/895, 6-16=-211/804, 14-16=-856/3726, 8-16=-600/2449, 8-14=-979/287, 9-14=-2350/687, 9-12=-260/1464, 2-19=-691/2874

**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, 2x3 - 1 row at 0-9-0 oc, 2x8 - 2 rows staggered at 0-5-0 oc.
Web connected as follows: 2x3 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 13-11-4, Exterior(2E) 13-11-4 to 19-5-4, Exterior(2R) 19-5-4 to 26-2-14, Interior (1) 26-2-14 to 33-4-8 zone; cantilever left and right exposed ; 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) 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Bearings are assumed to be: Joint 20 SP No.2 crushing capacity of 565 psi, Joint 11 SP 2400F 2.0E crushing capacity of 805 psi.
9) Two H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 11. This connection is for uplift only and does not consider lateral forces.
10) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 20. This connection is for uplift only and does not consider lateral forces.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Use Simpson Strong-Tie HUS26 (14-16d Girder, 4-16d Truss) or equivalent at 31-4-8 from the left end to connect truss(es) to back face of bottom chord.
14) Fill all nail holes where hanger is in contact with lumber.
15) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2038 lb down and 492 lb up at 29-7-9 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER
PE-2001018807
PROFESSIONAL ENGINEER

October 2,2024

Continued on page 2



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

Vert: 1-2=-70, 2-6=-70, 6-8=-70, 8-11=-70, 18-20=-20, 16-17=-20, 11-15=-20

Concentrated Loads (lb)

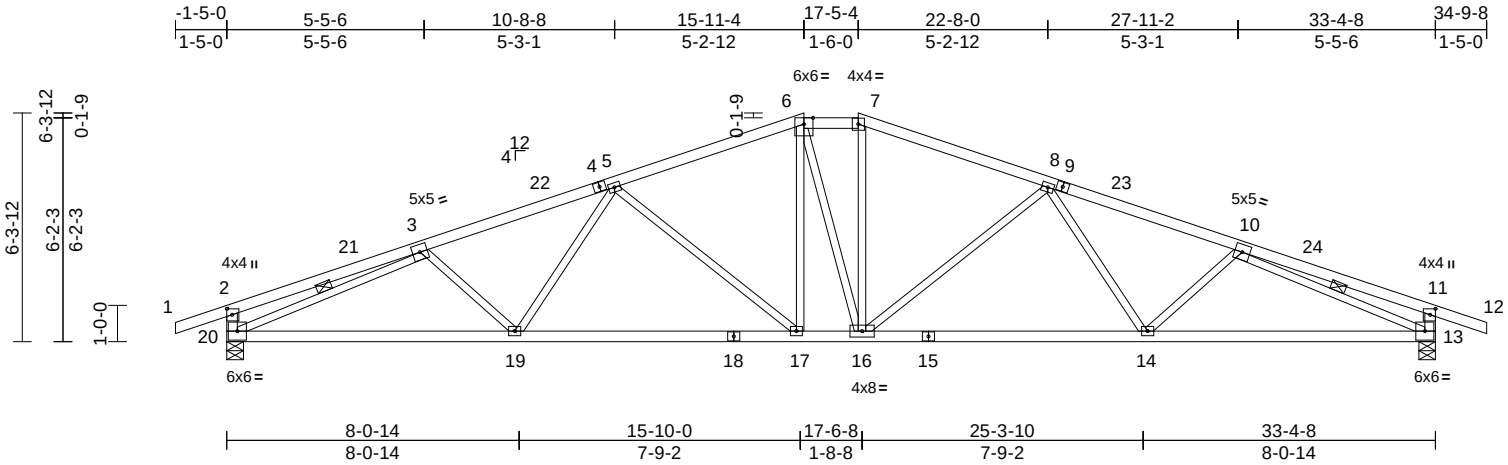
Vert: 23=-2038 (B), 24=-682 (B)

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | A07 | Hip | 1 | 1 | I68602413 |
| | | | | | Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:28
ID:BYroY?fSOjJ2Pom2wEJb_EzeBba-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f






Scale = 1:63.6

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

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.74 | Vert(LL) | -0.20 | 17-19 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.68 | Vert(CT) | -0.42 | 17-19 | >944 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.87 | Horz(CT) | 0.13 | 13 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 155 lb | FT = 20% |

**LUMBER**

TOP CHORD 2x4 SP No.2 *Except* 1-4,9-12:2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP 1650F 1.5E
WEBS 2x3 SPF No.2 *Except* 20-2,13-11:2x4 SP No.2

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 2-11-2 oc purlins, except end verticals, and 2-0-0 oc purlins (3-10-4 max.): 6-7.
BOT CHORD Rigid ceiling directly applied or 9-1-14 oc bracing.
WEBS 1 Row at midpt 3-20, 10-13

**REACTIONS** (size) 13=0-5-8, 20=0-5-8
Max Horiz 20=81 (LC 12)
Max Uplift 13=-339 (LC 9), 20=-339 (LC 8)
Max Grav 13=1598 (LC 1), 20=1598 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-436/135, 3-5=-2802/693, 5-6=-2253/629, 6-7=-2086/635, 7-8=-2254/631, 8-10=-2801/700, 10-11=-437/136, 11-12=0/35, 2-20=-435/262, 11-13=-435/261
BOT CHORD 19-20=-609/2617, 17-19=-539/2492, 16-17=-375/2084, 14-16=-508/2492, 13-14=-577/2617
WEBS 6-17=-81/462, 6-16=-235/245, 7-16=-89/427, 3-20=-2512/608, 10-13=-2510/604, 3-19=-88/167, 5-19=-12/277, 5-17=-565/211, 8-16=-563/211, 8-14=-12/277, 10-14=-88/167

**NOTES**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 15-11-4, Exterior(2E) 15-11-4 to 17-5-4, Exterior(2R) 17-5-4 to 24-6-2, Interior (1) 24-6-2 to 34-9-8 zone; cantilever left and right exposed ; 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) Provide adequate drainage to prevent water ponding.
4) All plates are 3x4 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) All bearings are assumed to be SP 1650F 1.5E crushing capacity of 565 psi.
8) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 20 and 13. This connection is for uplift only and does not consider lateral forces.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

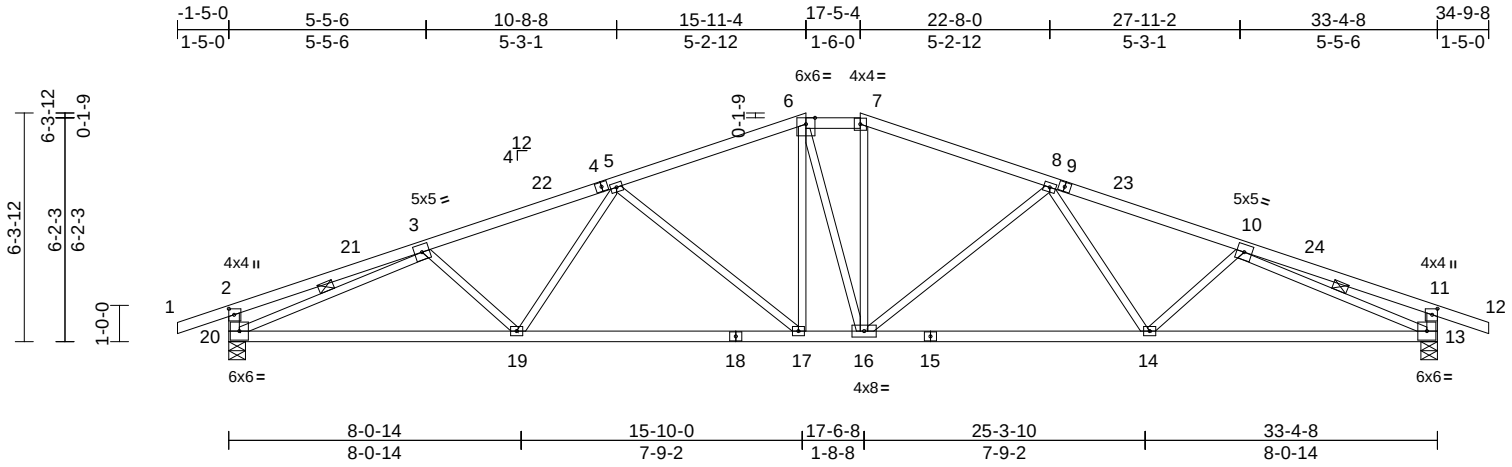

October 2,2024

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | A08 | Hip | 1 | 1 | I68602414 Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:29
ID:BYroY?fSOjJ2Pom2wEJb_EzeBba-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f






Scale = 1:63.6

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

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.74 | Vert(LL) | -0.20 | 17-19 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.68 | Vert(CT) | -0.42 | 17-19 | >945 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.87 | Horz(CT) | 0.13 | 13 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 155 lb | FT = 20% |

**LUMBER**

TOP CHORD 2x4 SP No.2 *Except* 1-4,9-12:2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP 1650F 1.5E
WEBS 2x3 SPF No.2 *Except* 20-2,13-11:2x4 SP 1650F 1.5E

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 2-11-2 oc purlins, except end verticals, and 2-0-0 oc purlins (3-10-4 max.): 6-7.
BOT CHORD Rigid ceiling directly applied or 9-1-14 oc bracing.
WEBS 1 Row at midpt 3-20, 10-13

**REACTIONS** (size) 13=0-5-8, 20=0-5-8
Max Horiz 20=-81 (LC 17)
Max Uplift 13=-339 (LC 9), 20=-339 (LC 8)
Max Grav 13=1598 (LC 1), 20=1598 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/35, 2-3=-440/136, 3-5=-2802/693, 5-6=-2253/629, 6-7=-2086/635, 7-8=-2254/631, 8-10=-2801/700, 10-11=-440/136, 11-12=0/35, 2-20=-436/262, 11-13=-436/262
BOT CHORD 19-20=-609/2617, 17-19=-539/2492, 16-17=-375/2084, 14-16=-508/2492, 13-14=-576/2617
WEBS 6-17=-81/462, 6-16=-235/245, 7-16=-89/427, 3-20=-2508/607, 10-13=-2507/603, 3-19=-88/167, 5-19=-12/277, 5-17=-565/212, 8-16=-563/211, 8-14=-12/277, 10-14=-88/167

**NOTES**

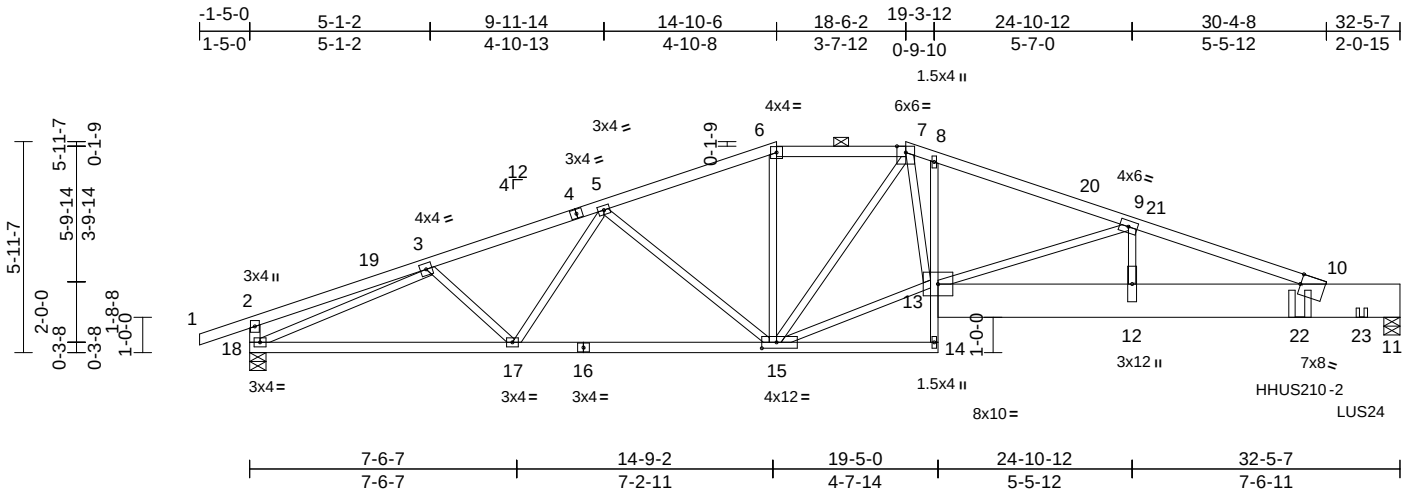
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 15-11-4, Exterior(2E) 15-11-4 to 17-5-4, Exterior(2R) 17-5-4 to 24-6-2, Interior (1) 24-6-2 to 34-9-8 zone; cantilever left and right exposed ; 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) Provide adequate drainage to prevent water ponding.
4) All plates are 3x4 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) All bearings are assumed to be SP 1650F 1.5E crushing capacity of 565 psi.
8) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 20 and 13. This connection is for uplift only and does not consider lateral forces.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard


October 2,2024

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | A09 | Roof Special Girder | 1 | 2 | I68602415 Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:29 Page: 1
ID:82tMaDSkXvGZgcMDrwyXakyXpc4-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:65

Plate Offsets (X, Y): [10:0-0-2,Edge], [15:0-5-0,0-2-0]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.81 | Vert(LL) | -0.24 | 12-13 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.81 | Vert(CT) | -0.42 | 12-13 | >915 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.67 | Horz(CT) | 0.09 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 370 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 14-8:2x3 SPF No.2, 13-11:1 1/2" x 11 1/4" 2.0E Microllam® LVL
WEBS 2x3 SPF No.2 *Except* 18-2:2x4 SP No.2

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 3-4-7 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 11=0-5-8, 18=0-5-8
Max Horiz 18=114 (LC 12)
Max Uplift 11=-1138 (LC 9), 18=-413 (LC 8)
Max Grav 11=5917 (LC 1), 18=1920 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-444/144, 3-5=-3603/860, 5-6=-3242/849, 6-7=-3039/843, 7-8=-4647/1210, 8-9=-4736/1162, 9-10=-8100/1821, 2-18=-442/261
BOT CHORD 17-18=-761/3244, 15-17=-758/3347, 14-15=-42/199, 13-14=0/64, 8-13=-172/201, 12-13=-1623/7478, 10-12=-1623/7478, 10-11=0/0
WEBS 6-15=-89/631, 7-15=-1673/375, 13-15=-817/3874, 7-13=-666/2748, 9-13=-3296/744, 9-12=-364/2284, 3-18=-3212/742, 3-17=-2/289, 5-17=-48/183, 5-15=-440/222

**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, 2x3 - 1 row at 0-9-0 oc, 2x12 - 2 rows staggered at 0-2-0 oc.
Web connected as follows: 2x3 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 14-10-6, Exterior(2E) 14-10-6 to 18-6-2, Exterior(2R) 18-6-2 to 23-6-2, Interior (1) 23-6-2 to 30-4-8 zone; cantilever left and right exposed ; 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) 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Bearings are assumed to be: Joint 18 SP No.2 crushing capacity of 565 psi, Joint 11 Trus Joist® LVL 2.0 E crushing capacity of 750 psi.
9) LGT2 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 11. This connection is for uplift only and does not consider lateral forces.
10) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 18. This connection is for uplift only and does not consider lateral forces.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Use Simpson Strong-Tie HHUS210-2 (30-16d Girder, 10-16d Truss) or equivalent at 29-7-9 from the left end to connect truss(es) to front face of bottom chord.
14) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss) or equivalent at 31-4-8 from the left end to connect truss(es) to front face of bottom chord.
15) Fill all nail holes where hanger is in contact with lumber.
16) N/A
17) LGT2 Hurricane ties must have two studs in line below the truss.

**LOAD CASE(S)** Standard


October 2,2024

Continued on page 2



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

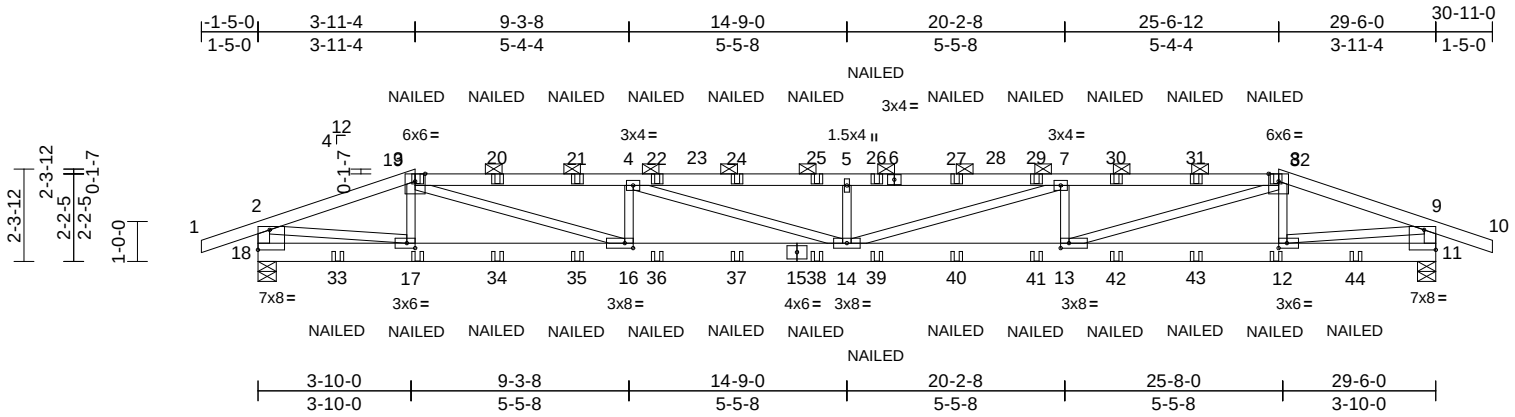
| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | A09 | Roof Special Girder | 1 | 2 | I68602415 |
| | | | | | Job Reference (optional) |



1) Dead + Roof Live (balanced): Lumber Increase=1.15,
Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-70, 2-6=-70, 6-7=-70, 7-10=-70,
14-18=-20, 10-13=-20, 10-11=-90
Concentrated Loads (lb)
Vert: 22=-4354 (F), 23=-487 (F)

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | B01 | Hip Girder | 1 | 2 | I68602416 Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:29 Page: 1
ID:57e2QzG5EP7bJXy1aKBqV1zeC6L-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:57.7

Plate Offsets (X, Y): [11:Edge,0-6-0], [12:0-2-8,0-1-8], [13:0-2-8,0-1-8], [16:0-2-8,0-1-8], [17:0-2-8,0-1-8], [18:Edge,0-6-0]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.94 | Vert(LL) | -0.35 | 14-16 | >996 | 240 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.66 | Vert(CT) | -0.65 | 14-16 | >536 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.53 | Horz(CT) | 0.05 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 265 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SPF No.2
WEBS 2x3 SPF No.2 *Except* 18-2,11-9:2x4 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 (3-11-3 max.): 3-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 11=0-5-8, 18=0-5-8
Max Horiz 18=8 (LC 16)
Max Uplift 11=-502 (LC 9), 18=-502 (LC 8)
Max Grav 11=1874 (LC 1), 18=1874 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-3296/833, 3-4=-6021/1532, 4-5=-7170/1771, 5-7=-7170/1771, 7-8=-5978/1519, 8-9=-3311/834, 9-10=0/35, 2-18=-1735/574, 9-11=-1744/575
BOT CHORD 17-18=-124/435, 16-17=-712/3112, 14-16=-1411/6018, 13-14=-1431/5975, 12-13=-736/3123, 11-12=-101/433
WEBS 3-17=-314/176, 8-12=-282/168, 2-17=-659/2702, 9-12=-663/2717, 3-16=-751/3103, 8-13=-736/3046, 4-16=-940/366, 4-14=-299/1234, 5-14=-511/253, 7-14=-308/1279, 7-13=-967/372

**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.
Web connected as follows: 2x3 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 3-11-4, Exterior(2R) 3-11-4 to 11-0-2, Interior (1) 11-0-2 to 25-6-12, Exterior(2E) 25-6-12 to 30-11-0 zone; cantilever left and right exposed ; 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) 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
9) Two H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 18 and 11. This connection is for uplift only and does not consider lateral forces.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-70, 2-3=-70, 3-8=-70, 8-9=-70, 9-10=-70, 11-18=-20
Concentrated Loads (lb)
Vert: 3=-38 (F), 17=-18 (F), 12=-18 (F), 8=-38 (F), 20=-38 (F), 21=-38 (F), 22=-38 (F), 24=-38 (F), 25=-38 (F), 26=-38 (F), 27=-38 (F), 29=-38 (F), 30=-38 (F), 31=-38 (F), 33=-117 (F), 34=-18 (F), 35=-18 (F), 36=-18 (F), 37=-18 (F), 38=-18 (F), 39=-18 (F), 40=-18 (F), 41=-18 (F), 42=-18 (F), 43=-18 (F), 44=-117 (F)

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER
October 2,2024

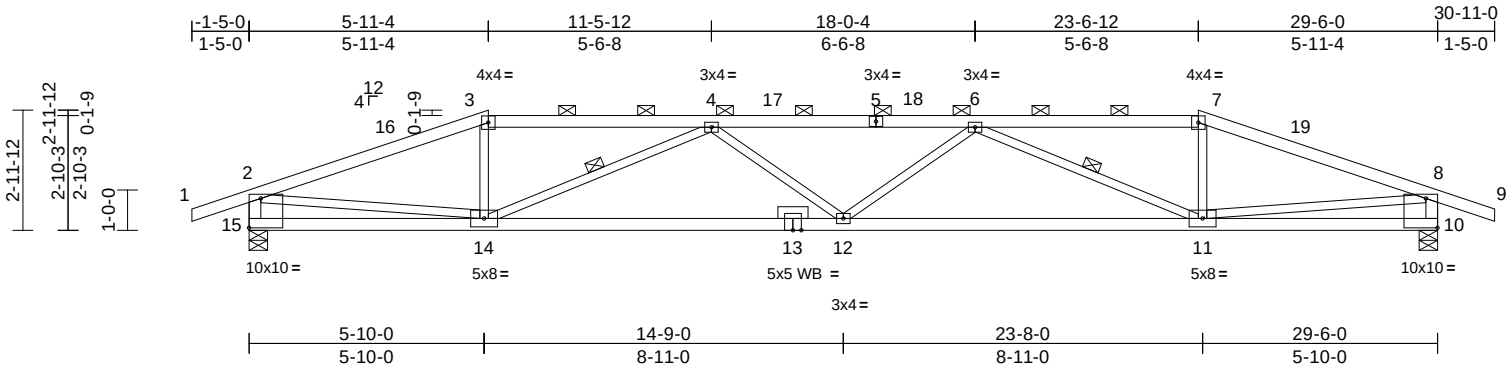
| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | B02 | Hip | 1 | 1 | I68602417 |
| | | | | | Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:30

ID:sCAwEKnRLJPdM_A519xhCuzeC5h-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f






Scale = 1:57.2

Plate Offsets (X, Y): [10:Edge,0-8-12], [15:Edge,0-8-12]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.92 | Vert(LL) | -0.29 | 12-14 | >999 | 240 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.83 | Vert(CT) | -0.57 | 11-12 | >617 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.69 | Horz(CT) | 0.10 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 125 lb | FT = 20% |

**LUMBER**

TOP CHORD 2x4 SP No.2 *Except* 3-5,5-7:2x4 SP 2400F 2.0E

BOT CHORD 2x4 SP 1650F 1.5E

WEBS 2x3 SPF No.2 *Except* 15-2,10-8:2x4 SP No.2

OTHERS 2x4 SP No.2

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 2-11-1 oc purlins, except end verticals, and 2-0-0 oc purlins (3-2-8 max.): 3-7.

BOT CHORD Rigid ceiling directly applied or 7-6-2 oc bracing.

WEBS 1 Row at midpt 4-14, 6-11

**REACTIONS** (size) 10=0-5-8, 15=0-5-8

Max Horiz 15=18 (LC 16)

Max Uplift 10=-351 (LC 9), 15=-351 (LC 8)

Max Grav 10=1424 (LC 1), 15=1424 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/35, 2-3=-2540/624, 3-4=-2332/619, 4-6=-3746/930, 6-7=-2328/611, 7-8=-2538/614, 8-9=0/35, 2-15=-1369/490, 8-10=-1370/486

BOT CHORD 14-15=-163/352, 12-14=-850/3606, 11-12=-903/3652, 10-11=-141/358

WEBS 3-14=-29/510, 7-11=-37/534, 2-14=-410/2012, 8-11=-399/2004, 4-12=0/298, 4-14=-1481/431, 6-12=0/274, 6-11=-1534/446

**NOTES**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 5-11-4, Exterior(2R) 5-11-4 to 13-0-2, Interior (1) 13-0-2 to 23-6-12, Exterior(2E) 23-6-12 to 30-11-0 zone; cantilever left and right exposed ; 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) 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) All bearings are assumed to be SP 1650F 1.5E crushing capacity of 565 psi.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 15 and 10. This connection is for uplift only and does not consider lateral forces.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

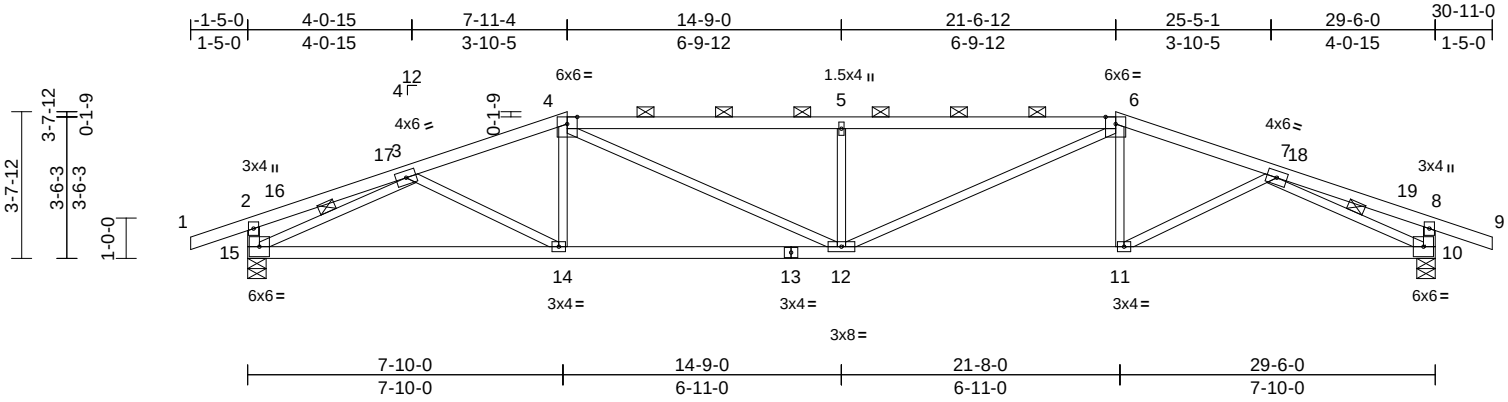
**LOAD CASE(S)** Standard


October 2,2024

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | B03 | Hip | 1 | 1 | I68602418 Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:30 Page: 1
ID:OH8zbozTaEQMHSOAzWDRrGzeC5R-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f




Scale = 1:57.2

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.76 | Vert(LL) | -0.22 | 12-14 | >999 | 240 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.79 | Vert(CT) | -0.40 | 12-14 | >885 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.51 | Horz(CT) | 0.10 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 128 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2 *Except* 4-6:2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 15-2,10-8:2x4 SP No.2

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

**REACTIONS** (size) 10=0-5-8, 15=0-5-8
Max Horiz 15=30 (LC 16)
Max Uplift 10=-344 (LC 9), 15=-344 (LC 8)
Max Grav 10=1424 (LC 1), 15=1424 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-289/92, 3-4=-2469/647, 4-5=-3075/857, 5-6=-3075/857, 6-7=-2468/646, 7-8=-290/93, 8-9=0/35, 2-15=-356/223, 8-10=-357/223
BOT CHORD 14-15=-564/2082, 12-14=-501/2317, 11-12=-498/2316, 10-11=-526/2082
WEBS 4-14=-34/188, 4-12=-248/953, 5-12=-595/282, 6-12=-248/955, 6-11=-35/188, 3-15=-2108/604, 7-10=-2106/602, 3-14=-11/412, 7-11=-11/411

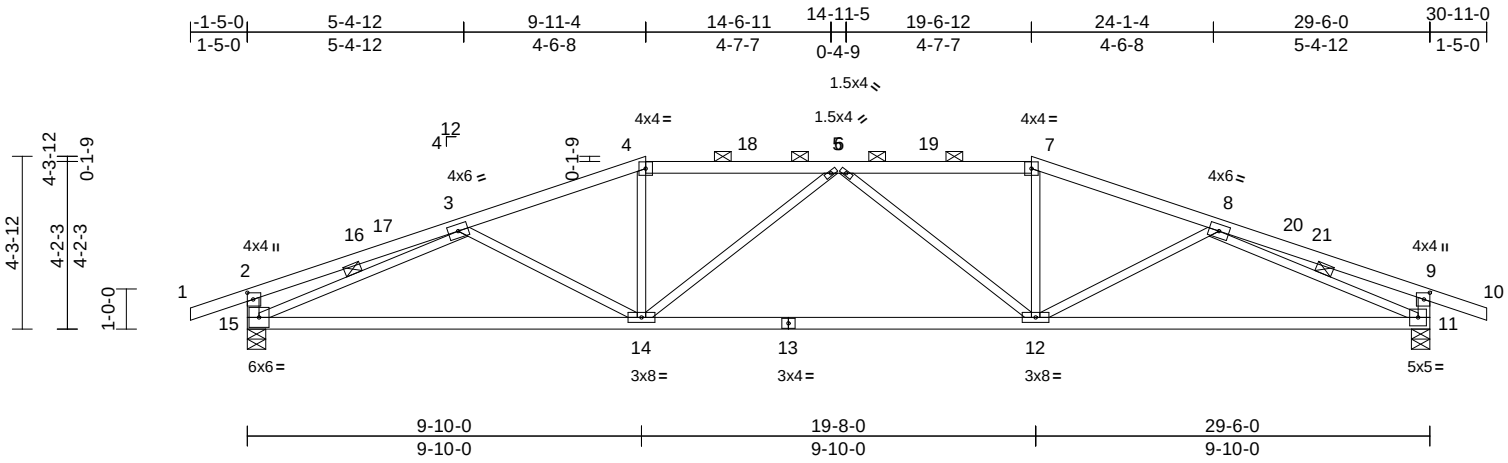
**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 7-11-4, Exterior(2R) 7-11-4 to 14-9-0, Interior (1) 14-9-0 to 21-6-12, Exterior(2R) 21-6-12 to 28-7-10, Interior (1) 28-7-10 to 30-11-0 zone; cantilever left and right exposed ; 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) 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 15 and 10. This connection is for uplift only and does not consider lateral forces.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard


October 2,2024

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | B04 | Hip | 1 | 1 | I68602419 Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:30 Page: 1
ID:W2yJu2LHWSC6t3hxjpmT3azeC4z-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f




Scale = 1:57.5

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

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.56 | Vert(LL) | -0.36 | 12-14 | >975 | 240 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.97 | Vert(CT) | -0.81 | 12-14 | >432 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.73 | Horz(CT) | 0.09 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 129 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP 1650F 1.5E *Except* 13-11:2x4 SP 2400F 2.0E
WEBS 2x3 SPF No.2 *Except* 15-2,11-9:2x4 SP 1650F 1.5E

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

**REACTIONS** (size) 11=0-5-8, 15=0-5-8
Max Horiz 15=43 (LC 12)
Max Uplift 11=-334 (LC 9), 15=-334 (LC 8)
Max Grav 11=1424 (LC 1), 15=1424 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-391/124, 3-4=-2390/644, 4-5=-2218/639, 5-6=-2478/763, 6-7=-2208/641, 7-8=-2379/646, 8-9=-410/125, 9-10=0/35, 2-15=-418/256, 9-11=-422/256
BOT CHORD 14-15=-622/2234, 12-14=-596/2478, 11-12=-587/2231
WEBS 4-14=-50/428, 7-12=-51/426, 3-15=-2135/626, 8-11=-2111/628, 6-12=-479/191, 5-14=-466/194, 8-12=-54/216, 3-14=-46/222

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 9-11-4, Exterior(2R) 9-11-4 to 17-0-2, Interior (1) 17-0-2 to 19-6-12, Exterior(2R) 19-6-12 to 26-7-10, Interior (1) 26-7-10 to 30-11-0 zone; cantilever left and right exposed ; 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) 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Bearings are assumed to be: Joint 15 SP 1650F 1.5E crushing capacity of 565 psi, Joint 11 SP 2400F 2.0E crushing capacity of 805 psi.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 15 and 11. This connection is for uplift only and does not consider lateral forces.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

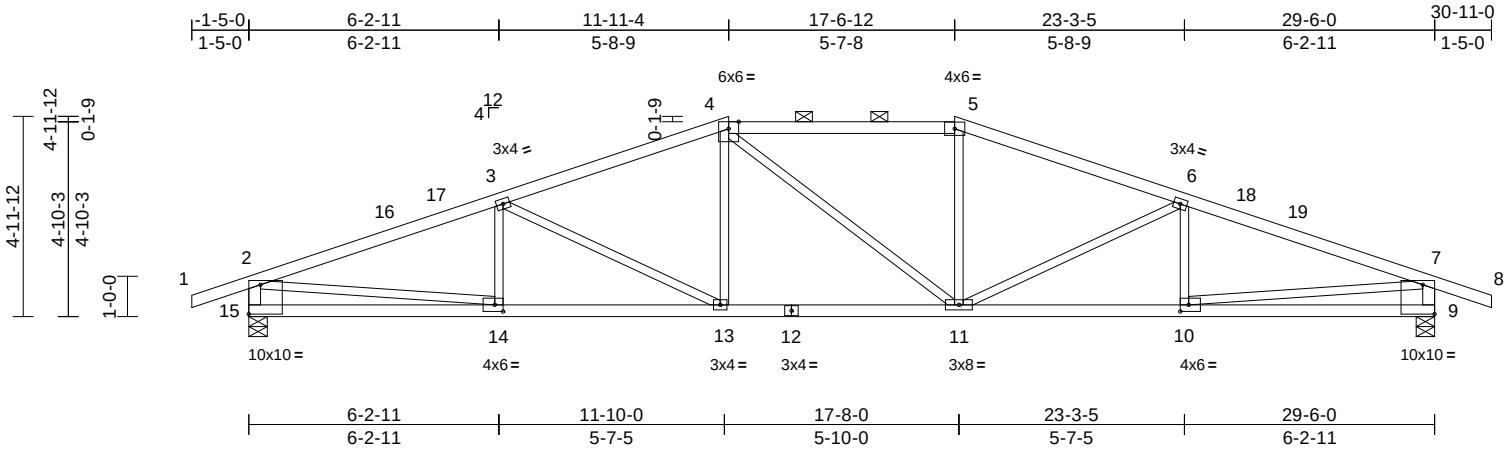

October 2,2024

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | B05 | Hip | 1 | 1 | I68602420 Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:30
ID:tYp24OplKR7a329RWVzc8pzeC4M-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f






Scale = 1:57.3

Plate Offsets (X, Y): [9:Edge,0-8-12], [10:0-2-8,0-2-0], [14:0-2-8,0-2-0], [15:Edge,0-8-12]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.81 | Vert(LL) | -0.15 | 13-14 | >999 | 240 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.74 | Vert(CT) | -0.30 | 11-13 | >999 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.68 | Horz(CT) | 0.07 | 9 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 132 lb | FT = 20% |

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

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

**REACTIONS** (size) 9=0-5-8, 15=0-5-8
Max Horiz 15=56 (LC 16)
Max Uplift 9=-323 (LC 9), 15=-323 (LC 8)
Max Grav 9=1424 (LC 1), 15=1424 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-2515/691, 3-4=-2196/649, 4-5=-2019/677, 5-6=-2193/673, 6-7=-2516/712, 7-8=0/35, 2-15=-1351/503, 7-9=-1352/493
BOT CHORD 14-15=-126/355, 13-14=-589/2318, 11-13=-451/2022, 10-11=-571/2319, 9-10=-75/354
WEBS 3-14=-148/137, 3-13=-372/181, 4-13=-9/335, 4-11=-203/194, 5-11=-3/326, 6-11=-377/177, 6-10=-144/142, 2-14=-487/1978, 7-10=-503/1980

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 11-11-4, Exterior(2E) 11-11-4 to 17-6-12, Exterior(2R) 17-6-12 to 24-7-10, Interior (1) 24-7-10 to 30-11-0 zone; cantilever left and right exposed ; 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) 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 15 and 9. This connection is for uplift only and does not consider lateral forces.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

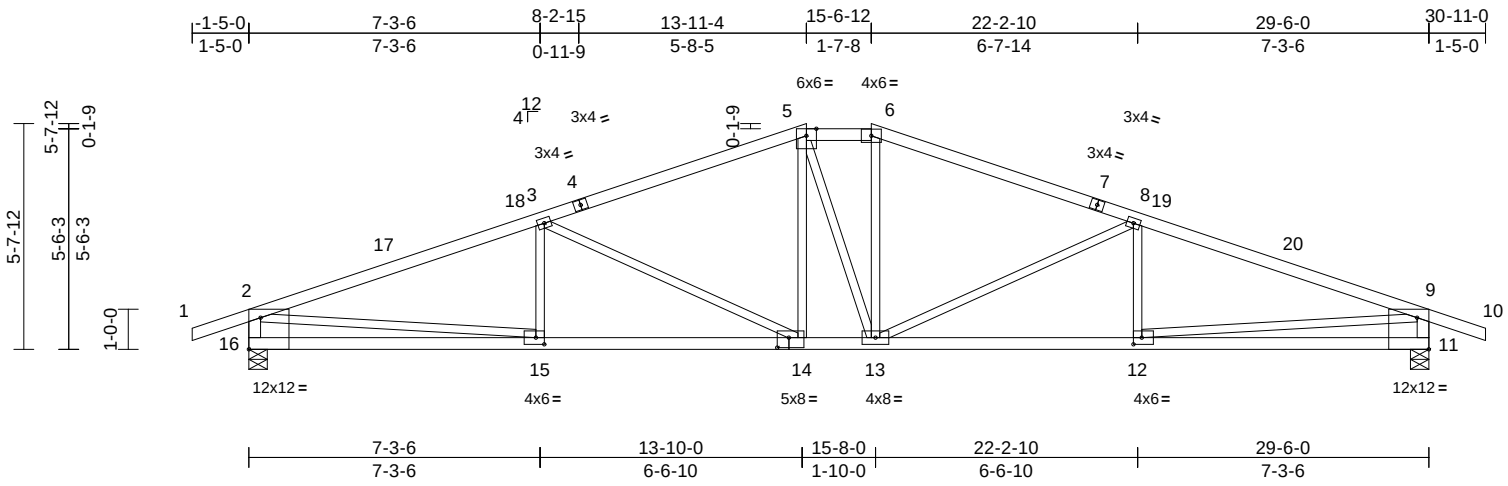

October 2,2024

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | B06 | Hip | 1 | 1 | I68602421 |
| | | | | | Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:30
ID:i3pSAVvquOafT2dwL75yK?zeC2x-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f






Scale = 1:57.6

Plate Offsets (X, Y): [11:Edge,0-9-8], [12:0-2-8,0-2-0], [14:0-3-8,0-3-0], [15:0-2-8,0-2-0], [16:Edge,0-9-8]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.94 | Vert(LL) | -0.16 | 14-15 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.81 | Vert(CT) | -0.33 | 14-15 | >999 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.80 | Horz(CT) | 0.07 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 136 lb | FT = 20% |

**LUMBER**

TOP CHORD 2x4 SP No.2 *Except* 4-5,6-7:2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 16-2,11-9:2x4 SP No.2

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 2-9-3 oc purlins, except end verticals, and 2-0-0 oc purlins (4-0-8 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 8-0-12 oc bracing.

**REACTIONS** (size) 11=0-5-8, 16=0-5-8
Max Horiz 16=68 (LC 12)
Max Uplift 11=-309 (LC 9), 16=-309 (LC 8)
Max Grav 11=1424 (LC 1), 16=1424 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-2534/631, 3-5=-1992/569, 5-6=-1828/580, 6-8=-2005/566, 8-9=-2528/640, 9-10=0/35, 2-16=-1349/485, 9-11=-1346/483
BOT CHORD 15-16=-207/483, 13-15=-522/2322, 12-13=-493/2317, 11-12=-140/488
WEBS 3-15=-49/177, 3-14=-616/189, 5-14=-57/306, 5-13=-186/258, 6-13=-59/363, 8-13=-598/197, 8-12=-63/154, 2-15=-376/1849, 9-12=-384/1839

**NOTES**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 13-11-4, Exterior(2E) 13-11-4 to 15-6-12, Exterior(2R) 15-6-12 to 22-7-10, Interior (1) 22-7-10 to 30-11-0 zone; cantilever left and right exposed ; 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) 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 16 and 11. This connection is for uplift only and does not consider lateral forces.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

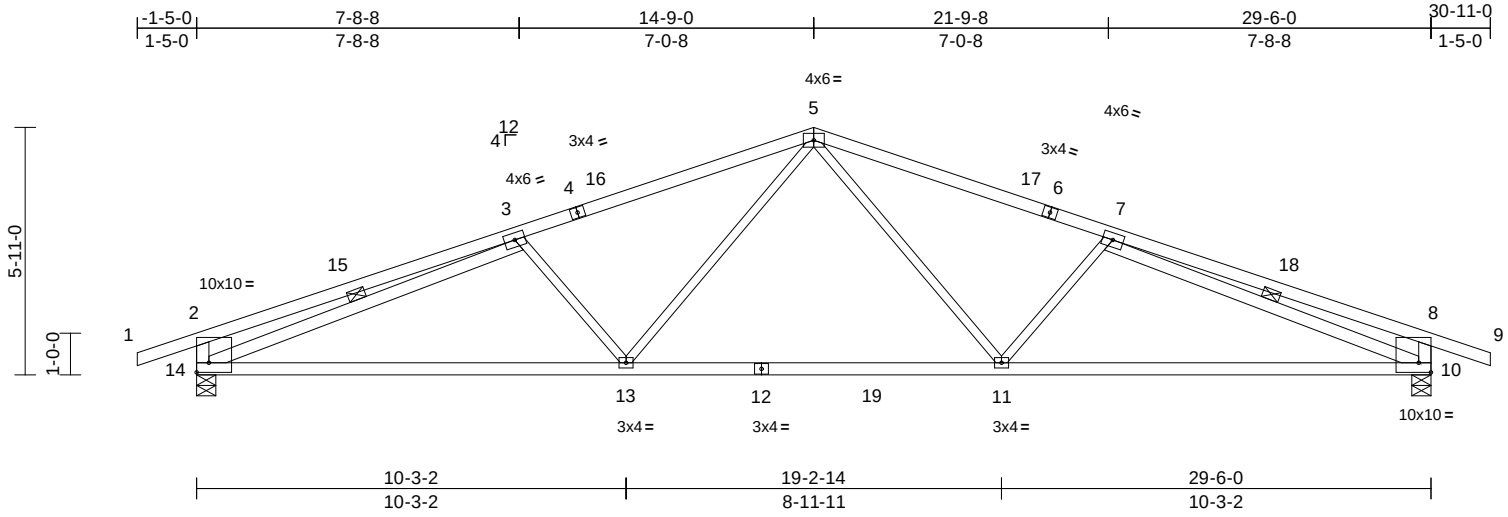

October 2,2024

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | B07 | Common | 1 | 1 | I68602422 Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:30
ID:6Gn1IGnNK1o3jpsI?c6SaCzeCHI-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f






Scale = 1:55.1

Plate Offsets (X, Y): [2:Edge,0-2-12], [10:Edge,0-2-12]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.91 | Vert(LL) | -0.40 | 11-13 | >876 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.68 | Vert(CT) | -0.60 | 11-13 | >586 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.68 | Horz(CT) | 0.07 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 138 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP 2400F 2.0E
WEBS 2x3 SPF No.2 *Except* 14-2,14-3,10-8,10-7:2x4 SP No.2

**BRACING**
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-14, 7-10

**REACTIONS** (size) 10=0-5-8, 14=0-5-8
Max Horiz 14=74 (LC 12)
Max Uplift 10=-303 (LC 9), 14=-303 (LC 8)
Max Grav 10=1461 (LC 2), 14=1460 (LC 2)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-594/197, 3-5=-2464/568, 5-7=-2445/569, 7-8=-619/195, 8-9=0/35, 2-14=-532/321, 8-10=-535/320
BOT CHORD 13-14=-504/2427, 11-13=-285/1808, 10-11=-474/2411
WEBS 5-11=-113/751, 7-11=-410/269, 5-13=-110/779, 3-13=-408/270, 3-14=-2102/457, 7-10=-2059/459

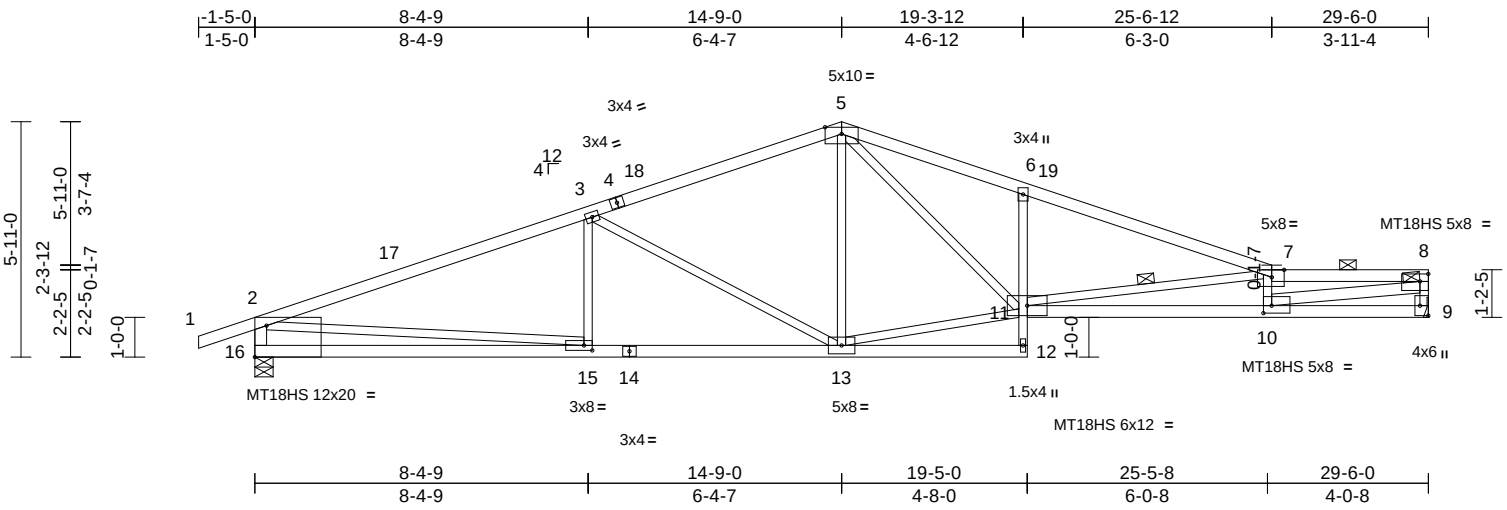
**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 14-9-0, Exterior(2R) 14-9-0 to 19-9-0, Interior (1) 19-9-0 to 30-11-0 zone; cantilever left and right exposed ; 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) 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) All bearings are assumed to be SP 2400F 2.0E crushing capacity of 805 psi.
6) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14 and 10. This connection is for uplift only and does not consider lateral forces.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard


October 2,2024

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | B08 | Roof Special | 1 | 1 | I68602423 Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:31 Page: 1
ID:0mMEUz1XEfAcWAfckRlX3PzeC1V-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:57.9

Plate Offsets (X, Y): [7:0-3-12,Edge], [8:Edge,0-2-4], [9:Edge,0-2-8], [10:0-2-8,0-2-4], [15:0-2-8,0-1-8], [16:Edge,0-9-8]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.88 | Vert(LL) | -0.32 | 10-11 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.73 | Vert(CT) | -0.60 | 10-11 | >583 | 180 | MT18HS | 197/144 |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.87 | Horz(CT) | 0.10 | 9 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 136 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP 1650F 1.5E *Except* 7-8:2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 12-6:2x3 SPF No.2, 11-9:2x4 SP 2400F 2.0E
WEBS 2x3 SPF No.2 *Except* 10-8,16-2:2x4 SP 1650F 1.5E

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

**REACTIONS** (size) 9= Mechanical, 16=0-5-8
Max Horiz 16=109 (LC 12)
Max Uplift 9=-232 (LC 9), 16=-301 (LC 8)
Max Grav 9=1313 (LC 1), 16=1429 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-2497/567, 3-5=-1901/506, 5-6=-3059/818, 6-7=-3102/739, 7-8=-4509/1035, 8-9=-1207/324, 2-16=-1340/485
BOT CHORD 15-16=-316/699, 13-15=-552/2270, 12-13=-27/67, 11-12=0/76, 6-11=-419/234, 10-11=-1023/4399, 9-10=-73/205
WEBS 5-11=-414/1586, 8-10=-1012/4413, 2-15=-240/1577, 5-13=-44/181, 11-13=-364/1706, 3-13=-666/210, 3-15=-3/186, 7-10=-993/331, 7-11=-1524/357

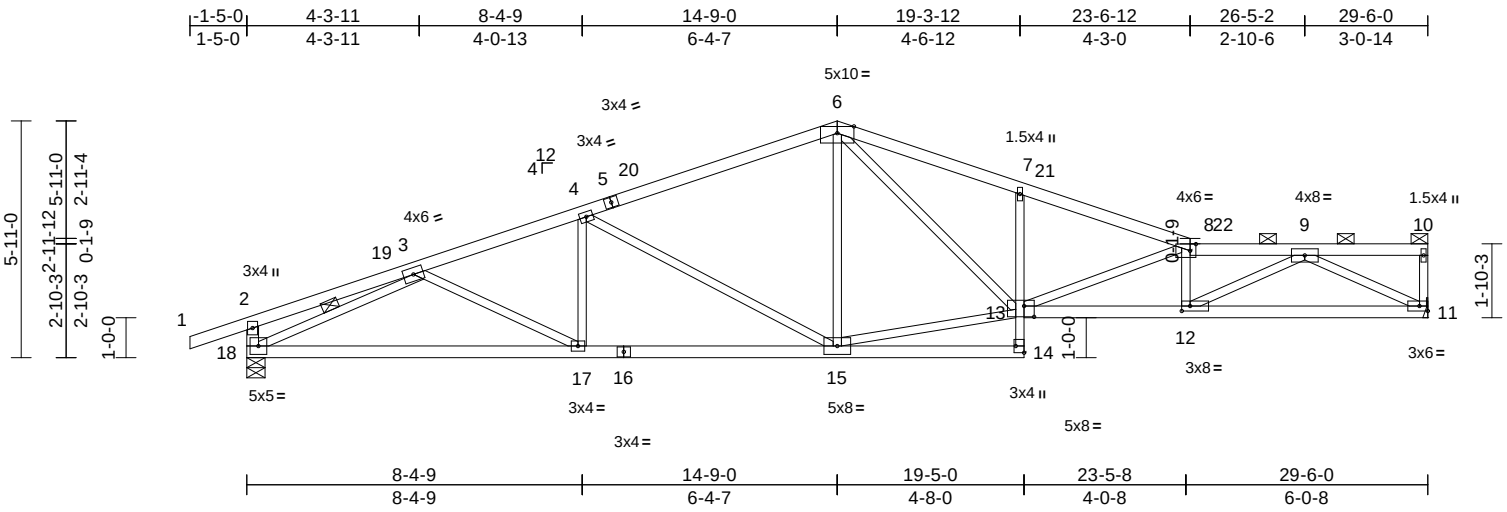
**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 14-9-0, Exterior(2R) 14-9-0 to 19-9-0, Interior (1) 19-9-0 to 29-4-12 zone; cantilever left and right exposed ; 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) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Bearings are assumed to be: Joint 16 SP No.2 crushing capacity of 565 psi.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 232 lb uplift at joint 9.
10) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 16. This connection is for uplift only and does not consider lateral forces.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard


October 2,2024

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | B09 | Roof Special | 1 | 1 | I68602424 Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:31 Page: 1
ID:zEbiAutSlA?gvx?3q8?yu9zeC0P-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:57.5

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

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.72 | Vert(LL) | -0.24 | 12-13 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.91 | Vert(CT) | -0.42 | 12-13 | >829 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.86 | Horz(CT) | 0.12 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 135 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2 *Except* 5-6:2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2 *Except* 14-7:2x3 SPF No.2, 13-11:2x4 SP 1650F 1.5E
WEBS 2x3 SPF No.2 *Except* 18-2:2x4 SP 2400F 2.0E

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 2-11-13 oc purlins, except end verticals, and 2-0-0 oc purlins (2-9-7 max.): 8-10.
BOT CHORD Rigid ceiling directly applied or 7-2-2 oc bracing.
WEBS 1 Row at midpt 3-18

**REACTIONS** (size) 11= Mechanical, 18=0-5-8
Max Horiz 18=112 (LC 12)
Max Uplift 11=-235 (LC 9), 18=-299 (LC 8)
Max Grav 11=1313 (LC 1), 18=1429 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-343/68, 3-4=-2430/575, 4-6=-1903/508, 6-7=-3006/803, 7-8=-3025/742, 8-9=-3840/893, 9-10=-66/36, 10-11=-105/57, 2-18=-382/221
BOT CHORD 17-18=-625/2110, 15-17=-595/2269, 14-15=-22/109, 13-14=0/77, 7-13=-314/186, 12-13=-919/3789, 11-12=-628/2226
WEBS 6-13=-396/1521, 8-13=-1027/227, 3-18=-2075/571, 6-15=-39/191, 13-15=-415/1666, 8-12=-748/241, 9-12=-346/1819, 9-11=-2460/681, 4-15=-663/207, 4-17=0/198, 3-17=0/208

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 14-9-0, Exterior(2R) 14-9-0 to 19-9-0, Interior (1) 19-9-0 to 29-4-12 zone; cantilever left and right exposed ; 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) 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Bearings are assumed to be: Joint 18 SP No.2 crushing capacity of 565 psi.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 235 lb uplift at joint 11.
9) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 18. This connection is for uplift only and does not consider lateral forces.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

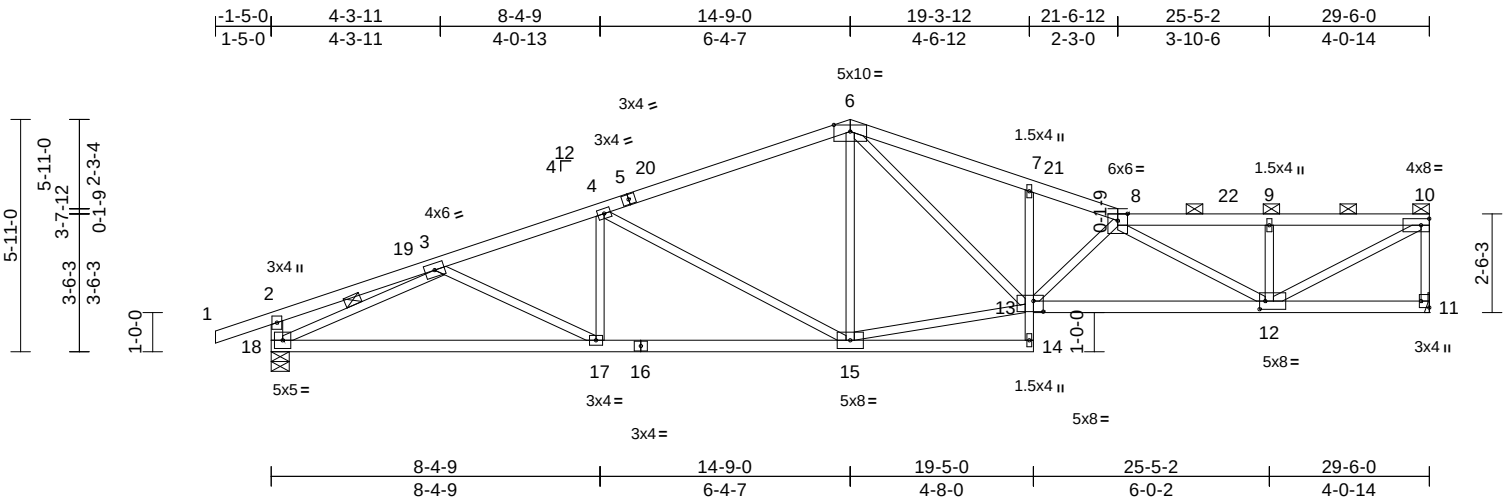
STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

October 2,2024

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | B10 | Roof Special | 1 | 1 | I68602425 |
| | | | | | Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:31 Page: 1
ID:OQRODo8J0QDn?4XEUhOZfIzeC_m-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:58.7

Plate Offsets (X, Y): [11:Edge,0-2-8], [12:0-1-12,0-2-8], [13:0-3-0,0-3-4]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.72 | Vert(LL) | -0.21 | 7-13 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.91 | Vert(CT) | -0.39 | 17-18 | >896 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.86 | Horz(CT) | 0.11 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 137 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2 *Except* 5-6:2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2 *Except* 14-7:2x3 SPF No.2, 13-11:2x4 SP 1650F 1.5E
WEBS 2x3 SPF No.2 *Except* 18-2:2x4 SP No.2

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 3-0-12 oc purlins, except end verticals, and 2-0-0 oc purlins (3-9-11 max.): 8-10.
BOT CHORD Rigid ceiling directly applied or 6-11-8 oc bracing.
WEBS 1 Row at midpt 3-18

**REACTIONS** (size) 11= Mechanical, 18=0-5-8
Max Horiz 18=114 (LC 12)
Max Uplift 11=-240 (LC 9), 18=-296 (LC 8)
Max Grav 11=1313 (LC 1), 18=1429 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-331/64, 3-4=-2430/575, 4-6=-1903/509, 6-7=-2994/794, 7-8=-3005/728, 8-9=-2087/494, 9-10=-2084/492, 10-11=-1277/361, 2-18=-376/221
BOT CHORD 17-18=-663/2111, 15-17=-631/2269, 14-15=-34/93, 13-14=0/77, 7-13=-211/146, 12-13=-852/3260, 11-12=-41/51
WEBS 6-13=-384/1507, 8-13=-634/179, 8-12=-1366/347, 10-12=-589/2360, 3-18=-2088/572, 6-15=-43/184, 13-15=-439/1685, 4-15=-663/207, 4-17=0/198, 3-17=0/208, 9-12=-346/190

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 14-9-0, Exterior(2R) 14-9-0 to 19-9-0, Interior (1) 19-9-0 to 29-4-12 zone; cantilever left and right exposed ; 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) 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Bearings are assumed to be: Joint 18 SP No.2 crushing capacity of 565 psi.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 240 lb uplift at joint 11.
9) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 18. This connection is for uplift only and does not consider lateral forces.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

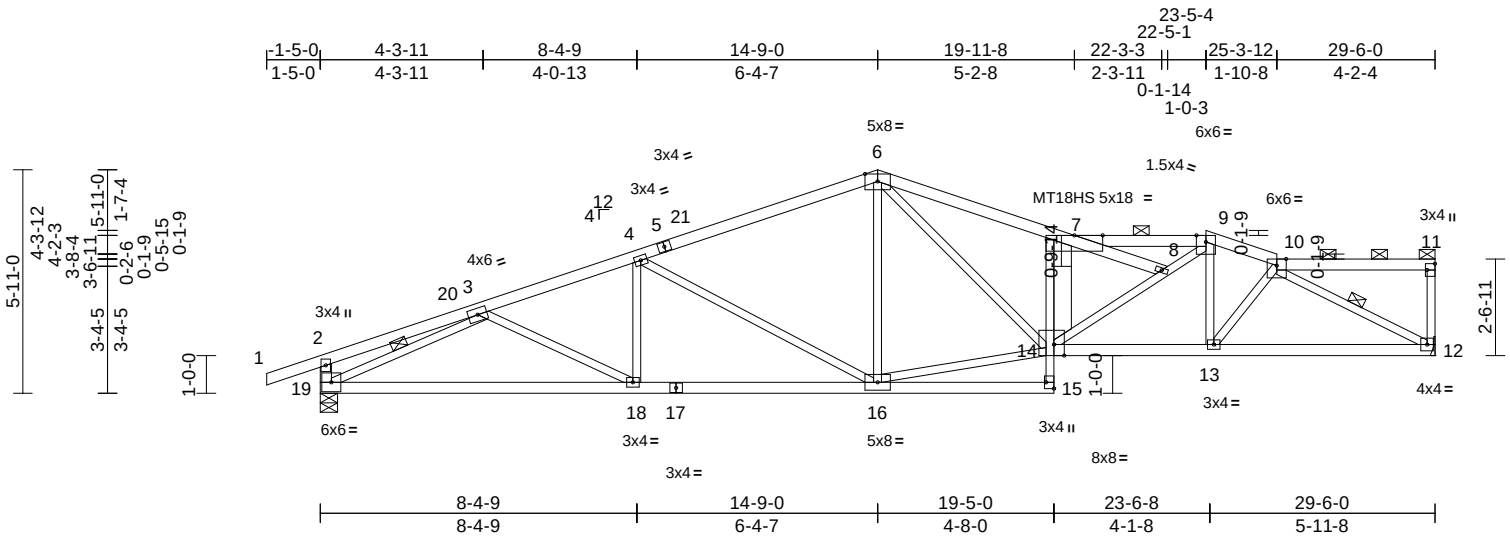
**LOAD CASE(S)** Standard

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

October 2,2024

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | B11 | Roof Special | 1 | 1 | I68602426 Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:31 Page: 1
ID:iOXb54ShLwyJaqMBN4r7aIzeBz3-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:61

Plate Offsets (X, Y): [11:Edge,0-2-8], [14:0-3-4,Edge], [15:Edge,0-2-8]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.71 | Vert(LL) | -0.19 | 14 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.91 | Vert(CT) | -0.38 | 18-19 | >914 | 180 | MT18HS | 197/144 |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.86 | Horz(CT) | 0.11 | 12 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 146 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2 *Except* 5-6:2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2 *Except* 15-7:2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except* 19-2:2x4 SP No.2, 7-14:2x6 SPF No.2

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 2-9-9 oc purlins, except end verticals, and 2-0-0 oc purlins (3-2-11 max.): 7-8, 7-9, 10-11.
BOT CHORD Rigid ceiling directly applied or 6-10-5 oc bracing.
WEBS 1 Row at midpt 10-12, 3-19

**REACTIONS** (size) 12= Mechanical, 19=0-5-8
Max Horiz 19=114 (LC 12)
Max Uplift 12=-242 (LC 9), 19=-296 (LC 8)
Max Grav 12=1310 (LC 1), 19=1427 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-331/66, 3-4=-2426/614, 4-6=-1899/554, 6-7=-2996/883, 7-8=-125/38, 7-9=-2904/800, 9-10=-2259/602, 10-11=-70/56, 11-12=-148/85, 2-19=-376/222
BOT CHORD 18-19=-682/2108, 16-18=-653/2265, 15-16=-43/215, 14-15=0/115, 7-14=-1288/466, 13-14=-594/2127, 12-13=-586/1974
WEBS 6-14=-440/1463, 8-14=-318/1097, 8-9=-297/1027, 9-13=-83/82, 10-13=-9/249, 10-12=-2235/630, 3-19=-2085/605, 6-16=-12/220, 14-16=-453/1552, 4-16=-664/207, 4-18=0/200, 3-18=0/207

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 14-9-0, Exterior(2E) 14-9-0 to 20-0-2, Interior (1) 20-0-2 to 23-5-4, Exterior(2E) 23-5-4 to 25-3-12, Interior (1) 25-3-12 to 29-4-12 zone; cantilever left and right exposed ; 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) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) All plates are 3x4 MT20 unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Bearings are assumed to be: Joint 19 SP No.2 crushing capacity of 565 psi.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 242 lb uplift at joint 12.
11) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 19. This connection is for uplift only and does not consider lateral forces.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

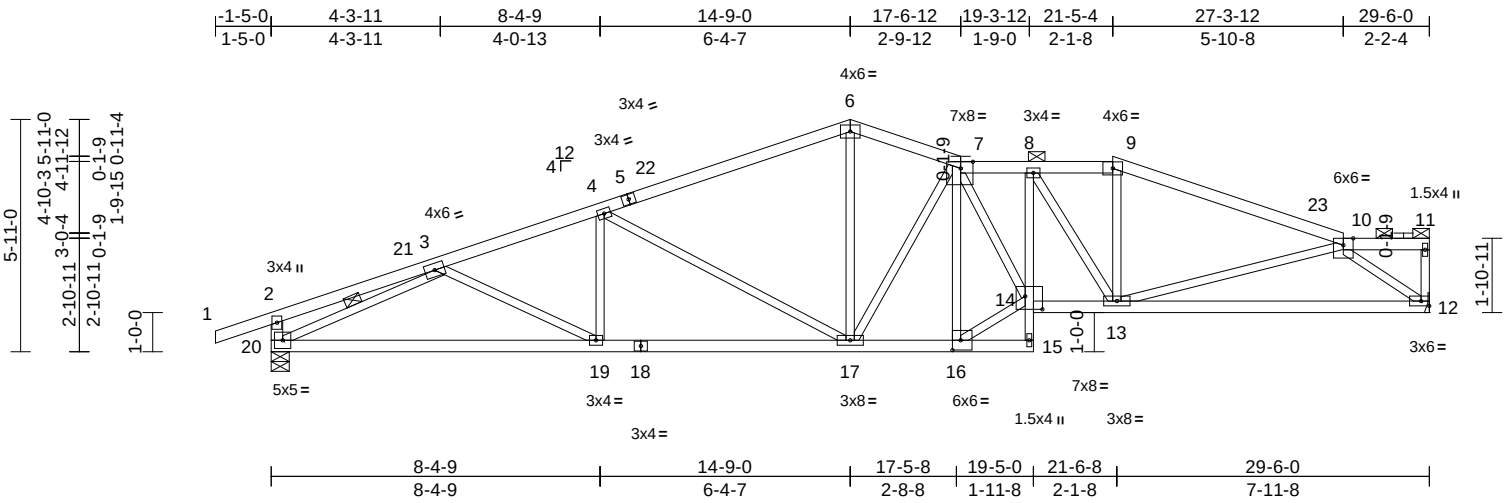
STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER
October 2,2024

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | B12 | Roof Special | 1 | 1 | I68602427 Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:31
ID:lr3Y21BRh8abt_5TG9kvU7zeBlD-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f






Scale = 1:58.7

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

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 1.00 | Vert(LL) | -0.17 | 19-20 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.91 | Vert(CT) | -0.38 | 19-20 | >929 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.86 | Horz(CT) | 0.11 | 12 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 142 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2 *Except* 5-6:2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2 *Except* 15-8:2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except* 20-2:2x4 SP No.2

**BRACING**
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-6-8 max.): 7-9, 10-11.
BOT CHORD Rigid ceiling directly applied or 6-11-13 oc bracing.
WEBS 1 Row at midpt 3-20

**REACTIONS** (size) 12= Mechanical, 20=0-5-8
Max Horiz 20=112 (LC 12)
Max Uplift 12=-236 (LC 9), 20=-295 (LC 8)
Max Grav 12=1313 (LC 1), 20=1429 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-330/67, 3-4=-2431/596, 4-6=-1900/529, 6-7=-1852/540, 7-8=-2550/714, 8-9=-2148/587, 9-10=-2350/582, 10-11=-66/20, 11-12=-37/19, 2-20=-376/222
BOT CHORD 19-20=-645/2111, 17-19=-618/2270, 16-17=-530/2004, 15-16=-17/102, 14-15=0/45, 8-14=-135/460, 13-14=-686/2557, 12-13=-476/1607
WEBS 7-16=-1229/358, 14-16=-622/2304, 7-14=-305/1130, 8-13=-761/258, 9-13=-43/444, 10-13=-71/574, 10-12=-1983/591, 3-20=-2089/587, 6-17=-173/832, 7-17=-566/185, 4-17=-664/205, 4-19=0/203, 3-19=0/210

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 14-9-0, Exterior(2E) 14-9-0 to 17-6-12, Interior (1) 17-6-12 to 21-5-4, Exterior(2R) 21-5-4 to 26-5-4, Interior (1) 26-5-4 to 29-4-12 zone; cantilever left and right exposed ; 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) 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Bearings are assumed to be: Joint 20 SP No.2 crushing capacity of 565 psi.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 236 lb uplift at joint 12.
9) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 20. This connection is for uplift only and does not consider lateral forces.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

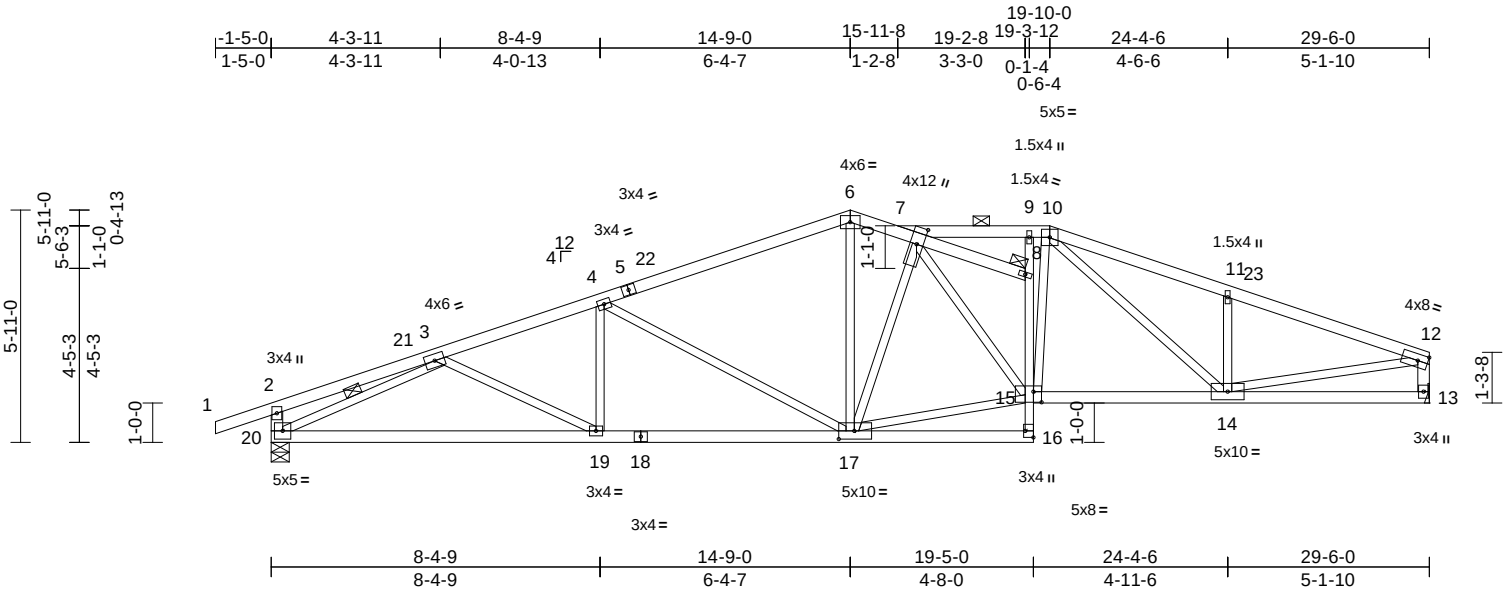
**LOAD CASE(S)** Standard

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER
PE-2001018807
PROFESSIONAL ENGINEER

October 2,2024

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | B13 | Roof Special | 1 | 1 | I68602428 Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:32 Page: 1
ID:X0i77eWRoxR_4uVcjGjixKzeBjV-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:58.7

Plate Offsets (X, Y): [7:0-5-4,0-2-0], [15:0-2-8,0-3-4], [16:Edge,0-2-8], [17:0-4-12,0-2-8]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.70 | Vert(LL) | -0.17 | 19-20 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.91 | Vert(CT) | -0.37 | 19-20 | >941 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.85 | Horz(CT) | 0.09 | 13 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 149 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2 *Except* 5-6:2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2 *Except* 16-9:2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except* 20-2:2x4 SP 2400F 2.0E, 13-12:2x4 SP No.2

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 3-6-10 oc purlins, except end verticals, and 2-0-0 oc purlins (3-10-15 max.): 7-8, 7-10.
BOT CHORD Rigid ceiling directly applied or 7-3-9 oc bracing.
WEBS 1 Row at midpt 3-20
JOINTS 1 Brace at Jt(s): 8

**REACTIONS** (size) 13= Mechanical, 20=0-5-8
Max Horiz 20=110 (LC 12)
Max Uplift 13=-233 (LC 9), 20=-295 (LC 8)
Max Grav 13=1311 (LC 1), 20=1427 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-342/71, 3-4=-2425/621, 4-6=-1900/545, 6-7=-1803/560, 7-8=-2/15, 7-9=-2061/625, 9-10=-2047/623, 10-11=-2228/683, 11-12=-2225/595, 2-20=-381/221, 12-13=-1255/385
BOT CHORD 19-20=-603/2107, 17-19=-581/2265, 16-17=-20/78, 15-16=0/79, 8-15=0/77, 8-9=-7/83, 14-15=-488/2000, 13-14=-71/150
WEBS 4-19=0/199, 11-14=-359/223, 3-20=-2073/575, 12-14=-480/1951, 6-17=-150/749, 4-17=-656/205, 3-19=0/208, 10-15=-89/386, 10-14=-98/188, 7-17=-800/236, 7-15=-62/210, 15-17=-483/1942

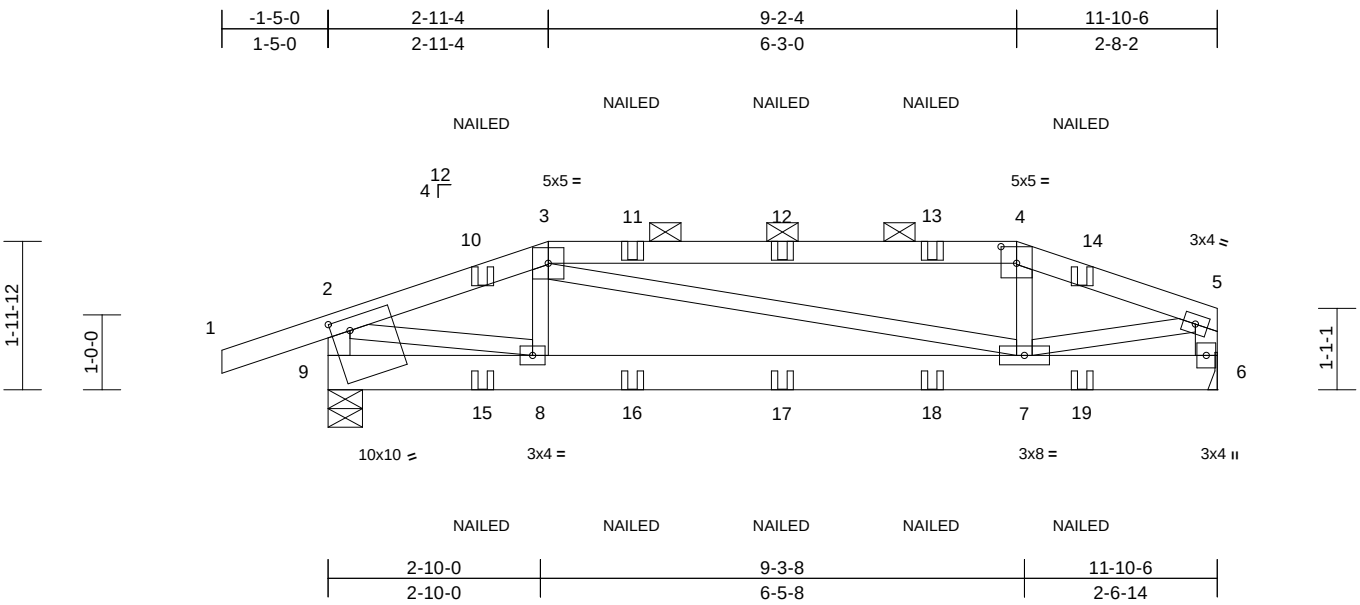
**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 14-9-0, Exterior(2E) 14-9-0 to 16-4-3, Interior (1) 16-4-3 to 19-10-0, Exterior(2R) 19-10-0 to 24-10-0, Interior (1) 24-10-0 to 29-4-4 zone; cantilever left and right exposed ; 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) 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Bearings are assumed to be: Joint 20 SP No.2 crushing capacity of 565 psi.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 233 lb uplift at joint 13.
9) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 20. This connection is for uplift only and does not consider lateral forces.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard


October 2,2024

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | C01 | Hip Girder | 1 | 1 | I68602429 |
| | | | | | Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:32 Page: 1
ID:AeRCOyHWm1HSkpGoOHj2Loz7HuD-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:30.7

Plate Offsets (X, Y): [4:0-2-8,0-2-11], [9:0-3-0,0-2-0]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.83 | Vert(LL) | 0.02 | 7-8 | >999 | 240 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.24 | Vert(CT) | -0.05 | 7-8 | >999 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.26 | Horz(CT) | 0.01 | 6 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 54 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SPF No.2
WEBS 2x3 SPF No.2 *Except* 9-2,6-5:2x4 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 (4-5-7 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 6= Mechanical, 9=0-5-8
Max Horiz 9=32 (LC 32)
Max Uplift 6=-152 (LC 9), 9=-227 (LC 8)
Max Grav 6=552 (LC 1), 9=674 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-836/449, 3-4=-755/468, 4-5=-804/439, 2-9=-631/443, 5-6=-509/292
BOT CHORD 8-9=-65/92, 7-8=-430/774, 6-7=-58/66
WEBS 3-8=-74/174, 3-7=-61/28, 4-7=-108/189, 2-8=-408/767, 5-7=-373/713

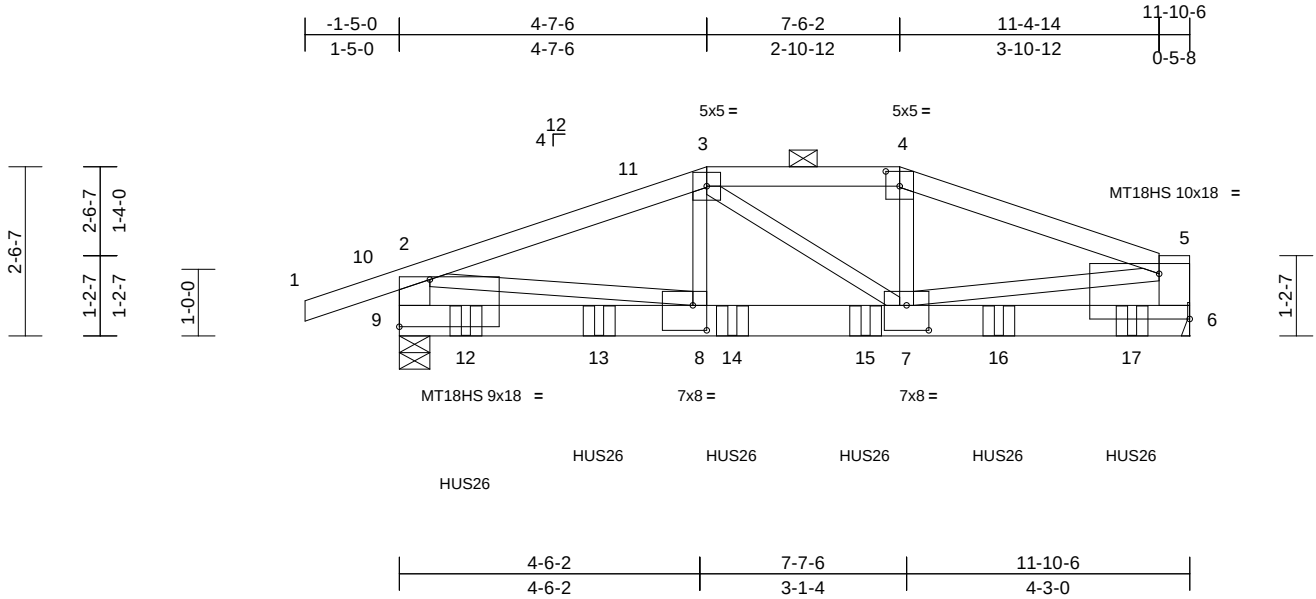
**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 2-11-4, Exterior(2R) 2-11-4 to 7-11-4, Interior (1) 7-11-4 to 9-2-4, Exterior(2E) 9-2-4 to 11-8-10 zone; cantilever left and right exposed ; 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) 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Bearings are assumed to be: Joint 9 SPF No.2 crushing capacity of 425 psi.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 152 lb uplift at joint 6.
9) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 9. This connection is for uplift only and does not consider lateral forces.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
13) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-5=-70, 6-9=-20
Concentrated Loads (lb)
Vert: 11=-2 (F), 12=-2 (F), 13=-2 (F), 15=-32 (F), 16=-2 (F), 17=-2 (F), 18=-2 (F), 19=-32 (F)


October 2,2024

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | C02 | Roof Special Girder | 1 | 2 | I68602430 Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:32 Page: 1
ID:RoDROLE8cpiSAiewuId1vzz7Hrh-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:34.6

Plate Offsets (X, Y): [4:0-2-8,0-2-11], [5:Edge,0-8-2], [7:0-4-0,0-4-8], [8:0-2-8,0-4-8], [9:Edge,0-8-8]

| Loading | (psf) | Spacing | 1-10-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.46 | Vert(LL) | -0.06 | 7-8 | >999 | 240 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.74 | Vert(CT) | -0.11 | 7-8 | >999 | 180 | MT18HS | 197/144 |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.71 | Horz(CT) | 0.02 | 6 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 111 lb | FT = 20% |

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

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 4-8-13 oc purlins, except end verticals, and 2-0-0 oc purlins (5-4-6 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 6= Mechanical, 9=0-5-8
Max Horiz 9=24 (LC 11)
Max Uplift 6=-839 (LC 9), 9=-896 (LC 8)
Max Grav 6=4394 (LC 1), 9=4423 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/33, 2-3=-5845/1386, 3-4=-5240/1297, 4-5=-5659/1340, 5-6=-2729/728, 2-9=-2768/837
BOT CHORD 8-9=-480/1654, 7-8=-1262/5393, 6-7=-329/1284
WEBS 3-8=-307/1803, 3-7=-258/65, 4-7=-286/1640, 2-8=-843/3876, 5-7=-921/4107

**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, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-6-0 oc.
Web connected as follows: 2x3 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 4-7-6, Exterior(2E) 4-7-6 to 11-7-10 zone; cantilever left and right exposed ; 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) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Bearings are assumed to be: Joint 9 SPF No.2 crushing capacity of 425 psi.
10) Refer to girder(s) for truss to truss connections.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 839 lb uplift at joint 6.
12) Two H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 9. This connection is for uplift only and does not consider lateral forces.
13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
15) Use Simpson Strong-Tie HUS26 (14-16d Girder, 4-16d Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-0-0 from the left end to 11-0-0 to connect truss(es) to back face of bottom chord.
16) Fill all nail holes where hanger is in contact with lumber.

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-64, 2-3=-64, 3-4=-64, 4-5=-64, 6-9=-18
Concentrated Loads (lb)
Vert: 12=-1297 (B), 13=-1295 (B), 14=-1295 (B), 15=-1292 (B), 16=-1295 (B), 17=-1296 (B)

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

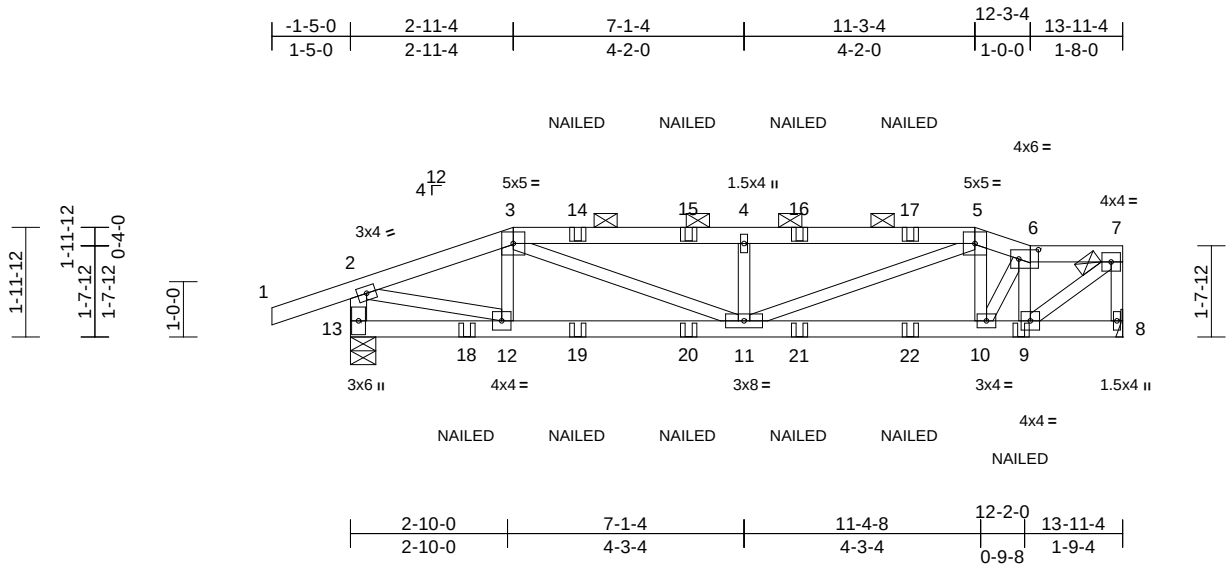
October 2,2024



RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/28/2024 10:57:48

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | C03 | Roof Special Girder | 1 | 1 | I68602431 Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:32 Page: 1
ID:JltgWHgfhNn71UYudwH0V2z7HsQ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:41.6

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

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.29 | Vert(LL) | 0.05 | 11 | >999 | 240 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.32 | Vert(CT) | -0.08 | 11-12 | >999 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.32 | Horz(CT) | 0.01 | 8 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 62 lb | FT = 20% |

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

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 5-8-14 oc purlins, except end verticals, and 2-0-0 oc purlins (4-8-0 max.): 3-5, 6-7.
BOT CHORD Rigid ceiling directly applied or 8-3-15 oc bracing.

**REACTIONS** (size) 8= Mechanical, 13=0-5-8
Max Horiz 13=67 (LC 9)
Max Uplift 8=-219 (LC 9), 13=-289 (LC 8)
Max Grav 8=702 (LC 1), 13=820 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-998/516, 3-4=-1416/753, 4-5=-1416/753, 5-6=-926/461, 6-7=-746/383, 7-8=-662/363, 2-13=-774/507
BOT CHORD 12-13=-144/119, 11-12=-503/918, 10-11=-490/896, 9-10=-387/701, 8-9=-31/34
WEBS 3-12=-106/128, 5-10=-161/141, 6-10=-169/351, 6-9=-585/300, 7-9=-489/932, 2-12=-452/904, 5-11=-316/592, 4-11=-321/249, 3-11=-275/566

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 2-11-4, Exterior(2R) 2-11-4 to 7-11-4, Interior (1) 7-11-4 to 11-3-4, Exterior(2E) 11-3-4 to 12-3-4, Interior (1) 12-3-4 to 13-10-0 zone; cantilever left and right exposed ; 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) 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Bearings are assumed to be: Joint 13 SP No.2 crushing capacity of 565 psi.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 219 lb uplift at joint 8.
9) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 13. This connection is for uplift only and does not consider lateral forces.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
13) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

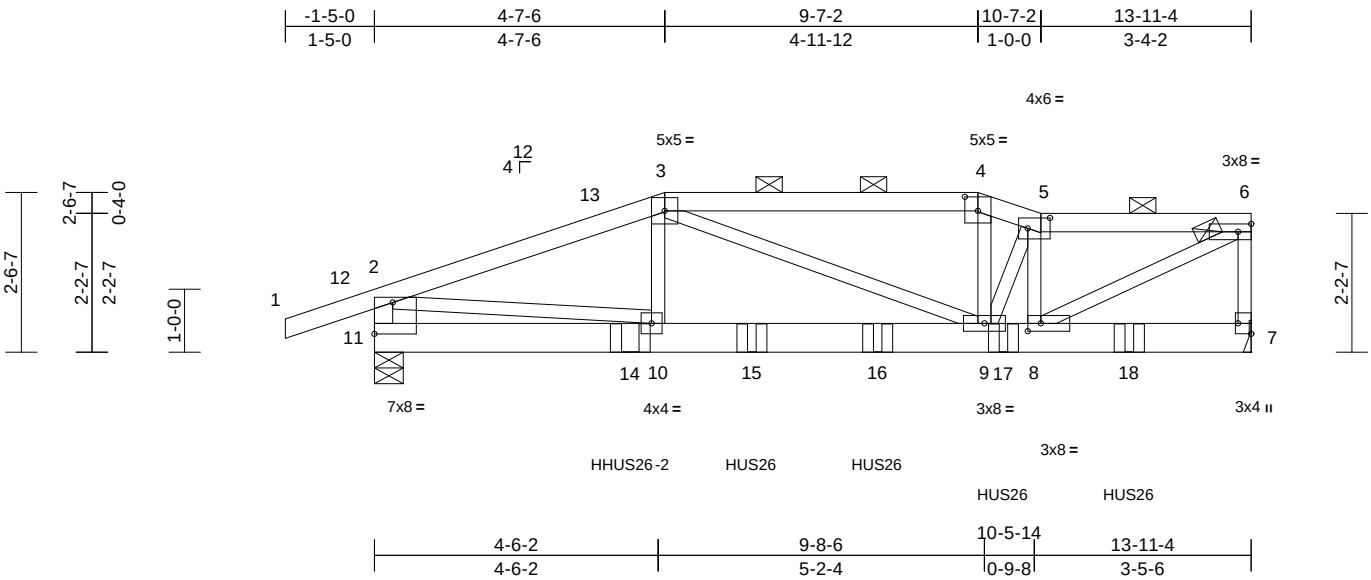
**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-70, 2-3=-70, 3-5=-70, 5-6=-70, 6-7=-70, 8-13=-20
Concentrated Loads (lb)
Vert: 9=-74 (B), 18=-74 (B), 19=-8 (B), 20=-8 (B), 21=-8 (B), 22=-8 (B)

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER
PE-2001018807
PROFESSIONAL ENGINEER

October 2,2024

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | C04 | Roof Special Girder | 1 | 2 | I68602432 Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:32 Page: 1
ID:hcNYYgARUTPXvY1juzV5XCz7HqU-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:36.6

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

| Loading | (psf) | Spacing | 1-10-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.32 | Vert(LL) | -0.07 | 9-10 | >999 | 240 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.56 | Vert(CT) | -0.12 | 9-10 | >999 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.59 | Horz(CT) | 0.01 | 7 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 133 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SPF No.2
WEBS 2x3 SPF No.2 *Except* 11-2:2x4 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.): 3-4, 5-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 7= Mechanical, 11=0-5-8
Max Horiz 11=83 (LC 32)
Max Uplift 7=-481 (LC 9), 11=-470 (LC 8)
Max Grav 7=2056 (LC 1), 11=1819 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/32, 2-3=-3370/1048, 3-4=-3244/1011, 4-5=-3435/1039, 5-6=-3086/935, 6-7=-1782/600, 2-11=-1738/687
BOT CHORD 10-11=-358/488, 9-10=-1059/3106, 8-9=-946/2990, 7-8=-49/66
WEBS 3-10=-145/750, 3-9=-39/229, 4-9=-167/786, 5-9=-211/728, 5-8=-1693/568, 6-8=-1059/3442, 2-10=-754/2684

**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, 2x3 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Web connected as follows: 2x3 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 4-7-6, Exterior(2E) 4-7-6 to 10-7-2, Interior (1) 10-7-2 to 13-10-0 zone; cantilever left and right exposed ; 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) 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Bearings are assumed to be: Joint 11 SPF No.2 crushing capacity of 425 psi.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 481 lb uplift at joint 7.
11) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 11. This connection is for uplift only and does not consider lateral forces.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Use Simpson Strong-Tie HHUS26-2 (14-10d Girder, 4-10d Truss) or equivalent at 4-0-13 from the left end to connect truss(es) to front face of bottom chord.
15) Use Simpson Strong-Tie HUS26 (14-16d Girder, 4-16d Truss) or equivalent spaced at 2-0-0 oc max. starting at 6-0-0 from the left end to 12-0-0 to connect truss(es) to front face of bottom chord.
16) Fill all nail holes where hanger is in contact with lumber.

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-64, 2-3=-64, 3-4=-64, 4-5=-64, 5-6=-64, 7-11=-18
Concentrated Loads (lb)
Vert: 14=-604 (F), 15=-483 (F), 16=-526 (F), 17=-534 (F), 18=-497 (F)

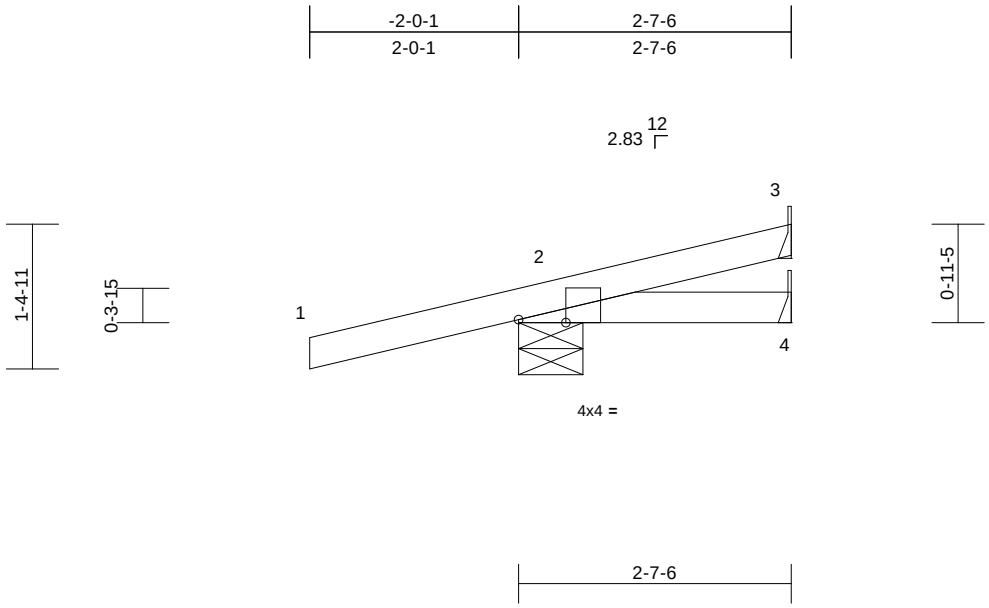

October 2,2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)

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

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | CJ1 | Jack-Open | 3 | 1 | I68602433 Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:32 Page: 1
ID:arBBSFcIbmGJfU5Z_G5kznzeD92-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:22.1

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

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.62 | Vert(LL) | 0.00 | 2-4 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.06 | Vert(CT) | 0.00 | 2-4 | >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 | IRC2018/TPI2014 | Matrix-P | | | | | | | Weight: 11 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 2-7-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 2=0-7-6, 3= Mechanical, 4= Mechanical
Max Horiz 2=53 (LC 8)
Max Uplift 2=-182 (LC 8), 3=-8 (LC 13)
Max Grav 2=346 (LC 1), 3=18 (LC 8), 4=45 (LC 3)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/30, 2-3=-44/17
BOT CHORD 2-4=0/0

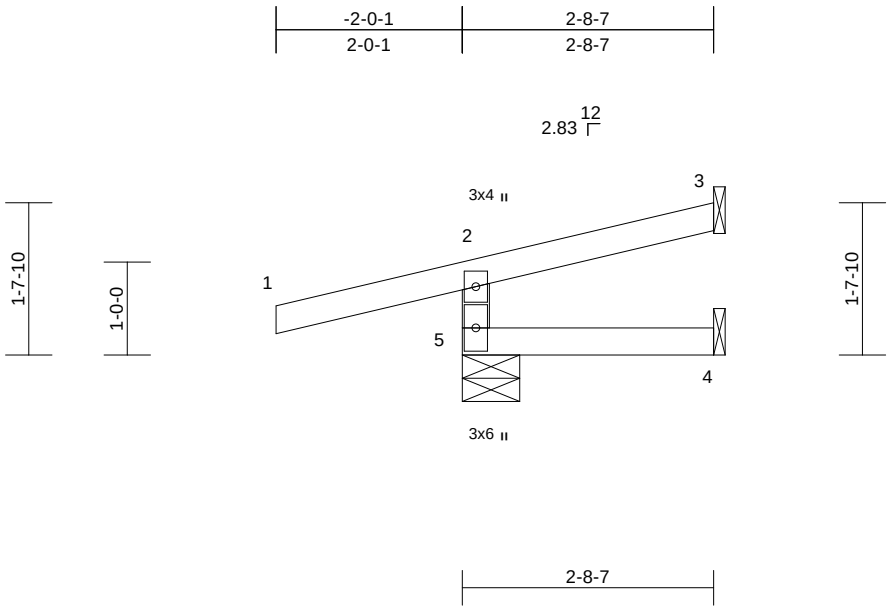
**NOTES**
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: , Joint 2 SP No.2 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 8 lb uplift at joint 3.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard


October 2,2024

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | CJ02 | Jack-Open | 2 | 1 | I68602434 Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:33 Page: 1
ID:B20vsS3NPLsGVEHwG3RjVOzeDLN-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:24.8

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.54 | Vert(LL) | 0.00 | 4-5 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.10 | Vert(CT) | 0.00 | 4-5 | >999 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.00 | Horz(CT) | 0.01 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-R | | | | | | | Weight: 12 lb | FT = 20% |

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

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

**REACTIONS** (size) 3= Mechanical, 4= Mechanical, 5=0-7-6
Max Horiz 5=44 (LC 9)
Max Uplift 3=-27 (LC 12), 5=-152 (LC 8)
Max Grav 3=40 (LC 1), 4=41 (LC 3), 5=328 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-285/420, 1-2=0/35, 2-3=-31/14
BOT CHORD 4-5=0/0

**NOTES**
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) zone; cantilever left and right exposed ; 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
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: , Joint 5 SP No.2 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 3.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

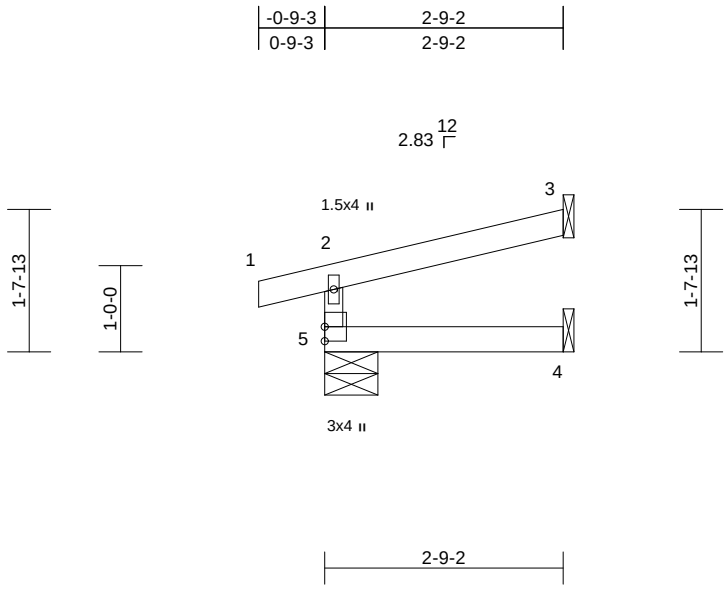
October 2,2024

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | CJ03 | Jack-Open | 2 | 1 | I68602435 Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:33
ID:CFLd4WwsxGnoTg8BEEJWeHzeDQj-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f






Scale = 1:26.7

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.17 | Vert(LL) | 0.00 | 4-5 | >999 | 240 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.09 | Vert(CT) | 0.00 | 4-5 | >999 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.00 | Horz(CT) | -0.01 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-R | | | | | | | Weight: 10 lb | FT = 20% |

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

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 2-9-2 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 3= Mechanical, 4= Mechanical, 5=0-7-6
Max Horiz 5=38 (LC 9)
Max Uplift 3=-42 (LC 12), 5=-61 (LC 8)
Max Grav 3=79 (LC 1), 4=50 (LC 3), 5=188 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-163/216, 1-2=0/14, 2-3=-32/15
BOT CHORD 4-5=0/0

**NOTES**
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) zone; cantilever left and right exposed ; 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
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: , Joint 5 SP No.2 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 42 lb uplift at joint 3.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER
PE-2001018807
PROFESSIONAL ENGINEER

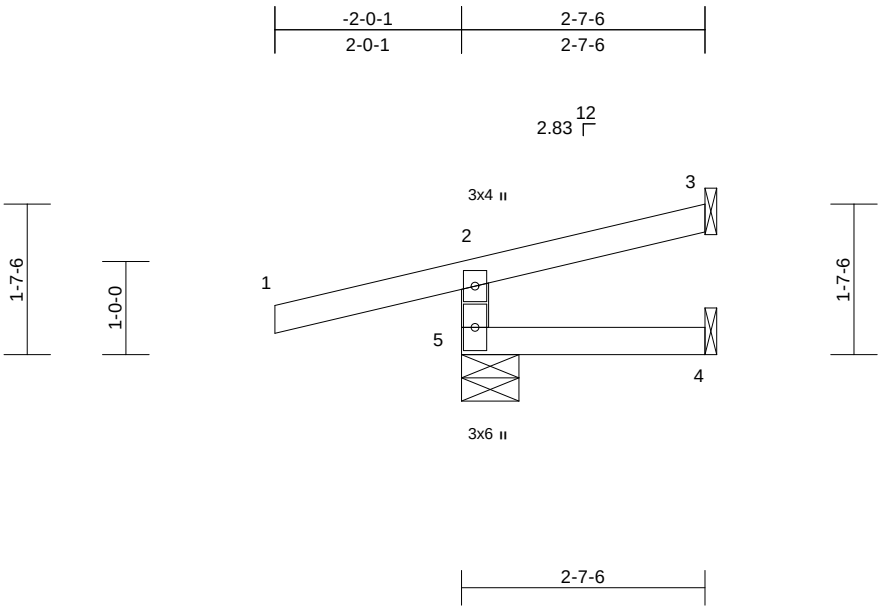
October 2,2024



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

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | CJ04 | Jack-Open | 3 | 1 | I68602436 Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:33 ID:wvl4XGEnRkvU_zOfJK2?MkzeDAq-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f Page: 1




Scale = 1:24.7

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.54 | Vert(LL) | 0.00 | 4-5 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.10 | Vert(CT) | 0.00 | 4-5 | >999 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.00 | Horz(CT) | 0.01 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-R | | | | | | | Weight: 12 lb | FT = 20% |

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

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 2-7-6 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 3= Mechanical, 4= Mechanical, 5=0-7-6
Max Horiz 5=44 (LC 9)
Max Uplift 3=-25 (LC 12), 5=-153 (LC 8)
Max Grav 3=35 (LC 1), 4=39 (LC 3), 5=326 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-284/419, 1-2=0/35, 2-3=-31/14
BOT CHORD 4-5=0/0

**NOTES**
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) zone; cantilever left and right exposed ; 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
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: , Joint 5 SP No.2 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 25 lb uplift at joint 3.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

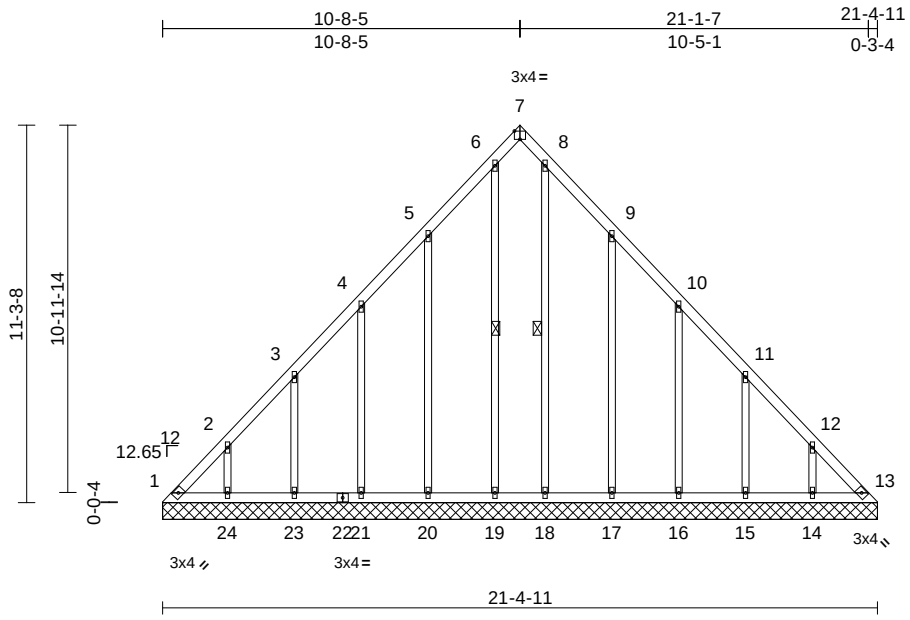
**LOAD CASE(S)** Standard

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

October 2,2024

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | HG1 | Lay-In Gable | 1 | 1 | I68602437<br>Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:33 Page: 1
ID:4aaBILsmFzqQEJMVaBas7szeC6t-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:68.9

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

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.14 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.07 | Vert(TL) | n/a | - | n/a | 999 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.32 | Horiz(TL) | 0.01 | 13 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 123 lb | FT = 20% |

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

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-19, 8-18

**REACTIONS** (size) 1=21-4-11, 13=21-4-11, 14=21-4-11, 15=21-4-11, 16=21-4-11, 17=21-4-11, 18=21-4-11, 19=21-4-11, 20=21-4-11, 21=21-4-11, 23=21-4-11, 24=21-4-11
Max Horiz 1=310 (LC 9)
Max Uplift 1=-146 (LC 10), 13=-109 (LC 11), 14=-137 (LC 13), 15=-137 (LC 13), 16=-134 (LC 13), 17=-162 (LC 13), 19=-17 (LC 9), 20=-159 (LC 12), 21=-133 (LC 12), 23=-137 (LC 12), 24=-137 (LC 12)
Max Grav 1=344 (LC 12), 13=319 (LC 13), 14=208 (LC 20), 15=207 (LC 20), 16=205 (LC 20), 17=219 (LC 20), 18=137 (LC 21), 19=160 (LC 19), 20=213 (LC 19), 21=207 (LC 19), 23=206 (LC 19), 24=207 (LC 19)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-491/328, 2-3=-365/228, 3-4=-230/164, 4-5=-144/115, 5-6=-130/150, 6-7=-101/96, 7-8=-101/93, 8-9=-130/118, 9-10=-106/64, 10-11=-197/123, 11-12=-332/228, 12-13=-457/328
BOT CHORD 1-24=-240/342, 23-24=-240/342, 21-23=-240/342, 20-21=-240/342, 19-20=-240/342, 18-19=-240/342, 17-18=-240/342, 16-17=-240/342, 15-16=-240/342, 14-15=-240/342, 13-14=-240/342
WEBS 2-24=-178/154, 3-23=-185/162, 4-21=-180/157, 5-20=-207/183, 6-19=-125/38, 8-18=-103/0, 9-17=-207/187, 10-16=-180/157, 11-15=-185/162, 12-14=-178/154

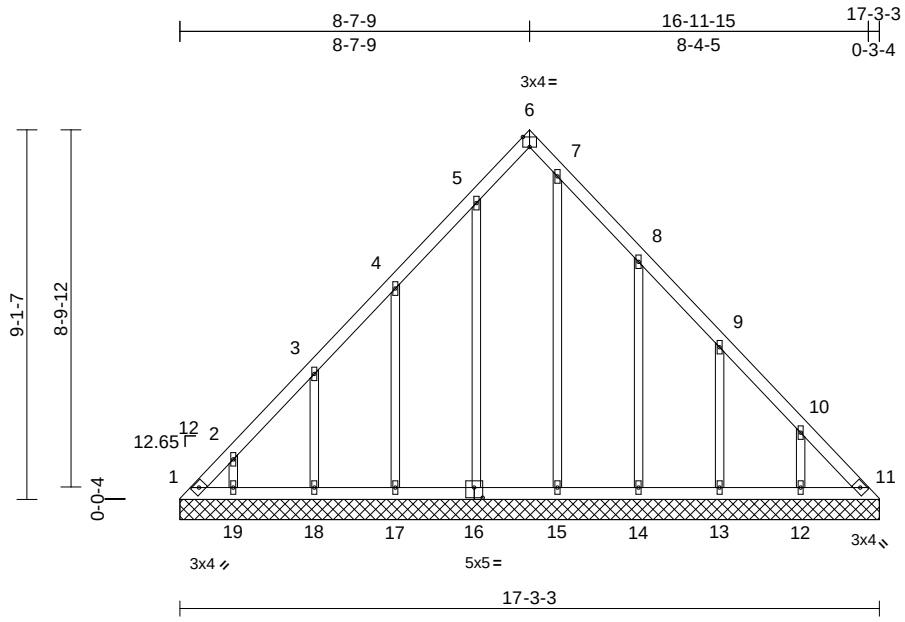
**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-4-1 to 5-4-1, Interior (1) 5-4-1 to 10-8-9, Exterior(2R) 10-8-9 to 15-5-9, Interior (1) 15-5-9 to 21-1-1 zone; cantilever left and right exposed ; 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) All plates are 1.5x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 0-0-0 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 146 lb uplift at joint 1, 109 lb uplift at joint 13, 137 lb uplift at joint 24, 137 lb uplift at joint 23, 133 lb uplift at joint 21, 159 lb uplift at joint 20, 17 lb uplift at joint 19, 162 lb uplift at joint 17, 134 lb uplift at joint 16, 137 lb uplift at joint 15 and 137 lb uplift at joint 14.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard


October 2,2024

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | HG2 | Lay-In Gable | 1 | 1 | I68602438<br>Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:33 Page: 1
ID:gPh1qn6EiV4GvAb_S_4fH9zeBhR-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:56.9

Plate Offsets (X, Y): [6:Edge,0-3-0], [16:0-2-8,0-3-0]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.10 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.06 | Vert(TL) | n/a | - | n/a | 999 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.20 | Horiz(TL) | 0.01 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 90 lb | FT = 20% |

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

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

**REACTIONS** (size) 1=17-3-3, 11=17-3-3, 12=17-3-3, 13=17-3-3, 14=17-3-3, 15=17-3-3, 16=17-3-3, 17=17-3-3, 18=17-3-3, 19=17-3-3
Max Horiz 1=248 (LC 9)
Max Uplift 1=-127 (LC 10), 11=-85 (LC 11), 12=-138 (LC 13), 13=-132 (LC 13), 14=-164 (LC 13), 16=-74 (LC 12), 17=-150 (LC 12), 18=-137 (LC 12), 19=-117 (LC 12)
Max Grav 1=306 (LC 12), 11=271 (LC 13), 12=208 (LC 20), 13=205 (LC 20), 14=216 (LC 20), 15=147 (LC 1), 16=181 (LC 19), 17=215 (LC 19), 18=210 (LC 19), 19=177 (LC 19)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-427/305, 2-3=-321/219, 3-4=-187/115, 4-5=-118/67, 5-6=-89/75, 6-7=-70/54, 7-8=-93/66, 8-9=-139/80, 9-10=-264/182, 10-11=-391/286
BOT CHORD 1-19=-213/296, 18-19=-213/296, 17-18=-213/296, 15-17=-213/296, 14-15=-212/296, 13-14=-212/296, 12-13=-212/296, 11-12=-212/296
WEBS 2-19=-158/134, 3-18=-190/162, 4-17=-207/177, 5-16=-149/93, 7-15=-101/6, 8-14=-213/187, 9-13=-185/157, 10-12=-184/155

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-4-1 to 5-4-1, Interior (1) 5-4-1 to 8-7-13, Exterior(2R) 8-7-13 to 13-7-13, Interior (1) 13-7-13 to 16-11-9 zone; cantilever left and right exposed ; 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) All plates are 1.5x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 0-0-0 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
10) N/A
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

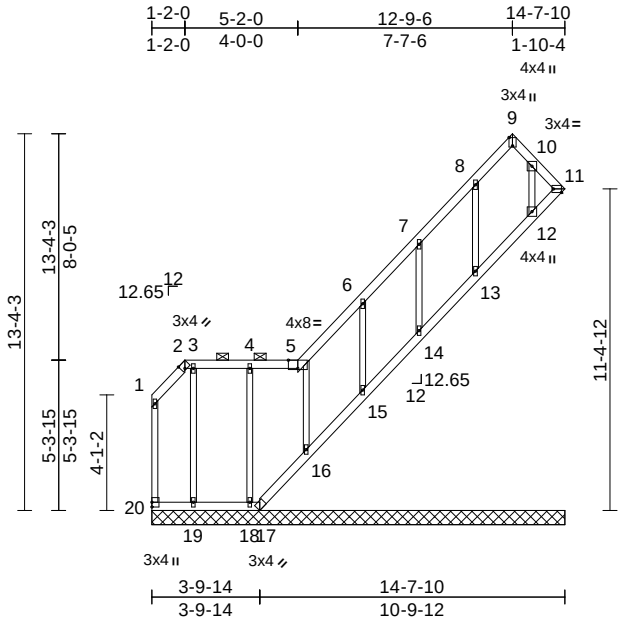
STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

October 2,2024

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | HG3 | Lay-In Gable | 1 | 1 | I68602439 Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 E Apr 26 2024 Print: 8.630 E Apr 26 2024 MiTek Industries, Inc. Wed Oct 02 08:55:47 Page: 1
ID:YZosHd0vTL2lu14QAkElWBzeC1W-6K7?opN_7FVoQk547S3T_ddW01MEYnfOccAW_tyXVUR




Scale = 1:81.7

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

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.50 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.14 | Vert(TL) | n/a | - | n/a | 999 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.16 | Horiz(TL) | -0.02 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 82 lb | FT = 20% |

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

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

**REACTIONS** All bearings 14-7-10.
(lb) - Max Horiz 20=321 (LC 9)
Max Uplift All uplift 100 (lb) or less at joint(s) 18, 19, 20 except 11=-848 (LC 12), 12=-348 (LC 10), 14=-202 (LC 12), 15=-136 (LC 12), 16=-143 (LC 12), 17=-223 (LC 10)
Max Grav All reactions 250 (lb) or less at joint (s) 13, 14, 15, 16, 18, 19, 20 except 11=549 (LC 10), 12=671 (LC 12), 17=343 (LC 12)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 6-7=-312/338, 7-8=-469/513, 8-9=-389/417, 10-11=-640/713
BOT CHORD 19-20=-367/336, 18-19=-367/336, 17-18=-367/336, 16-17=-546/510, 15-16=-510/467, 14-15=-509/466, 13-14=-509/465, 12-13=-512/466, 11-12=-486/436
WEBS 5-16=-266/234, 7-14=-257/224, 10-12=-782/651

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-4 to 5-2-0, Interior (1) 5-2-0 to 12-9-6, Exterior(2E) 12-9-6 to 14-5-3 zone; cantilever left and right exposed ; 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) Provide adequate drainage to prevent water ponding.
5) All plates are 1.5x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
8) Gable studs spaced at 0-0-0 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 19, 18 except (jt=lb) 11=848, 17=223, 16=142, 15=135, 14=201, 12=347.
12) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 11, 16, 15, 14, 13, 12.
13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

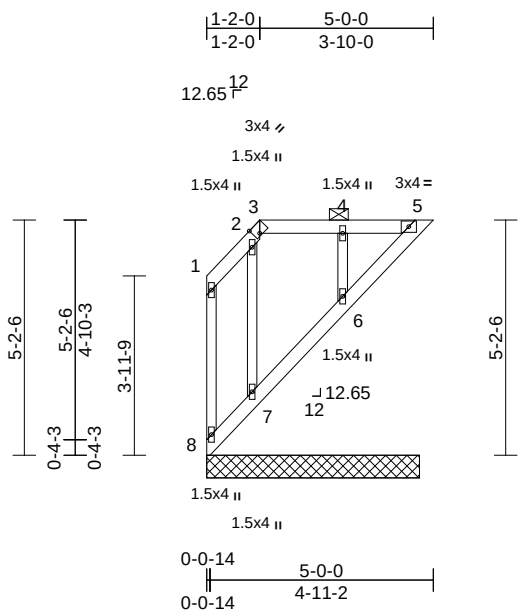

October 2,2024

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | HG4 | Lay-In Gable | 1 | 1 | I68602440 Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:33
ID:Fy5SwVYCsViMzm?e3OgvtMyXqGZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1




Scale = 1:50.9

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

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.19 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.08 | Vert(TL) | n/a | - | n/a | 999 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.05 | Horiz(TL) | 0.00 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 26 lb | FT = 20% |

**LUMBER**

| | |
|---|---|
| TOP CHORD | 2x4 SP No.2 |
| BOT CHORD | 2x4 SP No.2 |
| WEBS | 2x3 SPF No.2 |
| OTHERS | 2x3 SPF No.2 |

**BRACING**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 5-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-5. |
| BOT CHORD | Rigid ceiling directly applied or 6-0-0 oc bracing. |

**REACTIONS** (size) 5=4-8-6, 6=4-8-6, 7=4-8-6, 8=4-8-6
Max Horiz 8=-129 (LC 10)
Max Uplift 5=-89 (LC 9), 6=-50 (LC 8), 7=-27 (LC 8)
Max Grav 5=93 (LC 19), 6=194 (LC 1), 7=137 (LC 1), 8=26 (LC 21)

**FORCES** (lb) - Maximum Compression/Maximum Tension

| | |
|---|---|
| TOP CHORD | 1-8=-154/157, 1-2=-162/177, 2-3=-119/106, 3-4=-122/133, 4-5=-122/133 |
| BOT CHORD | 7-8=-223/215, 6-7=-197/191, 5-6=-200/183 |
| WEBS | 4-6=-150/72, 2-7=-154/101 |

**NOTES**

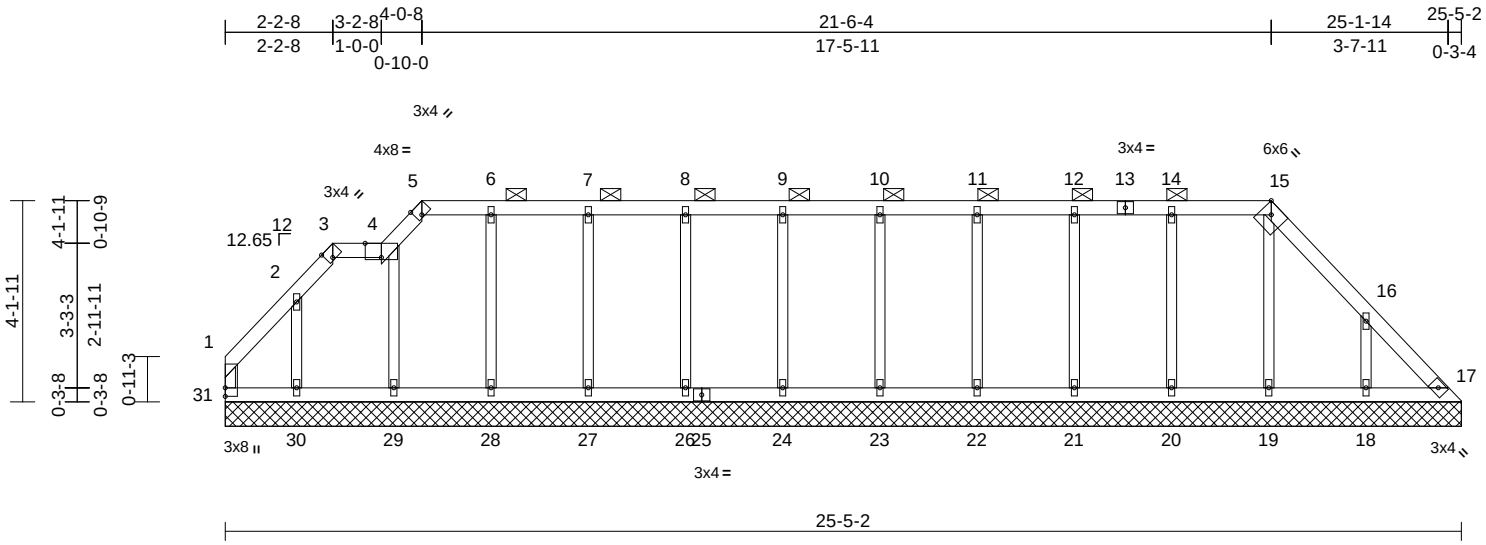
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical 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) Provide adequate drainage to prevent water ponding.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
10) Bearing at joint(s) 8, 5, 6, 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 89 lb uplift at joint 5, 50 lb uplift at joint 6 and 27 lb uplift at joint 7.
12) N/A
13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard


October 2,2024

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | HG5 | Lay-In Gable | 1 | 1 | I68602441 Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:34 Page: 1
ID:cCM_nrH3wHlFpx?tT_fVjZyXoyz-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:47.4

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

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.10 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.04 | Vert(TL) | n/a | - | n/a | 999 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.06 | Horiz(TL) | 0.00 | 17 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 112 lb | FT = 20% |

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

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4, 5-15.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 17=25-5-2, 18=25-5-2, 19=25-5-2, 20=25-5-2, 21=25-5-2, 22=25-5-2, 23=25-5-2, 24=25-5-2, 26=25-5-2, 27=25-5-2, 28=25-5-2, 29=25-5-2, 30=25-5-2, 31=25-5-2
Max Horiz 31=-121 (LC 8)
Max Uplift 17=-35 (LC 9), 18=-148 (LC 13), 19=-25 (LC 8), 20=-48 (LC 9), 21=-41 (LC 8), 22=-36 (LC 9), 23=-40 (LC 8), 24=-39 (LC 9), 26=-40 (LC 8), 27=-41 (LC 9), 28=-33 (LC 8), 29=-26 (LC 12), 30=-111 (LC 12), 31=-34 (LC 8)
Max Grav 17=100 (LC 19), 18=219 (LC 20), 19=145 (LC 26), 20=199 (LC 25), 21=183 (LC 1), 22=173 (LC 25), 23=181 (LC 1), 24=180 (LC 26), 26=179 (LC 25), 27=179 (LC 26), 28=192 (LC 25), 29=172 (LC 25), 30=160 (LC 19), 31=103 (LC 20)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-31=-80/28, 1-2=-91/52, 2-3=-85/64, 3-4=-66/58, 4-5=-98/82, 5-6=-87/87, 6-7=-87/87, 7-8=-87/87, 8-9=-87/87, 9-10=-87/87, 10-11=-87/87, 11-12=-87/87, 12-14=-87/87, 14-15=-87/87, 15-16=-97/90, 16-17=-101/94
BOT CHORD 30-31=-66/94, 29-30=-66/94, 28-29=-66/96, 27-28=-66/96, 26-27=-66/96, 24-26=-66/96, 23-24=-66/96, 22-23=-66/96, 21-22=-66/96, 20-21=-66/96, 19-20=-66/96, 18-19=-66/96, 17-18=-66/96
WEBS 2-30=-115/113, 4-29=-131/54, 6-28=-152/57, 7-27=-138/66, 8-26=-141/63, 9-24=-140/63, 10-23=-142/64, 11-22=-133/60, 12-21=-143/65, 14-20=-159/72, 15-19=-106/50, 16-18=-186/166

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-4 to 3-2-8, Interior (1) 3-2-8 to 4-0-8, Exterior(2R) 4-0-8 to 9-0-8, Interior (1) 9-0-8 to 21-6-4, Exterior(2E) 21-6-4 to 25-1-5 zone; cantilever left and right exposed ; 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) Provide adequate drainage to prevent water ponding.
5) All plates are 1.5x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 0-0-0 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
11) N/A
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard


October 2,2024

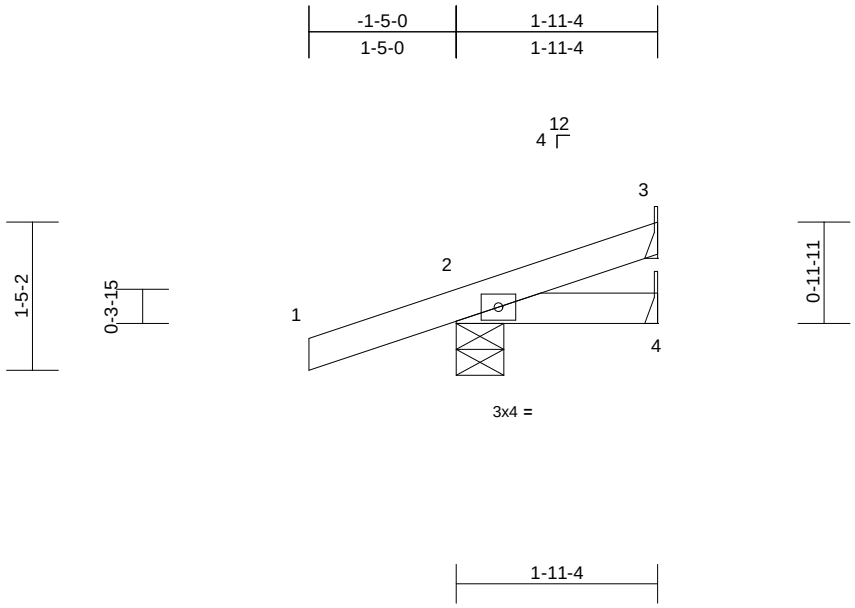
| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | J01 | Jack-Open | 1 | 1 | I68602442 |
| | | | | | Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:34



ID:6mrTrCbDvjIiI7jv04wNqEzeCPI-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:22.2

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.20 | Vert(LL) | 0.00 | 2-4 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.04 | Vert(CT) | 0.00 | 2-4 | >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 | IRC2018/TPI2014 | Matrix-P | | | | | | | Weight: 8 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 1-11-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 2=0-5-8, 3= Mechanical, 4= Mechanical
Max Horiz 2=55 (LC 8)
Max Uplift 2=-110 (LC 8), 3=-19 (LC 12)
Max Grav 2=227 (LC 1), 3=26 (LC 1), 4=38 (LC 3)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/30, 2-3=-35/17
BOT CHORD 2-4=0/0

**NOTES**
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; 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
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: , Joint 2 SP No.2 crushing capacity of 565 psi.
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 3.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

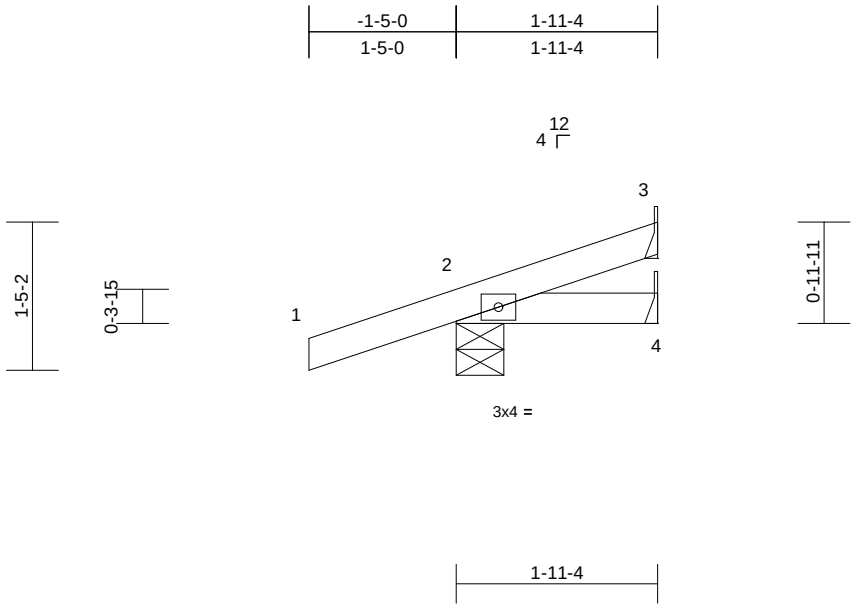

October 2,2024



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

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | J02 | Jack-Open | 1 | 1 | I68602443 Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:34 Page: 1
ID:6mrTrCbDvjIiI7jv04wNqEzeCPI-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:22.2

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.20 | Vert(LL) | 0.00 | 2-4 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.04 | Vert(CT) | 0.00 | 2-4 | >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 | IRC2018/TPI2014 | Matrix-P | | | | | | | Weight: 8 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 1-11-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 2=0-5-8, 3= Mechanical, 4= Mechanical
Max Horiz 2=55 (LC 8)
Max Uplift 2=-110 (LC 8), 3=-19 (LC 12)
Max Grav 2=227 (LC 1), 3=26 (LC 1), 4=38 (LC 3)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/30, 2-3=-35/17
BOT CHORD 2-4=0/0

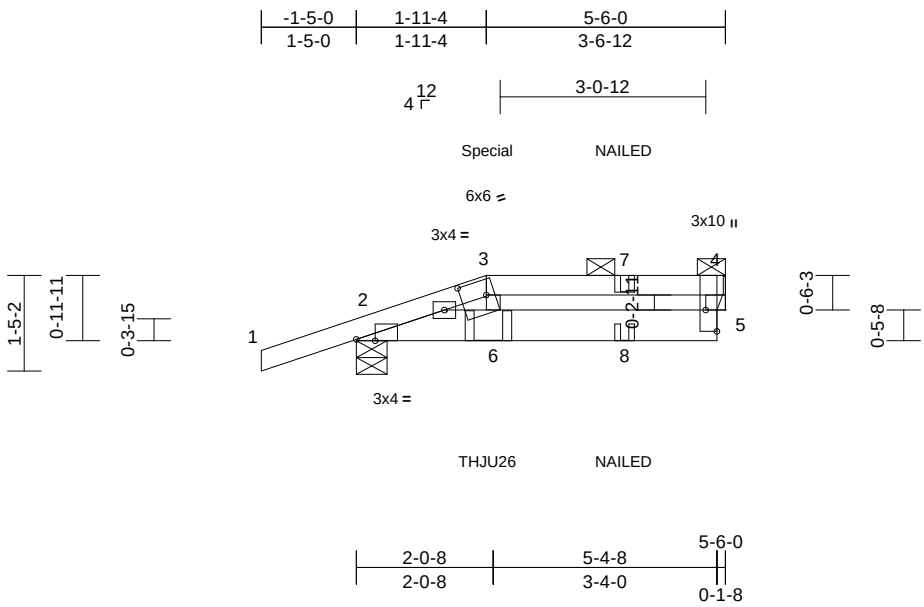
**NOTES**
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: , Joint 2 SP No.2 crushing capacity of 565 psi.
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 3.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard


October 2,2024

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | J03 | Half Hip Girder | 2 | 1 | I68602444 Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:34 ID:6mrTrCbDvjIiI7jv04wNqEzeCPI-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1




Scale = 1:34.3

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

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.26 | Vert(LL) | -0.01 | 6 | >999 | 240 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.12 | Vert(CT) | -0.01 | 5-6 | >999 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.02 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 21 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SPF No.2
WEBS 2x4 SP No.2 *Except* 6-3:2x3 SPF No.2

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

**REACTIONS** (size) 2=0-5-8, 5= Mechanical
Max Horiz 2=43 (LC 8)
Max Uplift 2=-115 (LC 8), 5=-35 (LC 9)
Max Grav 2=347 (LC 1), 5=205 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-218/55, 3-4=-174/61, 4-5=-130/145
BOT CHORD 2-6=-93/185, 5-6=-78/173
WEBS 3-6=-69/87

**NOTES**
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; 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
2) Provide adequate drainage to prevent water ponding.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Bearings are assumed to be: Joint 2 SPF No.2 crushing capacity of 425 psi.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 35 lb uplift at joint 5.
8) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Use Simpson Strong-Tie THJU26 (SGL & SGL SHORT RC 1-PLY) or equivalent at 1-11-10 from the left end to connect truss(es) to back face of bottom chord.
12) Fill all nail holes where hanger is in contact with lumber.
13) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 165 lb down and 104 lb up at 1-11-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
15) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-70, 3-4=-70, 2-5=-20
Concentrated Loads (lb)
Vert: 3=30 (B), 6=-2 (B), 8=-2 (B)

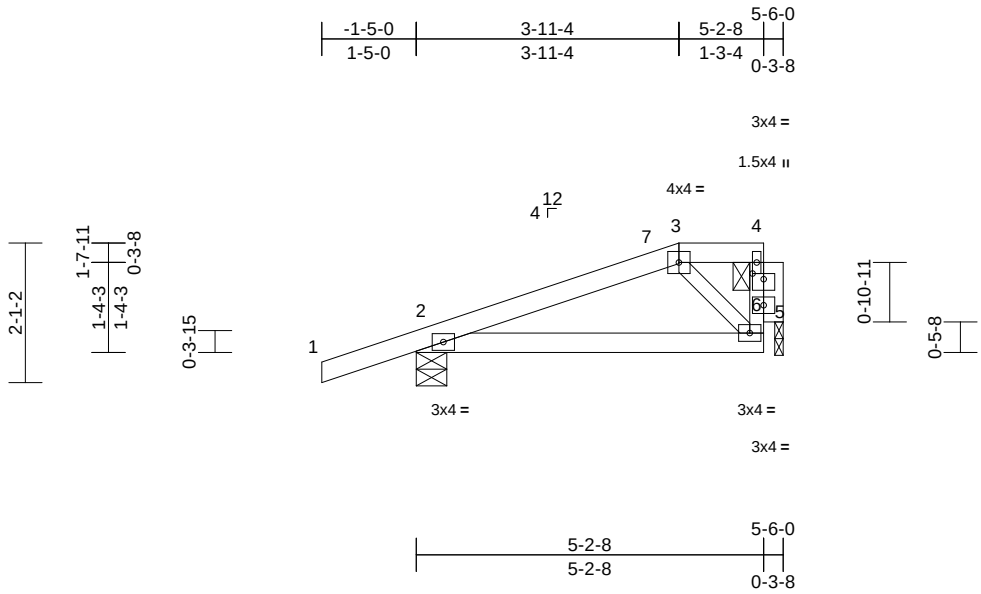

October 2,2024

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | J04 | Half Hip | 1 | 1 | I68602445 Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:34
ID:juQcuIcza1K?qo_?IfQY6SzeCMh-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f






Scale = 1:34.5

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

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.26 | Vert(LL) | -0.03 | 2-5 | >999 | 240 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.33 | Vert(CT) | -0.07 | 2-5 | >863 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.04 | Horz(CT) | 0.00 | 6 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-P | | | | | | | Weight: 22 lb | FT = 20% |

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

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

**REACTIONS** (size) 2=0-5-8, 6=0-1-8
Max Horiz 2=75 (LC 9)
Max Uplift 2=-134 (LC 8), 6=-38 (LC 8)
Max Grav 2=354 (LC 1), 6=200 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/30, 2-3=-155/104, 3-4=-37/44, 5-6=-96/148, 4-6=-52/65
BOT CHORD 2-5=-136/114
WEBS 3-5=-131/165

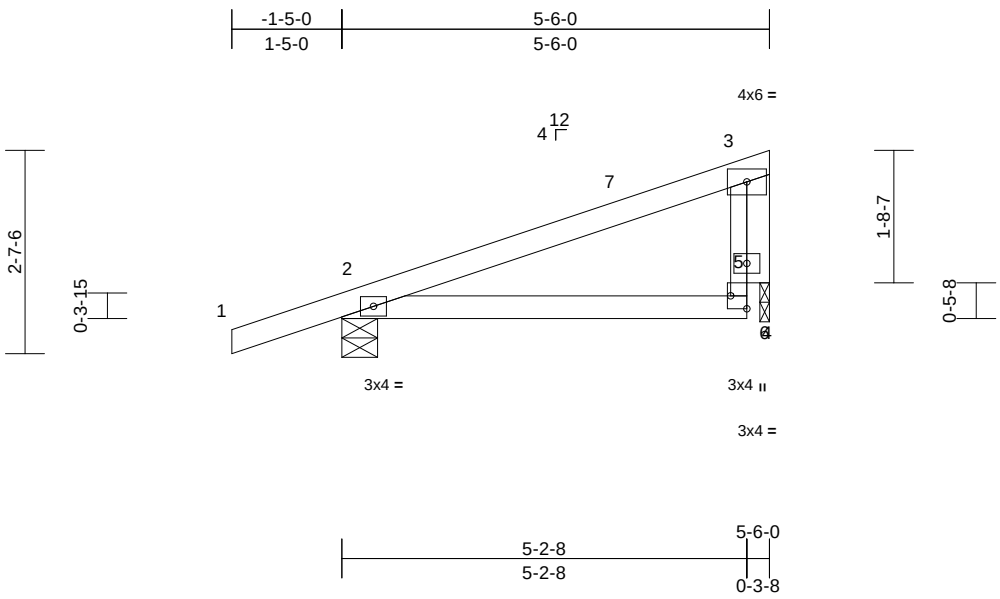
**NOTES**
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 3-11-4, Exterior(2E) 3-11-4 to 5-1-4 zone; cantilever left and right exposed ; 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
2) Provide adequate drainage to prevent water ponding.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
6) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 6.
8) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard


October 2,2024

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | J05 | Monopitch | 4 | 1 | I68602446 |
| | | | | | Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:34 Page: 1
ID:b6cGb2F9epYGEAiEXMtWu7zeCN9-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:29.6

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

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.33 | Vert(LL) | -0.02 | 2-4 | >999 | 240 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.20 | Vert(CT) | -0.03 | 2-4 | >999 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.00 | Horz(CT) | 0.00 | 6 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-R | | | | | | | Weight: 22 lb | FT = 20% |

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

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

**REACTIONS** (size) 2=0-5-8, 6=0-1-8
Max Horiz 2=94 (LC 8)
Max Uplift 2=-128 (LC 8), 6=-50 (LC 12)
Max Grav 2=367 (LC 1), 6=187 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/30, 2-3=-204/52, 4-5=0/103, 3-5=-92/222
BOT CHORD 2-4=-105/146
WEBS 3-6=-120/0

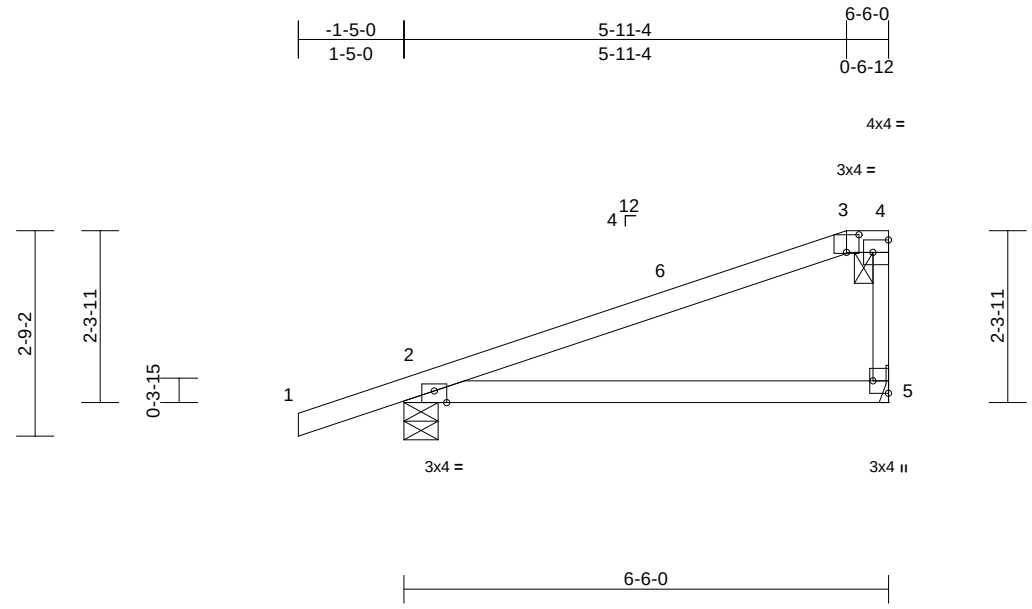
**NOTES**
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 5-1-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
5) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 6.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard


October 2,2024

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | J06 | Half Hip | 1 | 1 | I68602447 Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:34 ID:AGPiPC0cLf16q6AOM9Wp4vzeCNT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1




Scale = 1:30.9

Plate Offsets (X, Y): [2:0-2-0,Edge], [3:0-2-0,0-2-13], [4:Edge,0-2-0], [5:Edge,0-2-8]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.64 | Vert(LL) | -0.06 | 2-5 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.41 | Vert(CT) | -0.12 | 2-5 | >621 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.00 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-R | | | | | | | Weight: 24 lb | FT = 20% |

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

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

**REACTIONS** (size) 2=0-5-8, 5= Mechanical
Max Horiz 2=106 (LC 9)
Max Uplift 2=-141 (LC 8), 5=-56 (LC 8)
Max Grav 2=408 (LC 1), 5=262 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/30, 2-3=-156/45, 3-4=-103/100, 4-5=-185/229
BOT CHORD 2-5=-97/103

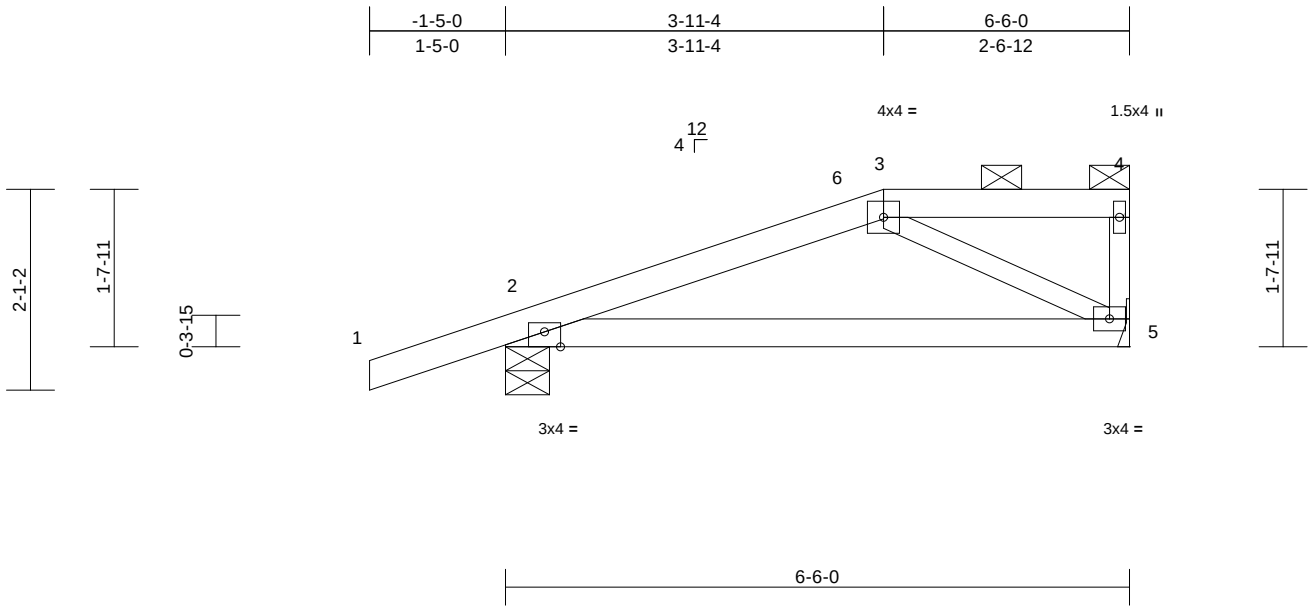
**NOTES**
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 5-11-4, Exterior(2E) 5-11-4 to 6-4-12 zone; cantilever left and right exposed ; 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
2) Provide adequate drainage to prevent water ponding.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 56 lb uplift at joint 5.
8) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard


October 2,2024

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | J07 | Half Hip | 1 | 1 | I68602448 |
| | | | | | Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:34 Page: 1
ID:T4HVkzhgiNdx5ycCH_XUUCzeCNu-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:24

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

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.27 | Vert(LL) | -0.09 | 2-5 | >853 | 240 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.55 | Vert(CT) | -0.17 | 2-5 | >427 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.07 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-P | | | | | | | Weight: 25 lb | FT = 20% |

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

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

**REACTIONS** (size) 2=0-5-8, 5= Mechanical
Max Horiz 2=75 (LC 9)
Max Uplift 2=-144 (LC 8), 5=-53 (LC 8)
Max Grav 2=408 (LC 1), 5=262 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/30, 2-3=-275/237, 3-4=-28/30, 4-5=-86/99
BOT CHORD 2-5=-279/209
WEBS 3-5=-238/296

**NOTES**
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 3-11-4, Exterior(2E) 3-11-4 to 6-4-12 zone; cantilever left and right exposed ; 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
2) Provide adequate drainage to prevent water ponding.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 53 lb uplift at joint 5.
8) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

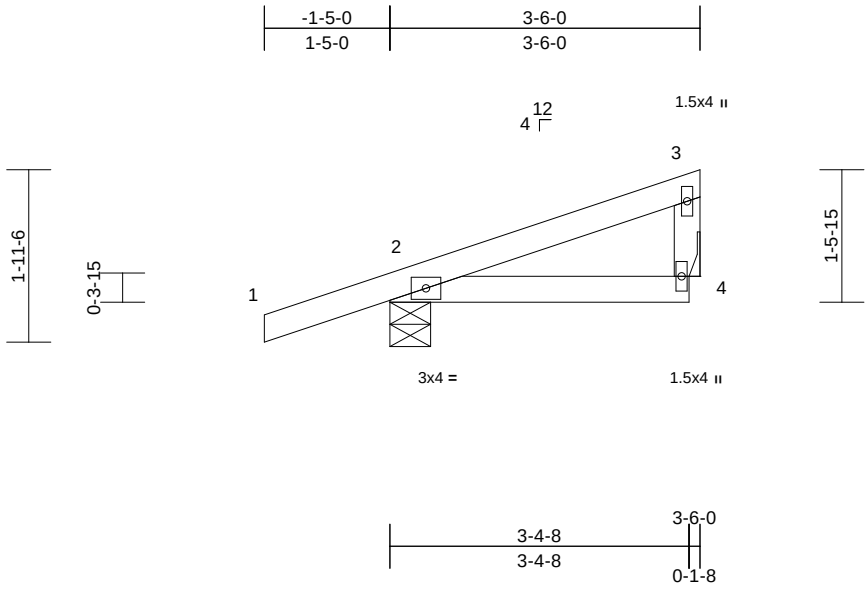
**LOAD CASE(S)** Standard

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER
PE-2001018807
PROFESSIONAL ENGINEER

October 2,2024

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | J08 | Jack-Closed | 4 | 1 | I68602449 Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:34 Page: 1
ID:SN?E2rd1k8D2iqcWKHUdbMzeCQY-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f







Scale = 1:26

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.25 | Vert(LL) | -0.01 | 2-4 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.12 | Vert(CT) | -0.01 | 2-4 | >999 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.00 | Horz(CT) | 0.00 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-P | | | | | | | Weight: 14 lb | FT = 20% |

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

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

**REACTIONS** (size) 2=0-5-8, 4= Mechanical
Max Horiz 2=65 (LC 9)
Max Uplift 2=-124 (LC 8), 4=-23 (LC 12)
Max Grav 2=286 (LC 1), 4=110 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/30, 2-3=-70/48, 3-4=-95/122
BOT CHORD 2-4=-24/26

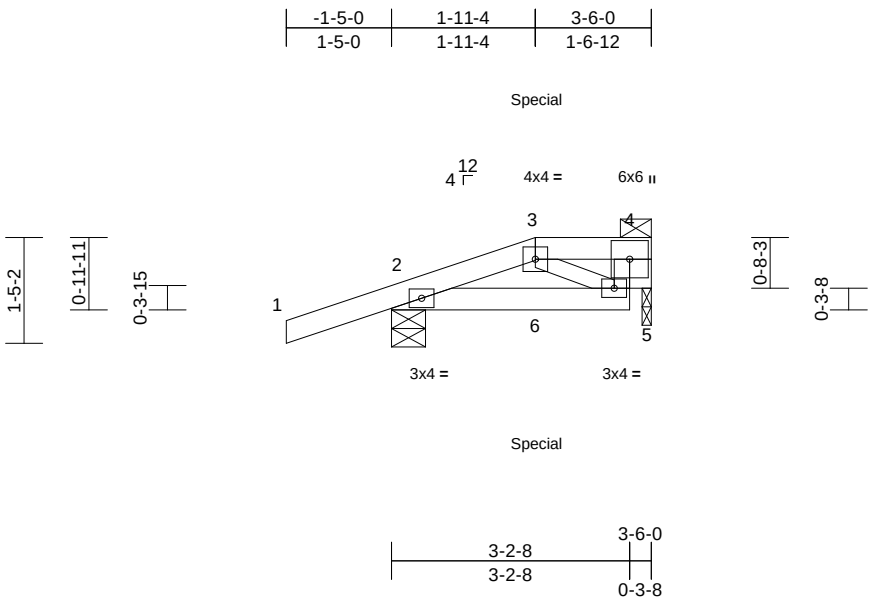
**NOTES**
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi.
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.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard


October 2,2024

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | J10 | Half Hip Girder | 1 | 1 | I68602450 Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:35 Page: 1
ID:2KNyZR?URf7fwbUUeIYuLuzeCQ3-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:31

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.25 | Vert(LL) | -0.01 | 2-5 | >999 | 240 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.12 | Vert(CT) | -0.01 | 2-5 | >999 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.02 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-P | | | | | | | Weight: 14 lb | FT = 20% |

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

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

**REACTIONS** (size) 2=0-5-8, 5=0-1-8
Max Horiz 2=43 (LC 9)
Max Uplift 2=-112 (LC 8), 5=-5 (LC 9)
Max Grav 2=271 (LC 1), 5=93 (LC 21)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/30, 2-3=-119/54, 3-4=-16/18, 4-5=-45/55
BOT CHORD 2-5=-53/133
WEBS 3-5=-136/63

**NOTES**
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; 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
2) Provide adequate drainage to prevent water ponding.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
6) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
8) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5 and 2. This connection is for uplift only and does not consider lateral forces.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 160 lb down and 99 lb up at 1-11-4 on top chord, and 15 lb down at 1-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-70, 3-4=-70, 2-5=-20
Concentrated Loads (lb)
Vert: 3=28 (F), 6=-2 (F)


October 2,2024

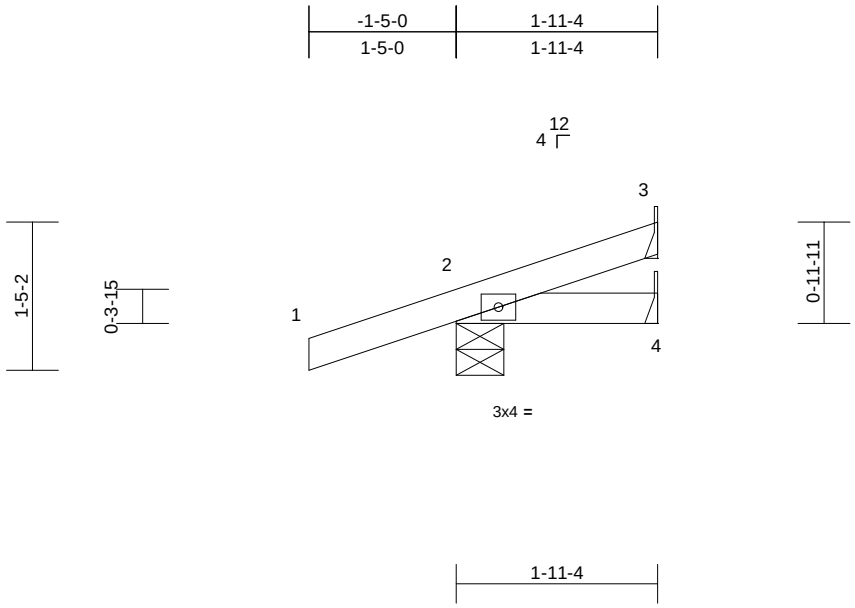
| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | J11 | Jack-Open | 1 | 1 | I68602451 |
| | | | | | Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:35



ID:BOeiL02QvhNHe5qbL2AgSRzeCTt-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:22.2

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.20 | Vert(LL) | 0.00 | 2-4 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.04 | Vert(CT) | 0.00 | 2-4 | >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 | IRC2018/TPI2014 | Matrix-P | | | | | | | Weight: 8 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 1-11-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 2=0-5-8, 3= Mechanical, 4= Mechanical
Max Horiz 2=55 (LC 8)
Max Uplift 2=-110 (LC 8), 3=-19 (LC 12)
Max Grav 2=227 (LC 1), 3=26 (LC 1), 4=38 (LC 3)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/30, 2-3=-35/17
BOT CHORD 2-4=0/0

**NOTES**
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; 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
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: , Joint 2 SP No.2 crushing capacity of 565 psi.
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 3.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

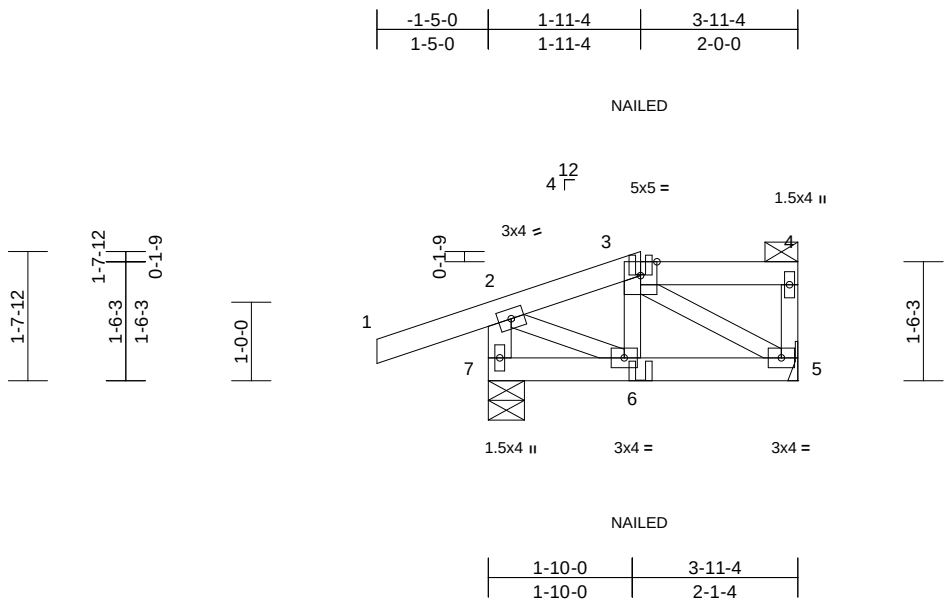

October 2,2024

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | J13 | Half Hip Girder | 3 | 1 | I68602452<br>Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:35
ID:PvRlR2sPBiS6DyMeMF_CTizeDA0-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f






Scale = 1:29.3

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.24 | Vert(LL) | 0.00 | 6 | >999 | 240 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.05 | Vert(CT) | 0.00 | 5-6 | >999 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.03 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-P | | | | | | | Weight: 19 lb | FT = 20% |

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

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

**REACTIONS** (size) 5= Mechanical, 7=0-5-8
Max Horiz 7=65 (LC 9)
Max Uplift 5=-37 (LC 9), 7=-120 (LC 8)
Max Grav 5=137 (LC 1), 7=292 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-113/88, 3-4=-27/31, 4-5=-66/82, 2-7=-278/314
BOT CHORD 6-7=-138/57, 5-6=-109/109
WEBS 2-6=0/95, 3-6=-5/51, 3-5=-108/110

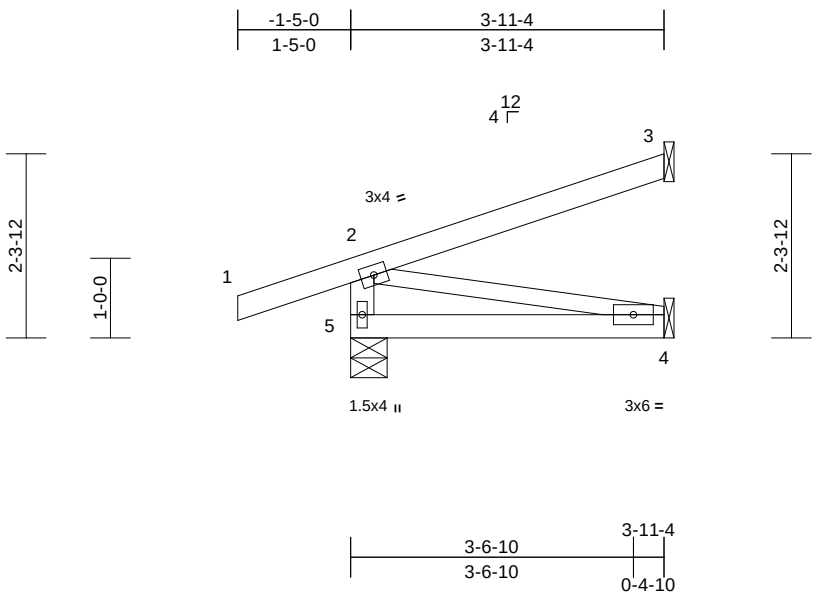
**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; 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) 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Bearings are assumed to be: Joint 7 SP No.2 crushing capacity of 565 psi.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 37 lb uplift at joint 5.
9) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 7. This connection is for uplift only and does not consider lateral forces.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
13) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-70, 2-3=-70, 3-4=-70, 5-7=-20
Concentrated Loads (lb)
Vert: 6=12 (B)


October 2,2024

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | J14 | Jack-Open | 25 | 1 | I68602453 Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:35 Page: 1
ID:o8UlE?szVW7lOM5uY1Wz8QzeDBI-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:28.9

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.24 | Vert(LL) | -0.01 | 4-5 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.19 | Vert(CT) | -0.02 | 4-5 | >999 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.04 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-P | | | | | | | Weight: 18 lb | FT = 20% |

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

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 3-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 3= Mechanical, 4= Mechanical, 5=0-5-8
Max Horiz 5=71 (LC 8)
Max Uplift 3=-58 (LC 12), 5=-101 (LC 8)
Max Grav 3=108 (LC 1), 4=76 (LC 3), 5=301 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-263/291, 1-2=0/35, 2-3=-59/30
BOT CHORD 4-5=-172/41
WEBS 2-4=-42/176

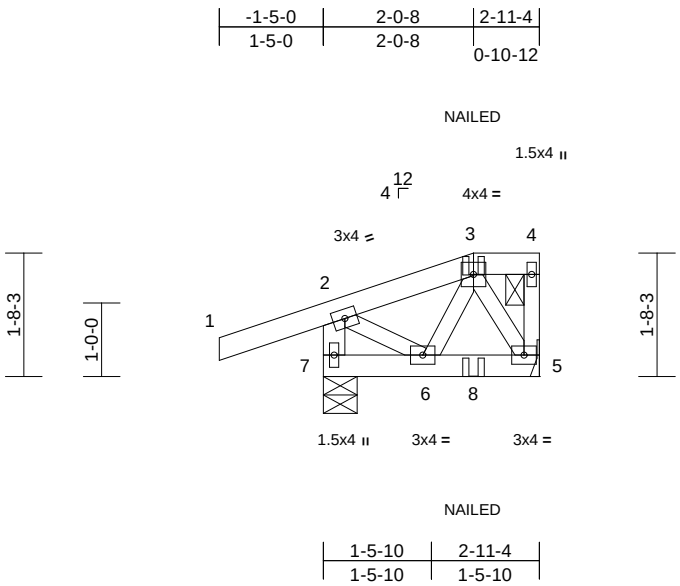
**NOTES**
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: , Joint 5 SP No.2 crushing capacity of 565 psi.
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 3.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard


October 2,2024

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | J15 | Half Hip Girder | 2 | 1 | I68602454 Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:35 Page: 1
ID:4I6ZUiA1?jQpVvEEz8BR_izeDQO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:31.3

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.24 | Vert(LL) | 0.00 | 6 | >999 | 240 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.03 | Vert(CT) | 0.00 | 5-6 | >999 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.03 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-P | | | | | | | Weight: 16 lb | FT = 20% |

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

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

**REACTIONS** (size) 5= Mechanical, 7=0-5-8
Max Horiz 7=73 (LC 11)
Max Uplift 5=-41 (LC 9), 7=-114 (LC 8)
Max Grav 5=94 (LC 1), 7=264 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-72/53, 3-4=-29/31, 4-5=-28/34, 2-7=-253/280
BOT CHORD 6-7=-158/67, 5-6=-65/52
WEBS 3-6=-29/44, 3-5=-60/90, 2-6=-7/108

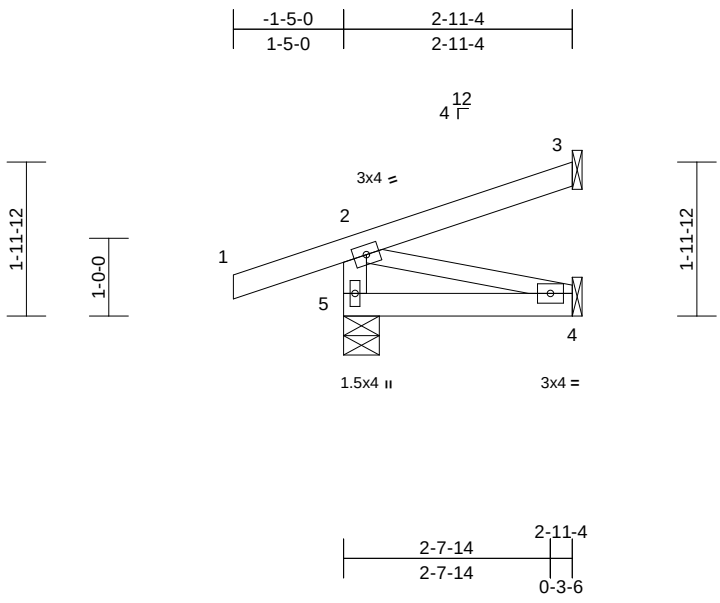
**NOTES**
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Bearings are assumed to be: Joint 7 SP No.2 crushing capacity of 565 psi.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 41 lb uplift at joint 5.
8) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 7. This connection is for uplift only and does not consider lateral forces.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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


October 2,2024

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | J16 | Jack-Open | 4 | 1 | I68602455 |
| | | | | | Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:35 Page: 1
ID:GPHjoSJwP5pFJbaL6yt0x1zeDQD-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:29.6

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.24 | Vert(LL) | 0.00 | 4-5 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.10 | Vert(CT) | -0.01 | 4-5 | >999 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.04 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-P | | | | | | | Weight: 14 lb | FT = 20% |

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

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 2-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 3= Mechanical, 4= Mechanical, 5=0-5-8
Max Horiz 5=57 (LC 8)
Max Uplift 3=-37 (LC 12), 5=-98 (LC 8)
Max Grav 3=64 (LC 1), 4=56 (LC 3), 5=264 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-236/264, 1-2=0/35, 2-3=-40/23
BOT CHORD 4-5=-142/31
WEBS 2-4=-32/147

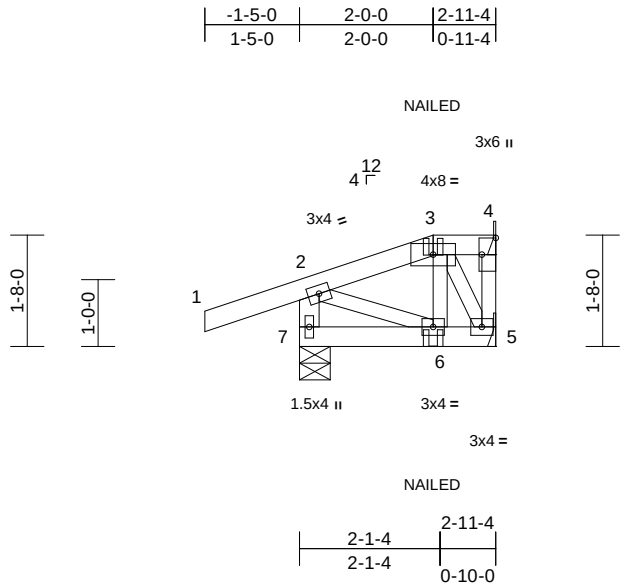
**NOTES**
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: , Joint 5 SP No.2 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 37 lb uplift at joint 3.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5 and 4. This connection is for uplift only and does not consider lateral forces.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard


October 2,2024

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | J18 | Half Hip Girder | 2 | 1 | I68602456 Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:35 Page: 1
ID:B20vsS3NPLsGVEHwG3RjVOzeDLN-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:34.5

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

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.24 | Vert(LL) | 0.00 | 6-7 | >999 | 240 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.03 | Vert(CT) | 0.00 | 6-7 | >999 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.03 | Horz(CT) | 0.00 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-P | | | | | | | Weight: 16 lb | FT = 20% |

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

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

**REACTIONS** (size) 4= Mechanical, 5= Mechanical, 7=0-5-8
Max Horiz 7=73 (LC 9)
Max Uplift 4=-13 (LC 9), 5=-18 (LC 9), 7=-113 (LC 8)
Max Grav 4=29 (LC 1), 5=65 (LC 3), 7=259 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-68/47, 3-4=-28/31, 4-5=0/0, 2-7=-241/286
BOT CHORD 6-7=-156/66, 5-6=-61/67
WEBS 3-5=-87/79, 2-6=-7/116, 3-6=-9/59

**NOTES**
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; 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
2) Provide adequate drainage to prevent water ponding.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Bearings are assumed to be: , Joint 7 SP No.2 crushing capacity of 565 psi.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 13 lb uplift at joint 4 and 18 lb uplift at joint 5.
8) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 7. This connection is for uplift only and does not consider lateral forces.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
12) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
13) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

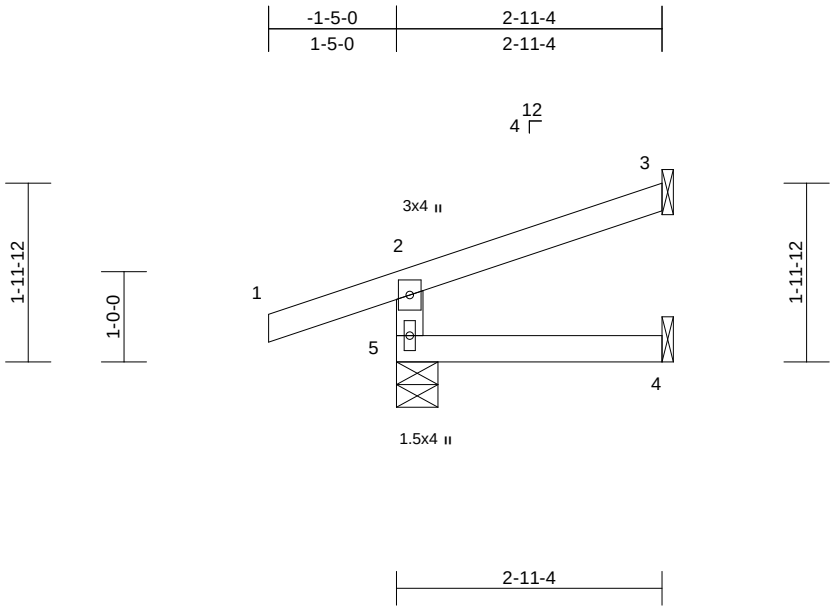
**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-70, 2-3=-70, 3-4=-70, 5-7=-20
Concentrated Loads (lb)
Vert: 6=11 (F)

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

October 2,2024

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | J19 | Jack-Open | 3 | 1 | I68602457 Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:35 Page: 1
ID:_DaUtZtr1j3xIQx89YhGfEzeDOC-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:25.5

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.24 | Vert(LL) | 0.00 | 4-5 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.10 | Vert(CT) | -0.01 | 4-5 | >999 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.00 | Horz(CT) | 0.01 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-R | | | | | | | Weight: 12 lb | FT = 20% |

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

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 2-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 3= Mechanical, 4= Mechanical, 5=0-5-8
Max Horiz 5=57 (LC 8)
Max Uplift 3=-43 (LC 12), 5=-98 (LC 8)
Max Grav 3=69 (LC 1), 4=49 (LC 3), 5=263 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-231/278, 1-2=0/35, 2-3=-44/22
BOT CHORD 4-5=0/0

**NOTES**
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; 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
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: , Joint 5 SP No.2 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 43 lb uplift at joint 3.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

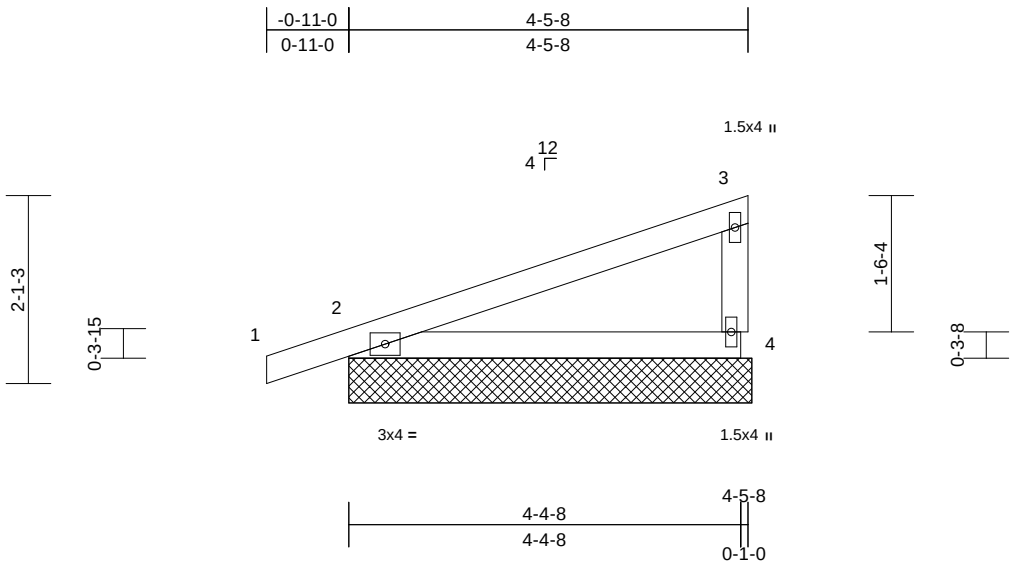

October 2,2024

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | M01 | Monopitch Supported Gable | 2 | 1 | I68602458<br>Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:35
ID:cquXHAJnb2z8dIhvV3xNnzzeCKV-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f






Scale = 1:25.7

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.51 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.25 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.00 | Horz(CT) | 0.00 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-P | | | | | | | Weight: 16 lb | FT = 20% |

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

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

**REACTIONS** (size) 2=4-6-0, 4=4-6-0
Max Horiz 2=76 (LC 9)
Max Uplift 2=-85 (LC 8), 4=-45 (LC 12)
Max Grav 2=265 (LC 1), 4=187 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/19, 2-3=-112/68, 3-4=-144/238
BOT CHORD 2-4=-30/40

**NOTES**
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) zone; cantilever left and right exposed ; 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
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 2-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 45 lb uplift at joint 4 and 85 lb uplift at joint 2.
9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

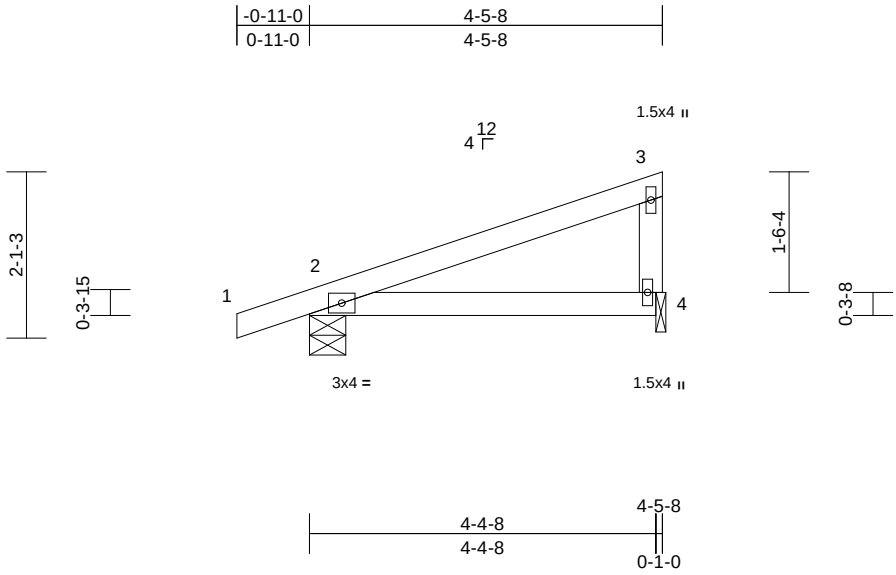
October 2,2024



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

| Job | Truss | Truss Type | Qty | Ply | Roof - HT Lot 180 |
|---|---|---|---|---|---|
| P240988-01 | M02 | Monopitch | 7 | 1 | I68602459 |
| | | | | | Job Reference (optional) |

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Tue Oct 01 11:25:36 Page: 1
ID:KTzupnDOFu58HEfZb5Jk?VzeCKc-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:29.1

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.37 | Vert(LL) | -0.02 | 2-4 | >999 | 240 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.22 | Vert(CT) | -0.03 | 2-4 | >999 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.00 | Horz(CT) | 0.00 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2018/TPI2014 | Matrix-P | | | | | | | Weight: 16 lb | FT = 20% |

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

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

**REACTIONS** (size) 2=0-5-8, 4=0-1-8
Max Horiz 2=76 (LC 9)
Max Uplift 2=-95 (LC 8), 4=-42 (LC 12)
Max Grav 2=275 (LC 1), 4=172 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/19, 2-3=-102/60, 3-4=-132/193
BOT CHORD 2-4=-30/33

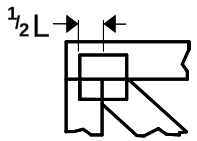
**NOTES**
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi, Joint 4 SPF No.3 crushing capacity of 425 psi.
5) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral forces.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

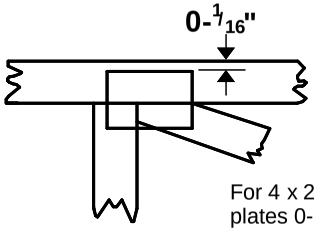

October 2,2024

# 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.

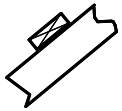
* Plate location details available in MiTek software or upon request.

## PLATE SIZE

4 x 4

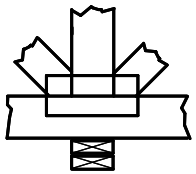
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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

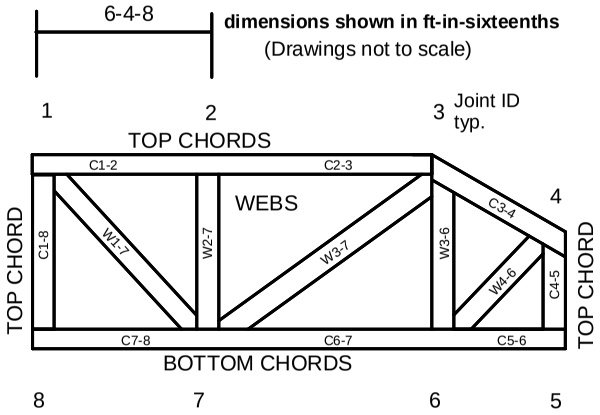


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

**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.