

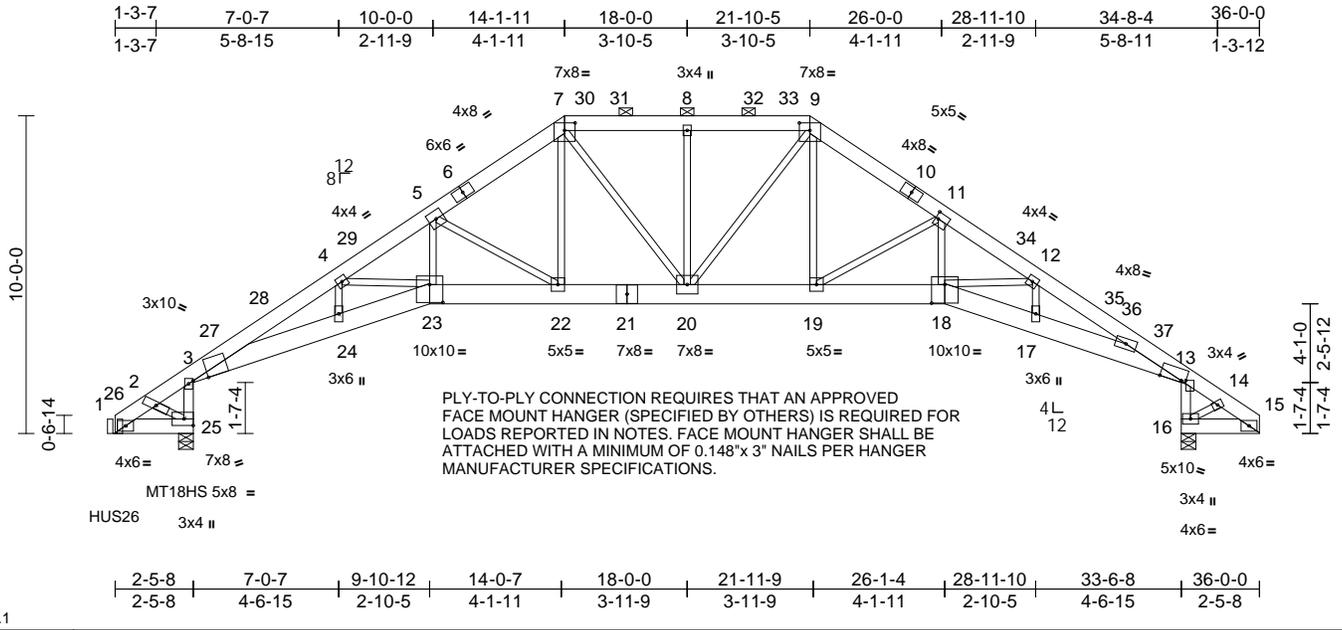
| | | | | | | |
|-------------------|-------------|-------------------------------------|----------|----------|----------------------------------|-----------|
| Job P241184-01 | Truss A1 | Truss Type Piggyback Base Girder | Qty 1 | Ply 3 | Roof Job Reference (optional) | 177196678 |
|-------------------|-------------|-------------------------------------|----------|----------|----------------------------------|-----------|

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

Run: 8.63 E Aug 30 2023 Print: 8.630 E Aug 30 2023 MiTek Industries, Inc. Wed Oct 22 16:07:45

Page: 1

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Scale = 1:72.1

Plate Offsets (X, Y): [3:0-5-14,Edge], [7:0-4-0,0-2-13], [9:0-4-0,0-2-13], [11:0-1-0,0-2-8], [13:0-8-6,Edge], [13:0-0-1,0-1-12], [18:0-5-0,0-7-0], [23:0-5-0,0-6-12]

| Loading | (psf) | Spacing | 2-0-0 | CSI | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP | |
|--------------|-----------|-----------------|-----------------|----------|------|----------|-------|--------|------|--------|----------------|----------|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.67 | Vert(LL) | -0.27 | 20 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf/Pg) | 21.9/20.0 | Lumber DOL | 1.15 | BC | 0.47 | Vert(CT) | -0.50 | 19-20 | >753 | 180 | MT18HS | 197/144 |
| TCDL | 10.0 | Rep Stress Incr | NO | WB | 0.68 | Horz(CT) | 0.55 | 16 | n/a | n/a | | |
| BCLL | 0.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | | |
| | | | | | | | | | | | Weight: 760 lb | FT = 20% |

LUMBER
TOP CHORD 2x6 SP No.2 *Except* 1-6,10-15:2x6 SP 2400F 2.0E
BOT CHORD 2x8 SP 2400F 2.0E *Except* 1-25,16-15:2x6 SP No.2, 25-3,13-16:2x4 SP No.2
WEBS 2x3 SPF No.2
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 7-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 1-25,3-25,13-16.
REACTIONS (lb/size) 16=6526/0-5-8, 25=8960/0-5-8
 Max Horiz 25=329 (LC 62)
 Max Uplift 16=648 (LC 64), 25=700 (LC 16)
 Max Grav 16=6892 (LC 40), 25=9326 (LC 40)
FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-26=-89/2841, 2-26=-75/2915, 2-3=-166/1915, 3-27=-19283/3168, 27-28=-19187/3186, 4-28=-18867/3279, 4-29=-20549/2586, 5-29=-20468/2656, 5-6=-14998/1673, 6-7=-14882/1758, 7-30=-14687/1661, 30-31=-14685/1661, 8-31=-14684/1662, 8-32=-14684/1662, 32-33=-14685/1662, 9-33=-14686/1661, 9-10=-15106/1591, 10-11=-15211/1506, 11-34=-21432/1966, 12-34=-21489/1908, 12-35=-21116/1874, 35-36=-21213/1833, 36-37=-21279/1819, 13-37=-21369/1808

BOT CHORD 1-25=-2244/77, 3-25=-10706/665, 22-23=-1985/16937, 21-22=-1154/12269, 20-21=-1154/12269, 19-20=-960/12449, 18-19=-1361/17648, 13-16=-6693/651, 15-16=-31/280, 17-18=-1504/18637, 13-17=-1487/18418, 3-24=-3051/16342, 23-24=-2960/16713
WEBS 5-23=-996/5201, 5-22=-5587/1056, 7-22=-594/3759, 9-19=-365/4045, 9-20=-575/3998, 11-18=-451/5906, 11-19=-6057/650, 8-20=-5256/583, 7-20=-504/4305, 4-23=-151/1919, 12-18=-106/485, 4-24=-1339/122, 12-17=-666/122, 14-16=-316/36, 2-25=-195/2677

NOTES
 1) N/A
 2) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x6 - 3 rows staggered at 0-4-0 oc.
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-4-0 oc, 2x4 - 1 row at 0-9-0 oc, 2x8 - 3 rows staggered at 0-5-0 oc.
 Web connected as follows: 2x3 - 1 row at 0-9-0 oc.
 3) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 4) Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-16; Vult=117mph (3-second gust) Vasd=92mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. III; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 5-0-0, Interior (1) 5-0-0 to 14-1-11, Exterior(2R) 14-1-11 to 21-2-9, Interior (1) 21-2-9 to 21-10-5, Exterior(2R) 21-10-5 to 28-11-14, Interior (1) 28-11-14 to 36-0-0 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
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=21.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.1; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
- Unbalanced snow loads have been considered for this design.
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.



October 22, 2025

Continued on page 2

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.sbcsccomponents.com)

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| | | | | | | |
|-------------------|-------------|-------------------------------------|----------|-----------------|----------------------------------|-----------|
| Job P241184-01 | Truss A1 | Truss Type Piggyback Base Girder | Qty 1 | Ply 3 | Roof Job Reference (optional) | I77196678 |
|-------------------|-------------|-------------------------------------|----------|-----------------|----------------------------------|-----------|

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

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Page: 2

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- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 648 lb uplift at joint 16 and 700 lb uplift at joint 25.
- 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) Girder carries tie-in span(s): 8-4-8 from 0-5-8 to 31-6-8
- 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 (14-10d Girder, 4-10d Truss) or equivalent at 0-0-0 from the left end to connect truss(es) to front face of bottom chord.
- 16) Fill all nail holes where hanger is in contact with lumber.
- 17) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 5030 lb down and 512 lb up at 18-0-0 on top chord, and 2213 lb down and 225 lb up at 18-0-9 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-26=-54, 3-26=-178 (F=-124), 3-7=-178 (F=-124), 7-9=-188 (F=-124), 9-36=-178 (F=-124), 13-36=-54, 13-15=-54, 1-25=-20, 18-23=-20, 15-16=-20, 13-18=-20, 3-23=-20
Concentrated Loads (lb)
Vert: 1=-1693 (F), 8=-5000 (F), 20=-2200 (F)

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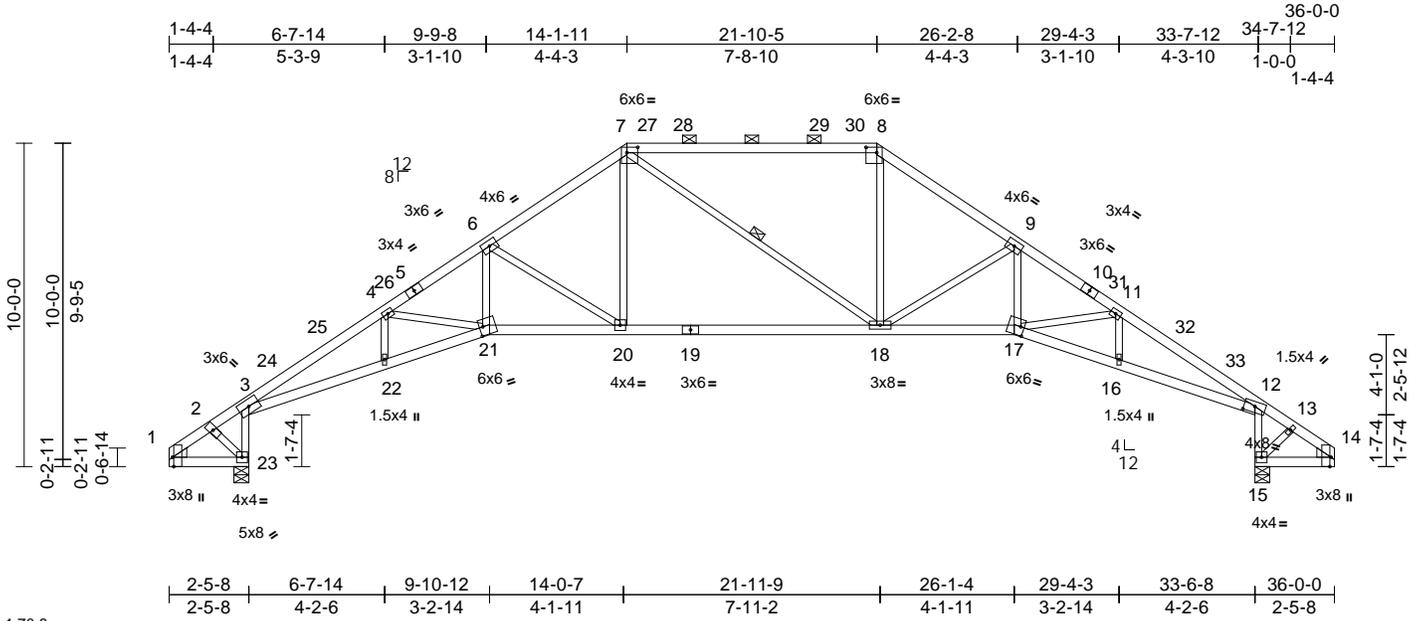
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|-------------------|-------------|------------------------------|----------|----------|----------------------------------|-----------|
| Job P241184-01 | Truss A2 | Truss Type Piggyback Base | Qty 8 | Ply 1 | Roof Job Reference (optional) | 177196679 |
|-------------------|-------------|------------------------------|----------|----------|----------------------------------|-----------|

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

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Mon Oct 20 16:02:22

Page: 1

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Scale = 1:70.8
Plate Offsets (X, Y): [1:0-3-8,Edge], [7:0-4-0,0-2-0], [8:0-4-0,0-2-0], [12:0-4-0,0-2-3], [14:0-3-8,Edge], [17:0-1-4,0-3-4], [21:0-1-4,0-3-4]

| Loading | (psf) | Spacing | 2-0-0 | CSI | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP | |
|--------------|-----------|-----------------|-----------------|----------|------|----------|-------|--------|------|--------|----------------|----------|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.92 | Vert(LL) | -0.29 | 20-21 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf/Pg) | 21.9/20.0 | Lumber DOL | 1.15 | BC | 0.93 | Vert(CT) | -0.56 | 18-20 | >666 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.92 | Horz(CT) | 0.67 | 15 | n/a | n/a | | |
| BCLL | 0.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | | |
| | | | | | | | | | | | Weight: 159 lb | FT = 20% |

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 7-8:2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP No.2 *Except* 23-3,21-6,9-17:2x3 SPF No.2
WEBS 2x3 SPF No.2
WEDGE Left: 2x4 SP No.2
Right: 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-6-4 oc purlins, except 2-0-0 oc purlins (2-2-0 max.): 7-8.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 7-18

REACTIONS (size) 15=0-5-8, 23=0-5-8
Max Horiz 23=202 (LC 12)
Max Uplift 15=49 (LC 17), 23=49 (LC 16)
Max Grav 15=1713 (LC 40), 23=1713 (LC 40)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-91/135, 2-3=-45/132, 3-4=-4033/228, 4-6=-3767/145, 6-7=-2382/80, 7-8=-1863/77, 8-9=-2384/51, 9-11=-3767/8, 11-12=-4033/0, 12-13=-52/135, 13-14=-86/120
BOT CHORD 1-23=-108/93, 3-23=-1754/206, 6-21=-77/1183, 20-21=-110/3122, 18-20=-37/1861, 17-18=0/3121, 9-17=0/1181, 3-22=-290/3388, 21-22=-280/3449, 16-17=0/3449, 12-16=0/3388, 14-15=-79/83
WEBS 6-20=-1473/182, 7-20=-13/932, 7-18=-171/175, 8-18=0/933, 9-18=-1470/63, 12-15=-1756/166, 2-23=-367/421, 13-15=-117/111, 11-17=-220/85, 11-16=-139/59, 4-22=-139/61, 4-21=-314/171

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=117mph (3-second gust) Vasd=92mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. III; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 5-0-0, Interior (1) 5-0-0 to 14-1-11, Exterior(2R) 14-1-11 to 21-2-9, Interior (1) 21-2-9 to 21-10-5, Exterior(2R) 21-10-5 to 28-11-3, Interior (1) 28-11-3 to 36-0-0 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
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=21.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.1; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
- Unbalanced snow loads have been considered for this design.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 49 lb uplift at joint 23 and 49 lb uplift at joint 15.
- 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.
- 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 22, 2025

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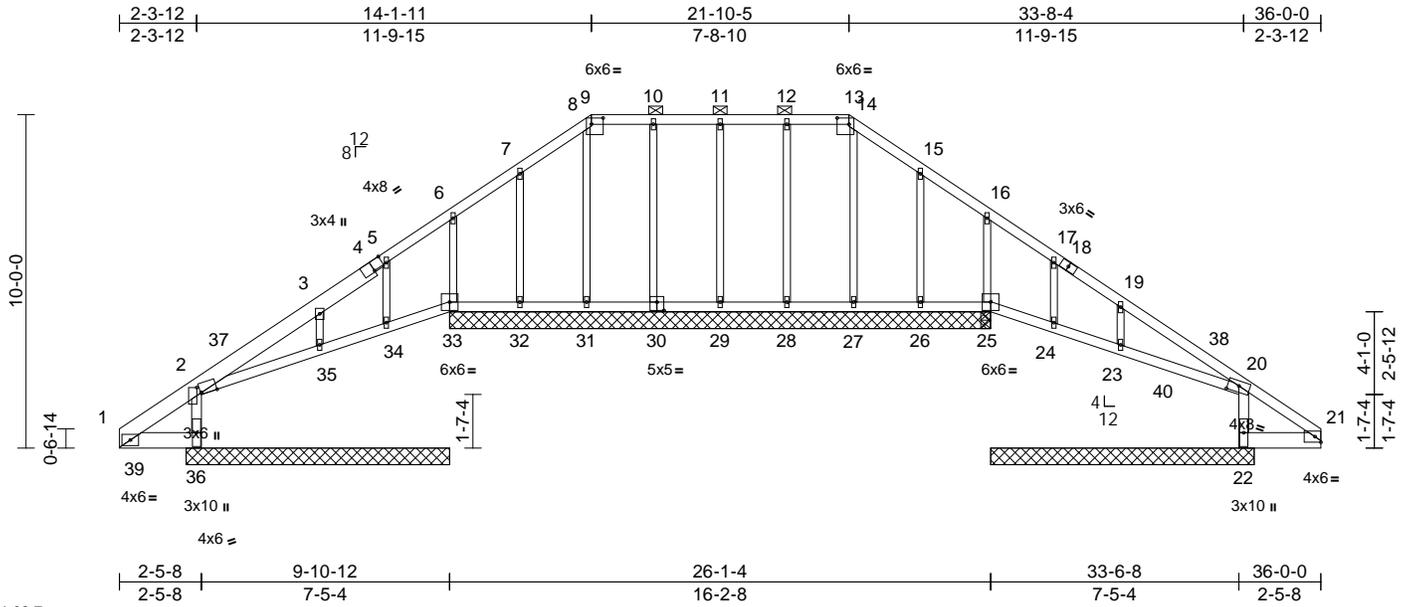
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|-------------------|-------------|--|----------|----------|----------------------------------|-----------|
| Job P241184-01 | Truss A3 | Truss Type Piggyback Base Supported Gable | Qty 1 | Ply 1 | Roof Job Reference (optional) | 177196680 |
|-------------------|-------------|--|----------|----------|----------------------------------|-----------|

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

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Mon Oct 20 16:02:22

Page: 1

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Scale = 1:68.7

Plate Offsets (X, Y): [2:0-5-12,Edge], [2:0-1-13,0-1-10], [4:0-3-14,Edge], [9:0-4-4,0-2-4], [13:0-4-4,0-2-4], [20:0-4-0,0-2-3], [30:0-2-8,0-3-0]

| Loading | (psf) | Spacing | 2-0-0 | CSI | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP | |
|--------------|-----------|-----------------|-----------------|----------|------|----------|-------|--------|------|--------|----------------|----------|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.81 | Vert(LL) | -0.03 | 20-23 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf/Pg) | 21.9/20.0 | Lumber DOL | 1.15 | BC | 0.91 | Vert(CT) | -0.04 | 2-35 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | NO | WB | 0.33 | Horz(CT) | -0.30 | 22 | n/a | n/a | | |
| BCLL | 0.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | | |
| | | | | | | | | | | | Weight: 171 lb | FT = 20% |

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 1-4:2x6 SP 2400F 2.0E, 18-21:2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP No.2 *Except* 1-36,22-21:2x6 SP No.2
WEBS 2x4 SP No.2
OTHERS 2x3 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-3-8 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 9-13.
BOT CHORD Rigid ceiling directly applied or 3-5-4 oc bracing.

REACTIONS (size)
22=7-10-12, 23=7-10-12, 24=7-10-12, 25=7-10-12, 26=16-2-8, 27=16-2-8, 28=16-2-8, 29=16-2-8, 30=16-2-8, 31=16-2-8, 32=16-2-8, 33=16-2-8, 34=7-10-12, 35=7-10-12, 36=7-10-12
Max Horiz 36=237 (LC 13)
Max Uplift 22=-1346 (LC 56), 23=-504 (LC 55), 24=-209 (LC 56), 25=-350 (LC 56), 26=-89 (LC 56), 27=-287 (LC 47), 28=-79 (LC 47), 29=-58 (LC 45), 30=-95 (LC 48), 31=-377 (LC 48), 32=-83 (LC 53), 33=-439 (LC 53), 34=-73 (LC 55), 35=-493 (LC 48), 36=-1403 (LC 45)
Max Grav 22=1495 (LC 51), 23=879 (LC 72), 24=516 (LC 71), 25=661 (LC 71), 26=563 (LC 92), 27=655 (LC 76), 28=525 (LC 81), 29=495 (LC 81), 30=521 (LC 81), 31=729 (LC 75), 32=555 (LC 90), 33=749 (LC 70), 34=443 (LC 92), 35=940 (LC 69), 36=1977 (LC 52)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-430/482, 2-3=-3008/2952, 3-5=-2180/2195, 5-6=-1850/1869, 6-7=-1505/1571, 7-8=-1200/1258, 8-9=-604/648, 9-10=-700/775, 10-11=-414/517, 11-12=-313/416, 12-13=-599/675, 13-14=-521/566, 14-15=-1080/1141, 15-16=-1380/1419, 16-17=-1683/1705, 17-19=-1950/1954, 19-20=-2722/2675, 20-21=-261/247, 26-27=-903/971, 25-26=-1196/1291, 2-35=-2415/2416, 34-35=-1947/1970, 33-34=-1655/1685, 24-25=-1553/1601, 23-24=-1840/1873, 20-23=-2259/2318, 21-22=-321/321
BOT CHORD 1-36=516/558, 32-33=-1294/1391, 31-32=-1002/1071, 29-31=-724/821, 28-29=-348/443, 27-28=-626/721, 26-27=-903/971, 25-26=-1196/1291, 2-35=-2415/2416, 34-35=-1947/1970, 33-34=-1655/1685, 24-25=-1553/1601, 23-24=-1840/1873, 20-23=-2259/2318, 21-22=-321/321
WEBS 2-36=-1901/1448, 20-22=-1594/1519, 11-29=-196/54, 10-30=-204/91, 8-31=-454/391, 7-32=-207/79, 6-33=-203/87, 5-34=-201/77, 3-35=-348/357, 12-28=-204/75, 14-27=-375/301, 15-26=-206/83, 16-25=-206/77, 17-24=-173/155, 19-23=-320/298

NOTES
1) Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-16; Vult=117mph (3-second gust) Vasd=92mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. III; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 0-0-0 to 5-0-0, Exterior(2N) 5-0-0 to 14-1-11, Corner(3R) 14-1-11 to 19-1-11, Exterior(2N) 19-1-11 to 21-10-5, Corner(3R) 21-10-5 to 26-10-5, Exterior(2N) 26-10-5 to 36-0-0 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
- 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.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=21.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.1; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
- Unbalanced snow loads have been considered for this design.
- Provide adequate drainage to prevent water ponding.



October 22, 2025

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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| | | | | | | |
|-------------------|-------------|--|----------|----------|----------------------------------|-----------|
| Job P241184-01 | Truss A3 | Truss Type Piggyback Base Supported Gable | Qty 1 | Ply 1 | Roof Job Reference (optional) | 177196680 |
|-------------------|-------------|--|----------|----------|----------------------------------|-----------|

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

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Mon Oct 20 16:02:22
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Page: 2

- 7) All plates are 1.5x4 MT20 unless otherwise indicated.
- 8) Gable studs spaced at 2-0-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) Bearings are assumed to be: Joint 35 SP No.2 crushing capacity of 565 psi, Joint 23 SP No.2 crushing capacity of 565 psi, Joint 26 SP No.2 crushing capacity of 565 psi, Joint 25 SP No.2 crushing capacity of 565 psi.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1403 lb uplift at joint 36, 439 lb uplift at joint 33, 95 lb uplift at joint 30, 350 lb uplift at joint 25, 1346 lb uplift at joint 22, 58 lb uplift at joint 29, 377 lb uplift at joint 31, 83 lb uplift at joint 32, 73 lb uplift at joint 34, 493 lb uplift at joint 35, 79 lb uplift at joint 28, 287 lb uplift at joint 27, 89 lb uplift at joint 26, 209 lb uplift at joint 24 and 504 lb uplift at joint 23.
- 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) This truss has been designed for a total drag load of 5000 lb. Lumber DOL=(1.33) Plate grip DOL=(1.33) Connect truss to resist drag loads along bottom chord from 0-0-0 to 36-0-0 for 138.9 plf.
- 14) Girder carries tie-in span(s): 9-0-0 from 0-5-8 to 31-6-8
- 15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 16) 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-9=-54, 9-13=-64, 13-21=-54, 1-39=-20, 36-39=-157 (F=-137), 25-33=-157 (F=-137), 2-33=-157 (F=-137), 25-40=-157 (F=-137), 20-40=-20, 21-22=-20

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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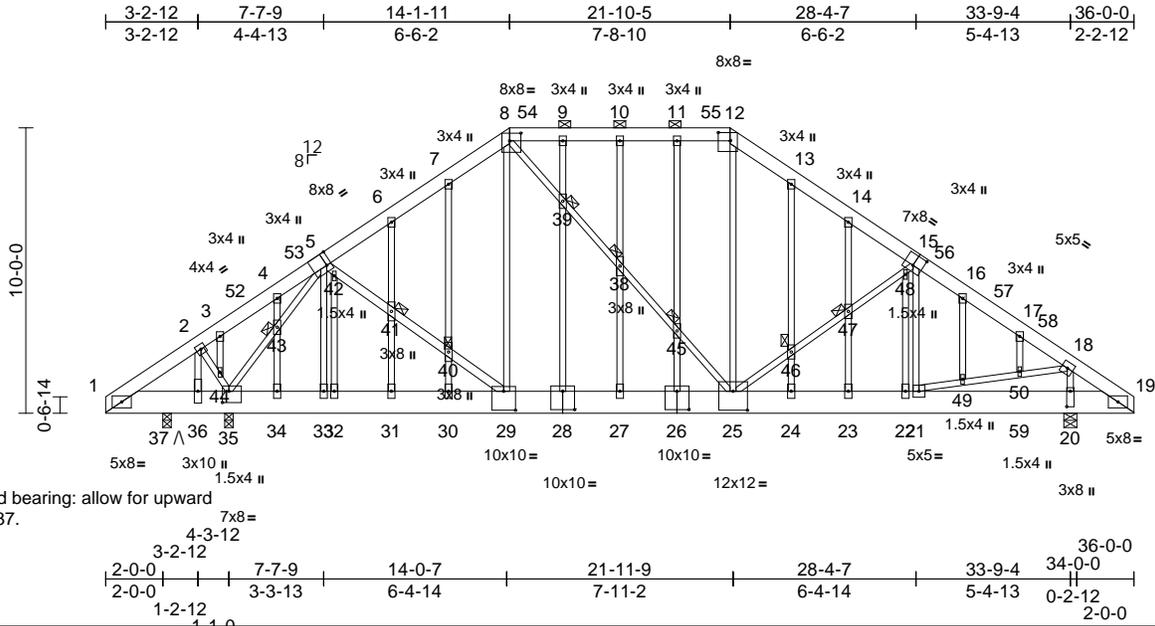
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|-------------------|-------------|-------------------------------------|----------|----------|----------------------------------|-----------|
| Job P241184-01 | Truss B1 | Truss Type Piggyback Base Girder | Qty 1 | Ply 2 | Roof Job Reference (optional) | 177196681 |
|-------------------|-------------|-------------------------------------|----------|----------|----------------------------------|-----------|

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

Run: 8.63 E May 25 2023 Print: 8.630 E May 25 2023 MiTek Industries, Inc. Wed Oct 22 08:54:11

Page: 1

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"^" indicates Released bearing: allow for upward movement at joint(s) 37.

Scale = 1:80.3

[5:0-2-0,Edge], [8:0-4-12,0-3-4], [12:0-5-0,0-3-8], [15:0-4-0,0-4-8], [20:0-6-8,0-1-8], [25:0-6-0,0-8-0], [26:0-5-0,0-7-12], [28:0-5-0,0-7-12], [29:0-5-0,0-8-0],

Plate Offsets (X, Y): [35:0-2-12,0-4-12]

| Loading | (psf) | Spacing | 2-0-0 | CSI | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP | |
|--------------|-----------|-----------------|-----------------|----------|------|----------|-------|--------|------|--------|----------------|----------|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.71 | Vert(LL) | -0.17 | 27 | >999 | 240 | MT20 | 197/144 |
| Snow (Pf/Pg) | 21.9/20.0 | Lumber DOL | 1.15 | BC | 0.76 | Vert(CT) | -0.32 | 27 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | NO | WB | 0.99 | Horz(CT) | 0.03 | 20 | n/a | n/a | | |
| BCLL | 0.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | | |
| | | | | | | | | | | | Weight: 714 lb | FT = 20% |

LUMBER
TOP CHORD 2x6 SP No.2 *Except* 8-12:2x6 SP 2400F 2.0E
BOT CHORD 2x10 SP 2400F 2.0E
WEBS 2x3 SPF No.2 *Except* 5-29:2x4 SP No.2
OTHERS 2x3 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-3-14 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 8-12.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 20-21,19-20.

JOINTS
1 Brace at Jt(s): 38, 39, 40, 41, 43, 45, 46, 47

REACTIONS (lb/size)
20=6817/0-5-8, 35=7855/0-3-8, 37=0/0-3-8
Max Horiz 37=-195 (LC 50)
Max Uplift 20=-2489 (LC 56), 35=-2704 (LC 53), 37=REL
Max Grav 20=8214 (LC 71), 35=8399 (LC 70), 37=1820 (LC 48)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD
1-2=-1179/227, 2-3=-1371/54, 3-52=-1078/69, 4-52=-1048/117, 4-53=-1414/182, 5-53=-1487/214, 5-6=-8922/1998, 6-7=-8835/1748, 7-8=-8334/1515, 8-54=-7597/1592, 9-54=-7526/1444, 9-10=-7363/1324, 10-11=-7269/1060, 11-55=-7394/1264, 12-55=-7466/1358, 12-13=-9057/1861, 13-14=-9600/2112, 14-15=-9901/2442, 15-56=-7398/1761, 16-56=-7718/1980, 16-57=-8337/2202, 17-57=-8680/2438, 17-58=-8680/2492, 18-58=-8946/2675, 18-19=-3488/1064

BOT CHORD
1-37=-171/1061, 36-37=-110/830, 35-36=-121/736, 34-35=-888/4398, 33-34=-613/4193, 32-33=-348/3994, 31-32=-288/3949, 30-31=-263/4167, 29-30=-594/4415, 28-29=-607/6818, 27-28=-932/7043, 26-27=-1225/7263, 25-26=-1576/7526, 24-25=-985/6280, 23-24=-1343/6549, 22-23=-1668/6792, 21-22=-1728/6837, 21-59=-912/2991, 20-59=-912/2991, 19-20=-941/3080



October 22, 2025

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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| | | | | | | |
|------------|-------|-----------------------|-----|-----|--------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Roof | 177196681 |
| P241184-01 | B1 | Piggyback Base Girder | 1 | 2 | Job Reference (optional) | |

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

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Page: 2

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- WEBS
- 8-29=-580/2667, 8-39=-941/1280,
38-39=-897/1233, 38-45=-889/1166,
25-45=-953/1289, 12-25=-575/3130,
2-44=-311/1077, 35-44=-373/1247,
2-36=-2060/559, 35-43=-6738/2129,
5-43=-6473/2047, 5-42=-1383/4311,
41-42=-1346/4203, 40-41=-1297/4018,
29-40=-1414/4425, 5-33=-1755/545,
25-46=-710/2013, 46-47=-650/1825,
47-48=-679/1925, 15-48=-675/1870,
15-21=-3548/1075, 21-49=-1521/4641,
49-50=-1424/4350, 18-50=-1444/4410,
18-20=-5381/1748, 10-38=-3286/389,
27-38=-3194/380, 9-39=-696/203,
28-39=-674/144, 7-40=-82/244,
30-40=-541/280, 6-41=-837/207,
31-41=-557/151, 32-42=-75/218,
4-43=-950/288, 34-43=-630/185,
3-44=-70/282, 11-45=-510/105,
26-45=-623/180, 13-46=-72/273,
24-46=-119/90, 14-47=-409/113,
23-47=-278/142, 22-48=-106/56,
16-49=-351/1055, 17-50=-290/98
- 15) 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.
- 16) This truss has been designed for a total drag load of 5200 lb. Lumber DOL=(1.33) Plate DOL=(1.33) Connect truss to resist drag loads along bottom chord from 0-0-0 to 32-0-0 for 162.5 plf.
- 17) Girder carries tie-in span(s): 8-4-0 from 0-0-0 to 36-0-0
- 18) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 19) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 5030 lb down and 512 lb up at 18-0-0 on top chord, and 2515 lb down and 256 lb up at 18-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-8=-177 (F=-123), 8-12=-187 (F=-123),
12-19=-177 (F=-123), 1-19=-20
Concentrated Loads (lb)
Vert: 10=-5000 (F), 27=-2500 (F)

NOTES

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-2-0 oc.
Bottom chords connected as follows: 2x10 - 4 rows staggered at 0-9-0 oc.
Web connected as follows: 2x3 - 1 row at 0-6-0 oc, 2x4 - 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=117mph (3-second gust) Vasd=92mph; TC DL=6.0psf; BC DL=6.0psf; h=35ft; Ke=1.00; Cat. III; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 5-0-0, Interior (1) 5-0-0 to 14-1-11, Exterior(2R) 14-1-11 to 21-2-9, Interior (1) 21-2-9 to 21-10-5, Exterior(2R) 21-10-5 to 28-11-3, Interior (1) 28-11-3 to 36-0-0 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 6) T CLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=21.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.1; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 7) Unbalanced snow loads have been considered for this design.
- 8) Provide adequate drainage to prevent water ponding.
- 9) All plates are 3x6 MT20 unless otherwise indicated.
- 10) Gable studs spaced at 2-0-0 oc.
- 11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 12) All bearings are assumed to be SP 2400F 2.0E crushing capacity of 805 psi.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2489 lb uplift at joint 20 and 2704 lb uplift at joint 35.
- 14) "A" indicates Released bearing: allow for upward movement at joint(s) 37.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2023 BEFORE USE.

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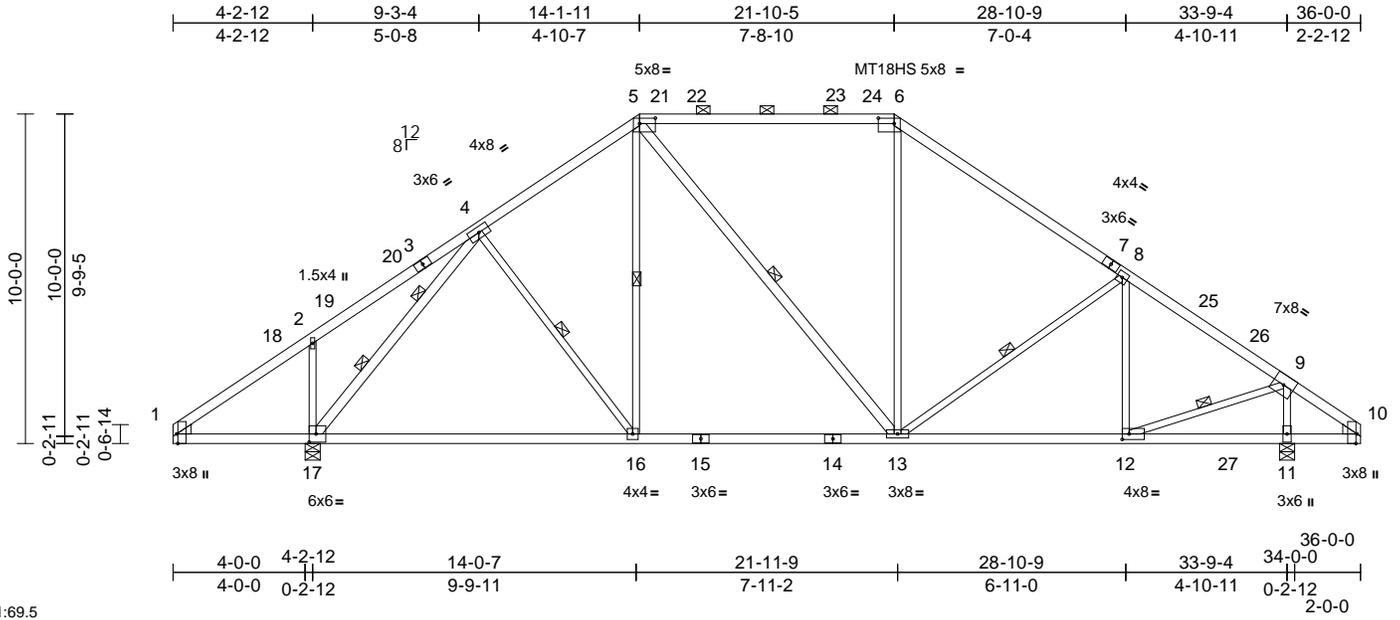
| | | | | | | |
|-------------------|-------------|------------------------------|----------|----------|----------------------------------|-----------|
| Job P241184-01 | Truss B3 | Truss Type Piggyback Base | Qty 1 | Ply 1 | Roof Job Reference (optional) | 177196683 |
|-------------------|-------------|------------------------------|----------|----------|----------------------------------|-----------|

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

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Page: 1

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Scale = 1:69.5

Plate Offsets (X, Y): [1:0-3-8,Edge], [5:0-5-12,0-2-0], [6:0-5-12,0-2-0], [10:0-3-8,Edge], [12:0-2-8,0-2-0], [17:0-2-8,0-3-0]

| Loading | (psf) | Spacing | 2-0-0 | CSI | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP | |
|--------------|-----------|-----------------|-----------------|----------|------|----------|-------|--------|------|--------|----------------|----------|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.87 | Vert(LL) | -0.18 | 16-17 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf/Pg) | 21.9/20.0 | Lumber DOL | 1.15 | BC | 0.81 | Vert(CT) | -0.36 | 16-17 | >993 | 180 | MT18HS | 197/144 |
| TCDL | 10.0 | Rep Stress Incr | NO | WB | 0.82 | Horz(CT) | 0.04 | 11 | n/a | n/a | | |
| BCLL | 0.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | | |
| | | | | | | | | | | | Weight: 187 lb | FT = 20% |

| LUMBER | TOP CHORD | BOT CHORD | WEBS | WEDGE | BRACING | TOP CHORD | BOT CHORD | WEBS | WEBS | REACTIONS | FORCES | TOP CHORD | BOT CHORD | WEBS |
|-------------------|-------------|---|---|--|--|---|------------------------|--|--|---|--|--|-----------|------|
| 2x4 SP 2400F 2.0E | 2x4 SP No.2 | 2x3 SPF No.2 *Except* 13-5,17-4:2x4 SP No.2 | Left: 2x4 SP No.2 Right: 2x4 SP No.2 | Structural wood sheathing directly applied or 4-10-13 oc purlins, except 2-0-0 oc purlins (5-5-7 max.): 5-6. | Rigid ceiling directly applied or 4-9-15 oc bracing. | 1 Row at midpt 5-16, 5-13, 8-13, 9-12, 4-16 | 2 Rows at 1/3 pts 4-17 | (size) 11=0-5-8, 17=0-5-8 Max Horiz 17=-202 (LC 50) Max Uplift 11=-2150 (LC 56), 17=-2150 (LC 53) Max Grav 11=2769 (LC 65), 17=2866 (LC 66) | (lb) - Maximum Compression/Maximum Tension | 1-2=-842/841, 2-4=-1594/1708, 4-5=-1616/993, 5-6=-1255/764, 6-8=-2567/1864, 8-9=-2835/2074, 9-10=-414/400 | 1-17=-743/743, 16-17=-1017/1363, 13-16=-1492/1917, 12-13=-1450/2112, 11-12=-483/526, 10-11=-75/118 | 5-16=-684/865, 5-13=-986/1044, 6-13=-305/518, 2-17=-431/238, 8-13=-841/803, 8-12=-820/788, 9-12=-2075/2754, 9-11=-2847/2158, 4-16=-873/1020, 4-17=-3363/2686 | | |

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=117mph (3-second gust) Vasd=92mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. III; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 5-0-0, Interior (1) 5-0-0 to 14-1-11, Exterior(2R) 14-1-11 to 21-2-9, Interior (1) 21-2-9 to 21-10-5, Exterior(2R) 21-10-5 to 28-10-9, Interior (1) 28-10-9 to 36-0-0 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
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=21.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.1; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
- Unbalanced snow loads have been considered for this design.
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2150 lb uplift at joint 17 and 2150 lb uplift at joint 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.
- This truss has been designed for a total drag load of 5200 lb. Lumber DOL=(1.33) Plate grip DOL=(1.33) Connect truss to resist drag loads along bottom chord from 0-0-0 to 32-0-0 for 162.5 pfl.
- 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 22, 2025

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| | | | | | | |
|-------------------|-------------|------------------------------|----------|----------|----------------------------------|-----------|
| Job P241184-01 | Truss B4 | Truss Type Piggyback Base | Qty 4 | Ply 1 | Roof Job Reference (optional) | 177196684 |
|-------------------|-------------|------------------------------|----------|----------|----------------------------------|-----------|

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

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Mon Oct 20 16:02:24
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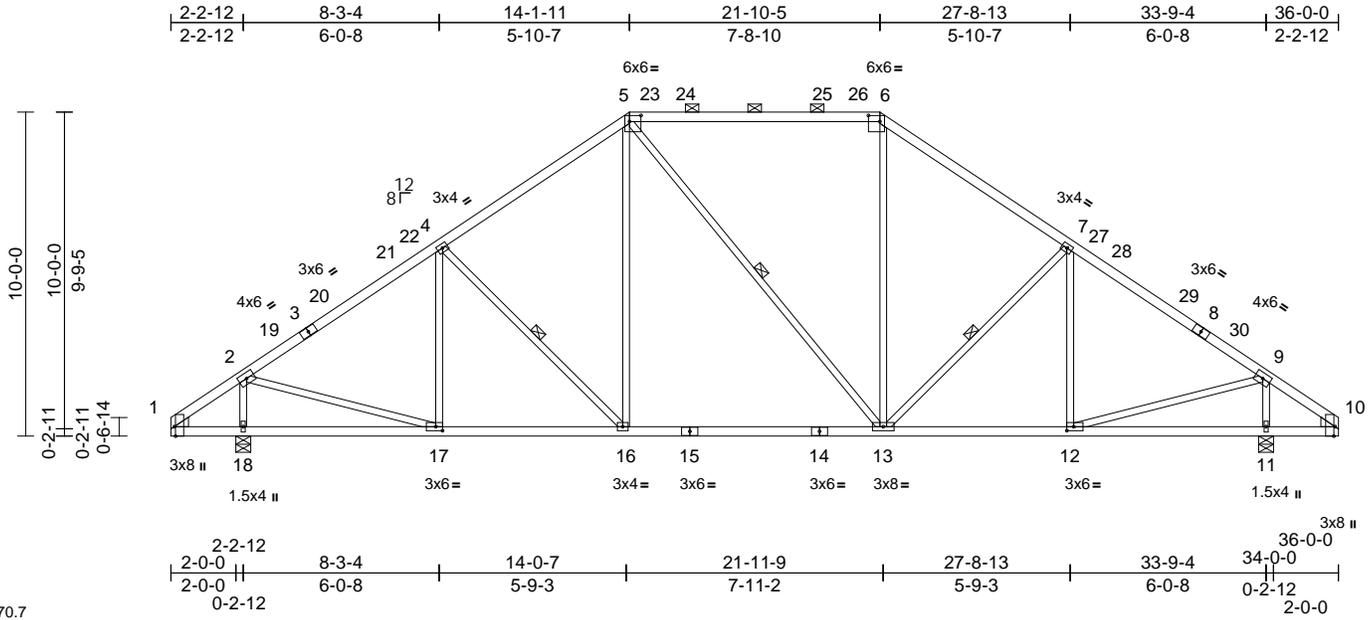


Plate Offsets (X, Y): [1:0-3-8,Edge], [5:0-4-4,0-2-4], [6:0-4-4,0-2-4], [10:0-3-8,Edge], [12:0-2-8,0-1-8], [17:0-2-8,0-1-8]

| Loading | (psf) | Spacing | 2-0-0 | CSI | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP | |
|--------------|-----------|-----------------|-----------------|----------|------|----------|-------|--------|------|--------|----------------|----------|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.84 | Vert(LL) | -0.10 | 13-16 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf/Pg) | 21.9/20.0 | Lumber DOL | 1.15 | BC | 0.54 | Vert(CT) | -0.22 | 13-16 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.45 | Horz(CT) | 0.04 | 11 | n/a | n/a | | |
| BCLL | 0.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | | |
| | | | | | | | | | | | Weight: 177 lb | FT = 20% |

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 5-6:2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
WEDGE Left: 2x4 SP No.2
Right: 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-6-10 oc purlins, except 2-0-0 oc purlins (4-5-7 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-13, 4-16, 7-13

REACTIONS (size) 11=0-5-8, 18=0-5-8
Max Horiz 18=202 (LC 12)
Max Uplift 11=49 (LC 17), 18=49 (LC 16)
Max Grav 11=1713 (LC 40), 18=1713 (LC 40)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-80/64, 2-4=-1725/69, 4-5=-1511/127, 5-6=-1103/148, 6-7=-1512/127, 7-9=-1725/70, 9-10=-80/64
BOT CHORD 1-18=0/65, 17-18=-192/221, 16-17=-59/1331, 13-16=-19/1102, 12-13=0/1331, 11-12=0/66, 10-11=0/66
WEBS 5-16=-24/395, 5-13=-134/135, 6-13=0/371, 2-18=-1592/128, 9-11=-1592/128, 4-16=-353/156, 7-13=-352/156, 4-17=-265/76, 2-17=-24/1323, 7-12=-266/76, 9-12=-24/1323

- Wind: ASCE 7-16; Vult=117mph (3-second gust) Vasd=92mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. III; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 5-0-0, Interior (1) 5-0-0 to 14-1-11, Exterior(2R) 14-1-11 to 21-2-9, Interior (1) 21-2-9 to 21-10-5, Exterior(2R) 21-10-5 to 28-11-3, Interior (1) 28-11-3 to 36-0-0 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
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=21.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.1; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
- Unbalanced snow loads have been considered for this design.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 49 lb uplift at joint 18 and 49 lb uplift at joint 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.
- 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

NOTES
1) Unbalanced roof live loads have been considered for this design.



October 22, 2025

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| | | | | | | |
|-------------------|-------------|------------------------------|----------|----------|----------------------------------|-----------|
| Job P241184-01 | Truss B5 | Truss Type Piggyback Base | Qty 3 | Ply 1 | Roof Job Reference (optional) | 177196685 |
|-------------------|-------------|------------------------------|----------|----------|----------------------------------|-----------|

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

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Mon Oct 20 16:02:25
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Page: 1

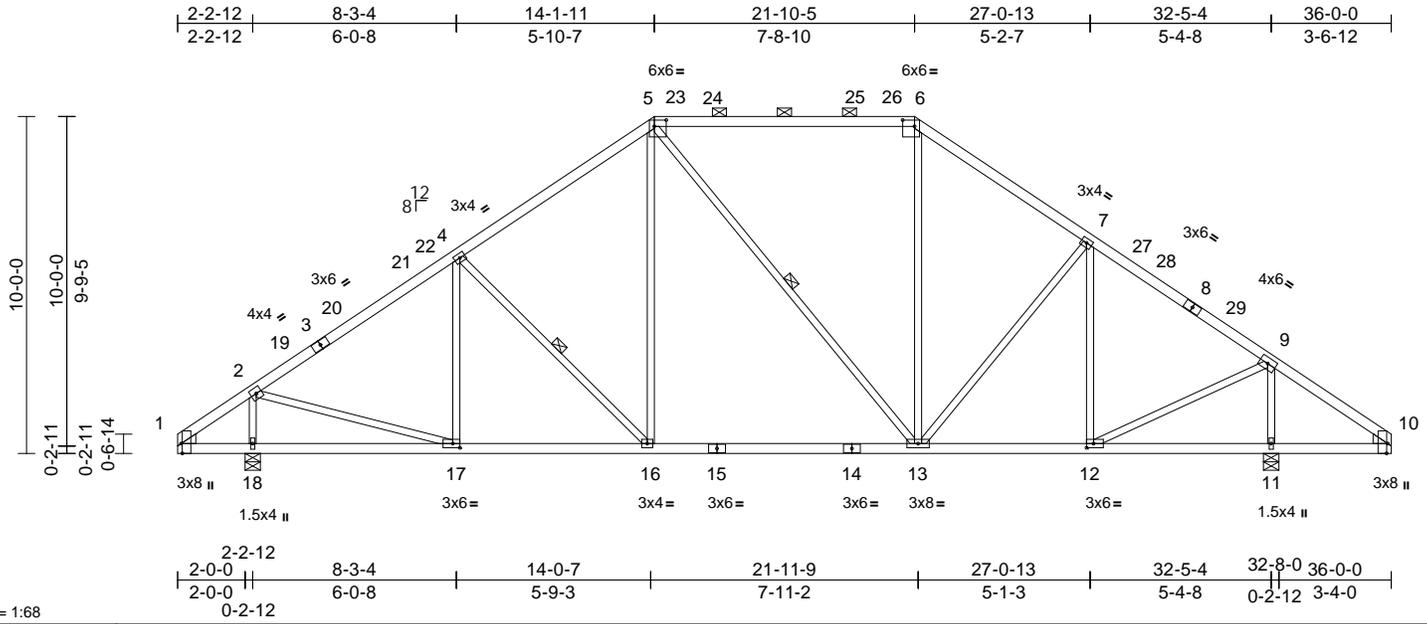


Plate Offsets (X, Y): [1:0-3-8,Edge], [5:0-4-4,0-2-4], [6:0-4-4,0-2-4], [10:0-3-8,Edge], [12:0-2-8,0-1-8], [17:0-2-8,0-1-8]

| Loading | (psf) | Spacing | 2-0-0 | CSI | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP | |
|--------------|-----------|-----------------|-----------------|----------|------|----------|-------|--------|------|--------|----------------|----------|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.82 | Vert(LL) | -0.10 | 13-16 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf/Pg) | 21.9/20.0 | Lumber DOL | 1.15 | BC | 0.53 | Vert(CT) | -0.21 | 13-16 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.43 | Horz(CT) | 0.03 | 11 | n/a | n/a | | |
| BCLL | 0.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | | |
| | | | | | | | | | | | Weight: 177 lb | FT = 20% |

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 5-6:2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
WEDGE Left: 2x4 SP No.2
Right: 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-9-5 oc purlins, except 2-0-0 oc purlins (4-11-7 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 11-12,10-11.
WEBS 1 Row at midpt 5-13, 4-16

REACTIONS (size) 11=0-5-8, 18=0-5-8
Max Horiz 18=202 (LC 12)
Max Uplift 11=51 (LC 17), 18=51 (LC 16)
Max Grav 11=1783 (LC 40), 18=1637 (LC 40)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-80/65, 2-4=-1630/72, 4-5=-1400/118, 5-6=-946/139, 6-7=-1302/121, 7-9=-1352/67, 9-10=-125/230
BOT CHORD 1-18=0/65, 17-18=-193/220, 16-17=-66/1252, 13-16=-31/1009, 12-13=0/1011, 11-12=-118/119, 10-11=-118/119
WEBS 5-16=-23/406, 5-13=-192/91, 6-13=-3/302, 2-18=-1518/124, 9-11=-1665/148, 4-16=-368/155, 4-17=-242/74, 2-17=-18/1242, 7-13=-166/202, 7-12=-453/77, 9-12=-32/1220

- Wind: ASCE 7-16; Vult=117mph (3-second gust) Vasd=92mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. III; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 5-0-0, Interior (1) 5-0-0 to 14-1-11, Exterior(2R) 14-1-11 to 21-2-9, Interior (1) 21-2-9 to 21-10-5, Exterior(2R) 21-10-5 to 28-11-3, Interior (1) 28-11-3 to 36-0-0 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
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=21.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.1; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
- Unbalanced snow loads have been considered for this design.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 51 lb uplift at joint 18 and 51 lb uplift at joint 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.
- 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

NOTES
1) Unbalanced roof live loads have been considered for this design.



October 22, 2025

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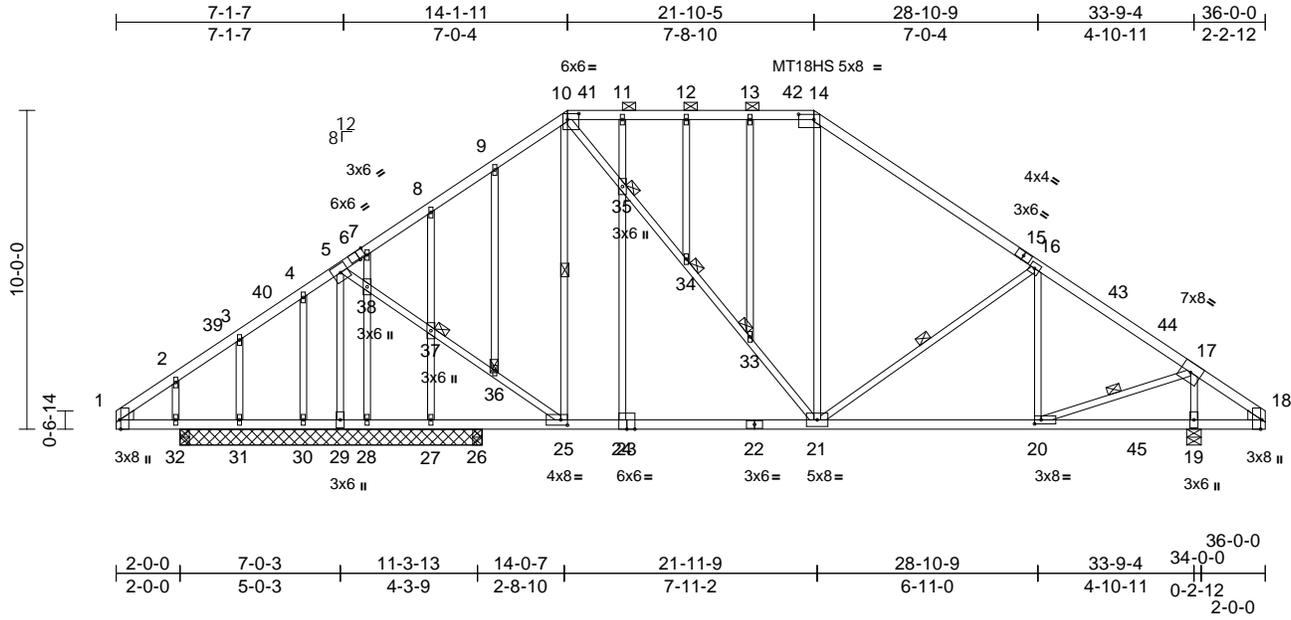
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| | | | | | | |
|-------------------|-------------|---|----------|----------|----------------------------------|-----------|
| Job P241184-01 | Truss B7 | Truss Type Piggyback Base Structural Gable | Qty 1 | Ply 1 | Roof Job Reference (optional) | 177196686 |
|-------------------|-------------|---|----------|----------|----------------------------------|-----------|

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

Run: 8.63 E May 25 2023 Print: 8.630 E May 25 2023 MiTek Industries, Inc. Wed Oct 22 09:05:34
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Page: 1



Scale = 1:71.8

Plate Offsets (X, Y): [1:0-3-8,Edge], [6:0-2-9,Edge], [10:0-4-4,0-2-4], [14:0-5-12,0-2-0], [18:0-3-8,Edge], [20:0-2-8,0-1-8], [25:0-2-8,0-2-0]

| Loading | (psf) | Spacing | 2-0-0 | CSI | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP | |
|--------------|-----------|-----------------|-----------------|----------|------|----------|-------|--------|------|--------|----------------|----------|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.85 | Vert(LL) | -0.16 | 21-24 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf/Pg) | 21.9/20.0 | Lumber DOL | 1.15 | BC | 0.82 | Vert(CT) | -0.25 | 21-24 | >999 | 180 | MT18HS | 197/144 |
| TCDL | 10.0 | Rep Stress Incr | NO | WB | 0.87 | Horz(CT) | 0.05 | 19 | n/a | n/a | | |
| BCLL | 0.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | | |
| | | | | | | | | | | | Weight: 207 lb | FT = 20% |

| LUMBER | TOP CHORD | 1-2=-324/319, 2-39=-179/202, 3-39=-141/200, 3-40=-300/373, 4-40=-551/655, 4-5=-601/663, 5-6=-1027/690, 6-7=-901/578, 7-8=-1135/746, 8-9=-894/489, 9-10=-717/390, 10-41=-914/525, 11-41=-853/331, 11-12=-752/310, 12-13=-856/474, 13-42=-1028/643, 14-42=-1109/724, 14-15=-2326/1756, 15-16=-2398/1820, 16-43=-1903/1330, 43-44=-2246/1734, 17-44=-2613/1962, 17-18=-362/348 | 2) Wind: ASCE 7-16; Vult=117mph (3-second gust) Vasd=92mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. III; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 5-0-0, Interior (1) 5-0-0 to 14-1-11, Exterior(2R) 14-1-11 to 21-2-9, Interior (1) 21-2-9 to 21-10-5, Exterior(2R) 21-10-5 to 28-10-9, Interior (1) 28-10-9 to 36-0-0 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 |
|-----------|---|---|--|
| TOP CHORD | 2x4 SP 2400F 2.0E *Except* 10-14:2x4 SP No.2 | 3-32=-323/321, 31-32=-296/293, 30-31=-725/704, 29-30=-888/867, 28-29=-1013/991, 27-28=-1295/1244, 26-27=-1483/1477, 25-26=-1882/1859, 24-25=-743/1013, 23-24=-743/1027, 22-23=-1006/1271, 21-22=-1602/1857, 20-21=-1381/1952, 20-45=-418/460, 19-45=-72/115, 18-19=-72/115 | 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. |
| BOT CHORD | 2x4 SP No.2 | 5-38=-1556/1916, 37-38=-1566/1922, 36-37=-1567/1936, 25-36=-1586/1948, 10-25=-1013/866, 10-35=-1017/1210, 34-35=-988/1164, 33-34=-987/1166, 21-33=-990/1173, 14-21=-362/496, 5-29=-1471/1149, 16-21=-814/760, 16-20=-748/740, 17-20=-1926/2515, 17-19=-2611/2011, 13-33=-6/20, 12-34=-54/13, 11-35=-204/125, 24-35=-236/102, 9-36=-34/43, 8-37=-352/135, 27-37=-399/149, 7-38=-448/346, 28-38=-458/352, 4-30=-463/349, 3-31=-307/318, 2-32=-360/327 | 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=21.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.1; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4. |
| WEBS | 2x3 SPF No.2 | | |
| OTHERS | 2x3 SPF No.2 | | |
| WEDGE | Left: 2x4 SP No.2 Right: 2x4 SP No.2 | | |
| BRACING | | | |
| TOP CHORD | Structural wood sheathing directly applied or 5-1-6 oc purlins, except 2-0-0 oc purlins (4-4-5 max.): 10-14. | | |
| BOT CHORD | Rigid ceiling directly applied or 4-2-14 oc bracing. | | |
| WEBS | 1 Row at midpt 10-25, 16-21, 17-20 | | |
| JOINTS | 1 Brace at Jt(s): 33, 34, 35, 36, 37 | | |
| REACTIONS | (lb/size) 19=1158/0-5-8, 26=-28/0-3-8, 27=232/9-5-9, 28=230/9-5-9, 29=582/9-5-9, 30=257/9-5-9, 31=106/9-5-9, 32=200/0-3-8 Max Horiz 31=-202 (LC 49) Max Uplift 19=2005 (LC 56), 26=-102 (LC 81), 27=-157 (LC 53), 28=-318 (LC 45), 29=-1119 (LC 45), 30=-383 (LC 53), 31=-477 (LC 54), 32=-535 (LC 53) Max Grav 19=2553 (LC 65), 26=102 (LC 51), 27=405 (LC 82), 28=470 (LC 66), 29=1399 (LC 66), 30=522 (LC 66), 31=528 (LC 49), 32=621 (LC 66) | | |
| FORCES | (lb) - Maximum Compression/Maximum Tension | | |

NOTES
 1) Unbalanced roof live loads have been considered for this design.



October 22, 2025

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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| | | | | | | |
|------------|-------|---------------------------------|-----|-----|--------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Roof | I77196686 |
| P241184-01 | B7 | Piggyback Base Structural Gable | 1 | 1 | Job Reference (optional) | |

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

Run: 8.63 E May 25 2023 Print: 8.630 E May 25 2023 MiTek Industries, Inc. Wed Oct 22 09:05:34

Page: 2

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- 5) Unbalanced snow loads have been considered for this design.
- 6) Provide adequate drainage to prevent water ponding.
- 7) All plates are MT20 plates unless otherwise indicated.
- 8) All plates are 1.5x4 MT20 unless otherwise indicated.
- 9) Gable studs spaced at 2-0-0 oc.
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1119 lb uplift at joint 29, 2005 lb uplift at joint 19, 157 lb uplift at joint 27, 318 lb uplift at joint 28, 383 lb uplift at joint 30, 477 lb uplift at joint 31, 535 lb uplift at joint 32 and 102 lb uplift at joint 26.
- 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) This truss has been designed for a total drag load of 4500 lb. Lumber DOL=(1.33) Plate grip DOL=(1.33) Connect truss to resist drag loads along bottom chord from 0-0-0 to 32-0-0 for 140.6 plf.
- 15) 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

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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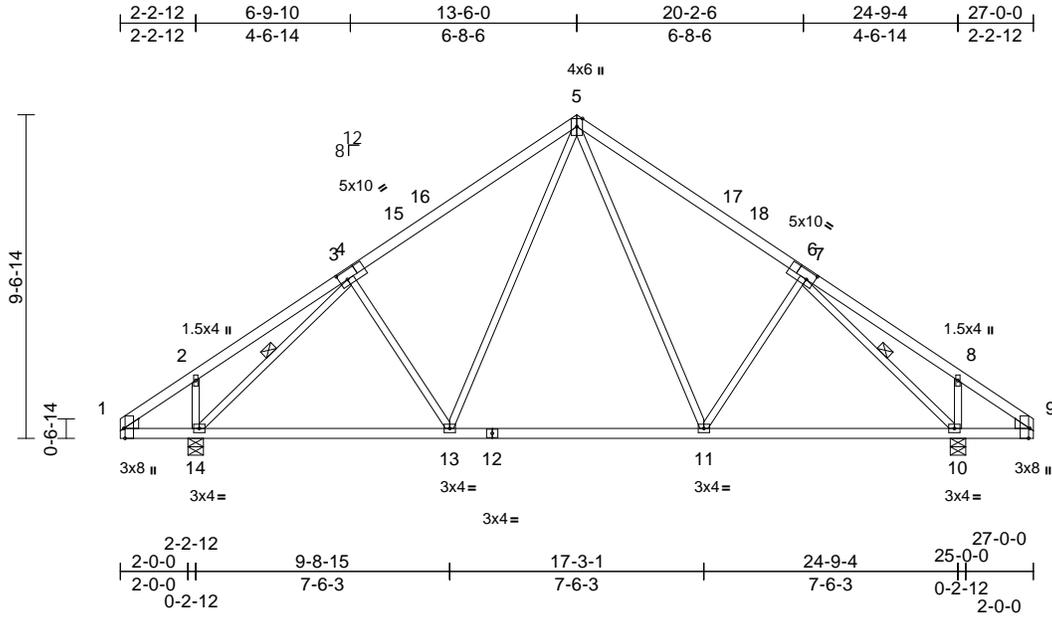
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| | | | | | | |
|-------------------|-------------|----------------------|----------|----------|----------------------------------|-----------|
| Job P241184-01 | Truss C1 | Truss Type Common | Qty 8 | Ply 1 | Roof Job Reference (optional) | 177196687 |
|-------------------|-------------|----------------------|----------|----------|----------------------------------|-----------|

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

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Page: 1



Scale = 1:67.8

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

| Loading | (psf) | Spacing | 2-0-0 | CSI | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP | |
|--------------|-----------|-----------------|-----------------|----------|------|----------|-------|--------|------|--------|----------------|----------|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.89 | Vert(LL) | -0.06 | 13-14 | >999 | 240 | MT20 | 197/144 |
| Snow (Pf/Pg) | 16.9/20.0 | Lumber DOL | 1.15 | BC | 0.48 | Vert(CT) | -0.12 | 13-14 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.42 | Horz(CT) | 0.02 | 10 | n/a | n/a | | |
| BCLL | 0.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | | |
| | | | | | | | | | | | Weight: 127 lb | FT = 20% |

LUMBER

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x3 SPF No.2
 WEDGE Left: 2x4 SP No.2
 Right: 2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
 WEBS 1 Row at midpt 3-14, 7-10

REACTIONS

(size) 10=0-5-8, 14=0-5-8
 Max Horiz 14=193 (LC 12)
 Max Uplift 10=51 (LC 17), 14=51 (LC 16)
 Max Grav 10=1080 (LC 2), 14=1080 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=-106/91, 2-3=-74/135, 3-5=-874/138,
 5-7=-874/138, 7-8=-74/135, 8-9=-106/91
 BOT CHORD 1-14=-33/96, 13-14=-95/731, 11-13=0/545,
 10-11=0/677, 9-10=-33/96
 WEBS 5-11=-72/292, 5-13=-72/292, 2-14=-197/108,
 3-14=-1019/94, 3-13=-142/189,
 7-11=-142/189, 7-10=-1019/94,
 8-10=-197/108

NOTES

1) Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-16; Vult=117mph (3-second gust)
 Vasd=92mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;
 Ke=1.00; Cat. III; Exp B; Enclosed; MWFRS (envelope)
 exterior zone and C-C Exterior(2E) 0-0-0 to 5-0-0,
 Interior (1) 5-0-0 to 13-6-0, Exterior(2R) 13-6-0 to
 18-6-0, Interior (1) 18-6-0 to 27-0-0 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
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15
 Plate DOL=1.15); Pg=20.0 psf; Pf=16.9 psf (Lum
 DOL=1.15 Plate DOL=1.15); Is=1.1; Rough Cat B;
 Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this
 design.
- This truss has been designed for a 10.0 psf bottom
 chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing
 capacity of 565 psi.
- Provide mechanical connection (by others) of truss to
 bearing plate capable of withstanding 51 lb uplift at joint
 14 and 51 lb uplift at joint 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



October 22, 2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2023 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.sbcsccomponents.com)

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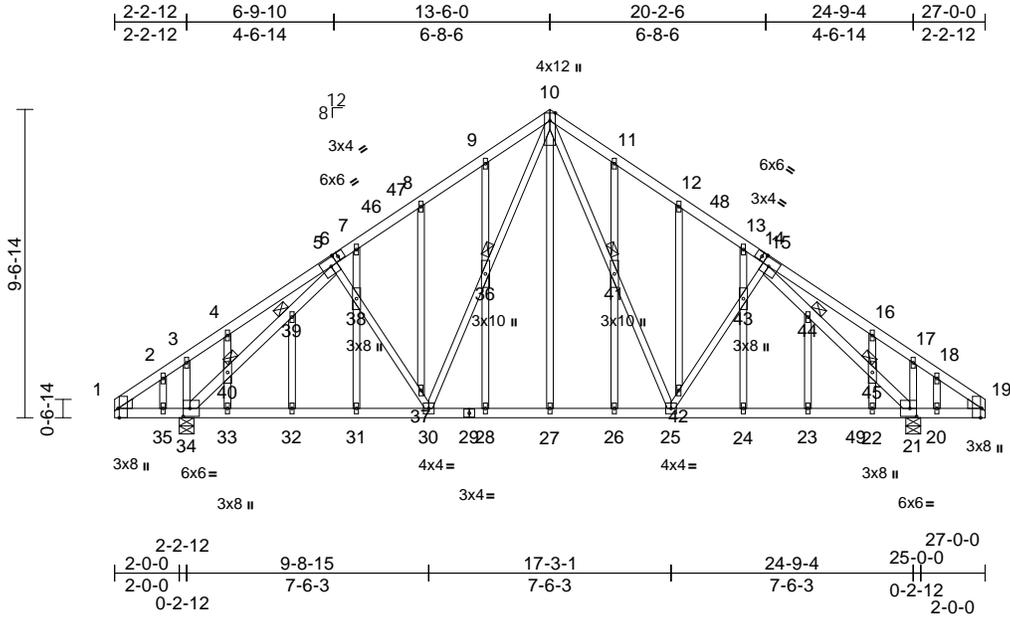
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| | | | | | | |
|-------------------|-------------|---------------------------------------|----------|----------|----------------------------------|-----------|
| Job P241184-01 | Truss C2 | Truss Type Common Structural Gable | Qty 1 | Ply 1 | Roof Job Reference (optional) | 177196688 |
|-------------------|-------------|---------------------------------------|----------|----------|----------------------------------|-----------|

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

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Mon Oct 20 16:02:26
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Page: 1



Scale = 1:71.1

Plate Offsets (X, Y): [1:0-3-8,Edge], [5:0-2-8,0-3-0], [6:0-1-11,0-1-8], [14:0-1-11,0-1-8], [15:0-2-8,0-3-0], [19:0-3-8,Edge], [21:0-2-8,0-3-0], [34:0-2-8,0-3-0]

| Loading | (psf) | Spacing | 2-0-0 | CSI | DEFL | in (loc) | l/defl | L/d | PLATES | GRIP | | |
|--------------|-----------|-----------------|-----------------|----------|------|----------|--------|-------|--------|------|----------------|----------|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.51 | Vert(LL) | 0.09 | 23-24 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf/Pg) | 16.9/20.0 | Lumber DOL | 1.15 | BC | 0.94 | Vert(CT) | -0.11 | 23-24 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | NO | WB | 0.93 | Horz(CT) | 0.03 | 21 | n/a | n/a | | |
| BCLL | 0.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | | |
| | | | | | | | | | | | Weight: 183 lb | FT = 20% |

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 5-34,15-21:2x4 SP No.2
OTHERS 2x3 SPF No.2
WEDGE Left: 2x4 SP No.2
Right: 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-1-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 4-1-15 oc bracing.
WEBS 2 Rows at 1/3 pts 5-34, 15-21
JOINTS 1 Brace at Jt(s): 36, 41

REACTIONS
21=0-5-8, 34=0-5-8
Max Horiz 34=191 (LC 46)
Max Uplift 21=1942 (LC 56), 34=1940 (LC 53)
Max Grav 21=2457 (LC 51), 34=2455 (LC 50)

FORCES
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-234/188, 2-3=-363/343, 3-4=-547/497, 4-5=-1251/1286, 5-7=-1873/1262, 7-8=-1569/1036, 8-9=-1233/709, 9-10=-864/412, 10-11=-880/444, 11-12=-1223/704, 12-13=-1567/1039, 13-15=-1870/1263, 15-16=-1251/1285, 16-17=-548/498, 17-18=-363/344, 18-19=-234/188

BOT CHORD 1-35=-146/218, 34-35=-288/361, 33-34=-1381/1820, 32-33=-1132/1572, 31-32=-741/1180, 30-31=-350/885, 28-30=-298/772, 27-28=-356/816, 26-27=-736/1160, 25-26=-1091/1504, 24-25=-1040/1509, 23-24=-1431/1900, 22-23=-1725/2193, 21-22=-1725/2193, 20-21=-137/209, 19-20=-137/209
WEBS 10-41=-651/748, 25-41=-689/789, 30-36=-653/758, 10-36=-681/793, 3-34=-401/273, 34-40=-2821/2241, 39-40=-2949/2337, 5-39=-3118/2499, 5-38=-622/646, 7-38=-637/660, 30-37=-710/697, 25-42=-714/703, 42-43=-632/655, 15-43=-621/646, 15-44=-3117/2506, 44-45=-2948/2342, 21-45=-2821/2248, 17-21=-400/273, 10-27=-26/154, 9-36=-117/61, 28-36=-92/73, 8-37=-215/102, 7-38=-130/253, 31-38=-94/211, 32-39=-228/219, 4-40=-173/264, 33-40=-69/99, 2-35=-44/45, 11-41=-90/63, 26-41=-102/75, 12-42=-200/89, 13-43=-128/250, 24-43=-97/214, 23-44=-227/220, 16-45=-172/263, 22-45=-69/98, 18-20=-44/45

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=117mph (3-second gust) Vasd=92mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. III; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 5-0-0, Interior (1) 5-0-0 to 13-4-9, Exterior(2R) 13-4-9 to 18-4-9, Interior (1) 18-4-9 to 27-0-0 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

- 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.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15) Plate DOL=1.15; Pg=20.0 psf; Pf=16.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.1; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1940 lb uplift at joint 34 and 1942 lb uplift at joint 21.
- 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.



October 22, 2025

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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| | | | | | | |
|------------|-------|-------------------------|-----|-----|--------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Roof | I77196688 |
| P241184-01 | C2 | Common Structural Gable | 1 | 1 | Job Reference (optional) | |

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

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Page: 2

- 12) This truss has been designed for a total drag load of 4500 lb. Lumber DOL=(1.33) Plate grip DOL=(1.33)
 Connect truss to resist drag loads along bottom chord from 0-0-0 to 23-0-0 for 195.7 plf.

LOAD CASE(S) Standard

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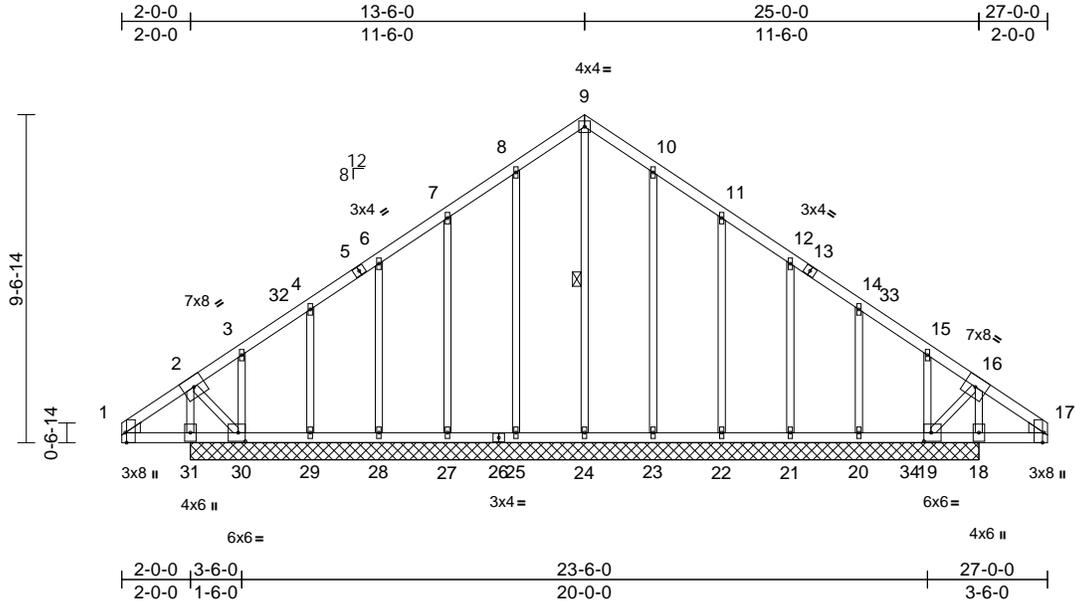
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| | | | | | | |
|-------------------|-------------|--------------------------------------|----------|----------|----------------------------------|-----------|
| Job P241184-01 | Truss C3 | Truss Type Common Supported Gable | Qty 1 | Ply 1 | Roof Job Reference (optional) | 177196689 |
|-------------------|-------------|--------------------------------------|----------|----------|----------------------------------|-----------|

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

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Page: 1



Scale = 1:66.9

Plate Offsets (X, Y): [1:0-3-8,Edge], [17:0-3-8,Edge], [19:0-2-8,0-3-0], [30:0-2-8,0-3-0]

| Loading | (psf) | Spacing | 2-0-0 | CSI | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP | |
|--------------|-----------|-----------------|-----------------|----------|------|-----------|-------|--------|-----|--------|----------------|----------|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.40 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf/Pg) | 16.9/20.0 | Lumber DOL | 1.15 | BC | 0.38 | Vert(TL) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | NO | WB | 0.79 | Horiz(TL) | 0.01 | 18 | n/a | n/a | | |
| BCLL | 0.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | | |
| | | | | | | | | | | | Weight: 143 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
WEDGE Left: 2x4 SP No.2
Right: 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-6-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except:
5-5-5 oc bracing: 29-30
5-8-12 oc bracing: 21-22
5-1-11 oc bracing: 20-21
4-9-3 oc bracing: 19-20.
WEBS 1 Row at midpt 9-24

REACTIONS (size)
18=23-0-0, 19=23-0-0, 20=23-0-0,
21=23-0-0, 22=23-0-0, 23=23-0-0,
24=23-0-0, 25=23-0-0, 27=23-0-0,
28=23-0-0, 29=23-0-0, 30=23-0-0,
31=23-0-0
Max Horiz 31=-193 (LC 46)
Max Uplift 18=-2557 (LC 48), 19=-1703 (LC 55), 20=-51 (LC 56), 21=-46 (LC 55), 22=-52 (LC 55), 23=-43 (LC 56), 24=-10 (LC 68), 25=-45 (LC 54), 27=-52 (LC 53), 28=-47 (LC 54), 29=-52 (LC 53), 30=-1835 (LC 54), 31=-2791 (LC 45)
Max Grav 18=2751 (LC 49), 19=1679 (LC 52), 20=172 (LC 30), 21=164 (LC 30), 22=182 (LC 23), 23=233 (LC 23), 24=236 (LC 75), 25=233 (LC 22), 27=182 (LC 22), 28=164 (LC 29), 29=172 (LC 29), 30=1824 (LC 49), 31=2985 (LC 52)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-261/266, 2-3=-1709/1688,
3-4=-1502/1470, 4-6=-1206/1208,
6-7=-933/959, 7-8=-670/724, 8-9=-428/475,
9-10=-313/360, 10-11=-550/580,
11-12=-789/811, 12-14=-1043/1047,
14-15=-1339/1308, 15-16=-1560/1524,
16-17=-276/275
BOT CHORD 1-31=-248/269, 30-31=-600/566,
29-30=-1181/1245, 28-29=-920/984,
27-28=-659/724, 25-27=-398/463,
24-25=-300/364, 23-24=-561/625,
22-23=-822/886, 21-22=-1082/1147,
20-21=-1343/1408, 19-20=-1539/1603,
18-19=-116/144, 17-18=-116/144
WEBS 9-24=-199/87, 8-25=-193/68, 7-27=-142/75,
6-28=-125/71, 4-29=-130/86, 3-30=-100/64,
2-31=-2807/2664, 10-23=-193/67,
11-22=-142/77, 12-21=-125/71,
14-20=-130/86, 15-19=-100/65,
16-18=-2588/2445, 2-30=-2270/2362,
16-19=-2088/2196

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=117mph (3-second gust) Vasd=92mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. III; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 0-0-0 to 5-0-0, Exterior(2N) 5-0-0 to 13-6-0, Corner(3R) 13-6-0 to 18-6-0, Exterior(2N) 18-6-0 to 27-0-0 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) 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=16.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.1; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) All plates are 1.5x4 MT20 unless otherwise indicated.
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.



October 22, 2025

Continued on page 2

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| | | | | | |
|-------------------|-------------|--------------------------------------|----------|----------|---|
| Job P241184-01 | Truss C3 | Truss Type Common Supported Gable | Qty 1 | Ply 1 | Roof I77196689 Job Reference (optional) |
|-------------------|-------------|--------------------------------------|----------|----------|---|

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

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Page: 2

- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 10 lb uplift at joint 24, 45 lb uplift at joint 25, 52 lb uplift at joint 27, 47 lb uplift at joint 28, 52 lb uplift at joint 29, 1835 lb uplift at joint 30, 2791 lb uplift at joint 31, 43 lb uplift at joint 23, 52 lb uplift at joint 22, 46 lb uplift at joint 21, 51 lb uplift at joint 20, 1703 lb uplift at joint 19 and 2557 lb uplift at joint 18.
- 11) Non Standard bearing condition. Review required.
- 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) This truss has been designed for a total drag load of 3000 lb. Lumber DOL=(1.33) Plate grip DOL=(1.33) Connect truss to resist drag loads along bottom chord from 0-0-0 to 23-0-0 for 130.4 plf.

LOAD CASE(S) Standard

⚠ WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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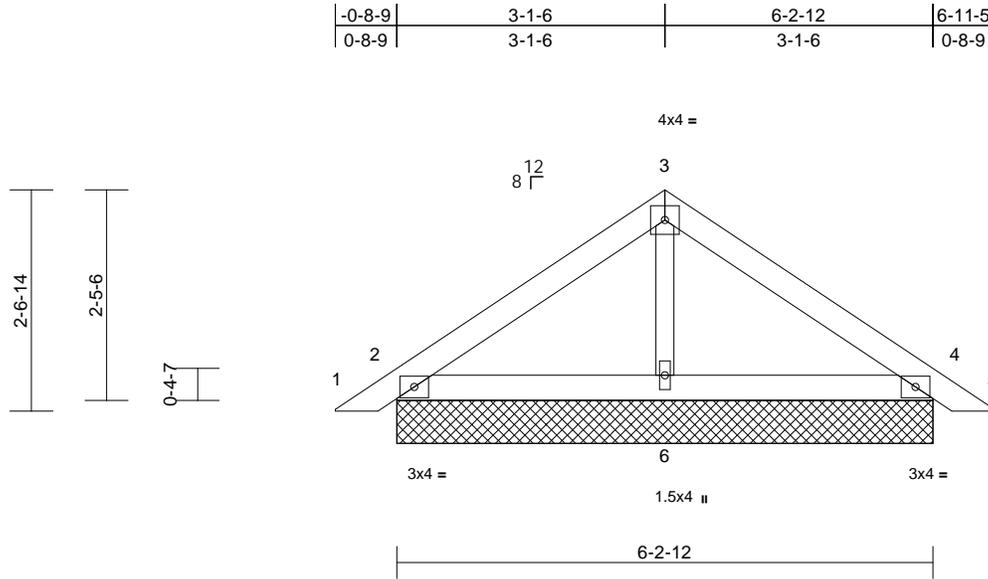
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| | | | | | | |
|-------------------|--------------|-------------------------|----------|----------|----------------------------------|-----------|
| Job P241184-01 | Truss PB1 | Truss Type Piggyback | Qty 2 | Ply 1 | Roof Job Reference (optional) | 177196690 |
|-------------------|--------------|-------------------------|----------|----------|----------------------------------|-----------|

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

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Mon Oct 20 16:02:27
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Page: 1



| Loading | (psf) | Spacing | 2-0-0 | CSI | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|--------------|-----------|-----------------|-----------------|----------|------|----------|-------|--------|-----|---------------|----------|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.24 | n/a | - | n/a | 999 | MT20 | 197/144 |
| Snow (Pf/Pg) | 16.9/20.0 | Lumber DOL | 1.15 | BC | 0.10 | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.03 | Horz(CT) | 0.00 | 4 | n/a | | |
| BCLL | 0.0 | Code | IRC2018/TPI2014 | Matrix-P | | | | | | | |
| BCDL | 10.0 | | | | | | | | | Weight: 24 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) 2=6-2-12, 4=6-2-12, 6=6-2-12
Max Horiz 2=-50 (LC 14)
Max Uplift 2=-29 (LC 16), 4=-35 (LC 17)
Max Grav 2=216 (LC 23), 4=216 (LC 24), 6=217 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/20, 2-3=-97/55, 3-4=-97/56, 4-5=0/20
BOT CHORD 2-6=-7/42, 4-6=-7/42
WEBS 3-6=-139/61

- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 16.9 psf on overhangs non-concurrent with other live loads.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 2 and 35 lb uplift at joint 4.
- 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.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=117mph (3-second gust) Vasd=92mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. III; Exp B; 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
 - 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.
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=16.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.1; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10



October 22, 2025

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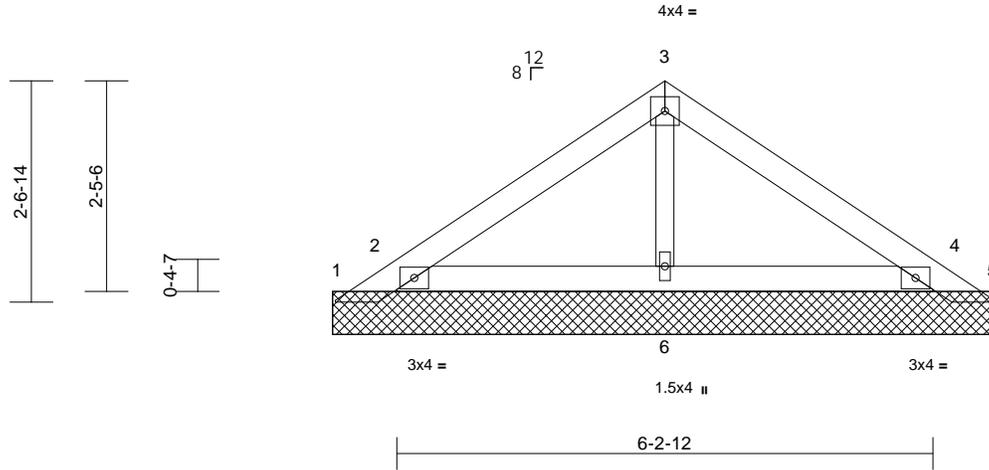
| | | | | | | |
|-------------------|--------------|-------------------------|-----------|----------|----------------------------------|-----------|
| Job P241184-01 | Truss PB2 | Truss Type Piggyback | Qty 19 | Ply 1 | Roof Job Reference (optional) | 177196691 |
|-------------------|--------------|-------------------------|-----------|----------|----------------------------------|-----------|

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

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| | | | |
|--------|-------|--------|--------|
| -0-8-9 | 3-1-6 | 6-2-12 | 6-11-5 |
| 0-8-9 | 3-1-6 | 3-1-6 | 0-8-9 |



| Loading | (psf) | Spacing | 2-0-0 | CSI | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP | |
|--------------|-----------|-----------------|-----------------|----------|------|-----------|-------|--------|-----|--------|---------------|----------|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.21 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 197/144 |
| Snow (Pf/Pg) | 16.9/20.0 | Lumber DOL | 1.15 | BC | 0.10 | Vert(TL) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.02 | Horiz(TL) | 0.00 | 4 | n/a | n/a | | |
| BCLL | 0.0 | Code | IRC2018/TPI2014 | Matrix-P | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 24 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=7-8-10, 2=7-8-10, 4=7-8-10, 5=7-8-10, 6=7-8-10
Max Horiz 1=-50 (LC 12)
Max Uplift 1=-167 (LC 23), 2=-129 (LC 16), 4=-117 (LC 17), 5=167 (LC 24)
Max Grav 1=96 (LC 16), 2=412 (LC 23), 4=412 (LC 24), 5=77 (LC 17), 6=195 (LC 7)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-76/120, 2-3=-114/52, 3-4=-114/52, 4-5=-61/105
BOT CHORD 2-6=-12/38, 4-6=-12/38
WEBS 3-6=-117/38

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=117mph (3-second gust) Vasd=92mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. III; Exp B; 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.

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=16.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.1; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 167 lb uplift at joint 1, 167 lb uplift at joint 5, 129 lb uplift at joint 2 and 117 lb uplift at joint 4.
 - 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.
 - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- LOAD CASE(S)** Standard



October 22, 2025

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.sbcsccomponents.com)

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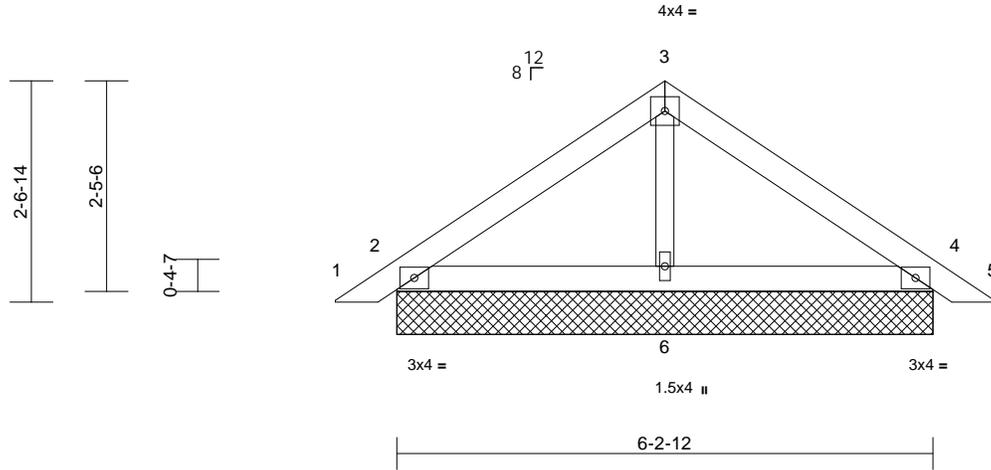
| | | | | | | |
|-------------------|--------------|-------------------------|----------|----------|----------------------------------|-----------|
| Job P241184-01 | Truss PB3 | Truss Type Piggyback | Qty 1 | Ply 2 | Roof Job Reference (optional) | 177196692 |
|-------------------|--------------|-------------------------|----------|----------|----------------------------------|-----------|

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

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Mon Oct 20 16:02:27
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| | | | |
|--------|-------|--------|--------|
| -0-8-9 | 3-1-6 | 6-2-12 | 6-11-5 |
| 0-8-9 | 3-1-6 | 3-1-6 | 0-8-9 |



Scale = 1:26.6

| Loading (psf) | Spacing | 2-0-0 | CSI | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|------------------------|----------------------|-------|----------|---------------|----|-------|--------|-----|---------------|----------|
| TCLL (roof) 20.0 | Plate Grip DOL 1.15 | | TC 0.12 | Vert(LL) n/a | - | n/a | 999 | | MT20 | 197/144 |
| Snow (Pf/Pg) 16.9/20.0 | Lumber DOL 1.15 | | BC 0.05 | Vert(CT) n/a | - | n/a | 999 | | | |
| TCDL 10.0 | Rep Stress Incr YES | | WB 0.01 | Horz(CT) 0.00 | 4 | n/a | n/a | | | |
| BCLL 0.0 | Code IRC2018/TPI2014 | | Matrix-P | | | | | | | |
| BCDL 10.0 | | | | | | | | | Weight: 49 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) 2=6-2-12, 4=6-2-12, 6=6-2-12
Max Horiz 2=-50 (LC 14)
Max Uplift 2=-29 (LC 16), 4=-35 (LC 17)
Max Grav 2=216 (LC 23), 4=216 (LC 24), 6=217 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/20, 2-3=-97/55, 3-4=-97/56, 4-5=0/20
BOT CHORD 2-6=-7/42, 4-6=-7/42
WEBS 3-6=-139/61

NOTES

- 2-ply truss to be connected together as follows:
Top chords connected with 10d (0.131"x3") nails as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected with 10d (0.131"x3") nails as follows: 2x4 - 1 row at 0-9-0 oc.
- 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.
- Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-16; Vult=117mph (3-second gust) Vasd=92mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. III; Exp B; 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
- 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.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=16.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.1; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 16.9 psf on overhangs non-concurrent with other live loads.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 2 and 35 lb uplift at joint 4.
- 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.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



October 22, 2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

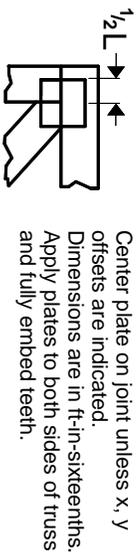
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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.sbcsccomponents.com)

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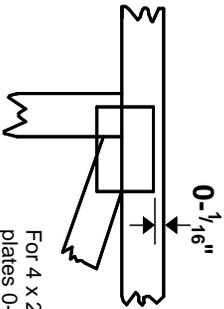
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Symbols

PLATE LOCATION AND ORIENTATION



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



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



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

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

PLATE SIZE

4 X 4

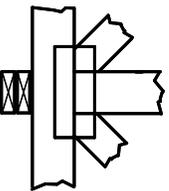
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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.

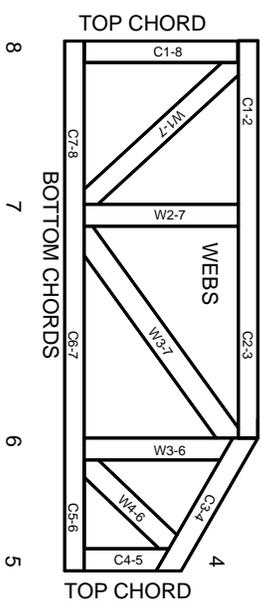
Industry Standards:

ANSI/TFP1: 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



1 TOP CHORDS
2 JOINT ID
3 Joint ID
4 WEBS



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-1-1988, 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/TFP 1 section 6.3. These truss designs rely on Lumber values established by others.

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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/TFP 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TFP 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/TFP 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.

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MITtek Engineering Reference Sheet: Mill-7473 rev. 1/2/2023