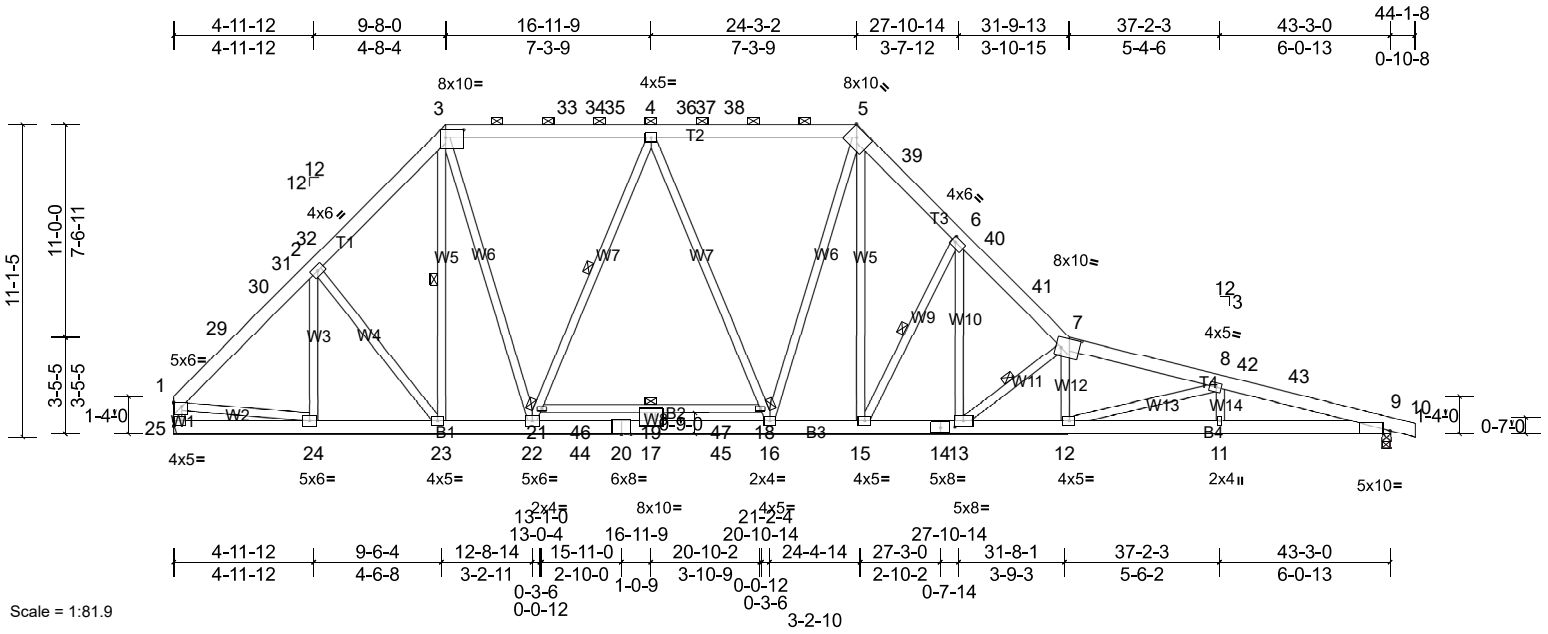
| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | A1 | Piggyback Base | 9 | 1 | Job Reference (optional) |





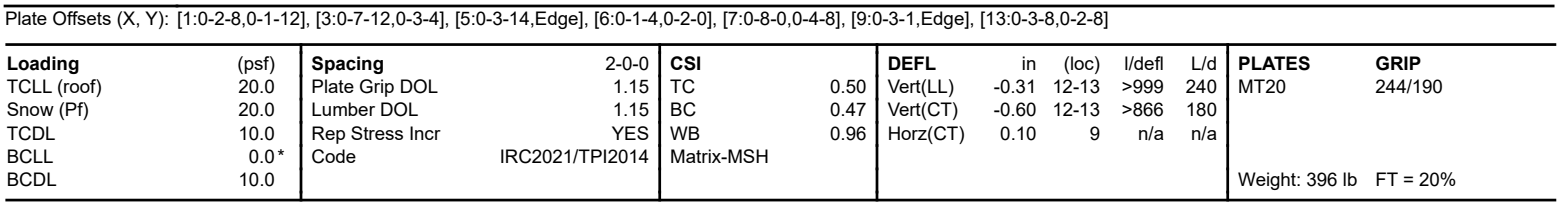




Plate Offsets (X, Y): [1:0-2-8,0-1-12], [3:0-7-12,0-3-4], [5:0-3-14,Edge], [6:0-1-4,0-2-0], [7:0-8-0,0-4-8], [9:0-3-1,Edge], [13:0-3-8,0-2-8]

| 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 | 0.50 | Vert(LL) | -0.31 | 12-13 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.47 | Vert(CT) | -0.60 | 12-13 | >866 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.96 | Horz(CT) | 0.10 | 9 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 396 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x6 SP 2400F 2.0E
BOT CHORD 2x6 SP 2400F 2.0E *Except* B2:2x4 SP No.2
WEBS 2x4 SP No.3 *Except* W6,W7:2x4 SP No.2

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 3-8-14 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 19-21,18-19.
WEBS 1 Row at midpt 3-23, 4-21, 6-15, 7-13

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 9=1918/0-3-8, (min. 0-1-13), 25=1944/ Mechanical, (min. 0-1-8)
Max Horiz 25=-270 (LC 12)
Max Uplift 9=-47 (LC 15)
Max Grav 9=2153 (LC 39), 25=2220 (LC 51)

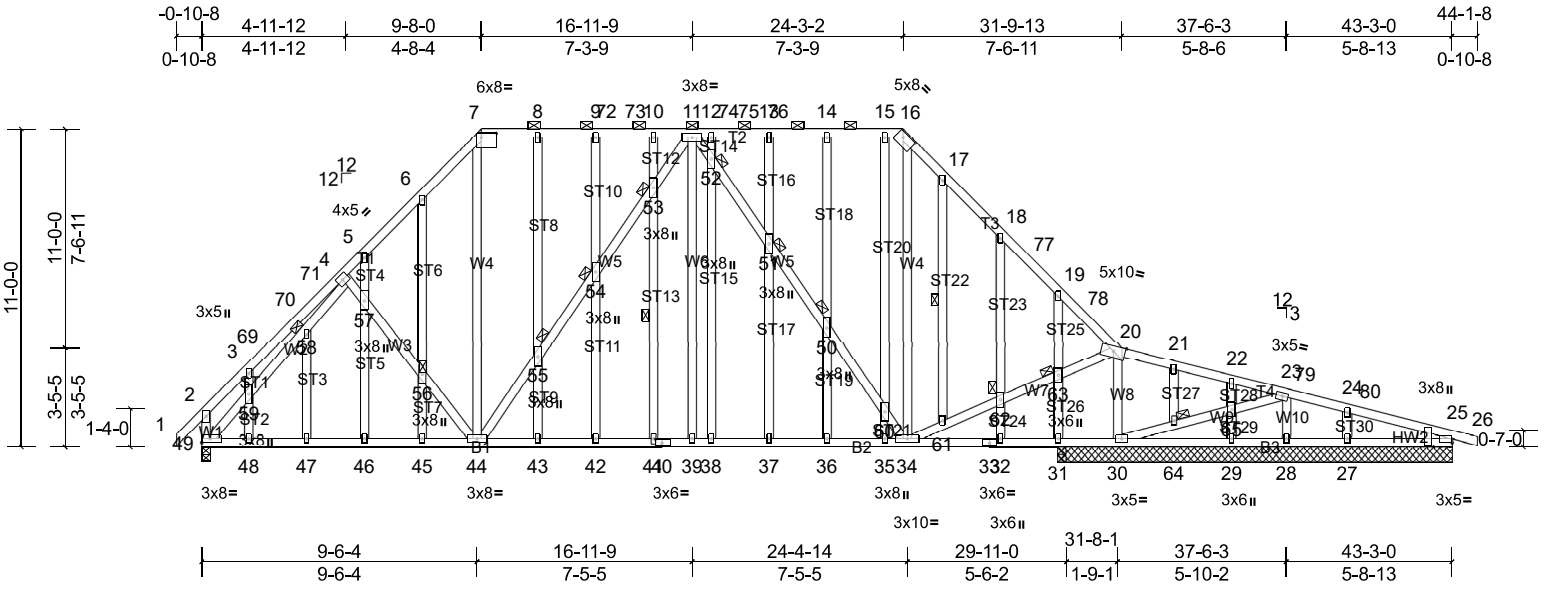
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-29=-2753/192, 29-30=-2670/192, 30-31=-2641/212, 2-31=-2624/216, 2-32=-2742/300, 3-32=-2735/340, 3-33=-2354/270, 33-34=-2354/270, 34-35=-2354/270, 4-35=-2354/270, 4-36=-2762/294, 36-37=-2762/294, 37-38=-2762/294, 5-38=-2762/294, 5-39=-3666/416, 6-39=-3739/400, 6-40=-4912/401, 40-41=-4959/383, 7-41=-5011/381, 7-8=-6965/516, 8-42=-7407/594, 42-43=-7412/587, 9-43=-7454/587, 1-25=-2342/207
BOT CHORD 24-25=-138/386, 23-24=-38/1856, 22-23=0/1814, 22-44=0/2544, 20-44=0/2544, 17-20=0/2544, 17-45=0/2544, 16-45=0/2544, 15-16=0/2497, 14-15=-90/3498, 13-14=-90/3498, 12-13=-391/6736, 11-12=-514/7180, 9-11=-514/7180
WEBS 2-23=-286/239, 5-15=-339/1885, 7-12=-4/442, 8-12=-840/207, 1-24=0/1655, 3-22=0/1540, 5-16=0/631, 21-22=-969/127, 4-21=-909/158, 4-18=-4/459, 16-18=-32/379, 6-15=-2177/341, 6-13=-170/2541, 7-13=-4069/378

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 4-5-10, Interior (1) 4-5-10 to 5-4-2, Exterior(2R) 5-4-2 to 13-11-14, Interior (1) 13-11-14 to 19-11-4, Exterior(2R) 19-11-4 to 28-7-0, Interior (1) 28-7-0 to 39-9-10, Exterior(2E) 39-9-10 to 44-1-8 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) 200.0lb AC unit load placed on the bottom chord, 16-11-9 from left end, supported at two points, 5-0-0 apart.
7) Provide adequate drainage to prevent water ponding.
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, with BCDL = 10.0psf.
10) Refer to girder(s) for truss to truss connections.
11) One H2.5A 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.
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

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | A1SE | Piggyback Base Structural Gable | 1 | 1 | Job Reference (optional) |






Scale = 1:79.7

Plate Offsets (X, Y): [7:0-6-4,0-1-12], [16:0-5-4,0-2-0], [25:Edge,0-1-7], [25:0-3-2,0-8-4], [40:0-2-8,0-1-8]

| 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 | 0.75 | Vert(LL) | -0.14 | 42-43 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.76 | Vert(CT) | -0.22 | 42-43 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.88 | Horz(CT) | 0.04 | 30 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 454 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* W4,W5,W6:2x4 SP No.2
OTHERS 2x4 SP No.3
WEDGE Right: 2x4 SP No.3

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 4-8-9 oc purlins, except end verticals, and 2-0-0 oc purlins (4-7-1 max.): 7-16.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 41-53, 17-61
JOINTS 1 Brace at Jt(s): 50, 51, 52, 53, 54, 55, 56, 58, 62, 63, 64

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** All bearings 13-7-8. except 49=0-3-8, 31=0-3-8
(lb) - Max Horiz 49=-283 (LC 12)
Max Uplift All uplift 100 (lb) or less at joint(s) 25, 27, 28, 29, 49, 66 except 30=-120 (LC 11), 31=-244 (LC 15)
Max Grav All reactions 250 (lb) or less at joint (s) 25, 28, 66 except 27=354 (LC 49), 29=457 (LC 49), 30=1203 (LC 42), 31=671 (LC 43), 49=1380 (LC 46)

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

TOP CHORD 2-3=-524/196, 3-69=-427/281, 69-70=-406/287, 70-71=-372/300, 4-71=-350/304, 4-5=-1316/334, 5-6=-1241/348, 6-7=-1260/461, 7-8=-896/370, 8-9=-896/370, 9-72=-896/370, 72-73=-896/370, 10-73=-896/370, 10-11=-896/370, 11-12=-717/309, 12-74=-717/309, 74-75=-717/309, 13-75=-717/309, 13-76=-717/309, 14-76=-717/309, 14-15=-717/309, 15-16=-717/309, 16-17=-938/360, 17-18=-1023/310, 18-77=-995/196, 19-77=-1018/181, 19-78=-941/129, 20-78=-980/113, 2-49=-532/239
BOT CHORD 48-49=-89/908, 47-48=-89/908, 46-47=-89/908, 45-46=-89/908, 44-45=-89/908, 43-44=-41/1077, 42-43=-41/1077, 41-42=-41/1077, 40-41=-41/1077, 39-40=-41/1077, 38-39=-41/1077, 37-38=-41/1077, 36-37=-41/1077, 35-36=-41/1077, 34-35=-41/1077
WEBS 56-57=-304/198, 44-56=-313/213, 7-44=-226/620, 44-55=-391/151, 54-55=-400/150, 53-54=-326/143, 11-53=-393/148, 11-39=-26/319, 11-52=-738/137, 51-52=-621/126, 50-51=-668/131, 50-60=-725/137, 34-60=-621/129, 16-34=-117/274, 34-61=-52/1046, 61-62=-40/1013, 62-63=-34/1024, 20-63=-43/987, 20-30=-1098/119, 49-59=-957/30, 58-59=-1022/14, 4-58=-1084/22, 19-63=-312/167, 31-63=-462/214, 22-65=-293/77, 29-65=-378/99, 24-27=-258/88

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 3-5-6, Interior (1) 3-5-6 to 5-4-2, Exterior(2R) 5-4-2 to 13-11-14, Interior (1) 13-11-14 to 19-11-4, Exterior(2R) 19-11-4 to 28-7-0, Interior (1) 28-7-0 to 39-7-8, Exterior(2E) 39-7-8 to 44-1-8 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) 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); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) All plates are 2x4 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) * 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.
12) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 30, 28, 49, 25, 29, and 27. This connection is for uplift only and does not consider lateral forces.
13) H10A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 31. This connection is for uplift only and does not consider lateral forces.

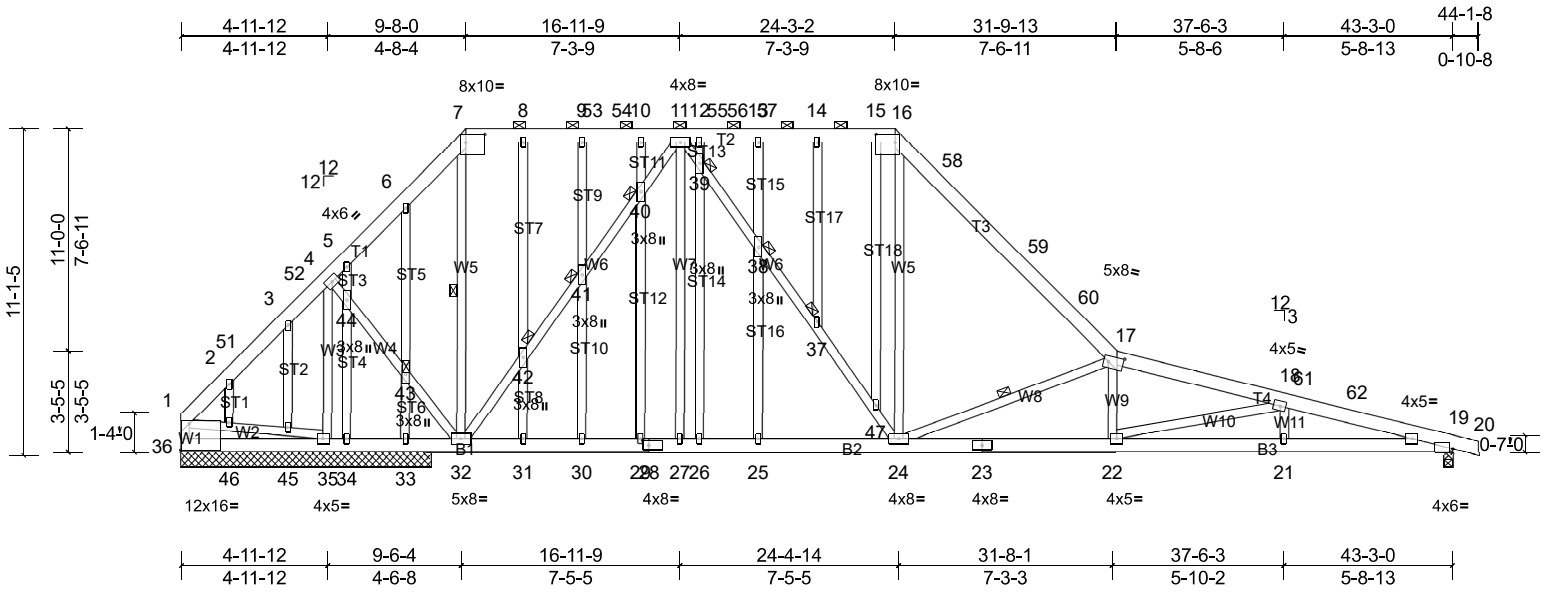
Continued on page 2

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

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | A1SEA | Piggyback Base Structural Gable | 1 | 1 | Job Reference (optional) |






Scale = 1:78.4

Plate Offsets (X, Y): [7:0-7-12,0-3-4], [16:0-7-12,0-3-4], [17:0-6-4,0-2-8], [19:0-1-1,Edge], [28:0-2-8,0-2-0], [36:Edge,0-11-0]

| 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 | 0.55 | Vert(LL) | -0.17 | 21-22 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.30 | Vert(CT) | -0.33 | 21-22 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.91 | Horz(CT) | 0.05 | 19 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 481 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x6 SP 2400F 2.0E
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except* W6,W7:2x4 SP No.2
OTHERS 2x4 SP No.3

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 5-0-14 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-16.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 35-36,34-35,33-34,32-33.
WEBS 1 Row at midpt 7-32, 17-24
JOINTS 1 Brace at Jt(s): 37, 38, 39, 40, 41, 42, 43

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** All bearings 8-5-8. except 19=0-3-8
(lb) - Max Horiz 36=-270 (LC 12)
Max Uplift All uplift 100 (lb) or less at joint(s) 33, 35 except 19=-142 (LC 15), 34=-558 (LC 63), 36=-1143 (LC 63)
Max Grav All reactions 250 (lb) or less at joint (s) 34, 36 except 19=1386 (LC 47), 33=1462 (LC 1), 35=2325 (LC 22)

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

TOP CHORD 1-2=-335/1485, 2-51=-327/1565, 3-51=-325/1606, 3-52=-245/1403, 4-52=-235/1421, 4-5=-33/794, 5-6=-3/578, 6-7=-68/377, 7-8=0/331, 8-9=0/331, 9-53=0/331, 53-54=0/331, 10-54=0/331, 10-11=0/331, 11-12=-1090/400, 12-55=-1090/400, 55-56=-1090/400, 13-56=-1090/400, 13-57=-1090/400, 14-57=-1090/400, 14-15=-1090/400, 15-16=-1090/400, 16-58=-1421/368, 58-59=-1493/337, 59-60=-1495/332, 17-60=-1619/317, 17-18=-3431/615, 18-61=-4051/658, 61-62=-4074/652, 19-62=-4108/652, 1-36=-201/1169
BOT CHORD 35-36=-155/272, 34-35=-1102/325, 33-34=-1102/325, 32-33=-1102/325, 31-32=0/823, 30-31=0/823, 29-30=0/823, 28-29=0/823, 27-28=0/823, 26-27=0/823, 25-26=0/823, 24-25=0/823, 23-24=-491/3318, 22-23=-491/3318, 21-22=-577/3953, 19-21=-577/3953
WEBS 4-44=-91/1452, 43-44=-96/1443, 32-43=-101/1505, 7-32=-285/0, 32-42=-1532/268, 41-42=-1515/266, 40-41=-1502/264, 11-40=-1530/267, 11-39=-157/732, 38-39=-154/736, 37-38=-151/729, 37-47=-156/718, 24-47=-162/772, 16-24=-40/597, 17-24=-2457/556, 17-22=0/416, 18-22=-1013/211, 1-46=-1147/355, 45-46=-1134/354, 35-45=-1207/377, 4-35=-1289/289, 6-43=-465/162, 33-43=-529/169, 5-44=-496/83, 34-44=-488/90, 3-45=-328/95

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 4-5-10, Interior (1) 4-5-10 to 5-4-2, Exterior(2R) 5-4-2 to 13-11-14, Interior (1) 13-11-14 to 19-11-4, Exterior(2R) 19-11-4 to 28-7-0, Interior (1) 28-7-0 to 39-9-10, Exterior(2E) 39-9-10 to 44-1-8 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) 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); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) All plates are 2x4 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) * 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.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) except (jt=lb) 36=1143, 34=557.
13) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 35, 19, and 33. This connection is for uplift only and does not consider lateral forces.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Continued on page 2

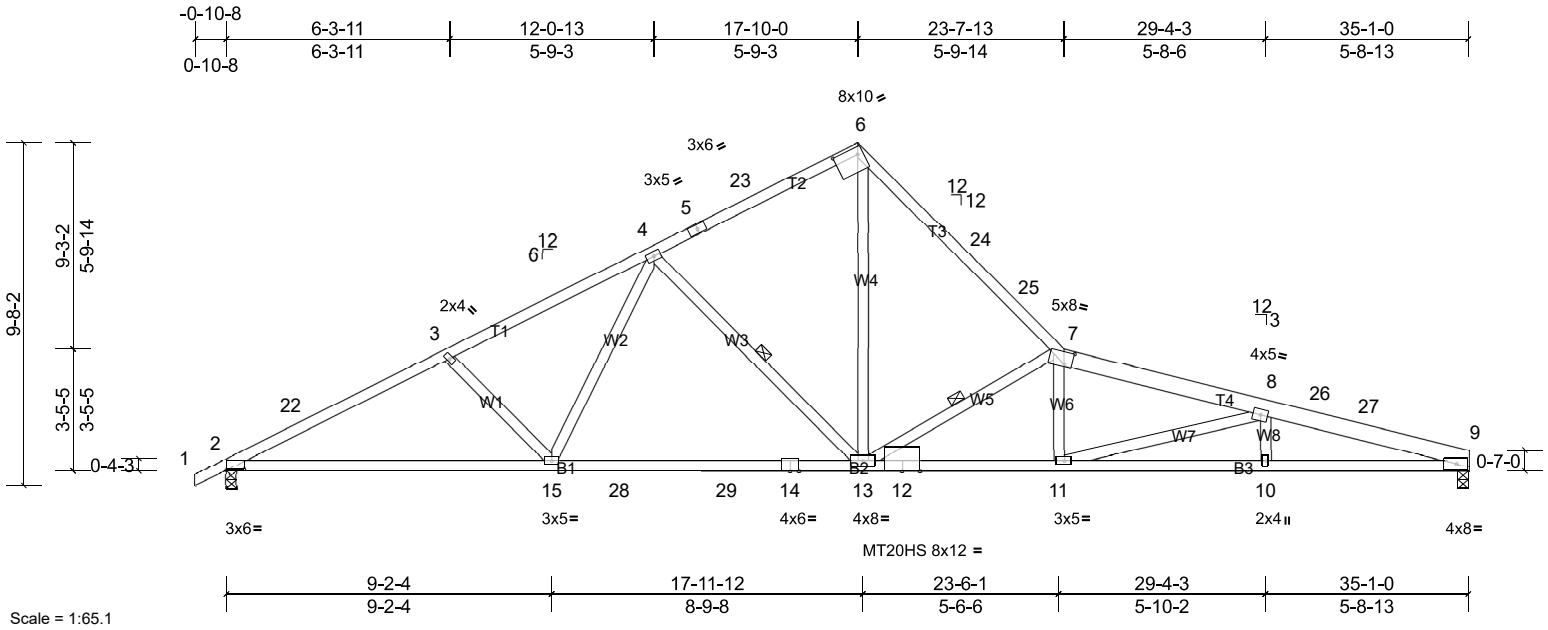
15) This truss has large uplift reaction(s) from gravity load case(s). Proper connection is required to secure truss against upward movement at the bearings. Building designer must provide for uplift reactions indicated.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | B1 | Roof Special | 2 | 1 | Job Reference (optional) |

Carter Components, Sanford, NC, user — Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Thu Feb 13 14:25:39 — Page: 1

ID:mVcpNxID8DdGstoTjMpxfyyaipl-XM0eauGhFxBvQtUsyu4gJxGChqiL4F1orqGGf6zlXtB




Scale = 1:65.1

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

| 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 | 0.96 | Vert(LL) | -0.36 | 13-15 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.92 | Vert(CT) | -0.65 | 13-15 | >645 | 180 | MT20HS | 187/143 |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.84 | Horz(CT) | 0.14 | 9 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 188 lb | FT = 20% |

**LUMBER**

TOP CHORD 2x4 SP No.2 *Except* T3:2x4 SP No.1, T4:2x6 SP No.2
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3

**BRACING**

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 4-13, 7-13

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 2=1456/0-3-8, (min. 0-1-14), 9=1403/0-3-8, (min. 0-1-12)
Max Horiz 2=158 (LC 14)
Max Uplift 2=-154 (LC 14), 9=-133 (LC 15)
Max Grav 2=1564 (LC 3), 9=1507 (LC 3)

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

TOP CHORD 2-22=-3181/443, 3-22=-3147/465, 3-4=-2953/446, 4-5=-1999/378, 5-23=-1937/389, 6-23=-1932/405, 6-24=-2482/441, 24-25=-2484/416, 7-25=-2584/404, 7-8=-4445/648, 8-26=-4969/675, 26-27=-4979/670, 9-27=-5024/668
BOT CHORD 2-15=-329/2802, 15-28=-203/2220, 28-29=-203/2220, 14-29=-203/2220, 13-14=-203/2220, 12-13=-539/4288, 11-12=-539/4288, 10-11=-610/4803, 9-10=-610/4803
WEBS 3-15=-389/184, 4-15=-29/731, 4-13=-818/213, 6-13=-300/2280, 7-13=-2961/528, 7-11=0/394, 8-11=-810/219

**NOTES**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 14-10-0, Exterior(2R) 14-10-0 to 20-10-0, Interior (1) 20-10-0 to 32-1-0, Exterior(2E) 32-1-0 to 35-1-0 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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, with BCDL = 10.0psf.
9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 9 and 2. This connection is for uplift only and does not consider lateral forces.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | C1 | Attic | 4 | 1 | Job Reference (optional) |



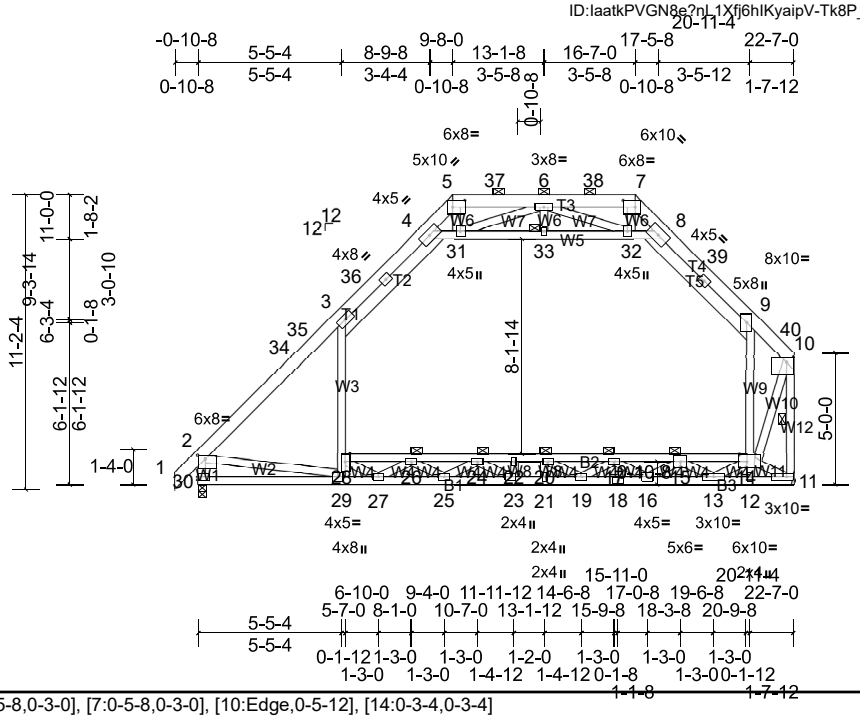



Plate Offsets (X, Y): [2:Edge,0-4-4], [5:0-5-8,0-3-0], [7:0-5-8,0-3-0], [10:Edge,0-5-12], [14:0-3-4,0-3-4]

| 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 | 0.71 | Vert(LL) | -0.25 | 22-24 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.83 | Vert(CT) | -0.44 | 23-25 | >607 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.95 | Horz(CT) | 0.04 | 11 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MSH | | Attic | -0.17 | 14-28 | >999 | 360 | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 246 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x6 SP No.2 *Except* T1,T4:2x6 SP 2400F 2.0E
BOT CHORD 2x4 SP No.2 *Except* B1:2x4 SP No.1
WEBS 2x4 SP No.2 *Except* W3,W9,W2,W12,W8,W6,W7,W10:2x4 SP No.3

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-7.
BOT CHORD Rigid ceiling directly applied or 3-0-5 oc bracing.
WEBS 1 Row at midpt 10-11
JOINTS 1 Brace at Jt(s): 15, 26, 17, 24, 33

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 11=1311/ Mechanical, (min. 0-1-8), 30=1256/0-3-8, (min. 0-1-14)
Max Horiz 30=251 (LC 11)
Max Grav 11=1857 (LC 48), 30=1610 (LC 48)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-34=-1796/0, 34-35=-1634/0, 3-35=-1602/0, 3-36=-1171/69, 4-36=-1030/104, 4-5=-443/370, 5-37=-235/618, 6-37=-235/618, 6-38=-58/959, 7-38=-58/959, 7-8=-359/506, 8-39=-1094/110, 9-39=-1249/74, 9-40=-1621/0, 10-40=-1688/0, 2-30=-1671/0, 10-11=-3712/0
BOT CHORD 29-30=-298/582, 27-29=-49/1208, 25-27=0/2687, 23-25=0/3412, 21-23=0/3369, 19-21=0/3369, 18-19=0/2178, 16-18=0/2178, 13-16=-784/522, 12-13=-3231/17, 11-12=-3083/25, 26-28=-1025/0, 24-26=-2293/0, 22-24=-2566/0, 20-22=-2566/0, 17-20=-1951/38, 15-17=-656/919, 14-15=-247/2894
WEBS 3-28=0/787, 9-14=-137/994, 4-31=-1662/0, 31-33=-1506/55, 32-33=-1506/55, 8-32=-1938/148, 2-29=-6/716, 13-14=0/1757, 27-28=0/1168, 13-15=-1817/0, 26-27=-1049/0, 15-16=0/1236, 25-26=0/499, 16-17=-1146/0, 24-25=-386/73, 17-19=0/768, 23-24=-270/138, 19-20=-835/0, 5-31=-37/256, 7-32=-47/362, 6-31=-472/165, 6-32=-723/169, 11-14=-27/3499, 10-14=0/2535

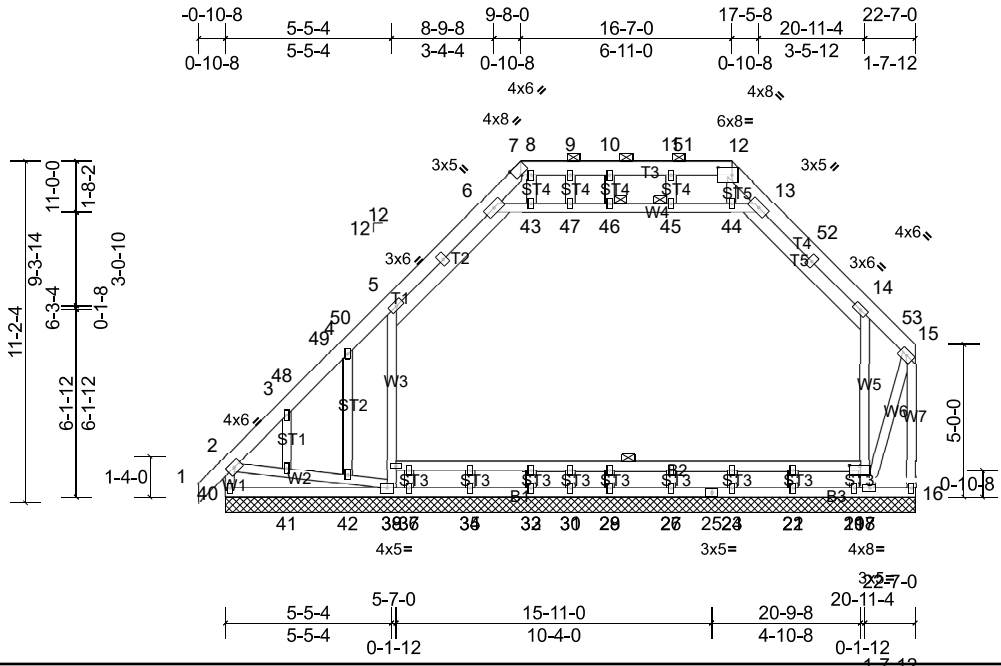
**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-5-2, Interior (1) 2-5-2 to 6-4-6, Exterior(2R) 6-4-6 to 19-1-10, Exterior(2E) 19-1-10 to 22-5-4 zone; cantilever left and right exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are 3x5 MT20 unless otherwise indicated.
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) Ceiling dead load (5.0 psf) on member(s). 3-4, 8-9, 4-31, 31-33, 32-33, 8-32; Wall dead load (5.0psf) on member (s).3-28, 9-14
11) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 26-28, 24-26, 22-24, 20-22, 17-20, 15-17, 14-15
12) Refer to girder(s) for truss to truss connections.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Attic room checked for L/360 deflection.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | C1GE | Attic Supported Gable | 1 | 1 | Job Reference (optional) |

Carter Components, Sanford, NC, user — Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Thu Feb 13 14:25:40 — Page: 1

ID:fovBLwm3BuPtQjimxLVrBzyaip9-Tk8P_aIxnZRdfBdE3J78OMLgcdYWYGY5J8lNj_zlXt9




Scale = 1:75.5

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

| 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 | 0.42 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.23 | Vert(CT) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.39 | Horz(CT) | -0.01 | 16 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 230 lb | FT = 20% |

**LUMBER**

TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* W4:2x4 SP No.2
OTHERS 2x4 SP No.3

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-12.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 45, 46

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** All bearings 22-7-0.
(lb) - Max Horiz 40=320 (LC 13)
Max Uplift All uplift 100 (lb) or less at joint(s) 37 except 16=-400 (LC 11), 17=-584 (LC 51), 39=-259 (LC 14), 40=-117 (LC 10)
Max Grav All reactions 250 (lb) or less at joint (s) 20, 22, 24, 27, 29, 31, 33, 35, 37 except 16=1081 (LC 41), 17=451 (LC 13), 39=717 (LC 52), 40=559 (LC 22)

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

TOP CHORD 2-40=-511/143, 2-3=-482/203, 3-48=-439/203, 48-49=-430/216, 4-49=-405/219, 4-50=-352/216, 5-50=-328/225, 5-6=-578/237, 6-7=-795/181, 7-8=-724/189, 8-9=-724/189, 9-10=-724/189, 10-11=-724/189, 11-51=-726/189, 12-51=-730/189, 12-13=-821/229, 13-52=-505/227, 14-52=-591/212, 14-53=-290/116, 15-53=-314/106, 15-16=-1055/388
BOT CHORD 39-40=-283/308, 37-39=-135/352, 35-37=-135/352, 33-35=-135/352, 31-33=-135/352, 29-31=-135/352, 27-29=-135/352, 25-27=-135/352, 24-25=-135/352, 22-24=-135/352, 20-22=-135/352, 17-20=-135/352
WEBS 2-41=-174/340, 41-42=-176/337, 39-42=-180/351, 38-39=-593/276, 5-38=-611/281, 17-18=-566/217, 14-18=-614/226, 15-17=-350/1014, 6-43=-128/425, 43-47=-128/426, 46-47=-128/426, 45-46=-128/426, 44-45=-128/426, 13-44=-127/424

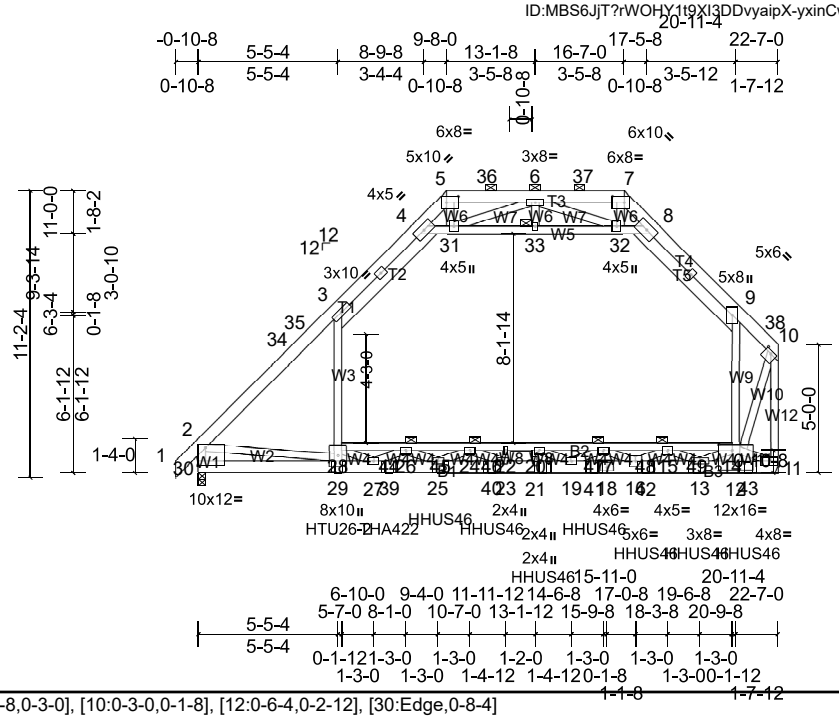
**NOTES**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 2-5-2, Exterior(2N) 2-5-2 to 6-4-6, Corner(3R) 6-4-6 to 12-11-10, Exterior(2N) 12-11-10 to 13-3-6, Corner(3R) 13-3-6 to 19-1-10, Corner(3E) 19-1-10 to 22-5-4 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) 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); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) All plates are 2x4 MT20 unless otherwise indicated.
9) Gable requires continuous bottom chord bearing.
10) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
11) Gable studs spaced at 2-0-0 oc.
12) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
13) * 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.
14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 37 except (jt=lb) 40=117, 16=400, 39=258, 17=583.
15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
16) Attic room checked for L/360 deflection.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | C1GR | Attic Girder | 2 | 4 | Job Reference (optional) |






Scale = 1:89.8

Plate Offsets (X, Y): [5:0-5-8,0-3-0], [7:0-5-8,0-3-0], [10:0-3-0,0-1-8], [12:0-6-4,0-2-12], [30:Edge,0-8-4]

| 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 | 1.00 | Vert(LL) | -0.24 | 23 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.68 | Vert(CT) | -0.35 | 23-25 | >756 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | NO | WB | 0.93 | Horz(CT) | 0.02 | 11 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MSH | | Attic | -0.16 | 14-28 | >999 | 360 | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 1049 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x6 SP No.2 *Except* T1,T4:2x6 SP 2400F 2.0E
BOT CHORD 2x6 SP No.2 *Except* B2:2x4 SP No.2, B1:2x6 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except* W5,W4,W11:2x4 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.): 5-7.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 15, 26, 17, 24, 33

**REACTIONS** (lb/size) 11=2456/ Mechanical, (min. 0-1-8), 30=2765/0-3-8, (min. 0-1-8)
Max Horiz 30=319 (LC 9)
Max Uplift 30=-76 (LC 12)
Max Grav 11=5238 (LC 19), 30=4163 (LC 47)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-34=-4356/0, 34-35=-4193/0, 3-35=-4161/0, 3-4=-2074/22, 4-5=0/1634, 5-36=0/2616, 6-36=0/2616, 6-37=-203/3136, 7-37=-203/3136, 7-8=-99/1882, 8-9=-2207/109, 9-38=-4708/0, 10-38=-4725/0, 2-30=-3830/0, 10-11=-9770/0
BOT CHORD 29-30=-442/1611, 27-29=-242/2955, 27-39=0/9500, 25-39=0/9500, 25-40=0/12768, 23-40=0/12768, 21-23=0/13127, 19-21=0/13127, 19-41=-115/8595, 18-41=-115/8595, 16-18=-115/8595, 16-42=-1900/1633, 13-42=-1900/1633, 12-13=-9095/372, 12-43=-8364/400, 11-43=-8364/400, 28-44=-4630/179, 26-44=-4630/179, 26-45=-9515/0, 24-45=-9515/0, 24-46=-10723/0, 22-46=-10723/0, 20-22=-10723/0, 20-47=-8567/261, 17-47=-8567/261, 17-48=-3470/1750, 15-48=-3470/1750, 15-49=-1061/7329, 14-49=-1061/7329
WEBS 28-29=-256/558, 3-28=-25/2977, 12-14=0/2381, 9-14=0/4156, 4-31=-5101/1, 31-33=-4821/133, 32-33=-4821/133, 8-32=-5734/320, 2-29=-41/1398, 27-28=0/4923, 13-15=-5716/0, 26-27=-3360/89, 15-16=0/5019, 25-26=-157/2862, 16-17=-3222/0, 24-25=-1006/405, 17-19=0/2812, 23-24=-710/504, 19-20=-2666/53, 20-21=-45/957, 5-31=-43/412, 7-32=-95/631, 6-31=-606/213, 6-32=-1106/278, 13-14=0/5956, 11-14=-478/9325, 10-14=-59/6065

**NOTES**
1) 4-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc, Except member 3-29 2x4 - 1 row at 0-7-0 oc.
Attach BC w/ 1/2" diam. bolts (ASTM A-307) in the center of the member w/washers at 4-0-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
6) Unbalanced snow loads have been considered for this design.
7) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
8) Provide adequate drainage to prevent water ponding.
9) All plates are 3x5 MT20 unless otherwise indicated.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * 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.
12) Ceiling dead load (5.0 psf) on member(s). 3-4, 8-9, 4-31, 31-33, 32-33, 8-32; Wall dead load (5.0psf) on member (s).3-28, 9-14
13) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 26-28, 24-26, 22-24, 20-22, 17-20, 15-17, 14-15
14) Refer to girder(s) for truss to truss connections.
15) LGT4-SDS3 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 30. This connection is for uplift only and does not consider lateral forces.
16) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
17) Use Simpson Strong-Tie HTU26-2 (20-10d Girder, 14-10d Truss, Single Ply Girder) or equivalent at 5-5-8 from the left end to connect truss(es) LGR (2 ply 2x6 SP) to front face of bottom chord.
18) Use Simpson Strong-Tie THA422 (6-16d Girder, 6-10d Truss) or equivalent at 7-5-4 from the left end to connect truss(es) FL12 (1 ply 2x4 SP) to front face of bottom chord.
19) Use Simpson Strong-Tie HHUS46 (14-10d Girder, 6-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 9-5-4 from the left end to 21-5-4 to connect truss(es) FL12 (1 ply 2x4 SP) to front face of bottom chord.
20) Fill all nail holes where hanger is in contact with lumber.
21) WARNING: The following hangers are manually applied but fail due to geometric considerations: THA422 on front face at 7-5-4 from the left end.
22) LGT4 Hurricane ties must have four studs in line below the truss.

Continued on page 2

23) Attic room checked for L/360 deflection.

**LOAD CASE(S)** Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 1-2=-60, 2-3=-60, 3-4=-70, 4-5=-60, 5-7=-60, 7-8=-60, 8-9=-70, 9-10=-60, 11-30=-20, 14-28=-30, 4-31=-10, 31-33=-10, 32-33=-10, 8-32=-10
   Drag: 3-28=-10, 9-14=-10
   Concentrated Loads (lb)
   Vert: 29=-1374, 13=-160, 25=-160, 21=-160, 39=-160, 40=-160, 41=-160, 42=-160, 43=-160

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | C2 | Attic | 3 | 1 | Job Reference (optional) |



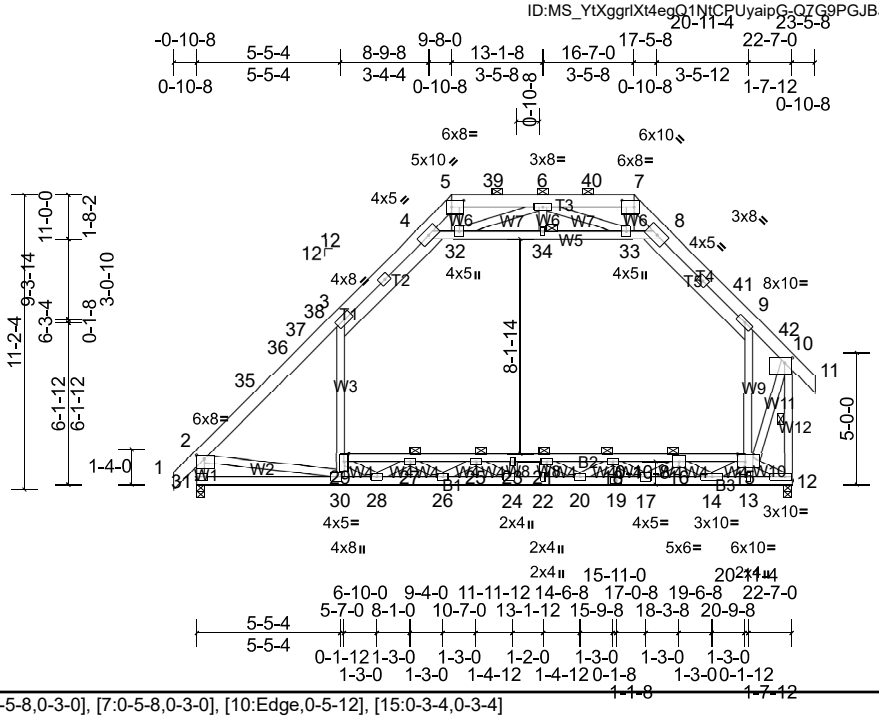



Plate Offsets (X, Y): [2:Edge,0-4-4], [5:0-5-8,0-3-0], [7:0-5-8,0-3-0], [10:Edge,0-5-12], [15:0-3-4,0-3-4]

| 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 | 0.72 | Vert(LL) | -0.25 | 23-25 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.83 | Vert(CT) | -0.44 | 24-26 | >607 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.95 | Horz(CT) | 0.04 | 12 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MSH | | Attic | -0.17 | 15-29 | >999 | 360 | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 249 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x6 SP No.2 *Except* T1,T4:2x6 SP 2400F 2.0E
BOT CHORD 2x4 SP No.2 *Except* B1:2x4 SP No.1
WEBS 2x4 SP No.2 *Except* W3,W9,W12,W2,W8,W6,W7,W11:2x4 SP No.3

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-7.
BOT CHORD Rigid ceiling directly applied or 3-0-5 oc bracing.
WEBS 1 Row at midpt 10-12
JOINTS 1 Brace at Jt(s): 16, 27, 18, 25, 34

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 12=1374/0-3-8, (min. 0-2-4), 31=1255/0-3-8, (min. 0-1-14)
Max Horiz 31=330 (LC 13)
Max Grav 12=1909 (LC 48), 31=1609 (LC 48)

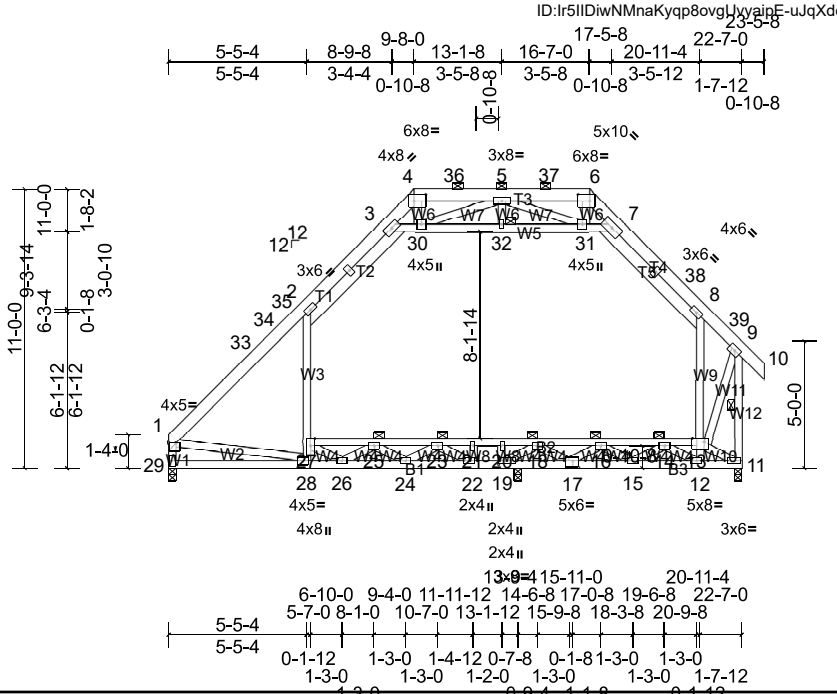
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-35=-1738/0, 35-36=-1615/0, 36-37=-1575/0, 37-38=-1544/0, 3-38=-1514/0, 3-4=-1112/129, 4-5=-445/364, 5-39=-237/632, 6-39=-237/632, 6-40=-52/957, 7-40=-52/957, 7-8=-360/504, 8-41=-1037/125, 9-41=-1192/92, 9-42=-1538/0, 10-42=-1605/0, 2-31=-1619/0, 10-12=-3714/0
BOT CHORD 30-31=-282/624, 28-30=-78/1261, 26-28=0/2687, 24-26=0/3411, 22-24=0/3367, 20-22=0/3367, 19-20=0/2175, 17-19=0/2175, 14-17=-789/537, 13-14=-3267/17, 12-13=-3118/23, 27-29=-1026/0, 25-27=-2293/0, 23-25=-2565/0, 21-23=-2565/0, 18-21=-1949/41, 16-18=-684/923, 15-16=-269/2958
WEBS 3-29=0/787, 9-15=-124/998, 4-32=-1570/45, 32-34=-1494/30, 33-34=-1494/30, 8-33=-1930/178, 2-30=-14/696, 28-29=0/1168, 14-16=-1817/0, 27-28=-1048/0, 16-17=0/1236, 26-27=0/498, 17-18=-1146/0, 25-26=-386/74, 18-20=0/777, 24-25=-271/134, 20-21=-846/0, 7-33=-49/350, 6-32=-442/176, 6-33=-699/172, 14-15=0/1757, 12-15=-36/3555, 10-15=0/2575

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-4-12, Interior (1) 2-4-12 to 5-0-8, Exterior(2R) 5-0-8 to 20-2-4, Exterior (2E) 20-2-4 to 23-5-8 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are 3x5 MT20 unless otherwise indicated.
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) Ceiling dead load (5.0 psf) on member(s). 3-4, 8-9, 4-32, 32-34, 33-34, 8-33; Wall dead load (5.0psf) on member (s).3-29, 9-15
11) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 27-29, 25-27, 23-25, 21-23, 18-21, 16-18, 15-16
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Attic room checked for L/360 deflection.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | C3 | Attic | 3 | 1 | Job Reference (optional) |






Scale = 1:90.8

Plate Offsets (X, Y): [1:0-3-4,0-3-8], [4:0-5-8,0-3-0], [6:0-5-8,0-3-0], [13:0-5-8,Edge], [17:0-2-12,0-3-0], [19:0-3-8,0-1-8]

| 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 | 0.75 | Vert(LL) | -0.17 | 28 | >912 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.96 | Vert(CT) | -0.32 | 28-29 | >488 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 1.00 | Horz(CT) | -0.02 | 11 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MSH | | Attic | 0.10 | 13-27 | >999 | 360 | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 246 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2 *Except* B2:2x4 SP No.1
WEBS 2x4 SP No.3 *Except* W5:2x4 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 (6-0-0 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 4-1-13 oc bracing.
WEBS 1 Row at midpt 9-11
JOINTS 1 Brace at Jt(s): 14, 25, 16, 23, 18, 32

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 11=1015/0-3-8, (min. 0-1-8), 19=617/0-3-8, (min. 0-1-10), 29=935/0-3-8, (min. 0-1-8)
Max Horiz 29=310 (LC 13)
Max Grav 11=1170 (LC 48), 19=1399 (LC 21), 29=1038 (LC 42)

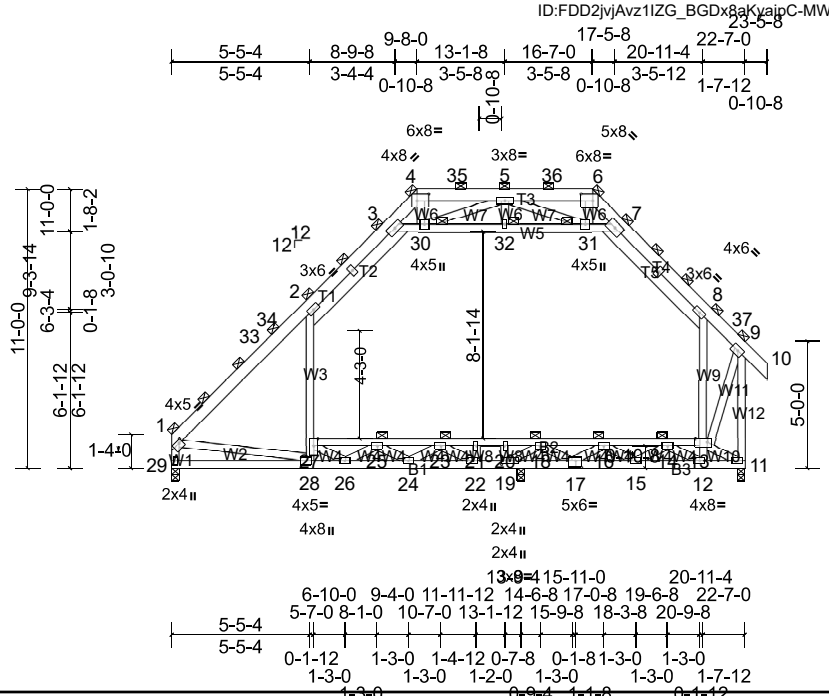
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-33=-1112/3, 33-34=-945/9, 34-35=-942/23, 2-35=-905/26, 2-3=-836/189, 3-4=-562/145, 4-36=-417/182, 5-36=-417/182, 5-37=-214/521, 6-37=-214/521, 6-7=-480/245, 7-38=-793/179, 8-38=-917/148, 8-39=-708/145, 9-39=-775/134, 1-29=-1015/26, 9-11=-2083/127
BOT CHORD 28-29=-290/474, 26-28=-151/1015, 24-26=0/965, 22-24=-336/292, 19-22=-1710/231, 17-19=-1578/360, 15-17=-1068/529, 12-15=-1248/475, 11-12=-1592/445, 25-27=-400/0, 23-25=-245/389, 21-23=-198/2351, 20-21=-198/2351, 18-20=-198/2351, 16-18=-434/1954, 14-16=-572/1744, 13-14=-559/2360
WEBS 12-13=0/444, 8-13=-469/165, 3-30=-727/228, 30-32=-721/275, 31-32=-721/275, 7-31=-1097/323, 1-28=-79/462, 26-27=-45/252, 25-26=-190/303, 24-25=-625/98, 16-17=-464/0, 23-24=-16/831, 17-18=0/442, 22-23=-1627/0, 18-19=-391/96, 21-22=0/553, 19-20=-818/0, 6-31=-55/307, 5-30=-419/194, 5-31=-651/176, 12-14=-615/0, 11-13=-542/1822, 9-13=-192/1689

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) interior zone and C-C Exterior(2E) 0-1-12 to 3-5-0, Interior (1) 3-5-0 to 5-0-8, Exterior(2R) 5-0-8 to 20-2-4, Exterior(2E) 20-2-4 to 23-5-8 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are 3x5 MT20 unless otherwise indicated.
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) Ceiling dead load (5.0 psf) on member(s). 2-3, 7-8, 3-30, 30-32, 31-32, 7-31; Wall dead load (5.0psf) on member (s).2-27, 8-13
11) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 25-27, 23-25, 21-23, 20-21, 18-20, 16-18, 14-16, 13-14
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Attic room checked for L/360 deflection.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | C3GR | Attic Girder | 1 | 2 | Job Reference (optional) |






Scale = 1:90.8

Plate Offsets (X, Y): [1:0-1-12,0-1-8], [4:0-5-8,0-3-0], [6:0-5-8,0-3-0], [13:0-5-8,Edge], [17:0-2-12,0-3-0], [19:0-3-8,0-1-8]

| Loading | (psf) | Spacing | 3-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.66 | Vert(LL) | -0.13 | 28-29 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.96 | Vert(CT) | -0.25 | 28-29 | >634 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | NO | WB | 0.77 | Horz(CT) | -0.01 | 11 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MSH | | Attic | 0.08 | 13-27 | >999 | 360 | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 491 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* W5:2x4 SP No.2

**BRACING**
TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals
(Switched from sheeted: Spacing > 2-0-0).
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 4, 6, 9, 1, 30, 31, 32, 14, 25, 16, 23, 18

**REACTIONS** (lb/size) 11=1535/0-3-8, (min. 0-1-8), 19=905/0-3-8, (min. 0-1-8), 29=1411/0-3-8, (min. 0-1-8)
Max Horiz 29=466 (LC 11)
Max Grav 11=1773 (LC 44), 19=2074 (LC 19), 29=1558 (LC 38)

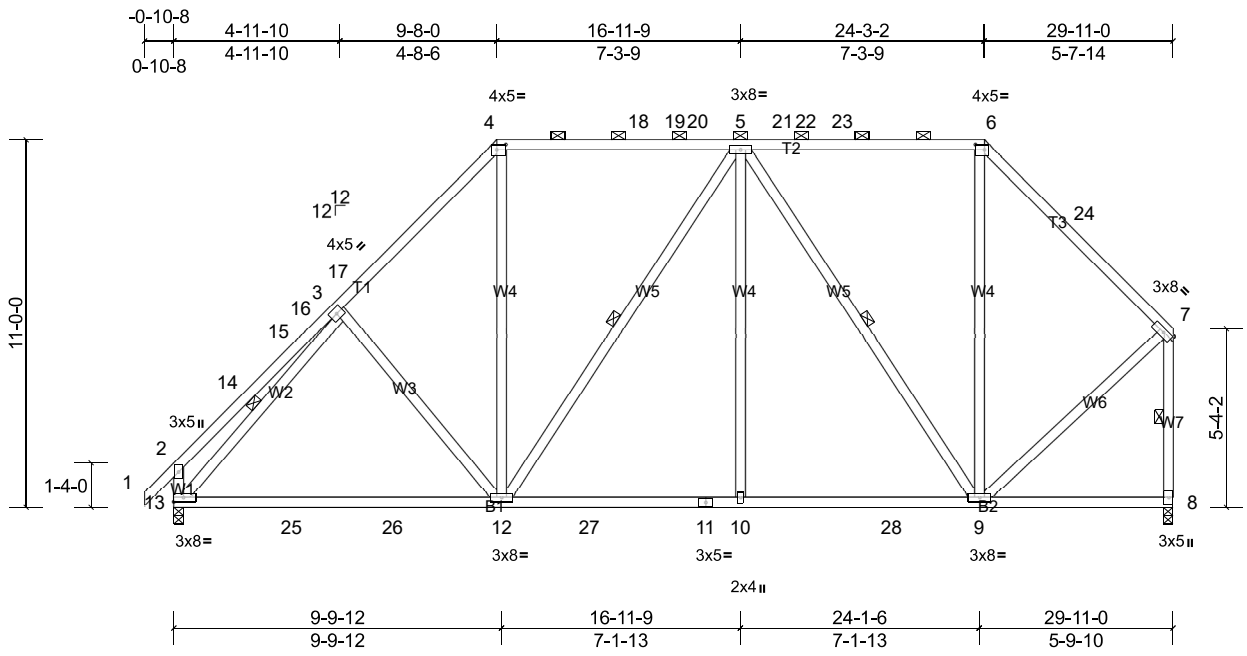
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-33=-1569/0, 33-34=-1324/0, 2-34=-1290/0, 2-3=-1208/202, 3-4=-842/218, 4-35=-626/272, 5-35=-626/272, 5-36=-312/793, 6-36=-312/793, 6-7=-714/370, 7-8=-1317/231, 8-37=-1036/191, 9-37=-1137/174, 1-29=-1416/0, 9-11=-2942/185
BOT CHORD 28-29=-435/713, 26-28=-227/1442, 24-26=0/1411, 22-24=-419/423, 19-22=-2394/326, 17-19=-2203/524, 15-17=-1529/780, 12-15=-1834/703, 11-12=-2354/656, 25-27=-641/0, 23-25=-357/504, 21-23=-277/3359, 20-21=-277/3359, 18-20=-277/3359, 16-18=-635/2808, 14-16=-847/2536, 13-14=-826/3512
WEBS 27-28=-265/128, 2-27=-204/375, 12-13=0/677, 8-13=-706/245, 3-30=-1056/255, 30-32=-1089/406, 31-32=-1089/406, 7-31=-1662/487, 1-28=-118/694, 21-22=0/770, 19-20=-1162/0, 4-30=-85/299, 6-31=-83/445, 5-30=-624/293, 5-31=-956/265, 9-13=-286/2342, 26-27=-35/403, 14-15=-25/381, 25-26=-282/425, 15-16=-251/126, 24-25=-904/144, 16-17=-679/0, 23-24=-20/1227, 17-18=0/626, 22-23=-2383/0, 18-19=-583/151, 12-14=-942/0, 11-13=-799/2695

**NOTES**
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) interior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
6) Unbalanced snow loads have been considered for this design.
7) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
8) Provide adequate drainage to prevent water ponding.
9) All plates are 3x5 MT20 unless otherwise indicated.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * 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.
12) Ceiling dead load (5.0 psf) on member(s). 2-3, 7-8, 3-30, 30-32, 31-32, 7-31; Wall dead load (5.0psf) on member (s).2-27, 8-13
13) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 25-27, 23-25, 21-23, 20-21, 18-20, 16-18, 14-16, 13-14
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
15) Attic room checked for L/360 deflection.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | D1 | Piggyback Base | 3 | 1 | Job Reference (optional) |






Scale = 1:69

Plate Offsets (X, Y): [4:0-3-4,0-1-12], [6:0-3-4,0-1-12], [7:0-3-7,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 | 0.92 | Vert(LL) | -0.29 | 12-13 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.73 | Vert(CT) | -0.49 | 12-13 | >724 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.73 | Horz(CT) | 0.04 | 8 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 226 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2 *Except* T2:2x4 SP No.1
BOT CHORD 2x4 SP No.1 *Except* B2:2x4 SP No.2
WEBS 2x4 SP No.3

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (2-2-0 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-12, 5-9, 3-13, 7-8

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 8=1184/0-3-8, (min. 0-1-11), 13=1247/0-3-8, (min. 0-1-11)
Max Horiz 13=329 (LC 13)
Max Uplift 8=-104 (LC 15), 13=-133 (LC 14)
Max Grav 8=1412 (LC 46), 13=1436 (LC 5)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-14=-500/143, 14-15=-417/145, 15-16=-372/162, 3-16=-371/166, 3-17=-1529/203, 4-17=-1439/241, 4-18=-1081/237, 18-19=-1081/237, 19-20=-1081/237, 5-20=-1081/237, 5-21=-768/225, 21-22=-768/225, 22-23=-768/225, 6-23=-768/225, 6-24=-1024/213, 7-24=-1085/191, 2-13=-482/174, 7-8=-1504/134
BOT CHORD 13-25=-277/1153, 25-26=-277/1153, 12-26=-277/1153, 12-27=-201/1308, 11-27=-201/1308, 10-11=-201/1308, 10-28=-201/1308, 9-28=-201/1308
WEBS 4-12=-38/675, 5-12=-345/172, 5-10=0/388, 5-9=-893/170, 6-9=-38/368, 3-13=-1190/83, 7-9=-100/1002

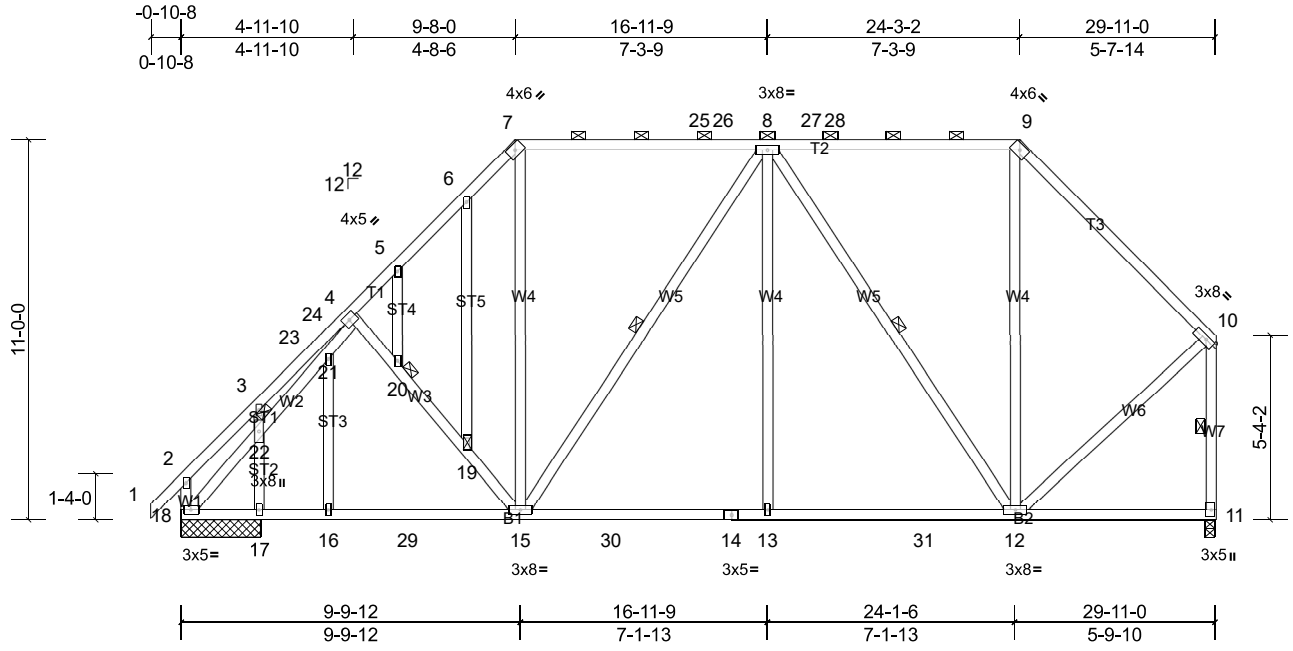
**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 5-5-1, Exterior(2R) 5-5-1 to 13-10-15, Interior (1) 13-10-15 to 20-0-3, Exterior(2R) 20-0-3 to 26-9-4, Exterior(2E) 26-9-4 to 29-9-4 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 13 and 8. This connection is for uplift only and does not consider lateral forces.
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

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | D1SE | Piggyback Base | 1 | 1 | Job Reference (optional) |

Carter Components, Sanford, NC, user — Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Thu Feb 13 14:25:45 — Page: 1

ID:I1W0bn4xNhMqi6Q?faViw9yaiq1-qixI2HM4c53vlyWCssiJ5Q3Pre9fCTxqSQS8OCzlXt4




Scale = 1:66.7

Plate Offsets (X, Y): [10:0-3-7,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 | 0.90 | Vert(LL) | -0.10 | 12-13 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.68 | Vert(CT) | -0.16 | 12-13 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.70 | Horz(CT) | 0.04 | 11 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 252 lb | FT = 20% |

**LUMBER**

TOP CHORD 2x4 SP No.2 *Except* T2:2x4 SP No.1
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2 *Except* W1,W7,W3,W6:2x4 SP No.3
OTHERS 2x4 SP No.3

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (3-9-12 max.): 7-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 10-11, 8-15, 4-18, 8-12
JOINTS 1 Brace at Jt(s): 19, 20

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 11=1151/0-3-8, (min. 0-1-10), 17=463/2-3-8, (min. 0-1-12), 18=818/2-3-8, (min. 0-1-12)
Max Horiz 18=329 (LC 13)
Max Uplift 11=-103 (LC 15), 17=-92 (LC 14), 18=-48 (LC 14)
Max Grav 11=1373 (LC 46), 17=547 (LC 5), 18=933 (LC 47)

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

TOP CHORD 3-23=-257/148, 4-5=-1500/170, 5-6=-1517/209, 6-7=-1463/237, 7-25=-1116/230, 25-26=-1116/230, 8-26=-1116/230, 8-27=-846/204, 27-28=-846/204, 9-28=-846/204, 9-10=-1157/196, 10-11=-1599/125
BOT CHORD 17-18=-251/1075, 16-17=-251/1075, 16-29=-251/1075, 15-29=-251/1075, 15-30=-197/1344, 14-30=-197/1344, 13-14=-197/1344, 13-31=-197/1344, 12-31=-197/1344
WEBS 8-13=0/427, 7-15=-55/610, 8-15=-427/154, 9-12=-34/348, 18-22=-1168/10, 21-22=-1376/0, 4-21=-1337/32, 10-12=-100/1029, 8-12=-914/164, 17-22=-481/103

**NOTES**

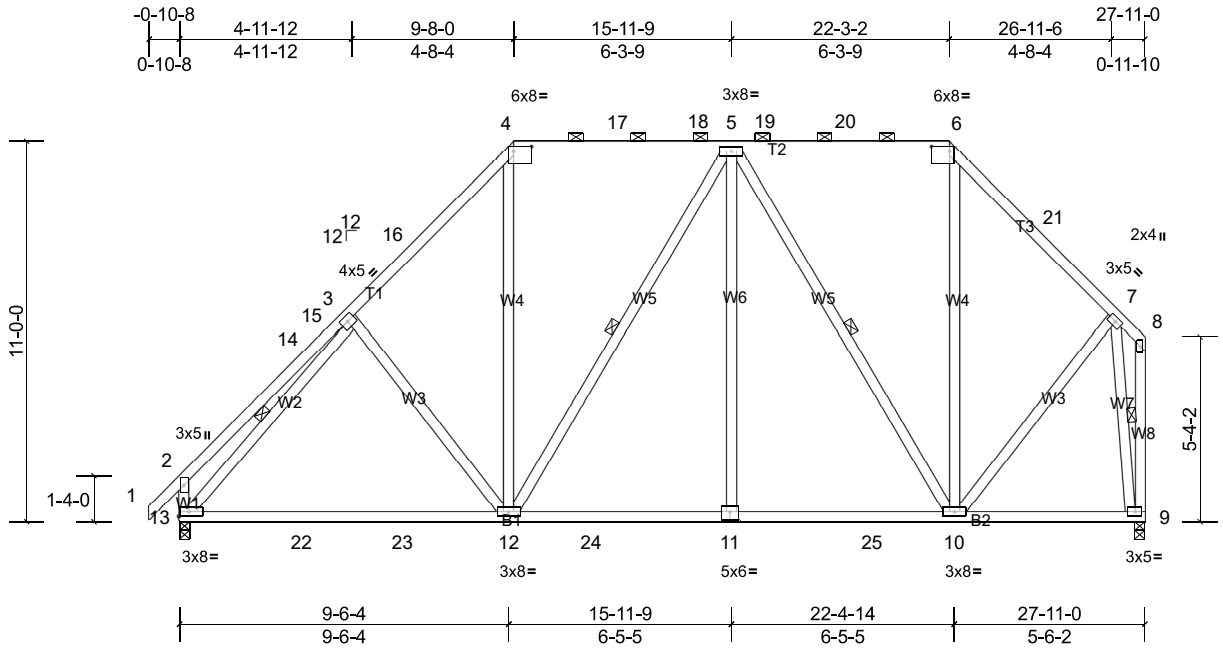
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-3-2, Interior (1) 2-3-2 to 5-5-1, Exterior(2R) 5-5-1 to 13-10-15, Interior (1) 13-10-15 to 20-0-3, Exterior(2R) 20-0-3 to 26-9-4, Exterior(2E) 26-9-4 to 29-9-4 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) 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); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) All plates are 2x4 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) * 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.
12) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 11, 18, and 17. This connection is for uplift only and does not consider lateral forces.
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

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | E1 | Piggyback Base | 2 | 1 | Job Reference (optional) |

Carter Components, Sanford, NC, user — Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Thu Feb 13 14:25:45 — Page: 1

ID:MeOGA53gs466TpGdY9SErkyaiq3-qixI2HM4c53vlyWCssiJ5Q3Pve5cCUUqSQS8OCzlXt4




Scale = 1:66.6

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

| 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 | 0.96 | Vert(LL) | -0.30 | 12-13 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.94 | Vert(CT) | -0.50 | 12-13 | >666 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.60 | Horz(CT) | 0.04 | 9 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 226 lb | FT = 20% |

**LUMBER**

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* W4,W5,W6:2x4 SP No.2

**BRACING**

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 9=1104/0-3-8, (min. 0-1-9), 13=1167/0-3-8, (min. 0-1-10)
Max Horiz 13=329 (LC 13)
Max Uplift 9=-26 (LC 15), 13=-67 (LC 14)
Max Grav 9=1329 (LC 46), 13=1356 (LC 47)

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

TOP CHORD 2-14=-506/137, 14-15=-376/155, 3-15=-376/159, 3-16=-1482/215, 4-16=-1433/241, 4-17=-1036/230, 17-18=-1036/230, 5-18=-1036/230, 5-19=-736/221, 19-20=-736/221, 6-20=-736/221, 6-21=-996/230, 7-21=-1043/209, 2-13=-489/167
BOT CHORD 13-22=-264/1138, 22-23=-264/1138, 12-23=-264/1138, 12-24=-180/1199, 11-24=-180/1199, 11-25=-180/1198, 10-25=-180/1198, 9-10=-62/271
WEBS 3-12=-257/243, 4-12=-48/658, 5-12=-314/165, 5-11=0/337, 5-10=-857/156, 6-10=-41/342, 7-10=-95/814, 3-13=-1143/65, 7-9=-1692/255

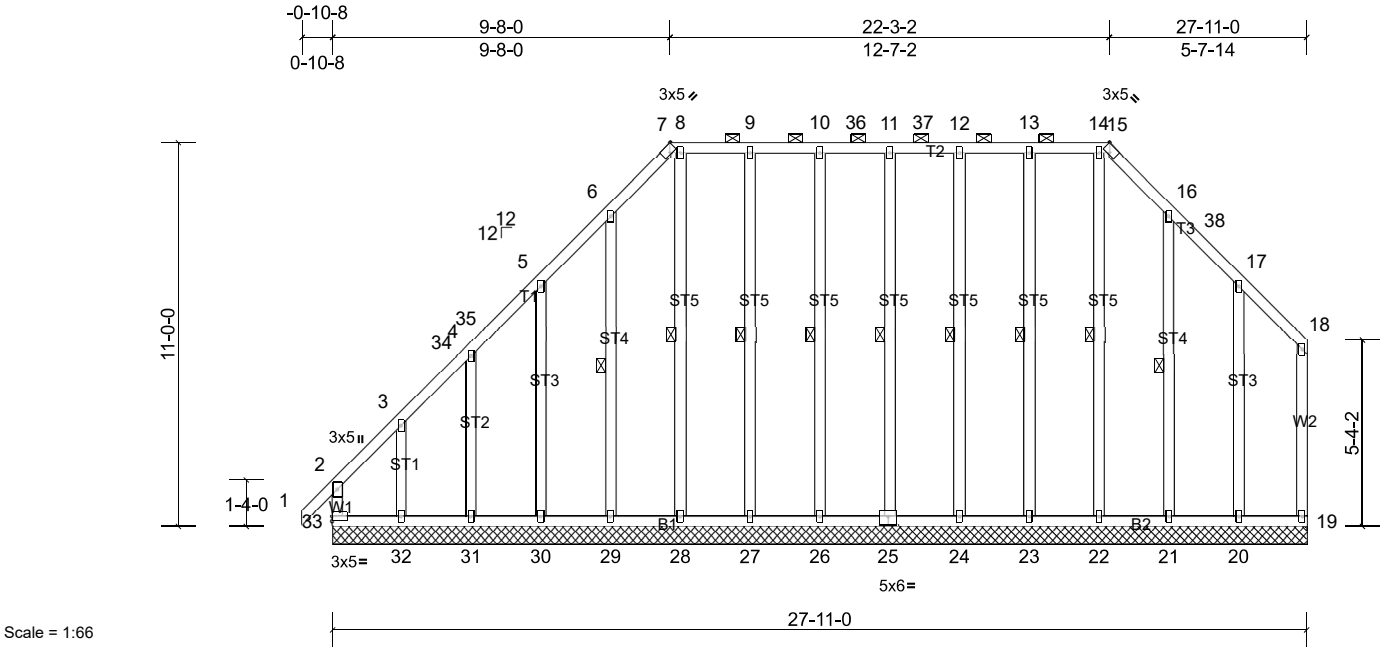
**NOTES**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 6-8-0, Exterior(2R) 6-8-0 to 12-8-0, Interior (1) 12-8-0 to 19-3-2, Exterior(2R) 19-3-2 to 24-9-4, Exterior(2E) 24-9-4 to 27-9-4 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 13 and 9. This connection is for uplift only and does not consider lateral forces.
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

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | E1GE | Piggyback Base Supported Gable | 1 | 1 | Job Reference (optional) |






Scale = 1:66

Plate Offsets (X, Y): [7:0-2-8,Edge], [15:0-2-8,Edge], [25:0-3-0,0-3-0]

| 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 | 0.43 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.24 | Vert(CT) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.22 | Horz(CT) | 0.00 | 19 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MR | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 269 lb | FT = 20% |

**LUMBER**

| | |
|---|---|
| TOP CHORD | 2x4 SP No.2 |
| BOT CHORD | 2x4 SP No.2 |
| WEBS | 2x4 SP No.3 |
| OTHERS | 2x4 SP No.2 *Except* ST4,ST3,ST2,ST1:2x4 SP No.3 |

**BRACING**

| | | |
|---|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-15. | |
| BOT CHORD | Rigid ceiling directly applied or 6-0-0 oc bracing. | |
| WEBS | 1 Row at midpt | 11-25, 10-26, 9-27, 8-28, 6-29, 12-24, 13-23, 14-22, 16-21 |

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** All bearings 27-11-0.

(lb) - Max Horiz 33=329 (LC 13)
Max Uplift All uplift 100 (lb) or less at joint(s) 19, 21, 22, 23, 24, 25, 26, 27, 28, 29, 31 except 20=-109 (LC 15), 30=-117 (LC 14), 32=-287 (LC 11), 33=-306 (LC 10)
Max Grav All reactions 250 (lb) or less at joint (s) 19, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31 except 20=277 (LC 53), 32=336 (LC 12), 33=440 (LC 13)

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

TOP CHORD 2-33=-332/245, 2-3=-406/341, 3-34=-286/233, 4-34=-260/247, 4-35=-273/240, 5-35=-268/254, 5-6=-242/325, 6-7=-204/395, 7-8=-133/314, 8-9=-133/314, 9-10=-133/314, 10-36=-133/314, 11-36=-133/314, 11-37=-133/314, 12-37=-133/314, 12-13=-133/314, 13-14=-133/314, 14-15=-133/314, 15-16=-186/396, 16-38=-137/321, 17-38=-163/316

**NOTES**

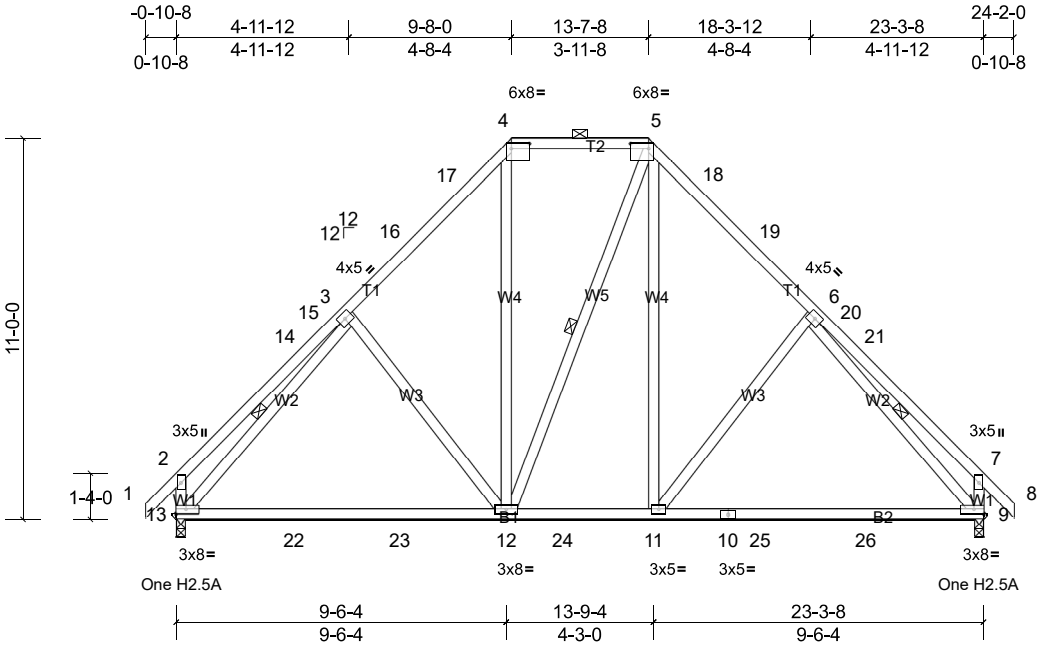
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 1-11-9, Exterior(2N) 1-11-9 to 6-8-0, Corner(3R) 6-8-0 to 12-8-0, Exterior(2N) 12-8-0 to 19-3-2, Corner(3R) 19-3-2 to 24-9-4, Corner (3E) 24-9-4 to 27-9-4 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) 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); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) All plates are 2x4 MT20 unless otherwise indicated.
9) Gable requires continuous bottom chord bearing.
10) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
11) Gable studs spaced at 2-0-0 oc.
12) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
13) * 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.
14) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 33, 19, 25, 26, 27, 28, 29, 30, 31, 32, 24, 23, 22, 21, and 20. This connection is for uplift only and does not consider lateral forces.
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

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | F1 | Piggyback Base | 5 | 1 | Job Reference (optional) |

Carter Components, Sanford, NC, user — Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Thu Feb 13 14:25:46 — Page: 1

ID:fGrKDILkCS7iLV6EyCutpoyaiph-IuVgFdMiNPBmN65OQaDYedbet2QXx_F_h4CixezlXt3




Scale = 1:66.5

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

| 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 | 0.69 | Vert(LL) | -0.33 | 9-11 | >844 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.96 | Vert(CT) | -0.55 | 9-11 | >505 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.44 | Horz(CT) | 0.03 | 9 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 178 lb | FT = 20% |

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

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 9=981/0-3-0, (min. 0-1-8), 13=981/0-3-0, (min. 0-1-8)
Max Horiz 13=-288 (LC 12)
Max Uplift 9=-94 (LC 10), 13=-94 (LC 11)
Max Grav 9=1235 (LC 47), 13=1232 (LC 47)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-14=-435/215, 14-15=-294/233, 3-15=-293/237, 3-16=-1172/414, 16-17=-1020/422, 4-17=-974/440, 4-5=-744/368, 5-18=-977/441, 18-19=-1022/423, 6-19=-1175/415, 6-20=-276/282, 20-21=-277/278, 7-21=-402/260, 2-13=-436/223, 7-9=-413/255
BOT CHORD 13-22=-248/822, 22-23=-248/822, 12-23=-248/822, 12-24=-128/683, 11-24=-128/683, 10-11=-96/821, 10-25=-96/821, 25-26=-96/821, 9-26=-96/821
WEBS 3-12=-287/243, 4-12=-207/431, 5-11=-210/438, 6-11=-284/243, 3-13=-958/145, 6-9=-957/103

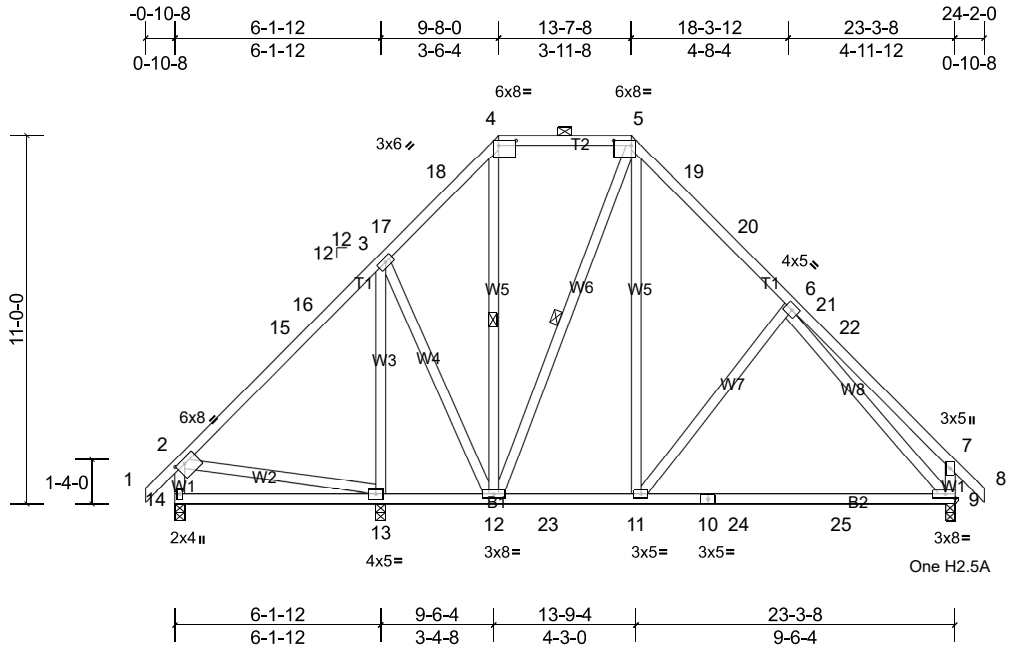
**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 6-8-0, Exterior(2R) 6-8-0 to 16-7-8, Interior (1) 16-7-8 to 21-2-0, Exterior(2E) 21-2-0 to 24-2-0 zone; cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 13 and 9. This connection is for uplift only and does not consider lateral forces.
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

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | F1A | Piggyback Base | 3 | 1 | Job Reference (optional) |

Carter Components, Sanford, NC, user — Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Thu Feb 13 14:25:46 — Page: 1

ID:7SPiQeMMzlFZzfhQVvP6M?yaipg-IuVgFdMiNPBmN65OQaDYedbfp2Rdxt?_h4CixezlXt3







Scale = 1:68.8

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

| 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 | 0.63 | Vert(LL) | -0.30 | 9-11 | >689 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.89 | Vert(CT) | -0.49 | 9-11 | >414 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.84 | Horz(CT) | 0.01 | 9 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 187 lb | FT = 20% |

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

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-12, 5-12

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 9=783/0-3-0, (min. 0-1-8), 13=759/0-3-8, (min. 0-1-8), 14=420/0-3-8, (min. 0-1-8)
Max Horiz 14=-288 (LC 12)
Max Uplift 9=-88 (LC 10), 13=-94 (LC 14), 14=-19 (LC 15)
Max Grav 9=965 (LC 47), 13=999 (LC 47), 14=460 (LC 41)

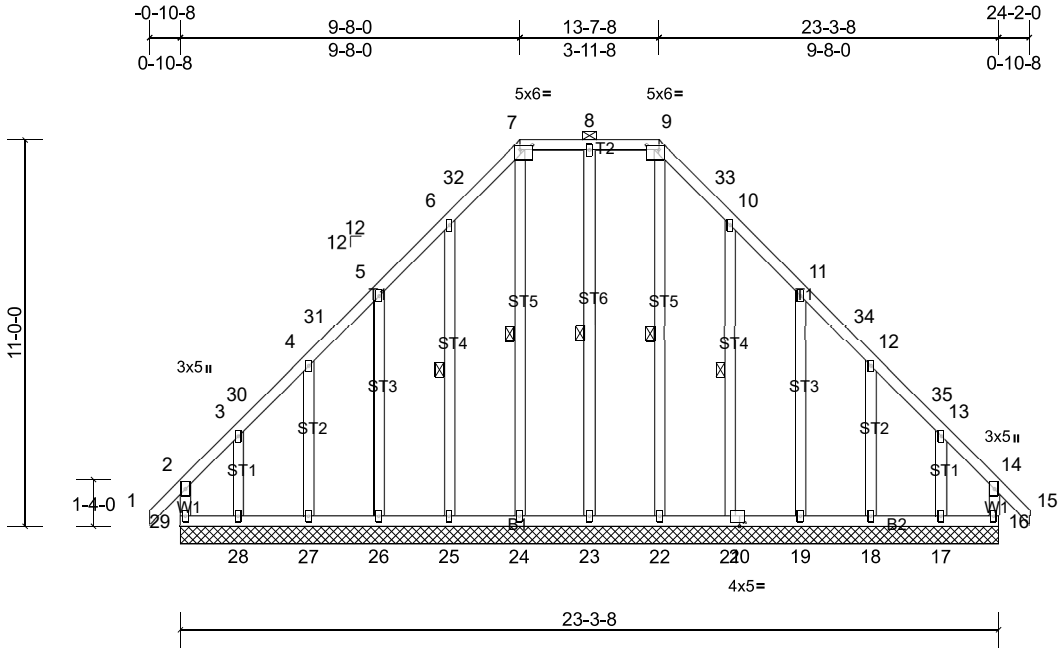
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-15=-352/87, 3-17=-615/290, 17-18=-586/292, 4-18=-482/317, 4-5=-354/257, 5-19=-619/346, 19-20=-665/328, 6-20=-817/320, 6-21=-247/280, 21-22=-247/276, 7-22=-373/258, 2-14=-405/117, 7-9=-391/253
BOT CHORD 13-14=-296/401, 12-13=-157/252, 12-23=-95/472, 11-23=-95/472, 10-11=-48/592, 10-24=-48/592, 24-25=-48/592, 9-25=-48/592
WEBS 3-13=-876/261, 3-12=-99/353, 5-12=-415/132, 5-11=-247/540, 6-11=-319/244, 2-13=-200/259, 6-9=-664/59

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 6-8-0, Exterior(2R) 6-8-0 to 16-7-8, Interior (1) 16-7-8 to 21-2-0, Exterior(2E) 21-2-0 to 24-2-0 zone; cantilever left and right exposed ; end vertical left and right exposed; porch right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14, 13, and 9. This connection is for uplift only and does not consider lateral forces.
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

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | F1GE | Piggyback Base Supported Gable | 1 | 1 | Job Reference (optional) |






Scale = 1:65.6

Plate Offsets (X, Y): [7:0-4-4,0-1-12], [9:0-4-4,0-1-12], [20:0-1-12,0-1-4]

| 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 | 0.26 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.14 | Vert(CT) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.18 | Horz(CT) | 0.00 | 16 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MR | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 199 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3 *Except* ST6,ST5:2x4 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.): 7-9.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 8-23, 7-24, 6-25, 9-22, 10-21

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** All bearings 23-3-8.
(lb) - Max Horiz 29=287 (LC 13)
Max Uplift All uplift 100 (lb) or less at joint(s) 18, 21, 23, 25, 27 except 16=-174 (LC 11), 17=-199 (LC 15), 19=-107 (LC 15), 26=-107 (LC 14), 28=-209 (LC 14), 29=-210 (LC 10)
Max Grav All reactions 250 (lb) or less at joint (s) 16, 17, 18, 19, 22, 24, 26, 27 except 21=255 (LC 41), 23=264 (LC 40), 25=255 (LC 41), 28=267 (LC 12), 29=270 (LC 53)

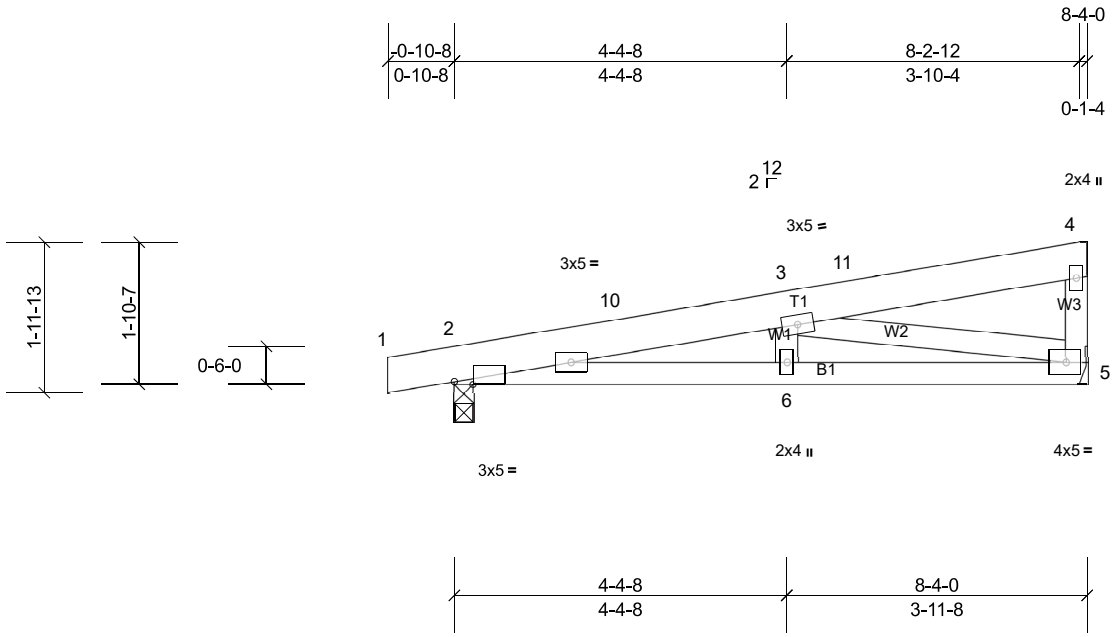
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 5-6=-161/337, 6-32=-212/425, 7-32=-197/437, 7-8=-159/340, 8-9=-159/340, 9-33=-197/437, 10-33=-212/425, 10-11=-161/337

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 6-8-0, Corner(3R) 6-8-0 to 16-7-8, Exterior(2N) 16-7-8 to 21-2-0, Corner(3E) 21-2-0 to 24-2-0 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); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) All plates are 2x4 MT20 unless otherwise indicated.
9) Gable requires continuous bottom chord bearing.
10) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
11) Gable studs spaced at 2-0-0 oc.
12) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
13) * 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.
14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 23, 25, 27, 21, 18 except (jt=lb) 29=210, 16=174, 26=107, 28=208, 19=107, 17=199.
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

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | FP01 | Half Hip | 1 | 1 | Job Reference (optional) |









Scale = 1:30.3

Plate Offsets (X, Y): [2:0-3-0,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 | 0.15 | Vert(LL) | -0.03 | 6-9 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.31 | Vert(CT) | -0.05 | 6-9 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.32 | Horz(CT) | 0.01 | 5 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MP | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 42 lb | FT = 20% |

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

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-9-9 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 2=383/0-3-0, (min. 0-1-8), 5=325/ Mechanical, (min. 0-1-8)
Max Horiz 2=56 (LC 13)
Max Uplift 2=-84 (LC 10), 5=-54 (LC 14)
Max Grav 2=486 (LC 21), 5=408 (LC 21)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-10=-981/358, 3-10=-972/363
BOT CHORD 2-6=-360/959, 5-6=-360/959
WEBS 3-5=-982/397

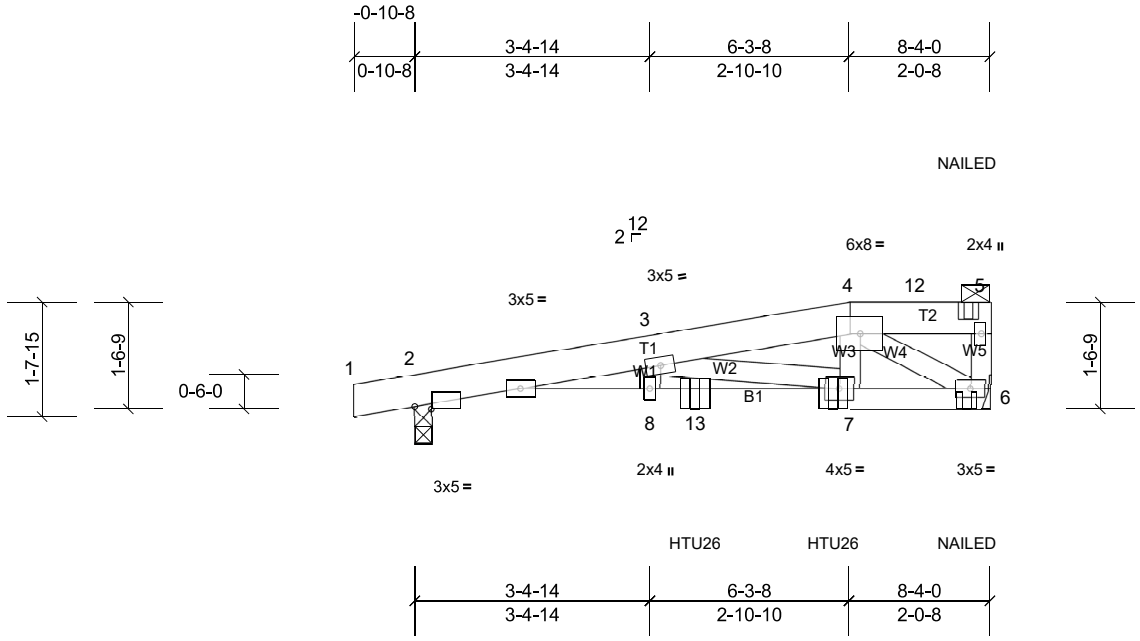
**NOTES**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 5-2-4, Exterior(2E) 5-2-4 to 8-2-4 zone; cantilever left and right exposed ; end 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 54 lb uplift at joint 5.
10) One H2.5A 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.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | FP02 | Half Hip Girder | 1 | 2 | Job Reference (optional) |

Carter Components, Sanford, NC, user — Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Thu Feb 13 14:25:48 — Page: 1

ID:shnsIaiWFWyyRcHPnzToNYzlY8i-EHdQgJOyu0RUdQEnX?G0j2h6CsBkPyEH8Oho?WzlXt1




Scale = 1:33.4

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

| Loading | (psf) | Spacing | 1-11-4 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.19 | Vert(LL) | -0.03 | 7-8 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.59 | Vert(CT) | -0.06 | 7-8 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | NO | WB | 0.15 | Horz(CT) | 0.01 | 6 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MP | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 87 lb | FT = 20% |

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

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

**REACTIONS** (lb/size) 2=700/0-3-0, (min. 0-1-8), 6=1050/ Mechanical, (min. 0-1-8)
Max Horiz 2=43 (LC 11)
Max Uplift 2=-128 (LC 8), 6=-113 (LC 8)
Max Grav 2=770 (LC 34), 6=1058 (LC 34)

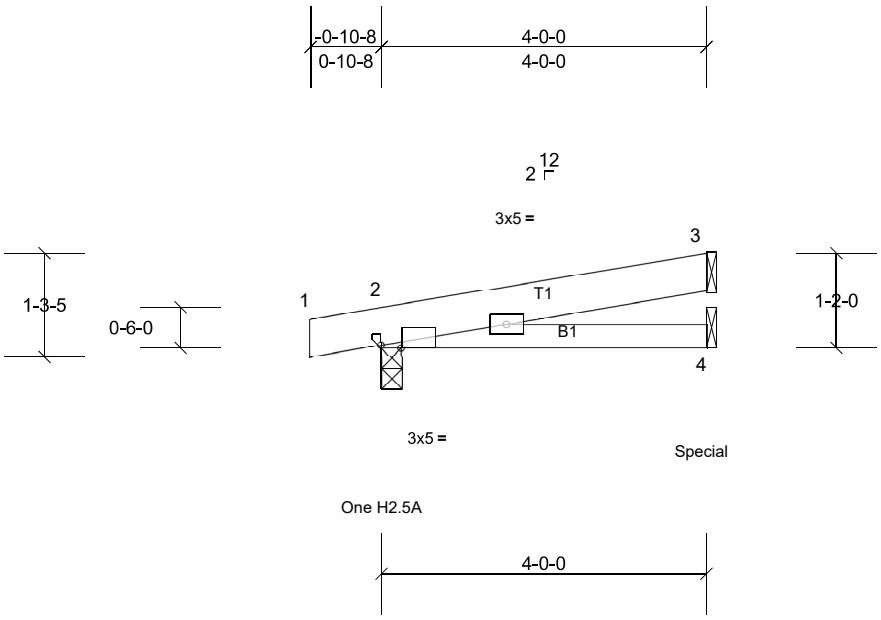
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2295/314, 3-4=-1267/186
BOT CHORD 2-8=-308/2232, 8-13=-308/2232, 7-13=-308/2232, 6-7=-169/1251
WEBS 3-8=-30/488, 3-7=-1009/145, 4-7=-74/734, 4-6=-1471/212

**NOTES**
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x4 - 1 row at 0-7-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc, Except member 4-7 2x4 - 2 rows staggered at 0-3-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
6) Unbalanced snow loads have been considered for this design.
7) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
8) Provide adequate drainage to prevent water ponding.
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) Refer to girder(s) for truss to truss connections.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 113 lb uplift at joint 6.
13) One H2.5A 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.
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 HTU26 (10-10d Girder, 14-10dx1 1/2 Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 4-0-12 from the left end to 6-0-12 to connect truss(es) FP06 (1 ply 2x4 SP), FP07 (1 ply 2x4 SP) to front face of bottom chord.
16) Fill all nail holes where hanger is in contact with lumber.
17) "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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-4=-58, 4-5=-58, 6-9=-19
Concentrated Loads (lb)
Vert: 5=-124 (F), 7=-276 (F), 6=-138 (F), 13=-527 (F)

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | FP03 | Jack-Open | 4 | 1 | Job Reference (optional) |






Scale = 1:28.4

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

| Loading | (psf) | Spacing | 1-11-4 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.13 | Vert(LL) | -0.01 | 4-7 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.09 | Vert(CT) | -0.01 | 4-7 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | 2 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MP | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 18 lb | FT = 20% |

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

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

**REACTIONS** (lb/size) 2=209/0-3-0, (min. 0-1-8), 3=112/ Mechanical, (min. 0-1-8), 4=35/ Mechanical, (min. 0-1-8)
Max Horiz 2=30 (LC 10)
Max Uplift 2=-56 (LC 10), 3=-33 (LC 14)
Max Grav 2=267 (LC 21), 3=145 (LC 21), 4=49 (LC 7)

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

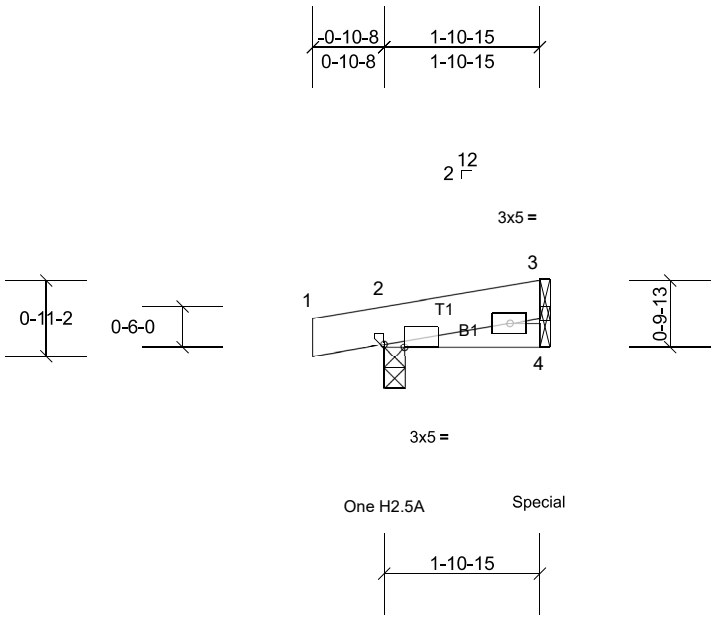
**NOTES**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 33 lb uplift at joint 3.
9) One H2.5A 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.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | FP04 | Jack-Open | 4 | 1 | Job Reference (optional) |

Carter Components, Sanford, NC, user — Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Thu Feb 13 14:25:48 — Page: 1

ID:tu7ZWeZ?oRsUP28gl8KbWQzlYE2-EHdQgJOyu0RUdQEnX?G0j2h8isKgP_bH8Oho?WzlXt1




Scale = 1:28.3

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

| Loading | (psf) | Spacing | 1-11-4 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.03 | Vert(LL) | 0.00 | 5-7 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.02 | Vert(CT) | 0.00 | 5-7 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | 4 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MP | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 10 lb | FT = 20% |

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

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 1-10-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (lb/size) 2=136/0-3-0, (min. 0-1-8), 3=44/ Mechanical, (min. 0-1-8), 4=18/ Mechanical, (min. 0-1-8)
Max Horiz 2=18 (LC 10)
Max Uplift 2=-48 (LC 10), 3=-5 (LC 14), 4=-5 (LC 14)
Max Grav 2=166 (LC 21), 3=52 (LC 21), 4=21 (LC 21)

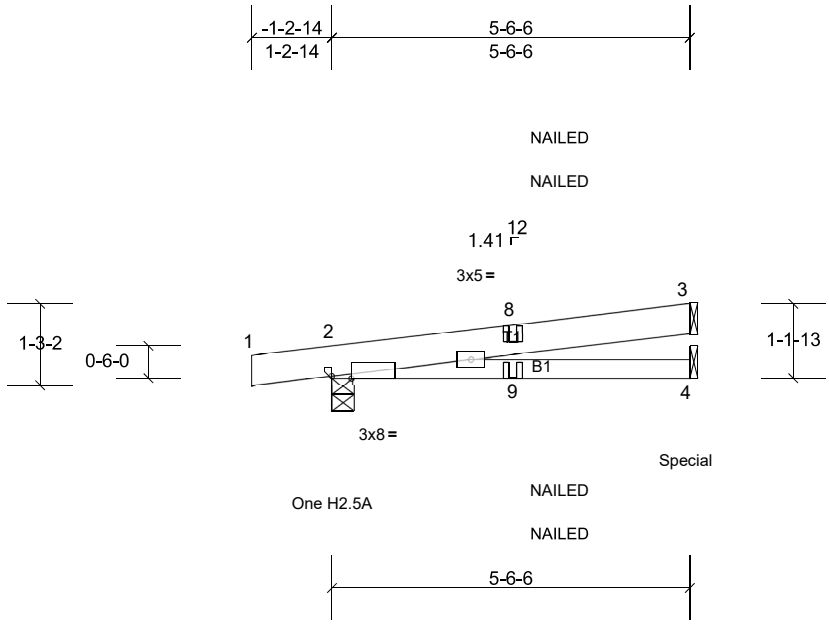
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**NOTES**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; 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
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 5 lb uplift at joint 3 and 5 lb uplift at joint 4.
9) One H2.5A 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.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | FP05 | Diagonal Hip Girder | 2 | 1 | Job Reference (optional) |






Scale = 1:35.6

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

| Loading | (psf) | Spacing | 1-11-4 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.32 | Vert(LL) | -0.03 | 4-7 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.23 | Vert(CT) | -0.05 | 4-7 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | NO | WB | 0.00 | Horz(CT) | 0.00 | 2 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MP | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 24 lb | FT = 20% |

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

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

**REACTIONS** (lb/size) 2=304/0-3-14, (min. 0-1-8), 3=164/ Mechanical, (min. 0-1-8), 4=52/ Mechanical, (min. 0-1-8)
Max Horiz 2=30 (LC 8)
Max Uplift 2=-90 (LC 8), 3=-51 (LC 12)
Max Grav 2=373 (LC 19), 3=203 (LC 19), 4=71 (LC 7)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-292/42

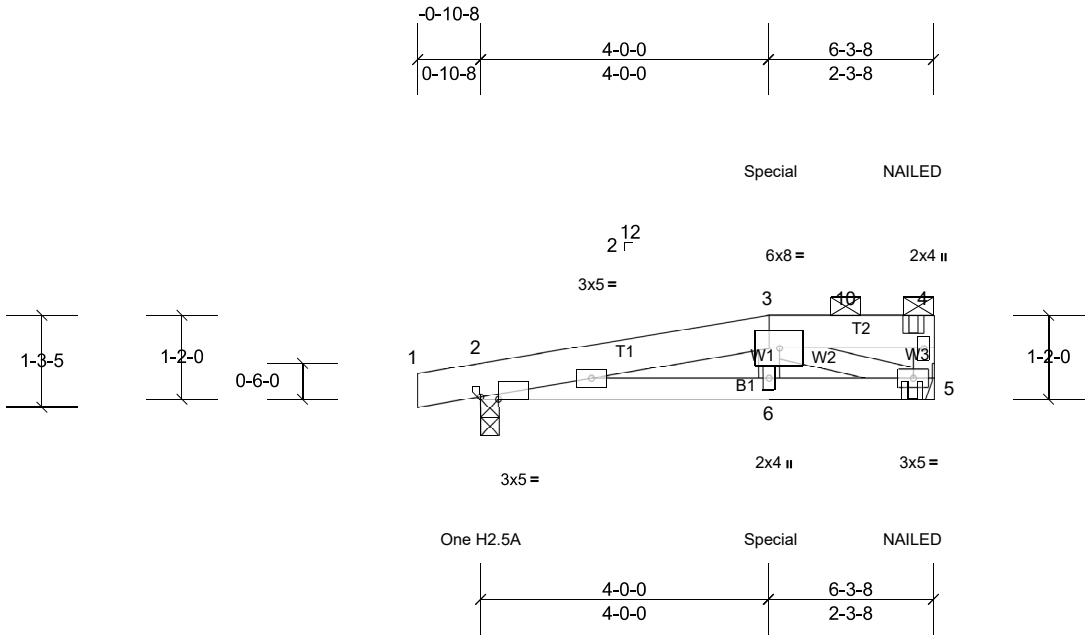
**NOTES**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 51 lb uplift at joint 3.
9) One H2.5A 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.
10) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-58, 4-5=-19
Concentrated Loads (lb)
Vert: 9=-25 (F=-13, B=-13)

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | FP06 | Half Hip Girder | 1 | 1 | Job Reference (optional) |

Carter Components, Sanford, NC, user — Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Thu Feb 13 14:25:49 — Page: 1

ID:Ra2tXxFJz8HCUwyl6hJ7NkzlY9H-jTBotfPafKZLEZpz5inFGGDIvFcX8OjQN2QMXzzlXt0




Scale = 1:32

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

| Loading | (psf) | Spacing | 1-11-4 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.13 | Vert(LL) | -0.02 | 6-9 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.30 | Vert(CT) | -0.03 | 6-9 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | NO | WB | 0.20 | Horz(CT) | 0.01 | 5 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MP | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 30 lb | FT = 20% |

**LUMBER**

TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

**BRACING**

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

**REACTIONS** (lb/size) 2=384/0-3-0, (min. 0-1-8), 5=546/ Mechanical, (min. 0-1-8)
Max Horiz 2=30 (LC 11)
Max Uplift 2=-76 (LC 8), 5=-58 (LC 8)
Max Grav 2=437 (LC 34), 5=546 (LC 1)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-892/86
BOT CHORD 2-6=-77/874, 5-6=-77/874
WEBS 3-5=-931/89

**NOTES**

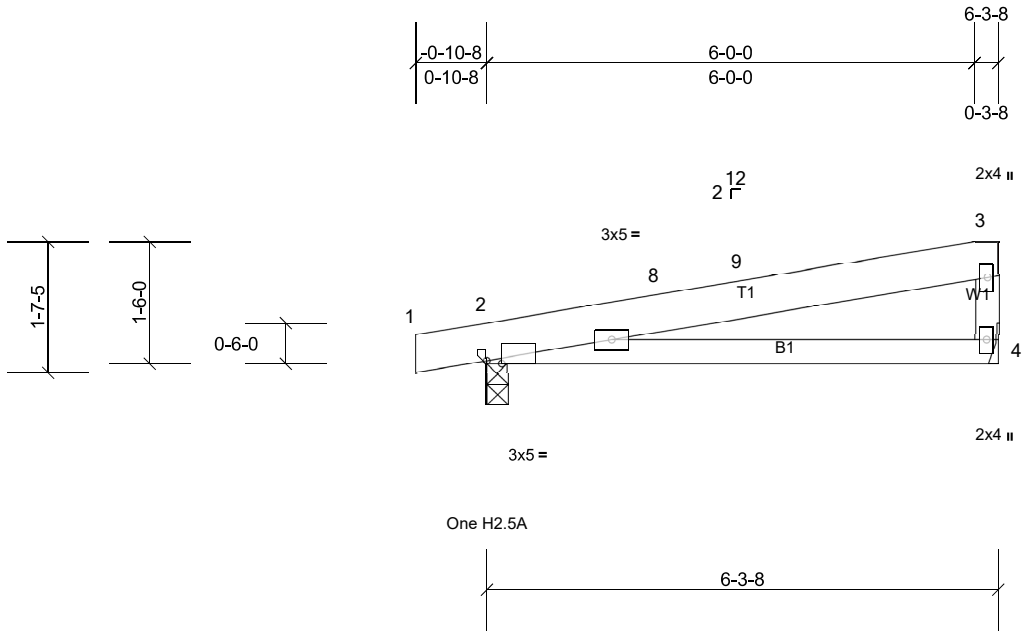
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 58 lb uplift at joint 5.
11) One H2.5A 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.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
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) 234 lb down and 89 lb up at 4-0-0 on top chord, and 51 lb down at 4-0-0 on bottom 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-58, 3-4=-58, 5-7=-19
Concentrated Loads (lb)
Vert: 4=-112 (B), 6=-51 (B), 3=-212 (B), 5=-28 (B)

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | FP07 | Half Hip | 1 | 1 | Job Reference (optional) |









Scale = 1:28.4

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

| Loading | (psf) | Spacing | 1-11-4 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.37 | Vert(LL) | -0.04 | 4-7 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.25 | Vert(CT) | -0.08 | 4-7 | >915 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | 2 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MP | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 28 lb | FT = 20% |

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

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

**REACTIONS** (lb/size) 2=293/0-3-0, (min. 0-1-8), 4=235/Mechanical, (min. 0-1-8)
Max Horiz 2=42 (LC 13)
Max Uplift 2=-69 (LC 10), 4=-39 (LC 14)
Max Grav 2=372 (LC 21), 4=294 (LC 21)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-280/117

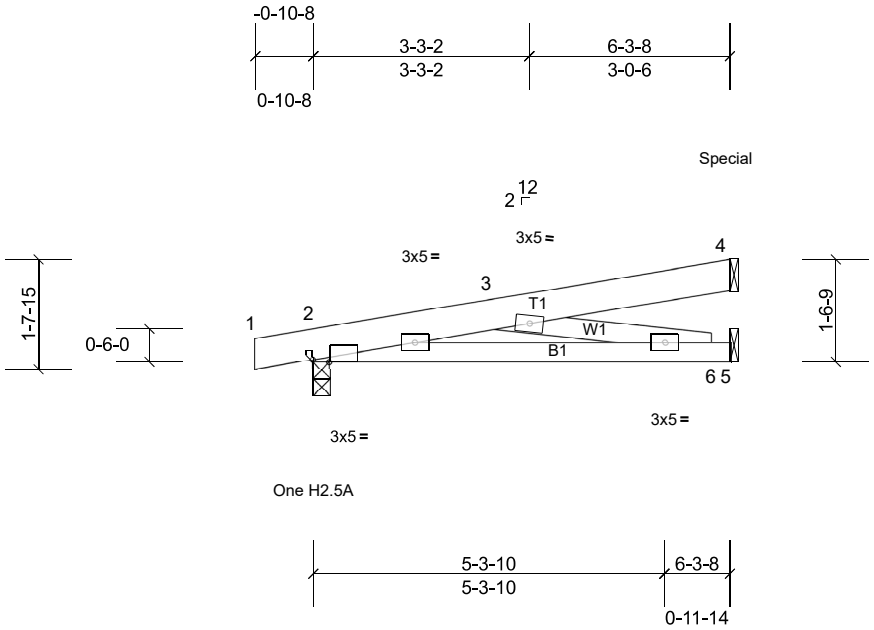
**NOTES**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 3-1-12, Exterior(2E) 3-1-12 to 6-1-12 zone; cantilever left and right exposed ; 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 39 lb uplift at joint 4.
10) One H2.5A 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.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | FP08 | Jack-Partial | 6 | 1 | Job Reference (optional) |

Carter Components, Sanford, NC, user — Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Thu Feb 13 14:25:49 — Page: 1

ID:tu7ZWeZ?oRsUP28gl8KbWQzlYE2-jTBotfPafKZLEZpz5inFGGDHQFcS8PCQN2QMXzzlXt0




Scale = 1:34.8

Plate Offsets (X, Y): [2:0-3-0,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 | 0.16 | Vert(LL) | -0.02 | 6-9 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.31 | Vert(CT) | -0.04 | 6-9 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.17 | Horz(CT) | 0.01 | 5 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MP | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 31 lb | FT = 20% |

**LUMBER**

TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-4-8 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 2=305/0-3-0, (min. 0-1-8), 4=119/Mechanical, (min. 0-1-8), 5=126/Mechanical, (min. 0-1-8)
Max Horiz 2=45 (LC 10)
Max Uplift 2=-70 (LC 10), 4=-46 (LC 14)
Max Grav 2=388 (LC 21), 4=158 (LC 21), 5=150 (LC 21)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-667/346
BOT CHORD 2-6=-391/658
WEBS 3-6=-668/396

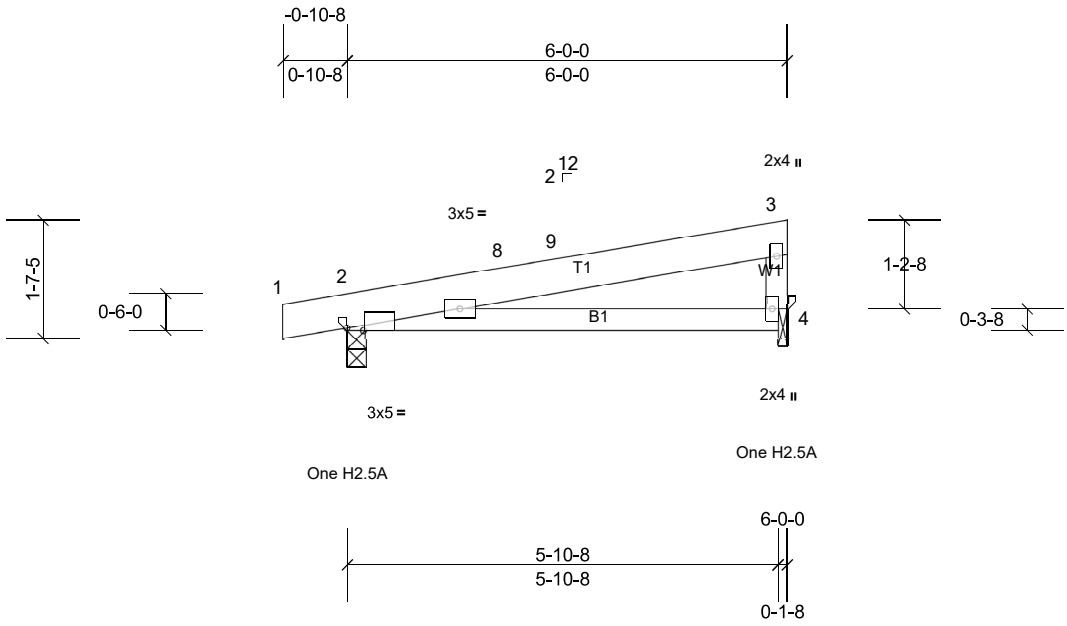
**NOTES**

1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; 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
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 46 lb uplift at joint 4.
9) One H2.5A 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.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | FP09 | Monopitch | 9 | 1 | Job Reference (optional) |






Scale = 1:31.4

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

| Loading | (psf) | Spacing | 1-11-4 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.33 | Vert(LL) | -0.04 | 4-7 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.23 | Vert(CT) | -0.07 | 4-7 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | 2 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MP | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 26 lb | FT = 20% |

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

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

**REACTIONS** (lb/size) 2=282/0-3-0, (min. 0-1-8), 4=223/0-1-8, (min. 0-1-8)
Max Horiz 2=41 (LC 13)
Max Uplift 2=-68 (LC 10), 4=-37 (LC 14)
Max Grav 2=358 (LC 21), 4=280 (LC 21)

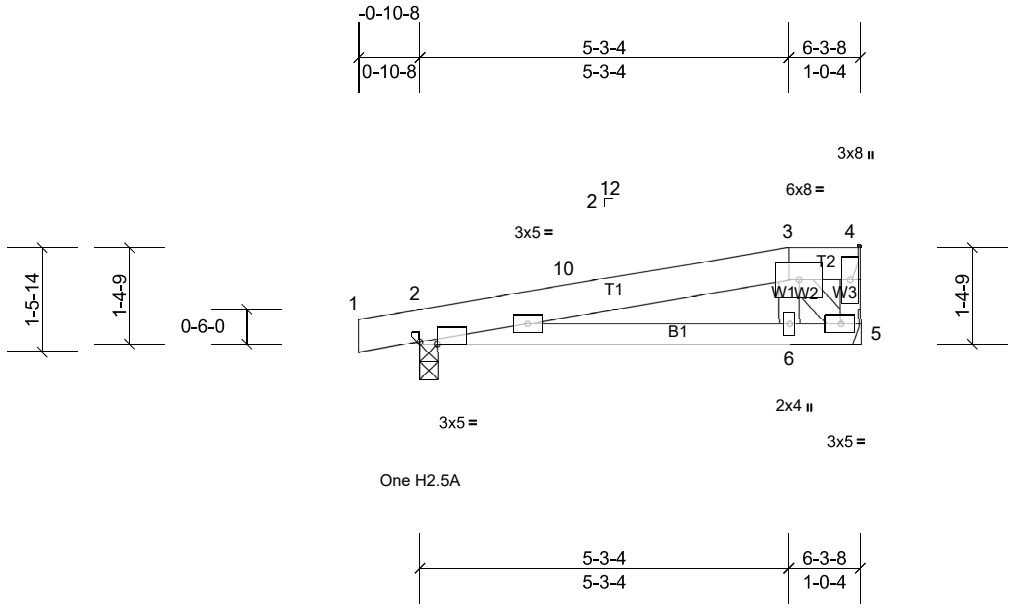
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-262/117

**NOTES**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 2-10-4, Exterior(2E) 2-10-4 to 5-10-4 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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) 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.
8) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
9) One H2.5A 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.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | FP10 | Half Hip | 1 | 1 | Job Reference (optional) |









Scale = 1:32.9

Plate Offsets (X, Y): [2:0-3-0,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 | 0.22 | Vert(LL) | -0.02 | 6-9 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.24 | Vert(CT) | -0.03 | 6-9 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.08 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MP | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 30 lb | FT = 20% |

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

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 2=302/0-3-0, (min. 0-1-8), 4=26/ Mechanical, (min. 0-1-8), 5=216/ Mechanical, (min. 0-1-8)
Max Horiz 2=38 (LC 13)
Max Uplift 2=-72 (LC 10), 4=-11 (LC 10), 5=-27 (LC 10)
Max Grav 2=365 (LC 38), 4=33 (LC 37), 5=241 (LC 38)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-10=-327/117, 3-10=-276/103
BOT CHORD 2-6=-98/300, 5-6=-81/300
WEBS 3-5=-441/152

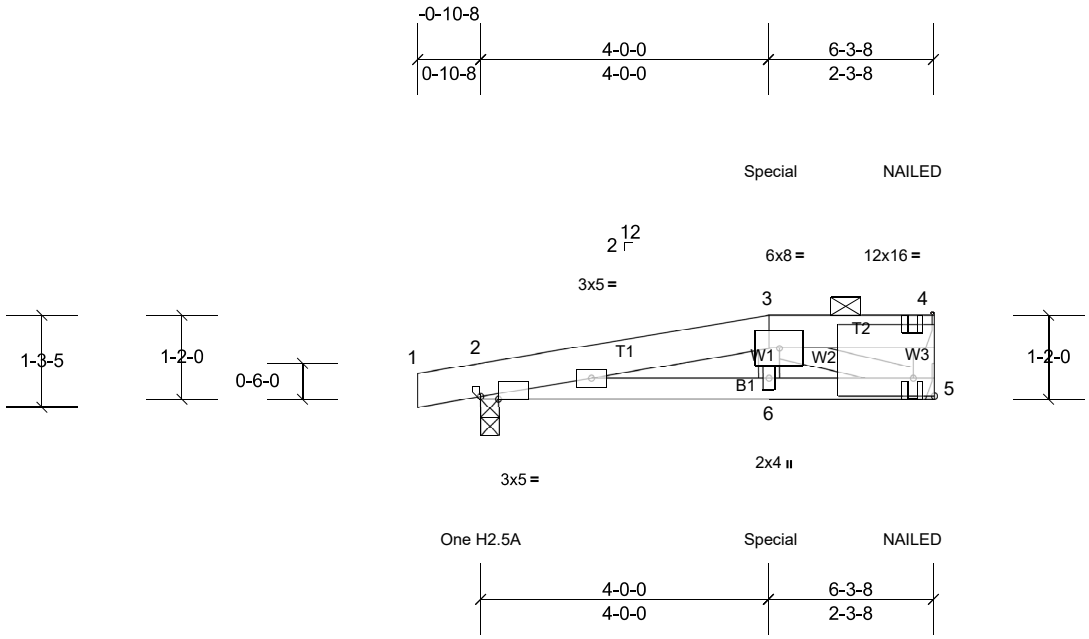
**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 5-3-4, Exterior(2R) 5-3-4 to 6-1-12 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 11 lb uplift at joint 4 and 27 lb uplift at joint 5.
11) One H2.5A 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.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | FP11 | Half Hip Girder | 1 | 1 | Job Reference (optional) |

Carter Components, Sanford, NC, user — Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Thu Feb 13 14:25:50 — Page: 1

ID:lgM4M0cVrgMwtfRR_zPXhGzlYE_-BflB5?QCQdhCsjO9fPIUoTmTffymtrzZciAv4PzlXt?




Scale = 1:32

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

| Loading | (psf) | Spacing | 1-11-4 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.13 | Vert(LL) | -0.02 | 6-9 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.30 | Vert(CT) | -0.03 | 6-9 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | NO | WB | 0.20 | Horz(CT) | 0.01 | 5 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MP | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 30 lb | FT = 20% |

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

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

**REACTIONS** (lb/size) 2=384/0-3-0, (min. 0-1-8), 4=175/ Mechanical, (min. 0-1-8), 5=371/ Mechanical, (min. 0-1-8)
Max Horiz 2=30 (LC 11)
Max Uplift 2=-76 (LC 8), 4=-45 (LC 8), 5=-15 (LC 12)
Max Grav 2=437 (LC 34), 4=183 (LC 33), 5=381 (LC 34)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-892/91
BOT CHORD 2-6=-85/874, 5-6=-85/874
WEBS 3-5=-931/96

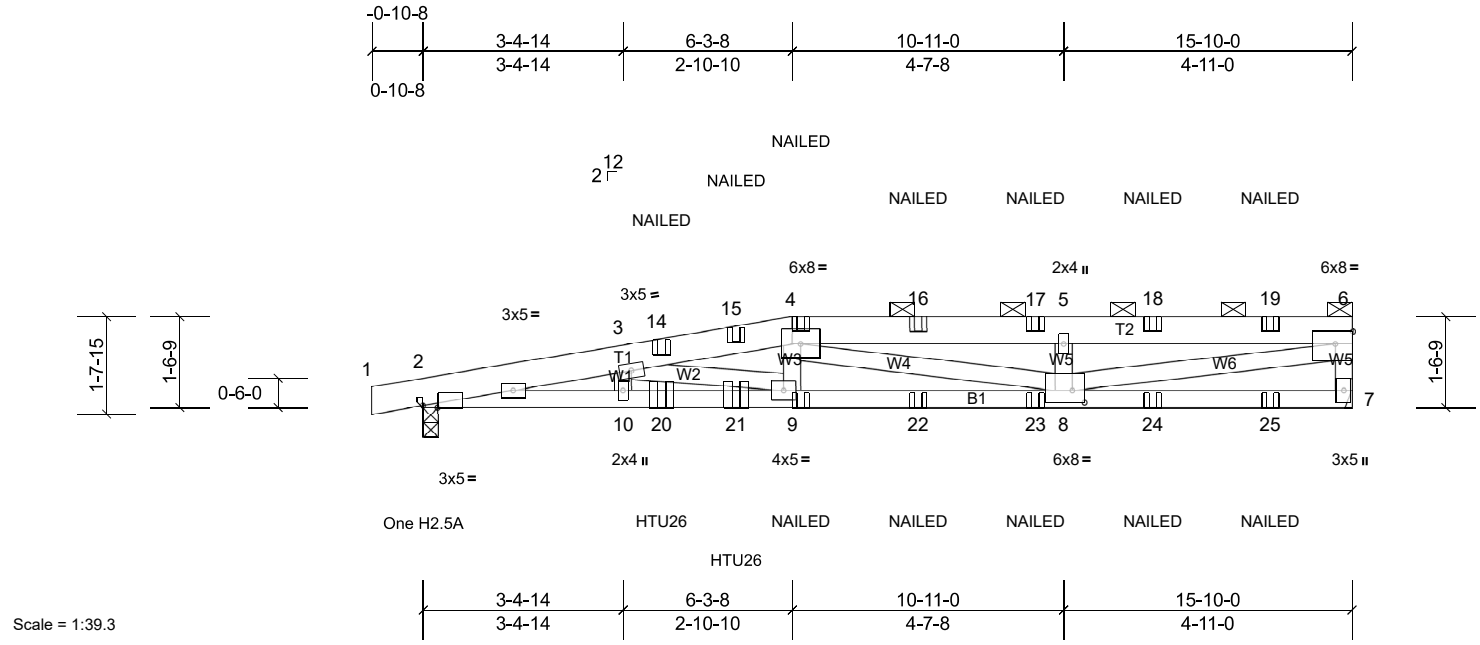
**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 45 lb uplift at joint 4 and 15 lb uplift at joint 5.
11) One H2.5A 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.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
14) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
15) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 234 lb down and 89 lb up at 4-0-0 on top chord, and 51 lb down at 4-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
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: 1-3=-58, 3-4=-58, 5-7=-19
Concentrated Loads (lb)
Vert: 4=-112 (F), 6=-51 (F), 3=-212 (F), 5=-28 (F)

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | FP12 | Half Hip Girder | 1 | 2 | Job Reference (optional) |

Carter Components, Sanford, NC, user — Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Thu Feb 13 14:25:51 — Page: 1

ID:AF2D_1fO8bkVk7A0f6yEluzlYDx-BflB5?QCQdhCsjO9fPlUoTmNBfrbtgZZciAv4PzlXt?




Scale = 1:39.3

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

| Loading | (psf) | Spacing | 1-11-4 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.48 | Vert(LL) | -0.15 | 9-10 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.76 | Vert(CT) | -0.26 | 8-9 | >733 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | NO | WB | 0.93 | Horz(CT) | 0.04 | 7 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 168 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 5-10-12 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (lb/size) 2=1557/0-3-0, (min. 0-1-8), 7=1573/ Mechanical, (min. 0-1-8)
Max Horiz 2=43 (LC 11)
Max Uplift 2=-165 (LC 8), 7=-75 (LC 8)
Max Grav 2=1598 (LC 34), 7=1610 (LC 33)

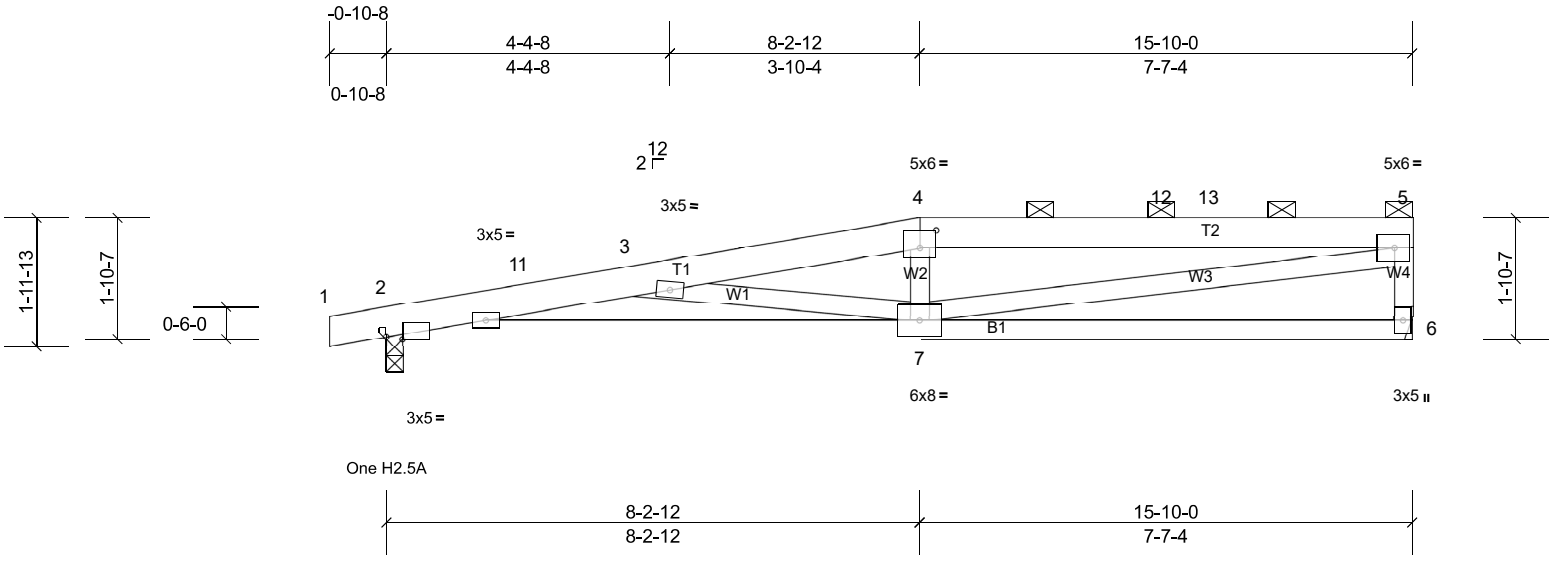
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-5800/477, 3-14=-5797/388, 14-15=-5770/385, 4-15=-5758/389, 4-16=-4689/251, 16-17=-4689/251, 5-17=-4689/251, 5-18=-4689/251, 18-19=-4689/251, 6-19=-4689/251, 6-7=-1406/129
BOT CHORD 2-10=-466/5662, 10-20=-466/5662, 20-21=-466/5662, 9-21=-466/5662, 9-22=-372/5726, 22-23=-372/5726, 8-23=-372/5726, 8-24=-10/326, 24-25=-10/326, 7-25=-10/326
WEBS 3-10=-16/282, 4-9=0/601, 4-8=-1224/175, 5-8=-454/188, 6-8=-242/4493

**NOTES**
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
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) Refer to girder(s) for truss to truss connections.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 75 lb uplift at joint 7.
12) One H2.5A 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.
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 HTU26 (10-10d Girder, 14-10dx1 1/2 Truss, Single Ply Girder) or equivalent spaced at 1-3-4 oc max. starting at 4-0-12 from the left end to 5-4-0 to connect truss(es) FP11 (1 ply 2x4 SP), FP10 (1 ply 2x4 SP) to back face of bottom chord.
15) Fill all nail holes where hanger is in contact with lumber.
16) "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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-4=-58, 4-6=-58, 7-11=-19
Concentrated Loads (lb)
Vert: 9=-130 (B), 4=-100 (B), 14=-126 (B), 16=-100 (B), 17=-100 (B), 18=-100 (B), 19=-100 (B), 20=-363 (B), 21=-222 (B), 22=-130 (B), 23=-130 (B), 24=-130 (B), 25=-130 (B)

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | FP13 | Half Hip | 1 | 1 | Job Reference (optional) |






Scale = 1:35.6

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

| 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 | 0.69 | Vert(LL) | -0.10 | 7-10 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.69 | Vert(CT) | -0.22 | 6-7 | >857 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.68 | Horz(CT) | 0.03 | 6 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 84 lb | FT = 20% |

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

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 4-8-14 oc purlins, except end verticals, and 2-0-0 oc purlins (4-8-13 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 7-0-4 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 2=681/0-3-0, (min. 0-1-8), 6=626/ Mechanical, (min. 0-1-8)
Max Horiz 2=57 (LC 13)
Max Uplift 2=-131 (LC 10), 6=-100 (LC 10)
Max Grav 2=746 (LC 38), 6=659 (LC 37)

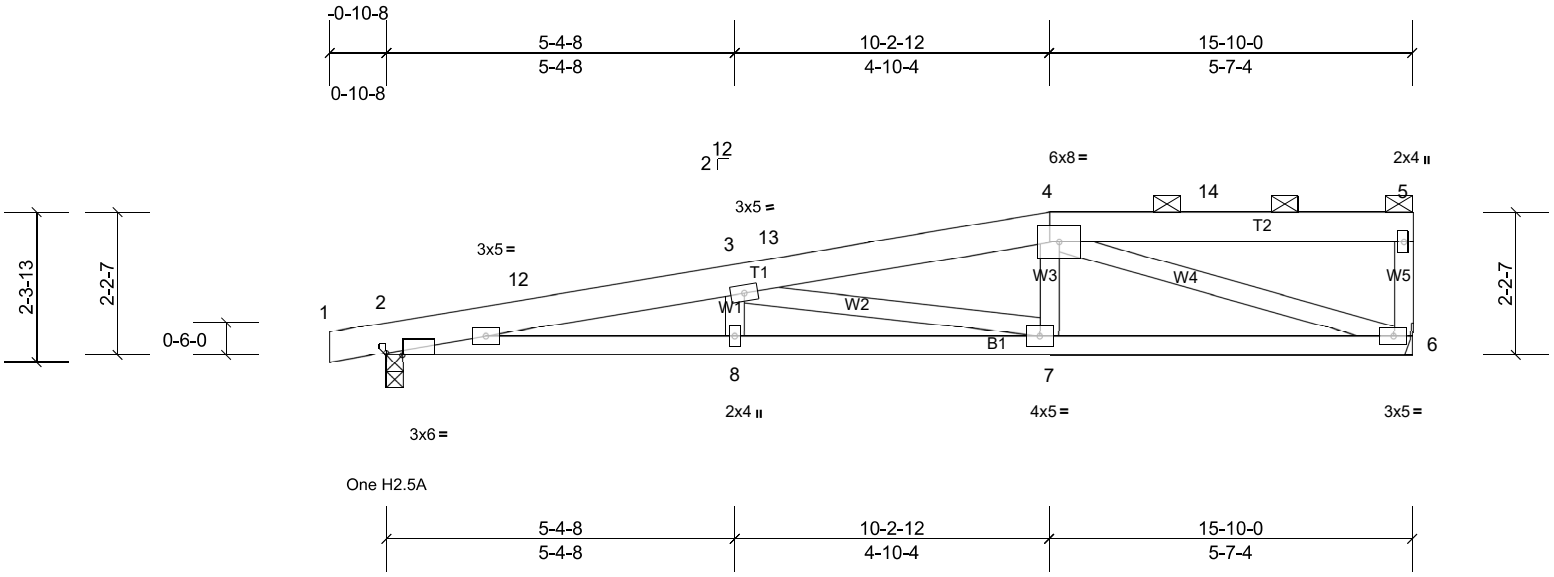
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-11=-2196/714, 3-11=-2181/718, 3-4=-1799/602, 4-12=-1775/615, 12-13=-1775/615, 5-13=-1775/615, 5-6=-589/268
BOT CHORD 2-7=-689/2192
WEBS 3-7=-534/131, 5-7=-549/1674

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 3-9-3, Exterior(2R) 3-9-3 to 12-8-4, Exterior(2E) 12-8-4 to 15-8-4 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint 6.
11) One H2.5A 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.
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

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | FP14 | Half Hip | 1 | 1 | Job Reference (optional) |






Scale = 1:35.6

Plate Offsets (X, Y): [2:0-3-0,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 | 0.30 | Vert(LL) | -0.11 | 7-8 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.66 | Vert(CT) | -0.21 | 7-8 | >886 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.84 | Horz(CT) | 0.05 | 6 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 83 lb | FT = 20% |

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

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 2=681/0-3-0, (min. 0-1-8), 6=626/ Mechanical, (min. 0-1-8)
Max Horiz 2=69 (LC 13)
Max Uplift 2=-131 (LC 10), 6=-100 (LC 10)
Max Grav 2=782 (LC 38), 6=626 (LC 1)

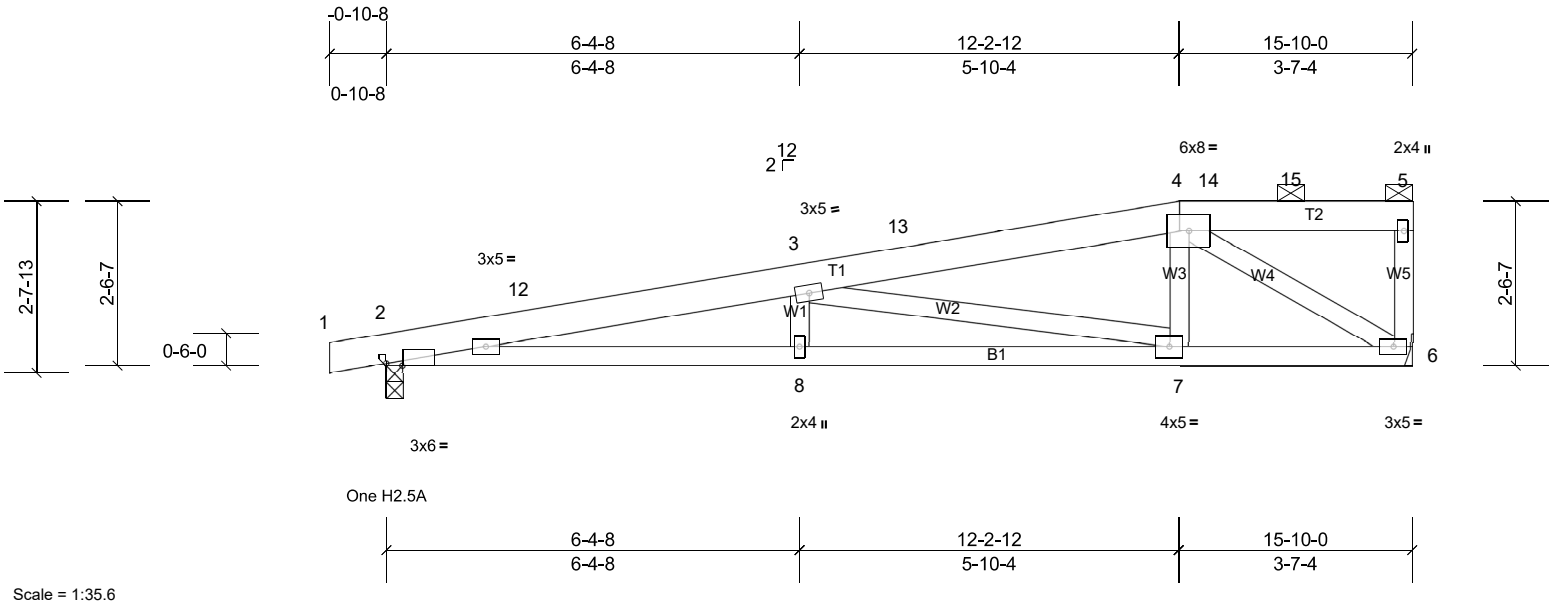
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-12=-2340/607, 3-12=-2321/613, 3-13=-1331/428, 4-13=-1315/436
BOT CHORD 2-8=-586/2303, 7-8=-586/2303, 6-7=-380/1339
WEBS 3-7=-1020/211, 4-7=0/352, 4-6=-1346/419

**NOTES**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 5-11-13, Exterior(2R) 5-11-13 to 12-8-4, Exterior(2E) 12-8-4 to 15-8-4 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint 6.
10) One H2.5A 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.
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

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | FP15 | Half Hip | 1 | 1 | Job Reference (optional) |






Scale = 1:35.6

Plate Offsets (X, Y): [2:0-3-0,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 | 0.31 | Vert(LL) | -0.13 | 8 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.70 | Vert(CT) | -0.23 | 7-8 | >835 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.99 | Horz(CT) | 0.05 | 6 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 83 lb | FT = 20% |

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

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 2=681/0-3-0, (min. 0-1-8), 6=626/Mechanical, (min. 0-1-8)
Max Horiz 2=82 (LC 13)
Max Uplift 2=-130 (LC 10), 6=-101 (LC 10)
Max Grav 2=808 (LC 38), 6=626 (LC 1)

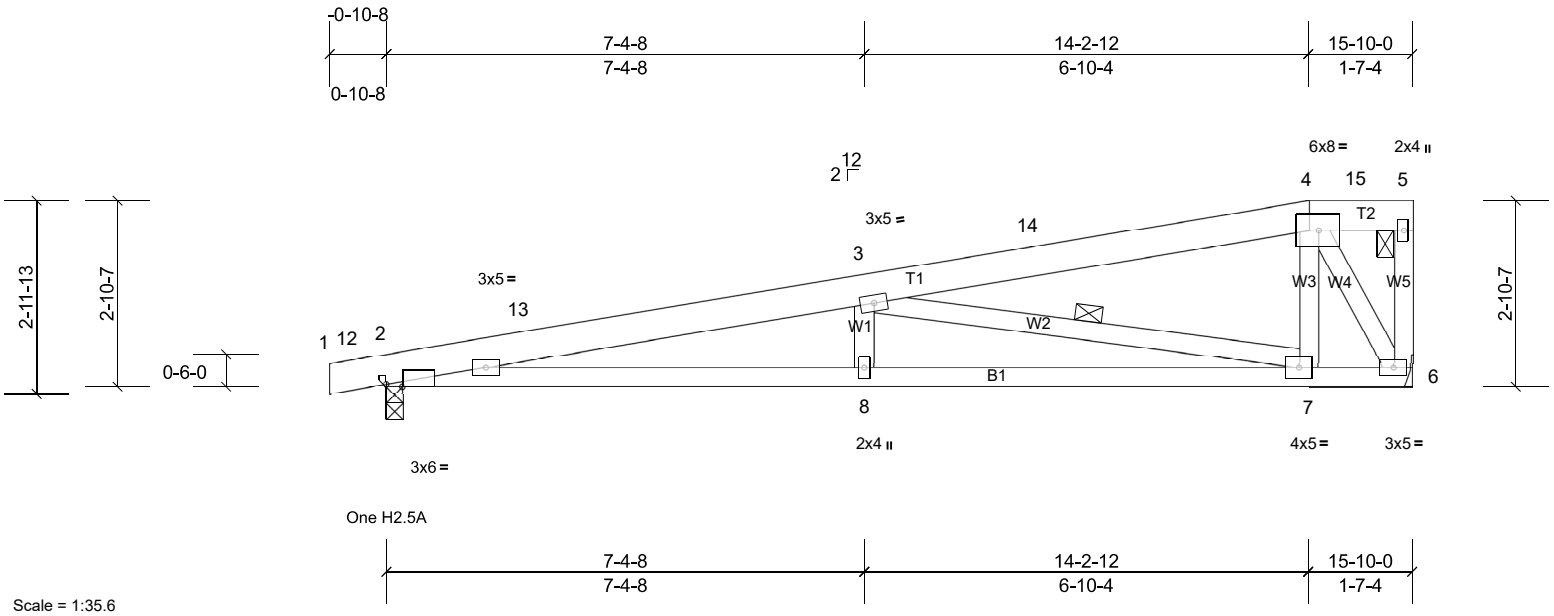
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-12=-2394/519, 3-12=-2374/528, 3-13=-964/274, 4-13=-937/283
BOT CHORD 2-8=-499/2342, 7-8=-499/2342, 6-7=-217/949
WEBS 3-7=-1446/287, 4-7=0/406, 4-6=-1085/297

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 7-11-13, Exterior(2R) 7-11-13 to 12-8-4, Exterior(2E) 12-8-4 to 15-8-4 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 101 lb uplift at joint 6.
11) One H2.5A 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.
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

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | FP16 | Half Hip | 1 | 1 | Job Reference (optional) |






One H2.5A




Scale = 1:35.6

Plate Offsets (X, Y): [2:0-3-0,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 | 0.40 | Vert(LL) | -0.15 | 8-11 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.75 | Vert(CT) | -0.25 | 8-11 | >742 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.56 | Horz(CT) | 0.05 | 6 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 84 lb | FT = 20% |

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

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 2=681/0-3-0, (min. 0-1-8), 6=626/ Mechanical, (min. 0-1-8)
Max Horiz 2=94 (LC 13)
Max Uplift 2=-129 (LC 10), 6=-102 (LC 10)
Max Grav 2=816 (LC 38), 6=693 (LC 38)

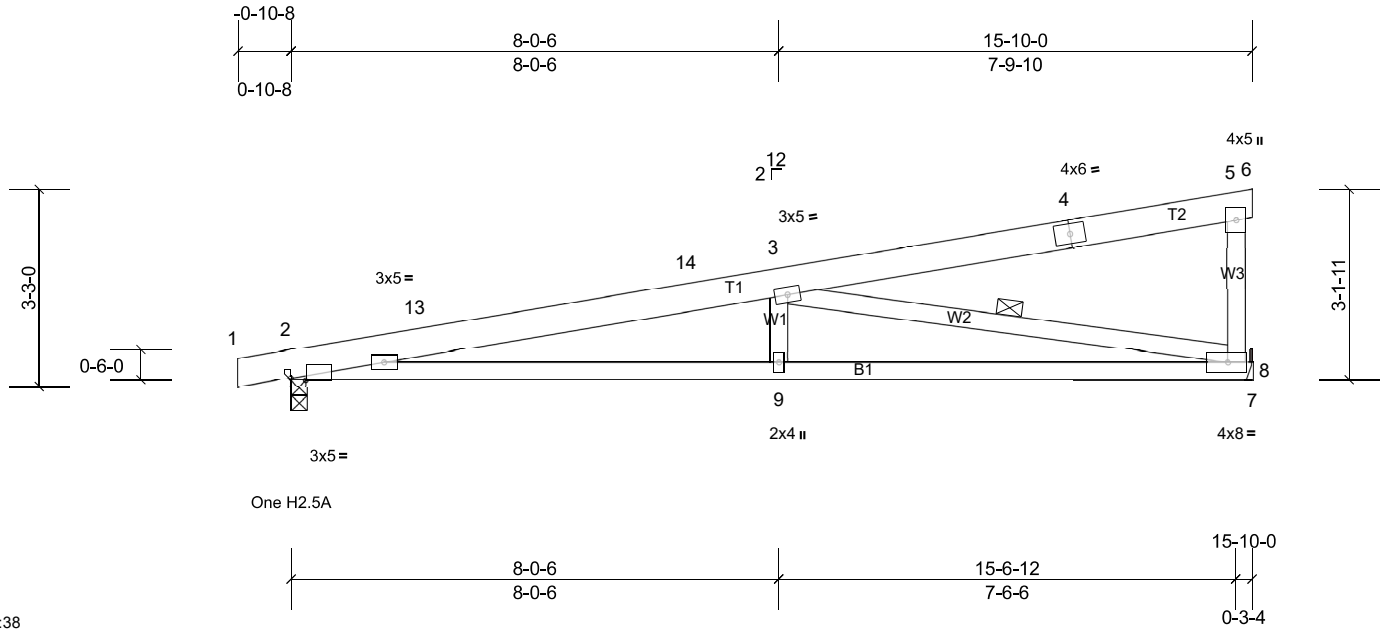
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-13=-2359/433, 3-13=-2338/443, 3-14=-541/132, 4-14=-498/140
BOT CHORD 2-8=-412/2306, 7-8=-412/2306, 6-7=-66/511
WEBS 3-8=0/263, 3-7=-1849/353, 4-7=0/507, 4-6=-968/216

**NOTES**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 9-11-13, Exterior(2R) 9-11-13 to 14-2-12, Exterior(2E) 14-2-12 to 15-8-4 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 102 lb uplift at joint 6.
10) One H2.5A 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.
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

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | FP17 | Monopitch | 1 | 1 | Job Reference (optional) |









Scale = 1:38

Plate Offsets (X, Y): [2:0-3-0,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 | 0.74 | Vert(LL) | -0.14 | 9-12 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.71 | Vert(CT) | -0.26 | 9-12 | >719 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.71 | Horz(CT) | 0.05 | 8 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 79 lb | FT = 20% |

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

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 2=676/0-3-0, (min. 0-1-8), 8=643/ Mechanical, (min. 0-1-8)
Max Horiz 2=103 (LC 13)
Max Uplift 2=-127 (LC 10), 8=-105 (LC 14)
Max Grav 2=729 (LC 21), 8=779 (LC 21)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-13=-2180/354, 13-14=-2179/357, 3-14=-2125/365, 5-8=-297/120
BOT CHORD 2-9=-331/2133, 8-9=-331/2133
WEBS 3-9=0/304, 3-8=-2075/379

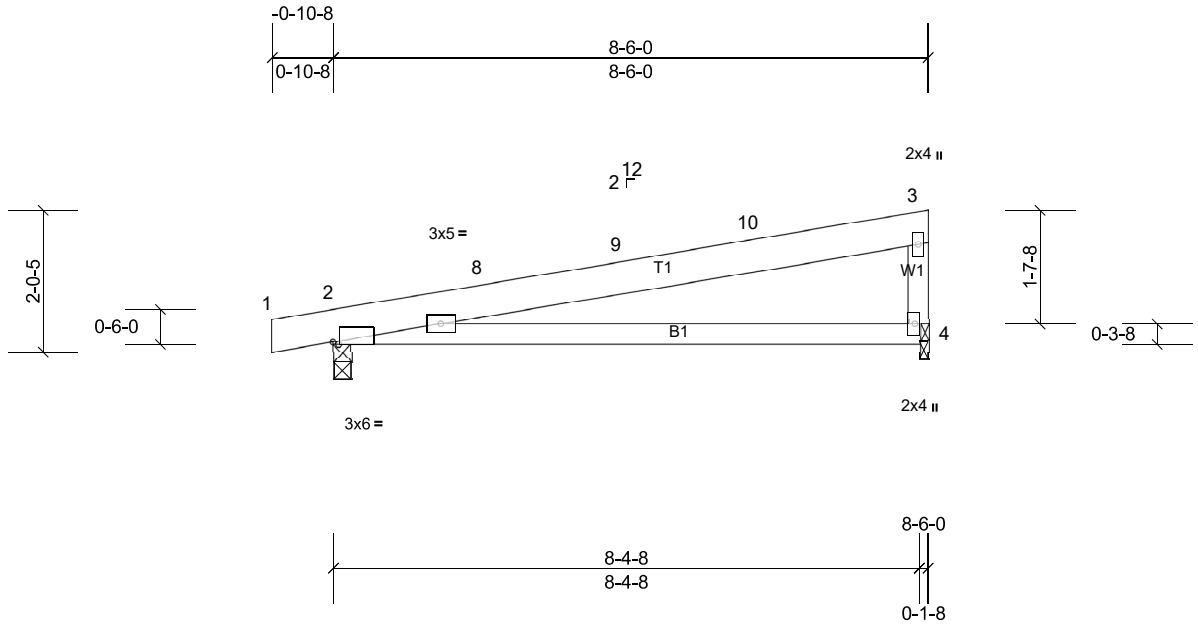
**NOTES**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 12-10-0, Exterior(2E) 12-10-0 to 15-10-0 zone; cantilever left and right exposed ; 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
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 105 lb uplift at joint 8.
9) One H2.5A 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.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | FP18 | Roof Special | 4 | 1 | Job Reference (optional) |

Carter Components, Sanford, NC, user — Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Thu Feb 13 14:25:53 — Page: 1

ID:1J0T9HeGEaq2qcU6wF_JauzlYGX-bEQJj0S5jY4njB7kKYrBQ6Opstv94Er0lgOZgkzlXsy







Scale = 1:32.9

Plate Offsets (X, Y): [2:0-1-0,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 | 0.77 | Vert(LL) | -0.15 | 4-7 | >669 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.51 | Vert(CT) | -0.29 | 4-7 | >341 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.01 | 2 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MP | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 37 lb | FT = 20% |

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

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 2=389/0-3-0, (min. 0-1-8), 4=331/0-1-8, (min. 0-1-8)
Max Horiz 2=57 (LC 13)
Max Uplift 2=-85 (LC 10), 4=-54 (LC 10)
Max Grav 2=494 (LC 21), 4=416 (LC 21)

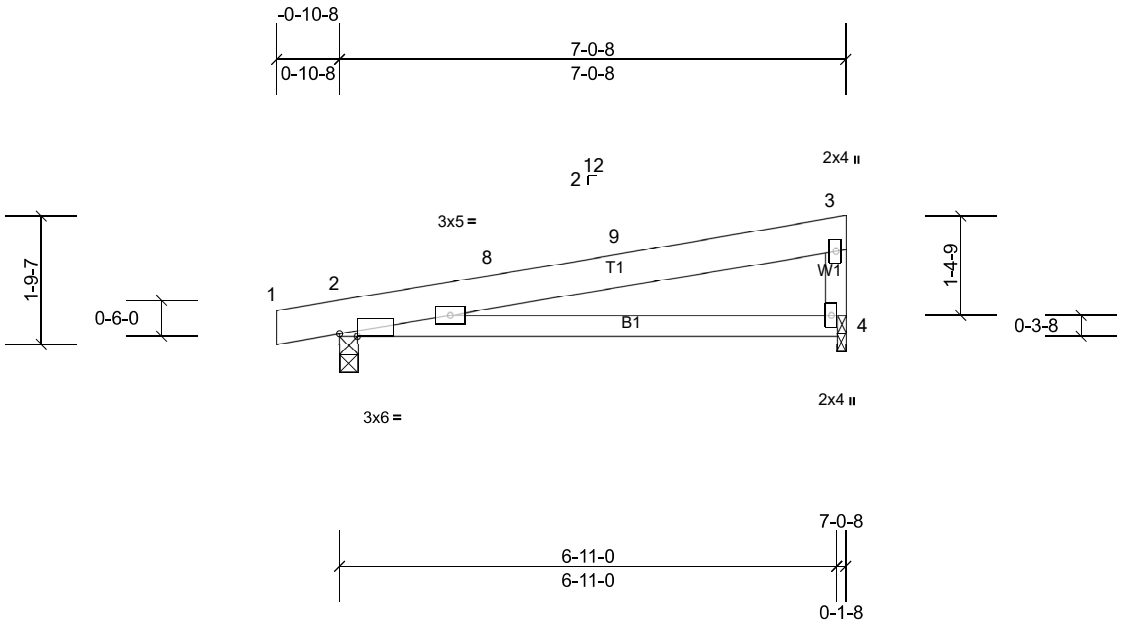
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-426/156, 3-4=-331/188
BOT CHORD 2-4=-139/321

**NOTES**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 4-1-5, Exterior(2R) 4-1-5 to 8-4-4 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
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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) 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.
8) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
9) One H2.5A 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.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | FP19 | Monopitch | 2 | 1 | Job Reference (optional) |









Scale = 1:32.1

Plate Offsets (X, Y): [2:0-3-0,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 | 0.50 | Vert(LL) | -0.07 | 4-7 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.34 | Vert(CT) | -0.13 | 4-7 | >617 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.01 | 2 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MP | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 31 lb | FT = 20% |

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

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 2=332/0-3-0, (min. 0-1-8), 4=273/0-1-8, (min. 0-1-8)
Max Horiz 2=48 (LC 13)
Max Uplift 2=-76 (LC 10), 4=-45 (LC 14)
Max Grav 2=421 (LC 21), 4=342 (LC 21)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-335/139, 3-4=-272/180
BOT CHORD 2-4=-124/251

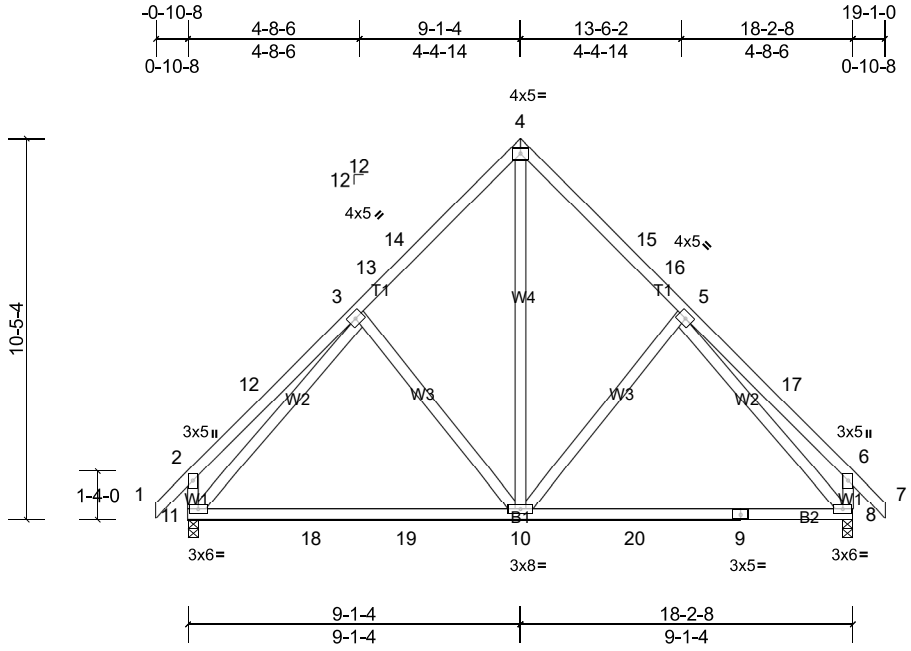
**NOTES**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 3-10-12, Exterior(2E) 3-10-12 to 6-10-12 zone; cantilever left and right exposed ; 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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) 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.
8) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
9) One H2.5A 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.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | G1 | Common | 1 | 1 | Job Reference (optional) |

Carter Components, Sanford, NC, user — Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Thu Feb 13 14:25:53 — Page: 1

ID:7vMsH0y1zJzNuQ4uWmo7_ryaiqC-bEQJj0S5jY4njB7kKYrBQ6Ou3tpn45T0IgOZgkzlXsy




Scale = 1:63.1




| 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 | 0.50 | Vert(LL) | -0.20 | 8-10 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.92 | Vert(CT) | -0.33 | 8-10 | >653 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.60 | Horz(CT) | 0.01 | 8 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 128 lb | FT = 20% |

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

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 8=778/0-3-8, (min. 0-1-8), 11=778/0-3-8, (min. 0-1-8)
Max Horiz 11=273 (LC 13)
Max Uplift 8=-55 (LC 15), 11=-55 (LC 14)
Max Grav 8=895 (LC 6), 11=892 (LC 5)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-12=-399/134, 3-12=-259/155, 3-13=-793/155, 13-14=-737/165, 4-14=-706/190, 4-15=-706/190, 15-16=-737/165, 5-16=-793/155, 6-17=-369/144, 2-11=-405/163, 6-8=-390/171
BOT CHORD 11-18=-94/616, 18-19=-94/616, 10-19=-94/616, 10-20=0/562, 9-20=0/562, 8-9=0/562
WEBS 4-10=-151/725, 3-11=-621/28, 5-8=-621/28

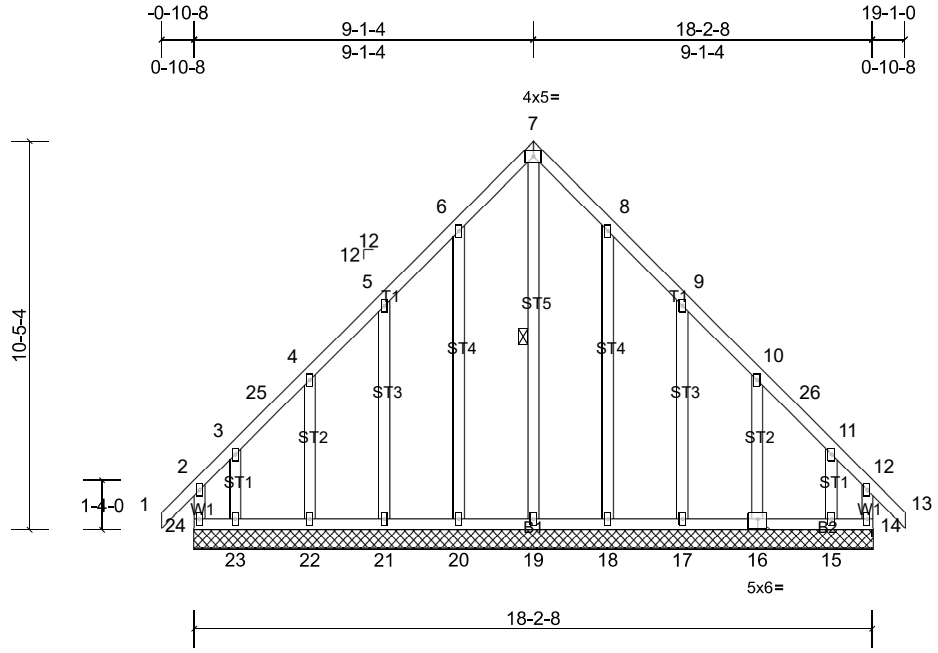
**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 6-1-4, Exterior(2R) 6-1-4 to 12-1-4, Interior (1) 12-1-4 to 16-1-0, Exterior(2E) 16-1-0 to 19-1-0 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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, with BCDL = 10.0psf.
8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 11 and 8. This connection is for uplift only and does not consider lateral forces.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | G1GE | Common Supported Gable | 1 | 1 | Job Reference (optional) |

Carter Components, Sanford, NC, user — Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Thu Feb 13 14:25:54 — Page: 1

ID:7vMsH0y1zJzNuQ4uWmo7_ryaiqC-bEQJj0S5jY4njB7kKYrBQ6Oyzt?z4A90IgOZgkzlXsy




Scale = 1:61.9

Plate Offsets (X, Y): [16:0-3-0,0-3-0]

| 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 | 0.25 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.14 | Vert(CT) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.30 | Horz(CT) | 0.00 | 14 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MR | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 145 lb | FT = 20% |

**LUMBER**

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

**BRACING**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. |
| BOT CHORD | Rigid ceiling directly applied or 6-0-0 oc bracing. |
| WEBS | 1 Row at midpt 7-19 |

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** All bearings 18-2-8.

(lb) - Max Horiz 24=273 (LC 13)

Max Uplift All uplift 100 (lb) or less at joint(s) 16, 18, 20, 22 except 14=-202 (LC 11), 15=-243 (LC 15), 17=-110 (LC 15), 21=-109 (LC 14), 23=-252 (LC 14), 24=-238 (LC 10)

Max Grav All reactions 250 (lb) or less at joint (s) 16, 17, 21, 22 except 14=270 (LC 10), 15=265 (LC 13), 18=282 (LC 22), 19=362 (LC 15), 20=282 (LC 21), 23=289 (LC 12), 24=305 (LC 11)

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

| | |
|---|---|
| TOP CHORD | 5-6=-125/320, 6-7=-177/418, 7-8=-177/418, 8-9=-125/320 |
| WEBS | 7-19=-509/148 |

**NOTES**

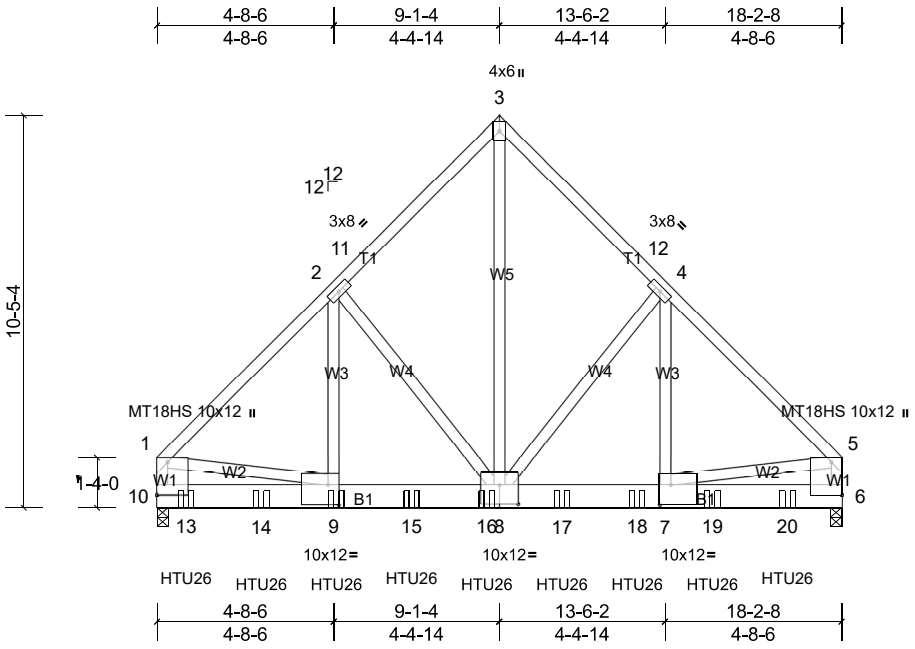
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 6-1-4, Corner(3R) 6-1-4 to 12-1-4, Exterior(2N) 12-1-4 to 16-1-0, Corner(3E) 16-1-0 to 19-1-0 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); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
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) * 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.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 20, 22, 18, 16 except (jt=lb) 24=237, 14=201, 21=109, 23=251, 17=109, 15=242.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | G1GR | Common Girder | 1 | 3 | Job Reference (optional) |

Carter Components, Sanford, NC, user — Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Thu Feb 13 14:25:54 — Page: 1

ID:3NaJ_yoxUpoSHBRLcT2Ypbyaip6-3R_hwMTjUsCeLLiwuFNQzJx?JGKUpV79XJ87CAzlXsx




Scale = 1:61.3

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

| 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 | 0.66 | Vert(LL) | -0.07 | 7-8 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.25 | Vert(CT) | -0.14 | 7-8 | >999 | 180 | MT18HS | 244/190 |
| TCDL | 10.0 | Rep Stress Incr | NO | WB | 0.83 | Horz(CT) | 0.01 | 6 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 477 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except* W5,W1:2x4 SP No.2

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

**REACTIONS** (lb/size) 6=9059/0-3-8, (min. 0-2-13), 10=9724/0-3-8, (min. 0-3-0)
Max Horiz 10=244 (LC 9)
Max Grav 6=10188 (LC 6), 10=10946 (LC 5)

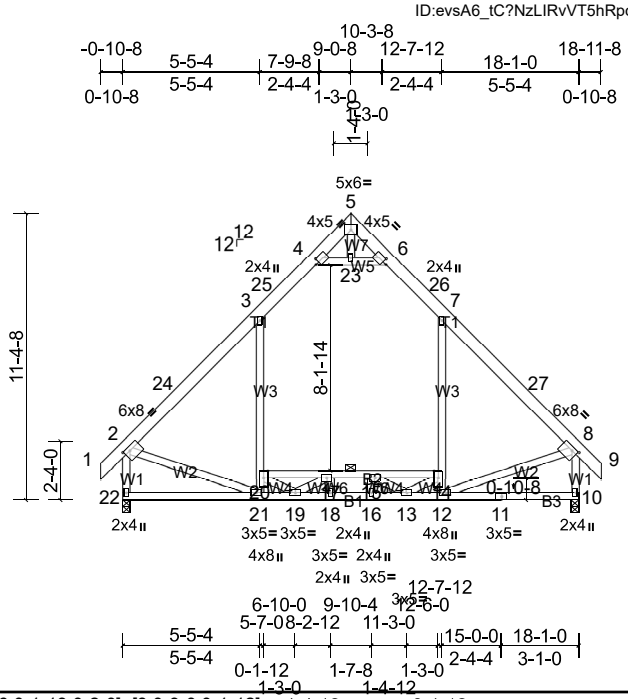
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-9543/0, 2-11=-7074/0, 3-11=-6966/0, 3-12=-6966/0, 4-12=-7074/0, 4-5=-9546/0, 1-10=-8059/0, 5-6=-8064/0
BOT CHORD 10-13=0/991, 13-14=0/991, 9-14=0/991, 9-15=0/6683, 15-16=0/6683, 8-16=0/6683, 8-17=0/6685, 17-18=0/6685, 7-18=0/6685, 7-19=0/840, 19-20=0/840, 6-20=0/840
WEBS 3-8=0/9562, 4-8=-2820/0, 4-7=0/3752, 2-8=-2817/0, 2-9=0/3747, 1-9=0/5971, 5-7=0/5985

**NOTES**
1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 3 rows staggered at 0-5-0 oc.
Web connected as follows: 2x4 - 2 rows staggered at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
6) Unbalanced snow loads have been considered for this design.
7) All plates are MT20 plates unless otherwise indicated.
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) Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss) or equivalent spaced at 2-0-0 oc max. starting at 0-9-4 from the left end to 16-9-4 to connect truss(es) A1 (1 ply 2x6 SP) to back face of bottom chord.
11) Fill all nail holes where hanger is in contact with lumber.

**LOAD CASE(S)** Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-60, 3-5=-60, 6-10=-20
Concentrated Loads (lb)
Vert: 9=-1927, 13=-1931, 14=-1927, 15=-1927, 16=-1927, 17=-1927, 18=-1927, 19=-1927, 20=-1927

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | H1 | Attic | 4 | 1 | Job Reference (optional) |






Scale = 1:91.4

Plate Offsets (X, Y): [2:0-3-0,0-1-12], [4:0-1-13,0-2-0], [6:0-1-13,0-2-0], [8:0-3-0,0-1-12] 1-4-12 0-1-12

| 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 | 0.62 | Vert(LL) | 0.12 | 21-22 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.45 | Vert(CT) | -0.16 | 21-22 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.38 | Horz(CT) | 0.01 | 10 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MSH | | Attic | -0.07 | 14-20 | >999 | 360 | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 162 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* W5:2x4 SP No.2

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 17-20,15-17,14-15.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 10=981/0-3-8, (min. 0-1-8), 22=981/0-3-8, (min. 0-1-8)
Max Horiz 22=302 (LC 13)
Max Grav 10=1134 (LC 6), 22=1134 (LC 5)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-24=-1092/0, 3-24=-955/0, 3-25=-681/76, 4-25=-602/99, 4-5=-66/299, 5-6=-66/295, 6-26=-606/100, 7-26=-685/76, 7-27=-952/0, 8-27=-1086/0, 2-22=-1158/0, 8-10=-1169/0
BOT CHORD 21-22=-286/355, 19-21=-49/781, 18-19=0/1450, 16-18=0/1450, 13-16=0/1450, 12-13=0/679, 17-20=-508/59, 15-17=-900/0, 14-15=-513/66
WEBS 7-14=0/412, 3-20=0/412, 4-23=-1220/188, 6-23=-1220/188, 2-21=0/669, 8-12=0/671, 13-14=0/534, 19-20=0/534, 13-15=-562/60, 17-19=-568/67

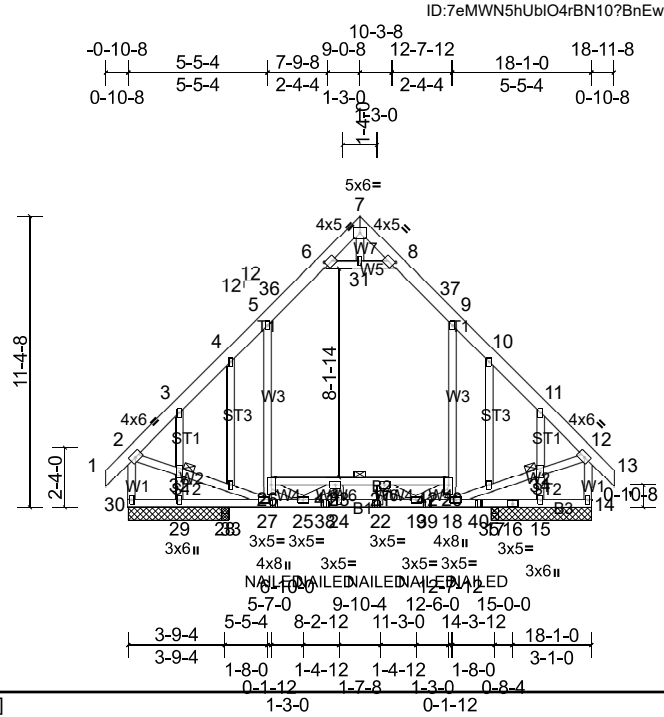
**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 6-0-8, Exterior(2R) 6-0-8 to 12-0-8, Interior (1) 12-0-8 to 15-11-8, Exterior(2E) 15-11-8 to 18-11-8 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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) Ceiling dead load (5.0 psf) on member(s). 3-4, 6-7, 4-23, 6-23; Wall dead load (5.0psf) on member(s).7-14, 3-20
9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 17-20, 15-17, 14-15
10) Attic room checked for L/360 deflection.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | H1GE | Attic Structural Gable | 1 | 1 | Job Reference (optional) |

Carter Components, Sanford, NC, user — Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Thu Feb 13 14:25:55 — Page: 1

ID:7eMWN5hUblO4rBN10?BnEwyKFS2-XdY48iTLFAKUyUH7RzufVXTGggccY1NJlztgkczlXsw




Scale = 1:90

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

| 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 | 0.30 | Vert(LL) | -0.05 | 23-26 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.45 | Vert(CT) | -0.08 | 23-26 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.51 | Horz(CT) | 0.01 | 14 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MSH | | Attic | -0.02 | 20-26 | >999 | 360 | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 187 lb | FT = 20% |

**LUMBER**

| | |
|---|---|
| TOP CHORD | 2x6 SP No.2 |
| BOT CHORD | 2x4 SP No.2 |
| WEBS | 2x4 SP No.3 *Except* W5:2x4 SP No.2 |
| OTHERS | 2x4 SP No.3 |

**BRACING**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. |
| BOT CHORD | Rigid ceiling directly applied or 5-8-8 oc bracing. |
| JOINTS | 1 Brace at Jt(s): 32, 34 |

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** All bearings 3-11-0. except 28=0-3-8, 17=0-3-8

(lb) - Max Horiz 30=302 (LC 13)
Max Uplift All uplift 100 (lb) or less at joint(s) 14, 28, 30 except 15=-191 (LC 15), 17=-118 (LC 15), 29=-197 (LC 14)
Max Grav All reactions 250 (lb) or less at joint (s) except 14=696 (LC 26), 15=426 (LC 27), 17=403 (LC 27), 28=362 (LC 26), 29=436 (LC 26), 30=701 (LC 27)

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

TOP CHORD 2-3=-676/55, 3-4=-820/57, 4-5=-802/85, 5-36=-543/92, 6-36=-476/116, 8-37=-476/114, 9-37=-544/90, 9-10=-799/85, 10-11=-819/57, 11-12=-672/50, 2-30=-673/50, 12-14=-669/45

BOT CHORD 29-30=-291/258, 28-29=-291/258, 27-28=-291/258, 25-27=-54/534, 25-38=0/1600, 24-38=0/1600, 22-24=0/1600, 19-22=0/1600, 19-39=-23/509, 18-39=-23/509, 26-41=-708/58, 23-41=-708/58, 21-23=-1084/0, 21-42=-730/75, 20-42=-730/75

WEBS 18-20=-376/9, 9-20=-86/335, 26-27=-371/1, 5-26=-85/333, 6-31=-727/207, 8-31=-727/207, 2-32=-15/574, 32-33=-8/587, 27-33=-15/571, 18-35=-18/573, 34-35=-11/590, 12-34=-18/576, 3-32=-481/211, 29-32=-564/256, 11-34=-484/212, 15-34=-563/257, 19-20=-70/863, 25-26=-51/841, 19-21=-522/33, 23-25=-547/59

**NOTES**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 1-11-13, Interior (1) 1-11-13 to 6-0-8, Exterior(2R) 6-0-8 to 12-0-8, Interior (1) 12-0-8 to 15-11-8, Exterior(2E) 15-11-8 to 18-11-8 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) 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); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
11) Ceiling dead load (5.0 psf) on member(s). 5-6, 8-9, 6-31, 8-31; Wall dead load (5.0psf) on member(s).9-20, 5-26
12) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 23-26, 21-23, 20-21
13) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 30, 14, 29, and 15. This connection is for uplift only and does not consider lateral forces.
14) H10A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 28 and 17. This connection is for uplift only and does not consider lateral forces.
15) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
16) Attic room checked for L/360 deflection.

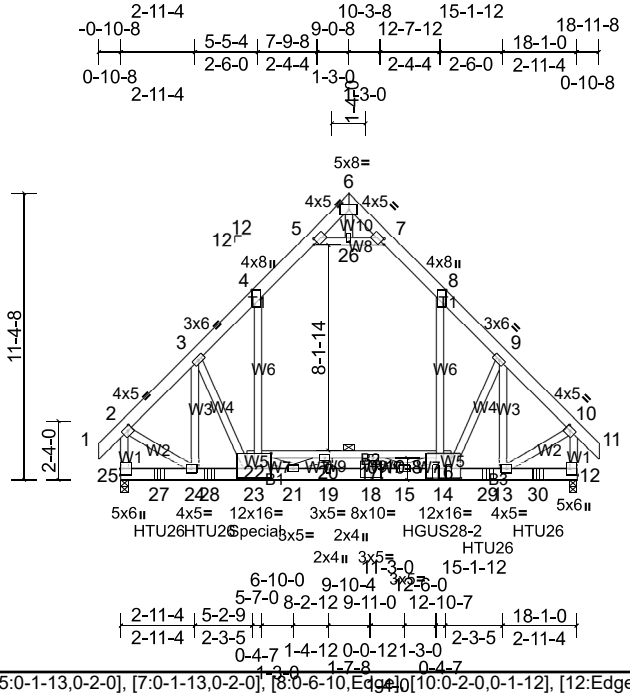
**LOAD CASE(S)** Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 1-2=-60, 2-5=-60, 5-6=-70, 6-7=-60, 7-8=-60, 8-9=-70, 9-12=-60, 12-13=-60, 14-30=-20, 20-26=-30, 6-31=-10, 8-31=-10
   Drag: 9-20=-10, 5-26=-10
   Concentrated Loads (lb)
   Vert: 27=-47, 22=-47, 38=-47, 39=-47, 40=-47

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | H1GR | Attic Girder | 1 | 4 | Job Reference (optional) |

Carter Components, Sanford, NC, user — Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Thu Feb 13 14:25:55 — Page: 1

ID:4fgNsV_bJvd_VurcAofqggyKEuo-XdY48iTLFAKUyUH7RzufVXTADgc8Yx2JlztgkczlXsw




Scale = 1:91.4

Plate Offsets (X, Y): [2:0-2-0,0-1-12], [4:0-6-10,Edge], [5:0-1-13,0-2-0], [7:0-1-13,0-2-0], [8:0-6-10,Edge], [10:0-2-0,0-1-12], [12:Edge,0-3-8], [16:0-4-8,0-4-12], [18:0-5-0,0-4-8], [22:0-8-0,0-4-12]

| 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 | 0.65 | Vert(LL) | -0.10 | 17-20 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.48 | Vert(CT) | -0.16 | 18-19 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | NO | WB | 0.85 | Horz(CT) | 0.02 | 12 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MSH | | Attic | -0.01 | 16-22 | >999 | 360 | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 791 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x6 SP 2400F 2.0E
BOT CHORD 2x6 SP No.2 *Except* B2:2x4 SP No.2
WEBS 2x4 SP No.3 *Except* W6,W8:2x4 SP No.2

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 20-22,17-20,16-17.

**REACTIONS** (lb/size) 12=6488/0-3-8, (min. 0-2-14), 25=6488/0-3-8, (min. 0-2-14)
Max Horiz 25=-299 (LC 10)
Max Grav 12=9795 (LC 6), 25=9795 (LC 5)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-7566/0, 3-4=-8357/0, 4-5=-3509/0, 5-6=0/2318, 6-7=0/2318, 7-8=-3510/0, 8-9=-8358/0, 9-10=-7566/0, 2-25=-8992/0, 10-12=-8992/0
BOT CHORD 25-27=-225/343, 24-27=-225/343, 24-28=0/5559, 23-28=0/5559, 21-23=0/5070, 19-21=0/6379, 18-19=0/6379, 15-18=0/6369, 14-15=0/4999, 14-29=0/5421, 13-29=0/5421, 20-22=-1672/0, 17-20=-1773/0, 16-17=-1684/0
WEBS 14-16=0/5776, 8-16=0/6623, 9-13=-867/284, 22-23=0/5775, 4-22=0/6624, 3-24=-867/280, 5-26=-8206/0, 7-26=-8206/0, 6-26=0/576, 2-24=0/6403, 10-13=0/6403, 15-16=0/1569, 21-22=0/1558, 20-21=-261/241, 3-23=-1398/0, 9-14=-1400/0

**NOTES**

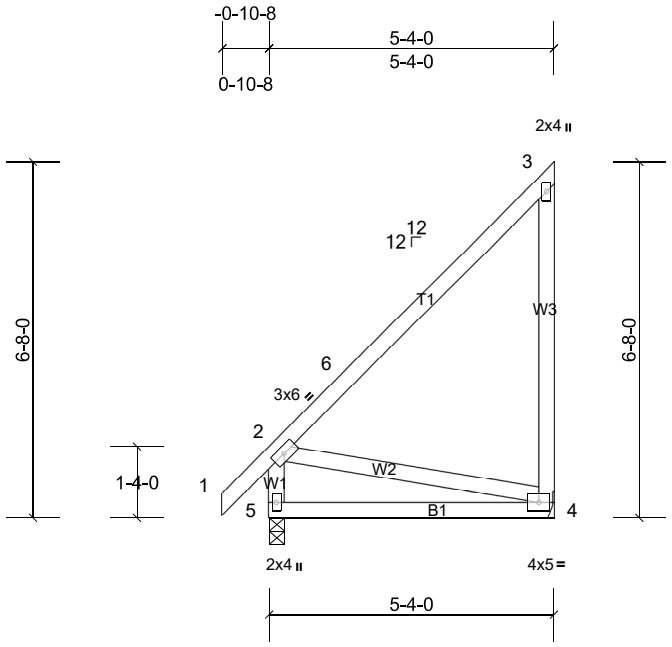
1) 4-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 3 rows staggered at 0-5-0 oc, 2x4 - 1 row at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc, Except member 8-14 2x4 - 2 rows staggered at 0-4-0 oc, Except member 4-23 2x4 - 2 rows staggered at 0-4-0 oc.
Attach BC w/ 1/2" diam. bolts (ASTM A-307) in the center of the member w/washers at 4-0-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
6) Unbalanced snow loads have been considered for this design.
7) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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) Ceiling dead load (5.0 psf) on member(s). 4-5, 7-8, 5-26, 7-26; Wall dead load (5.0psf) on member(s).8-16, 4-22
11) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 20-22, 17-20, 16-17
12) Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss, Single Ply Girder) or equivalent spaced at 11-0-8 oc max. starting at 1-6-4 from the left end to 16-6-12 to connect truss(es) C1 (1 ply 2x4 SP) to back face of bottom chord.
13) Use Simpson Strong-Tie HGUS28-2 (36-10d Girder, 12-10d Truss) or equivalent at 12-9-0 from the left end to connect truss(es) C1GR (4 ply 2x6 SP) to back face of bottom chord.
14) Fill all nail holes where hanger is in contact with lumber.
15) WARNING: The following hangers are manually applied but fail due to geometric considerations: HGUS28-2 on back face at 12-9-0 from the left end.
16) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 5218 lb down at 5-3-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
17) Attic room checked for L/360 deflection.

**LOAD CASE(S)** Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-60, 2-4=-60, 4-5=-70, 5-6=-60, 6-7=-60, 7-8=-70, 8-10=-60, 10-11=-60, 12-25=-20, 16-22=-30, 5-26=-10, 7-26=-10
Drag: 8-16=-10, 4-22=-10
Concentrated Loads (lb)
Vert: 23=-2597, 14=-2597, 27=-1453, 28=-1453, 29=-1453, 30=-1453

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | J4 | Jack-Closed | 3 | 1 | Job Reference (optional) |

Carter Components, Sanford, NC, user — Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Thu Feb 13 14:25:56 — Page: 1

ID:EhACaHJrvXl7U1NfG4KAB9yaipk-?p6SL2Uz0TSLaesJ?gPu2k0IW4?tHatS_ddDG3zlXsv




Scale = 1:43.2

| 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) | -0.04 | 4-5 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.32 | Vert(CT) | -0.08 | 4-5 | >786 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.11 | Horz(CT) | 0.00 | 4 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MP | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 39 lb | FT = 20% |

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

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-8-7 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 4=195/ Mechanical, (min. 0-1-8), 5=269/0-3-8, (min. 0-1-8)
Max Horiz 5=203 (LC 14)
Max Uplift 4=-166 (LC 14)
Max Grav 4=314 (LC 21), 5=340 (LC 21)

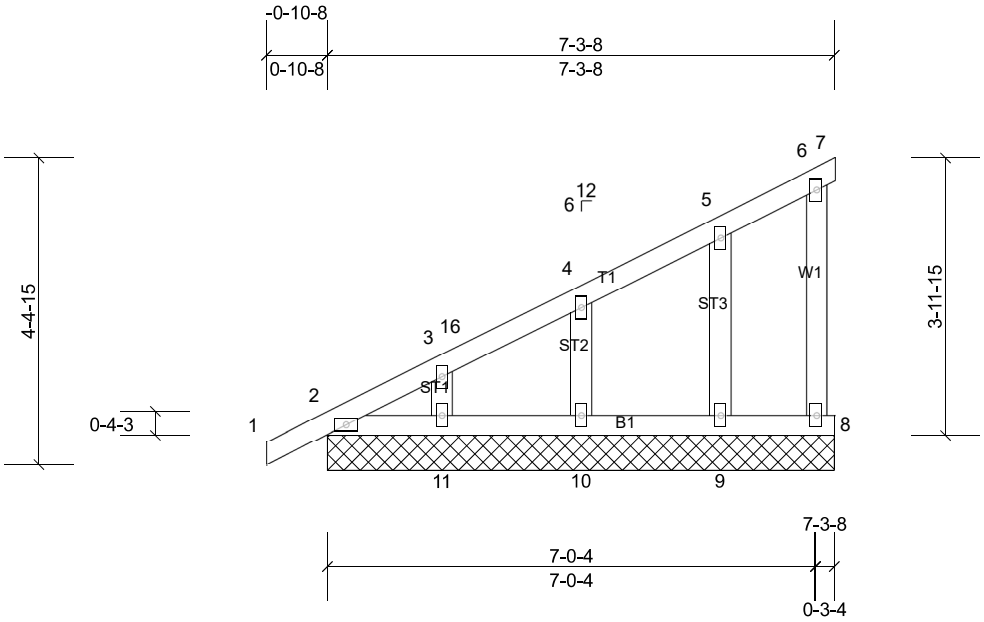
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-290/0, 3-4=-264/248
BOT CHORD 4-5=-357/122
WEBS 2-4=-125/366

**NOTES**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 166 lb uplift at joint 4.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | K1GE | Monopitch Supported Gable | 1 | 1 | Job Reference (optional) |






Scale = 1:33.1

| 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 | 0.08 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.03 | Vert(CT) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.05 | Horz(CT) | 0.00 | 7 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MP | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 37 lb | FT = 20% |

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

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

**REACTIONS** All bearings 7-3-8.
(lb) - Max Horiz 2=147 (LC 14), 12=147 (LC 14)
Max Uplift All uplift 100 (lb) or less at joint(s) 7, 8, 9, 10, 11
Max Grav All reactions 250 (lb) or less at joint (s) 2, 7, 8, 9, 10, 11, 12

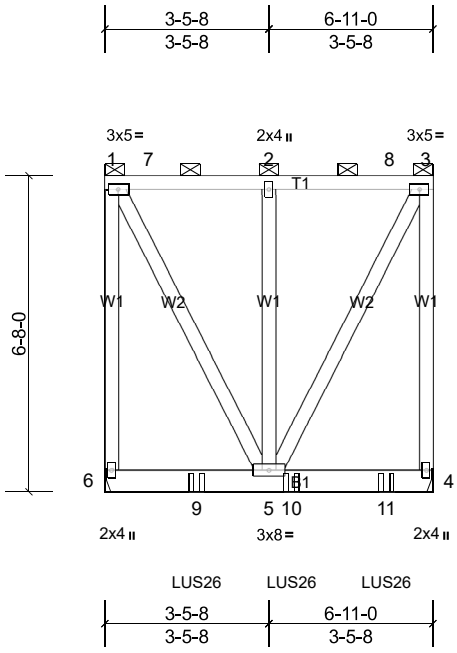
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-258/93

**NOTES**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 7-3-8 zone; cantilever left and right exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 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) 7, 8, 10, 11, 9.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | LGR | Flat Girder | 1 | 2 | Job Reference (optional) |






Scale = 1:48.6

| 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 | 0.10 | Vert(LL) | 0.01 | 4-5 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.14 | Vert(CT) | -0.01 | 5-6 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | NO | WB | 0.11 | Horz(CT) | n/a | - | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MP | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 145 lb | FT = 20% |

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

**BRACING**
TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-3, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (lb/size) 4=771/ Mechanical, (min. 0-1-8), 6=642/ Mechanical, (min. 0-1-8)
Max Uplift 4=-347 (LC 8), 6=-270 (LC 8)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-6=-526/233, 3-4=-526/233
WEBS 1-5=-227/506, 3-5=-227/506

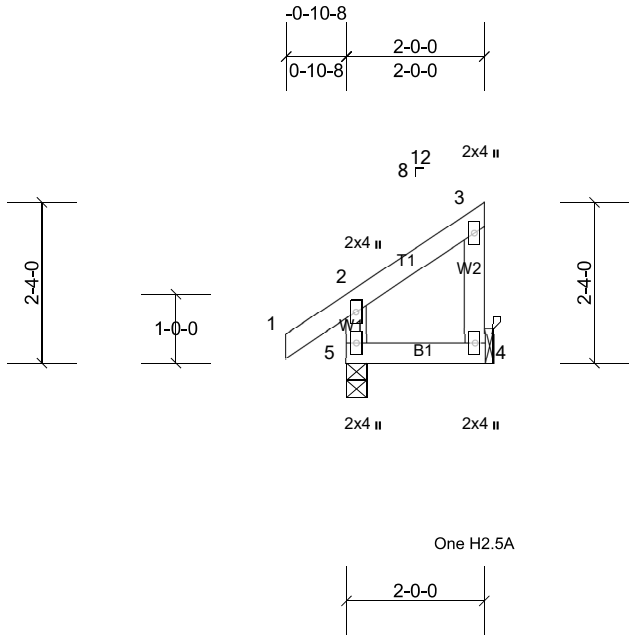
**NOTES**
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 270 lb uplift at joint 6 and 347 lb uplift at joint 4.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 1-11-4 from the left end to 5-11-4 to connect truss(es) J4 (1 ply 2x4 SP) to back face of bottom chord.
13) Fill all nail holes where hanger is in contact with lumber.

**LOAD CASE(S)** Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-60, 4-6=-20
Concentrated Loads (lb)
Vert: 9=-294, 10=-294, 11=-296

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | M1 | Jack-Closed | 8 | 1 | Job Reference (optional) |

Carter Components, Sanford, NC, user — Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Thu Feb 13 14:25:57 — Page: 1

ID:ewF4NbPZvlILOL49xAmZ4Zyaj9Z-U0gqZOVbnnaCCoRVZNw7ayYeWUPJ02qbDHMnpVzlXsu







Scale = 1:33.4

| 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 | 0.15 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.05 | Vert(CT) | 0.00 | 4-5 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | n/a | - | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MR | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 12 lb | FT = 20% |

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

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 4=50/ Mechanical, (min. 0-1-8), 5=148/0-3-8, (min. 0-1-8)
Max Horiz 5=53 (LC 14)
Max Uplift 4=-41 (LC 14)
Max Grav 4=67 (LC 21), 5=214 (LC 21)

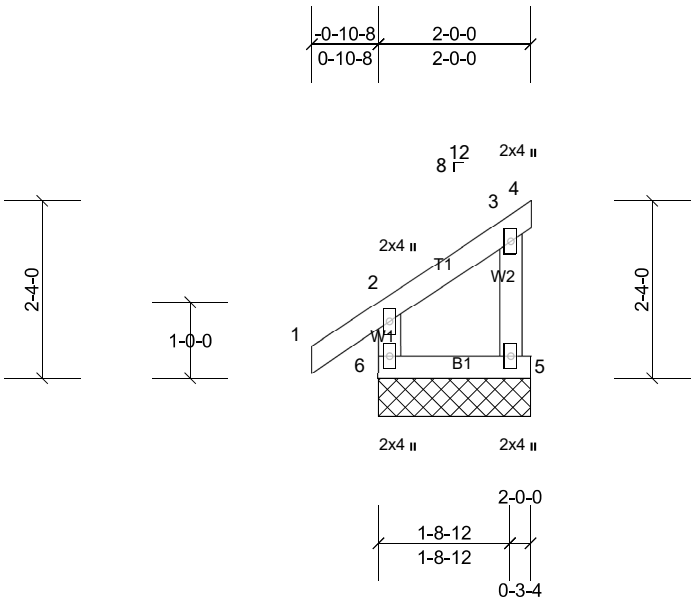
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**NOTES**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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) Refer to girder(s) for truss to truss connections.
8) One H2.5A 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.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | M1GE | Monopitch Supported Gable | 4 | 1 | Job Reference (optional) |






Scale = 1:30.3

| 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 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.08 | Vert(CT) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | 4 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MR | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 12 lb | FT = 20% |

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

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 4=5/2-0-0, (min. 0-1-8), 5=55/2-0-0, (min. 0-1-8), 6=144/2-0-0, (min. 0-1-8)
Max Horiz 6=57 (LC 14)
Max Uplift 4=-12 (LC 14), 5=-41 (LC 14)
Max Grav 4=10 (LC 12), 5=77 (LC 21), 6=210 (LC 21)

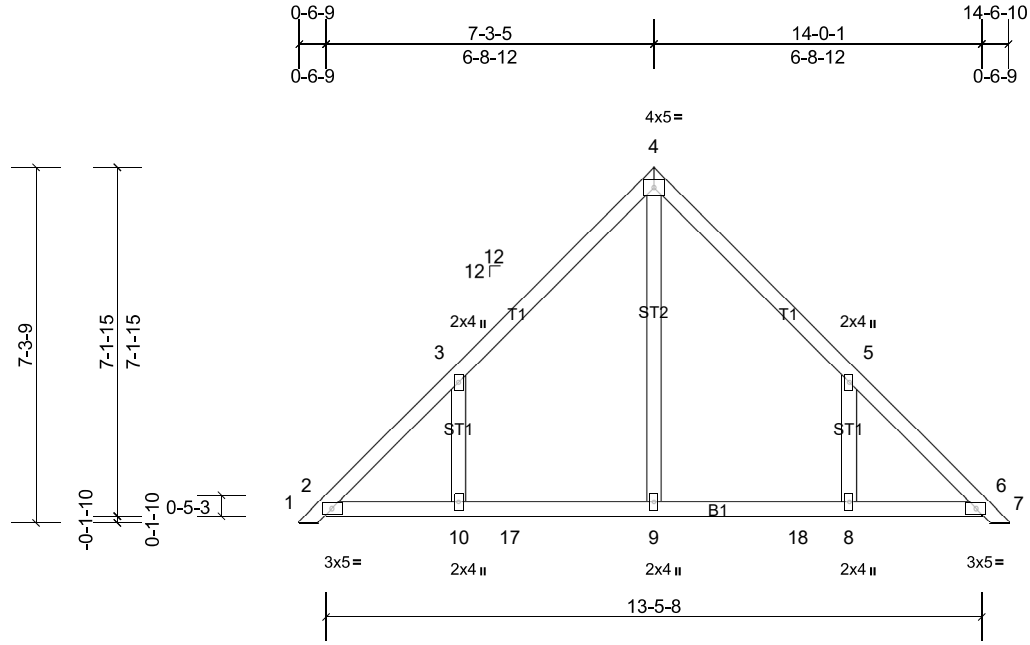
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**NOTES**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) zone; cantilever left and right exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 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 12 lb uplift at joint 4 and 41 lb uplift at joint 5.
12) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 4.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | PB1 | Piggyback | 13 | 1 | Job Reference (optional) |






Scale = 1:47.3

| 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 | 0.33 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.17 | Vert(TL) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.17 | Horiz(TL) | 0.00 | 7 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 68 lb | FT = 20% |

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

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** All bearings 14-7-2.
(lb) - Max Horiz 1=-166 (LC 10)
Max Uplift All uplift 100 (lb) or less at joint(s) 2, 11 except 1=-179 (LC 12), 8=-196 (LC 15), 10=-202 (LC 14)
Max Grav All reactions 250 (lb) or less at joint (s) 1, 2, 7, 11 except 8=463 (LC 22), 9=373 (LC 28), 10=448 (LC 21)

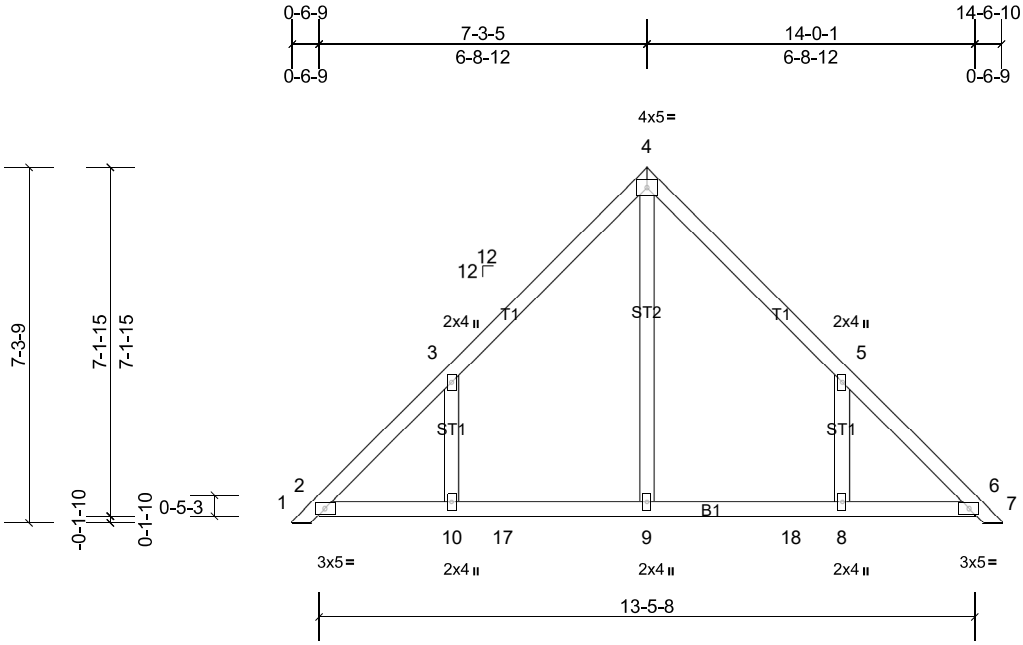
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-225/256
WEBS 3-10=-379/239, 5-8=-385/237

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-2-10 to 3-3-9, Interior (1) 3-3-9 to 4-3-9, Exterior(2R) 4-3-9 to 10-3-9, Interior (1) 10-3-9 to 11-3-9, Exterior(2E) 11-3-9 to 14-4-8 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
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); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 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, with BCDL = 10.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 2, 2 except (jt=lb) 1=179, 10=201, 8=196.
11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | PB1GE | Piggyback | 2 | 1 | Job Reference (optional) |






Scale = 1:47.3

| 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 | 0.33 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.17 | Vert(TL) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.17 | Horiz(TL) | 0.00 | 7 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 68 lb | FT = 20% |

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

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** All bearings 14-7-2.
(lb) - Max Horiz 1=-166 (LC 10)
Max Uplift All uplift 100 (lb) or less at joint(s) 2, 11 except 1=-179 (LC 12), 8=-196 (LC 15), 10=-202 (LC 14)
Max Grav All reactions 250 (lb) or less at joint (s) 1, 2, 7, 11 except 8=463 (LC 22), 9=373 (LC 28), 10=448 (LC 21)

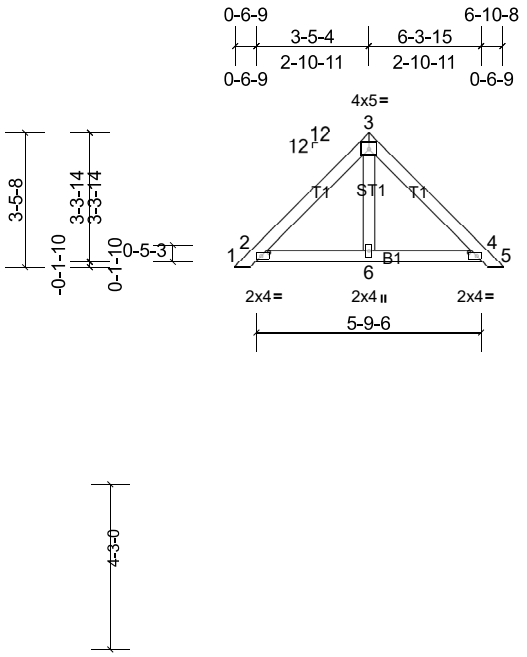
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-225/256
WEBS 3-10=-379/239, 5-8=-385/237

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-2-10 to 3-3-9, Interior (1) 3-3-9 to 4-3-9, Exterior(2R) 4-3-9 to 10-3-9, Interior (1) 10-3-9 to 11-3-9, Exterior(2E) 11-3-9 to 14-4-8 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
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); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 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, with BCDL = 10.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 2, 2 except (jt=lb) 1=179, 10=201, 8=196.
11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | PB2 | Piggyback | 11 | 1 | Job Reference (optional) |






Scale = 1:59.3

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

| 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 | 0.17 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.17 | Vert(CT) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.01 | Horz(CT) | 0.00 | 2 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MP | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 27 lb | FT = 20% |

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

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** All bearings 5-9-6.
(lb) - Max Horiz 2=-76 (LC 12), 7=-76 (LC 12)
Max Uplift All uplift 100 (lb) or less at joint(s) 2, 4, 7, 10
Max Grav All reactions 250 (lb) or less at joint (s) 2, 4, 6, 7, 10

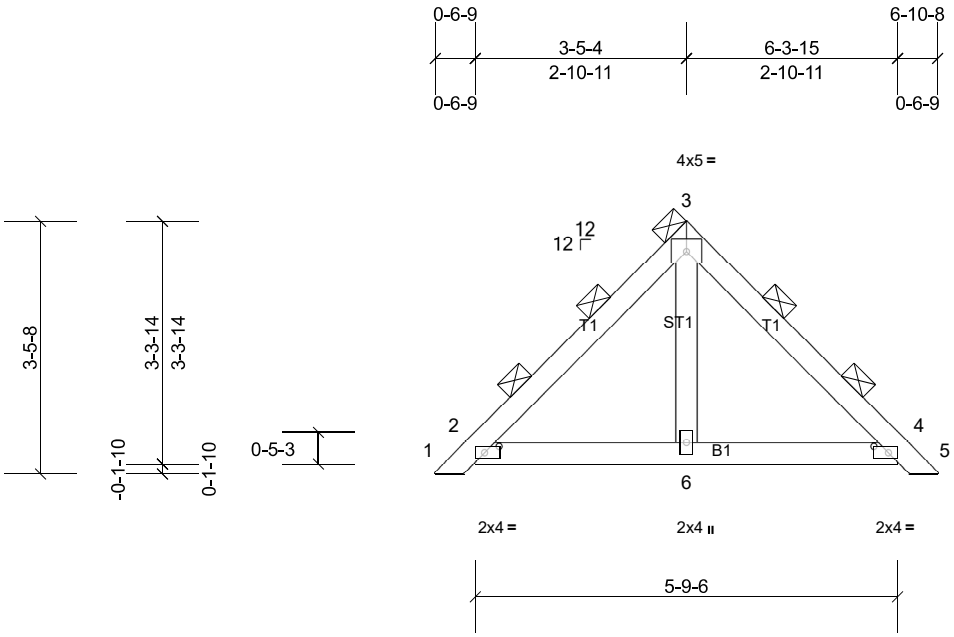
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; 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.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 4-0-0 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) One H2.5A 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.
12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | PB2GR | Piggyback | 2 | 4 | Job Reference (optional) |






Scale = 1:31.5

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

| Loading | (psf) | Spacing | 5-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.13 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.11 | Vert(CT) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | NO | WB | 0.01 | Horz(CT) | 0.00 | 2 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MP | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 108 lb | FT = 20% |

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

**BRACING**
TOP CHORD 2-0-0 oc purlins (6-0-0 max.)
(Switched from sheeted: Spacing > 2-0-0).
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** All bearings 5-9-6.
(lb) - Max Horiz 2=190 (LC 13), 7=190 (LC 13)
Max Uplift All uplift 100 (lb) or less at joint(s) 2, 4, 7, 10
Max Grav All reactions 250 (lb) or less at joint (s) except 2=619 (LC 21), 4=619 (LC 22), 6=441 (LC 21), 7=619 (LC 21), 10=619 (LC 22)

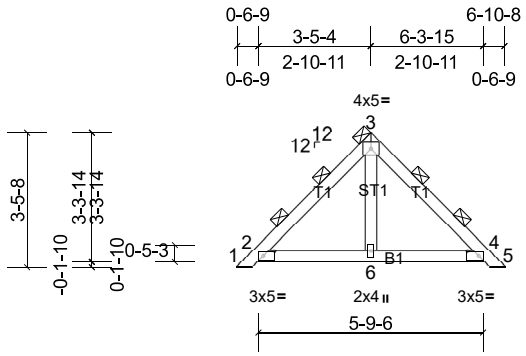
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-427/173, 3-4=-427/158

**NOTES**
1) 4-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.
Attach TC w/ 1/2" diam. bolts (ASTM A-307) in the center of the member w/washers at 4-0-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; 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
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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
7) Unbalanced snow loads have been considered for this design.
8) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
9) Gable requires continuous bottom chord bearing.
10) Gable studs spaced at 4-0-0 oc.
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * 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.
13) One H2.5A 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.
14) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | PB2GRA | Piggyback | 1 | 2 | Job Reference (optional) |







Scale = 1:59.3

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

| Loading | (psf) | Spacing | 5-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.25 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.23 | Vert(CT) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | NO | WB | 0.02 | Horz(CT) | 0.00 | 2 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MP | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 54 lb | FT = 20% |

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

**BRACING**
TOP CHORD 2-0-0 oc purlins (6-0-0 max.) (Switched from sheeted: Spacing > 2-0-0).
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** All bearings 5-9-6.
(lb) - Max Horiz 2=190 (LC 13), 7=190 (LC 13)
Max Uplift All uplift 100 (lb) or less at joint(s) 2, 4, 7, 10
Max Grav All reactions 250 (lb) or less at joint (s) except 2=619 (LC 21), 4=619 (LC 22), 6=440 (LC 21), 7=619 (LC 21), 10=619 (LC 22)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-430/171, 3-4=-430/155

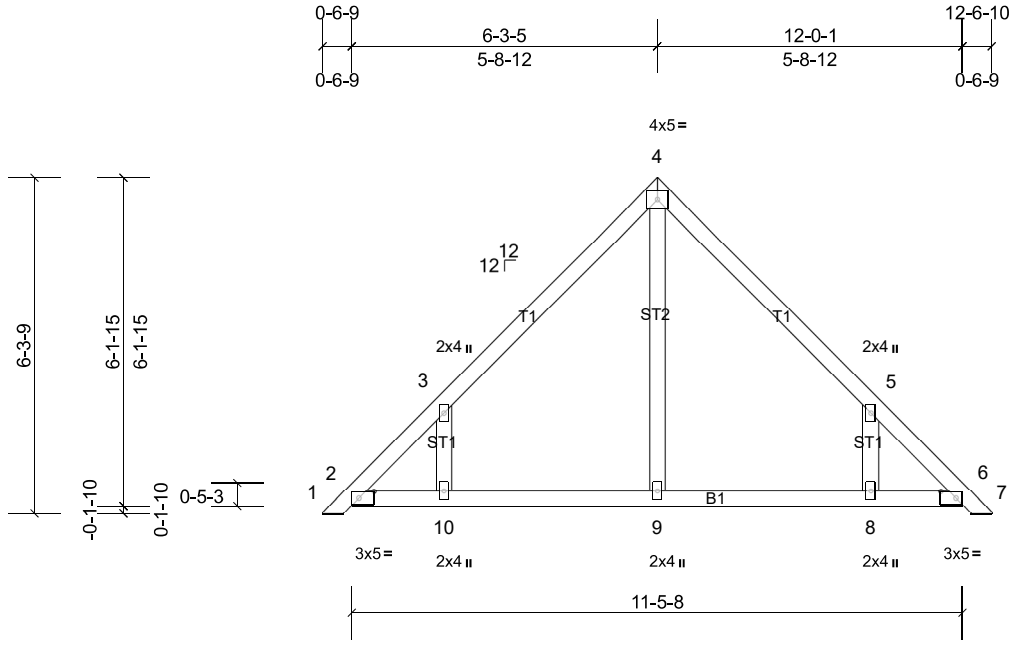
**NOTES**
1) 2-ply truss to be connected together as follows:
Top chords connected with 10d (0.131"x3") nails as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected with 10d (0.131"x3") nails as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; 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
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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
7) Unbalanced snow loads have been considered for this design.
8) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
9) Gable requires continuous bottom chord bearing.
10) Gable studs spaced at 4-0-0 oc.
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * 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.
13) One H2.5A 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.
14) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | PB3 | Piggyback | 2 | 1 | Job Reference (optional) |

Carter Components, Sanford, NC, user — Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Thu Feb 13 14:25:59 — Page: 1

ID:AXE5sKwnRhjge7xVOMmfuQyaiqE-QOoa_4WsJOqwR6augoybgNexCH3iUxdugbrutOzIXss




Scale = 1:43.2

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

| 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 | 0.33 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.12 | Vert(CT) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.11 | Horz(CT) | 0.00 | 6 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 56 lb | FT = 20% |

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

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** All bearings 11-5-8.
(lb) - Max Horiz 2=-143 (LC 12), 11=-143 (LC 12)
Max Uplift All uplift 100 (lb) or less at joint(s) 2, 6, 11, 14 except 8=-196 (LC 15), 10=-197 (LC 14)
Max Grav All reactions 250 (lb) or less at joint (s) 2, 6, 11, 14 except 8=434 (LC 22), 9=259 (LC 21), 10=434 (LC 21)

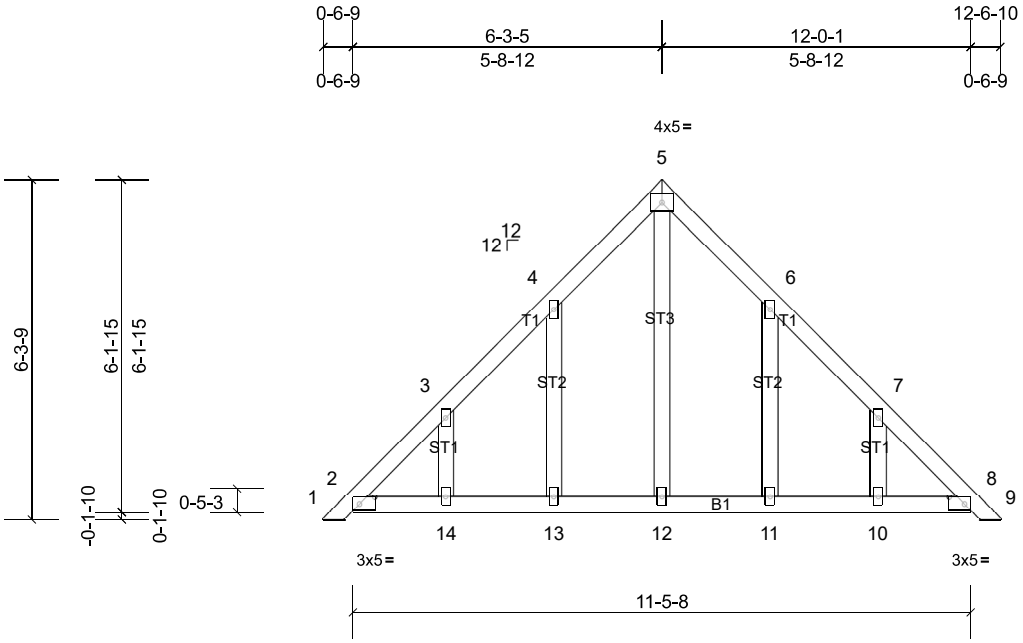
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-10=-400/244, 5-8=-400/243

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-2-10 to 3-2-10, Exterior(2R) 3-2-10 to 9-4-8, Exterior(2E) 9-4-8 to 12-4-8 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
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); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 4-0-0 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) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 6, 10, and 8. This connection is for uplift only and does not consider lateral forces.
12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | PB3GE | Piggyback | 1 | 1 | Job Reference (optional) |






Scale = 1:42.7

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

| 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 | 0.09 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.04 | Vert(CT) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.08 | Horz(CT) | 0.00 | 8 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 67 lb | FT = 20% |

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

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** All bearings 11-5-8.
(lb) - Max Horiz 2=-143 (LC 12), 15=-143 (LC 12)
Max Uplift All uplift 100 (lb) or less at joint(s) 2, 8, 15, 18 except 10=-110 (LC 15), 11=-101 (LC 15), 13=-101 (LC 14), 14=-111 (LC 14)
Max Grav All reactions 250 (lb) or less at joint (s) 2, 8, 10, 12, 14, 15, 18 except 11=283 (LC 22), 13=283 (LC 21)

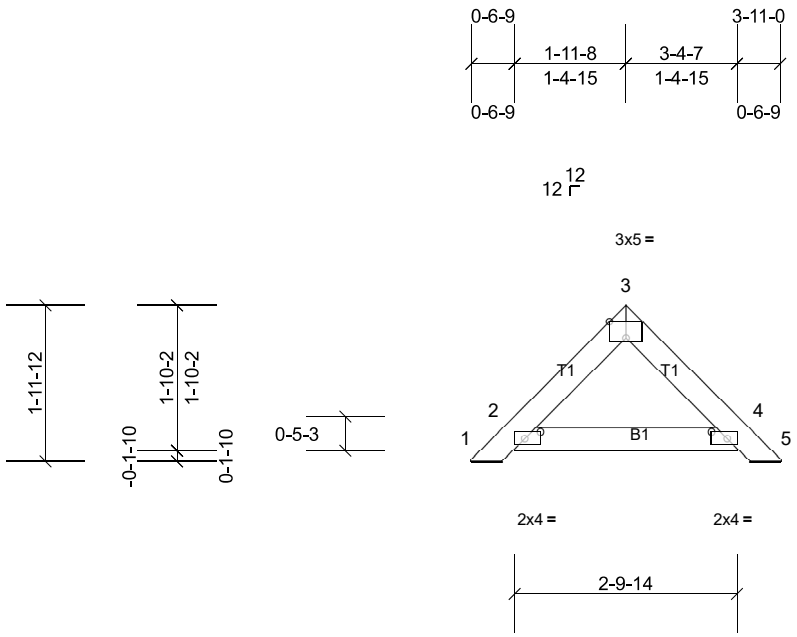
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-2-10 to 3-2-10, Exterior(2R) 3-2-10 to 9-4-8, Exterior(2E) 9-4-8 to 12-4-8 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
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); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
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) * 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.
12) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 8, 13, 14, 11, and 10. This connection is for uplift only and does not consider lateral forces.
13) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | PB5 | Piggyback | 8 | 1 | Job Reference (optional) |






Scale = 1:29.2

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

| 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 | 0.04 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.04 | Vert(CT) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | n/a | - | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MP | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 12 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 3-11-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** All bearings 2-9-14.
(lb) - Max Horiz 2=-41 (LC 12), 6=-41 (LC 12)
Max Uplift All uplift 100 (lb) or less at joint(s) 2, 4, 6, 9
Max Grav All reactions 250 (lb) or less at joint (s) 2, 4, 6, 9

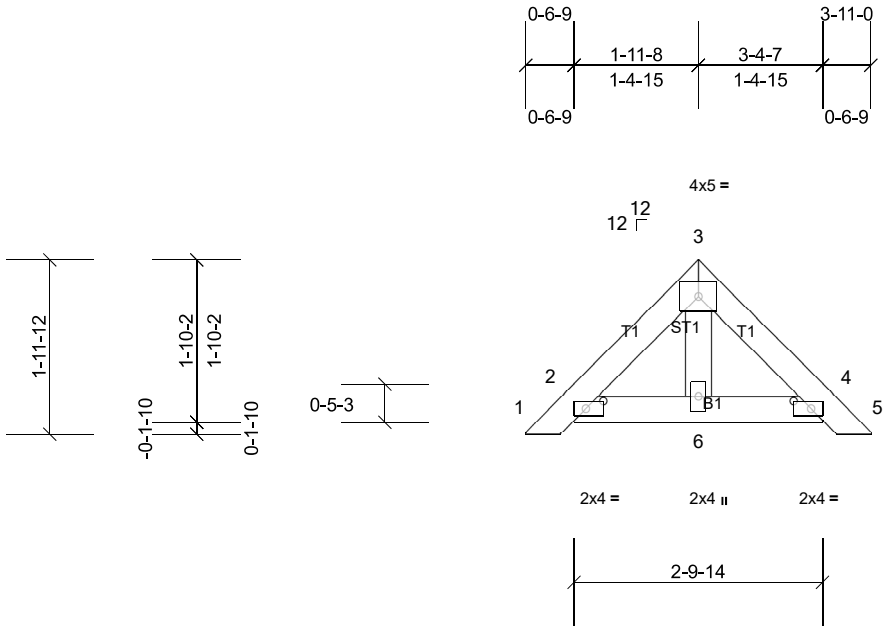
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; 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.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 4-0-0 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) One H2.5A 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.
12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | PB5GE | Piggyback | 1 | 1 | Job Reference (optional) |






Scale = 1:26.2

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

| 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 | 0.03 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.04 | Vert(CT) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.01 | Horz(CT) | n/a | - | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MP | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 14 lb | FT = 20% |

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

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 3-11-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** All bearings 2-9-14.
(lb) - Max Horiz 2=-41 (LC 12), 7=-41 (LC 12)
Max Uplift All uplift 100 (lb) or less at joint(s) 2, 4, 6, 7, 10
Max Grav All reactions 250 (lb) or less at joint (s) 2, 4, 6, 7, 10

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

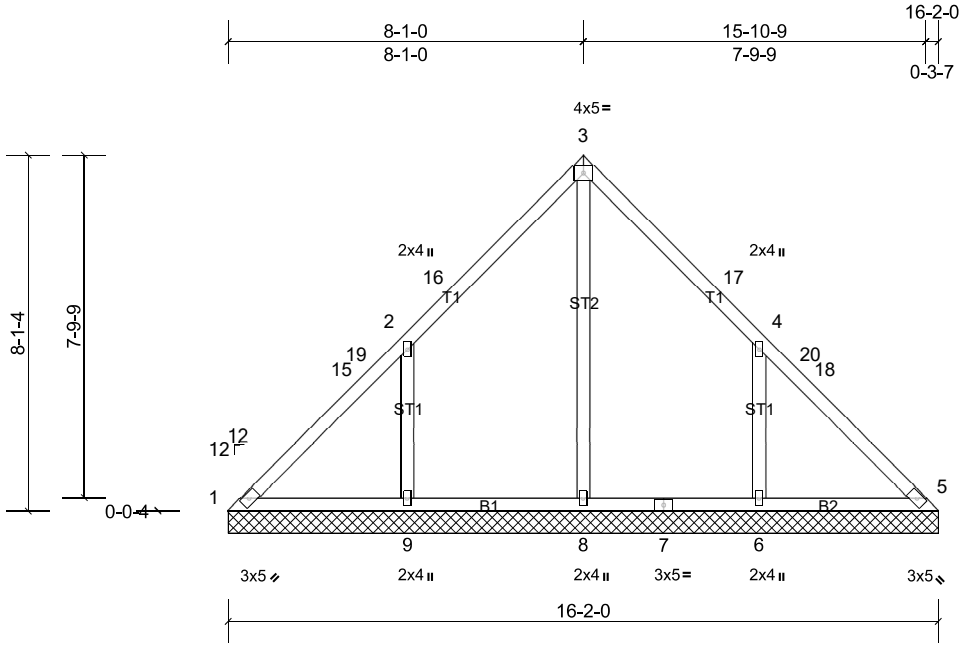
**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical 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.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 4, and 6. This connection is for uplift only and does not consider lateral forces.
12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | V1 | Valley | 1 | 1 | Job Reference (optional) |

Carter Components, Sanford, NC, user — Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Thu Feb 13 14:26:01 — Page: 1

ID:XU1_w2_wGELylupTBvLqbTyaiq9-MnvLOlY6q04egPkGoD?3lojH45kNykDB8vK_yGzlXsq




Scale = 1:52.5

| 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 | 0.37 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.17 | Vert(TL) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.55 | Horiz(TL) | 0.00 | 5 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 78 lb | FT = 20% |

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

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** All bearings 16-2-0.
(lb) - Max Horiz 1=185 (LC 11)
Max Uplift All uplift 100 (lb) or less at joint(s) 5, 14 except 1=-103 (LC 10), 6=-224 (LC 15), 9=-231 (LC 14)
Max Grav All reactions 250 (lb) or less at joint (s) 1, 5, 14 except 6=512 (LC 6), 8=683 (LC 27), 9=511 (LC 24)

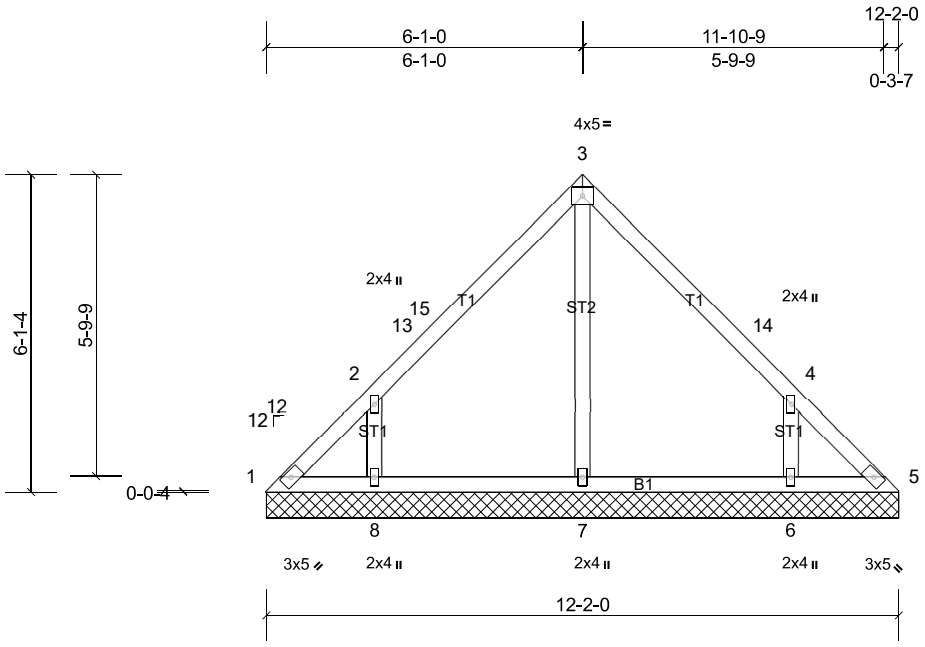
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-15=-158/297, 15-19=-136/347, 2-19=-133/374, 3-16=-22/331, 3-17=-22/303, 4-20=-1/264
WEBS 3-8=-485/0, 2-9=-395/261, 4-6=-396/258

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-4 to 3-0-4, Interior (1) 3-0-4 to 5-1-4, Exterior(2R) 5-1-4 to 11-1-4, Interior (1) 11-1-4 to 12-10-4, Exterior(2E) 12-10-4 to 15-10-4 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 102 lb uplift at joint 1, 230 lb uplift at joint 9 and 223 lb uplift at joint 6.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | V2 | Valley | 1 | 1 | Job Reference (optional) |






Scale = 1:44.3

| 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 | 0.33 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.12 | Vert(TL) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.10 | Horiz(TL) | 0.00 | 5 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 55 lb | FT = 20% |

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

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** All bearings 12-2-0.
(lb) - Max Horiz 1=-138 (LC 10)
Max Uplift All uplift 100 (lb) or less at joint(s) 1, 5 except 6=-173 (LC 15), 8=-178 (LC 14)
Max Grav All reactions 250 (lb) or less at joint (s) 1, 5, 7 except 6=447 (LC 21), 8=447 (LC 20)

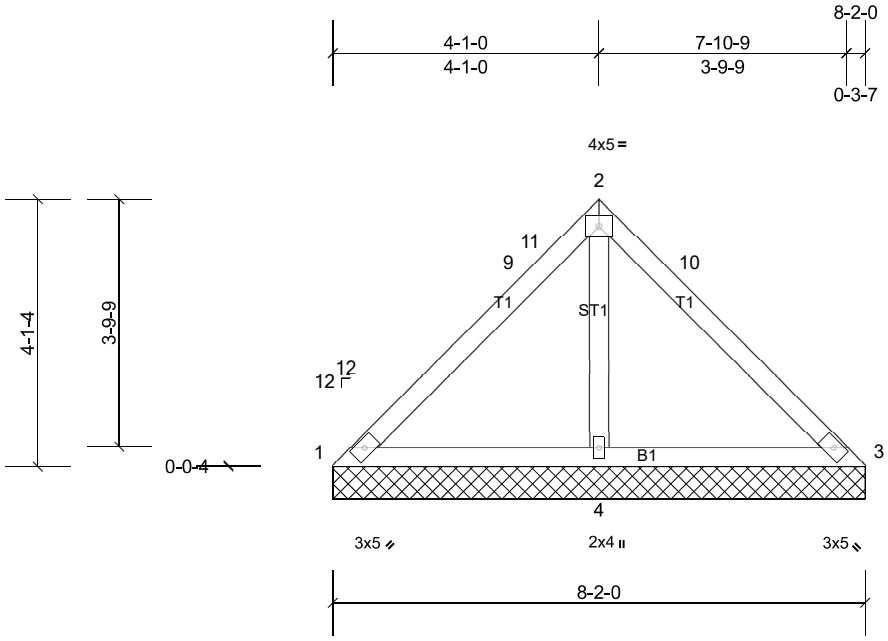
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-407/271, 4-6=-407/271

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-4 to 3-0-4, Exterior(2R) 3-0-4 to 9-2-4, Exterior(2E) 9-2-4 to 12-2-4 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 1, 5 except (jt=lb) 8=178, 6=173.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | V3 | Valley | 1 | 1 | Job Reference (optional) |






Scale = 1:35.3

| 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 | 0.37 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.36 | Vert(TL) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.15 | Horiz(TL) | 0.00 | 3 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MP | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 33 lb | FT = 20% |

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

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 8-2-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 1=33/8-2-0, (min. 0-1-8), 3=33/8-2-0, (min. 0-1-8), 4=588/8-2-0, (min. 0-1-8)
Max Horiz 1=92 (LC 11)
Max Uplift 1=-35 (LC 21), 3=-35 (LC 20), 4=-126 (LC 14)
Max Grav 1=87 (LC 20), 3=87 (LC 21), 4=643 (LC 21)

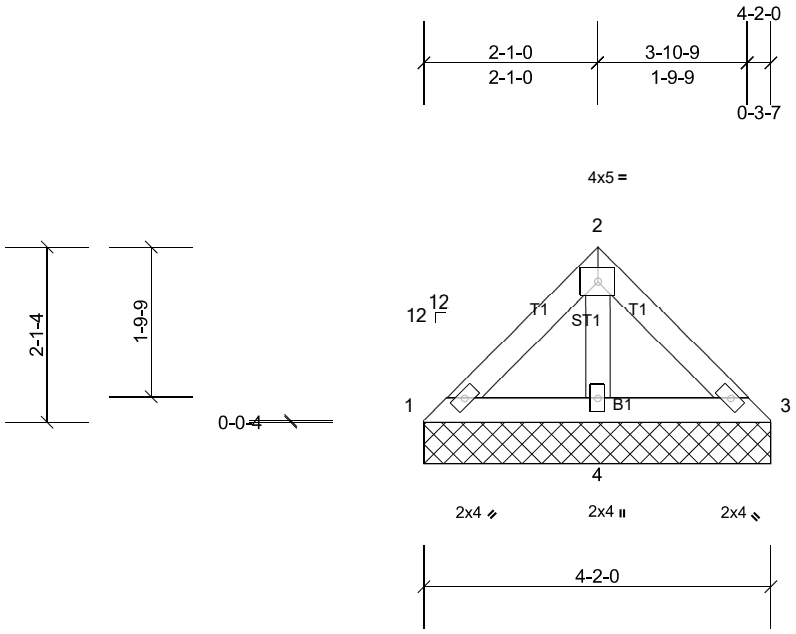
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-11=-111/275, 2-10=-113/275
WEBS 2-4=-526/289

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-4 to 3-0-4, Exterior(2R) 3-0-4 to 5-2-4, Exterior(2E) 5-2-4 to 8-2-4 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 35 lb uplift at joint 1, 35 lb uplift at joint 3 and 126 lb uplift at joint 4.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | Isabelle-Roof-Isabelle GRH |
|---|---|---|---|---|---|
| 24090030-A | V4 | Valley | 1 | 1 | Job Reference (optional) |






Scale = 1:27.7

| 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 | 0.06 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.08 | Vert(TL) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.03 | Horiz(TL) | n/a | - | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2021/TPI2014 | Matrix-MP | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 16 lb | FT = 20% |

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

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 4-2-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 1=50/4-2-0, (min. 0-1-8), 3=50/4-2-0, (min. 0-1-8), 4=233/4-2-0, (min. 0-1-8)
Max Horiz 1=45 (LC 13)
Max Uplift 3=-3 (LC 15), 4=-33 (LC 14)
Max Grav 1=83 (LC 20), 3=83 (LC 21), 4=240 (LC 21)

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

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 3 lb uplift at joint 3 and 33 lb uplift at joint 4.

**LOAD CASE(S)** Standard