ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: Master
3293795

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Builders FirstSource-Apex,NC.

Pages or sheets covered by this seal: I54564439 thru I54564474

My license renewal date for the state of North Carolina is December 31, 2022.

North Carolina COA: C-0844


October 5,2022

Gilbert, Eric

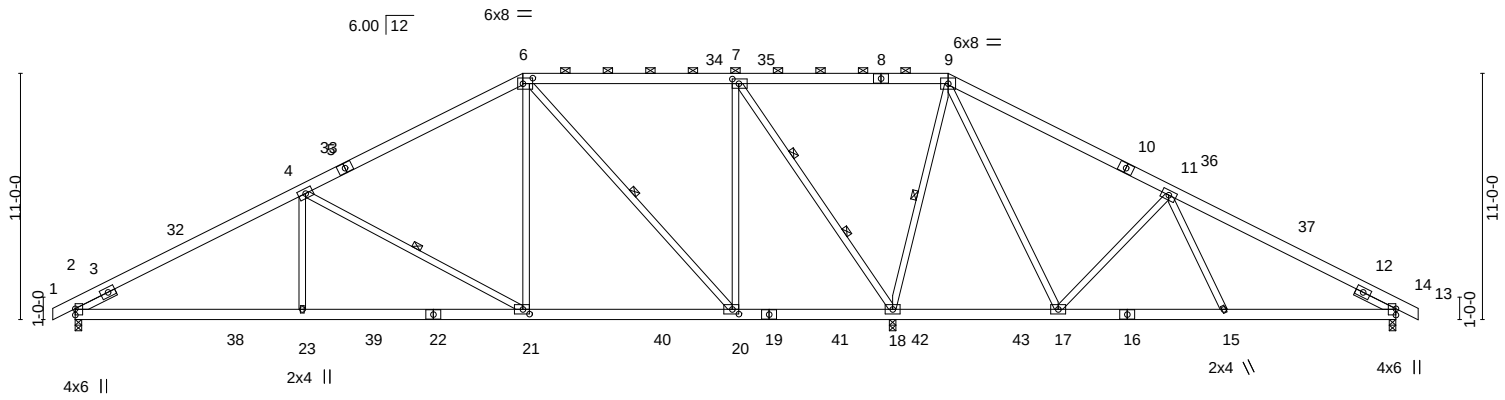
**IMPORTANT NOTE:** The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes),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

| Job | Truss | Truss Type | Qty | Ply | 3293795 I54564439 |
|---|---|---|---|---|---|
| MASTER | A07 | HIP | 4 | 1 | Job Reference (optional) |

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Oct 5 10:12:10 2022 Page 1
ID:zbkIr1dFypInNUy02maTGGyYVBm-?ejvgbBeag3s91QcvrFPFrmH4zMxaq?4eERltZyWV4p

| -1-0-0 | 10-1-12 | 20-0-0 | 29-6-0 | 39-0-0 | 48-10-4 | 59-0-0 | 60-0-0 |
|---|---|---|---|---|---|---|---|
| 1-0-0 | 10-1-12 | 9-10-4 | 9-6-0 | 9-6-0 | 9-10-4 | 10-1-12 | 1-0-0 |

Scale = 1:102.9




| 10-1-12 | 20-0-0 | 29-6-0 | 36-6-4 | 43-11-0 | 51-3-12 | 59-0-0 |
|---|---|---|---|---|---|---|
| 10-1-12 | 9-10-4 | 9-6-0 | 7-0-4 | 7-4-12 | 7-4-12 | 7-8-4 |

Plate Offsets (X,Y)-- [6:0-5-4,0-3-0], [7:0-3-8,0-2-8], [20:0-3-8,0-2-8], [21:0-3-8,0-2-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.65 | Vert(LL) | -0.12 | 20-21 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.56 | Vert(CT) | -0.20 | 20-21 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 1.00 | Horz(CT) | 0.05 | 18 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-MS | | Wind(LL) | 0.05 | 23 | >999 | 240 | Weight: 442 lb | FT = 20% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x6 SP No.2 |
| BOT CHORD | 2x6 SP No.2 |
| WEBS | 2x4 SP No.3 *Except* 6-20,7-18: 2x4 SP No.2 |
| SLIDER | Left 2x4 SP No.3 1-11-12, Right 2x4 SP No.3 1-11-12 |

**BRACING-**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 4-7-13 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 6-9. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 17-18,15-17. |
| WEBS | 1 Row at midpt 4-21, 6-20, 9-18<br>2 Rows at 1/3 pts 7-18 |

**REACTIONS.** (size) 2=0-3-8, 18=0-3-8, 13=0-3-8
Max Horz 2=-140(LC 13)
Max Uplift 2=-117(LC 12), 13=-121(LC 13)
Max Grav 2=1364(LC 25), 18=2983(LC 2), 13=714(LC 24)

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

| | |
|---|---|
| TOP CHORD | 2-4=-2113/204, 4-6=-1267/212, 6-7=-402/220, 7-9=0/707, 9-11=-211/349, 11-13=-803/202 |
| BOT CHORD | 2-23=-209/1808, 21-23=-209/1808, 20-21=-45/1037, 18-20=-48/403, 17-18=-427/117, 15-17=-98/544, 13-15=-67/635 |
| WEBS | 4-23=0/388, 4-21=-909/187, 6-21=0/788, 6-20=-977/82, 7-20=0/1022, 7-18=-1864/115, 9-18=-1255/136, 9-17=-71/746, 11-17=-744/217, 11-15=0/357 |

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 4-10-13, Interior(1) 4-10-13 to 20-0-0, Exterior(2) 20-0-0 to 28-4-2, Interior(1) 28-4-2 to 39-0-0, Exterior(2) 39-0-0 to 47-4-2, Interior(1) 47-4-2 to 60-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are 5x8 MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=117, 13=121.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.


October 5,2022



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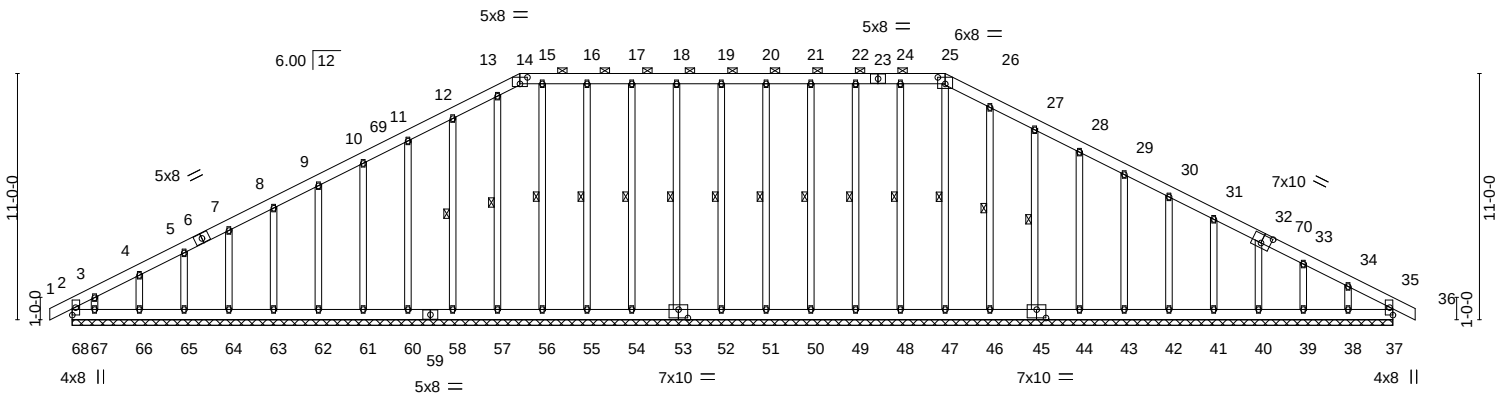
| Job | Truss | Truss Type | Qty | Ply | 3293795 |
|---|---|---|---|---|---|
| MASTER | A07G | GABLE | 1 | 1 | I54564440 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Oct 5 10:12:14 2022 Page 1
ID:zbkIr1dFypInNUy02maTGGyYVBm-uQyPWyE8evZIeekN8hKLQhw4zassWrOgZsPz0KyWV4I

-1-0-0 20-0-0 39-0-0 59-0-0 60-0-0
1-0-0 20-0-0 19-0-0 20-0-0 1-0-0

Scale = 1:102.9




59-0-0
59-0-0

Plate Offsets (X,Y)-- [14:0-4-0,0-3-8], [25:0-4-0,0-3-8], [32:0-5-0,0-4-8], [45:0-5-0,0-4-8], [53:0-5-0,0-4-8]

| LOADING (psf) | | SPACING- 2-0-0 | | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.15 | Vert(LL) | -0.00 | 35 | n/r | 120 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.05 | Vert(CT) | -0.00 | 36 | n/r | 120 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.14 | Horz(CT) | 0.01 | 37 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-R | | | | | | | Weight: 588 lb | FT = 20% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x6 SP No.2 |
| BOT CHORD | 2x6 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, and 2-0-0 oc purlins (6-0-0 max.): 14-25. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS | 1 Row at midpt 25-47, 24-48, 22-49, 21-50, 20-51, 19-52, 18-53, 17-54, 16-55, 15-56, 13-57, 12-58, 26-46, 27-45 |

**REACTIONS.** All bearings 59-0-0.
(lb) - Max Horz 68=125(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 68, 48, 49, 50, 51, 52, 53, 54, 55, 58, 60, 61, 62, 63, 64, 65, 66, 46, 45, 44, 43, 42, 41, 40, 39, 38 except 67=-139(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 68, 37, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 60, 61, 62, 63, 64, 65, 66, 67, 46, 45, 44, 43, 42, 41, 40, 39, 38

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 11-12=-86/253, 12-13=-100/294, 13-14=-101/290, 14-15=-92/290, 15-16=-92/290, 16-17=-92/290, 17-18=-92/290, 18-19=-92/290, 19-20=-92/290, 20-21=-92/290, 21-22=-92/290, 22-24=-92/290, 24-25=-92/289, 25-26=-104/298, 26-27=-92/266

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -1-0-0 to 5-0-0, Exterior(2) 5-0-0 to 20-0-0, Corner(3) 20-0-0 to 25-10-13, Exterior(2) 25-10-13 to 39-0-0, Corner(3) 39-0-0 to 45-0-0, Exterior(2) 45-0-0 to 60-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 68, 48, 49, 50, 51, 52, 53, 54, 55, 58, 60, 61, 62, 63, 64, 65, 66, 46, 45, 44, 43, 42, 41, 40, 39, 38 except (jt=lb) 67=139.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.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| Job | Truss | Truss Type | Qty | Ply | 3293795 I54564441 |
|---|---|---|---|---|---|
| MASTER | A07H | HIP | 5 | 1 | Job Reference (optional) |

Builders FirstSource, Apex, NC 27523 — 8.530 s May 26 2022 MiTek Industries, Inc. Wed Oct 5 10:53:06 2022 Page 1
ID:zbkIr1dFypInNUy02maTGGyYVBm-KyOQXweTDLYgVC_fyLXG_0Ux7?Z71dabPLNi4CyWUUR

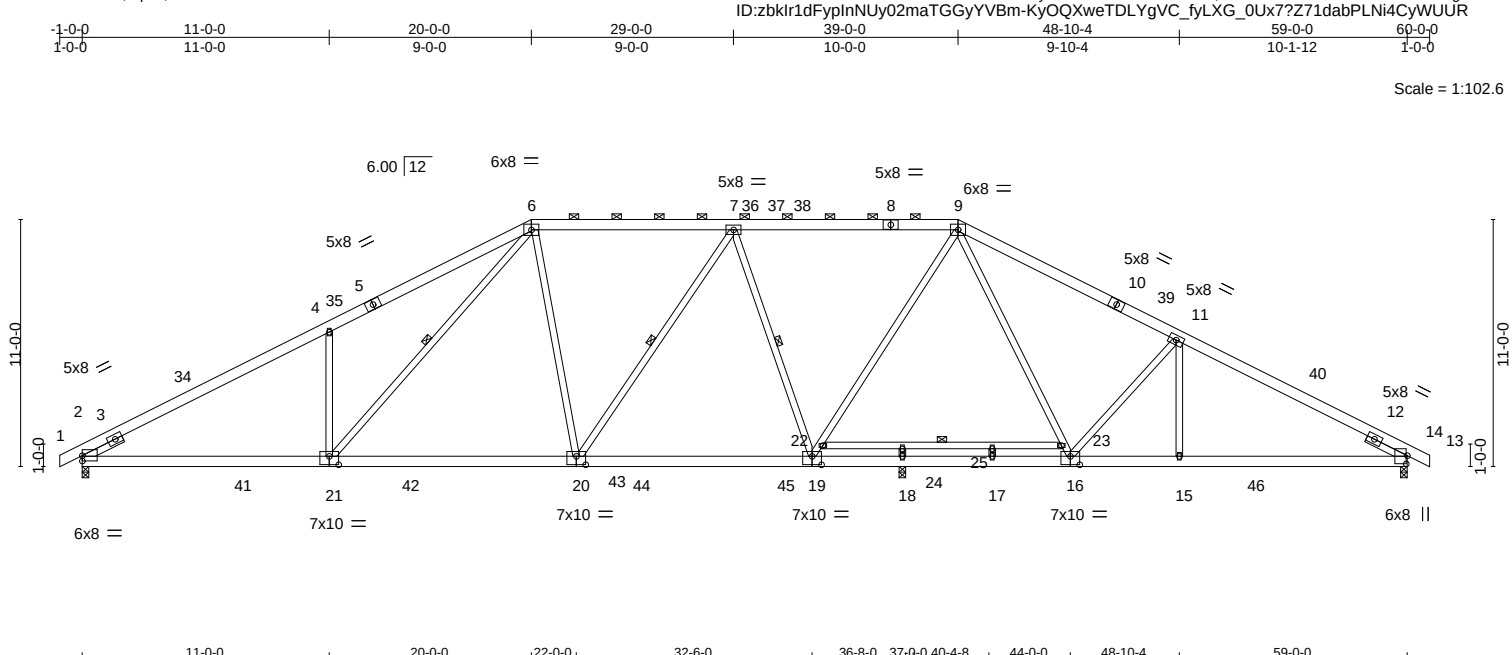


Plate Offsets (X,Y)-- [2:0-0-0,0-2-14], [13:0-4-6,0-0-9], [16:0-5-0,0-4-8], [19:0-5-0,0-4-8], [20:0-5-0,0-4-8], [21:0-5-0,0-4-8]

| LOADING (psf) | | SPACING- 2-0-0 | | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.85 | Vert(LL) | -0.30 | 19-20 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.65 | Vert(CT) | -0.56 | 19-20 | >782 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.90 | Horz(CT) | 0.13 | 13 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-MS | | Wind(LL) | 0.14 | 19-20 | >999 | 240 | Weight: 446 lb | FT = 20% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x6 SP No.2 *Except* 1-5,10-14: 2x6 SP DSS |
| BOT CHORD | 2x6 SP DSS |
| WEBS | 2x4 SP No.3 *Except* 7-20,6-21: 2x4 SP No.2 |
| SLIDER | Left 2x4 SP No.3 1-11-12, Right 2x4 SP No.3 1-11-12 |

**BRACING-**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 2-11-4 oc purlins, except 2-0-0 oc purlins (4-1-2 max.): 6-9. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS | 1 Row at midpt 7-20, 7-19, 22-23, 6-21 |

**REACTIONS.** (size) 2=0-3-8, 18=0-3-8, 13=0-3-8
Max Horz 2=-140(LC 13)
Max Uplift 2=-125(LC 12), 13=-134(LC 13)
Max Grav 2=2199(LC 2), 18=745(LC 1), 13=1959(LC 1)

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

| | |
|---|---|
| TOP CHORD | 2-3=-1591/0, 3-34=-3754/223, 4-34=-3632/273, 4-35=-3741/385, 5-35=-3726/389, 5-6=-3638/433, 6-36=-2696/324, 7-36=-2696/324, 7-37=-2426/326, 37-38=-2426/326, 8-38=-2426/326, 8-9=-2426/326, 9-10=-2604/345, 10-39=-2658/307, 11-39=-2733/297, 11-40=-3047/287, 12-40=-3236/241, 12-13=-1416/2 |
| BOT CHORD | 2-41=-208/3249, 21-41=-208/3249, 21-42=-67/2607, 42-43=-67/2607, 20-43=-67/2607, 20-44=-65/2631, 44-45=-65/2631, 19-45=-65/2631, 18-19=-56/2207, 17-18=-56/2207, 16-17=-56/2207, 15-16=-164/2787, 15-46=-164/2787, 13-46=-164/2787 |
| WEBS | 4-21=-574/285, 7-19=-748/152, 19-22=-60/641, 9-22=-60/619, 9-23=-71/414, 16-23=-76/409, 11-16=-717/189, 11-15=0/345, 6-20=-23/605, 6-21=-217/1022 |

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 4-10-13, Interior(1) 4-10-13 to 20-0-0, Exterior(2) 20-0-0 to 28-4-2, Interior(1) 28-4-2 to 39-0-0, Exterior(2) 39-0-0 to 47-4-2, Interior(1) 47-4-2 to 60-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 125 lb uplift at joint 2 and 134 lb uplift at joint 13.
8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) N/A


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10) 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

**LOAD CASE(S)**



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**LOAD CASE(S)**

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-6=-60, 6-9=-60, 9-14=-60, 26-30=-20
2) Dead + 0.75 Roof Live (balanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-6=-50, 6-9=-50, 9-14=-50, 26-41=-20, 21-41=-50, 21-42=-20, 42-43=-50, 43-44=-20, 44-45=-50, 15-45=-20, 15-46=-50, 30-46=-20
3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-6=-20, 6-9=-20, 9-14=-20, 26-30=-40
4) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=42, 2-34=22, 6-34=12, 6-36=20, 9-36=15, 9-39=22, 13-39=12, 13-14=8, 26-30=-12
   Horz: 1-2=-54, 2-34=-34, 6-34=-24, 9-39=34, 13-39=24, 13-14=20
5) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=8, 2-35=12, 6-35=22, 6-38=15, 9-38=20, 9-40=12, 13-40=22, 13-14=42, 26-30=-12
   Horz: 1-2=-20, 2-35=-24, 6-35=-34, 9-40=24, 13-40=34, 13-14=54
6) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=-13, 2-6=-32, 6-9=-29, 9-13=-32, 13-14=-27, 26-30=-20
   Horz: 1-2=-7, 2-6=12, 9-13=-12, 13-14=-7
7) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=-27, 2-6=-32, 6-9=-29, 9-13=-32, 13-14=-13, 26-30=-20
   Horz: 1-2=7, 2-6=12, 9-13=-12, 13-14=7
8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=7, 2-6=-3, 6-9=19, 9-13=7, 13-14=2, 26-30=-12
   Horz: 1-2=-19, 2-6=-9, 9-13=19, 13-14=14
9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=2, 2-6=7, 6-9=19, 9-13=-3, 13-14=7, 26-30=-12
   Horz: 1-2=-14, 2-6=-19, 9-13=9, 13-14=19
10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
    Uniform Loads (plf)
    Vert: 1-2=-15, 2-6=-20, 6-9=2, 9-13=-10, 13-14=-6, 26-30=-20
    Horz: 1-2=-5, 2-6=-0, 9-13=10, 13-14=14
11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
    Uniform Loads (plf)
    Vert: 1-2=-6, 2-6=-10, 6-9=2, 9-13=-20, 13-14=-15, 26-30=-20
    Horz: 1-2=-14, 2-6=-10, 9-13=0, 13-14=5
12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
    Uniform Loads (plf)
    Vert: 1-2=14, 2-6=19, 6-37=19, 9-37=5, 9-13=5, 13-14=1, 26-30=-12
    Horz: 1-2=-26, 2-6=-31, 9-13=17, 13-14=13
13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
    Uniform Loads (plf)
    Vert: 1-2=1, 2-6=5, 6-37=5, 9-37=19, 9-13=19, 13-14=14, 26-30=-12
    Horz: 1-2=-13, 2-6=-17, 9-13=31, 13-14=26
14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
    Uniform Loads (plf)
    Vert: 1-2=5, 2-6=9, 6-37=9, 9-37=2, 9-13=2, 13-14=-3, 26-30=-12
    Horz: 1-2=-17, 2-6=-21, 9-13=14, 13-14=9
15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
    Uniform Loads (plf)
    Vert: 1-2=-3, 2-6=2, 6-37=2, 9-37=9, 9-13=9, 13-14=5, 26-30=-12
    Horz: 1-2=-9, 2-6=-14, 9-13=21, 13-14=17
16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
    Uniform Loads (plf)
    Vert: 1-2=6, 2-6=2, 6-37=2, 9-37=-11, 9-13=-11, 13-14=-7, 26-30=-20
    Horz: 1-2=-26, 2-6=-22, 9-13=9, 13-14=13
17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
    Uniform Loads (plf)
    Vert: 1-2=-7, 2-6=-11, 6-37=-11, 9-37=2, 9-13=2, 13-14=6, 26-30=-20
    Horz: 1-2=-13, 2-6=-9, 9-13=22, 13-14=26
18) Dead + Uninhabitable Attic Storage: Lumber Increase=1.25, Plate Increase=1.25
    Uniform Loads (plf)
    Vert: 1-6=-20, 6-9=-20, 9-14=-20, 26-41=-20, 21-41=-60, 21-42=-20, 42-43=-60, 43-44=-20, 44-45=-60, 15-45=-20, 15-46=-60, 30-46=-20
19) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
    Uniform Loads (plf)
    Vert: 1-2=-46, 2-6=-50, 6-9=-34, 9-13=-43, 13-14=-39, 26-41=-20, 21-41=-50, 21-42=-20, 42-43=-50, 43-44=-20, 44-45=-50, 15-45=-20, 15-46=-50, 30-46=-20
    Horz: 1-2=-4, 2-6=-0, 9-13=7, 13-14=11

Continued on page 3

**LOAD CASE(S)**

20) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-39, 2-6=-43, 6-9=-34, 9-13=-50, 13-14=-46, 26-41=-20, 21-41=-50, 21-42=-20, 42-43=-50, 43-44=-20, 44-45=-50, 15-45=-20, 15-46=-50, 30-46=-20
Horz: 1-2=-11, 2-6=-7, 9-13=0, 13-14=4

21) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-30, 2-6=-34, 6-37=-34, 9-37=-44, 9-13=-44, 13-14=-40, 26-41=-20, 21-41=-50, 21-42=-20, 42-43=-50, 43-44=-20, 44-45=-50, 15-45=-20, 15-46=-50, 30-46=-20
Horz: 1-2=-20, 2-6=-16, 9-13=6, 13-14=10

22) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-40, 2-6=-44, 6-37=-44, 9-37=-34, 9-13=-34, 13-14=-30, 26-41=-20, 21-41=-50, 21-42=-20, 42-43=-50, 43-44=-20, 44-45=-50, 15-45=-20, 15-46=-50, 30-46=-20
Horz: 1-2=-10, 2-6=-6, 9-13=16, 13-14=20

23) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-6=-60, 6-9=-60, 9-14=-20, 26-30=-20

24) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-6=-20, 6-9=-60, 9-14=-60, 26-30=-20

25) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-6=-50, 6-9=-50, 9-14=-20, 26-41=-20, 21-41=-50, 21-42=-20, 42-43=-50, 43-44=-20, 44-45=-50, 15-45=-20, 15-46=-50, 30-46=-20

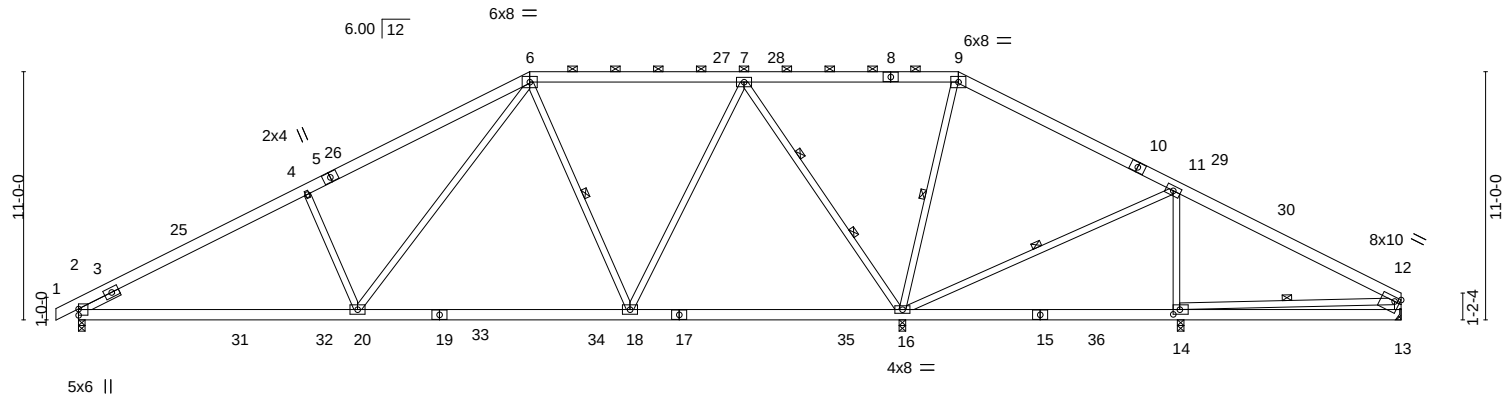
26) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-6=-20, 6-9=-50, 9-14=-50, 26-41=-20, 21-41=-50, 21-42=-20, 42-43=-50, 43-44=-20, 44-45=-50, 15-45=-20, 15-46=-50, 30-46=-20

| Job | Truss | Truss Type | Qty | Ply | 3293795 |
|---|---|---|---|---|---|
| MASTER | A08 | HIP | 4 | 1 | I54564442 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Oct 5 10:12:17 2022 Page 1
ID:zbkIr1dFypInNUy02maTGGyYVBm-I?eY8_H1xqxsV6Typpt22JYTHni2j?66FqeddfyWV4i

| -1-0-0 | 10-1-12 | 20-0-0 | 29-6-0 | 39-0-0 | 48-8-0 | 58-7-8 |
|---|---|---|---|---|---|---|
| 1-0-0 | 10-1-12 | 9-10-4 | 9-6-0 | 9-6-0 | 9-8-0 | 9-11-8 |

Scale = 1:102.1




| 12-4-7 | 24-5-5 | 36-6-4 | 48-10-4 | 58-7-8 |
|---|---|---|---|---|
| 12-4-7 | 12-0-15 | 12-0-15 | 12-4-0 | 9-9-4 |

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

| LOADING (psf) | | SPACING- 2-0-0 | | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.65 | Vert(LL) | -0.19 | 18-20 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.72 | Vert(CT) | -0.31 | 18-20 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.98 | Horz(CT) | 0.04 | 13 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-MS | | Wind(LL) | 0.05 | 20-23 | >999 | 240 | Weight: 427 lb | FT = 20% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x6 SP No.2 |
| BOT CHORD | 2x6 SP No.2 |
| WEBS | 2x4 SP No.3 *Except* 6-20,7-16,11-16: 2x4 SP No.2 |
| SLIDER | Left 2x4 SP No.3 1-11-12 |

**BRACING-**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 4-8-7 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-9. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 14-16. |
| WEBS | 1 Row at midpt 6-18, 9-16, 11-16, 12-14<br>2 Rows at 1/3 pts 7-16 |

**REACTIONS.** All bearings 0-3-8 except (jt=length) 13=Mechanical.
(lb) - Max Horz 2=144(LC 16)
Max Uplift All uplift 100 lb or less at joint(s) 13, 16, 14 except 2=-101(LC 12)
Max Grav All reactions 250 lb or less at joint(s) except 13=312(LC 24), 2=1352(LC 25), 16=2757(LC 2), 14=636(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-2062/187, 4-6=-1901/258, 6-7=-782/175, 7-9=0/717, 9-11=-7/710, 11-12=-123/287
BOT CHORD 2-20=-193/1767, 18-20=-30/984, 16-18=-33/333, 13-14=-71/274
WEBS 4-20=-555/252, 6-20=-111/1046, 6-18=-591/171, 7-18=-15/1092, 7-16=-1820/185, 9-16=-752/114, 11-16=-452/133, 11-14=-379/213, 12-14=-340/113

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 4-10-6, Interior(1) 4-10-6 to 20-0-0, Exterior(2) 20-0-0 to 28-3-8, Interior(1) 28-3-8 to 39-0-0, Exterior(2) 39-0-0 to 47-3-8, Interior(1) 47-3-8 to 58-5-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are 5x8 MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13, 16, 14 except (jt=lb) 2=101.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.


October 5,2022



ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 3293795 |
|---|---|---|---|---|---|
| MASTER | A08H | HIP | 1 | 1 | I54564443 |

Job Reference (optional)

Builders FirstSource, Apex, NC 27523 — 8.530 s May 26 2022 MiTek Industries, Inc. Wed Oct 5 10:53:22 2022 Page 1

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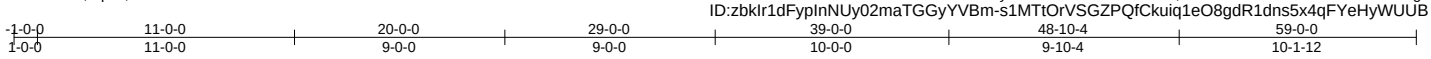
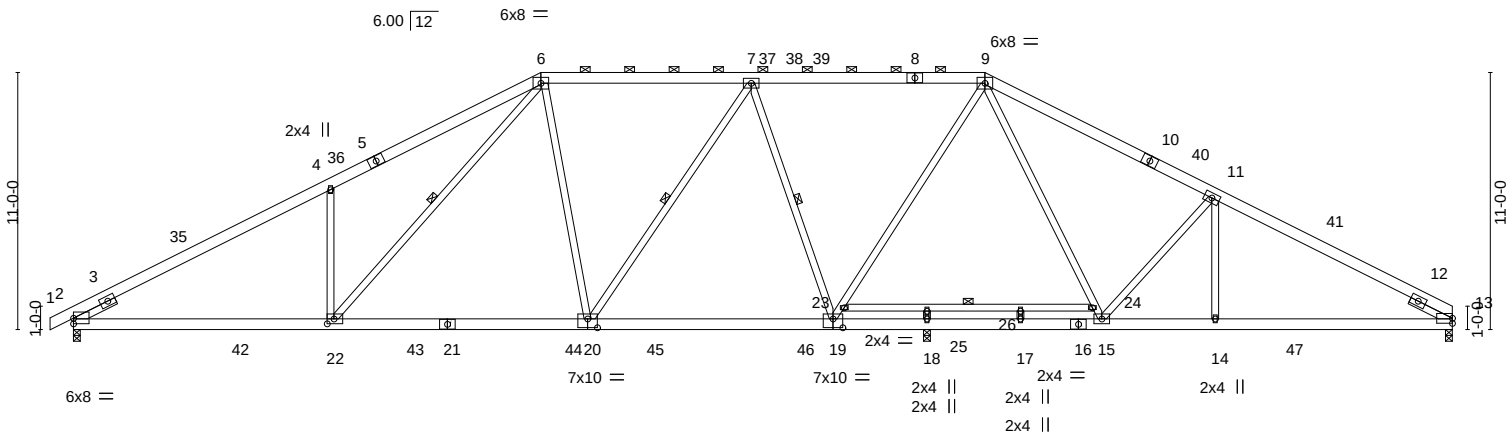



Scale = 1:98.6



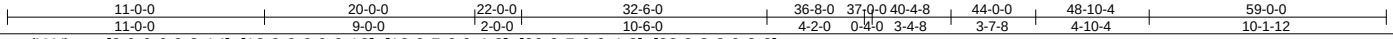




Plate Offsets (X,Y)-- [2:0-0-0,0-2-14], [13:0-0-0,0-2-10], [19:0-5-0,0-4-8], [20:0-5-0,0-4-8], [22:0-3-8,0-2-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.88 | Vert(LL) | -0.31 | 19-20 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.66 | Vert(CT) | -0.57 | 19-20 | >765 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.93 | Horz(CT) | 0.13 | 13 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-MS | | Wind(LL) | 0.14 | 19-20 | >999 | 240 | Weight: 443 lb | FT = 20% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x6 SP No.2 *Except* 1-5: 2x6 SP DSS |
| BOT CHORD | 2x6 SP DSS |
| WEBS | 2x4 SP No.3 *Except* 7-20,6-22: 2x4 SP No.2 |
| SLIDER | Left 2x4 SP No.3 1-11-12, Right 2x4 SP No.3 1-11-12 |

**BRACING-**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 2-11-6 oc purlins, except 2-0-0 oc purlins (4-1-5 max.): 6-9. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS | 1 Row at midpt 7-20, 7-19, 23-24, 6-22 |

**REACTIONS.** (size) 2=0-3-8, 18=0-3-8, 13=0-3-8
Max Horz 2=147(LC 16)
Max Uplift 2=-125(LC 12), 13=-119(LC 13)
Max Grav 2=2190(LC 2), 18=767(LC 1), 13=1885(LC 1)

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

| | |
|---|---|
| TOP CHORD | 2-3=-1584/0, 3-35=-3736/224, 4-35=-3615/274, 4-36=-3724/386, 5-36=-3709/391, 5-6=-3620/435, 6-37=-2679/325, 7-37=-2679/325, 7-38=-2399/324, 38-39=-2399/324, 8-39=-2399/324, 8-9=-2399/324, 9-10=-2574/340, 10-40=-2628/302, 11-40=-2703/292, 11-41=-3017/282, 12-41=-3207/250, 12-13=-1312/0 |
| BOT CHORD | 2-42=-215/3233, 22-42=-215/3233, 22-43=-73/2592, 21-43=-73/2592, 21-44=-73/2592, 20-44=-73/2592, 20-45=-89/2607, 45-46=-89/2607, 19-46=-89/2607, 18-19=-63/2183, 17-18=-63/2183, 16-17=-63/2183, 15-16=-63/2183, 14-15=-168/2763, 14-47=-168/2763, 13-47=-168/2763 |
| WEBS | 4-22=-574/285, 7-19=-757/152, 19-23=-60/636, 9-23=-60/613, 9-24=-68/405, 15-24=-73/400, 11-15=-720/188, 11-14=0/346, 6-22=-217/1022, 6-20=-23/598 |

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 4-10-13, Interior(1) 4-10-13 to 20-0-0, Exterior(2) 20-0-0 to 28-4-2, Interior(1) 28-4-2 to 39-0-0, Exterior(2) 39-0-0 to 47-4-2, Interior(1) 47-4-2 to 59-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are 5x8 MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 125 lb uplift at joint 2 and 119 lb uplift at joint 13.
8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) N/A
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.


October 5,2022

Continued on page 2



ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

**LOAD CASE(S)**

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-6=-60, 6-9=-60, 9-13=-60, 27-31=-20
2) Dead + 0.75 Roof Live (balanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-6=-50, 6-9=-50, 9-13=-50, 27-42=-20, 22-42=-50, 22-43=-20, 43-44=-50, 44-45=-20, 45-46=-50, 14-46=-20, 14-47=-50, 31-47=-20
3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-6=-20, 6-9=-20, 9-13=-20, 27-31=-40
4) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=42, 2-35=22, 6-35=12, 6-37=20, 9-37=15, 9-40=22, 13-40=12, 27-31=-12
   Horz: 1-2=-54, 2-35=-34, 6-35=-24, 9-40=34, 13-40=24
5) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=8, 2-36=12, 6-36=22, 6-39=15, 9-39=20, 9-41=12, 13-41=22, 27-31=-12
   Horz: 1-2=-20, 2-36=-24, 6-36=-34, 9-41=24, 13-41=34
6) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=-13, 2-6=-32, 6-9=-29, 9-13=-32, 27-31=-20
   Horz: 1-2=-7, 2-6=12, 9-13=-12
7) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=-27, 2-6=-32, 6-9=-29, 9-13=-32, 27-31=-20
   Horz: 1-2=7, 2-6=12, 9-13=-12
8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=7, 2-6=-3, 6-9=19, 9-13=7, 27-31=-12
   Horz: 1-2=-19, 2-6=-9, 9-13=19
9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=2, 2-6=7, 6-9=19, 9-13=-3, 27-31=-12
   Horz: 1-2=-14, 2-6=-19, 9-13=9
10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
    Uniform Loads (plf)
    Vert: 1-2=-15, 2-6=-20, 6-9=2, 9-13=-10, 27-31=-20
    Horz: 1-2=-5, 2-6=-0, 9-13=10
11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
    Uniform Loads (plf)
    Vert: 1-2=-6, 2-6=-10, 6-9=2, 9-13=-20, 27-31=-20
    Horz: 1-2=-14, 2-6=-10, 9-13=0
12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
    Uniform Loads (plf)
    Vert: 1-2=14, 2-6=19, 6-38=19, 9-38=5, 9-13=5, 27-31=-12
    Horz: 1-2=-26, 2-6=-31, 9-13=17
13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
    Uniform Loads (plf)
    Vert: 1-2=1, 2-6=5, 6-38=5, 9-38=19, 9-13=19, 27-31=-12
    Horz: 1-2=-13, 2-6=-17, 9-13=31
14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
    Uniform Loads (plf)
    Vert: 1-2=5, 2-6=9, 6-38=9, 9-38=2, 9-13=2, 27-31=-12
    Horz: 1-2=-17, 2-6=-21, 9-13=14
15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
    Uniform Loads (plf)
    Vert: 1-2=-3, 2-6=2, 6-38=2, 9-38=9, 9-13=9, 27-31=-12
    Horz: 1-2=-9, 2-6=-14, 9-13=21
16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
    Uniform Loads (plf)
    Vert: 1-2=6, 2-6=2, 6-38=2, 9-38=-11, 9-13=-11, 27-31=-20
    Horz: 1-2=-26, 2-6=-22, 9-13=9
17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
    Uniform Loads (plf)
    Vert: 1-2=-7, 2-6=-11, 6-38=-11, 9-38=2, 9-13=2, 27-31=-20
    Horz: 1-2=-13, 2-6=-9, 9-13=22
18) Dead + Uninhabitable Attic Storage: Lumber Increase=1.25, Plate Increase=1.25
    Uniform Loads (plf)
    Vert: 1-6=-20, 6-9=-20, 9-13=-20, 27-42=-20, 22-42=-60, 22-43=-20, 43-44=-60, 44-45=-20, 45-46=-60, 14-46=-20, 14-47=-60, 31-47=-20
19) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
    Uniform Loads (plf)
    Vert: 1-2=-46, 2-6=-50, 6-9=-34, 9-13=-43, 27-42=-20, 22-42=-50, 22-43=-20, 43-44=-50, 44-45=-20, 45-46=-50, 14-46=-20, 14-47=-50, 31-47=-20
    Horz: 1-2=-4, 2-6=-0, 9-13=7

Continued on page 3

**LOAD CASE(S)**

20) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-39, 2-6=-43, 6-9=-34, 9-13=-50, 27-42=-20, 22-42=-50, 22-43=-20, 43-44=-50, 44-45=-20, 45-46=-50, 14-46=-20, 14-47=-50, 31-47=-20
Horz: 1-2=-11, 2-6=-7, 9-13=0

21) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-30, 2-6=-34, 6-38=-34, 9-38=-44, 9-13=-44, 27-42=-20, 22-42=-50, 22-43=-20, 43-44=-50, 44-45=-20, 45-46=-50, 14-46=-20, 14-47=-50, 31-47=-20
Horz: 1-2=-20, 2-6=-16, 9-13=6

22) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-40, 2-6=-44, 6-38=-44, 9-38=-34, 9-13=-34, 27-42=-20, 22-42=-50, 22-43=-20, 43-44=-50, 44-45=-20, 45-46=-50, 14-46=-20, 14-47=-50, 31-47=-20
Horz: 1-2=-10, 2-6=-6, 9-13=16

23) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-6=-60, 6-9=-60, 9-13=-20, 27-31=-20

24) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-6=-20, 6-9=-60, 9-13=-60, 27-31=-20

25) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-6=-50, 6-9=-50, 9-13=-20, 27-42=-20, 22-42=-50, 22-43=-20, 43-44=-50, 44-45=-20, 45-46=-50, 14-46=-20, 14-47=-50, 31-47=-20

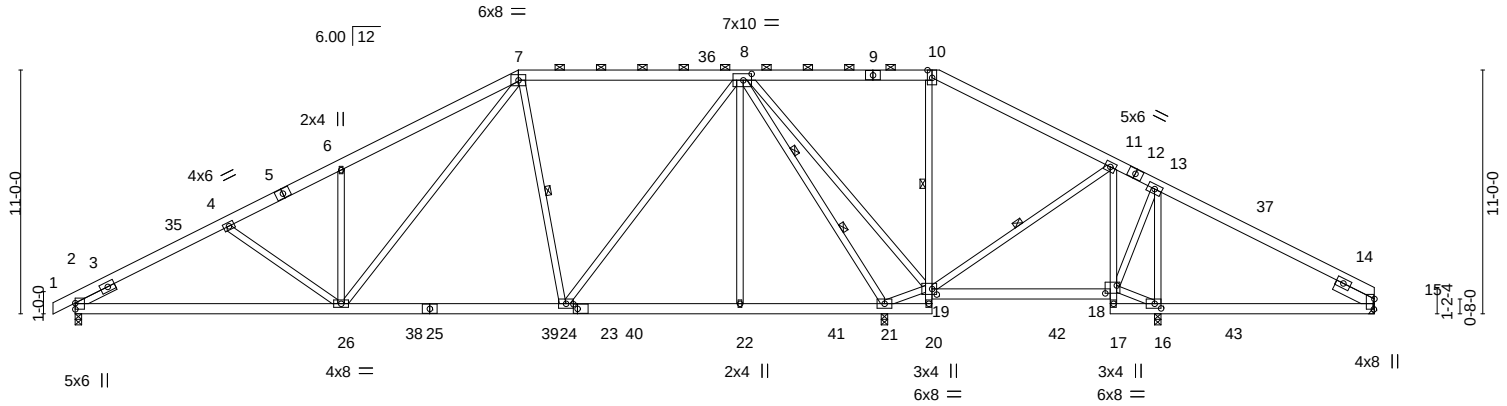
26) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-6=-20, 6-9=-50, 9-13=-50, 27-42=-20, 22-42=-50, 22-43=-20, 43-44=-50, 44-45=-20, 45-46=-50, 14-46=-20, 14-47=-50, 31-47=-20

| Job | Truss | Truss Type | Qty | Ply | 3293795 I54564444 |
|---|---|---|---|---|---|
| MASTER | A08T | SPECIAL | 1 | 1 | Job Reference (optional) |

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Oct 5 10:12:20 2022 Page 1
ID:jww8HilN90uFSTm7sxLqmezW8I3-jZJhm0JvDlKRMZBXVxRlfyA?7?n0wNzZyosHD_yWV4f

| -1-0-0 | 6-10-5 | 12-0-0 | 13-5-3 | 20-0-0 | 22-0-0 | 30-0-0 | 38-8-0 | 39-0-0 | 46-8-8 | 48-10-4 | 52-6-4 | 58-7-8 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-0-0 | 6-10-5 | 5-1-11 | 1-5-3 | 6-6-13 | 2-0-0 | 8-0-0 | 8-8-0 | 0-4-0 | 7-8-8 | 2-1-12 | 3-8-0 | 6-1-4 |

Scale = 1:104.0




| 12-0-0 | 20-0-0 | 22-0-0 | 30-0-0 | 36-6-4 | 38-8-0 | 46-8-8 | 48-10-4 | 58-7-8 |
|---|---|---|---|---|---|---|---|---|
| 12-0-0 | 8-0-0 | 2-0-0 | 8-0-0 | 6-6-4 | 2-1-12 | 8-0-8 | 2-1-12 | 9-9-4 |

Plate Offsets (X,Y)-- [8:0-4-8,0-3-8], [10:0-4-2,Edge], [15:0-5-10,0-0-5], [16:0-3-8,0-2-8], [18:0-6-4,0-4-4], [19:0-2-8,0-3-0], [23:0-2-4,0-2-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.62 | Vert(LL) | -0.16 | 24-26 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.57 | Vert(CT) | -0.26 | 24-26 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.91 | Horz(CT) | 0.06 | 16 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-MS | | Wind(LL) | 0.05 | 26 | >999 | 240 | Weight: 477 lb | FT = 20% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x6 SP No.2 |
| BOT CHORD | 2x6 SP No.2 *Except* 10-20,11-17: 2x4 SP No.3 |
| WEBS | 2x4 SP No.3 *Except* 8-24,8-19,7-26: 2x4 SP No.2, 8-21: 2x4 SP SS |
| SLIDER | Left 2x4 SP No.3 1-11-12, Right 2x6 SP No.2 1-11-12 |

**BRACING-**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 4-5-9 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 7-10. |
| BOT CHORD | Rigid ceiling directly applied or 6-0-0 oc bracing. Except: 1 Row at midpt 10-19; 6-0-0 oc bracing: 17-18 |
| WEBS | 1 Row at midpt 7-24, 11-19; 2 Rows at 1/3 pts 8-21 |

**REACTIONS.** All bearings 0-3-8 except (jt=length) 15=Mechanical.
(lb) - Max Horz 2=151(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 2, 21 except 15=-116(LC 13)
Max Grav All reactions 250 lb or less at joint(s) except 2=1423(LC 1), 15=444(LC 24), 21=2482(LC 2), 16=670(LC 26)

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

| | |
|---|---|
| TOP CHORD | 2-4=-2174/164, 4-6=-1927/170, 6-7=-1994/306, 7-8=-1072/219, 8-10=0/368, 10-11=-73/458, 11-13=-321/274, 13-15=-340/226 |
| BOT CHORD | 2-26=-98/1863, 24-26=0/1157, 22-24=0/557, 21-22=0/552, 10-19=-532/77 |
| WEBS | 6-26=-450/205, 7-24=-472/125, 8-24=-22/902, 8-21=-2281/153, 19-21=-613/213, 8-19=-47/661, 11-19=-394/139, 16-18=-49/325, 13-16=-452/73, 7-26=-126/984, 8-22=0/346 |

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 4-10-6, Interior(1) 4-10-6 to 20-0-0, Exterior(2) 20-0-0 to 28-3-8, Interior(1) 28-3-8 to 38-8-0, Exterior(2) 38-8-0 to 46-10-4, Interior(1) 46-10-4 to 58-7-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are 5x8 MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 21 except (jt=lb) 15=116.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.


October 5,2022

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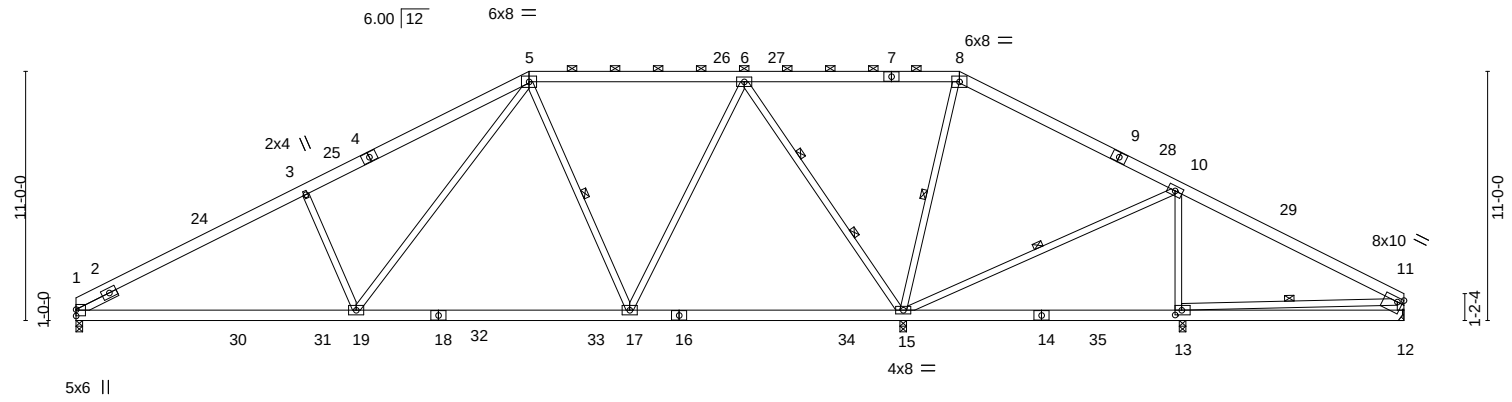
| Job | Truss | Truss Type | Qty | Ply | 3293795 |
|---|---|---|---|---|---|
| MASTER | A09 | HIP | 1 | 1 | I54564445 |

Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Oct 5 10:12:22 2022 Page 1
ID:zbkIr1dFypInNUy02maTGGyYVBm-fyRRBhKAlMa9btLwcMTDlNGK1oPDOGLrP6LOIsyWV4d

| 10-1-12 | 20-0-0 | 29-6-0 | 39-0-0 | 48-8-0 | 58-7-8 |
|---|---|---|---|---|---|
| 10-1-12 | 9-10-4 | 9-6-0 | 9-6-0 | 9-8-0 | 9-11-8 |

Scale = 1:101.7




| 12-4-7 | 24-5-5 | 36-6-4 | 48-10-4 | 58-7-8 |
|---|---|---|---|---|
| 12-4-7 | 12-0-15 | 12-0-15 | 12-4-0 | 9-9-4 |

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

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.65 | Vert(LL) | -0.19 | 17-19 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.72 | Vert(CT) | -0.31 | 17-19 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.98 | Horz(CT) | 0.04 | 12 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-MS | | Wind(LL) | 0.05 | 19-22 | >999 | 240 | Weight: 425 lb | FT = 20% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x6 SP No.2 |
| BOT CHORD | 2x6 SP No.2 |
| WEBS | 2x4 SP No.3 *Except* 5-19,6-15,10-15: 2x4 SP No.2 |
| SLIDER | Left 2x4 SP No.3 1-11-12 |

**BRACING-**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 4-8-4 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-8. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 13-15. |
| WEBS | 1 Row at midpt 5-17, 8-15, 10-15, 11-13<br>2 Rows at 1/3 pts 6-15 |

**REACTIONS.** All bearings 0-3-8 except (jt=length) 12=Mechanical.
(lb) - Max Horz 1=131(LC 16)
Max Uplift All uplift 100 lb or less at joint(s) 12, 1, 15, 13
Max Grav All reactions 250 lb or less at joint(s) except 12=312(LC 24), 1=1301(LC 25), 15=2757(LC 2), 13=636(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-2067/188, 3-5=-1906/259, 5-6=-784/181, 6-8=0/716, 8-10=-8/709, 10-11=-123/286
BOT CHORD 1-19=-193/1772, 17-19=-30/986, 15-17=-32/335, 12-13=-71/274
WEBS 3-19=-557/252, 5-19=-112/1050, 5-17=-592/172, 6-17=-15/1093, 6-15=-1820/186, 8-15=-752/115, 10-15=-452/133, 10-13=-378/212, 11-13=-340/114

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-0-0 to 5-10-6, Interior(1) 5-10-6 to 20-0-0, Exterior(2) 20-0-0 to 28-3-8, Interior(1) 28-3-8 to 39-0-0, Exterior(2) 39-0-0 to 47-3-8, Interior(1) 47-3-8 to 58-5-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are 5x8 MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 1, 15, 13.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.


October 5,2022



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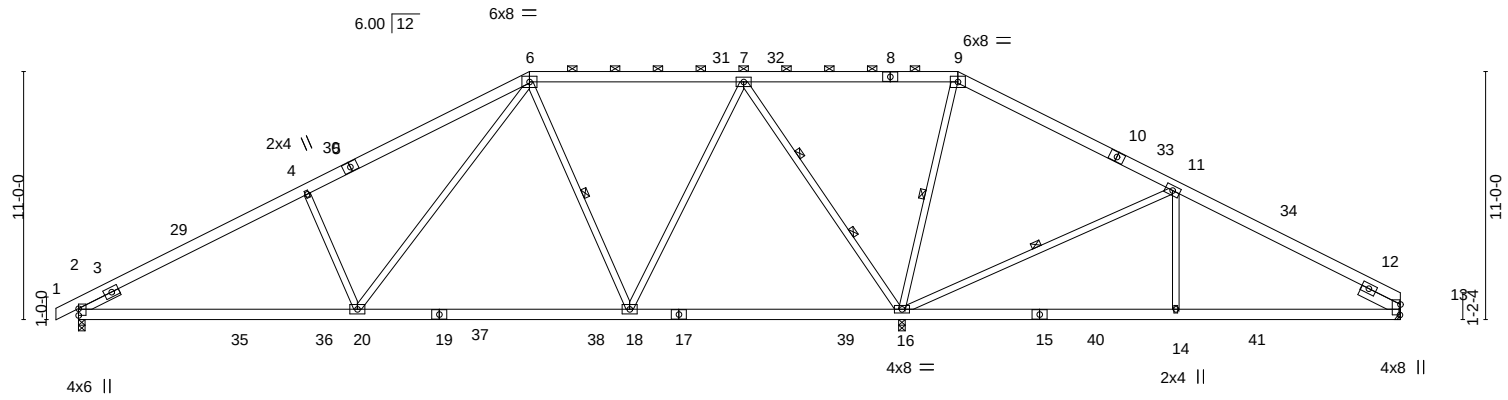
| Job | Truss | Truss Type | Qty | Ply | 3293795 |
|---|---|---|---|---|---|
| MASTER | A10 | HIP | 4 | 1 | I54564446 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Oct 5 10:12:23 2022 Page 1
ID:zbklr1dFypInNUy02maTGGyYVBm-78?pP1LoWgi0D1w6A4_SHaoVzClN7iZ?em5xqJyWV4c

| -1-0-0 | 10-1-12 | 20-0-0 | 29-6-0 | 39-0-0 | 48-8-0 | 58-7-8 |
|---|---|---|---|---|---|---|
| 1-0-0 | 10-1-12 | 9-10-4 | 9-6-0 | 9-6-0 | 9-8-0 | 9-11-8 |

Scale = 1:102.2




| 12-4-7 | 24-5-5 | 36-6-4 | 48-8-0 | 58-7-8 |
|---|---|---|---|---|
| 12-4-7 | 12-0-15 | 12-0-15 | 12-1-12 | 9-11-8 |

Plate Offsets (X,Y)-- [13:0-5-10,0-0-5]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.64 | Vert(LL) | -0.19 | 18-20 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.72 | Vert(CT) | -0.31 | 18-20 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.98 | Horz(CT) | 0.04 | 16 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-MS | | Wind(LL) | 0.05 | 20 | >999 | 240 | Weight: 417 lb | FT = 20% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x6 SP No.2 |
| BOT CHORD | 2x6 SP No.2 |
| WEBS | 2x4 SP No.3 *Except* 6-20,7-16,11-16: 2x4 SP No.2 |
| SLIDER | Left 2x4 SP No.3 1-11-12, Right 2x6 SP No.2 1-11-12 |

**BRACING-**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 4-8-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 6-9. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS | 1 Row at midpt 6-18, 9-16, 11-16<br>2 Rows at 1/3 pts 7-16 |

**REACTIONS.** (size) 2=0-3-8, 16=0-3-8 (req. 0-3-10), 13=Mechanical
Max Horz 2=150(LC 12)
Max Uplift 2=-116(LC 12), 13=-106(LC 13)
Max Grav 2=1361(LC 23), 16=3049(LC 2), 13=647(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-2078/217, 4-6=-1916/288, 6-7=-800/224, 7-9=0/754, 9-11=0/747, 11-13=-732/203
BOT CHORD 2-20=-229/1781, 18-20=-69/998, 16-18=-68/381, 14-16=-83/574, 13-14=-83/574
WEBS 4-20=-555/251, 6-20=-109/1048, 6-18=-592/155, 7-18=0/1103, 7-16=-1825/154, 9-16=-759/117, 11-16=-1096/175, 11-14=0/474

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 4-10-6, Interior(1) 4-10-6 to 20-0-0, Exterior(2) 20-0-0 to 28-3-8, Interior(1) 28-3-8 to 39-0-0, Exterior(2) 39-0-0 to 47-3-8, Interior(1) 47-3-8 to 58-7-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are 5x8 MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) WARNING: Required bearing size at joint(s) 16 greater than input bearing size.
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(s) except (jt=lb) 2=116, 13=106.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.


October 5,2022



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| Job | Truss | Truss Type | Qty | Ply | 3293795 |
|---|---|---|---|---|---|
| MASTER | A10G | GABLE | 1 | 1 | I54564447 |

Job Reference (optional)

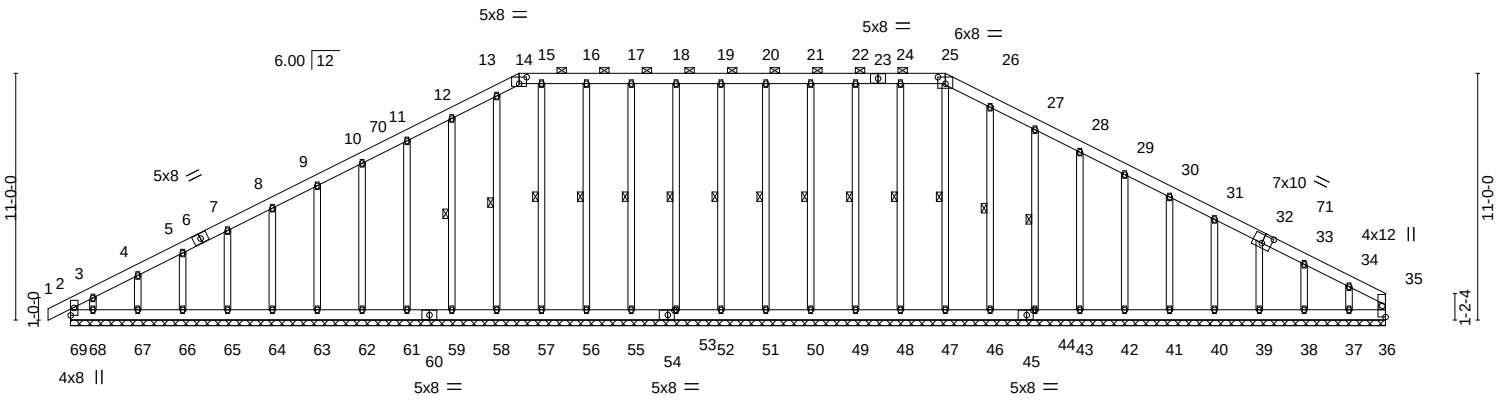
Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Oct 5 10:12:27 2022 Page 1

ID:zbkIr1dFypInNUy02maTGGyYVBm-0wEKEPOIauCRheEtPv3OSQzJgpIu3jcbZO39z4yWV4Y

-1-0-0 20-0-0 39-0-0 58-7-8

1-0-0 20-0-0 19-0-0 19-7-8

Scale = 1:102.7




58-7-8

58-7-8

Plate Offsets (X,Y)-- [14:0-4-0,0-3-8], [25:0-4-0,0-3-8], [32:0-5-0,0-4-8], [45:0-3-8,0-2-8], [54:0-3-8,0-2-8]

| LOADING (psf) | | SPACING- 2-0-0 | | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.15 | Vert(LL) | 0.00 | 1 | n/r | 120 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.05 | Vert(CT) | -0.00 | 1 | n/r | 120 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.14 | Horz(CT) | 0.01 | 36 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-R | | | | | | | Weight: 583 lb | FT = 20% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x6 SP No.2 |
| BOT CHORD | 2x6 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, and 2-0-0 oc purlins (6-0-0 max.): 14-25. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS | 1 Row at midpt 25-47, 24-48, 22-49, 21-50, 20-51, 19-52, 18-53, 17-55, 16-56, 15-57, 13-58, 12-59, 26-46, 27-44 |

**REACTIONS.** All bearings 58-7-8.

(lb) - Max Horz 69=133(LC 16)

Max Uplift All uplift 100 lb or less at joint(s) 69, 48, 49, 50, 51, 52, 53, 55, 56, 59, 61, 62, 63, 64, 65, 66, 67, 46, 44, 43, 42, 41, 40, 39, 38, 37 except 68=-140(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 69, 36, 47, 48, 49, 50, 51, 52, 53, 55, 56, 57, 58, 59, 61, 62, 63, 64, 65, 66, 67, 68, 46, 44, 43, 42, 41, 40, 39, 38, 37

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

TOP CHORD 11-12=-88/257, 12-13=-102/298, 13-14=-104/294, 14-15=-94/293, 15-16=-94/293, 16-17=-94/293, 17-18=-94/293, 18-19=-94/293, 19-20=-94/293, 20-21=-94/293, 21-22=-94/293, 22-24=-94/293, 24-25=-94/293, 25-26=-107/299, 26-27=-95/266

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -1-0-0 to 5-0-0, Exterior(2) 5-0-0 to 20-0-0, Corner(3) 20-0-0 to 25-10-6, Exterior(2) 25-10-6 to 39-0-0, Corner(3) 39-0-0 to 45-0-0, Exterior(2) 45-0-0 to 58-5-12 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 69, 48, 49, 50, 51, 52, 53, 55, 56, 59, 61, 62, 63, 64, 65, 66, 67, 46, 44, 43, 42, 41, 40, 39, 38, 37 except (jt=lb) 68=140.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.


October 5,2022



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818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 3293795 |
|---|---|---|---|---|---|
| MASTER | A11 | MONO HIP | 5 | 1 | I54564448 |

Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Oct 5 10:12:28 2022 Page 1
ID:zbkIr1dFypInNUy02maTGGyYVBm-U6oiSlPwLCKIJoo4zdad_eWMcDT1o0Ckn1oiWWyWV4X

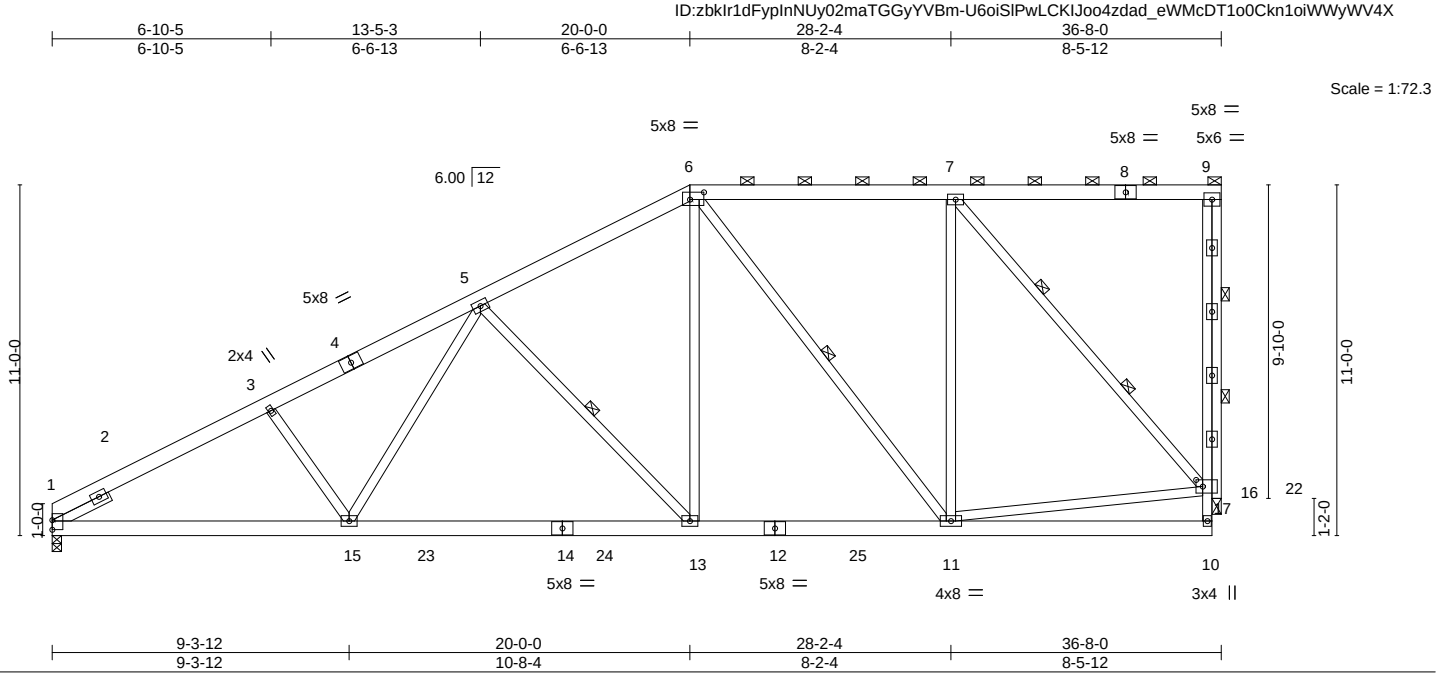


Plate Offsets (X,Y)-- [6:0-5-4,0-2-12], [16:0-2-8,0-2-8]

| LOADING (psf) | | SPACING- 2-0-0 | | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.58 | Vert(LL) | -0.18 | 13-15 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.76 | Vert(CT) | -0.35 | 13-15 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.82 | Horz(CT) | 0.05 | 22 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-MS | | Wind(LL) | 0.07 | 13-15 | >999 | 240 | Weight: 319 lb | FT = 20% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x6 SP No.2 |
| BOT CHORD | 2x6 SP No.2 |
| WEBS | 2x4 SP No.3 *Except* 6-11: 2x4 SP No.2 |
| SLIDER | Left 2x4 SP No.2 1-11-12 |

**BRACING-**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 3-10-11 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-9. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS | 1 Row at midpt 5-13, 6-11<br>2 Rows at 1/3 pts 7-16, 9-22 |

**REACTIONS.** (size) 1=0-3-8, 22=0-3-8
Max Horz 1=326(LC 7)
Max Uplift 1=-88(LC 8), 22=-105(LC 5)
Max Grav 1=1461(LC 1), 22=1438(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-2415/179, 3-5=-2255/196, 5-6=-1568/182, 6-7=-947/141, 9-16=-47/1238
BOT CHORD 1-15=-240/2073, 13-15=-161/1753, 11-13=-139/1339
WEBS 5-15=-1/491, 5-13=-669/175, 6-13=-13/860, 6-11=-658/89, 7-11=0/585, 7-16=-1374/118, 11-16=-222/883, 9-22=-1438/105

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are 4x6 MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Bearing at joint(s) 22 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 22=105.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.


October 5,2022



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| Job | Truss | Truss Type | Qty | Ply | 3293795 |
|---|---|---|---|---|---|
| MASTER | A12 | SPECIAL | 3 | 1 | I54564449 |

Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Oct 5 10:12:29 2022 Page 1

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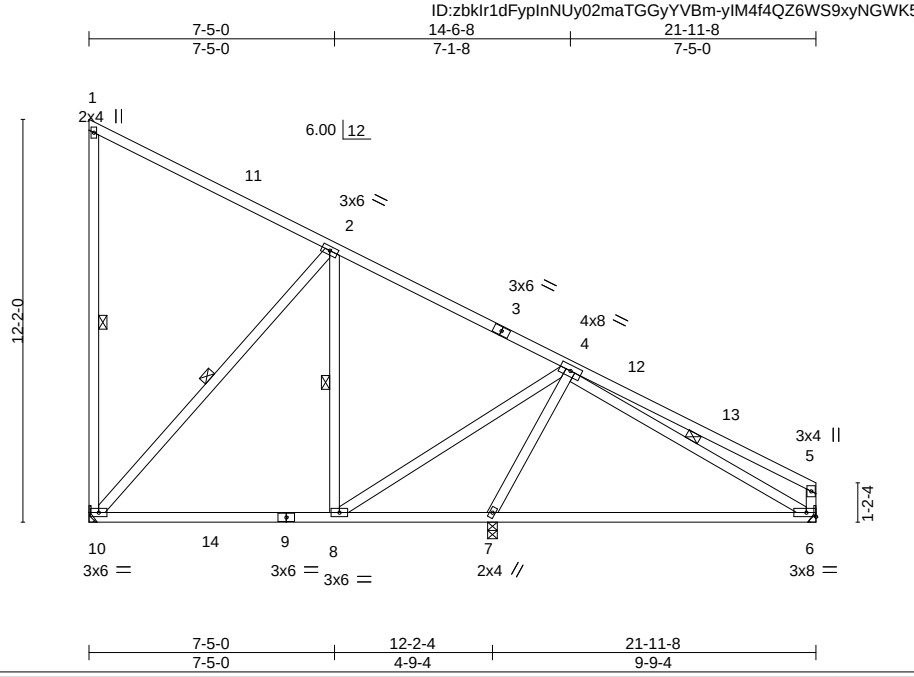


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.68 | Vert(LL) | -0.23 | 6-7 | >503 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.72 | Vert(CT) | -0.46 | 6-7 | >253 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.35 | Horz(CT) | 0.01 | 6 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-MS | | Wind(LL) | 0.00 | 8 | >999 | 240 | Weight: 147 lb | FT = 20% |

**LUMBER-**

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

**BRACING-**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. |
| BOT CHORD | Rigid ceiling directly applied or 6-0-0 oc bracing. |
| WEBS | 1 Row at midpt 1-10, 2-10, 2-8, 4-6 |

**REACTIONS.** (size) 10=Mechanical, 6=Mechanical, 7=0-3-8
Max Horz 10=-250(LC 13)
Max Uplift 10=-88(LC 13)
Max Grav 10=533(LC 20), 6=453(LC 1), 7=750(LC 1)

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

| | |
|---|---|
| TOP CHORD | 2-4=-383/0, 4-5=-344/80, 5-6=-312/90 |
| BOT CHORD | 8-10=0/313, 6-7=0/306 |
| WEBS | 2-10=-391/158, 4-8=0/369, 4-7=-660/25 |

**NOTES-**

1) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 4-4-11, Interior(1) 4-4-11 to 21-9-12 zone; cantilever left and right exposed ; end vertical right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10.


October 5,2022



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| Job | Truss | Truss Type | Qty | Ply | 3293795 |
|---|---|---|---|---|---|
| MASTER | A13 | SPECIAL | 2 | 1 | I54564450 |

Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Oct 5 10:12:30 2022 Page 1

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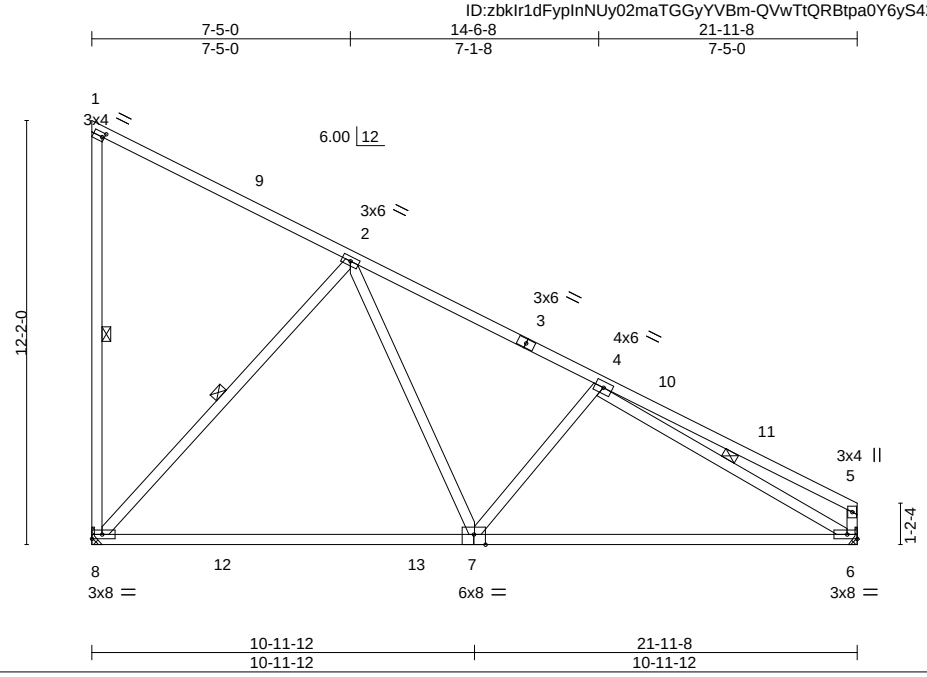


Plate Offsets (X,Y)-- [1:0-0-13,0-1-8], [7:0-4-0,Edge]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.68 | Vert(LL) | -0.60 | 7-8 | >430 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.94 | Vert(CT) | -0.89 | 7-8 | >293 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.49 | Horz(CT) | 0.02 | 6 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-MS | | Wind(LL) | -0.12 | 7-8 | >999 | 240 | Weight: 137 lb | FT = 20% |

**LUMBER-**

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3 *Except*
1-8: 2x4 SP No.1

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-5-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 1-8, 2-8, 4-6

**REACTIONS.** (size) 8=Mechanical, 6=Mechanical
Max Horz 8=-368(LC 8)
Max Uplift 8=-45(LC 8)
Max Grav 8=892(LC 20), 6=867(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-992/98, 4-5=-366/71, 5-6=-321/84
BOT CHORD 7-8=0/634, 6-7=-23/975
WEBS 2-8=-799/131, 2-7=0/617, 4-7=-321/144, 4-6=-957/31

**NOTES-**

1) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 4-4-11, Interior(1) 4-4-11 to 21-9-12 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8.


October 5,2022



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| Job | Truss | Truss Type | Qty | Ply | 3293795 |
|---|---|---|---|---|---|
| MASTER | B01SG | MODIFIED QUEENPOST | 1 | 1 | I54564451 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Oct 5 10:12:31 2022 Page 1
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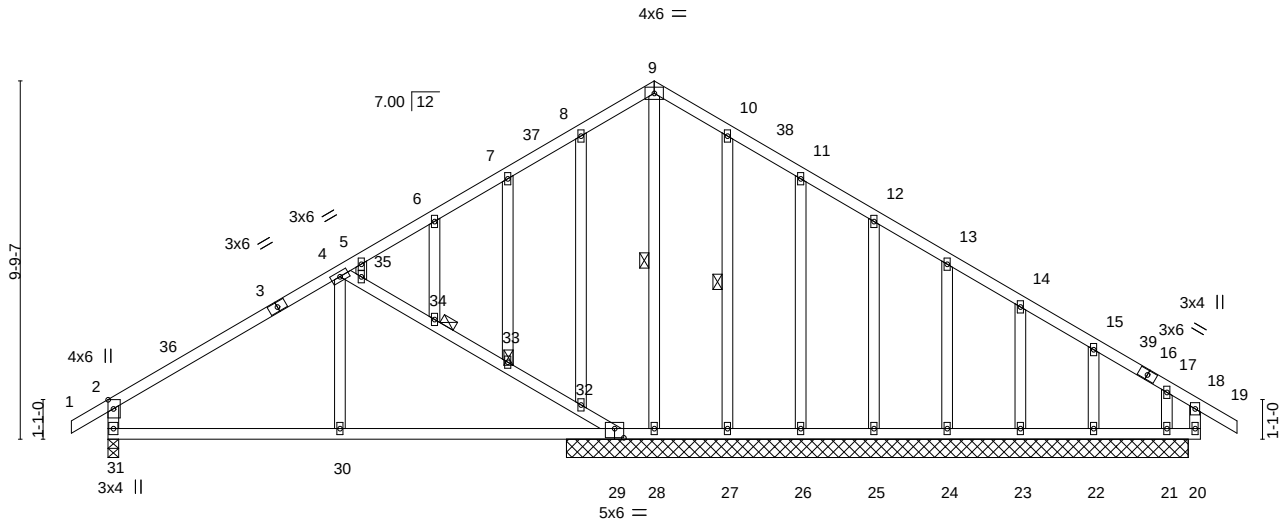
| 1-0-0 | 1-7-2 | 3-11-9 | 6-4-0 | 11-0-14 | 14-11-0 | 29-10-0 | 30-10-0 |
|---|---|---|---|---|---|---|---|
| 1-0-0 | 1-7-2 | 2-4-7 | 2-4-7 | 4-8-14 | 3-10-2 | 14-11-0 | 1-0-0 |

Scale = 1:62.9




| 2-9-5 | 6-4-0 | 9-10-11 | 29-6-0 | 29-10-0 |
|---|---|---|---|---|
| 2-9-5 | 3-6-11 | 3-6-11 | 19-7-5 | 0-4-0 |

Plate Offsets (X,Y)-- [2:0-3-0,Edge], [29:0-3-0,0-3-0]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.77 | Vert(LL) | -0.06 | 29-30 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.47 | Vert(CT) | -0.12 | 29-30 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.76 | Horz(CT) | 0.01 | 29 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-MS | | Wind(LL) | 0.02 | 29-30 | >999 | 240 | Weight: 206 lb | FT = 20% |

**LUMBER-**

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

**BRACING-**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. |
| BOT CHORD | Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 30-31,29-30. |
| WEBS | 1 Row at midpt 9-28, 10-27 |
| JOINTS | 1 Brace at Jt(s): 33, 34 |

**REACTIONS.** All bearings 16-11-12 except (jt=length) 31=0-3-8.
(lb) - Max Horz 31=-208(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 31, 29, 28, 27, 26, 25, 24, 23, 22, 21
Max Grav All reactions 250 lb or less at joint(s) 27, 26, 25, 24, 23, 21 except 31=516(LC 23), 29=694(LC 19), 28=259(LC 22), 22=280(LC 20)

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

| | |
|---|---|
| TOP CHORD | 2-4=-478/112, 7-8=0/303, 8-9=-65/275, 9-10=-53/278, 2-31=-447/124 |
| BOT CHORD | 30-31=-107/405, 29-30=-107/405 |
| WEBS | 4-35=-639/184, 34-35=-537/124, 33-34=-582/145, 32-33=-573/144, 29-32=-695/194, 9-28=-347/0, 4-30=0/279 |

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 14-11-0, Exterior(2) 14-11-0 to 17-11-0, Interior(1) 17-11-0 to 30-10-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 31, 29, 28, 27, 26, 25, 24, 23, 22, 21.


October 5,2022

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| Job | Truss | Truss Type | Qty | Ply | 3293795 |
|---|---|---|---|---|---|
| MASTER | B02GR | COMMON | 1 | 3 | I54564452 |

Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Oct 5 10:12:33 2022 Page 1

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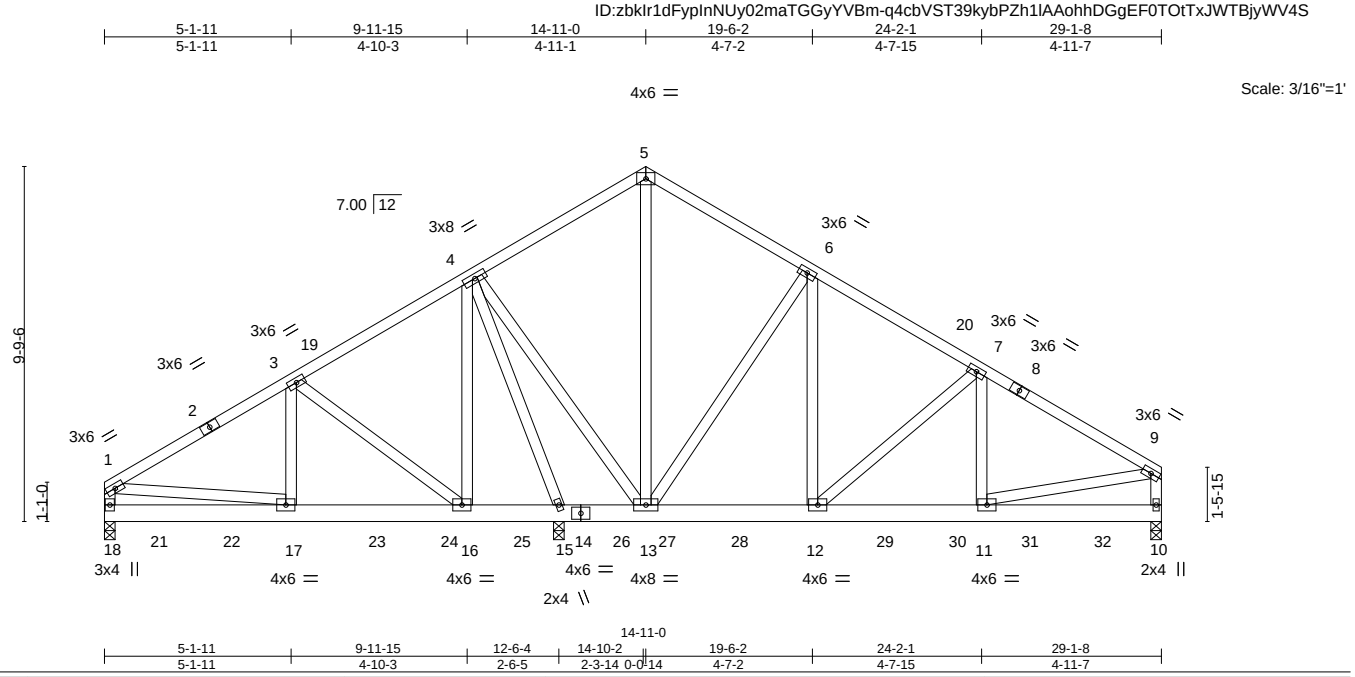


| LOADING (psf) | | SPACING- 2-0-0 | | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.44 | Vert(LL) | -0.03 | 16-17 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.38 | Vert(CT) | -0.05 | 16-17 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.35 | Horz(CT) | 0.01 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-MS | | Wind(LL) | 0.02 | 17-18 | >999 | 240 | Weight: 681 lb | FT = 20% |

**LUMBER-**

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

**BRACING-**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 13-15. |

**REACTIONS.** (size) 18=0-3-8, 10=0-3-8, 15=0-3-8
Max Horz 18=196(LC 24)
Max Uplift 18=-181(LC 8), 10=-118(LC 9)
Max Grav 18=2303(LC 19), 10=1733(LC 1), 15=5231(LC 1)

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

| | |
|---|---|
| TOP CHORD | 1-18=-1648/89, 1-3=-2555/118, 3-4=-886/0, 4-5=-416/0, 5-6=-408/0, 6-7=-1370/9, 7-9=-1946/116, 9-10=-1437/97 |
| BOT CHORD | 17-18=-245/565, 16-17=-182/2141, 15-16=0/701, 13-15=-780/166, 12-13=0/1124, 11-12=-59/1621 |
| WEBS | 1-17=0/1629, 3-17=-245/1675, 3-16=-1806/350, 4-16=0/2234, 4-15=-3995/0, 4-13=0/1777, 6-13=-1482/160, 6-12=-106/1418, 7-12=-656/228, 7-11=-155/496, 9-11=-19/1482 |

**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: 2x6 - 2 rows staggered at 0-9-0 oc.
   Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 18=181, 10=118.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 627 lb down and 126 lb up at 1-5-4, 627 lb down and 126 lb up at 3-5-4, 627 lb down and 126 lb up at 5-5-4, 627 lb down and 126 lb up at 7-5-4, 847 lb down at 9-5-4, 847 lb down at 11-5-4, 433 lb down at 13-5-4, 433 lb down at 15-5-4, 433 lb down at 17-5-4, 292 lb down and 71 lb up at 19-5-4, 292 lb down and 71 lb up at 21-5-4, 292 lb down and 71 lb up at 23-5-4, and 292 lb down and 71 lb up at 25-5-4, and 292 lb down and 71 lb up at 27-5-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard


October 5,2022

Continued on page 2



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**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-5=-60, 5-9=-60, 10-18=-20
   Concentrated Loads (lb)
   Vert: 17=-627(B) 12=-292(B) 21=-627(B) 22=-627(B) 23=-627(B) 24=-847(B) 25=-847(B) 26=-433(B) 27=-433(B) 28=-433(B) 29=-292(B) 30=-292(B) 31=-292(B) 32=-292(B)

| Job | Truss | Truss Type | Qty | Ply | 3293795 |
|---|---|---|---|---|---|
| MASTER | C01G | GABLE | 1 | 1 | I54564453 |

Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Oct 5 10:12:34 2022 Page 1
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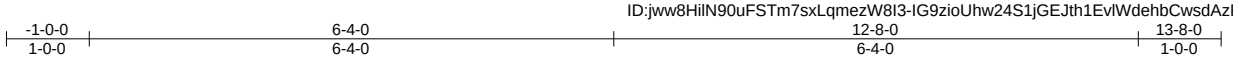


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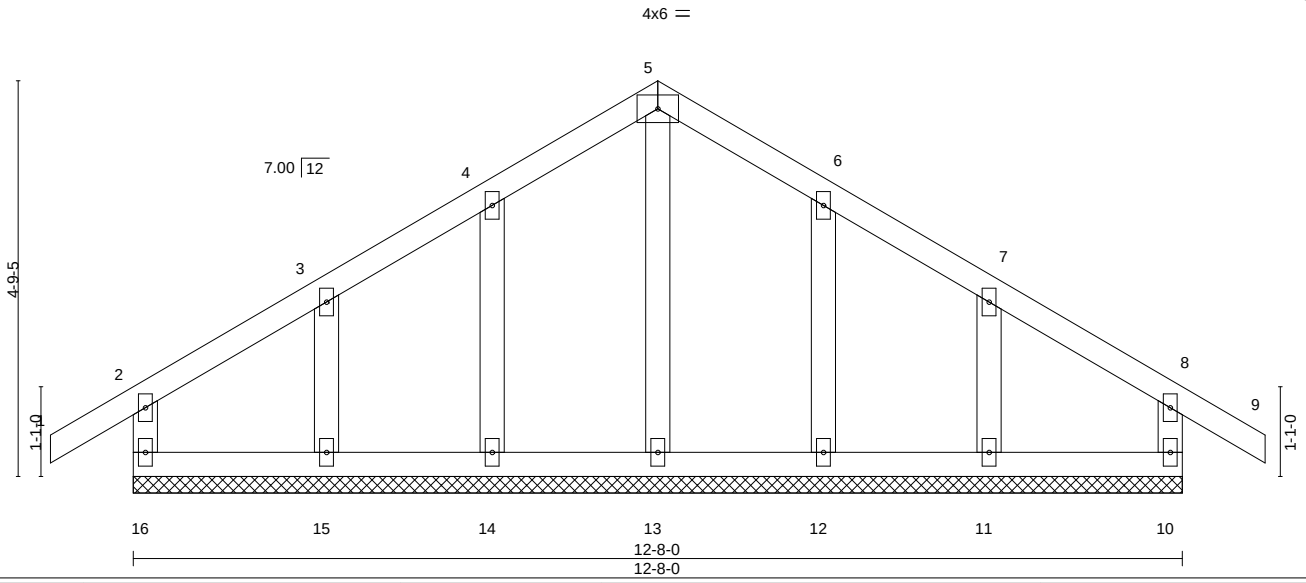


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.10 | Vert(LL) | -0.00 | 9 | n/r | 120 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.04 | Vert(CT) | -0.00 | 9 | n/r | 120 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.05 | Horz(CT) | 0.00 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-R | | | | | | | Weight: 67 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. |

**REACTIONS.** All bearings 12-8-0.
(lb) - Max Horz 16=109(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 16, 10, 14, 15, 12, 11
Max Grav All reactions 250 lb or less at joint(s) 16, 10, 13, 14, 15, 12, 11

**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 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -1-0-0 to 2-0-0, Exterior(2) 2-0-0 to 6-4-0, Corner(3) 6-4-0 to 9-4-0, Exterior(2) 9-4-0 to 13-8-0 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) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 10, 14, 15, 12, 11.


October 5,2022



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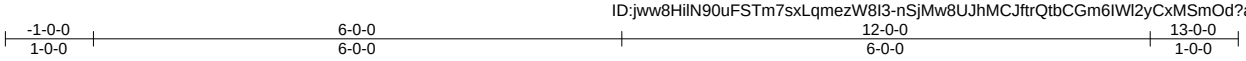
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 3293795 |
|---|---|---|---|---|---|
| MASTER | D01 | COMMON | 2 | 1 | I54564454 |

Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Oct 5 10:12:35 2022 Page 1
ID:jww8HilN90uFSTm7sxLqmezW8I3-nSjMw8UJhMCJftrQtbCGm6IWl2yCxMSmOd?aFcyWV4Q

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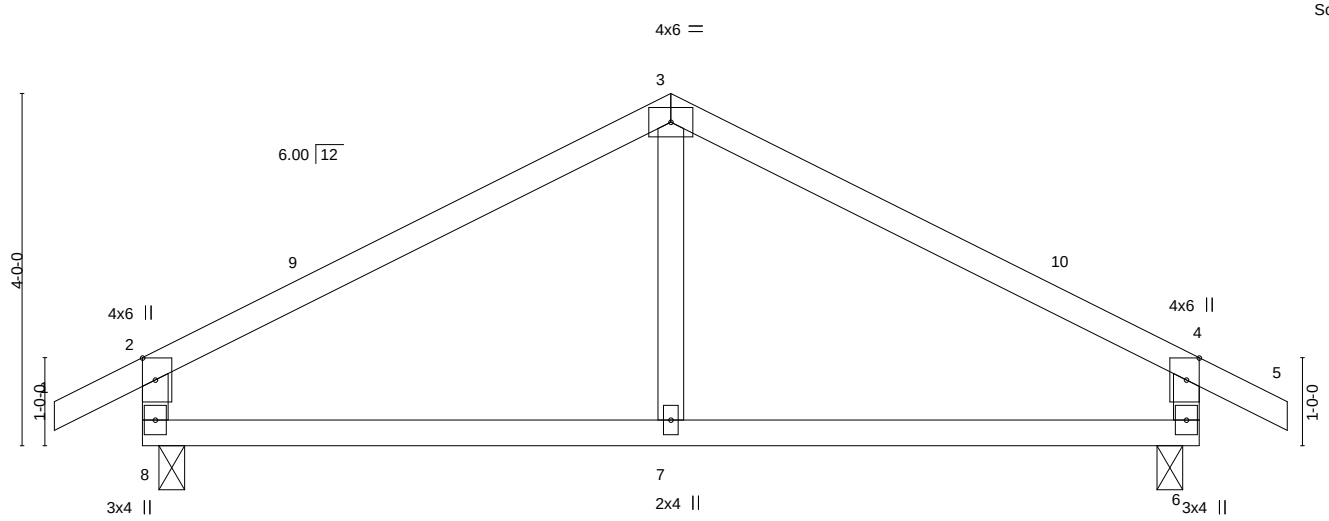


Plate Offsets (X,Y)-- [2:0-3-0,Edge], [4:0-3-0,Edge]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.78 | Vert(LL) | -0.03 | 7-8 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.27 | Vert(CT) | -0.07 | 7-8 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.09 | Horz(CT) | 0.01 | 6 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-MR | | Wind(LL) | 0.01 | 7-8 | >999 | 240 | Weight: 48 lb | FT = 20% |

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

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

**REACTIONS.** (size) 8=0-3-8, 6=0-3-8
Max Horz 8=56(LC 11)
Max Uplift 8=-23(LC 12), 6=-23(LC 13)
Max Grav 8=537(LC 1), 6=537(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-468/136, 2-3=-523/83, 3-4=-523/81, 4-6=-468/133
BOT CHORD 7-8=0/384, 6-7=0/384

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 6-0-0, Exterior(2) 6-0-0 to 10-2-15, Interior(1) 10-2-15 to 13-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.


October 5,2022



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| Job | Truss | Truss Type | Qty | Ply | 3293795 |
|---|---|---|---|---|---|
| MASTER | D01GR | HIP | 1 | 1 | I54564455 |

Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Oct 5 10:12:36 2022 Page 1
ID:jww8HilN90uFSTm7sxLqmezW8I3-FeHk7UVySfLAG1QcRIjVJKroVRJ8gmwvdHk7o2yWV4P

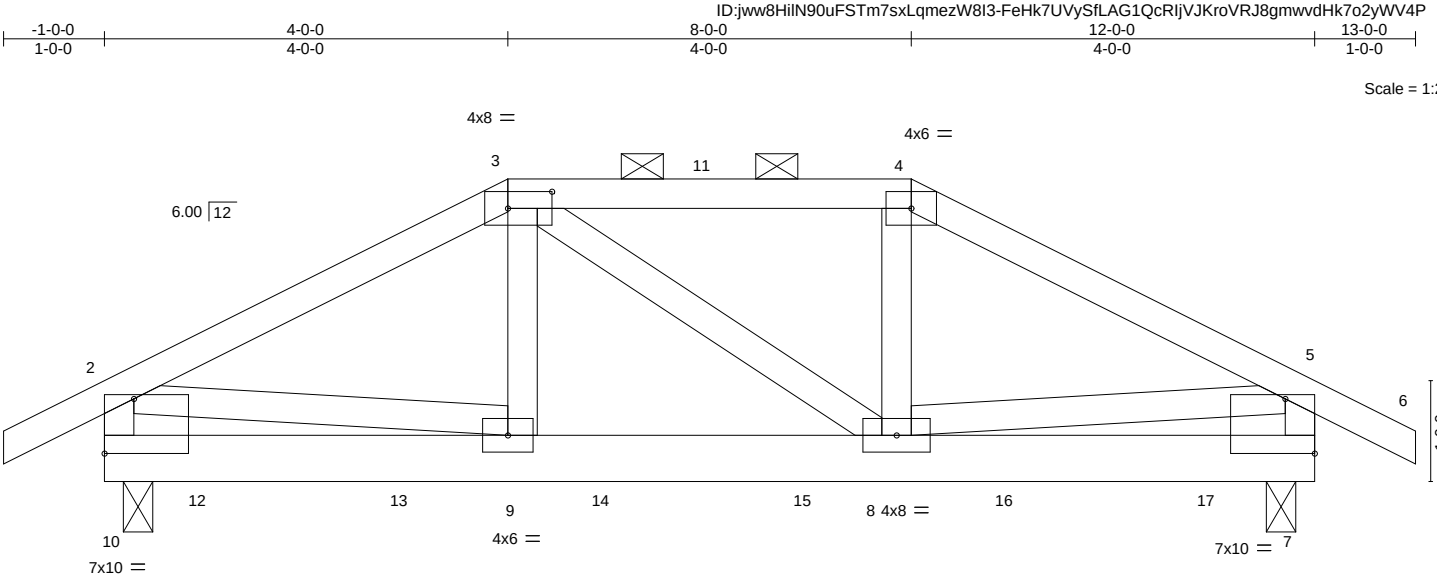



Plate Offsets (X,Y)-- [3:0-5-4,0-2-0], [7:Edge,0-6-8], [10:Edge,0-6-8]

| LOADING (psf) | | SPACING- 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL 20.0 | | Plate Grip DOL 1.15 | TC | 0.33 | Vert(LL) | -0.02 | 8-9 | >999 | 360 | MT20 | 244/190 |
| TCDL 10.0 | | Lumber DOL 1.15 | BC | 0.23 | Vert(CT) | -0.03 | 8-9 | >999 | 240 | | |
| BCLL 0.0 | * | Rep Stress Incr NO | WB | 0.27 | Horz(CT) | 0.00 | 7 | n/a | n/a | | |
| BCDL 10.0 | | Code IRC2015/TPI2014 | Matrix-MS | | Wind(LL) | 0.01 | 8-9 | >999 | 240 | Weight: 76 lb | FT = 20% |

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

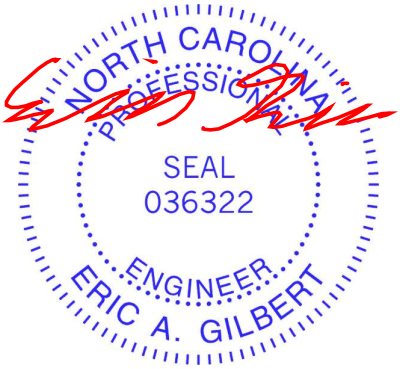
**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 5-9-11 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 10=0-3-8, 7=0-3-8
Max Horz 10=44(LC 7)
Max Uplift 10=-159(LC 8), 7=-158(LC 9)
Max Grav 10=880(LC 1), 7=881(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-10=-722/141, 2-3=-982/175, 3-4=-844/175, 4-5=-981/174, 5-7=-717/140
BOT CHORD 8-9=-130/835
WEBS 2-9=-106/642, 5-8=-107/635

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=159, 7=158.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 108 lb down and 49 lb up at 1-0-0, 118 lb down and 43 lb up at 3-0-0, 118 lb down and 57 lb up at 5-0-0, 118 lb down and 57 lb up at 7-0-0, and 118 lb down and 43 lb up at 9-0-0, and 109 lb down and 47 lb up at 11-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-60, 2-3=-60, 3-4=-60, 4-5=-60, 5-6=-60, 7-10=-20
Concentrated Loads (lb)
Vert: 12=-108(B) 13=-118(B) 14=-118(B) 15=-118(B) 16=-118(B) 17=-109(B)

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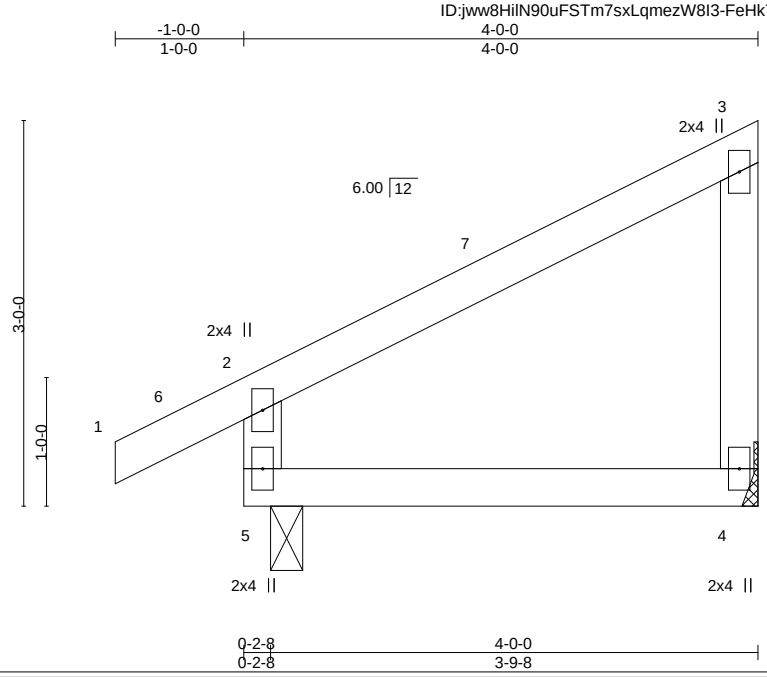
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 3293795 |
|---|---|---|---|---|---|
| MASTER | J01 | JACK | 2 | 1 | I54564456 |

Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Oct 5 10:12:36 2022 Page 1
ID:jww8HilN90uFSTm7sxLqmezW8I3-FeHk7UVySfLAG1QcRIjVJKrqaRKOgqfvdHk7o2yWV4P




| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.20 | Vert(LL) | -0.01 | 4-5 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.15 | Vert(CT) | -0.02 | 4-5 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.03 | Horz(CT) | 0.00 | | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-MS | | Wind(LL) | 0.01 | 4-5 | >999 | 240 | Weight: 19 lb | FT = 20% |

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.** (size) 5=0-3-0, 4=Mechanical
Max Horz 5=64(LC 12)
Max Uplift 5=-4(LC 12), 4=-37(LC 12)
Max Grav 5=228(LC 1), 4=138(LC 1)

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

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 3-10-4 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 4.


October 5,2022



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| Job | Truss | Truss Type | Qty | Ply | 3293795 |
|---|---|---|---|---|---|
| MASTER | J02 | MONO HIP | 2 | 1 | I54564457 |

Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Oct 5 10:12:37 2022 Page 1
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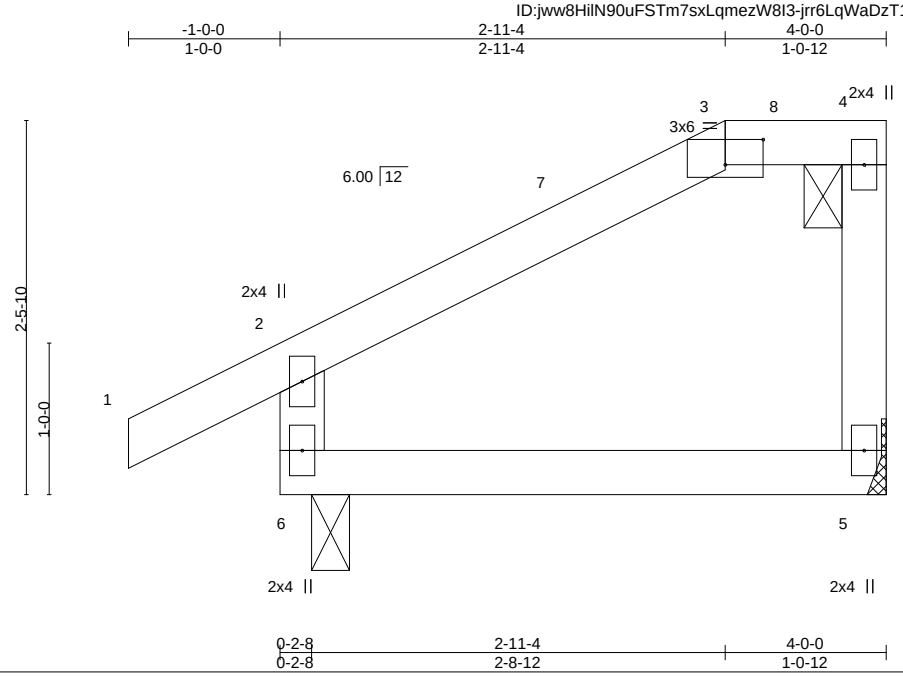


Plate Offsets (X,Y)-- [3:0-3-0,0-2-0]

| LOADING | (psf) | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.19 | Vert(LL) | -0.01 | 5-6 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.15 | Vert(CT) | -0.02 | 5-6 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.02 | Horz(CT) | 0.00 | | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-MS | | Wind(LL) | 0.01 | 5-6 | >999 | 240 | Weight: 18 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 4-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 6=0-3-0, 5=Mechanical
Max Horz 6=51(LC 12)
Max Uplift 6=-13(LC 12), 5=-23(LC 12)
Max Grav 6=228(LC 1), 5=138(LC 1)

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

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 2-11-4, Exterior(2) 2-11-4 to 3-10-4 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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 5.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.


October 5,2022



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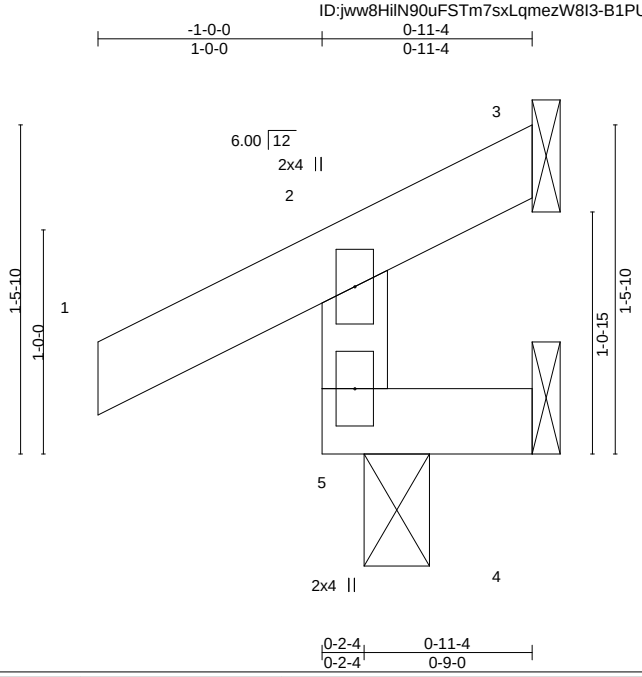
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 3293795 |
|---|---|---|---|---|---|
| MASTER | J03 | JACK | 2 | 1 | I54564458 |

Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Oct 5 10:12:38 2022 Page 1

ID:jww8HilN90uFSTm7sxLqmezW8I3-B1PUY9XC_HbuWKZ?YjmzOlwCqF2t8kZC4bDEsxyWV4N




| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.09 | Vert(LL) | 0.00 | 5 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.02 | Vert(CT) | 0.00 | 5 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-MR | | Wind(LL) | 0.00 | 5 | >999 | 240 | Weight: 6 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 0-11-4 oc purlins, except end verticals. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing. |

**REACTIONS.** (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=28(LC 9)
Max Uplift 5=-11(LC 12), 3=-16(LC 1), 4=-6(LC 9)
Max Grav 5=150(LC 1), 3=3(LC 8), 4=11(LC 3)

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

**NOTES-**

1) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3, 4.


October 5,2022



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| Job | Truss | Truss Type | Qty | Ply | 3293795 |
|---|---|---|---|---|---|
| MASTER | J03GR | MONO HIP | 2 | 1 | I54564459 |

Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Oct 5 10:12:38 2022 Page 1

ID:jww8HilN90uFSTm7sxLqmezW8I3-B1PUY9XC_HbuWKZ?YjmzOlwBkF148kJC4bDEsxyWV4N

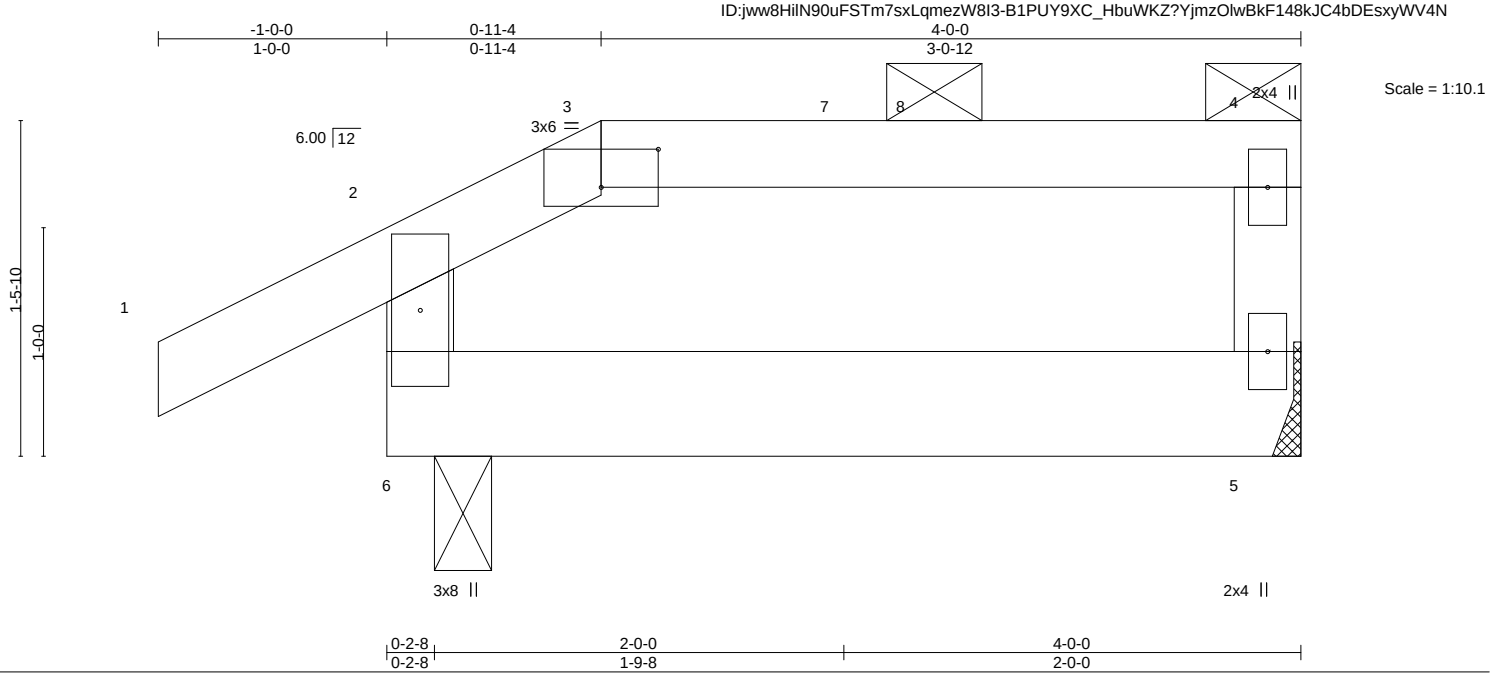


Plate Offsets (X,Y)-- [3:0-3-0,0-2-0]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.16 | Vert(LL) | -0.00 | 5-6 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.07 | Vert(CT) | -0.01 | 5-6 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.02 | Horz(CT) | 0.00 | | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-MS | | Wind(LL) | 0.00 | 5-6 | >999 | 240 | Weight: 19 lb | FT = 20% |

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.** (size) 6=0-3-0, 5=Mechanical
Max Horz 6=27(LC 5)
Max Uplift 6=-37(LC 8), 5=-29(LC 5)
Max Grav 6=215(LC 1), 5=128(LC 20)

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

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 5.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 75 lb up at 2-0-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-60, 2-3=-60, 3-4=-60, 5-6=-20
   Concentrated Loads (lb)
   Vert: 7=27(B)


October 5,2022




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| Job | Truss | Truss Type | Qty | Ply | 3293795 |
|---|---|---|---|---|---|
| MASTER | PB01G | GABLE | 2 | 1 | I54564460 |

Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Oct 5 10:12:40 2022 Page 1
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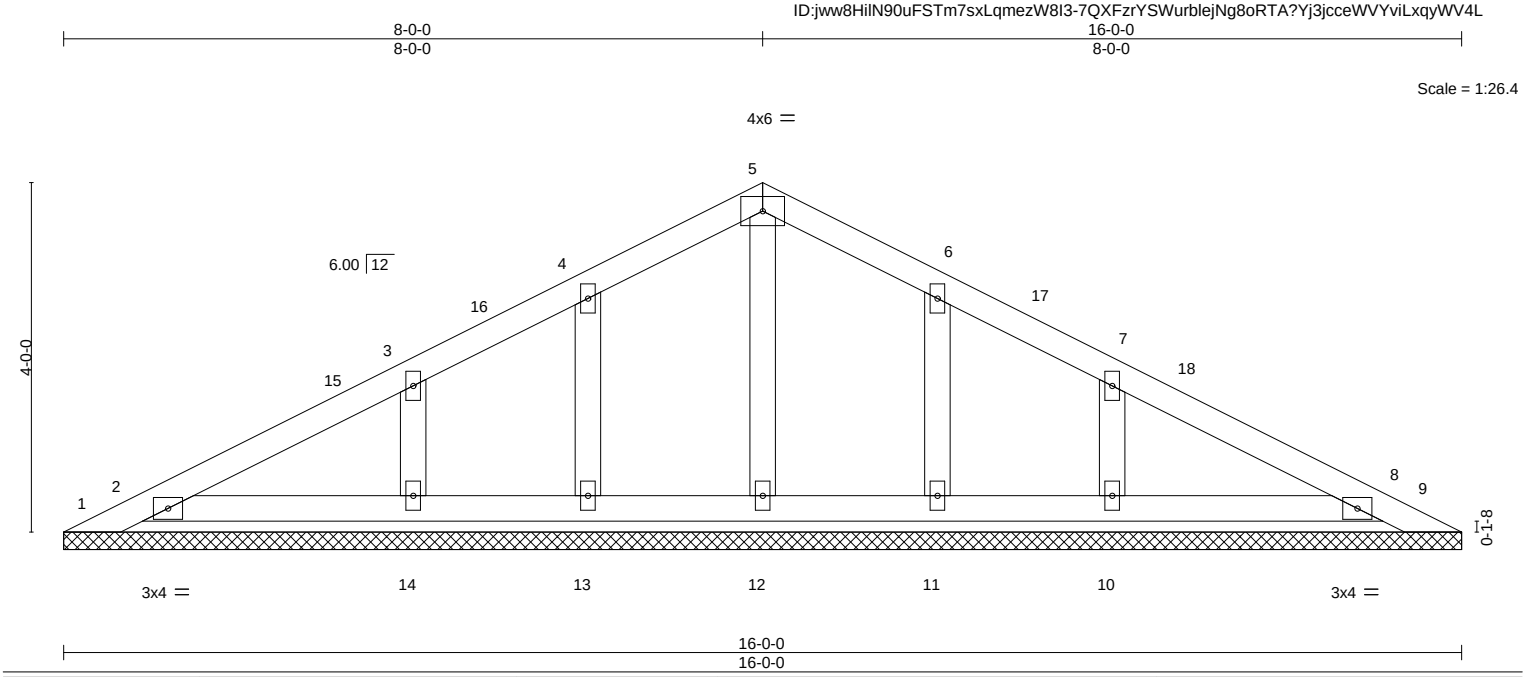


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.13 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.07 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.03 | Horz(CT) | 0.00 | 8 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 63 lb | FT = 20% |

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.** All bearings 16-0-0.
(lb) - Max Horz 1=51(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 2, 8, 13, 14, 11, 10
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 2, 8, 12, 13, 14, 11, 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 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-3-15 to 3-3-15, Exterior(2) 3-3-15 to 8-0-0, Corner(3) 8-0-0 to 11-0-0, Exterior(2) 11-0-0 to 15-8-1 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9, 2, 8, 13, 14, 11, 10.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.


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| Job | Truss | Truss Type | Qty | Ply | 3293795 |
|---|---|---|---|---|---|
| MASTER | PB02 | GABLE | 19 | 1 | I54564461 |

Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Oct 5 10:12:41 2022 Page 1
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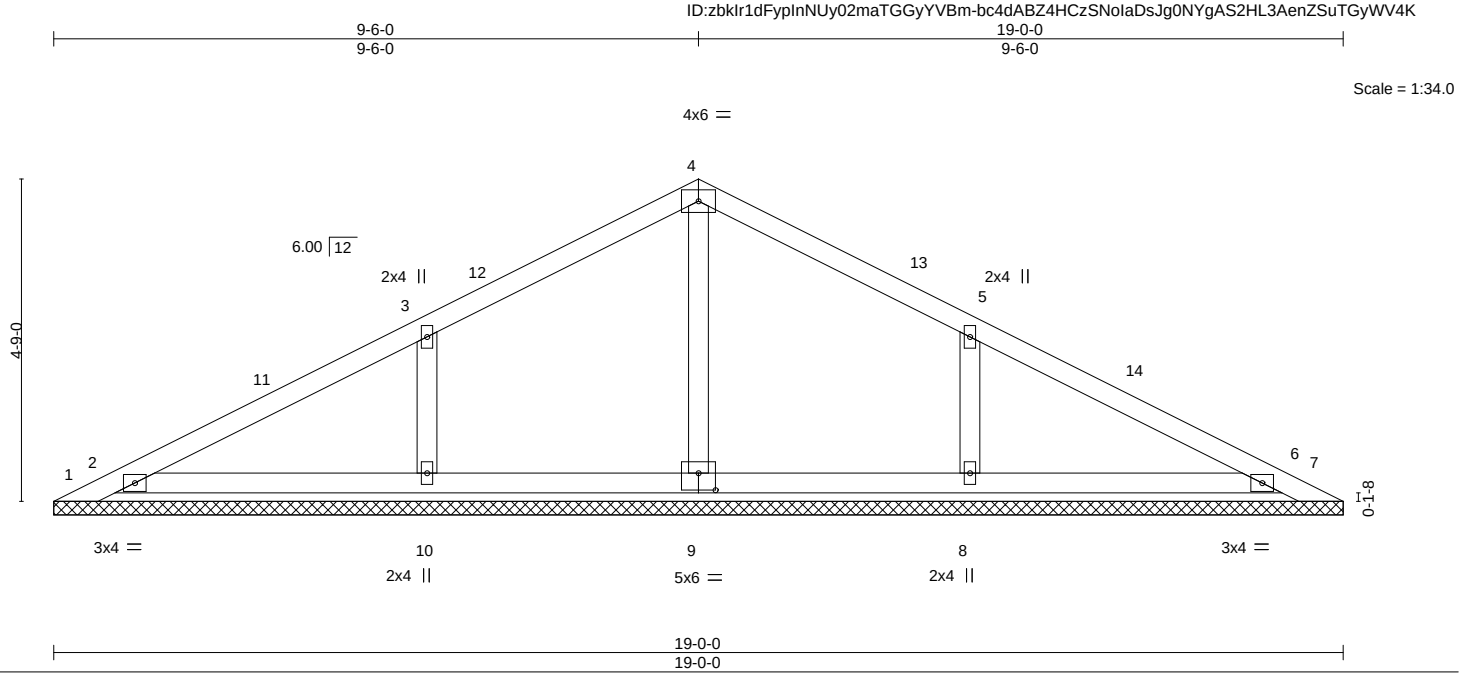


Plate Offsets (X,Y)-- [9:0-3-0,0-3-0]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.27 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.17 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.07 | Horz(CT) | 0.00 | 6 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 69 lb | FT = 20% |

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

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

**REACTIONS.** All bearings 19-0-0.
(lb) - Max Horz 1=-61(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 2, 10, 8, 6 except 1=-157(LC 1), 7=-157(LC 1)
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 2=389(LC 1), 9=257(LC 1), 10=380(LC 23), 8=380(LC 24), 6=389(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-10=-283/177, 5-8=-283/177

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-3-15 to 3-3-15, Exterior(2) 3-3-15 to 9-6-0, Corner(3) 9-6-0 to 12-6-0, Exterior(2) 12-6-0 to 18-8-1 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10, 8, 6 except (jt=lb) 1=157, 7=157.
9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.


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| Job | Truss | Truss Type | Qty | Ply | 3293795 |
|---|---|---|---|---|---|
| MASTER | PB02G | GABLE | 2 | 1 | I54564462 |

Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Oct 5 10:12:43 2022 Page 1
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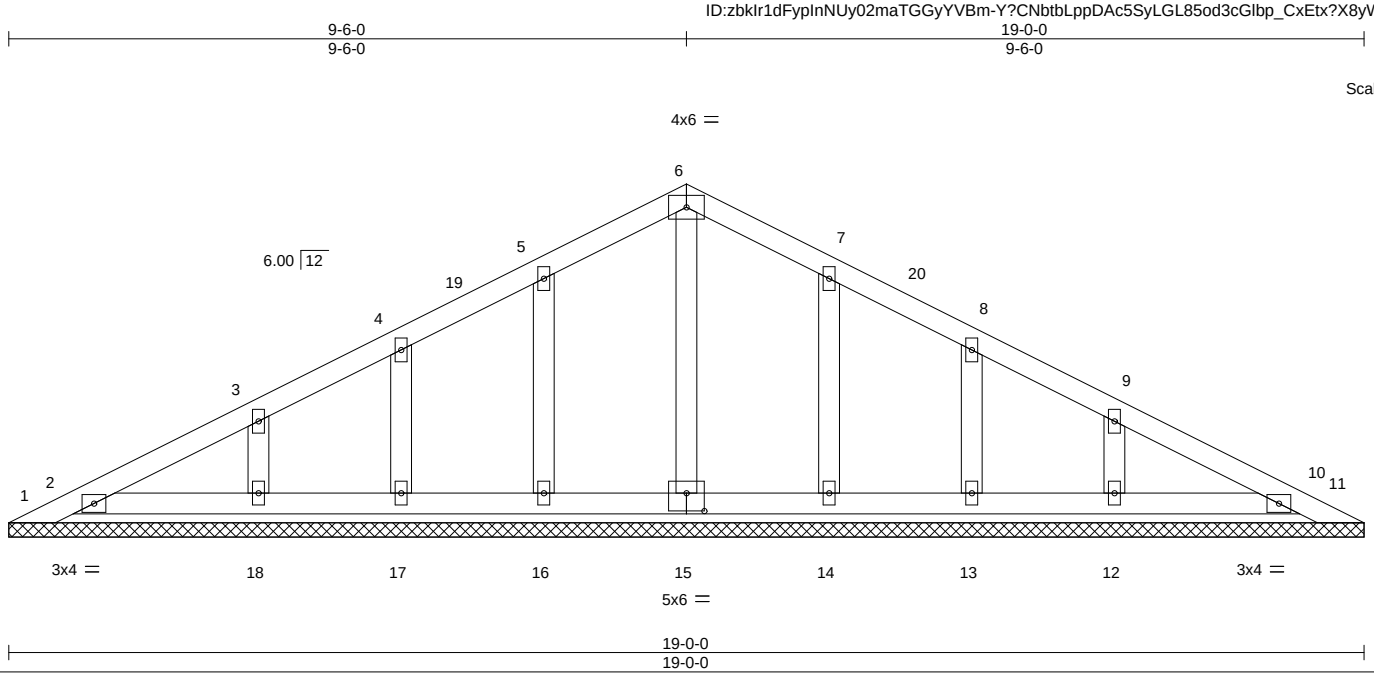


Plate Offsets (X,Y)-- [15:0-3-0,0-3-0]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.09 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.05 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.04 | Horz(CT) | 0.00 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 82 lb | FT = 20% |

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

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

**REACTIONS.** All bearings 19-0-0.
(lb) - Max Horz 1=61(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 1, 11, 2, 16, 17, 18, 14, 13, 12, 10
Max Grav All reactions 250 lb or less at joint(s) 1, 11, 2, 15, 16, 17, 18, 14, 13, 12, 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 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-3-15 to 3-6-0, Exterior(2) 3-6-0 to 9-6-0, Corner(3) 9-6-0 to 12-6-0, Exterior(2) 12-6-0 to 18-8-1 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 11, 2, 16, 17, 18, 14, 13, 12, 10.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.


October 5,2022



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| Job | Truss | Truss Type | Qty | Ply | 3293795 |
|---|---|---|---|---|---|
| MASTER | PB03 | GABLE | 5 | 1 | I54564463 |

Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Oct 5 10:12:44 2022 Page 1
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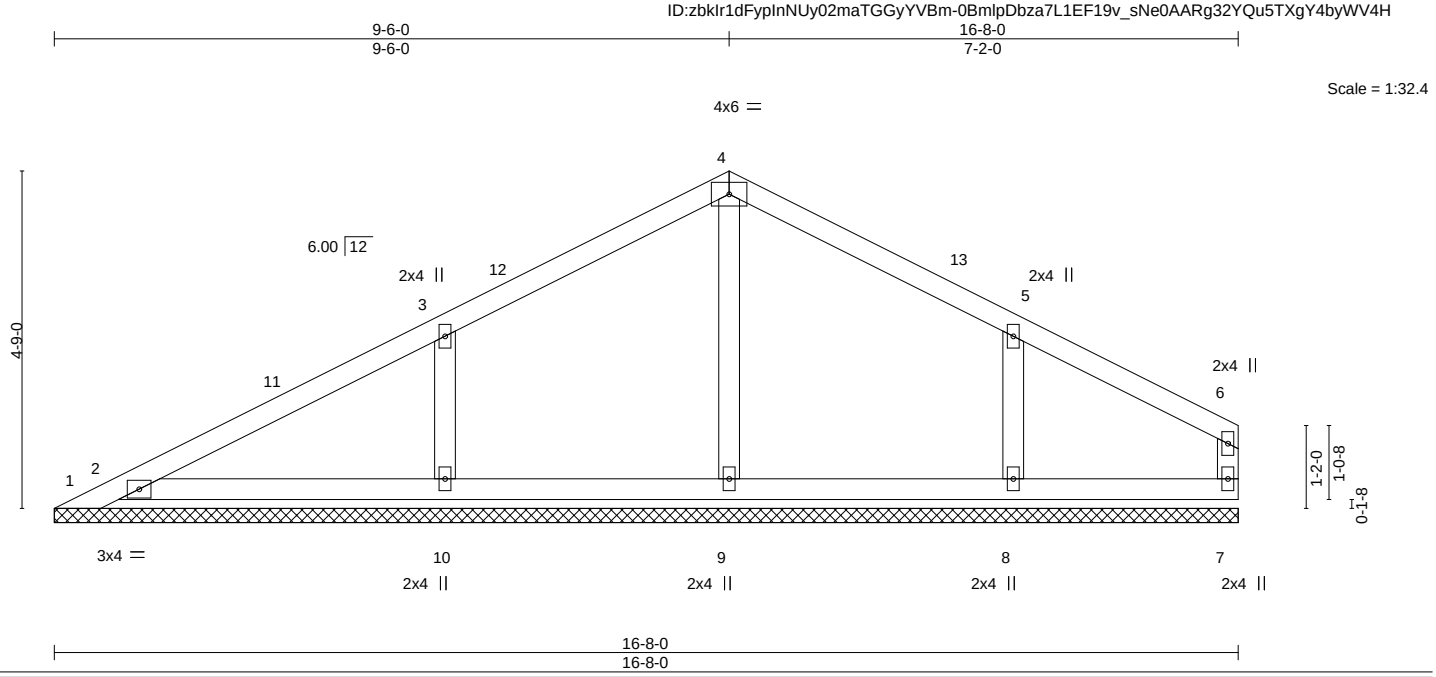


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.27 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.16 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.07 | Horz(CT) | 0.00 | 7 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 64 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 16-8-0.
(lb) - Max Horz 1=68(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 7, 2, 10, 8 except 1=-158(LC 1)
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 2=392(LC 1), 9=267(LC 1), 10=378(LC 23), 8=327(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-10=-282/182

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-3-15 to 3-3-15, Exterior(2) 3-3-15 to 9-6-0, Corner(3) 9-6-0 to 12-6-0, Exterior(2) 12-6-0 to 16-6-4 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) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 2, 10, 8 except (jt=lb) 1=158.
9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.


October 5,2022



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| Job | Truss | Truss Type | Qty | Ply | 3293795 |
|---|---|---|---|---|---|
| MASTER | V01 | GABLE | 1 | 1 | I54564464 |
| | | | | | Job Reference (optional) |

Builders FirstSource, Apex, NC 27523 — 8.530 s May 26 2022 MiTek Industries, Inc. Wed Oct 5 10:57:29 2022 Page 1

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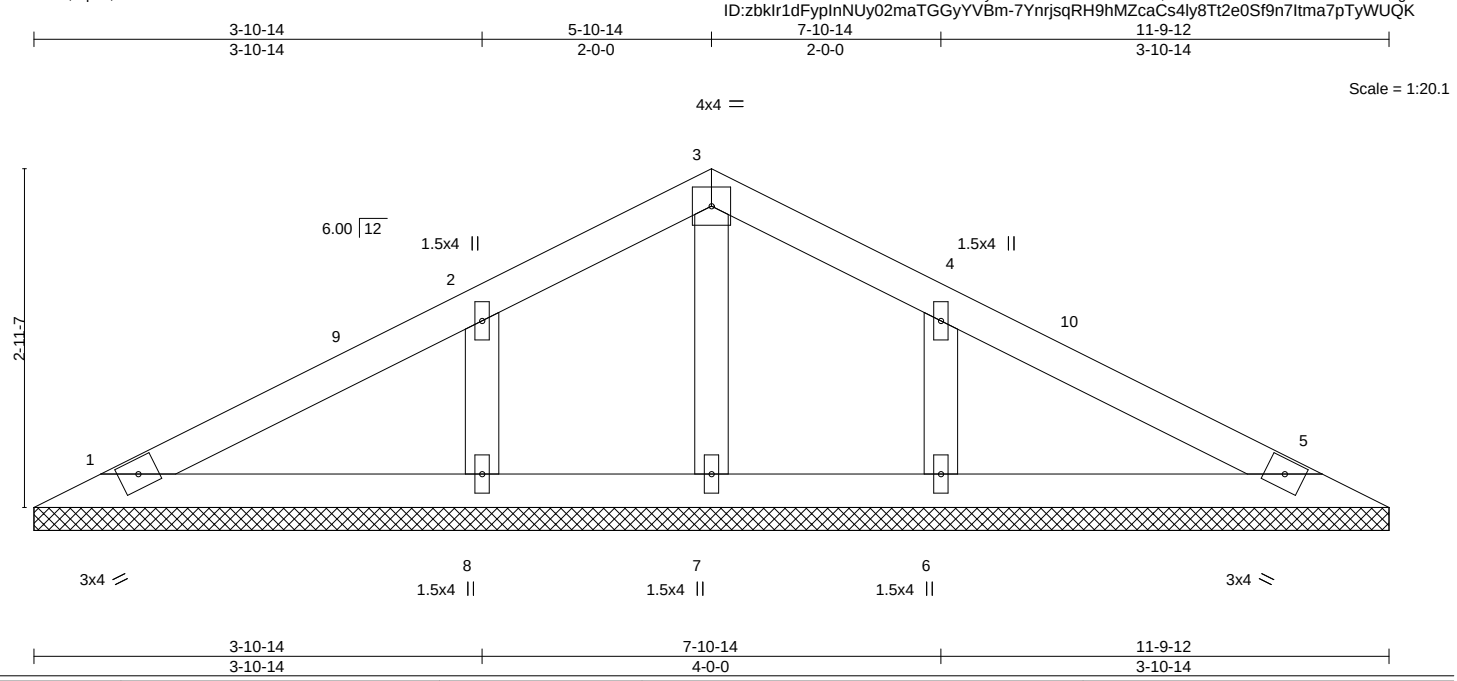


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.22 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.14 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.04 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 43 lb | FT = 20% |

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.** All bearings 11-9-12.
(lb) - Max Horz 1=35(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 5, 8, 6
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=278(LC 1), 6=278(LC 1)

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

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-7-7 to 3-10-14, Interior(1) 3-10-14 to 5-10-14, Exterior(2) 5-10-14 to 8-10-14, Interior(1) 8-10-14 to 11-2-6 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) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 8, 6.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)**
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-5=-60, 1-5=-20
2) Dead + 0.75 Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-50, 3-5=-50, 1-5=-20
3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-3=-20, 3-5=-20, 1-5=-40
4) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=26, 2-3=13, 3-10=26, 5-10=13, 1-5=-12
Horz: 1-2=-38, 2-3=-25, 3-10=38, 5-10=25


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Continued on page 2



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**LOAD CASE(S)**

5) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-9=13, 3-9=26, 3-4=13, 4-5=26, 1-5=-12
Horz: 1-9=-25, 3-9=-38, 3-4=25, 4-5=38

6) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-33, 3-5=-33, 1-5=-20
Horz: 1-3=13, 3-5=-13

7) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-33, 3-5=-33, 1-5=-20
Horz: 1-3=13, 3-5=-13

8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-3, 3-5=7, 1-5=-12
Horz: 1-3=-9, 3-5=19

9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=7, 3-5=-3, 1-5=-12
Horz: 1-3=-19, 3-5=9

10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-20, 3-5=-10, 1-5=-20
Horz: 1-3=-0, 3-5=10

11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-10, 3-5=-20, 1-5=-20
Horz: 1-3=-10, 3-5=0

12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=19, 3-5=5, 1-5=-12
Horz: 1-3=-31, 3-5=17

13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=5, 3-5=19, 1-5=-12
Horz: 1-3=-17, 3-5=31

14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=9, 3-5=2, 1-5=-12
Horz: 1-3=-21, 3-5=14

15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=2, 3-5=9, 1-5=-12
Horz: 1-3=-14, 3-5=21

16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=2, 3-5=-11, 1-5=-20
Horz: 1-3=-22, 3-5=9

17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-11, 3-5=2, 1-5=-20
Horz: 1-3=-9, 3-5=22

18) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
Uniform Loads (plf)
Vert: 1-3=-20, 3-5=-20, 1-5=-20

19) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-50, 3-5=-43, 1-5=-20
Horz: 1-3=-0, 3-5=7

20) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-43, 3-5=-50, 1-5=-20
Horz: 1-3=-7, 3-5=0

21) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-34, 3-5=-44, 1-5=-20
Horz: 1-3=-16, 3-5=6

22) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-44, 3-5=-34, 1-5=-20
Horz: 1-3=-6, 3-5=16

23) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-5=-20, 1-5=-20

24) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-20, 3-5=-60, 1-5=-20

Continued on page 3

**LOAD CASE(S)**

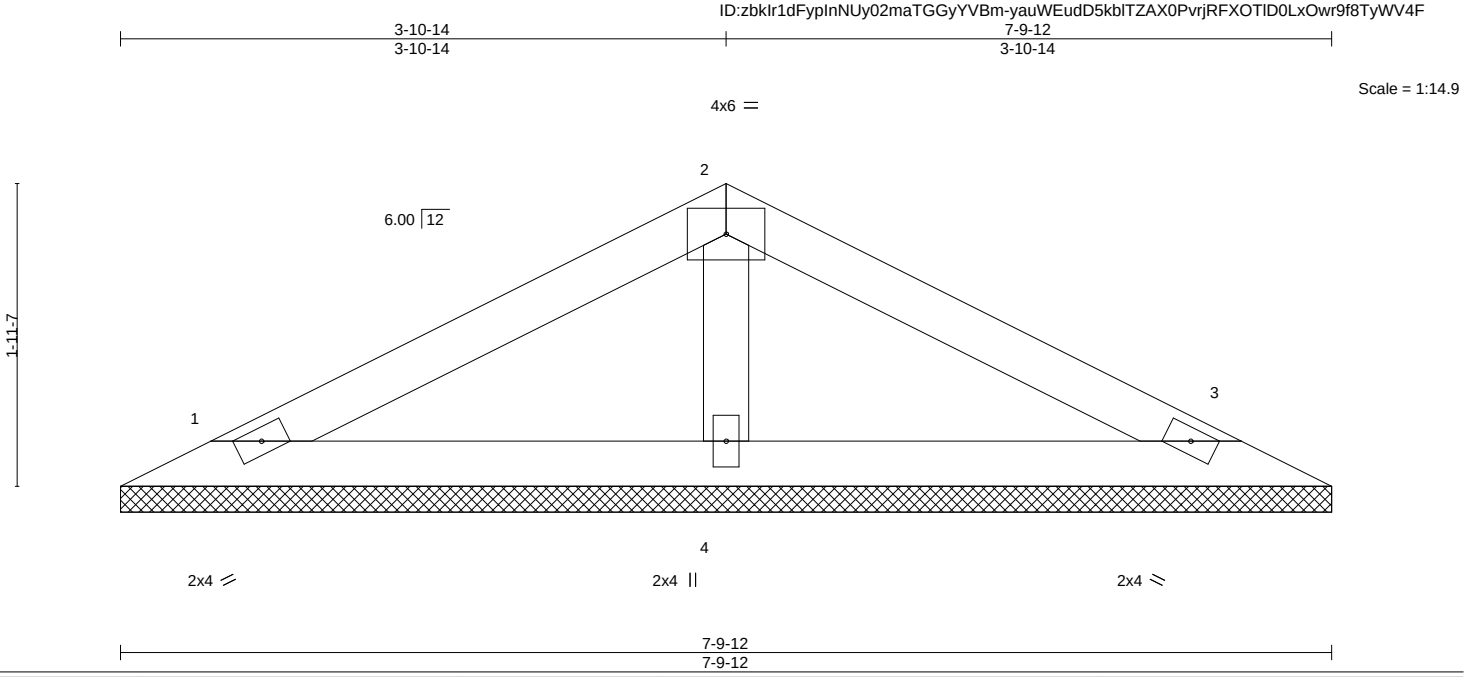
25) 3rd Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-50, 3-5=-20, 1-5=-20

26) 4th Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-20, 3-5=-50, 1-5=-20

| Job | Truss | Truss Type | Qty | Ply | 3293795 |
|---|---|---|---|---|---|
| MASTER | V02 | VALLEY | 1 | 1 | I54564465 |

Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Oct 5 10:12:46 2022 Page 1
ID:zbkIr1dFypInNUy02maTGGyYVBm-yauWEudD5kblTZAX0PvrjRFXOTlD0LxOwr9f8TyWV4F




| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.24 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.18 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.04 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 25 lb | FT = 20% |

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

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

**REACTIONS.** (size) 1=7-9-12, 3=7-9-12, 4=7-9-12
Max Horz 1=22(LC 12)
Max Uplift 1=-12(LC 12), 3=-16(LC 13)
Max Grav 1=121(LC 23), 3=121(LC 24), 4=288(LC 1)

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

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.


October 5,2022



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| Job | Truss | Truss Type | Qty | Ply | 3293795 |
|---|---|---|---|---|---|
| MASTER | V03 | VALLEY | 1 | 1 | I54564466 |

Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Oct 5 10:12:46 2022 Page 1
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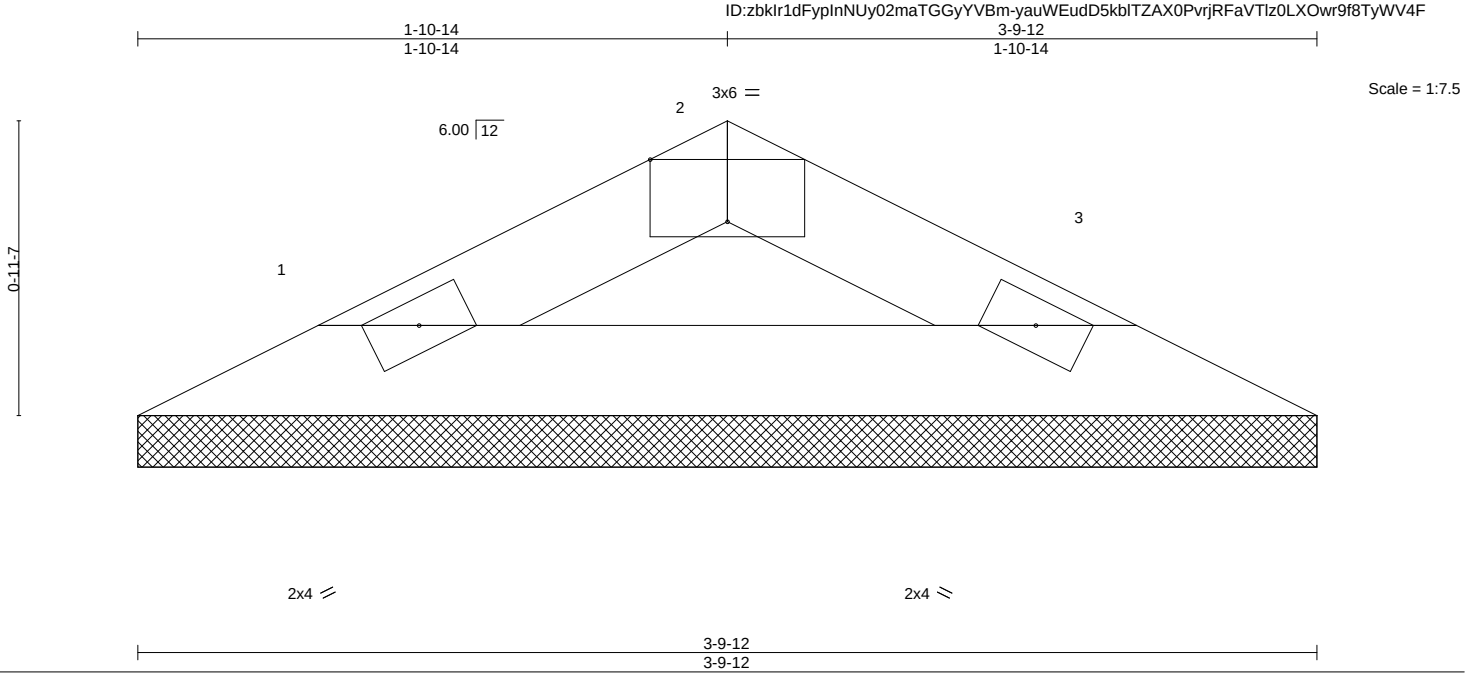


Plate Offsets (X,Y)-- [2:0-3-0,Edge]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.04 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.13 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-P | | | | | | | Weight: 10 lb | FT = 20% |

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

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 3-9-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=3-9-12, 3=3-9-12
Max Horz 1=9(LC 16)
Max Uplift 1=-3(LC 12), 3=-3(LC 13)
Max Grav 1=103(LC 1), 3=103(LC 1)

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

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.


October 5,2022



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| Job | Truss | Truss Type | Qty | Ply | 3293795 |
|---|---|---|---|---|---|
| MASTER | V04 | GABLE | 1 | 1 | I54564467 |

Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Oct 5 10:12:47 2022 Page 1
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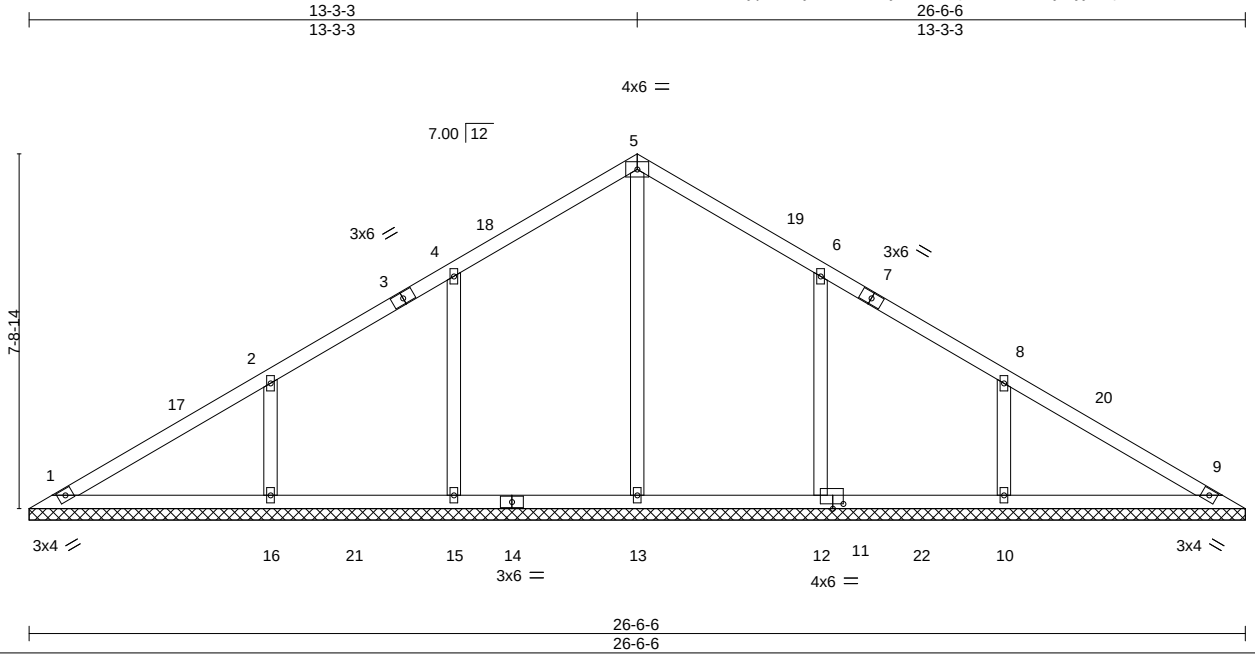


Plate Offsets (X,Y)-- [12:0-2-12,0-1-4]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.47 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.30 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.21 | Horz(CT) | 0.00 | 9 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | | Weight: 116 lb | FT = 20% |

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

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

**REACTIONS.** All bearings 26-6-6.
(lb) - Max Horz 1=-146(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 15, 16, 12, 10
Max Grav All reactions 250 lb or less at joint(s) 1, 9 except 13=392(LC 22), 15=429(LC 19), 16=420(LC 19), 12=421(LC 20), 10=420(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-16=-297/139, 8-10=-297/139

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 13-3-3, Exterior(2) 13-3-3 to 16-3-3, Interior(1) 16-3-3 to 25-11-14 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) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 15, 16, 12, 10.


October 5,2022



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| Job | Truss | Truss Type | Qty | Ply | 3293795 |
|---|---|---|---|---|---|
| MASTER | V05 | GABLE | 1 | 1 | I54564468 |

Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Oct 5 10:12:48 2022 Page 1
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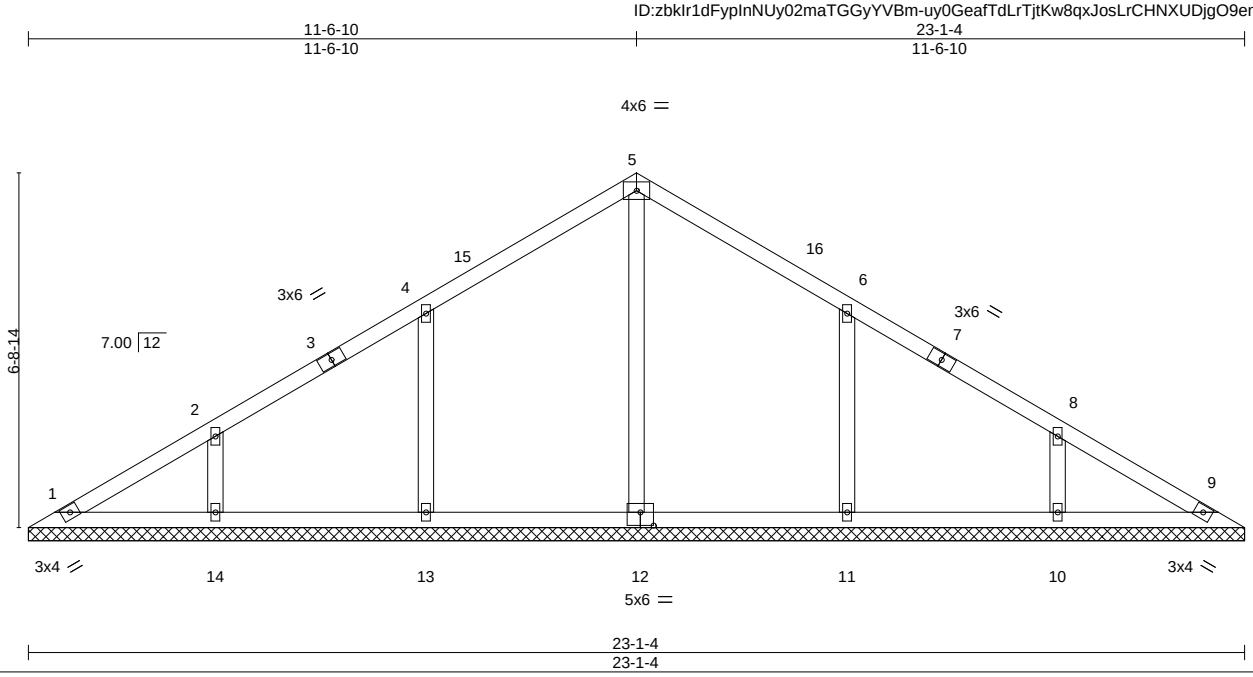


Plate Offsets (X,Y)-- [12:0-3-0,0-3-0]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.35 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.32 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.15 | Horz(CT) | 0.00 | 9 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 98 lb | FT = 20% |

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

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

**REACTIONS.** All bearings 23-1-4.
(lb) - Max Horz 1=-127(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 13, 14, 11, 10
Max Grav All reactions 250 lb or less at joint(s) 1, 9 except 12=389(LC 19), 13=407(LC 19), 14=307(LC 1), 11=400(LC 20), 10=307(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 4-13=-265/128, 6-11=-265/128

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-6-8 to 3-6-10, Interior(1) 3-6-10 to 11-6-10, Exterior(2) 11-6-10 to 14-6-10, Interior(1) 14-6-10 to 22-6-12 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) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 13, 14, 11, 10.


October 5,2022




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| Job | Truss | Truss Type | Qty | Ply | 3293795 |
|---|---|---|---|---|---|
| MASTER | V06 | GABLE | 1 | 1 | I54564469 |

Job Reference (optional)

Builders FirstSource, Apex, NC 27523 — 8.530 s May 26 2022 MiTek Industries, Inc. Wed Oct 5 10:58:32 2022 Page 1

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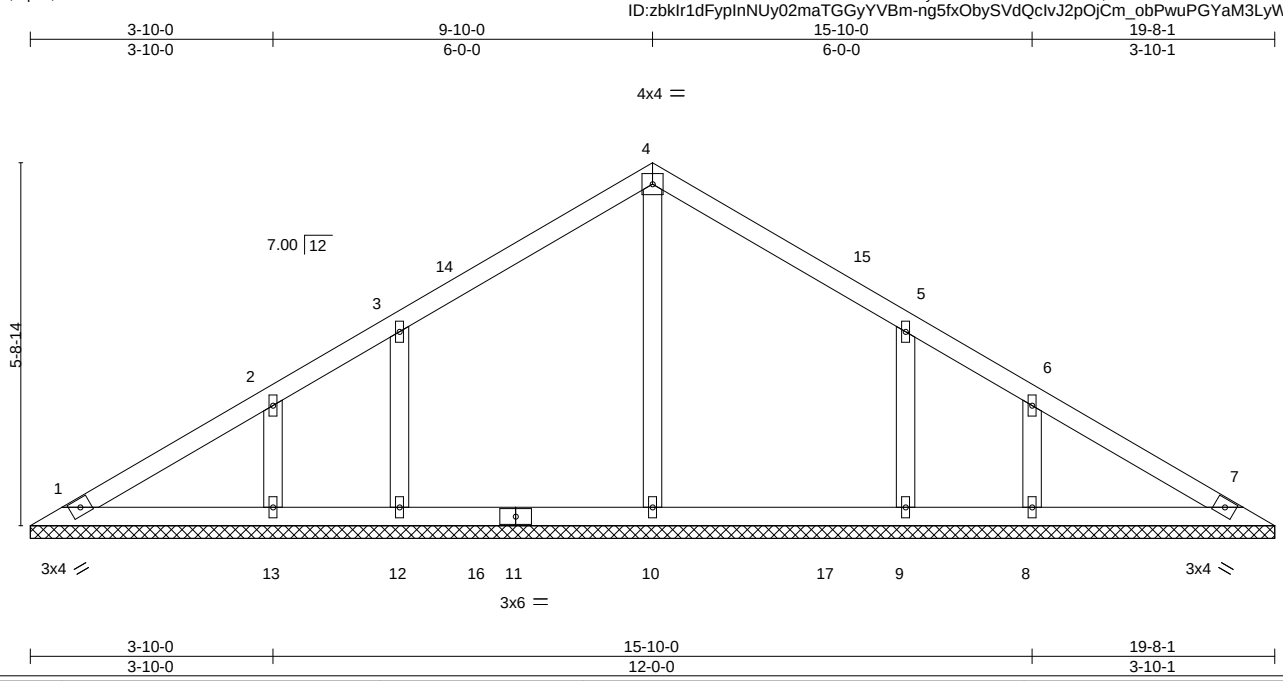


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.29 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.30 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.12 | Horz(CT) | 0.00 | 7 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 83 lb | FT = 20% |

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.** All bearings 19-8-1.

(lb) - Max Horz 1=-107(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 12, 9, 13, 8
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 13, 8 except 10=392(LC 19), 12=286(LC 19), 9=286(LC 20)

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

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-6-8 to 3-10-0, Interior(1) 3-10-0 to 9-10-0, Exterior(2) 9-10-0 to 12-10-0, Interior(1) 12-10-0 to 19-1-9 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 1.5x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 12, 9, 13, 8.
8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)**

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-60, 4-7=-60, 1-7=-20
2) Dead + 0.75 Roof Live (balanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-50, 4-7=-50, 1-16=-20, 16-17=-50, 7-17=-20
3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-4=-20, 4-7=-20, 1-7=-40
4) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60


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Continued on page 2



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**LOAD CASE(S)**

Uniform Loads (plf)
Vert: 1-2=17, 2-4=12, 4-15=17, 7-15=12, 1-7=-12
Horz: 1-2=-29, 2-4=-24, 4-15=29, 7-15=24

5) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-14=12, 4-14=17, 4-6=12, 6-7=17, 1-7=-12
Horz: 1-14=-24, 4-14=-29, 4-6=24, 6-7=29

6) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-44, 4-7=-44, 1-7=-20
Horz: 1-4=24, 4-7=-24

7) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-44, 4-7=-44, 1-7=-20
Horz: 1-4=24, 4-7=-24

8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-14, 4-7=5, 1-7=-12
Horz: 1-4=2, 4-7=17

9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=5, 4-7=-14, 1-7=-12
Horz: 1-4=-17, 4-7=-2

10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-31, 4-7=-11, 1-7=-20
Horz: 1-4=11, 4-7=9

11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-11, 4-7=-31, 1-7=-20
Horz: 1-4=-9, 4-7=-11

12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=19, 4-7=5, 1-7=-12
Horz: 1-4=-31, 4-7=17

13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=5, 4-7=19, 1-7=-12
Horz: 1-4=-17, 4-7=31

14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=9, 4-7=2, 1-7=-12
Horz: 1-4=-21, 4-7=14

15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=2, 4-7=9, 1-7=-12
Horz: 1-4=-14, 4-7=21

16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=2, 4-7=-11, 1-7=-20
Horz: 1-4=-22, 4-7=9

17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-11, 4-7=2, 1-7=-20
Horz: 1-4=-9, 4-7=22

18) Dead + Uninhabitable Attic Storage: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-4=-20, 4-7=-20, 1-16=-20, 16-17=-60, 7-17=-20

19) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-58, 4-7=-44, 1-16=-20, 16-17=-50, 7-17=-20
Horz: 1-4=8, 4-7=6

20) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-44, 4-7=-58, 1-16=-20, 16-17=-50, 7-17=-20
Horz: 1-4=-6, 4-7=-8

21) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-34, 4-7=-44, 1-16=-20, 16-17=-50, 7-17=-20
Horz: 1-4=-16, 4-7=6

22) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60

Continued on page 3

**LOAD CASE(S)**

Uniform Loads (plf)
Vert: 1-4=-44, 4-7=-34, 1-16=-20, 16-17=-50, 7-17=-20
Horz: 1-4=-6, 4-7=16

23) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-60, 4-7=-20, 1-7=-20

24) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-20, 4-7=-60, 1-7=-20

25) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-50, 4-7=-20, 1-16=-20, 16-17=-50, 7-17=-20

26) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-20, 4-7=-50, 1-16=-20, 16-17=-50, 7-17=-20

| Job | Truss | Truss Type | Qty | Ply | 3293795 |
|---|---|---|---|---|---|
| MASTER | V07 | GABLE | 1 | 1 | I54564470 |

Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Oct 5 10:12:50 2022 Page 1
ID:zbkIr1dFypInNUy02maTGGyYVBm-rL703Ggk9z5ByAUIFFzntHQBU55ty8MzrT7tHEyWV4B

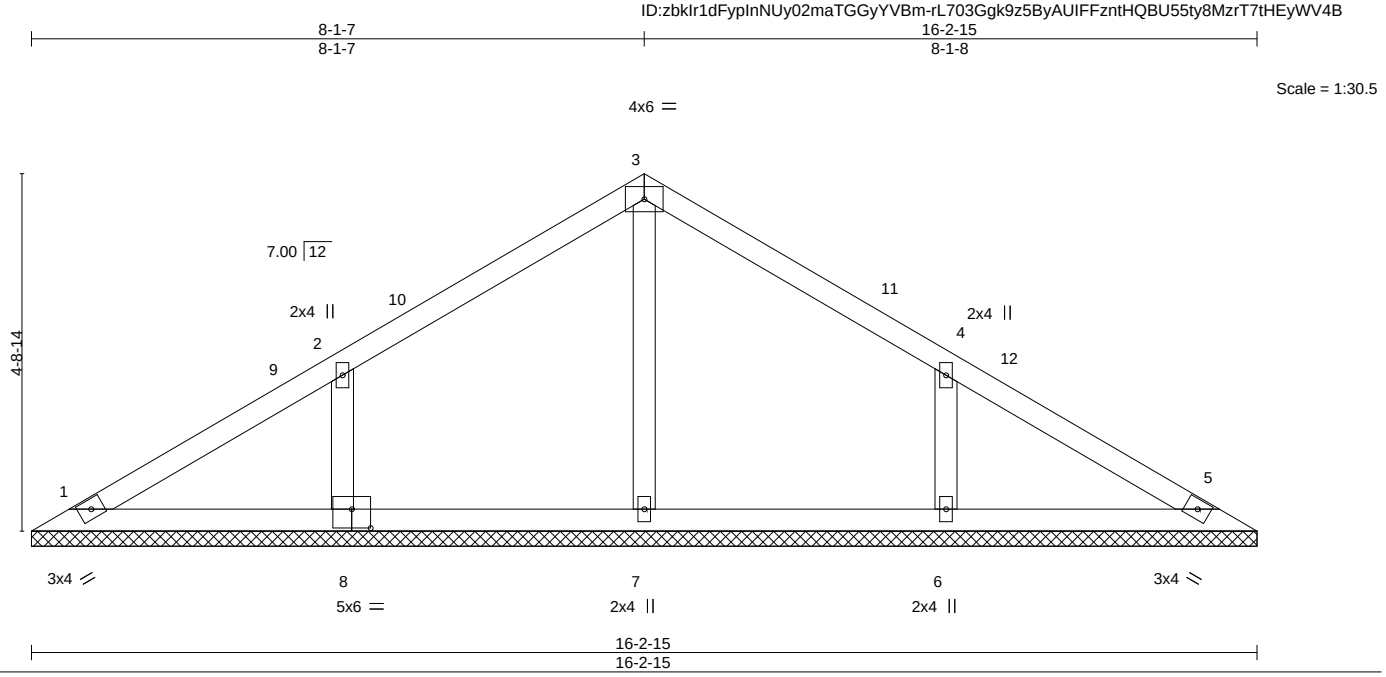


Plate Offsets (X,Y)-- [8:0-3-0,0-3-0]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.36 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.20 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.08 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 62 lb | FT = 20% |

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

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

**REACTIONS.** All bearings 16-2-15.
(lb) - Max Horz 1=-87(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 8, 6
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=260(LC 1), 8=354(LC 19), 6=363(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-264/125, 4-6=-272/129

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 8-1-7, Exterior(2) 8-1-7 to 11-1-7, Interior(1) 11-1-7 to 15-8-7 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) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 8, 6.


October 5,2022



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| Job | Truss | Truss Type | Qty | Ply | 3293795 |
|---|---|---|---|---|---|
| MASTER | V08 | GABLE | 1 | 1 | I54564471 |

Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Oct 5 10:12:51 2022 Page 1
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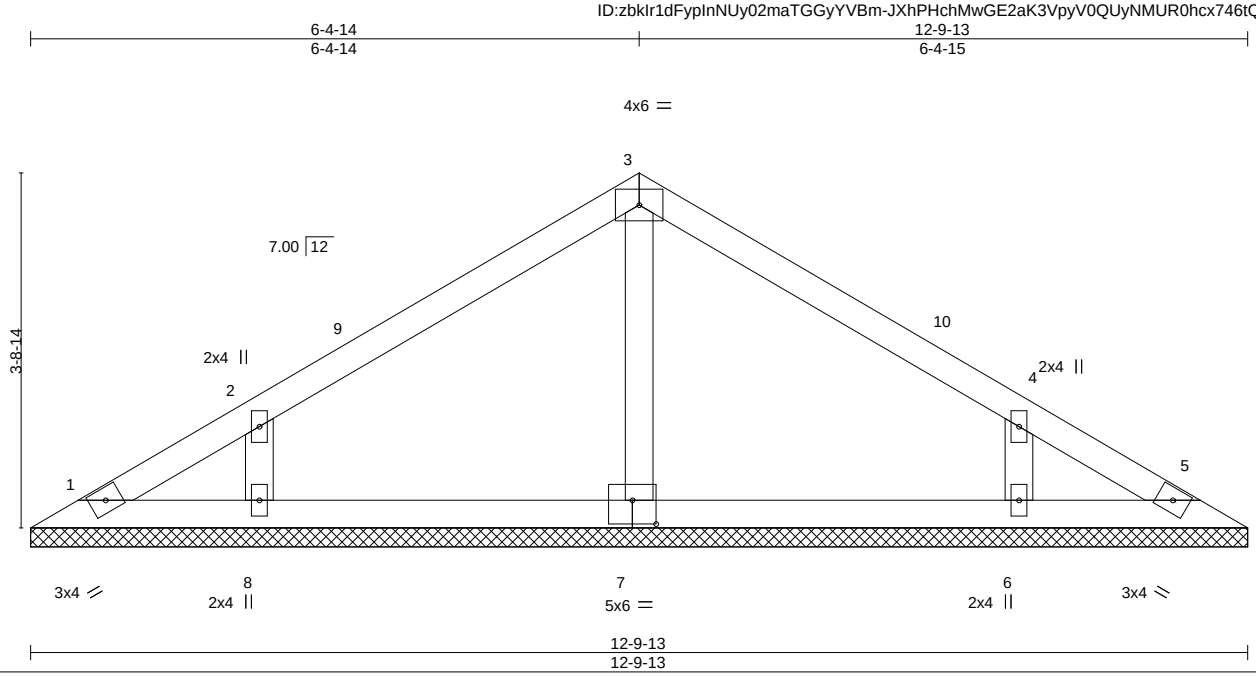


Plate Offsets (X,Y)-- [7:0-3-0,0-3-0]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.29 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.21 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.05 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 47 lb | FT = 20% |

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

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

**REACTIONS.** All bearings 12-9-13.
(lb) - Max Horz 1=-68(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 8, 6
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=279(LC 1), 8=296(LC 19), 6=299(LC 20)

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

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 6-4-14, Exterior(2) 6-4-14 to 9-4-14, Interior(1) 9-4-14 to 12-3-5 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 8, 6.


October 5,2022



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| Job | Truss | Truss Type | Qty | Ply | 3293795 |
|---|---|---|---|---|---|
| MASTER | V09 | GABLE | 1 | 1 | I54564472 |

Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Oct 5 10:12:52 2022 Page 1

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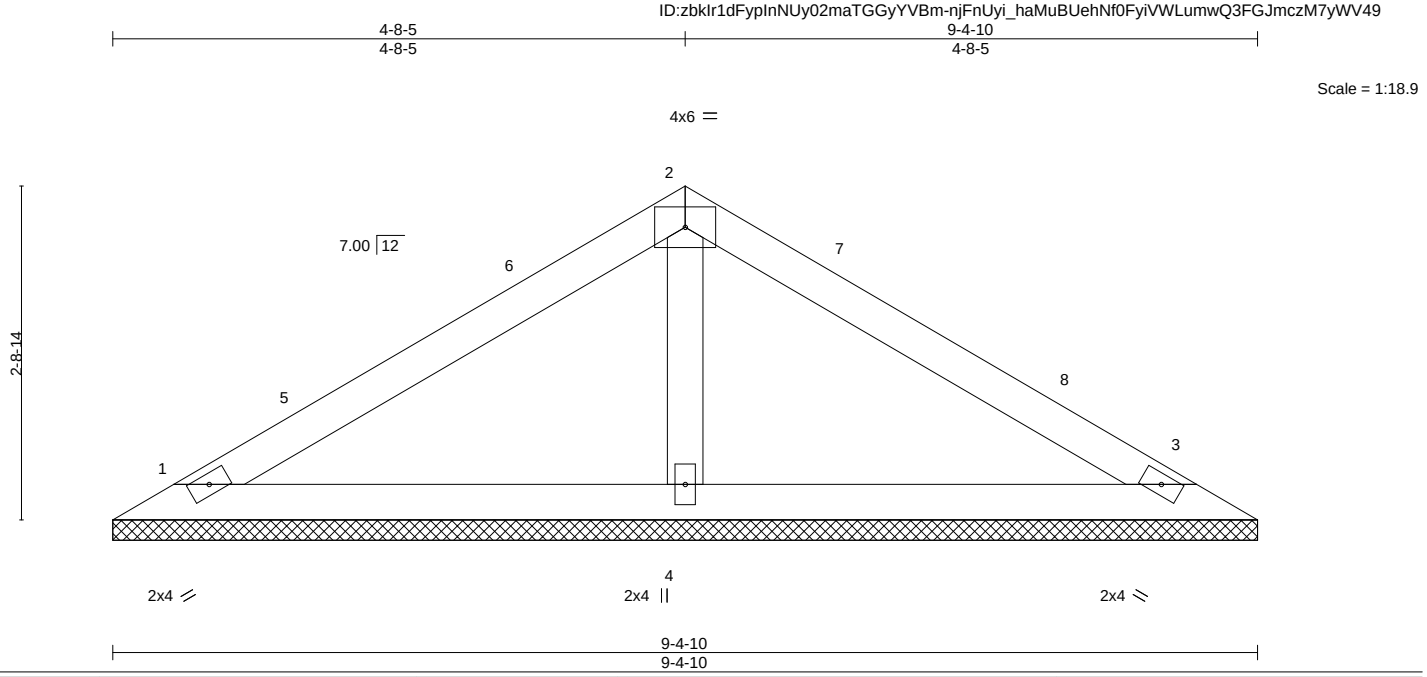


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.41 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.29 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.05 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 32 lb | FT = 20% |

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.** (size) 1=9-4-10, 3=9-4-10, 4=9-4-10
Max Horz 1=-48(LC 8)
Max Uplift 1=-15(LC 12), 3=-22(LC 13)
Max Grav 1=156(LC 23), 3=156(LC 24), 4=352(LC 1)

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

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 4-8-5, Exterior(2) 4-8-5 to 7-8-5, Interior(1) 7-8-5 to 8-10-2 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) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.


October 5,2022



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| Job | Truss | Truss Type | Qty | Ply | 3293795 |
|---|---|---|---|---|---|
| MASTER | V10 | GABLE | 1 | 1 | I54564473 |

Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Oct 5 10:12:52 2022 Page 1
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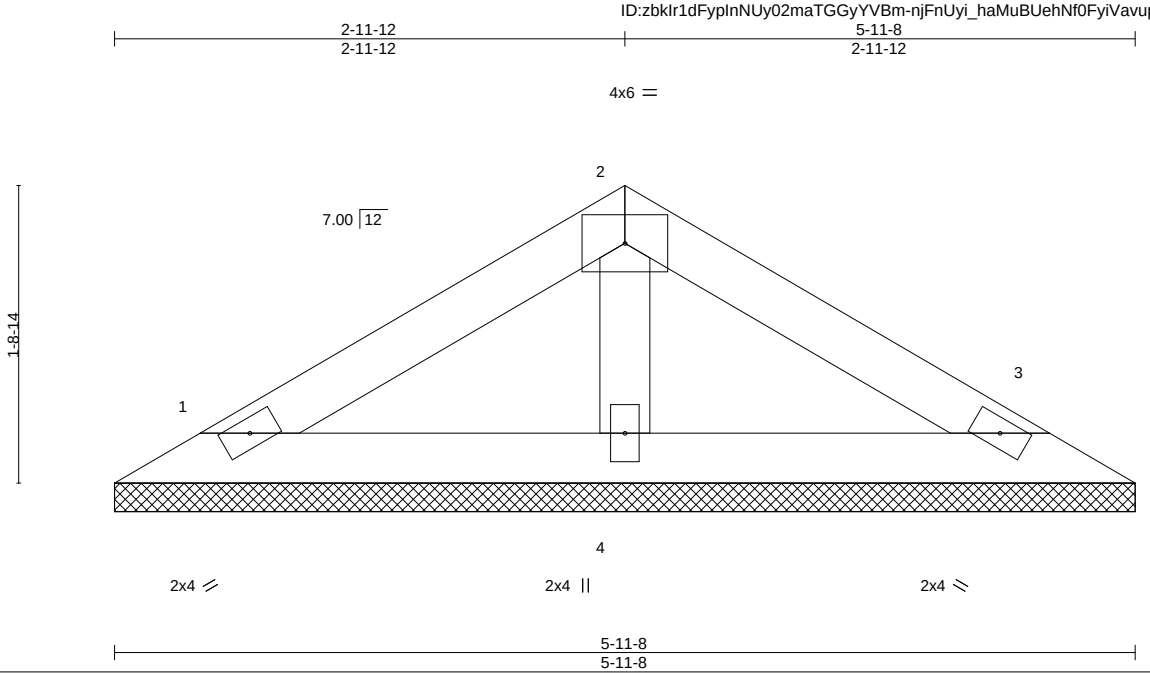


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.18 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.10 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.03 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-P | | | | | | | Weight: 19 lb | FT = 20% |

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

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 5-11-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=5-11-8, 3=5-11-8, 4=5-11-8
Max Horz 1=-28(LC 8)
Max Uplift 1=-13(LC 12), 3=-16(LC 13)
Max Grav 1=101(LC 1), 3=101(LC 1), 4=188(LC 1)

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

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.


October 5,2022



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| Job | Truss | Truss Type | Qty | Ply | 3293795 |
|---|---|---|---|---|---|
| MASTER | V11 | GABLE | 1 | 1 | I54564474 |

Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Oct 5 10:12:53 2022 Page 1
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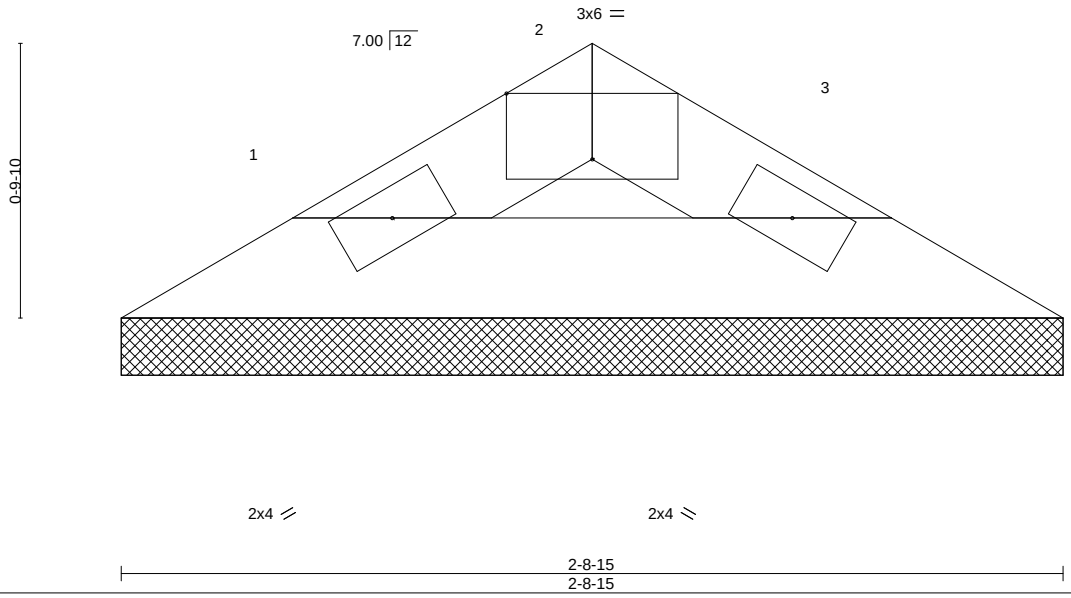


Plate Offsets (X,Y)-- [2:0-3-0,Edge]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.02 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.05 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-P | | | | | | | Weight: 7 lb | FT = 20% |

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

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 2-8-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=2-8-15, 3=2-8-15
Max Horz 1=-10(LC 8)
Max Uplift 1=-2(LC 12), 3=-2(LC 13)
Max Grav 1=67(LC 1), 3=67(LC 1)

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

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.


October 5,2022



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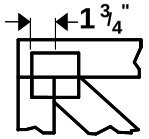
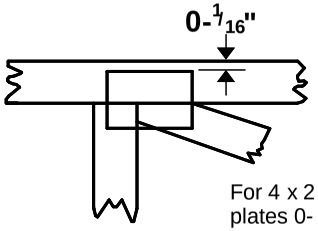
# Symbols

## PLATE LOCATION AND ORIENTATION




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




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

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

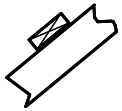
*** Plate location details available in MiTek 20/20 software or upon request.**

## PLATE SIZE

4 x 4

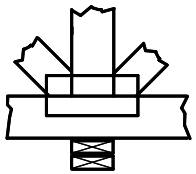
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

## BEARING

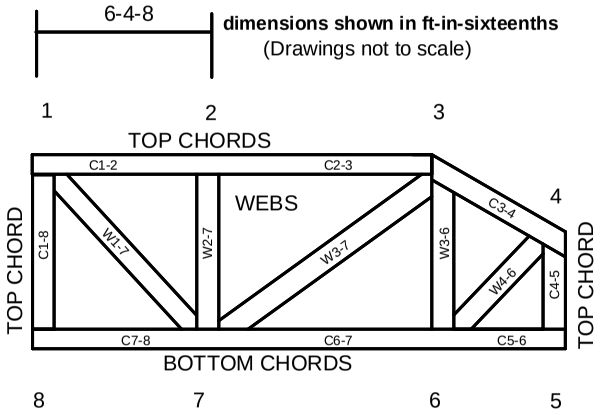


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

**Industry Standards:**

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System




**JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.**

**CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.**

## PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

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



MiTek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

# General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.