

Qty

28' Frame truss

Job

Truss

TOP CHORD 2x4 SPF-S No.2 BOT CHORD 2x4 SPF-S No.2 2x4 SPF-S No.2 OTHERS

TOP CHORD **BOT CHORD**  Structural wood sheathing directly applied or 4-6-13 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

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

REACTIONS. All bearings 4-6-13.

(lb) - Max Horz 1=-32(LC 12)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 2, 4 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 2, 4, 6

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

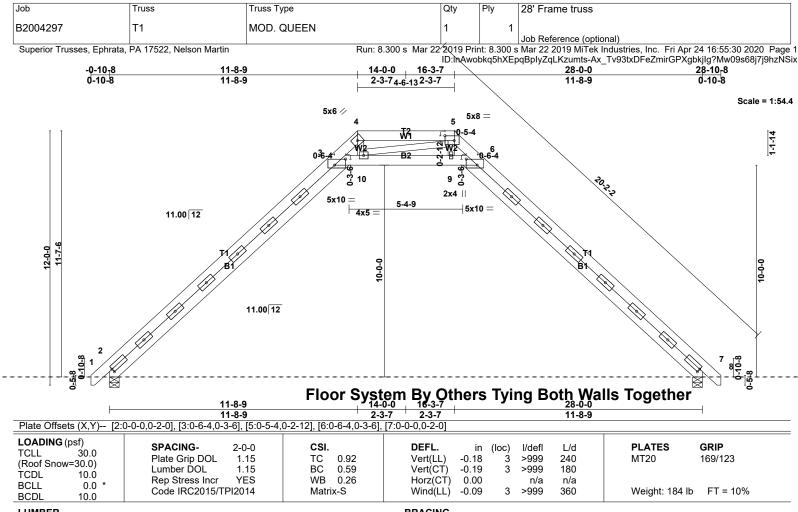
- 1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=3.0psf; BCDL=3.0psf; h=25ft; B=45ft; L=5ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For stude exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1
- 3) TCLL: ASCE 7-10; Pf=30.0 psf (flat roof snow); Category II; Exp B; Partially Exp.; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 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.

Truss Type

- 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 1-0-0 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, 5, 2, 4.

  10) 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
- 11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



LUMBER-

TOP CHORD 2x6 SP No.1 BOT CHORD 2x6 SP No.1 WFBS 2x4 SPF-S No 2 **BRACING-**

TOP CHORD **BOT CHORD**  Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-5.

Rigid ceiling directly applied or 4-6-0 oc bracing

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

**REACTIONS.** (lb/size) 2=1546/0-5-8 (min. 0-3-15), 7=1546/0-5-8 (min. 0-3-15)

Max Horz 2=1708(LC 31), 7=-1708(LC 31) Max Uplift2=-142(LC 14), 7=-142(LC 14) Max Grav 2=2514(LC 31), 7=2514(LC 31)

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

2-11=-2761/177, 11-12=-2318/189, 12-13=-2074/209, 13-14=-1927/220, 3-14=-1636/252, TOP CHORD

3-4=-194/1262, 5-6=-249/1143, 6-15=-1636/252, 15-16=-2074/209, 16-17=-2318/189,

7-17=-2761/177, 4-18=-216/1431, 18-19=-215/1432, 5-19=-215/1432

**BOT CHORD** 3-10=-3077/510, 9-10=-3023/505, 6-9=-2967/490 **WEBS** 4-10=-485/118, 5-10=-618/494, 5-9=-448/112

## NOTES-

- 1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=3.0psf; BCDL=3.0psf; h=25ft; B=45ft; L=35ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) -0-9-7 to 2-8-9, Interior(1) 2-8-9 to 11-8-9, Exterior(2) 11-8-9 to 15-2-9, Interior(1) 15-2-9 to 16-3-7, Exterior(2) 16-3-7 to 19-9-7, Interior(1) 19-9-7 to 28-9-7 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
- 2) TCLL: ASCE 7-10; Pf=30.0 psf (flat roof snow); Category II; Exp B; Partially Exp.; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design
- 4) This truss has been designed for greater of min roof live load of 20.0 psf or 1.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
- 5) Provide adequate drainage to prevent water ponding.
- 6) All plates are 4x10 MT20 unless otherwise indicated.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- 9) Bearing at joint(s) 2, 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=142,
- 11) Non Standard bearing condition. Review required.
- 12) 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.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.