

Plate Offsets (X,Y)				
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 *	SPACING-         2-0-0           Plate Grip DOL         1.15           Lumber DOL         1.15           Rep Stress Incr         YES	CSI. TC 0.77 BC 0.62 WB 0.39	DEFL.         in (loc)         l/defl         L/d           Vert(LL)         -0.34 13-15         >898         360           Vert(CT)         -0.51 13-15         >602         240           Horz(CT)         0.03         11         n/a         n/a	PLATES         GRIP           MT20         244/190
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.27 11-13 >999 240	Weight: 212 lb FT = 20%

BRACING-TOP CHORD

**BOT CHORD** 

23-1-12

31-0-0

Structural wood sheathing directly applied or 4-5-15 oc purlins.

MiTek recommends that Stabilizers and required cross bracing

be installed during truss erection, in accordance with Stabilizer

Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

6-0-0 oc bracing: 2-16.

Installation guide.

LUMBER-

TOP CHORD 2x6 SP No.1 \*Except\* T1: 2x4 SP No.1 BOT CHORD 2x6 SP No.1

WEBS 2x4 SP No.2 \*Except\*

W2: 2x6 SP No.1

**REACTIONS.** (size) 11=0-3-8 (min. 0-1-9), 16=0-3-8 (min. 0-2-0)

Max Horz 16=220(LC 11)

Max Uplift11=-67(LC 13), 16=-116(LC 12) Max Grav 11=1303(LC 20), 16=1673(LC 2)

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

TOP CHORD 2-17=-578/998, 3-17=-568/1048, 3-16=-2554/733, 3-4=-1722/195, 4-5=-1579/223,

7-0-0

12-10-4

5-18=-1212/287, 6-18=-1148/299, 6-7=-74/533, 7-8=-58/534, 8-19=-1146/315,

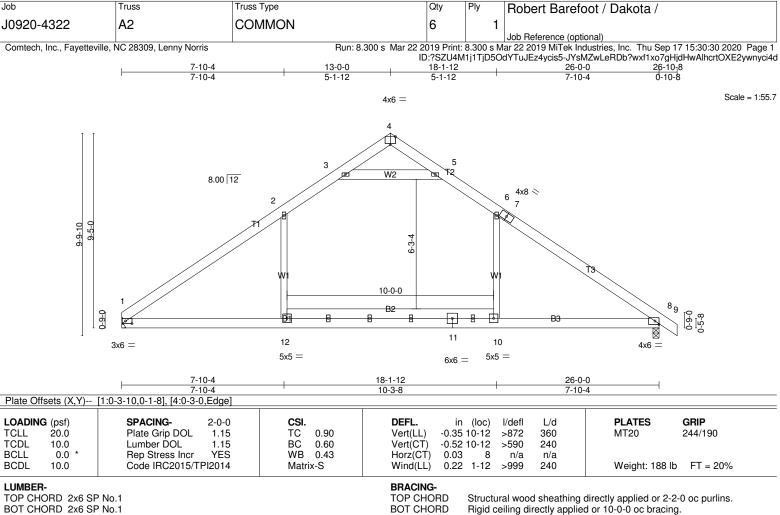
9-19=-1210/303, 9-10=-1539/234, 10-20=-1577/228, 11-20=-1762/205

BOT CHORD 2-16=-975/617, 16-21=-28/1318, 15-21=-28/1318, 14-15=-28/1318, 13-14=-28/1318, 13-22=-28/1318, 11-22=-28/1318

WEBS 5-15=0/689, 9-13=0/663, 6-8=-1863/448

## NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 18-0-0, Exterior(2) 18-0-0 to 22-4-13, Interior(1) 22-4-13 to 31-8-12 zone; 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 30.0psf 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.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11 except (jt=lb) 16=116.
- 6) 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.
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



MiTek recommends that Stabilizers and required cross bracing

be installed during truss erection, in accordance with Stabilizer

Installation guide

BOT CHORD 2x6 SP No.1 WEBS

2x4 SP No.2 \*Except\*

W2: 2x6 SP No.1

REACTIONS.

(size) 1=Mechanical, 8=0-3-8 (min. 0-1-9) Max Horz 1=-219(LC 8)

Max Uplift1=-54(LC 12), 8=-68(LC 13)

Max Grav 1=1287(LC 19), 8=1346(LC 20)

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

TOP CHORD 1-13=-1853/232, 2-13=-1678/253, 2-14=-1284/327, 3-14=-1220/339, 3-4=-101/642,

4-5=-109/643, 5-15=-1219/333, 6-15=-1283/321, 6-7=-1642/260, 7-16=-1682/255,

8-16=-1865/230

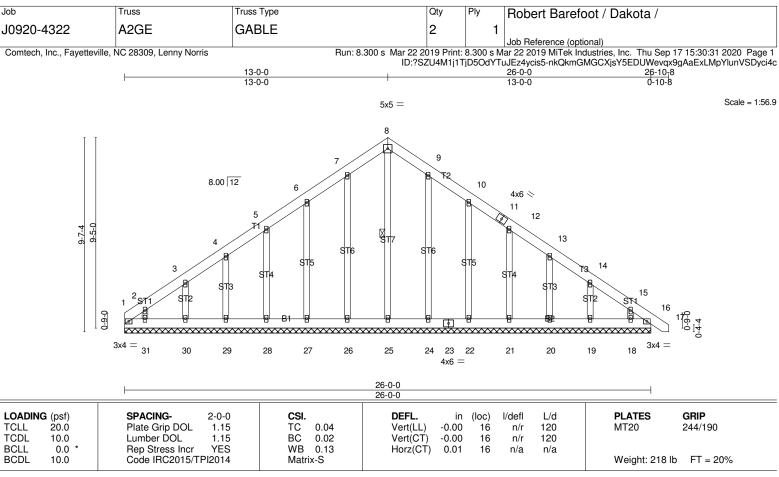
**BOT CHORD** 1-17=-58/1405, 12-17=-58/1405, 11-12=-58/1405, 10-11=-58/1405, 10-18=-58/1405,

8-18=-58/1405

**WEBS** 6-10=0/698, 2-12=0/681, 3-5=-2078/516

## NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-4 to 4-6-1, Interior(1) 4-6-1 to 13-0-0, Exterior(2) 13-0-0 to 17-4-13, Interior(1) 17-4-13 to 26-10-8 zone; 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 30.0psf 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.
- 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) 1, 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.



TOP CHORD 2x6 SP No.1 BOT CHORD 2x6 SP No.1 OTHERS 2x4 SP No.2 **BRACING-**

TOP CHORD BOT CHORD WEBS

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

1 Row at midpt 8-25

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

REACTIONS. All bearings 26-0-0.

(lb) - Max Horz 1=-272(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 16, 26, 27, 28, 29, 30, 24, 22, 21, 20, 19 except 1=-133(LC 10),

31=-130(LC 12), 18=-109(LC 13)

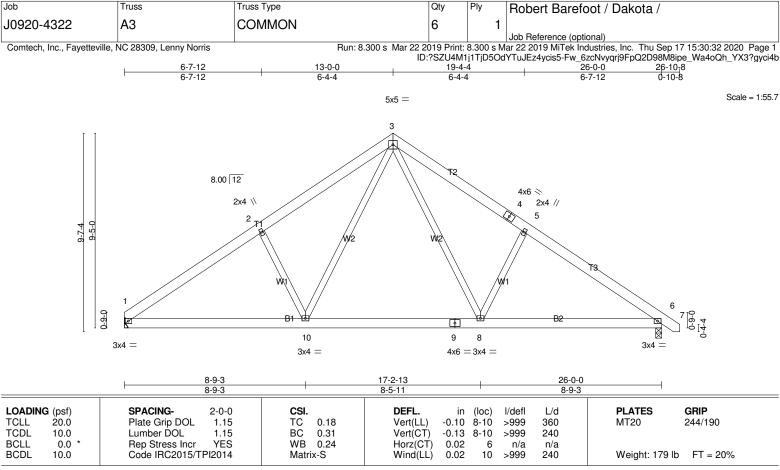
Max Grav All reactions 250 lb or less at joint(s) 1, 16, 25, 26, 27, 28, 29, 30, 31, 24, 22, 21, 20, 19, 18

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

TOP CHORD 1-2=-320/227

## NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-0-0 to 4-4-13, Exterior(2) 4-4-13 to 13-0-0, Corner(3) 13-0-0 to 17-4-13, Exterior(2) 17-4-13 to 26-8-12 zone; 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 30.0psf 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) 16, 26, 27, 28, 29, 30, 24, 22, 21, 20, 19 except (jt=lb) 1=133, 31=130, 18=109.
- 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.



TOP CHORD 2x6 SP No.1 BOT CHORD 2x6 SP No.1 2x4 SP No.2 WEBS

**BRACING-**

TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 6-0-0 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.

(size) 1=Mechanical, 6=0-3-8 (min. 0-1-8)

Max Horz 1=-218(LC 8)

Max Uplift1=-54(LC 12), 6=-66(LC 13) Max Grav 1=1060(LC 19), 6=1110(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-11=-1510/297, 2-11=-1373/323, 2-12=-1397/367, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406, 3-12=-1305/406,

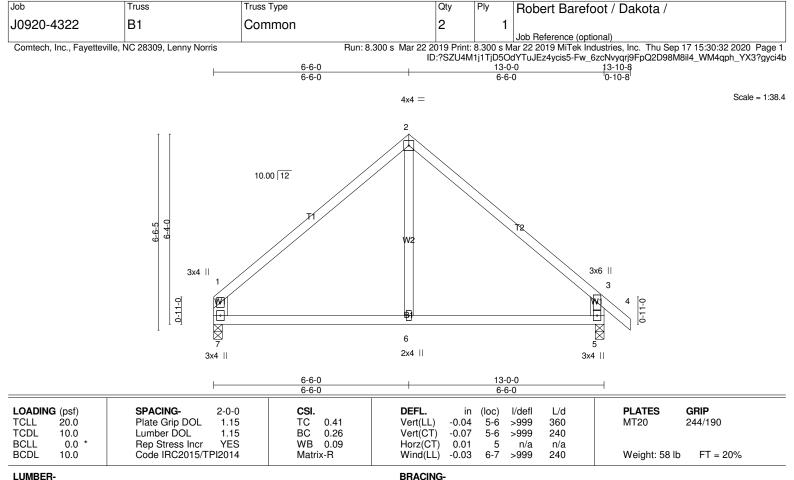
1-11=-1510/297, 2-11=-1373/323, 2-12=-1397/367, 3-12=-1305/406, 3-13=-1302/395, 4-13=-1368/358, 4-5=-1391/357, 5-14=-1420/314, 6-14=-1523/289

**BOT CHORD**  $1 - 10 = -147/1322, \ 10 - 15 = 0/864, \ 15 - 16 = 0/864, \ 9 - 16 = 0/864, \ 8 - 9 = 0/864, \ 6 - 8 = -145/1166$ 

**WEBS** 3-8=-142/693, 5-8=-408/257, 3-10=-144/703, 2-10=-414/262

# NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-4 to 4-6-1, Interior(1) 4-6-1 to 13-0-0, Exterior(2) 13-0-0 to 17-4-13, Interior(1) 17-4-13 to 26-8-12 zone;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 30.0psf 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.
- 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) 1, 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.



TOP CHORD

**BOT CHORD** 

end verticals.

Installation guide

Structural wood sheathing directly applied or 6-0-0 oc purlins, except

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

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

LUMBER-

REACTIONS.

TOP CHORD 2x4 SP No.1 BOT CHORD 2x4 SP No.1 2x6 SP No.1 \*Except\* WEBS

W2: 2x4 SP No.2

(size) 7=0-3-8 (min. 0-1-8), 5=0-3-8 (min. 0-1-8)

Max Horz 7=-140(LC 8)

Max Uplift7=-18(LC 12), 5=-34(LC 13) Max Grav 7=569(LC 19), 5=635(LC 20)

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

TOP CHORD 1-8=-616/128, 8-9=-507/136, 2-9=-476/162, 2-10=-505/162, 10-11=-518/136,
3-11=-623/128, 1-7=-492/186, 3-5=-565/250

**BOT CHORD** 7-12=0/421, 6-12=0/421, 6-13=0/421, 5-13=0/421

WEBS 2-6=0/385

# NOTES-

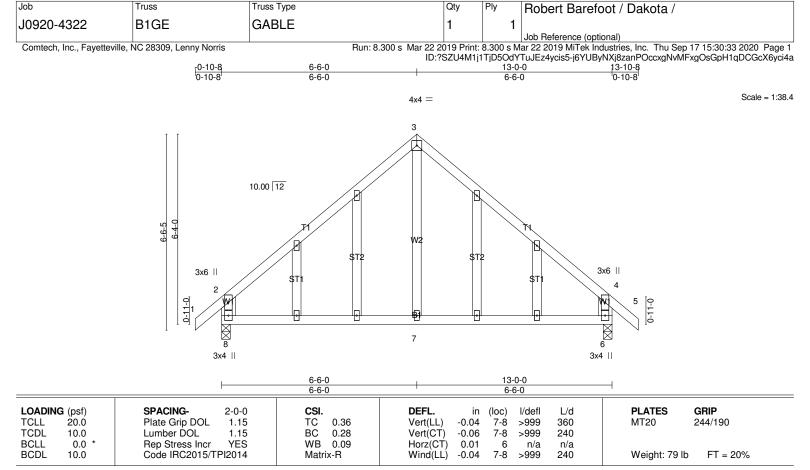
1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-12 to 4-7-9, Interior(1) 4-7-9 to 6-6-0, Exterior(2) 6-6-0 to 10-10-13, Interior(1) 10-10-13 to 13-10-8 zone;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 30.0psf 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.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 5.

6) 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.



**BRACING-**

TOP CHORD

**BOT CHORD** 

end verticals.

Installation guide

Structural wood sheathing directly applied or 6-0-0 oc purlins, except

MiTek recommends that Stabilizers and required cross bracing

be installed during truss erection, in accordance with Stabilizer

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

### LUMBER-

TOP CHORD 2x4 SP No.1 BOT CHORD 2x4 SP No.1 2x6 SP No.1 \*Except\* WEBS W2: 2x4 SP No.2

**OTHERS** 2x4 SP No.2

REACTIONS.

(size) 8=0-3-8 (min. 0-1-8), 6=0-3-8 (min. 0-1-8) Max Horz 8=-184(LC 10) Max Uplift8=-114(LC 12), 6=-114(LC 13)

Max Grav 8=632(LC 19), 6=632(LC 20)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 2-3=-627/172, 3-4=-627/172, 2-8=-566/262, 4-6=-566/262

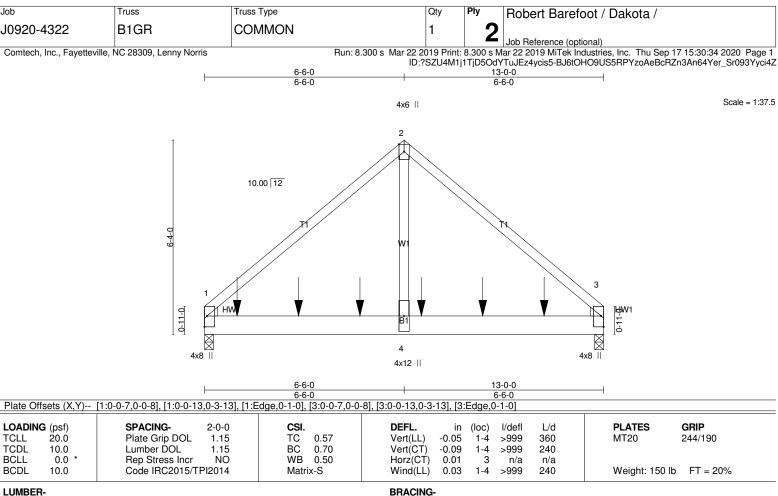
BOT CHORD 8-17=-14/433, 7-17=-14/433, 7-18=-14/433, 6-18=-14/433

**WEBS** 3-7=0/393

# NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 3-6-5, Exterior(2) 3-6-5 to 6-6-0, Corner(3) 6-6-0 to 10-10-13, Exterior(2) 10-10-13 to 13-10-8 zone; 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 studs spaced at 2-0-0 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 30.0psf 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.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=114,
- 9) 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.



TOP CHORD

**BOT CHORD** 

Structural wood sheathing directly applied or 6-0-0 oc purlins.

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

LUMBER-

TOP CHORD 2x4 SP No.1 BOT CHORD 2x8 SP No.1 2x4 SP No.2 WEBS

WEDGE

Left: 2x4 SP No.2, Right: 2x4 SP No.2

REACTIONS. (size) 1=0-3-8 (min. 0-2-3), 3=0-3-8 (min. 0-1-15)

Max Horz 1=140(LC 7)

Max Uplift1=-229(LC 8), 3=-203(LC 9) Max Grav 1=3745(LC 1), 3=3328(LC 1)

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

TOP CHORD 1-2=-3409/260, 2-3=-3410/260

**BOT CHORD** 1-5=-126/2443, 5-6=-126/2443, 6-7=-126/2443, 7-8=-126/2443, 4-8=-126/2443,

4-9=-126/2443, 9-10=-126/2443, 10-11=-126/2443, 11-12=-126/2443, 3-12=-126/2443

**WEBS** 

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
  - Top chords connected as follows: 2x4 1 row at 0-9-0 oc.
  - Bottom chords connected as follows: 2x8 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=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); 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 30.0psf 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) 1=229, 3 = 203
- 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1010 lb down and 73 lb up at 1-0-12 , 1009 lb down and 74 lb up at 3-0-12, 1009 lb down and 74 lb up at 5-0-12, 1009 lb down and 74 lb up at 7-0-12, and 1009 lb down and 74 lb up at 9-0-12, and 1009 lb down and 74 lb up at 11-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

# LOAD CASE(S) Standard

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Robert Barefoot / Dakota /
J0920-4322	B1GR	COMMON	1	2	Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309, Lenny Norris

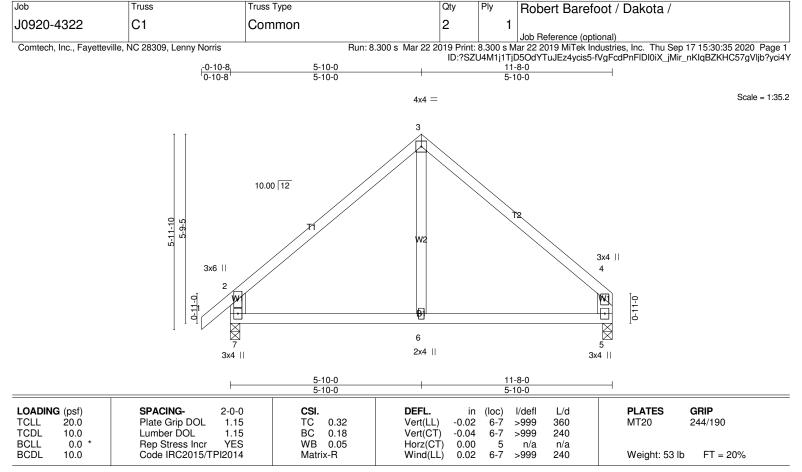
Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Sep 17 15:30:34 2020 Page 2 ID:?SZU4M1j1TjD5OdYTuJEz4ycis5-BJ6tOHO9US5RPYzoAeBcRZn3An64Yer\_Sr093Yyci4Z

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)

Vert: 1-3=-20, 1-2=-60, 2-3=-60

Concentrated Loads (lb)

Vert: 5=-1010(B) 6=-1009(B) 8=-1009(B) 9=-1009(B) 11=-1009(B) 12=-1009(B)



TOP CHORD 2x4 SP No.1 BOT CHORD 2x4 SP No.1 2x6 SP No.1 \*Except\* WEBS

W2: 2x4 SP No.2

**BRACING-**

TOP CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins, except

end verticals.

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

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

REACTIONS.

(size) 7=0-3-8 (min. 0-1-8), 5=0-3-8 (min. 0-1-8) Max Horz 7=127(LC 9)

Max Uplift7=-31(LC 12), 5=-16(LC 13)

Max Grav 7=518(LC 1), 5=445(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-8=-447/117, 8-9=-386/128, 3-9=-362/150, 3-10=-343/150, 10-11=-364/128,

4-11=-440/117, 2-7=-463/238, 4-5=-394/173

BOT CHORD 6-7=0/266, 5-6=0/266

# NOTES-

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

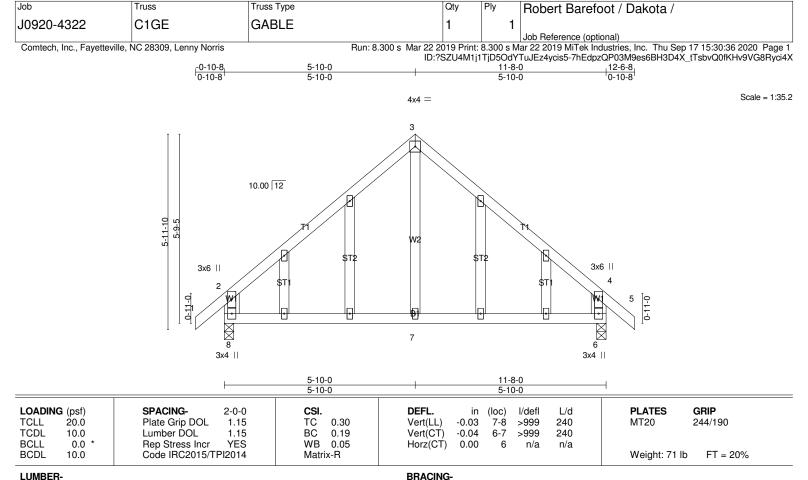
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 5-10-0, Exterior(2) 5-10-0 to 10-2-13, Interior(1) 10-2-13 to 11-5-4 zone;C-C for members and forces & MWFRS 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 30.0psf 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) 7, 5.

6) 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.



TOP CHORD

**BOT CHORD** 

end verticals.

Installation guide

Structural wood sheathing directly applied or 6-0-0 oc purlins, except

MiTek recommends that Stabilizers and required cross bracing

be installed during truss erection, in accordance with Stabilizer

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

LUMBER-

TOP CHORD 2x4 SP No.1 BOT CHORD 2x4 SP No.1 2x6 SP No.1 \*Except\* WEBS

W2: 2x4 SP No.2 **OTHERS** 2x4 SP No.2

REACTIONS.

(size) 8=0-3-8 (min. 0-1-8), 6=0-3-8 (min. 0-1-8) Max Horz 8=168(LC 11)

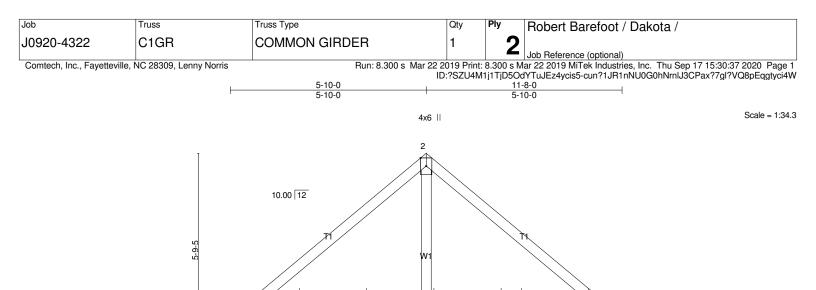
Max Uplift8=-105(LC 12), 6=-105(LC 13)

Max Grav 8=515(LC 1), 6=515(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-445/157, 3-4=-445/157, 2-8=-463/246, 4-6=-463/246

BOT CHORD 7-8=-11/287, 6-7=-11/287

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 3-6-5, Exterior(2) 3-6-5 to 5-10-0, Corner(3) 5-10-0 to 10-2-13, Exterior(2) 10-2-13 to 12-6-8 zone: 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 studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf 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) except (jt=lb) 8=105,
- 9) 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.



5-10-0 11-8-0 5-10-0 5-10-0

4

4x12 ||

BRACING-

TOP CHORD

**BOT CHORD** 

0-11

4x8

Structural wood sheathing directly applied or 6-0-0 oc purlins.

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

Plate Offsets (X,Y)-- [1:0-0-7,0-0-8], [1:0-0-13,0-3-13], [1:Edge,0-1-0], [3:0-0-7,0-0-8], [3:0-0-13,0-3-13], [3:Edge,0-1-0]

HW1

0-11-0

LOADING	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.53	Vert(LL) -0.04 3-4 >999 360	MT20 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.70	Vert(CT) -0.09 3-4 >999 240	
BCLL	0.0 *	Rep Stress Incr NO	WB 0.51	Horz(CT) 0.01 3 n/a n/a	
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.03 3-4 >999 240	Weight: 135 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.1 BOT CHORD 2x8 SP No.1 WEBS 2x4 SP No.2

WEDGE

Left: 2x4 SP No.2 , Right: 2x4 SP No.2

**REACTIONS.** (size) 1=0-3-8 (min. 0-1-13), 3=0-3-8 (min. 0-2-5)

Max Horz 1=127(LC 26)

Max Uplift1=-189(LC 8), 3=-238(LC 9) Max Grav 1=3095(LC 1), 3=3869(LC 1)

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

TOP CHORD 1-2=-3407/255, 2-3=-3379/254

BOT CHORD 1-5=-129/2418, 5-6=-129/2418, 4-6=-129/2418, 4-7=-129/2418, 7-8=-129/2418,

8-9=-129/2418, 3-9=-129/2418 WEBS 2-4=-205/4117

## NOTES-

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
  - Top chords connected as follows: 2x4 1 row at 0-9-0 oc.
  - Bottom chords connected as follows: 2x8 2 rows staggered at 0-6-0 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=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); 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 30.0psf 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) 1=189, 3=238
- 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1009 lb down and 74 lb up at 2-0-12, 1009 lb down and 74 lb up at 4-0-12, 1009 lb down and 74 lb up at 8-0-12, and 1009 lb down and 74 lb up at 8-8-0, and 1010 lb down and 72 lb up at 10-8-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

# LOAD CASE(S) Standard

Continued on page 2

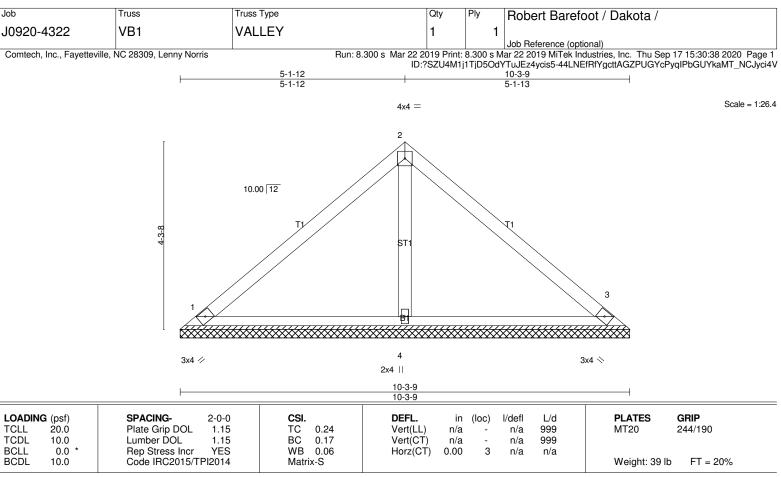
Job	Truss	Truss Type	Qty	Ply	Robert Barefoot / Dakota /
J0920-4322	C1GR	COMMON GIRDER	1	2	Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309, Lenny Norris

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Sep 17 15:30:37 2020 Page 2 ID:?SZU4M1j1TjD5OdYTuJEz4ycis5-cun?1JR1nNU0G0hNrnlJ3CPax?7gl?VQ8pEqgtyci4W

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, 1-3=-20

Concentrated Loads (lb)
Vert: 4=-1009(B) 5=-1009(B) 6=-1009(B) 7=-1009(B) 8=-1009(B) 9=-1010(B)



TOP CHORD 2x4 SP No.1 BOT CHORD 2x4 SP No.1 OTHERS 2x4 SP No.2 **BRACING-**

TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 6-0-0 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.

(size) 1=10-3-9 (min. 0-1-8), 3=10-3-9 (min. 0-1-8), 4=10-3-9 (min. 0-1-8)

Max Horz 1=-95(LC 8)

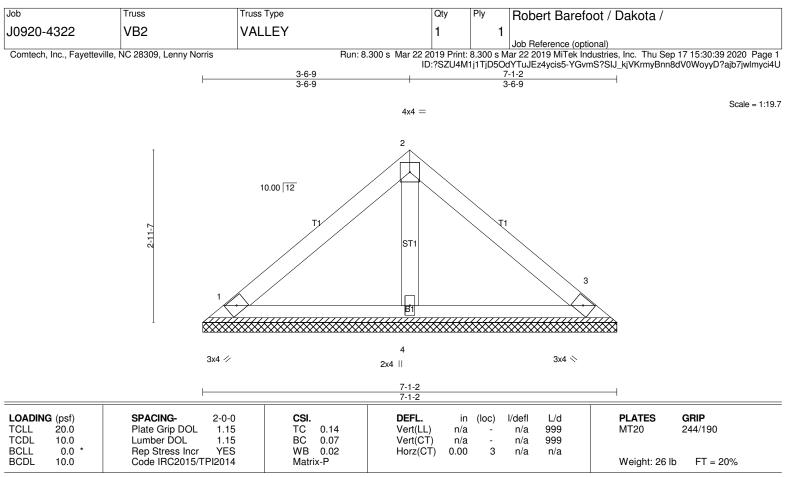
Max Uplift1=-22(LC 13), 3=-31(LC 13)

Max Grav 1=203(LC 1), 3=203(LC 1), 4=354(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=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-13 to 4-9-10, Interior(1) 4-9-10 to 5-1-12, Exterior(2) 5-1-12 to 9-6-9, Interior(1) 9-6-9 to 9-10-12 zone; 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 30.0psf 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) 1, 3.
- 6) Non Standard bearing condition. Review required.
- 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.



TOP CHORD 2x4 SP No.1 BOT CHORD 2x4 SP No.1 2x4 SP No.2 **OTHERS** 

**BRACING-**

TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 6-0-0 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.

(size) 1=7-1-2 (min. 0-1-8), 3=7-1-2 (min. 0-1-8), 4=7-1-2 (min. 0-1-8)

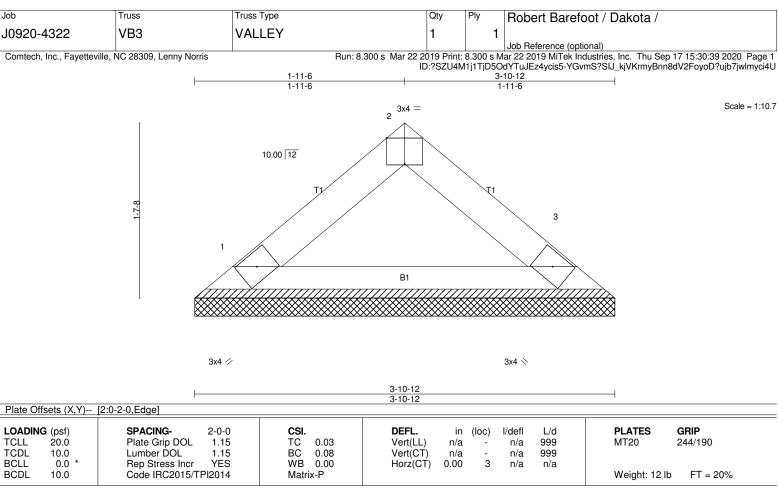
Max Horz 1=-63(LC 8)

Max Uplift1=-22(LC 13), 3=-28(LC 13)

Max Grav 1=145(LC 1), 3=145(LC 1), 4=212(LC 1)

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

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip
- 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 30.0psf 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.
- 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.



TOP CHORD 2x4 SP No.1 BOT CHORD 2x4 SP No.1 **BRACING-**

TOP CHORD BOT CHORD Structural wood sheathing directly applied or 3-10-12 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.

(size) 1=3-10-12 (min. 0-1-8), 3=3-10-12 (min. 0-1-8)

Max Horz 1=31(LC 9)

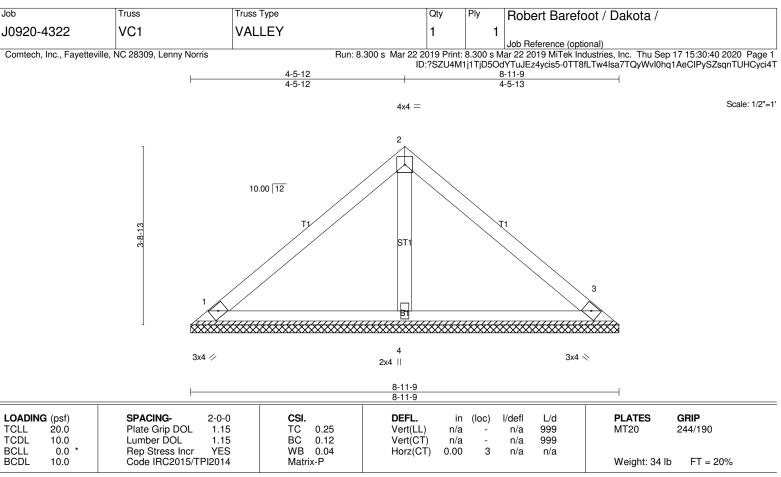
Max Uplift1=-5(LC 12), 3=-5(LC 13) Max Grav 1=124(LC 1), 3=124(LC 1)

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=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; 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 30.0psf 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) 1, 3.
- 6) Non Standard bearing condition. Review required.
- 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.



TOP CHORD 2x4 SP No.1 BOT CHORD 2x4 SP No.1 OTHERS 2x4 SP No.2 **BRACING-**

TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 6-0-0 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.

(size) 1=8-11-9 (min. 0-1-8), 3=8-11-9 (min. 0-1-8), 4=8-11-9 (min. 0-1-8)

Max Horz 1=-81(LC 8)

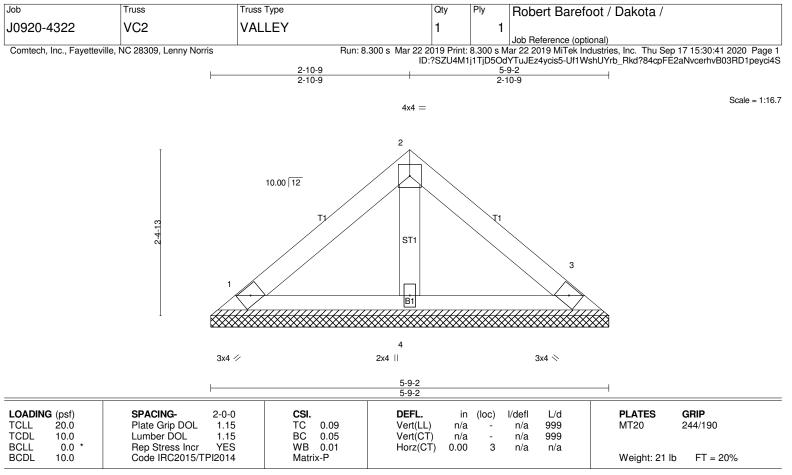
Max Uplift1=-28(LC 13), 3=-36(LC 13)

Max Grav 1=189(LC 1), 3=189(LC 1), 4=275(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=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; 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 30.0psf 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) 1, 3.
- 6) Non Standard bearing condition. Review required.
- 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.



TOP CHORD 2x4 SP No.1 BOT CHORD 2x4 SP No.1 2x4 SP No.2 **OTHERS** 

**BRACING-**

TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 5-9-2 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.

(size) 1=5-9-2 (min. 0-1-8), 3=5-9-2 (min. 0-1-8), 4=5-9-2 (min. 0-1-8)

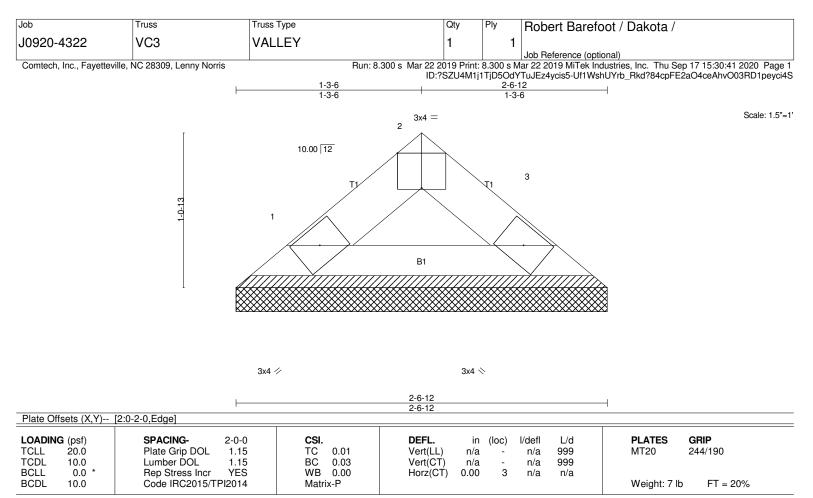
Max Horz 1=-49(LC 8)

Max Uplift1=-17(LC 13), 3=-22(LC 13)

Max Grav 1=115(LC 1), 3=115(LC 1), 4=167(LC 1)

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

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip
- 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 30.0psf 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.
- 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.



TOP CHORD 2x4 SP No.1 BOT CHORD 2x4 SP No.1 **BRACING-**

TOP CHORD **BOT CHORD**  Structural wood sheathing directly applied or 2-6-12 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.

(size) 1=2-6-12 (min. 0-1-8), 3=2-6-12 (min. 0-1-8)

Max Horz 1=18(LC 9)

Max Uplift1=-3(LC 12), 3=-3(LC 13) Max Grav 1=70(LC 1), 3=70(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=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown, Lumber DOL=1.60 plate grip
- 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 30.0psf 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) 1, 3.
- 6) Non Standard bearing condition. Review required.
- 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.