

LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 1-4-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO Code IRC2015/TPI2014	CSI. TC 0.60 BC 0.71 WB 0.36 Matrix-MS	DEFL. in (loc) l/defl L/d Vert(LL) -0.37 11-12 >980 360 Vert(CT) -0.65 11-12 >552 240 Horz(CT) 0.05 8 n/a n/a	PLATES GRIP MT20 244/190 Weight: 144 lb FT = 20%
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LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
B3: 2x4 SP DSS
WEBS 2x4 SP No.3

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

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

REACTIONS. (lb/size) 2=1034/0-3-8 (min. 0-1-8), 8=1034/0-3-8 (min. 0-1-8)
Max Horz 2=-154(LC 8)
Max Uplift 2=-191(LC 10), 8=-191(LC 11)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/20, 2-15=-546/57, 3-15=-1689/369, 3-4=-1573/376, 4-5=-1504/398, 5-6=-1504/398, 6-7=-1573/376, 7-18=-1689/369, 8-18=-546/57, 8-9=0/20
BOT CHORD 14-16=-117/513, 13-16=-290/1509, 12-13=-290/1509, 12-20=-107/983, 20-21=-107/983, 11-21=-107/983, 10-11=-232/1405, 10-19=-232/1405, 17-19=-70/461
WEBS 3-12=-300/194, 5-12=-184/790, 5-11=-184/790, 7-11=-300/194, 2-14=-584/165, 15-16=-406/251, 14-15=-521/76, 2-16=-114/483, 8-17=-584/165, 18-19=-399/245, 17-18=-521/76, 8-19=-77/435

JOINT STRESS INDEX
2 = 0.00, 3 = 0.00, 4 = 0.00, 5 = 0.00, 6 = 0.00, 7 = 0.00, 8 = 0.00, 10 = 0.00, 11 = 0.00, 12 = 0.00 and 13 = 0.00

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=30ft; 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
 - 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 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 191 lb uplift at joint 2 and 191 lb uplift at joint 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.
 - 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: 12-14=-13, 11-12=-53(F=-40), 11-17=-13, 1-5=-40, 5-9=-40

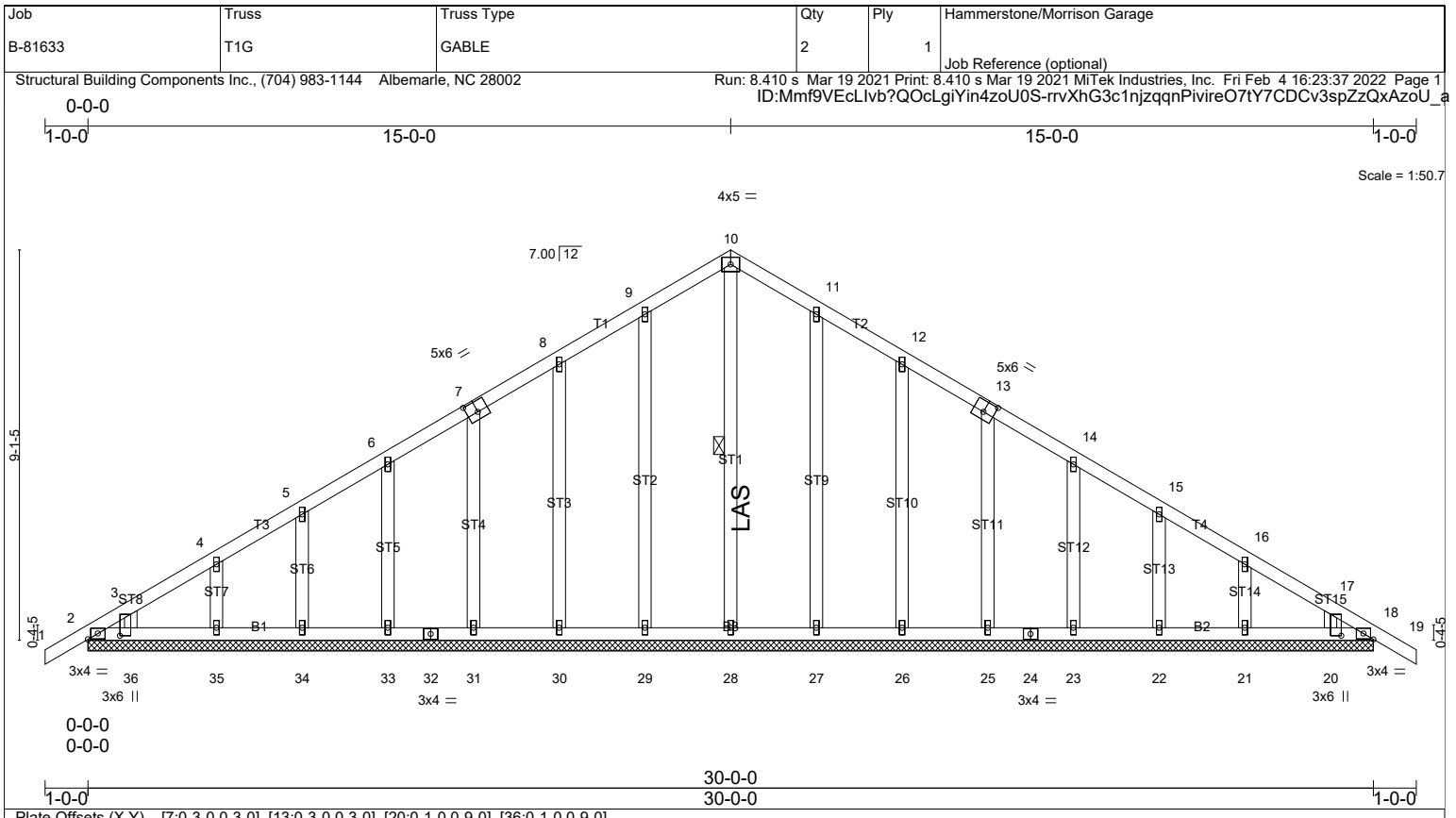


Plate Offsets (X,Y)-- [7:0-3-0,0-3-0], [13:0-3-0,0-3-0], [20:0-1-0,0-9-0], [36:0-1-0,0-9-0]

LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2015/TPI2014	CSI. TC 0.05 BC 0.03 WB 0.10 Matrix-S	DEFL. in (loc) l/defl L/d Vert(LL) -0.00 19 n/r 180 Vert(CT) -0.00 19 n/r 120 Horz(CT) 0.01 18 n/a n/a Wind(LL) 0.00 19 n/r 120	PLATES MT20 GRIP 244/190 Weight: 194 lb FT = 20%
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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. WEBS 1 Row at midpt 10-28
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MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 2=82/30-0-0 (min. 0-2-0), 18=82/30-0-0 (min. 0-2-0), 28=89/30-0-0 (min. 0-2-0), 29=111/30-0-0 (min. 0-2-0), 30=105/30-0-0 (min. 0-2-0), 31=107/30-0-0 (min. 0-2-0), 33=108/30-0-0 (min. 0-2-0), 34=105/30-0-0 (min. 0-2-0), 35=113/30-0-0 (min. 0-2-0), 36=65/30-0-0 (min. 0-2-0), 27=111/30-0-0 (min. 0-2-0), 26=105/30-0-0 (min. 0-2-0), 25=107/30-0-0 (min. 0-2-0), 23=108/30-0-0 (min. 0-2-0), 22=105/30-0-0 (min. 0-2-0), 21=113/30-0-0 (min. 0-2-0), 20=65/30-0-0 (min. 0-2-0)
Max Horz 2=-154(LC 8)
Max Uplift 2=-46(LC 6), 18=-14(LC 7), 29=-41(LC 10), 30=-44(LC 10), 31=-42(LC 10), 33=-43(LC 10), 34=-42(LC 10), 35=-45(LC 10), 36=-28(LC 10), 27=-39(LC 11), 26=-44(LC 11), 25=-42(LC 11), 23=-43(LC 11), 22=-42(LC 11), 21=-45(LC 11), 20=-26(LC 11)
Max Grav 2=97(LC 18), 18=82(LC 1), 28=131(LC 20), 29=118(LC 17), 30=110(LC 17), 31=112(LC 17), 33=113(LC 17), 34=110(LC 17), 35=118(LC 17), 36=74(LC 17), 27=116(LC 18), 26=111(LC 18), 25=112(LC 18), 23=113(LC 18), 22=110(LC 18), 21=118(LC 18), 20=72(LC 18)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/19, 2-3=-145/117, 3-4=-120/110, 4-5=-100/96, 5-6=-90/85, 6-7=-81/87, 7-8=-71/107, 8-9=-98/127, 9-10=-124/149, 10-11=-124/149, 11-12=-98/119, 12-13=-70/85, 13-14=-42/52, 14-15=-40/27, 15-16=-48/36, 16-17=-78/54, 17-18=-103/79, 18-19=0/19
BOT CHORD 2-36=-56/107, 35-36=-56/107, 34-35=-56/107, 33-34=-56/107, 32-33=-56/107, 31-32=-56/107, 30-31=-55/106, 29-30=-55/106, 28-29=-55/106, 27-28=-55/106, 26-27=-55/106, 25-26=-55/106, 24-25=-56/107, 23-24=-56/107, 22-23=-56/107, 21-22=-56/107, 20-21=-56/107, 18-20=-56/107
WEBS 10-28=-107/51, 9-29=-91/54, 8-30=-83/57, 7-31=-86/55, 6-33=-86/57, 5-34=-84/55, 4-35=-90/58, 3-36=-74/44, 11-27=-89/52, 12-26=-84/58, 13-25=-85/55, 14-23=-86/57, 15-22=-84/55, 16-21=-89/58, 17-20=-74/42

JOINT STRESS INDEX
2 = 0.00, 3 = 0.00, 4 = 0.00, 5 = 0.00, 6 = 0.00, 7 = 0.00, 8 = 0.00, 9 = 0.00, 10 = 0.00, 11 = 0.00, 12 = 0.00, 13 = 0.00, 14 = 0.00, 15 = 0.00, 16 = 0.00, 17 = 0.00, 18 = 0.00, 20 = 0.00, 20 = 0.00, 21 = 0.00, 22 = 0.00, 23 = 0.00, 24 = 0.00, 25 = 0.00, 26 = 0.00, 27 = 0.00, 28 = 0.00, 29 = 0.00, 30 = 0.00, 31 = 0.00, 32 = 0.00, 33 = 0.00, 34 = 0.00, 35 = 0.00, 36 = 0.00 and 36 = 0.00

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=30ft; 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
 - 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.
 - All plates are 1.5x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 46 lb uplift at joint 2, 14 lb uplift at joint 18, 41 lb uplift at joint 29, 44 lb uplift at joint 30, 42 lb uplift at joint 31, 43 lb uplift at joint 33, 42 lb uplift at joint 34, 45 lb uplift at joint 35, 28 lb uplift at joint 36, 39 lb uplift at joint 27, 44 lb uplift at joint 26, 42 lb uplift at joint 25, 43 lb uplift at joint 23, 42 lb uplift at joint 22, 45 lb uplift at joint 21 and 26 lb uplift at joint 20.
 - 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) Standard