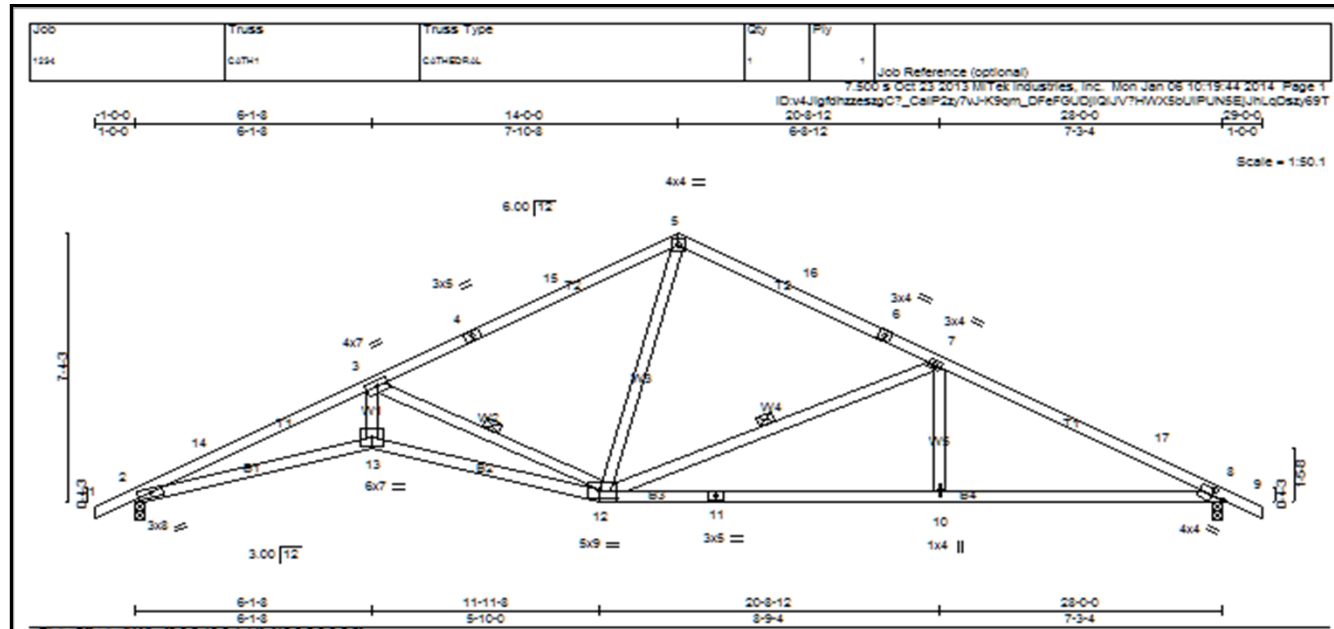


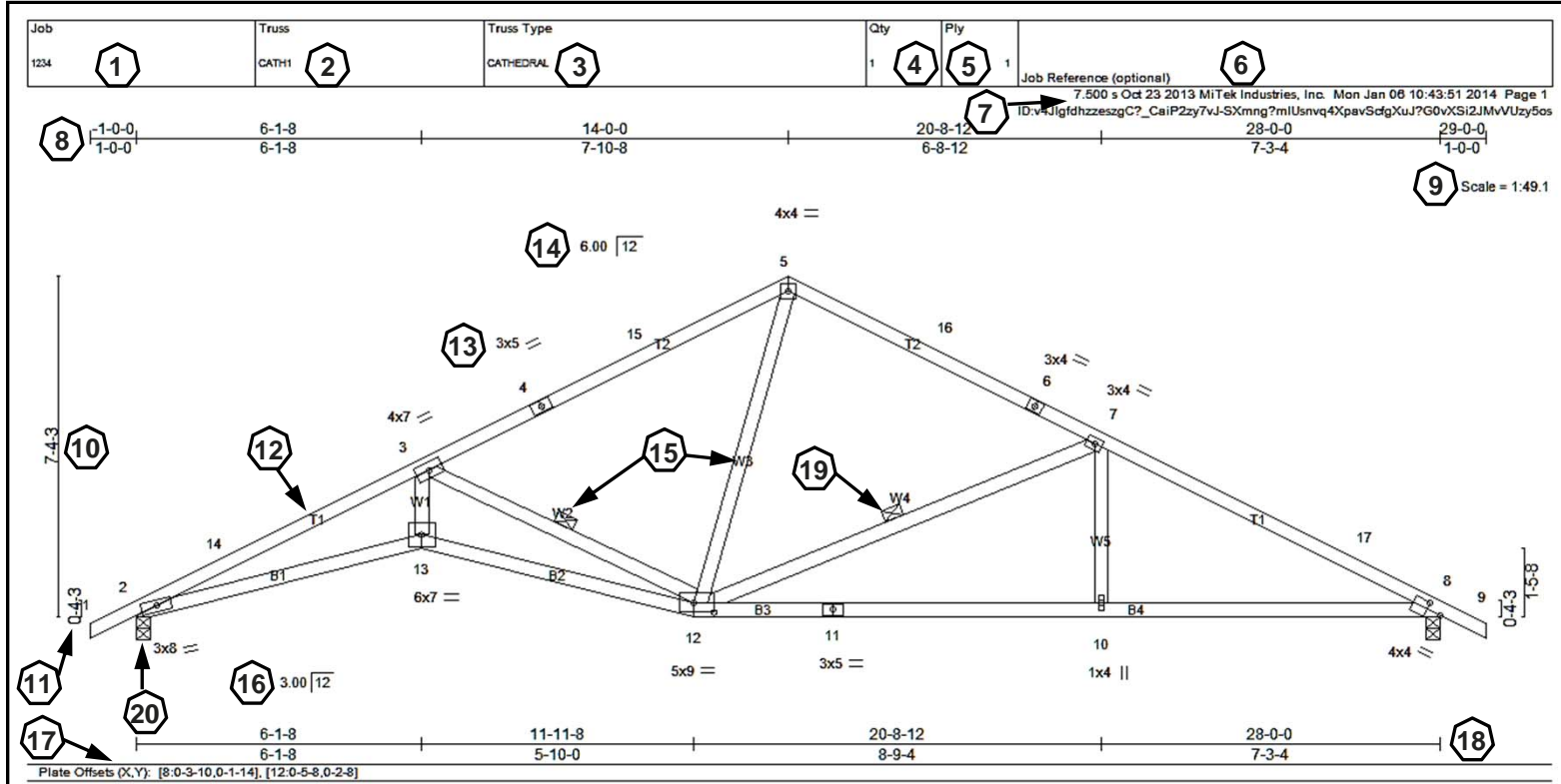
The Engineering Drawings will be explained in two parts.

Part 1



Part 2

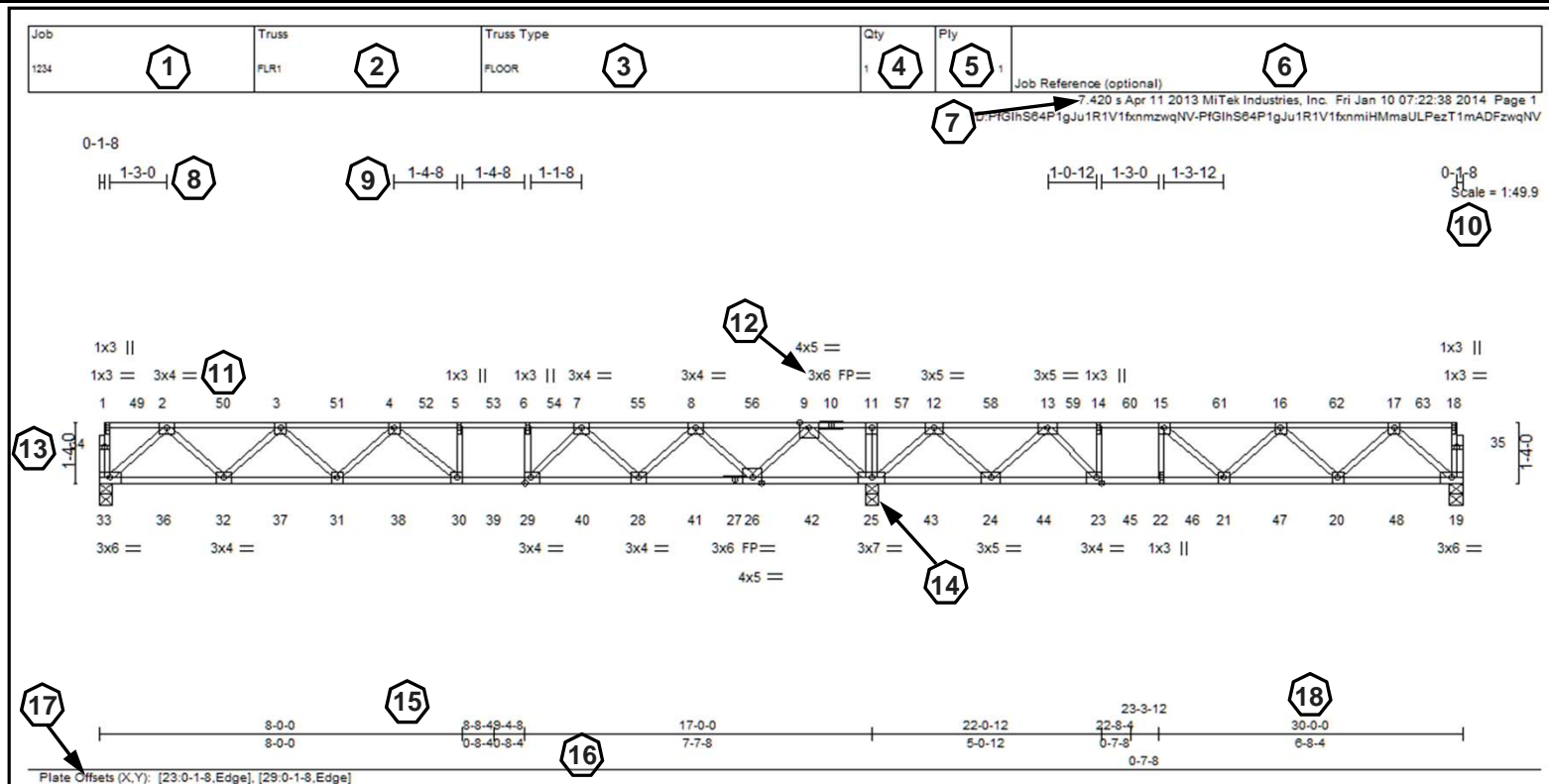
LOADING (psf) TCLL 20.0 TCOL 10.0 BCLL 0.0 BCOL 10.0	SPACING 2-0-0 Plates Increase 1.15 Lumber Increase 1.15 Rep Stress Incr YES Code IBC2006/TP12002	CBI TC 0.69 BC 0.95 WB 0.72 (Matrix)	DEFL In (loc) ldefl Lld Ver(L) -0.23 12-13 >999 240 Ver(TL) -0.87 10-12 >498 180 Horz(TL) -0.30 2 n/a n/a	PLATE & GRIP MT20 244/190 Weight: 133 lb FT = 20%
LUMBER TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 "Except" B1: 2x4 SP No.1 WEBS 2x4 SP No.3	BRACING TOP CHORD Structural wood sheathing directly applied or 2-6-11 oc purlins. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 2-0-0 oc bracing: 12-13. 1 Row at midpt 3-12, 7-12	REACTIONS (lb/size) 2=1177/0-3-8 (min. 0-1-8), 8=1177/0-3-8 (min. 0-1-8) Max Horiz S=147(LC 7) Max Uplift S=164(LC 9), S=164(LC 9)		
FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-14=3782/463, 3-14=3633/488, 3-4=1479/248, 4-15=1368/257, 5-15=1348/277, 5-16=1138/270, 6-16=1137/254, 6-7=1235/238, 7-17=1912/270, 8-17=1998/241 BOT CHORD 2-13=381/3403, 12-13=381/3401, 11-12=138/1699, 10-11=138/1699, 8-10=138/1699 WEBS 3-13=111/1749, 3-12=2341/375, 5-12=54/741, 7-12=740/150, 7-10=0/372				
NOTE 1) This truss has been checked for uniform roof live load only, except as noted. 2) Wind: ASCE 7-05; 90mph; TODL=6.0psf; BCOL=6.0psf; h=25ft; B=45ft; L=23ft; eave=4ft; Cat. II; Exp C; enclosed; MWFRS (all heights) and C-C Exterior 2) -1-0-0 to 2-0-0, Interior 1) 2-0-0 to 14-0-0, Exterior 2) 14-0-0 to 17-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.50 plate grip DOL=1.50 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) Bearing at joints) 2 considers parallel to grain value using ANSI/TP1 angle to grain formula. Building designer should verify capacity of bearing surface. 6) One RT3 USP connectors recommended to connect truss to bearing walls due to UPLIFT at J(s) 2 and 8. This connection is for uplift only and does not consider lateral forces. 7) This truss is designed in accordance with the 2006 International Building Code section 2306.1 and referenced standard ANSI/TP1 1. 8) *Semi-rigid pitchbreaks including heels* Member end fixity model was used in the analysis and design of this truss.				
LOAD CASE(S) Standard				



- | | | |
|---|--|--|
| 1 Job name | 9 Drawing scale of the truss | 17 Plate offsets |
| 2 Truss label | 10 Overall height – top of bearing to top of truss | 18 Panel length and accumulated dimensions for the bottom of the truss |
| 3 Truss type | 11 Heel height | 19 Continuous lateral bracing location |
| 4 Truss quantity | 12 Top chord member label | 20 Bearing location |
| 5 Number of plies | 13 Connector size and orientation | |
| 6 Job description | 14 Top chord slope | |
| 7 Software version used | 15 Web member label | |
| 8 Overhang, panel length and accumulated dimensions for the top of the truss (feet – Inches – Sixteenths) | 16 Bottom chord slope | |

LOADING (psf) TCCLL 20.0 TCCL 10.0 BOLL 0.0 BCCL 10.0	SPACING 2'-0" Plates Increase 1.15 Lumber Increase 1.15 Rep Stress Incr YES Code IBC2006/TPI2002	CSI TC 0.69 BC 0.95 WB 0.72 (Matrix)	DEFL In (loc) l/defl L/d Ver(LL) -0.23 12-13 >999 240 Ver(TL) -0.67 10-12 >498 180 Horz(TL) -0.30 2 n/a n/a	PLATE & GRIP MT20 244/190 Weight: 133 lb FT = 20%
LUMBER TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 *Except* B1: 2x4 SP No.1 WEBS 2x4 SP No.3	BRACING TOP CHORD Structural wood sheathing directly applied or 2-6-11 oc purlins. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 2-2-0 oc bracing: 12-13. WEBS 1 Row at midpt 3-12, 7-12 MiTek recommends that stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.			
REACTIONS (lb/size) 2=1177/0-3-8 (min. 0-1-8), 8=1177/0-3-8 (min. 0-1-8) Max Horz 8=147(LC 7) Max Uplift 2=164(LC 9), 8=164(LC 9)	FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-14=3782/483, 3-14=3633/486, 3-4=1479/248, 4-15=1368/257, 5-15=1348/277, 5-16=1135/270, 6-16=1137/254, 6-7=1235/238, 7-17=1912/270, 8-17=1998/241 BOT CHORD 2-13=381/3403, 12-13=381/3401, 11-12=138/1699, 10-11=138/1699, 8-10=138/1699 WEBS 3-13=111/1749, 3-12=2341/375, 5-12=54/741, 7-12=740/150, 7-10=0/372			
NOTE 1) This truss has been checked for uniform roof live load only, except as noted. 2) Wind: ASCE 7-05; 90mph; TCCL=6.0psf, BCCL=6.0psf, h=25ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp C; enclosed; MWFRS (all heights) and O-C Exterior(2) -1-0-0 to 2-0-0; Interior(1) 2-0-0 to 14-0-0; Exterior(2) 14-0-0 to 17-0-0 zone: cantilever left and right exposed; end vertical left and right exposed; O-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) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface. 6) One RT3 USP connectors recommended to connect truss to bearing walls due to UPLIFT at (j/s) 2 and 8. This connection is for uplift only and does not consider lateral forces. 7) This truss is designed in accordance with the 2006 International Building Code section 2306.1 and referenced standard ANSI/TPI 1. 8) *Semi-rigid pitchbreaks including heels* Member end fixity model was used in the analysis and design of this truss.				
LOAD CASE(S) Standard				

- 21 Design Loading (PSF)
- 29 Lumber requirements
- 22 Spacing on center (feet – Inches – Sixteenths)
- 30 Reaction (pounds) Bearing size - input & min required
- 23 Design code
- 31 Maximum uplift and/or horizontal reaction if applicable
- 24 Duration of Load for plate and lumber design
- 32 Required member bracing
- 25 Top chord, bottom chord and web maximum CSI
- 33 Maximum member forces Tension (+) Compression (-)
- 26 Deflections (inches) and span to deflection ratio
- 34 Notes
- 27 Input span to deflection ratio
- 35 Additional loads / load cases
- 28 MiTek plate allowables (PSI)



- 1 Job name
- 2 Truss label
- 3 Truss type
- 4 Truss quantity
- 5 Number of plys
- 6 Job description
- 7 Software version used
- 8 Standard panel width
- 9 Non-standard panel width
- 10 Drawing scale of the truss
- 11 Connector size and orientation
- 12 Chord splice Face Plate
- 13 Truss Depth
- 14 Bearing location
- 15 Cumulative dimensions
- 16 Panel length (feet – inches – sixteenths)
- 17 Plate offsets
- 18 Truss span (feet – inches – sixteenths)

LOADING (psf) TCLL 40.0 TCCL 10.0 BCCL 0.0 BCCL 5.0	SPACING 2-0-0 Plates Increase 1.00 Lumber Increase 1.00 Rep Stress Incr YES Code ORC/IRC03/TPI2002	CSI TC 0.68 BC 0.78 WB 0.48 (Matrix)	DEFL in (loc) l/defl L/d Vert(LL) -0.16 30-31 >999 360 Vert(TL) -0.25 30-31 >809 240 Horz(TL) 0.04 19 n/a n/a	PLATES GRIP MT20 244/190 Weight: 156 lb FT = 20%F, 11%E
LUMBER TOP CHORD 2x4 SYP No.2(flat) BOT CHORD 2x4 SYP No.2(flat) WEBS 2x4 SYP No.3(flat)	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 (lb/size) 33=780/0-3-8 (min. 0-1-8), 25=1964/0-3-8 (min. 0-1-8), 19=516/0-3-8 (min. 0-1-8) Max Grav 33=807(LC 3), 25=1964(LC 1), 19=615(LC 4)	FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 33-34=-258/39, 1-34=-257/39, 19-35=-259/36, 18-35=-259/36, 2-50=-1426/0, 3-50=-1426/0, 3-51=-2238/0, 4-51=-2238/0, 4-52=-2409/0, 5-52=-2409/0, 5-53=-2409/0, 6-53=-2409/0, 6-54=-2409/0, 7-54=-2409/0, 7-55=-1589/0, 8-55=-1589/0, 8-56=-331/317, 9-56=-331/317, 9-10=0/1949, 10-11=0/1949, 11-57=0/1949, 12-57=0/1949, 12-58=-444/953, 13-58=-444/953, 13-59=-1340/382, 14-59=-1340/382, 14-60=-1340/382, 15-60=-1340/382, 15-61=-1405/150, 16-61=-1405/150, 16-62=-1015/0, 17-62=-1015/0 BOT CHORD 33-36=0/864, 32-36=0/864, 32-37=0/1966, 31-37=0/1966, 31-38=0/2460, 30-38=0/2460, 30-39=0/2409, 29-39=0/2409, 29-40=0/2076, 28-40=0/2076, 28-41=-81/1102, 27-41=-81/1102, 26-27=-81/1102, 26-42=-815/0, 25-42=-815/0, 25-43=-1225/0, 24-43=-1225/0, 24-44=-669/980, 23-44=-669/980, 23-45=-382/1340, 22-45=-382/1340, 22-46=-382/1340, 21-46=-382/1340, 21-47=-25/1370, 20-47=-25/1370, 20-48=0/640, 19-48=0/640 WEBS 6-29=-350/52, 11-25=-270/48, 14-23=-363/19, 15-22=-277/87, 2-33=-1147/0, 2-32=0/782, 3-32=-751/0, 3-31=0/379, 4-31=-308/80, 4-30=-336/193, 9-25=-1509/0, 9-26=0/1148, 8-26=-1111/0, 8-28=0/714, 7-28=-720/0, 7-29=-44/708, 12-25=-1244/0, 12-24=0/853, 13-24=-906/0, 13-23=0/836, 17-19=-849/0, 17-20=-17/522, 16-20=-493/49, 15-21=-66/422			
NOTES 1) Unbalanced floor live loads have been considered for this design. 2) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads. 3) All plates are 3x3 MT20 unless otherwise indicated. 4) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads. 5) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss. 6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means. 7) CAUTION. Do not erect truss backwards.				
LOAD CASE(S) Standard				

- | | |
|---|--|
| 21 Design Loading (PSF)
22 Spacing on center (feet – Inches – Sixteenths)
23 Design code
24 Duration of Load for plate and lumber design
25 Top chord, bottom chord and web maximum CSI
26 Deflections (inches) and span to deflection ratio
27 Input span to deflection ratio
28 MiTek plate allowables (PSI) | 29 Lumber requirements
30 Reaction (pounds) Bearing size - input & min required
31 Maximum uplift and/or horizontal reaction if applicable
32 Required member bracing
33 Maximum member forces Tension (+) Compression (-)
34 Notes
35 Additional loads / load cases |
|---|--|