

Job	Truss	Truss Type	Qty	Ply	HLCC / Strawberry Park Elementary - 25 x 60
Q220372	T1LG	GABLE	2	1	Job Reference (optional)

Alpine Lumber Co, Montrose, CO - 81403, Dennis Jones

Run: 8.530 s Feb 23 2022 Print: 8.530 s Feb 23 2022 MiTek Industries, Inc. Thu Apr 21 09:07:40 2022 Page 1
ID:HUIsRtj3_9Cv0UA1IQv4bdzivY4-KCkY1gHNrIKMjga9IQ7S5N4Sv5ye9DpG9In2mzzOX51

25-0-0
25-0-0

Scale = 1:40.9

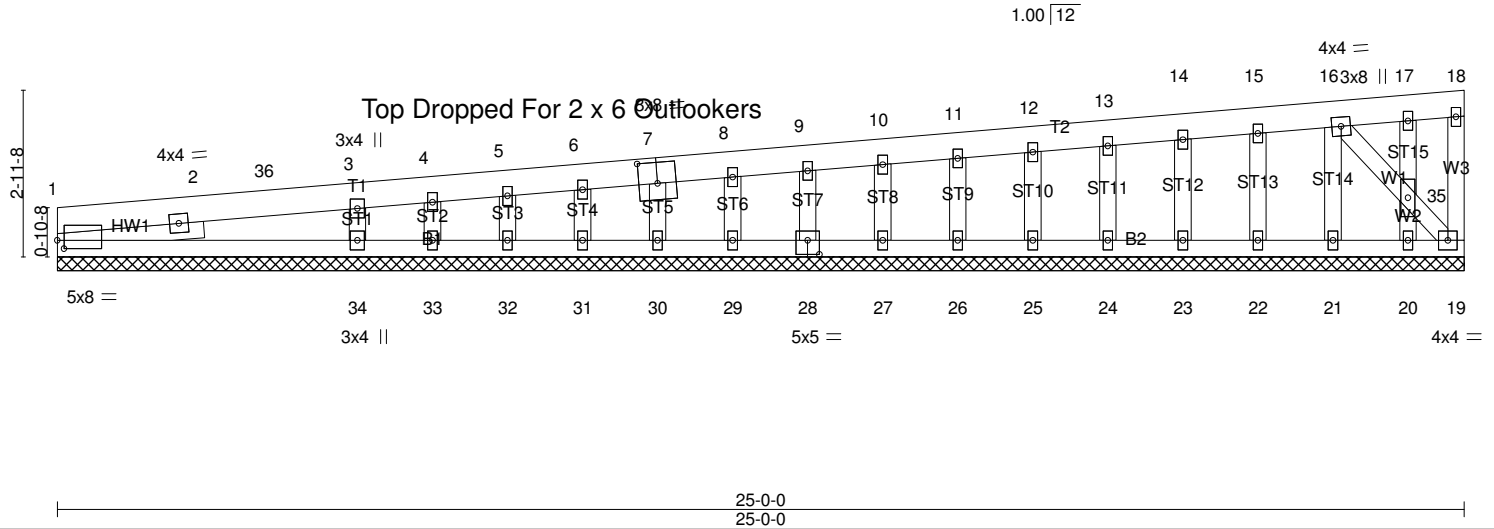


Plate Offsets (X,Y)-- [1:0-1-7,0-1-12], [7:0-4-0,0-4-8], [28:0-2-8,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 55.0	4-0-0	TC 0.43	Vert(LL)	n/a	-	n/a	999	MT20	169/123
(Roof Snow=55.0)	Plate Grip DOL 1.00	BC 0.26	Vert(CT)	n/a	-	n/a	999		
TCDL 10.0	Lumber DOL 1.00	WB 0.50	Horz(CT)	0.01	19	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr NO	Matrix-SH							
BCDL 10.0	Code IBC2018/TPI2014							Weight: 101 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SPF 1650F 1.5E *Except*
T1: 2x6 SPF 2100F 1.8E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 WW Stud
OTHERS 2x4 WW Stud
SLIDER Left 2x4 SPF 1650F 1.5E 2-7-6

BRACING-

TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals
(Switched from sheeted: Spacing > 2-0-0).
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

All bearings 25-0-0.
(lb) - Max Horz 1=144(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 1, 19, 34, 32, 31, 30, 29, 28, 27, 26, 25, 24, 23, 22 except
33=216(LC 1)
Max Grav All reactions 250 lb or less at joint(s) except 1=700(LC 20), 19=352(LC 20), 34=1845(LC 20), 32=530(LC 20), 31=480(LC 20), 30=489(LC 20), 29=482(LC 20), 28=483(LC 20), 27=482(LC 20), 26=482(LC 20), 25=482(LC 20), 24=484(LC 20), 23=488(LC 20), 22=457(LC 20), 21=378(LC 20), 20=308(LC 20)

FORCES.

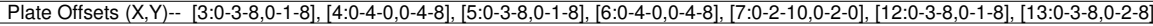
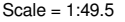
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-289/44
WEBS 3-34=-1588/382, 5-32=-442/94, 6-31=-436/92, 7-30=-433/92, 8-29=-429/90, 9-28=-430/91,
10-27=-429/90, 11-26=-429/90, 12-25=-429/90, 13-24=-430/91, 14-23=-434/93,
15-22=-404/81, 16-21=-324/53, 17-35=-316/71, 19-35=-261/118, 20-35=-262/52

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
- 2) 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.
- 3) TCCL: ASCE 7-16; Pf=55.0 psf (Lum DOL=1.00 Plate DOL=1.00); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.20
- 4) Unbalanced snow loads have been considered for this design.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 1-4-0 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) 1, 19, 34, 32, 31, 30, 29, 28, 27, 26, 25, 24, 23, 22 except (jt=lb) 33=216.
- 11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

Run: 8.530 s Feb 23 2022 Print: 8.530 s Feb 23 2022 MiTek Industries, Inc. Thu Apr 21 09:07:41 2022 Page 1
ID:HUlsRtj3_9Cv0UA1lQv4bdzivY4-pOlwe?!?bcSDLq9Ll7fhebcY6VBdudDPNyWblQzOX50



LUMBER-
TOP CHORD 2x6 SPF 1650F 1.5E *Except*
T3: 2x6 SPF 2100F 1.8E
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x4 WW Stud *Except*
W11,W1,W2: 2x6 SPF 1650F 1.5E, W8,W9,W10: 2x4 SPF 1650F 1.5E

BRACING-
TOP CHORD 2-0-0 oc purlins (5-3-11 max.), except end verticals
 (Switched from sheeted: Spacing > 2-0-0).
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
 6-0-0 oc bracing: 13-14.

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

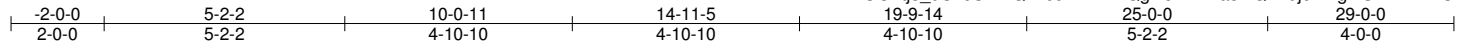
TOP CHORD 2-3=-8713/1002, 3-4=-10410/1183, 4-15=-8569/966, 15-16=-8509/967, 5-16=-8479/970,
5-6=-4512/504, 6-7=-118/254, 7-9=-1955/362, 2-14=-3422/496

BOT CHORD 13-14=-282/575, 12-13=-1155/8627, 11-12=-1284/10339, 10-11=-1026/8495, 9-10=-511/4344

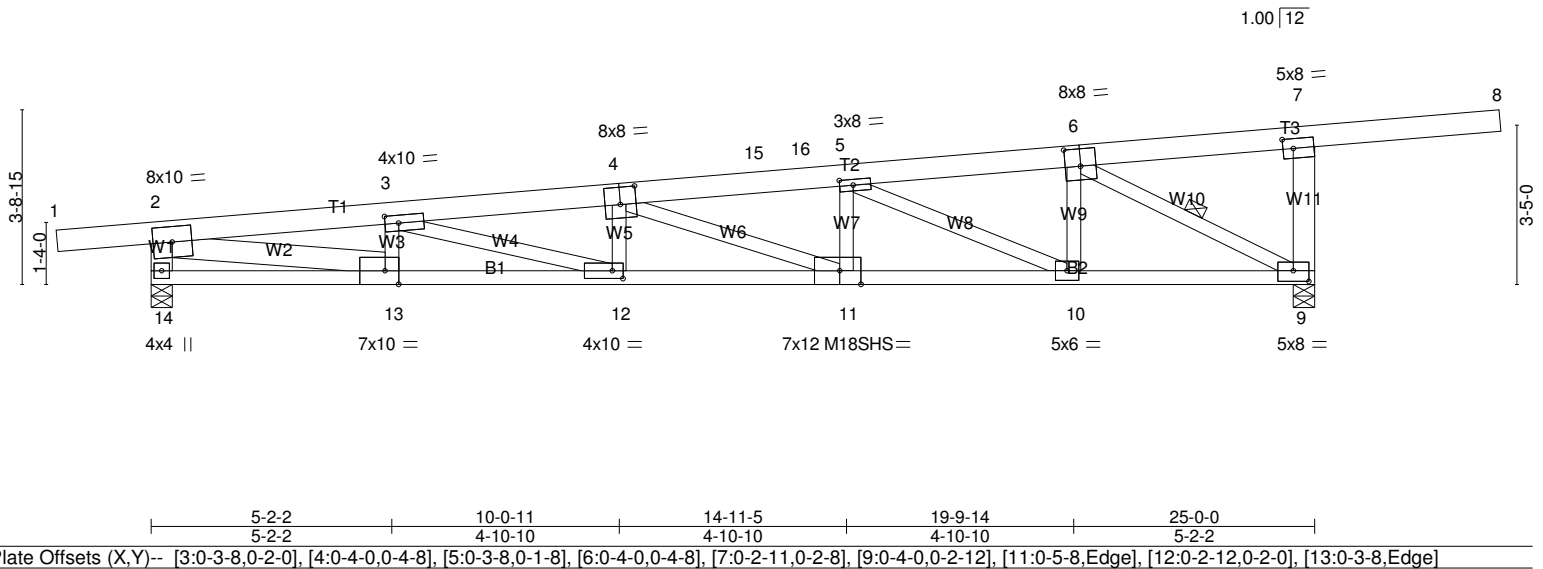
WEBS 3-13=-1489/283, 3-12=-161/1777, 4-12=-349/141, 4-11=-1965/274, 5-11=-9/832,
5-10=-4448/558, 6-10=-134/1986, 6-9=-5148/599, 2-13=-937/8208

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered 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) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 2-0-4 to 12-11-12, Exterior(2) 12-11-12 to 13-11-12, Corner(3) 13-11-12 to 28-11-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
- 4) TCLL: ASCE 7-16; Pf=55.0 psf (Lum DOL=1.00 Plate DOL=1.00); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.20
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 20.0 psf or 1.00 times flat roof load of 55.0 psf on overhangs non-concurrent with other live loads.
- 7) All plates are MT20 plates unless otherwise indicated.
- 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) except (jt=lb) 9=176, 14=168.
- 11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



Scale = 1:49.5

[illegible]

LUMBER-

TOP CHORD 2x6 SPF 1650F 1.5E *Except*
T3: 2x6 SPF 2100F 1.8E
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x4 WW Stud *Except*
W11,W1,W2: 2x6 SPF 1650F 1.5E, W8,W9,W10: 2x4 SPF 1650F 1.5E

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-8-1 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 6-9

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

REACTIONS.

(lb/size) 9=2422/0-5-8 (min. 0-3-13), 14=2099/0-5-8 (min. 0-3-0)
 Max Horz 14=95(LC 11)
 Max Uplift 9=-117(LC 14), 14=-112(LC 10)
 Max Grav 9=2991(LC 21), 14=2359(LC 21)

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

TOP CHORD 2-3=-5809/668, 3-4=-6940/789, 4-15=-5713/644, 15-16=-5673/644, 5-16=-5653/646,
5-6=-3008/336, 7-9=-1303/241, 2-14=-2281/331

BOT CHORD 13-14=-188/383, 12-13=-770/5752, 11-12=-856/6893, 10-11=-684/5663, 9-10=-341/2896

WEBS 3-13=-993/189, 3-12=-107/1185, 4-11=-1310/183, 5-11=-6/555, 5-10=-2965/372,
6-10=-90/1324, 6-9=-3432/400, 2-13=-625/5472

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph(3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -2-0-4 to 12-11-12, Exterior(2) 12-11-12 to 13-11-12, Corner(3) 13-11-12 to 28-11-12 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=55.0 psf (Lum DOL=1.00 Plate DOL=1.00); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.20
- 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 55.0 psf on overhangs non-concurrent with other live loads.
- 5) All plates are MT20 plates unless otherwise indicated.
- 6) The Fabrication Tolerance at joint 11 = 12%
- 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) except (jt=lb) 9=117, 14=112.
- 10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard