MiTek®

MiTek, Inc.
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571

Re: Q230973
STEAMBOAT BUILDING CO

The truss drawing(s) referenced below have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Alpine Truss-Montrose, CO.

Pages or sheets covered by this seal: R81680699 thru R81680704

My license renewal date for the state of Colorado is October 31, 2025.

Anthem, LLC

Received: 4/8/24

[X] Reviewed: No Exceptions [ ] Reviewed: Exceptions Noted

[ ] Revise & Resubmit [ ] Rejected

[ ] Information Only

This review was performed only for the general conformance with the design concept and the general compliance with the information given in the Contract Documents. Modifications or comments made on the shop drawings or submittal during this review do not relieve the Contractor from responsibility for compliance with the requirements of the plans and specifications. Approval of a specific item shall not include approval of an assembly of which the item is a component. Contractor is responsible for: dimensions and quantites; information that pertains solely to the fabrication process or to the means, methods, techniques, sequences and procedures of construction; and coordination of the work of all trades.

By: CMC Date: 04/11/2024

TYP 16/16 PAGES

April 4,2024

Zhao, Xiaoming

IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

Job	Truss	Truss Type	Qty	Ply	STEAMBOAT BUILDING CO
Q230973	A5E	Monopitch Supported Gable	8	1	R81680699
					Job Reference (optional)

Alpine Truss, Montrose, CO - 81401, 8.730 s Mar 21 2024 MiTek Industries, Inc. Thu Apr 4 09:40:50 2024 Page 1
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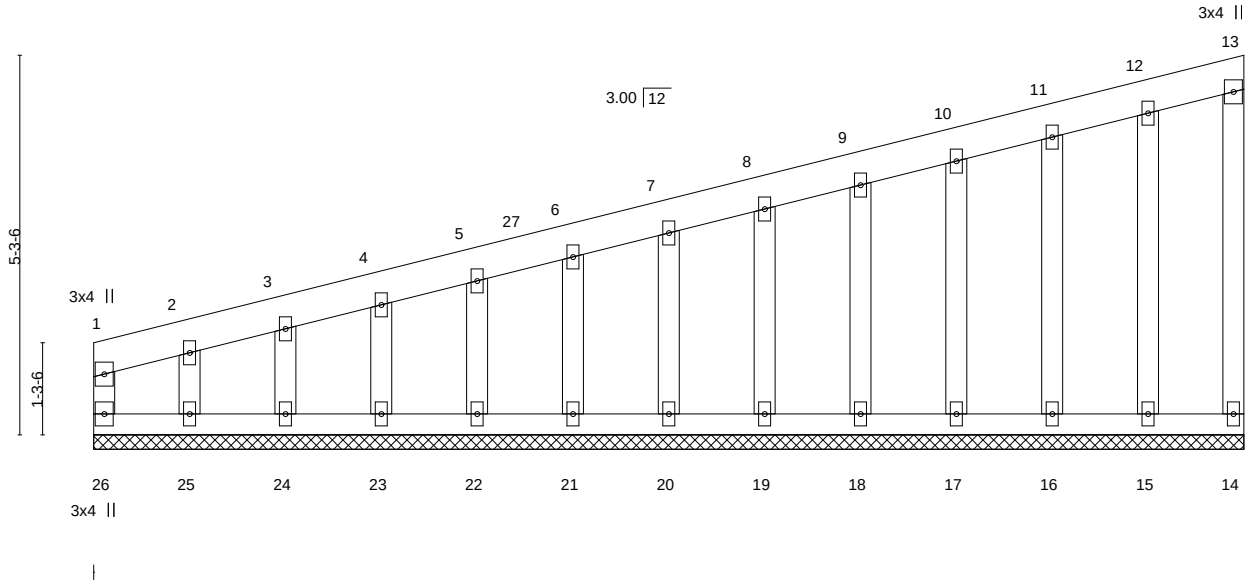

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.39	Vert(LL)	n/a	-	n/a	999	MT20	169/123
Snow (Pf)	40.0	Lumber DOL	1.00	BC	0.11	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	NO	WB	0.14	Horz(CT)	0.00	14	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-R							Weight: 80 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x6 SPF 1650F 1.5E
BOT CHORD	2x4 SPF 1650F 1.5E
WEBS	2x4 WW Stud
OTHERS	2x4 WW Stud

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.

REACTIONS. All bearings 16-0-0.
(lb) - Max Horz 26=119(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 14, 15, 17, 18, 19, 20, 21, 22, 23, 25
Max Grav All reactions 250 lb or less at joint(s) 26, 14, 15 except 16=272(LC 22), 17=294(LC 22), 18=318(LC 22), 19=346(LC 22), 20=374(LC 22), 21=391(LC 22), 22=384(LC 22), 23=401(LC 1), 24=435(LC 1), 25=462(LC 22)

TYPICAL AT ALL TRUSSES IN THIS PACKAGE:
NOTE THAT THESE REACTIONS DO IN FACT REFLECT THE DRIFT LOADING INDICATED ON THE CONTRACT DOCUMENTS, AND THAT THEY REPRESENT THE CONTROLLING LOAD CASE.

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 10-17=-267/35, 9-18=-292/34, 8-19=-319/34, 7-20=-348/34, 6-21=-365/34, 5-22=-357/34, 4-23=-374/33, 3-24=-410/34, 2-25=-431/126

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.83; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-1-12 to 3-1-12, Exterior(2N) 3-1-12 to 15-10-4 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.00 Plate DOL=1.00); Pf=40.0 psf (Lum DOL=1.00 Plate DOL=1.00); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
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) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
8) Gable studs spaced at 1-4-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * 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.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 15, 17, 18, 19, 20, 21, 22, 23, 25.
12) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
13) Load case(s) 1, 4, 5, 6, 22, 23, 25, 26, 27, 28, 33 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
14) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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LOAD CASE(S) Standard

Continued on page 2

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LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
      Vert: 14-26=-20
   Trapezoidal Loads (plf)
      Vert: 1=-340(F=-240)-to-13=-100
4) Dead + 0.75 Snow (balanced): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
      Vert: 14-26=-20
   Trapezoidal Loads (plf)
      Vert: 1=-260(F=-180)-to-13=-80
5) Dead + 0.75 Snow (Unbal. Left): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
      Vert: 14-26=-20
   Trapezoidal Loads (plf)
      Vert: 1=-260(F=-180)-to-27=-193(F=-113), 27=-223(F=-113)-to-13=-110
6) Dead + 0.75 Snow (Unbal. Right): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
      Vert: 14-26=-20
   Trapezoidal Loads (plf)
      Vert: 1=-218(F=-180)-to-13=-38
22) Dead + Snow (Unbal. Left): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
      Vert: 14-26=-20
   Trapezoidal Loads (plf)
      Vert: 1=-340(F=-240)-to-27=-251(F=-151), 27=-290(F=-151)-to-13=-140
23) Dead + Snow (Unbal. Right): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
      Vert: 14-26=-20
   Trapezoidal Loads (plf)
      Vert: 1=-284(F=-240)-to-13=-44
25) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.33, Plate Increase=1.33
   Uniform Loads (plf)
      Vert: 14-26=-20
      Horz: 1-26=12, 1-13=-13, 13-14=4
   Trapezoidal Loads (plf)
      Vert: 1=-247(F=-180)-to-13=-67
26) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.33, Plate Increase=1.33
   Uniform Loads (plf)
      Vert: 14-26=-20
      Horz: 1-26=-4, 1-13=-6, 13-14=-12
   Trapezoidal Loads (plf)
      Vert: 1=-254(F=-180)-to-13=-74
27) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.33, Plate Increase=1.33
   Uniform Loads (plf)
      Vert: 14-26=-20
      Horz: 1-26=11, 1-13=-13, 13-14=4
   Trapezoidal Loads (plf)
      Vert: 1=-247(F=-180)-to-13=-67
28) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.33, Plate Increase=1.33
   Uniform Loads (plf)
      Vert: 14-26=-20
      Horz: 1-26=-4, 1-13=-5, 13-14=-11
   Trapezoidal Loads (plf)
      Vert: 1=-255(F=-180)-to-13=-75
33) Dead + Minimum Snow: Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
      Vert: 14-26=-20
   Trapezoidal Loads (plf)
      Vert: 1=-300(F=-240)-to-13=-60

Job	Truss	Truss Type	Qty	Ply	STEAMBOAT BUILDING CO
Q230973	A6E	Monopitch Supported Gable	2	1	R81680700
					Job Reference (optional)

Alpine Truss, Montrose, CO - 81401, 8.730 s Mar 21 2024 MiTek Industries, Inc. Thu Apr 4 09:40:51 2024 Page 1

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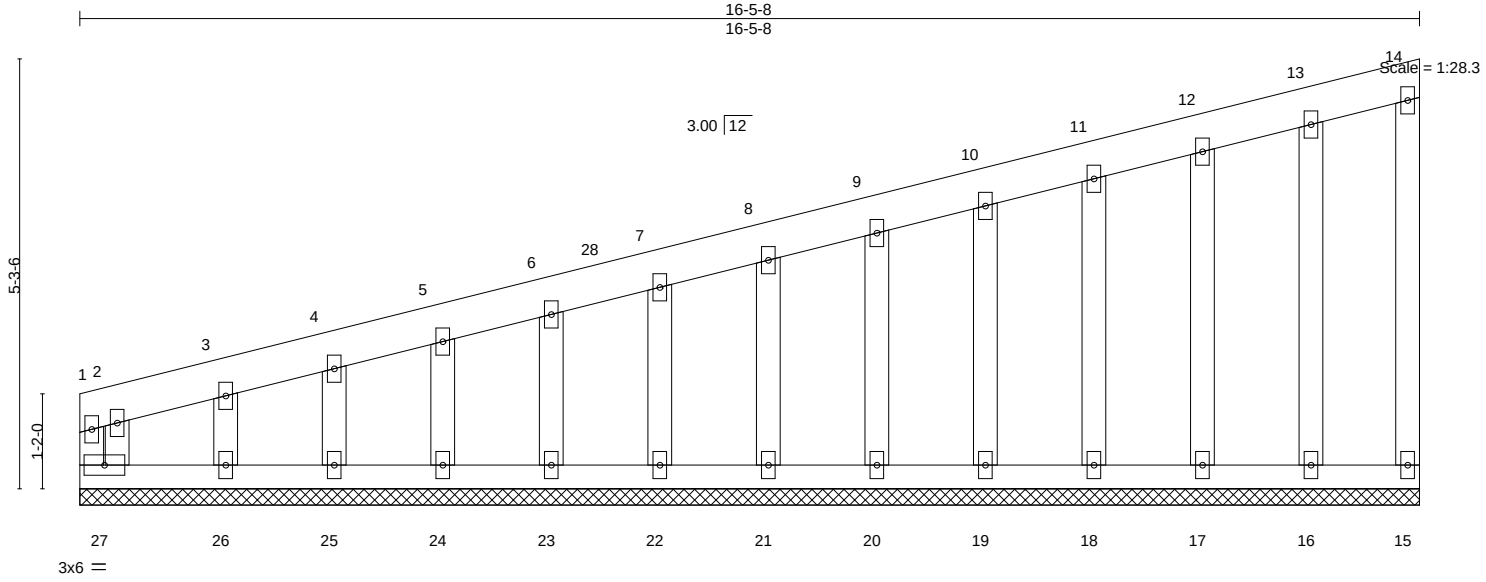

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.28	Vert(LL)	n/a	-	n/a	999	MT20	169/123
Snow (Pf)	40.0	Lumber DOL	1.00	BC	0.06	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	NO	WB	0.15	Horz(CT)	0.00	15	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-R							Weight: 82 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x6 SPF 1650F 1.5E
BOT CHORD	2x4 SPF 1650F 1.5E
WEBS	2x4 WW Stud
OTHERS	2x4 WW Stud

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.

REACTIONS. All bearings 16-5-8.

(lb) - Max Horz 27=119(LC 13)

Max Uplift All uplift 100 lb or less at joint(s) 15, 16, 18, 19, 20, 21, 22, 23, 24, 26

Max Grav All reactions 250 lb or less at joint(s) 15, 16 except 27=278(LC 22), 17=270(LC 22), 18=292(LC 22), 19=315(LC 22), 20=342(LC 22), 21=370(LC 22), 22=386(LC 22), 23=378(LC 22), 24=394(LC 1), 25=415(LC 1), 26=519(LC 22)

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

TOP CHORD 1-27=-167/269

WEBS 11-18=-265/34, 10-19=-289/33, 9-20=-316/33, 8-21=-343/33, 7-22=-359/33, 6-23=-351/33, 5-24=-367/32, 4-25=-392/28, 3-26=-482/155, 2-27=-386/226

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.83; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-1-12 to 3-1-8, Exterior(2N) 3-1-8 to 16-3-12 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) 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.00 Plate DOL=1.00); Pf=40.0 psf (Lum DOL=1.00 Plate DOL=1.00); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
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) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
8) Gable studs spaced at 1-4-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * 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.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 16, 18, 19, 20, 21, 22, 23, 24, 26.
12) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
13) Load case(s) 1, 4, 5, 6, 22, 23, 25, 26, 27, 28, 33 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
14) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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LOAD CASE(S) Standard

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Roseville, CA 95661
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LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
      Vert: 15-27=-20
   Trapezoidal Loads (plf)
      Vert: 1=-340(F=-240)-to-14=-100
4) Dead + 0.75 Snow (balanced): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
      Vert: 15-27=-20
   Trapezoidal Loads (plf)
      Vert: 1=-260(F=-180)-to-14=-80
5) Dead + 0.75 Snow (Unbal. Left): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
      Vert: 15-27=-20
   Trapezoidal Loads (plf)
      Vert: 1=-260(F=-180)-to-28=-190(F=-110), 28=-220(F=-110)-to-14=-110
6) Dead + 0.75 Snow (Unbal. Right): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
      Vert: 15-27=-20
   Trapezoidal Loads (plf)
      Vert: 1=-218(F=-180)-to-14=-38
22) Dead + Snow (Unbal. Left): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
      Vert: 15-27=-20
   Trapezoidal Loads (plf)
      Vert: 1=-340(F=-240)-to-28=-246(F=-146), 28=-286(F=-146)-to-14=-140
23) Dead + Snow (Unbal. Right): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
      Vert: 15-27=-20
   Trapezoidal Loads (plf)
      Vert: 1=-284(F=-240)-to-14=-44
25) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.33, Plate Increase=1.33
   Uniform Loads (plf)
      Vert: 1-27=-12, 15-27=-20
      Horz: 1-27=12, 1-14=-13, 14-15=4
   Trapezoidal Loads (plf)
      Vert: 1=-247(F=-180)-to-14=-67
26) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.33, Plate Increase=1.33
   Uniform Loads (plf)
      Vert: 1-27=4, 15-27=-20
      Horz: 1-27=-4, 1-14=-6, 14-15=-12
   Trapezoidal Loads (plf)
      Vert: 1=-254(F=-180)-to-14=-74
27) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.33, Plate Increase=1.33
   Uniform Loads (plf)
      Vert: 1-27=-11, 15-27=-20
      Horz: 1-27=11, 1-14=-13, 14-15=4
   Trapezoidal Loads (plf)
      Vert: 1=-247(F=-180)-to-14=-67
28) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.33, Plate Increase=1.33
   Uniform Loads (plf)
      Vert: 1-27=4, 15-27=-20
      Horz: 1-27=-4, 1-14=-5, 14-15=-11
   Trapezoidal Loads (plf)
      Vert: 1=-255(F=-180)-to-14=-75
33) Dead + Minimum Snow: Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
      Vert: 15-27=-20
   Trapezoidal Loads (plf)
      Vert: 1=-300(F=-240)-to-14=-60

Job	Truss	Truss Type	Qty	Ply	STEAMBOAT BUILDING CO
Q230973	A4E	Monopitch Supported Gable	2	1	R81680701
					Job Reference (optional)

Alpine Truss, Montrose, CO - 81401, 8.730 s Mar 21 2024 MiTek Industries, Inc. Thu Apr 4 09:40:49 2024 Page 1
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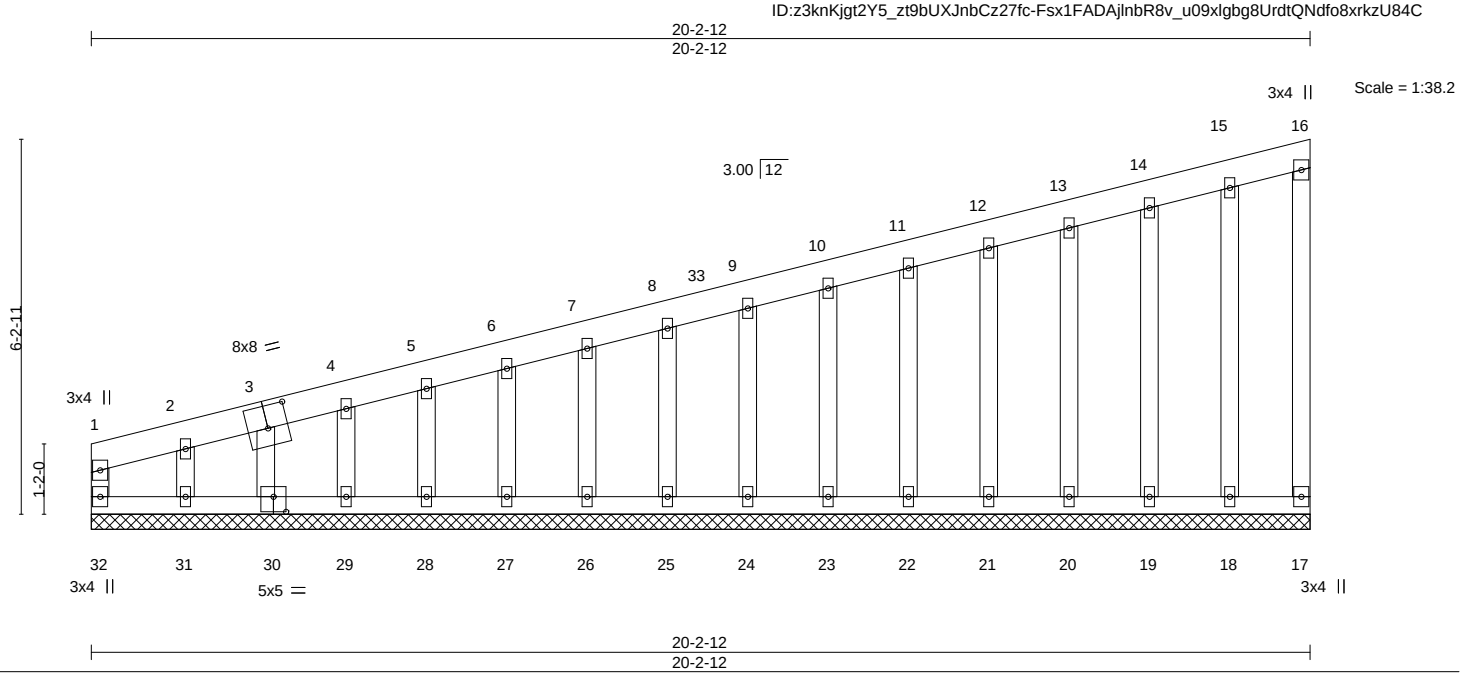

Plate Offsets (X,Y)-- [3:0-4-0,0-4-8], [30:0-2-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.38	Vert(LL)	n/a	-	n/a	999	MT20	169/123
Snow (Pf)	40.0	Lumber DOL	1.00	BC	0.09	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	NO	WB	0.18	Horz(CT)	0.00	17	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-R							Weight: 107 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x6 SPF 1650F 1.5E
BOT CHORD	2x4 SPF 1650F 1.5E
WEBS	2x4 WW Stud
OTHERS	2x4 WW Stud

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.

REACTIONS. All bearings 20-2-12.
(lb) - Max Horz 32=143(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 17, 18, 20, 21, 22, 23, 24, 25, 26, 27, 28, 30, 31
Max Grav All reactions 250 lb or less at joint(s) 32, 17, 18 except 19=261(LC 22), 20=278(LC 22), 21=296(LC 22), 22=318(LC 22), 23=340(LC 22), 24=351(LC 22), 25=339(LC 22), 26=350(LC 1), 27=371(LC 1), 28=393(LC 22), 29=419(LC 22), 30=421(LC 1), 31=491(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 13-20=-251/27, 12-21=-269/27, 11-22=-291/26, 10-23=-314/26, 9-24=-324/26, 8-25=-313/26, 7-26=-324/26, 6-27=-345/28, 5-28=-365/37, 4-29=-395/11, 3-30=-394/98, 2-31=-469/56

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.83; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-1-12 to 2-10-8, Exterior(2N) 2-10-8 to 20-1-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.00 Plate DOL=1.00); Pf=40.0 psf (Lum DOL=1.00 Plate DOL=1.00); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
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) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
8) Gable studs spaced at 1-4-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * 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.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17, 18, 20, 21, 22, 23, 24, 25, 26, 27, 28, 30, 31.
12) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
13) Load case(s) 1, 4, 5, 6, 22, 23, 25, 26, 27, 28, 33 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
14) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

Continued on page 2

April 4,2024

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LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
   Vert: 17-32=-20
   Trapezoidal Loads (plf)
   Vert: 1=-340(F=-240)-to-16=-100
4) Dead + 0.75 Snow (balanced): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
   Vert: 17-32=-20
   Trapezoidal Loads (plf)
   Vert: 1=-260(F=-180)-to-16=-80
5) Dead + 0.75 Snow (Unbal. Left): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
   Vert: 17-32=-20
   Trapezoidal Loads (plf)
   Vert: 1=-260(F=-180)-to-33=-169(F=-89), 33=-199(F=-89)-to-16=-110
6) Dead + 0.75 Snow (Unbal. Right): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
   Vert: 17-32=-20
   Trapezoidal Loads (plf)
   Vert: 1=-218(F=-180)-to-16=-38
22) Dead + Snow (Unbal. Left): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
   Vert: 17-32=-20
   Trapezoidal Loads (plf)
   Vert: 1=-340(F=-240)-to-33=-219(F=-119), 33=-258(F=-119)-to-16=-140
23) Dead + Snow (Unbal. Right): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
   Vert: 17-32=-20
   Trapezoidal Loads (plf)
   Vert: 1=-284(F=-240)-to-16=-44
25) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.33, Plate Increase=1.33
   Uniform Loads (plf)
   Vert: 17-32=-20
   Horz: 1-32=12, 1-16=-13, 16-17=4
   Trapezoidal Loads (plf)
   Vert: 1=-247(F=-180)-to-16=-67
26) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.33, Plate Increase=1.33
   Uniform Loads (plf)
   Vert: 17-32=-20
   Horz: 1-32=-4, 1-16=-6, 16-17=-12
   Trapezoidal Loads (plf)
   Vert: 1=-254(F=-180)-to-16=-74
27) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.33, Plate Increase=1.33
   Uniform Loads (plf)
   Vert: 17-32=-20
   Horz: 1-32=11, 1-16=-13, 16-17=4
   Trapezoidal Loads (plf)
   Vert: 1=-247(F=-180)-to-16=-67
28) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.33, Plate Increase=1.33
   Uniform Loads (plf)
   Vert: 17-32=-20
   Horz: 1-32=-4, 1-16=-5, 16-17=-11
   Trapezoidal Loads (plf)
   Vert: 1=-255(F=-180)-to-16=-75
33) Dead + Minimum Snow: Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
   Vert: 17-32=-20
   Trapezoidal Loads (plf)
   Vert: 1=-300(F=-240)-to-16=-60

Job	Truss	Truss Type	Qty	Ply	STEAMBOAT BUILDING CO
Q230973	A2	Monopitch	26	1	R81680702
					Job Reference (optional)

Alpine Truss, Montrose, CO - 81401, 8.730 s Mar 21 2024 MiTek Industries, Inc. Thu Apr 4 09:40:48 2024 Page 1
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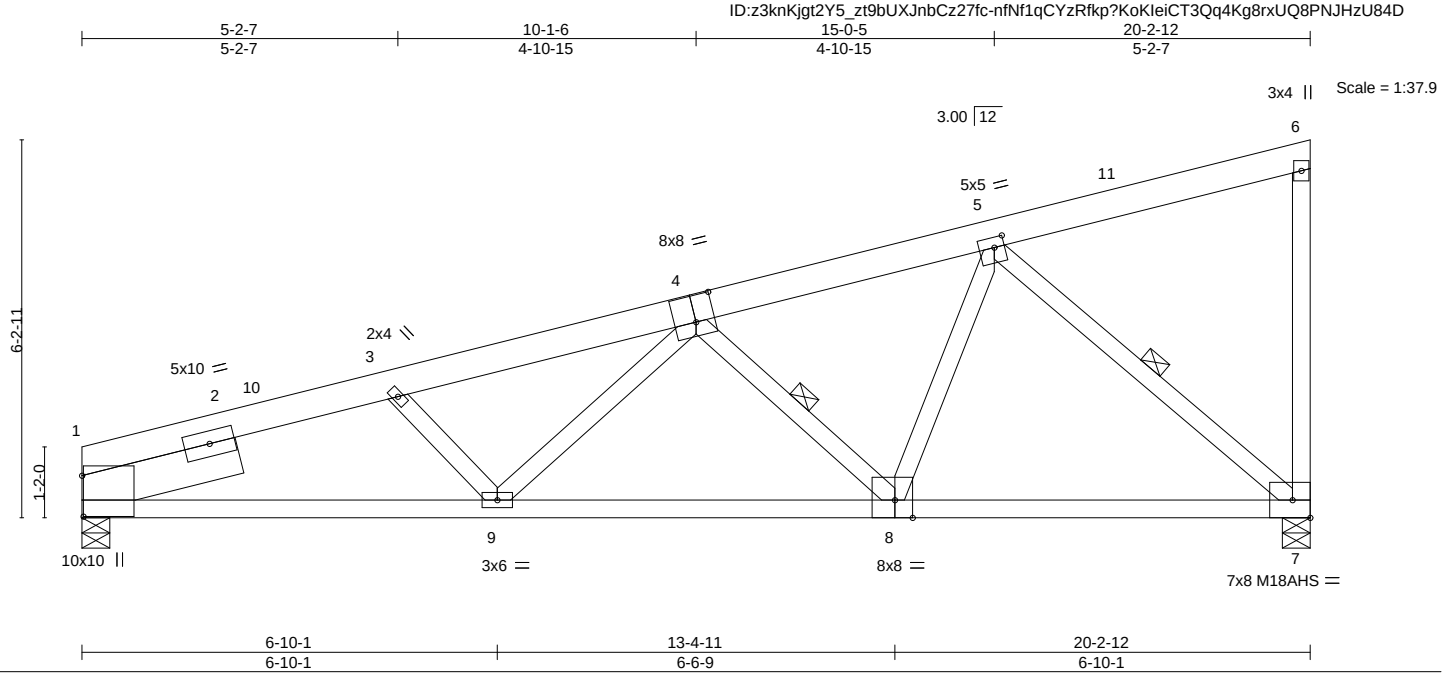

Plate Offsets (X,Y)-- [1:0-8-1,0-0-5], [4:0-3-12,0-5-4], [5:0-2-0,0-2-0], [8:0-3-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.74	Vert(LL)	-0.22	8-9	>999	360	MT20	169/123
Snow (Pf)	40.0	Lumber DOL	1.00	BC	0.78	Vert(CT)	-0.27	8-9	>899	240	M18AHS	121/117
TCDL	10.0	Rep Stress Incr	NO	WB	0.70	Horz(CT)	0.10	7	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-SH		Wind(LL)	0.02	9	>999	240	Weight: 97 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x6 SPF 1650F 1.5E *Except*
	1-4: 2x6 SPF 2100F 1.8E
BOT CHORD	2x4 SPF 2100F 1.8E *Except*
	7-8: 2x4 SPF 1650F 1.5E
WEBS	2x4 WW Stud *Except*
	5-8,5-7: 2x4 SPF 1650F 1.5E
SLIDER	Left 2x8 DF 1950F 1.7E 2-8-5

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-1-13 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 4-8, 5-7

REACTIONS. (size) 7=0-5-8, 1=0-5-8
Max Horz 1=145(LC 13)
Max Uplift 7=-7(LC 16)
Max Grav 7=2308(LC 22), 1=2911(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-5695/30, 3-4=-4832/10, 4-5=-2947/28, 6-7=-320/50
BOT CHORD 1-9=-119/4951, 8-9=-79/4115, 7-8=-71/2159
WEBS 3-9=-593/87, 4-9=0/764, 4-8=-1971/53, 5-8=0/1638, 5-7=-2888/40

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.83; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 20-1-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.00 Plate DOL=1.00); Pf=40.0 psf (Lum DOL=1.00 Plate DOL=1.00); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) All plates are MT20 plates unless otherwise indicated.
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 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.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1, 4, 5, 6, 22, 23, 25, 26, 27, 28 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.

LOAD CASE(S) Standard Except:
1) Dead + Snow (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 1-7=-20

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Continued on page 2

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LOAD CASE(S) Standard Except:

Trapezoidal Loads (plf)
Vert: 1=-340-to-6=-100

4) Dead + 0.75 Snow (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 1-7=-20
Trapezoidal Loads (plf)
Vert: 1=-239-to-6=-80

5) Dead + 0.75 Snow (Unbal. Left): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 1-7=-20
Trapezoidal Loads (plf)
Vert: 1=-239-to-4=-159, 4=-189-to-6=-110

6) Dead + 0.75 Snow (Unbal. Right): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 1-7=-20
Trapezoidal Loads (plf)
Vert: 1=-197-to-6=-38

22) Dead + Snow (Unbal. Left): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 1-7=-20
Trapezoidal Loads (plf)
Vert: 1=-340-to-4=-220, 4=-260-to-6=-140

23) Dead + Snow (Unbal. Right): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 1-7=-20
Trapezoidal Loads (plf)
Vert: 1=-284-to-6=-44

25) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.33, Plate Increase=1.33
Uniform Loads (plf)
Vert: 1-7=-20
Horz: 1-6=-13, 6-7=4
Trapezoidal Loads (plf)
Vert: 1=-226-to-6=-67

26) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.33, Plate Increase=1.33
Uniform Loads (plf)
Vert: 1-7=-20
Horz: 1-6=-6, 6-7=-12
Trapezoidal Loads (plf)
Vert: 1=-233-to-6=-74

27) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.33, Plate Increase=1.33
Uniform Loads (plf)
Vert: 1-7=-20
Horz: 1-6=-13, 6-7=4
Trapezoidal Loads (plf)
Vert: 1=-226-to-6=-67

28) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.33, Plate Increase=1.33
Uniform Loads (plf)
Vert: 1-7=-20
Horz: 1-6=-5, 6-7=-11
Trapezoidal Loads (plf)
Vert: 1=-234-to-6=-75

Job	Truss	Truss Type	Qty	Ply	STEAMBOAT BUILDING CO	
Q230973	A3	Monopitch	65	1	Job Reference (optional)	R81680703

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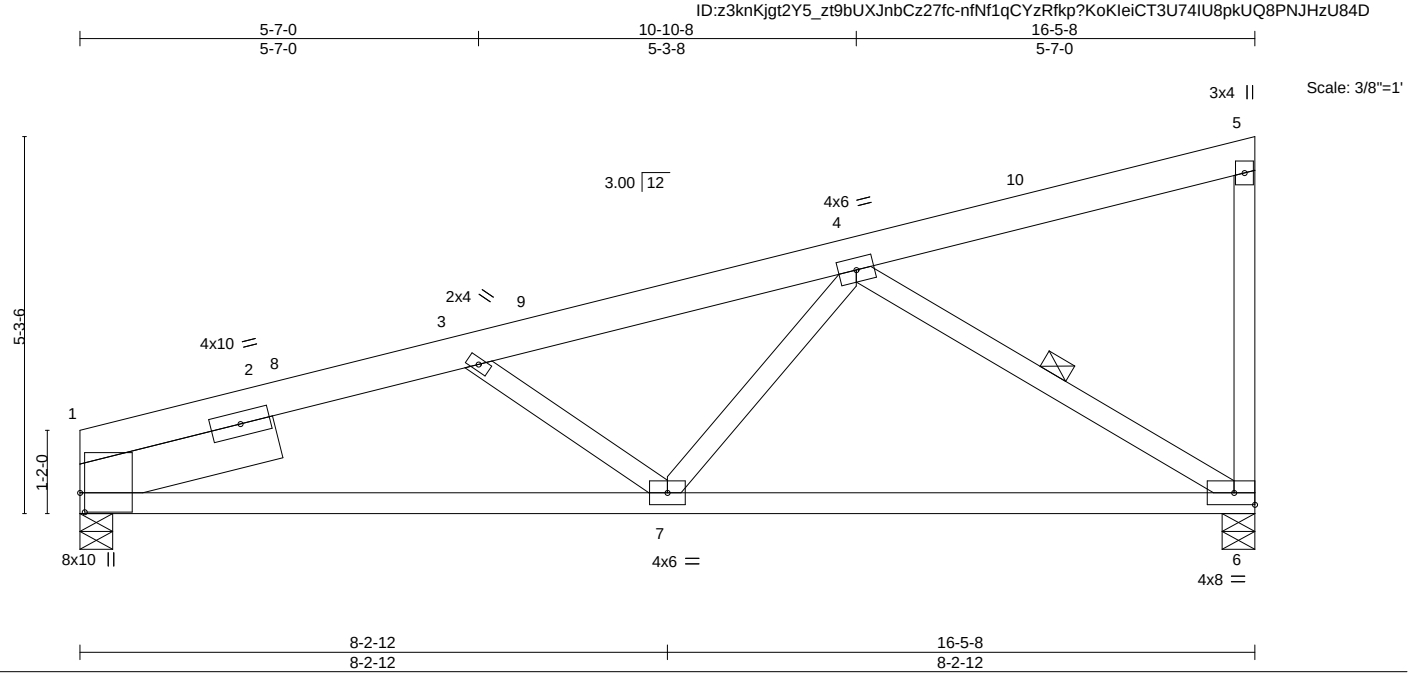

Plate Offsets (X,Y)-- [1:0-3-4,0-0-13]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.46	Vert(LL)	-0.11	6-7	>999	360	MT20	169/123
Snow (Pf)	40.0	Lumber DOL	1.00	BC	0.92	Vert(CT)	-0.26	6-7	>741	240		
TCDL	10.0	Rep Stress Incr	NO	WB	0.78	Horz(CT)	0.08	6	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-SH		Wind(LL)	0.02	6-7	>999	240	Weight: 76 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x6 SPF 2100F 1.8E
BOT CHORD	2x4 SPF 1650F 1.5E
WEBS	2x4 WW Stud *Except*
	4-6: 2x4 SPF 1650F 1.5E
SLIDER	Left 2x8 DF 1950F 1.7E 2-10-8

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-4-10 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 4-6

REACTIONS. (size) 1=0-5-8, 6=0-5-8
Max Horz 1=121(LC 15)
Max Grav 1=2402(LC 22), 6=1905(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-4386/0, 3-4=-3163/0, 5-6=-325/32
BOT CHORD 1-7=0/3824, 6-7=0/2353
WEBS 3-7=-1074/0, 4-7=0/1010, 4-6=-2780/0

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.83; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 16-3-12 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; Pr=20.0 psf (roof LL: Lum DOL=1.00 Plate DOL=1.00); Pf=40.0 psf (Lum DOL=1.00 Plate DOL=1.00); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
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 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.
6) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
7) Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
8) 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 + Snow (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 1-6=-20
Trapezoidal Loads (plf)
Vert: 1=-340(F=-240)-to-5=-100
2) Dead + Roof Live (balanced): Lumber Increase=1.00, Plate Increase=1.00

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LOAD CASE(S) Standard

Uniform Loads (plf)
Vert: 1-6=-20
Trapezoidal Loads (plf)
Vert: 1=-300(F=-240)-to-5=-60

3) Dead + 0.75 Roof Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 1-6=-20
Trapezoidal Loads (plf)
Vert: 1=-290(F=-240)-to-5=-50

4) Dead + 0.75 Snow (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 1-6=-20
Trapezoidal Loads (plf)
Vert: 1=-320(F=-240)-to-5=-80

5) Dead + 0.75 Snow (Unbal. Left): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 1-6=-20
Trapezoidal Loads (plf)
Vert: 1=-320(F=-240)-to-9=-225(F=-145), 9=-255(F=-145)-to-5=-110

6) Dead + 0.75 Snow (Unbal. Right): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 1-6=-20
Trapezoidal Loads (plf)
Vert: 1=-278(F=-240)-to-5=-38

7) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-6=-40
Trapezoidal Loads (plf)
Vert: 1=-260(F=-240)-to-5=-20

8) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.33, Plate Increase=1.33
Uniform Loads (plf)
Vert: 1-6=-12
Horz: 1-8=-36, 5-8=-23, 5-6=24
Trapezoidal Loads (plf)
Vert: 1=-216(F=-240)-to-8=-172(F=-196), 8=-185(F=-196)-to-5=11

9) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.33, Plate Increase=1.33
Uniform Loads (plf)
Vert: 1-6=-12
Horz: 1-10=-23, 5-10=-36, 5-6=-16
Trapezoidal Loads (plf)
Vert: 1=-229(F=-240)-to-10=-33(F=-44), 10=-20(F=-44)-to-5=24

10) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.33, Plate Increase=1.33
Uniform Loads (plf)
Vert: 1-6=-20
Horz: 1-5=9, 5-6=17
Trapezoidal Loads (plf)
Vert: 1=-269(F=-240)-to-5=-29

11) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.33, Plate Increase=1.33
Uniform Loads (plf)
Vert: 1-6=-20
Horz: 1-5=9, 5-6=-22
Trapezoidal Loads (plf)
Vert: 1=-269(F=-240)-to-5=-29

12) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.33, Plate Increase=1.33
Uniform Loads (plf)
Vert: 1-6=-12
Horz: 1-5=-24, 5-6=13
Trapezoidal Loads (plf)
Vert: 1=-228(F=-240)-to-5=12

13) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.33, Plate Increase=1.33
Uniform Loads (plf)
Vert: 1-6=-12
Horz: 1-5=-15, 5-6=-10
Trapezoidal Loads (plf)
Vert: 1=-237(F=-240)-to-5=3

14) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.33, Plate Increase=1.33
Uniform Loads (plf)
Vert: 1-6=-20
Horz: 1-5=-17, 5-6=6
Trapezoidal Loads (plf)
Vert: 1=-243(F=-240)-to-5=-3

15) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.33, Plate Increase=1.33
Uniform Loads (plf)
Vert: 1-6=-20
Horz: 1-5=-8, 5-6=-17

Continued on page 3

LOAD CASE(S) Standard

Trapezoidal Loads (plf)
Vert: 1=-252(F=-240)-to-5=-12

16) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.33, Plate Increase=1.33
Uniform Loads (plf)
Vert: 1-6=-12
Horz: 1-5=-24, 5-6=12
Trapezoidal Loads (plf)
Vert: 1=-228(F=-240)-to-5=12

17) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.33, Plate Increase=1.33
Uniform Loads (plf)
Vert: 1-6=-12
Horz: 1-5=-13, 5-6=-8
Trapezoidal Loads (plf)
Vert: 1=-239(F=-240)-to-5=1

18) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.33, Plate Increase=1.33
Uniform Loads (plf)
Vert: 1-6=-12
Horz: 1-5=-17, 5-6=9
Trapezoidal Loads (plf)
Vert: 1=-235(F=-240)-to-5=5

19) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.33, Plate Increase=1.33
Uniform Loads (plf)
Vert: 1-6=-12
Horz: 1-5=-10, 5-6=-4
Trapezoidal Loads (plf)
Vert: 1=-242(F=-240)-to-5=-2

20) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.33, Plate Increase=1.33
Uniform Loads (plf)
Vert: 1-6=-20
Horz: 1-5=-17, 5-6=5
Trapezoidal Loads (plf)
Vert: 1=-243(F=-240)-to-5=-3

21) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.33, Plate Increase=1.33
Uniform Loads (plf)
Vert: 1-6=-20
Horz: 1-5=-7, 5-6=-15
Trapezoidal Loads (plf)
Vert: 1=-253(F=-240)-to-5=-13

22) Dead + Snow (Unbal. Left): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 1-6=-20
Trapezoidal Loads (plf)
Vert: 1=-340(F=-240)-to-9=-245(F=-145), 9=-285(F=-145)-to-5=-140

23) Dead + Snow (Unbal. Right): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 1-6=-20
Trapezoidal Loads (plf)
Vert: 1=-284(F=-240)-to-5=-44

24) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
Uniform Loads (plf)
Vert: 1-6=-20
Trapezoidal Loads (plf)
Vert: 1=-260(F=-240)-to-5=-20

25) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.33, Plate Increase=1.33
Uniform Loads (plf)
Vert: 1-6=-20
Horz: 1-5=-13, 5-6=4
Trapezoidal Loads (plf)
Vert: 1=-307(F=-240)-to-5=-67

26) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.33, Plate Increase=1.33
Uniform Loads (plf)
Vert: 1-6=-20
Horz: 1-5=-6, 5-6=-12
Trapezoidal Loads (plf)
Vert: 1=-314(F=-240)-to-5=-74

27) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.33, Plate Increase=1.33
Uniform Loads (plf)
Vert: 1-6=-20
Horz: 1-5=-13, 5-6=4
Trapezoidal Loads (plf)
Vert: 1=-307(F=-240)-to-5=-67

28) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.33, Plate Increase=1.33
Uniform Loads (plf)
Vert: 1-6=-20
Horz: 1-5=-5, 5-6=-11

Continued on page 4

LOAD CASE(S) Standard

Trapezoidal Loads (plf)
Vert: 1=-315(F=-240)-to-5=-75

29) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.33, Plate Increase=1.33
Uniform Loads (plf)
Vert: 1-6=-20
Horz: 1-5=-13, 5-6=4
Trapezoidal Loads (plf)
Vert: 1=-277(F=-240)-to-5=-37

30) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.33, Plate Increase=1.33
Uniform Loads (plf)
Vert: 1-6=-20
Horz: 1-5=-6, 5-6=-12
Trapezoidal Loads (plf)
Vert: 1=-284(F=-240)-to-5=-44

31) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.33, Plate Increase=1.33
Uniform Loads (plf)
Vert: 1-6=-20
Horz: 1-5=-13, 5-6=4
Trapezoidal Loads (plf)
Vert: 1=-277(F=-240)-to-5=-37

32) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.33, Plate Increase=1.33
Uniform Loads (plf)
Vert: 1-6=-20
Horz: 1-5=-5, 5-6=-11
Trapezoidal Loads (plf)
Vert: 1=-285(F=-240)-to-5=-45

33) Dead + 0.6 C-C Wind Min. Down: Lumber Increase=1.33, Plate Increase=1.33
Uniform Loads (plf)
Vert: 1-6=-12
Horz: 1-5=16, 5-6=16
Trapezoidal Loads (plf)
Vert: 1=-268(F=-240)-to-5=-28

34) Dead + 0.6 C-C Wind Min. Upward: Lumber Increase=1.33, Plate Increase=1.33
Uniform Loads (plf)
Vert: 1-6=-12
Horz: 1-5=-16, 5-6=16
Trapezoidal Loads (plf)
Vert: 1=-236(F=-240)-to-5=4

Job	Truss	Truss Type	Qty	Ply	STEAMBOAT BUILDING CO
Q230973	A1E	Monopitch Supported Gable	2	1	R81680704
					Job Reference (optional)

Alpine Truss, Montrose, CO - 81401, 8.730 s Mar 21 2024 MiTek Industries, Inc. Thu Apr 4 09:40:47 2024 Page 1
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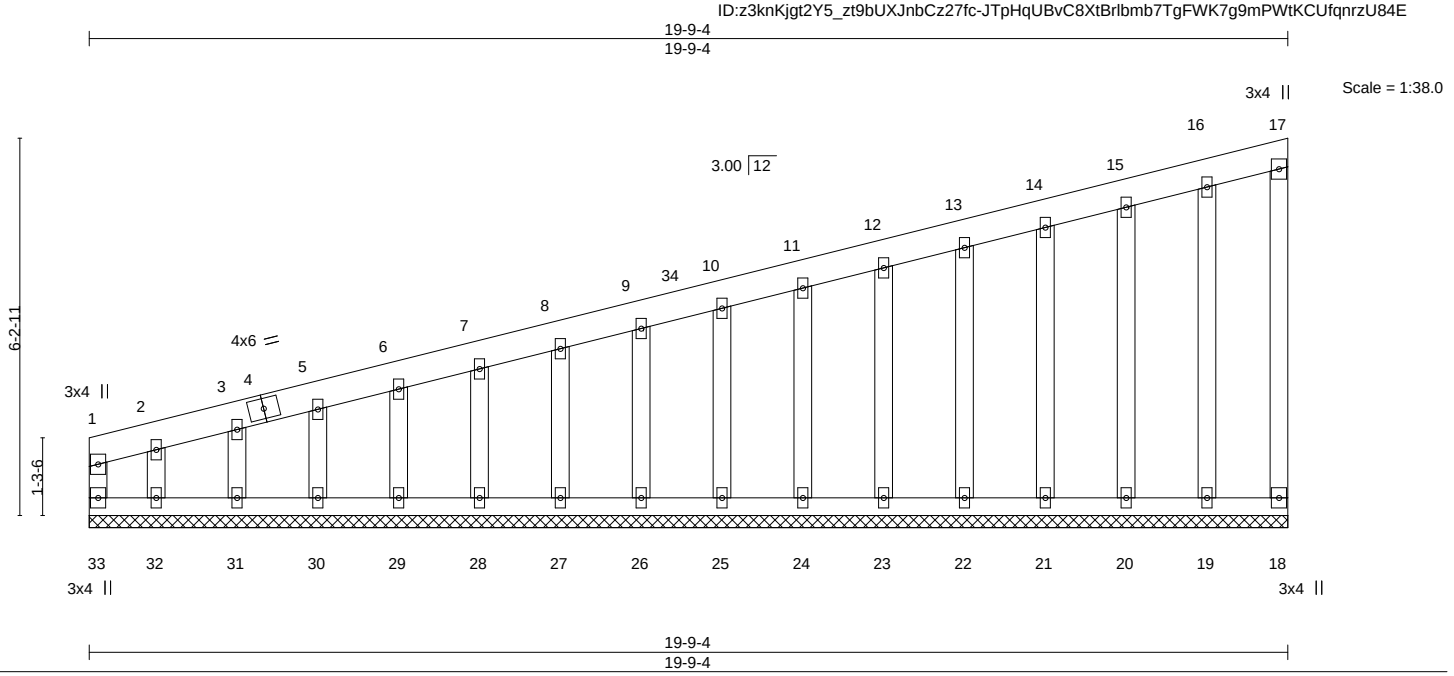

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.41	Vert(LL)	n/a	-	n/a	999	MT20	169/123
Snow (Pf)	40.0	Lumber DOL	1.00	BC	0.12	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	NO	WB	0.18	Horz(CT)	0.00	18	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-R							Weight: 106 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x6 SPF 1650F 1.5E
BOT CHORD	2x4 SPF 1650F 1.5E
WEBS	2x4 WW Stud
OTHERS	2x4 WW Stud

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.

REACTIONS. All bearings 19-9-4.
(lb) - Max Horz 33=142(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 18, 19, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30 except 32=-114(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 33, 18, 19 except 20=262(LC 22), 21=279(LC 22), 22=298(LC 22), 23=321(LC 22), 24=343(LC 22), 25=354(LC 22), 26=343(LC 22), 27=355(LC 1), 28=377(LC 1), 29=398(LC 22), 30=421(LC 22), 31=456(LC 22), 32=421(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 14-21=-252/28, 13-22=-271/28, 12-23=-294/27, 11-24=-317/27, 10-25=-327/27, 9-26=-317/27, 8-27=-328/27, 7-28=-350/27, 6-29=-372/27, 5-30=-394/26, 3-31=-429/34, 2-32=-393/129

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.83; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-1-12 to 3-1-12, Exterior(2N) 3-1-12 to 19-7-8 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.00 Plate DOL=1.00); Pf=40.0 psf (Lum DOL=1.00 Plate DOL=1.00); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
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) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
8) Gable studs spaced at 1-4-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * 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.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18, 19, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30 except (jt=lb) 32=114.
12) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
13) Load case(s) 1, 4, 5, 6, 22, 23, 25, 26, 27, 28, 33 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.

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LOAD CASE(S) Standard Except:

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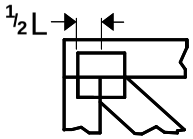
LOAD CASE(S) Standard Except:

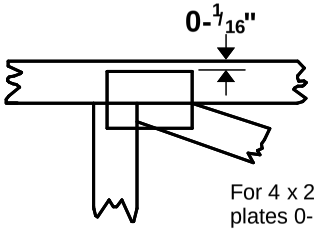
1) Dead + Snow (balanced): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
   Vert: 18-33=-20
   Trapezoidal Loads (plf)
   Vert: 1=-340-to-17=-100
4) Dead + 0.75 Snow (balanced): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
   Vert: 18-33=-20
   Trapezoidal Loads (plf)
   Vert: 1=-239-to-17=-80
5) Dead + 0.75 Snow (Unbal. Left): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
   Vert: 18-33=-20
   Trapezoidal Loads (plf)
   Vert: 1=-239-to-34=-160, 34=-190-to-17=-110
6) Dead + 0.75 Snow (Unbal. Right): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
   Vert: 18-33=-20
   Trapezoidal Loads (plf)
   Vert: 1=-197-to-17=-38
22) Dead + Snow (Unbal. Left): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
   Vert: 18-33=-20
   Trapezoidal Loads (plf)
   Vert: 1=-340-to-34=-221, 34=-261-to-17=-140
23) Dead + Snow (Unbal. Right): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
   Vert: 18-33=-20
   Trapezoidal Loads (plf)
   Vert: 1=-284-to-17=-44
25) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.33, Plate Increase=1.33
   Uniform Loads (plf)
   Vert: 18-33=-20
   Horz: 1-33=12, 1-17=-13, 17-18=4
   Trapezoidal Loads (plf)
   Vert: 1=-226-to-17=-67
26) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.33, Plate Increase=1.33
   Uniform Loads (plf)
   Vert: 18-33=-20
   Horz: 1-33=-4, 1-17=-6, 17-18=-12
   Trapezoidal Loads (plf)
   Vert: 1=-233-to-17=-74
27) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.33, Plate Increase=1.33
   Uniform Loads (plf)
   Vert: 18-33=-20
   Horz: 1-33=11, 1-17=-13, 17-18=4
   Trapezoidal Loads (plf)
   Vert: 1=-226-to-17=-67
28) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.33, Plate Increase=1.33
   Uniform Loads (plf)
   Vert: 18-33=-20
   Horz: 1-33=-4, 1-17=-5, 17-18=-11
   Trapezoidal Loads (plf)
   Vert: 1=-234-to-17=-75
33) Dead + Minimum Snow: Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
   Vert: 18-33=-20
   Trapezoidal Loads (plf)
   Vert: 1=-300-to-17=-60

Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.

This symbol indicates the required direction of slots in connector plates.

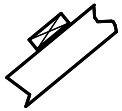
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

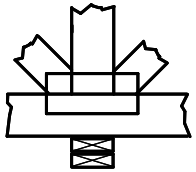
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

BEARING

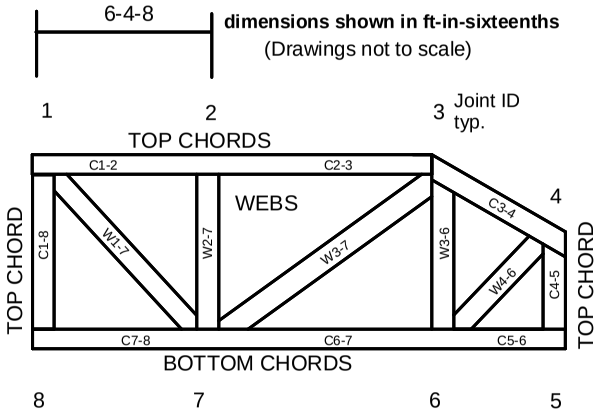


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

Product Code Approvals

ICC-ES Reports:

ESR-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

Design General Notes

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

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General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.