

Tri-State Engineering, Inc.

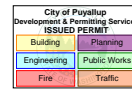
terry@tse-aep.com

(206) 369-8394

Re: J1177148
Vitaly Kravchishin

Calculations required to be provided by
the Permittee on site for all Inspections

PRRNTH20250328



**City of Puyallup
Building
REVIEWED
FOR
COMPLIANCE**

BSnowden
03/26/2025
11:13:13 AM



The truss drawing(s) referenced below have been prepared by Tri-State Engineering under my direct supervision based on the parameters provided by The Truss Company and Building Supply, LLC

Pages or sheets covered by this seal: Page 1 through Page 15

My license renewal date for the state of Washington is August 20th 2026



2/04/25

Digitally signed by: Terry L. Powell, P.E.

The seal on these drawings indicate acceptance of professional engineering responsibility solely for the truss components shown. The suitability and use of this component for any particular building is the responsibility of the building designer, per ANSI/TPI 1.

The Truss Company and Building Supply LLC, Sumner, WA

Run: 8.830 s Jan 17 2025 Print: 8.830 s Jan 17 2025 MiTek Industries, Inc. Tue Feb 4 10:18:56 2025 Page 1
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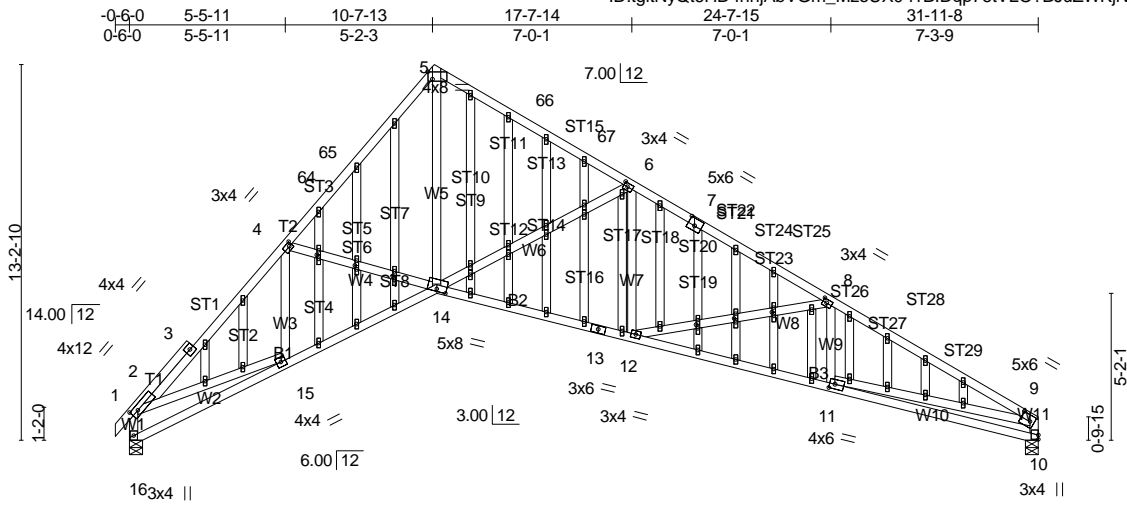


Plate Offsets (X,Y)--	[2:0-3-0,0-2-0], [4:0-1-4,0-1-8], [5:0-1-15,Edge], [6:0-1-12,0-1-8], [7:0-3-0,0-3-0], [8:0-1-12,0-1-8], [9:0-4-4,0-2-8], [11:0-2-4,0-2-0], [14:0-4-0,0-1-0], [17:0-1-10,0-0-12], [20:0-1-10,0-0-12], [23:0-1-10,0-0-12], [47:0-1-9,0-0-12], [50:0-1-9,0-0-12], [53:0-1-9,0-0-12]
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LOADING (psf)	TCLL 25.0 (Roof Snow=25.0) TCDL 8.0 BCLL 0.0 * BCDL 7.0	SPACING-	2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IBC2021/TPI2014	CSI.	TC 0.97 BC 0.54 WB 0.84 Matrix-SH	DEFL	in (loc) l/defl L/d Vert(LL) -0.18 11-12 >999 240 Vert(CT) -0.30 11-12 >999 180 Horz(CT) 0.25 10 n/a n/a	PLATES	GRIP
								MT20	185/148
								Weight: 268 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 HF-N No.1/No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 2x4 HF-N No.1/No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 DF Stud *Except*	
OTHERS W5,W6,W8,W10: 2x4 HF-N No.1/No.2	
OTHERS 2x4 DF Stud	

REACTIONS. (lb/size) 16=1310/0-5-8 (min. 0-2-2), 10=1266/0-5-8 (min. 0-2-2)
 Max Horz 16=224(LC 13)
 Max Uplift 16=-79(LC 15), 10=-99(LC 15)
 Max Grav 16=1310(LC 1), 10=1292(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 9-10=-1330/142, 2-3=-2147/128, 3-4=-2092/149, 4-64=-1951/101, 64-65=-1834/113,
 5-65=-1803/132, 5-66=-1374/149, 66-67=-1375/134, 6-67=-1547/123, 6-7=-2200/158,
 7-8=-2410/131, 8-9=-2942/199
 BOT CHORD 15-16=-220/741, 14-15=-172/1566, 13-14=-7/2061, 12-13=-15/2040, 11-12=-125/2531,
 10-11=-72/397
 WEBS 4-14=-294/196, 5-14=-92/1689, 6-14=-910/212, 6-12=-13/384, 8-12=-507/173, 2-15=0/879,
 2-16=-1634/170, 9-11=-62/2093

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=110mph (3-second gust) Vasd=87mph; TCDL=4.2psf; BCDL=4.2psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-6-0 to 2-6-0, Interior(1) 2-6-0 to 10-10-0, Exterior(2R) 10-10-0 to 13-10-0, Interior(1) 13-10-0 to 31-9-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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; Pf=25.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 4) Unbalanced snow loads have been considered for this design.
 - 5) This truss has been designed for greater of min roof live load of 17.0 psf or 1.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
 - 6) All plates are 1.5x4 MT20 unless otherwise indicated.
 - 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 23.0psf 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) Bearing at joint(s) 16, 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.



Continued on page 2

2/04/25

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 BEFORE USE.
 Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI1 Quality Criteria, DSB-89 and BCS11 Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	Vitaly Kravchishin	City of Pasaden Development & Permitting Services ISSUED PERMIT	Page 2 of 15
J1177148	A1	ROOF SPECIAL STRUCTU	2	1	Job Reference (optional)	Building Engineering Fire Planning Public Works Traffic	

The Truss Company and Building Supply LLC, Sumner, WA

Run: 8.830 s Jan 17 2025 Print: 8.830 s Jan 17 2025 MiTek Industries, Inc. Tue Feb 4 10:18:57 2025 Page 2
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NOTES-

11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 79 lb uplift at joint 16 and 99 lb uplift at joint 10.

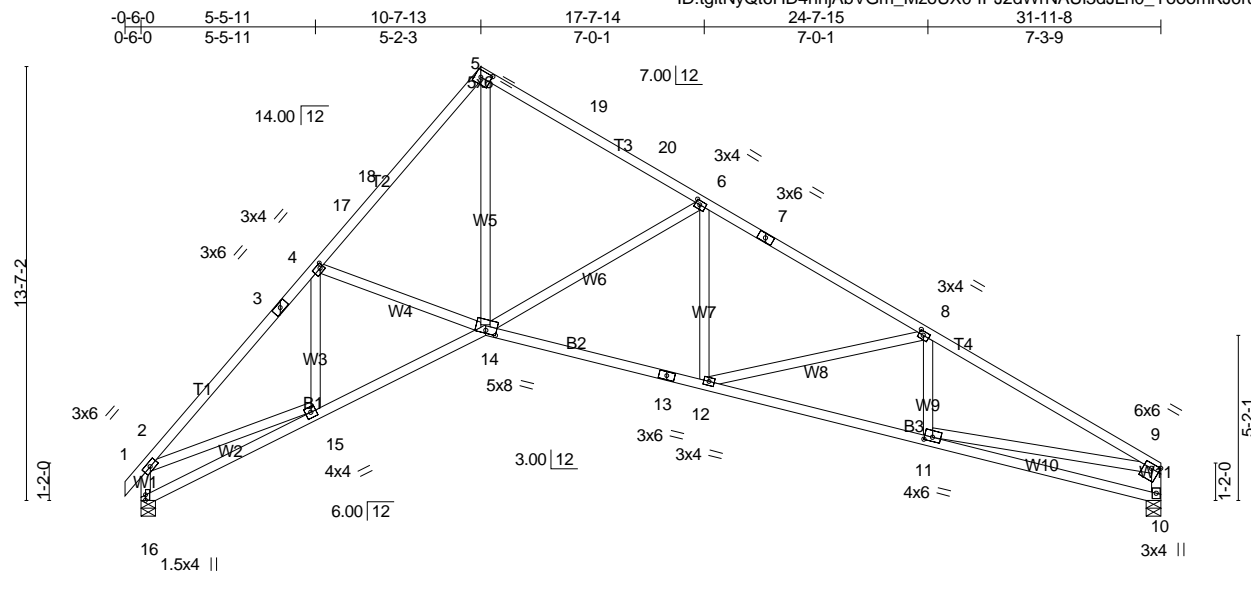
LOAD CASE(S) Standard



2/04/25

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Scale = 1:72.2

5-5-11	10-9-11	17-7-14	24-7-15	31-11-8
5-5-11	5-4-0	6-10-4	7-0-1	7-3-9

Plate Offsets (X,Y)-- [4:0-1-4,0-1-8], [5:0-3-12,0-2-8], [6:0-1-12,0-1-8], [8:0-1-12,0-1-8], [9:Edge,0-1-12], [11:0-3-0,0-1-8], [14:0-4-0,0-1-0], [16:0-2-0,0-0-0]							
LOADING (psf)	SPACING-	CSI.	DEFL.		PLATES	GRIP	
TCLL 25.0 (Roof Snow=25.0)	Plate Grip DOL 1.15	TC 0.95	in (loc) l/defl L/d		MT20	185/148	
TCDL 8.0	Lumber DOL 1.15	BC 0.50	Vert(LL) -0.16 11-12 >999 240				
BCLL 0.0 *	Rep Stress Incr YES	WB 0.82	Vert(CT) -0.27 11-12 >999 180				
BCDL 7.0	Code IBC2021/TPI2014	Matrix-SH	Horz(CT) 0.22 10 n/a n/a				
							Weight: 169 lb FT = 20%

LUMBER-
 TOP CHORD 2x4 HF-N No.1/No.2
 BOT CHORD 2x4 HF-N No.1/No.2
 WEBS 2x4 DF Stud *Except*
 W5,W6: 2x4 HF-N No.1/No.2

BRACING-
 TOP CHORD Structural wood sheathing directly applied, 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. (lb/size) 16=1310/0-5-8 (min. 0-2-2), 10=1266/0-5-8 (min. 0-2-2)
 Max Horz 16=232(LC 13)
 Max Uplift 16=-84(LC 15), 10=-98(LC 15)
 Max Grav 16=1310(LC 1), 10=1293(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2001/115, 3-4=-1787/135, 4-17=-1841/119, 17-18=-1731/130, 5-18=-1700/149,
 5-19=-1316/152, 19-20=-1320/138, 6-20=-1493/125, 6-7=-2068/164, 7-8=-2278/137,
 8-9=-2666/185, 9-10=-1296/136
 BOT CHORD 15-16=-270/275, 14-15=-164/1429, 13-14=-18/1945, 12-13=-26/1924, 11-12=-116/2286
 WEBS 5-14=-104/1589, 6-14=-850/211, 6-12=-14/361, 8-12=-398/159, 9-11=-70/1988,
 2-15=-5/1300, 2-16=-1278/135

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=110mph (3-second gust) Vasd=87mph; TCDL=4.2psf; BCDL=4.2psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-6-0 to 2-6-0, Interior(1) 2-6-0 to 10-7-13, Exterior(2R) 10-7-13 to 13-7-13, Interior(1) 13-7-13 to 31-9-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) This truss has been designed for greater of min roof live load of 17.0 psf or 1.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
 - 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 23.0psf 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) Bearing at joint(s) 16, 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 84 lb uplift at joint 16 and 98 lb uplift at joint 10.

LOAD CASE(S) Standard



2/04/25

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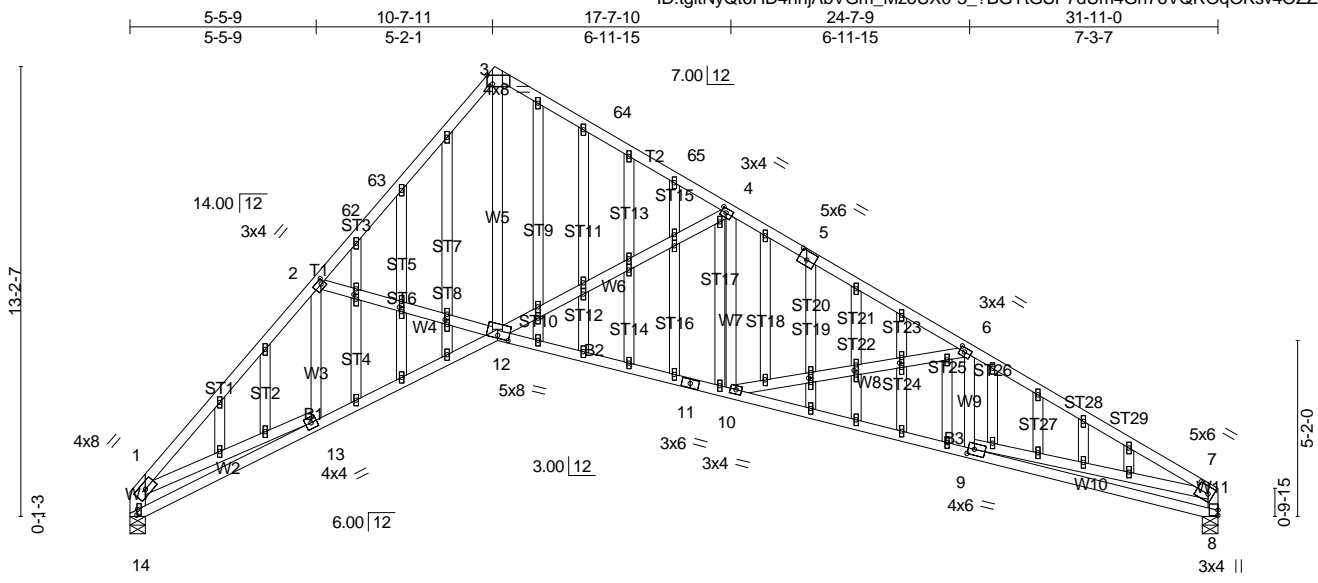


Plate Offsets (X,Y)-- [2:0-1-4,0-1-8], [3:0-1-15,Edge], [4:0-1-12,0-1-8], [5:0-3-0,0-3-0], [6:0-1-12,0-1-8], [7:0-4-4,0-2-8], [9:0-2-4,0-2-0], [12:0-4-0,0-1-0], [14:0-2-0,0-0-4], [15:0-1-10,0-0-12], [18:0-1-10,0-0-12], [21:0-1-10,0-0-12], [45:0-1-9,0-0-12], [48:0-1-9,0-0-12], [51:0-1-9,0-0-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.96	in (loc) l/defl L/d	MT20	185/148
(Roof Snow=25.0)	Lumber DOL 1.15	BC 0.54	Vert(LL) -0.18 9-10 >999 240		
TCDL 8.0	Rep Stress Incr YES	WB 0.84	Vert(CT) -0.30 9-10 >999 180		
BCLL 0.0 *	Code IBC2021/TPI2014	Matrix-SH	Horz(CT) 0.24 8 n/a n/a		
BCDL 7.0				Weight: 265 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 HF-N No.1/No.2
 BOT CHORD 2x4 HF-N No.1/No.2
 WEBS 2x4 DF Stud *Except*
 OTHERS 2x4 DF Stud

BRACING-
 TOP CHORD Structural wood sheathing directly applied, 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. (lb/size) 14=1262/0-5-8 (min. 0-2-1), 8=1262/0-5-8 (min. 0-2-2)
 Max Horz 14=-225(LC 10)
 Max Uplift 14=-79(LC 15), 8=-99(LC 15)
 Max Grav 14=1262(LC 1), 8=1288(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 7-8=-1325/142, 1-2=-2161/143, 2-62=-1933/103, 62-63=-1816/114, 3-63=-1789/133, 3-64=-1365/147, 64-65=-1365/133, 4-65=-1537/121, 4-5=-2189/157, 5-6=-2398/131, 6-7=-2931/198
 BOT CHORD 13-14=-251/265, 12-13=-176/1540, 11-12=-6/2051, 10-11=-14/2030, 9-10=-125/2521, 8-9=-72/396
 WEBS 2-12=-277/202, 3-12=-95/1668, 4-12=-908/212, 4-10=-13/383, 6-10=-507/173, 1-14=-1230/122, 1-13=-20/1445, 7-9=-61/2084

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=110mph (3-second gust) Vasd=87mph; TCDL=4.2psf; BCDL=4.2psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-2-12 to 3-2-12, Interior(1) 3-2-12 to 10-9-13, Exterior(2R) 10-9-13 to 13-9-13, Interior(1) 13-9-13 to 31-9-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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; Pf=25.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 4) Unbalanced snow loads have been considered for this design.
 - 5) All plates are 1.5x4 MT20 unless otherwise indicated.
 - 6) Gable studs spaced at 1-4-0 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 23.0psf 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) Bearing at joint(s) 14, 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 79 lb uplift at joint 14 and 99 lb uplift at joint 8.

LOAD CASE(S) Standard



2/04/25

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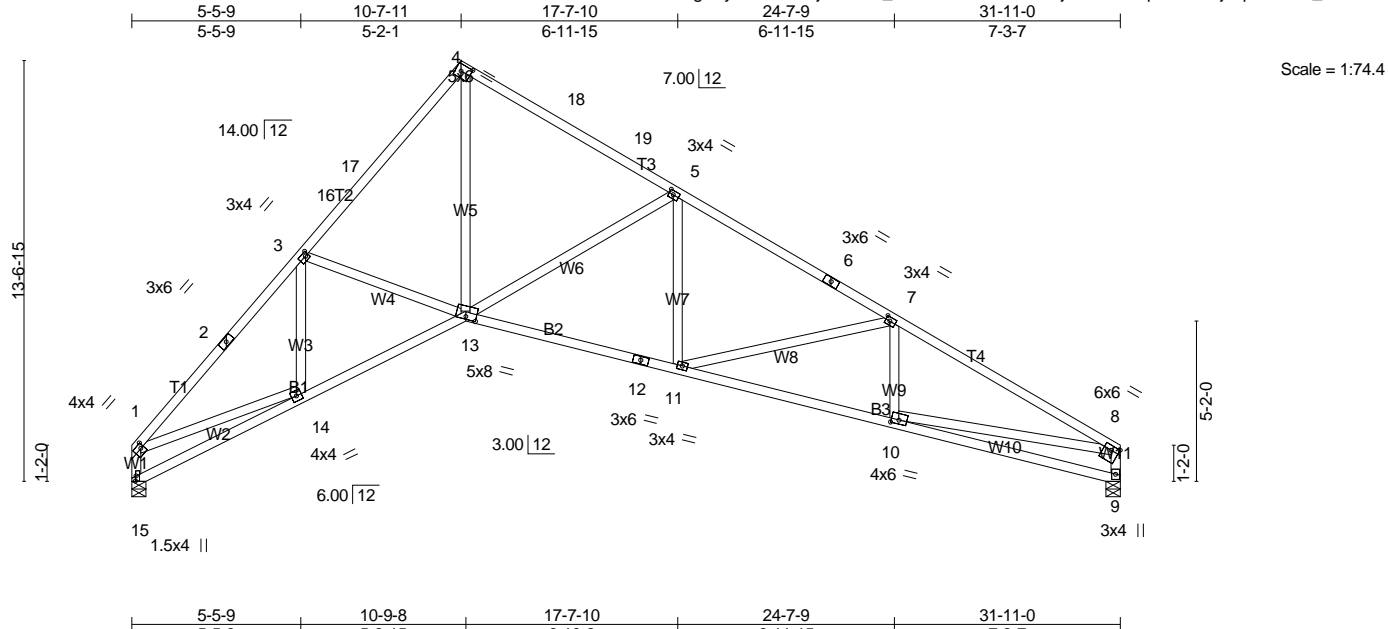


Plate Offsets (X,Y)-- [1:0-1-4,0-1-12], [3:0-1-4,0-1-8], [4:0-3-12,0-2-8], [5:0-1-12,0-1-8], [7:0-1-12,0-1-8], [8:Edge,0-1-12], [10:0-3-0,0-1-8], [13:0-4-0,0-1-0], [15:0-2-0,0-0-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0 (Roof Snow=25.0)	2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15	TC 0.95 BC 0.50 WB 0.82	in (loc) l/defl L/d Vert(LL) -0.16 10-11 >999 240 Vert(CT) -0.27 10-11 >999 180 Horz(CT) 0.22 9 n/a n/a	MT20	185/148
TCDL 8.0	Rep Stress Incr YES	Matrix-SH			
BCLL 0.0 *	Code IBC2021/TPI2014				
BCDL 7.0				Weight: 168 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 HF-N No.1/No.2
 BOT CHORD 2x4 HF-N No.1/No.2
 WEBS 2x4 DF Stud *Except*
 W5,W6: 2x4 HF-N No.1/No.2

BRACING-
 TOP CHORD Structural wood sheathing directly applied, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

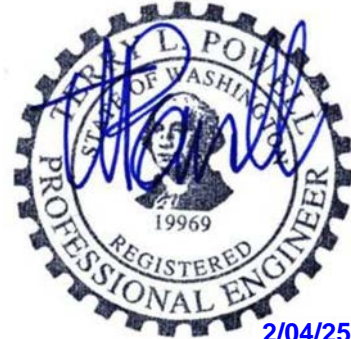
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 15=1265/0-5-8 (min. 0-2-1), 9=1265/0-5-8 (min. 0-2-2)
 Max Horz 15=-231(LC 10)
 Max Uplift 15=-82(LC 15), 9=-98(LC 15)
 Max Grav 15=1265(LC 1), 9=1292(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-2000/111, 2-3=-1881/132, 3-16=-1840/118, 16-17=-1731/129, 4-17=-1700/148,
 4-18=-1315/151, 18-19=-1319/136, 5-19=-1492/124, 5-6=-2066/163, 6-7=-2275/136,
 7-8=-2662/184, 8-9=-1295/136
 BOT CHORD 14-15=-260/270, 13-14=-162/1429, 12-13=-18/1942, 11-12=-25/1921, 10-11=-115/2283
 WEBS 4-13=-103/1589, 5-13=-849/211, 5-11=-14/360, 7-11=-397/159, 8-10=-70/1986,
 1-15=-1233/118, 1-14=-18/1301

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=110mph (3-second gust) Vasd=87mph; TCDL=4.2psf; BCDL=4.2psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 10-7-11, Exterior(2R) 10-7-11 to 13-7-11, Interior(1) 13-7-11 to 31-9-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; 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 23.0psf 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) Bearing at joint(s) 15, 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 82 lb uplift at joint 15 and 98 lb uplift at joint 9.

LOAD CASE(S) Standard



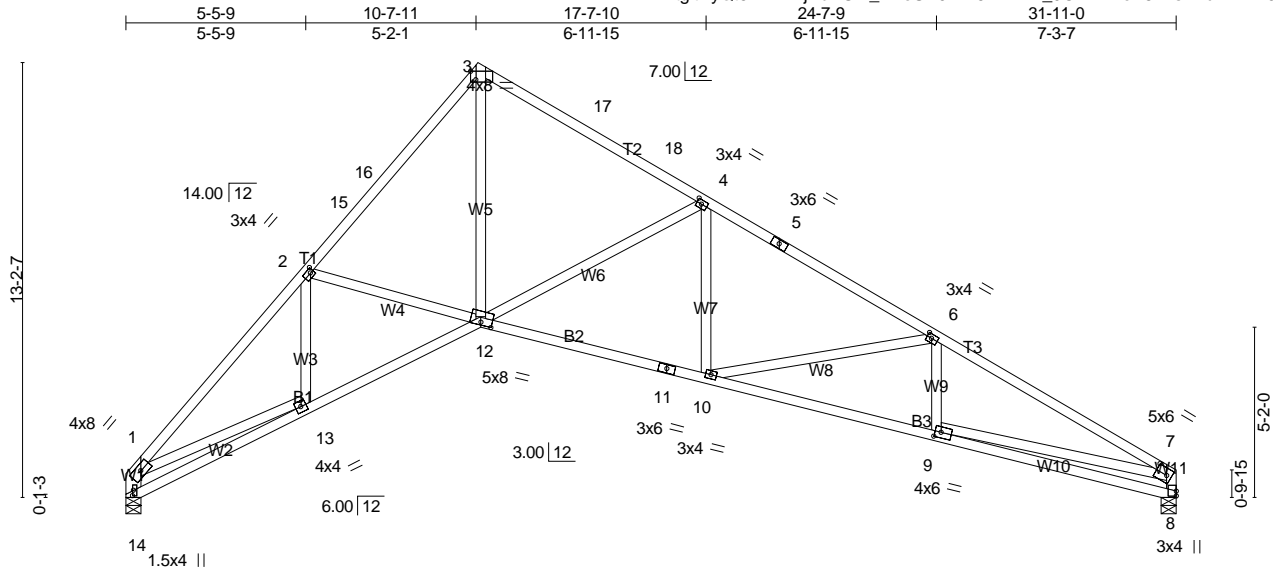
2/04/25

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ID:tgitNyQt6HD4nhjAbVGm_MzoUX0-?N6xhDvW_0OLk4DfoY8zVsTAu7XNYI3sManCW1zoWhc



Scale = 1:70.0

5-5-9	10-9-8	17-7-10	24-7-9	31-11-0
5-5-9	5-3-15	6-10-2	6-11-15	7-3-7

Plate Offsets (X,Y)-- [2:0-1-4,0-1-8], [3:0-1-15,Edge], [4:0-1-12,0-1-8], [6:0-1-12,0-1-8], [7:0-4-4,0-2-8], [9:0-2-4,0-2-0], [12:0-4-0,0-1-0], [14:0-2-0,0-0-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0 (Roof Snow=25.0)	2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15	TC 0.96 BC 0.54 WB 0.84	in (loc) l/defl L/d Vert(LL) -0.18 9-10 >999 240 Vert(CT) -0.30 9-10 >999 180 Horz(CT) 0.24 8 n/a n/a	MT20	185/148
TCDL 8.0	Rep Stress Incr YES	Matrix-SH			
BCLL 0.0 *	Code IBC2021/TPI2014				
BCDL 7.0				Weight: 164 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 HF-N No.1/No.2
 BOT CHORD 2x4 HF-N No.1/No.2
 WEBS 2x4 DF Stud *Except*
 W5,W6,W10: 2x4 HF-N No.1/No.2, W1: 2x6 DF SS

BRACING-
 TOP CHORD Structural wood sheathing directly applied, 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. (lb/size) 14=1262/0-5-8 (min. 0-2-1), 8=1262/0-5-8 (min. 0-2-2)
 Max Horz 14=-225(LC 10)
 Max Uplift 14=-79(LC 15), 8=-99(LC 15)
 Max Grav 14=1262(LC 1), 8=1288(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 7-8=-1325/142, 1-2=-2161/143, 2-15=-1933/103, 15-16=-1816/114, 3-16=-1789/133,
 3-17=-1365/147, 17-18=-1365/133, 4-18=-1537/121, 4-5=-2189/157, 5-6=-2398/131,
 6-7=-2931/198
 BOT CHORD 13-14=-251/265, 12-13=-176/1540, 11-12=-6/2051, 10-11=-14/2030, 9-10=-125/2521,
 8-9=-72/396
 WEBS 2-12=-277/202, 3-12=-95/1668, 4-12=-908/212, 4-10=-13/383, 6-10=-507/173,
 1-14=-1230/122, 1-13=-20/1445, 7-9=-61/2084

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=110mph (3-second gust) Vasd=87mph; TCCL=4.2psf; BCDL=4.2psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-2-12 to 3-2-12, Interior(1) 3-2-12 to 10-9-13, Exterior(2R) 10-9-13 to 13-9-13, Interior(1) 13-9-13 to 31-9-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; 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 23.0psf 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) Bearing at joint(s) 14, 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 79 lb uplift at joint 14 and 99 lb uplift at joint 8.

LOAD CASE(S) Standard



2/04/25

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-7473 BEFORE USE.
 Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI1 Quality Criteria, DSB-89 and BCS11 Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



The Truss Company and Building Supply LLC, Sumner, WA

Run: 8.830 s Jan 17 2025 Print: 8.830 s Jan 17 2025 MiTek Industries, Inc. Tue Feb 4 10:19:05 2025 Page 1
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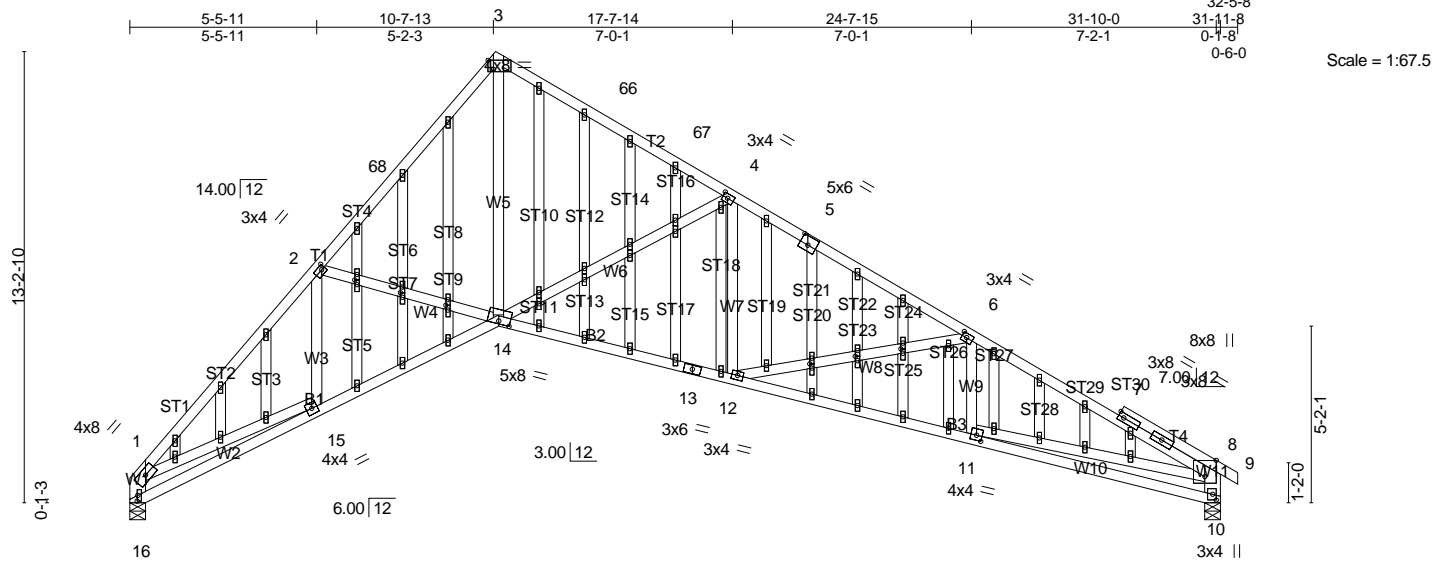


Plate Offsets (X,Y)--	[2:0-1-4,0-1-8], [3:0-1-15,Edge], [4:0-1-12,0-1-8], [5:0-3-0,0-3-0], [6:0-1-12,0-1-8], [8:0-5-12,Edge], [10:0-2-0,0-1-4], [11:0-2-0,0-1-12], [14:0-4-0,0-1-0], [16:0-2-0,0-0-4], [17:0-1-10,0-0-12], [20:0-1-10,0-0-12], [23:0-1-10,0-0-12], [49:0-1-9,0-0-12], [52:0-1-9,0-0-12], [55:0-1-9,0-0-12]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0 (Roof Snow=25.0) TCDL 8.0 BCLL 0.0 * BCDL 7.0	2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IBC2021/TPI2014	TC 0.85 BC 0.53 WB 0.84 Matrix-SH	in (loc) l/defl L/d Vert(LL) -0.17 11-12 >999 240 Vert(CT) -0.29 11-12 >999 180 Horz(CT) 0.24 10 n/a n/a	MT20 Weight: 273 lb	185/148 FT = 20%

LUMBER-	BRACING-	
TOP CHORD 2x4 HF-N No.1/No.2 BOT CHORD 2x4 HF-N No.1/No.2 WEBS 2x4 DF Stud *Except* OTHERS 2x4 DF Stud	TOP CHORD Structural wood sheathing directly applied or 2-2-0 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. (lb/size) 16=1259/0-5-8 (min. 0-2-1), 10=1309/0-5-8 (min. 0-2-3)
 Max Horz 16=-228(LC 10)
 Max Uplift 16=-79(LC 15), 10=-109(LC 15)
 Max Grav 16=1259(LC 1), 10=1335(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 8-10=-1477/170, 3-6=-1360/146, 66-67=-1361/132, 4-67=-1533/120, 4-5=-2175/155,
 5-6=-2385/139, 6-7=-2770/195, 7-8=-2882/168, 1-2=-2157/141, 2-68=-1927/101,
 3-68=-1783/131
 BOT CHORD 15-16=-255/268, 14-15=-173/1542, 13-14=-4/2043, 12-13=-12/2022, 11-12=-117/2479,
 10-11=-156/879
 WEBS 3-14=-93/1663, 4-14=-903/212, 4-12=-9/379, 6-12=-478/163, 1-16=-1228/121,
 1-15=-19/1442, 8-11=0/1564

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=110mph (3-second gust) Vasd=87mph; TCDL=4.2psf; BCDL=4.2psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-2-12 to 3-2-12, Interior(1) 3-2-12 to 10-10-0, Exterior(2R) 10-10-0 to 13-10-0, Interior(1) 13-10-0 to 32-5-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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; Pf=25.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 4) Unbalanced snow loads have been considered for this design.
 - 5) This truss has been designed for greater of min roof live load of 17.0 psf or 1.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
 - 6) All plates are 1.5x4 MT20 unless otherwise indicated.
 - 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 23.0psf 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) Bearing at joint(s) 16, 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.



Continued on page 2

2/04/25

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-7473 BEFORE USE.
 Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI1 Quality Criteria, DSB-89 and BCS11 Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job J1177148	Truss A5	Truss Type Roof Special Structural Gable	Qty 2	Ply 1	Vitaly Kravchishin Job Reference (optional)		Page 9 of 15
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The Truss Company and Building Supply LLC, Sumner, WA

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NOTES-

11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 79 lb uplift at joint 16 and 109 lb uplift at joint 10.

LOAD CASE(S) Standard



2/04/25

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-7473 BEFORE USE.
 Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component.
 Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI1 Quality Criteria, DSB-89 and BCS11 Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



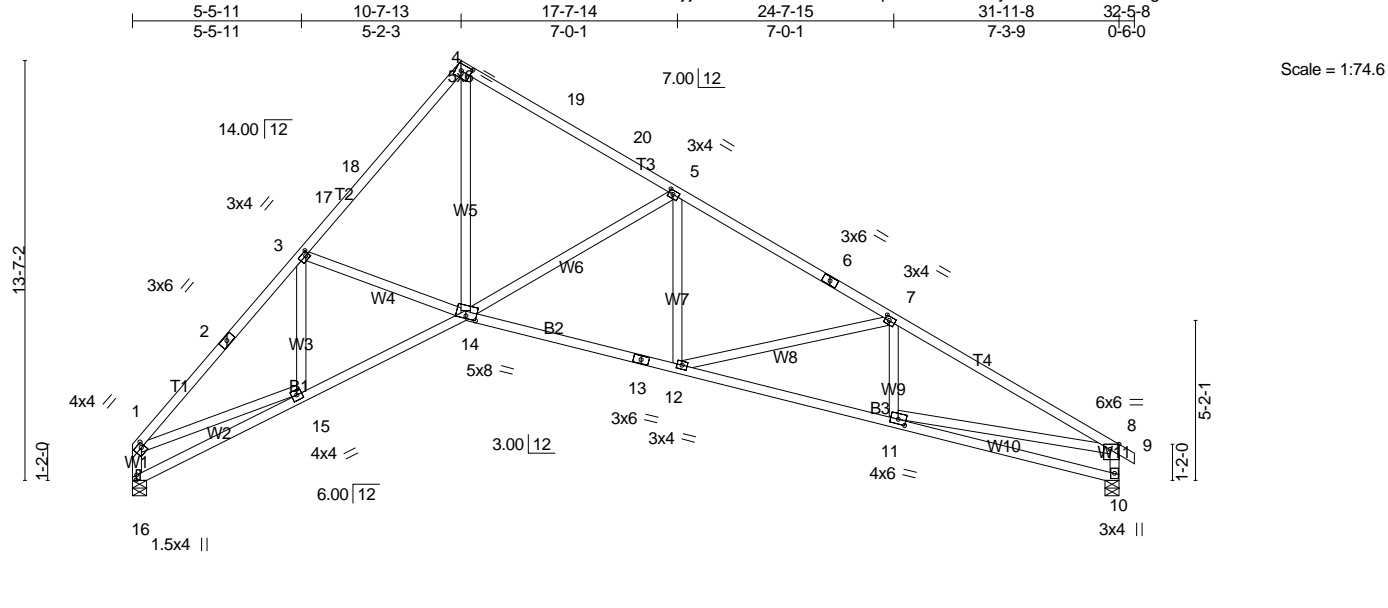


Plate Offsets (X,Y)--	[1:0-1-4,0-1-12], [3:0-1-4,0-1-8], [4:0-3-12,0-2-8], [5:0-1-12,0-1-8], [7:0-1-12,0-1-8], [8:0-3-8,Edge], [11:0-3-0,0-1-12], [14:0-4-0,0-1-0], [16:0-2-0,0-0-4]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0 (Roof Snow=25.0)	2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15	TC 0.93 BC 0.50 WB 0.82	in (loc) l/defl L/d Vert(LL) -0.16 11-12 >999 240 Vert(CT) -0.26 11-12 >999 180 Horz(CT) 0.22 10 n/a n/a	MT20	185/148
TCDL 8.0	Rep Stress Incr YES	Matrix-SH			
BCLL 0.0 *	Code IBC2021/TPI2014				
BCDL 7.0				Weight: 169 lb	FT = 20%

LUMBER- TOP CHORD 2x4 HF-N No.1/No.2 BOT CHORD 2x4 HF-N No.1/No.2 WEBS 2x4 DF Stud *Except* W5,W6: 2x4 HF-N No.1/No.2	BRACING- TOP CHORD BOT CHORD Structural wood sheathing directly applied, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.
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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) 16=1266/0-5-8 (min. 0-2-1), 10=1310/0-5-8 (min. 0-2-3)
 Max Horz 16=-236(LC 10)
 Max Uplift 16=-82(LC 15), 10=-107(LC 15)
 Max Grav 16=1266(LC 1), 10=1337(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2002/107, 2-3=-1883/128, 3-17=-1842/106, 17-18=-1733/117, 4-18=-1701/136,
 4-19=-1317/148, 19-20=-1320/134, 5-20=-1494/121, 5-6=-2066/154, 6-7=-2276/128,
 7-8=-2663/180, 8-10=-1364/153
BOT CHORD 15-16=-263/276, 14-15=-155/1437, 13-14=0/1945, 12-13=-5/1924, 11-12=-100/2274,
 10-11=-86/348
WEBS 4-14=-99/1592, 5-14=-851/212, 5-12=-13/359, 7-12=-387/157, 8-11=-30/1877,
 1-16=-1235/116, 1-15=-10/1303

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=110mph (3-second gust) Vasd=87mph; TCCL=4.2psf; BCDL=4.2psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 10-7-13, Exterior(2R) 10-7-13 to 13-7-13, Interior(1) 13-7-13 to 32-5-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) This truss has been designed for greater of min roof live load of 17.0 psf or 1.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
 - 5) The Fabrication Tolerance at joint 8 = 16%
 - 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 23.0psf 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) Bearing at joint(s) 16, 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 82 lb uplift at joint 16 and 107 lb uplift at joint 10.

LOAD CASE(S) Standard



2/04/25

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 BEFORE USE.

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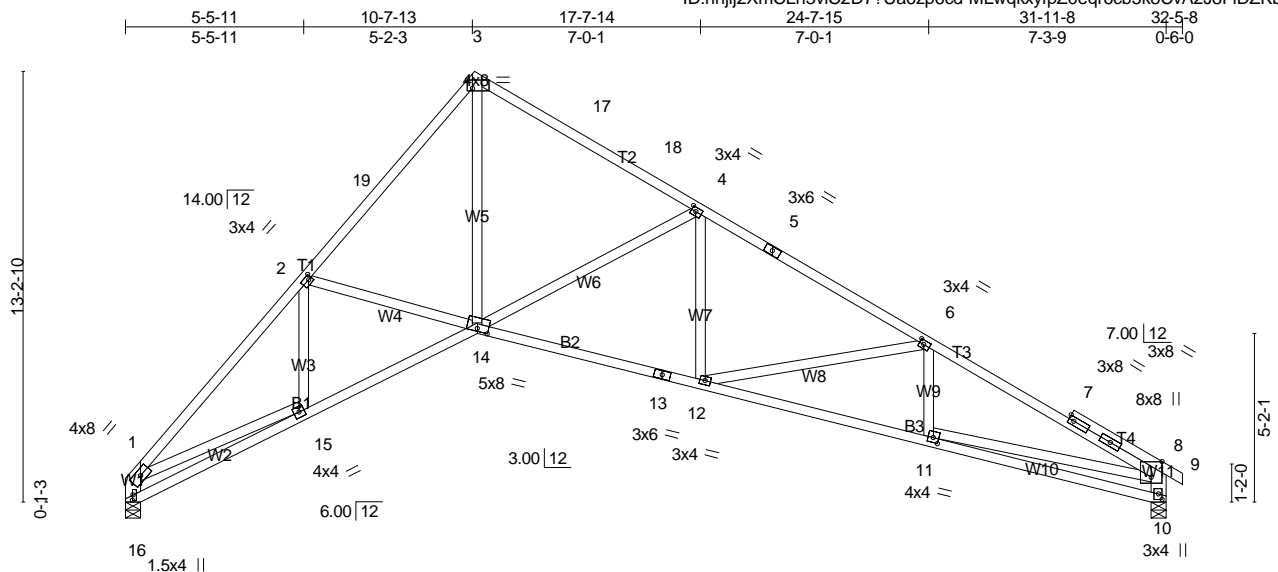


Plate Offsets (X,Y)--	[2:0-1-4,0-1-8], [3:0-1-15,Edge], [4:0-1-12,0-1-8], [6:0-1-12,0-1-8], [8:0-5-12,Edge], [10:0-2-0,0-1-4], [11:0-2-0,0-1-12], [14:0-4-0,0-1-0], [16:0-2-0,0-0-4]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0 (Roof Snow=25.0)	2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15	TC 0.85 BC 0.53 WB 0.84	in (loc) l/defl L/d Vert(LL) -0.17 11-12 >999 240 Vert(CT) -0.29 11-12 >999 180 Horz(CT) 0.24 10 n/a n/a	MT20	185/148
TCDL 8.0	Rep Stress Incr YES	Matrix-SH			
BCLL 0.0 *	Code IBC2021/TPI2014				
BCDL 7.0				Weight: 170 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 HF-N No.1/No.2
 BOT CHORD 2x4 HF-N No.1/No.2
 WEBS 2x4 DF Stud *Except*
 W5,W6: 2x4 HF-N No.1/No.2, W11,W1: 2x6 DF SS

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 2-2-0 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. (lb/size) 16=1259/0-5-8 (min. 0-2-1), 10=1309/0-5-8 (min. 0-2-3)
 Max Horz 16=-228(LC 10), 10=-109(LC 15)
 Max Uplift 16=-79(LC 15), 10=-109(LC 15)
 Max Grav 16=1259(LC 1), 10=1335(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 8-10=-1477/170, 3-17=-1360/146, 17-18=-1361/132, 4-18=-1533/120, 4-5=-2175/155,
 5-6=-2385/139, 6-7=-2770/195, 7-8=-2882/168, 1-2=-2157/141, 2-19=-1927/101,
 3-19=-1783/131
 BOT CHORD 15-16=-255/268, 14-15=-173/1542, 13-14=-4/2043, 12-13=-12/2022, 11-12=-117/2479,
 10-11=-156/879
 WEBS 3-14=-93/1663, 4-14=-903/212, 4-12=-9/379, 6-12=-478/163, 1-16=-1228/121,
 1-15=-19/1442, 8-11=0/1564

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=110mph (3-second gust) Vasd=87mph; TCCL=4.2psf; BCDL=4.2psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-2-12 to 3-2-12, Interior(1) 3-2-12 to 10-10-0, Exterior(2R) 10-10-0 to 13-10-0, Interior(1) 13-10-0 to 32-5-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) This truss has been designed for greater of min roof live load of 17.0 psf or 1.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
 - 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 23.0psf 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) Bearing at joint(s) 16, 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 79 lb uplift at joint 16 and 109 lb uplift at joint 10.

LOAD CASE(S) Standard

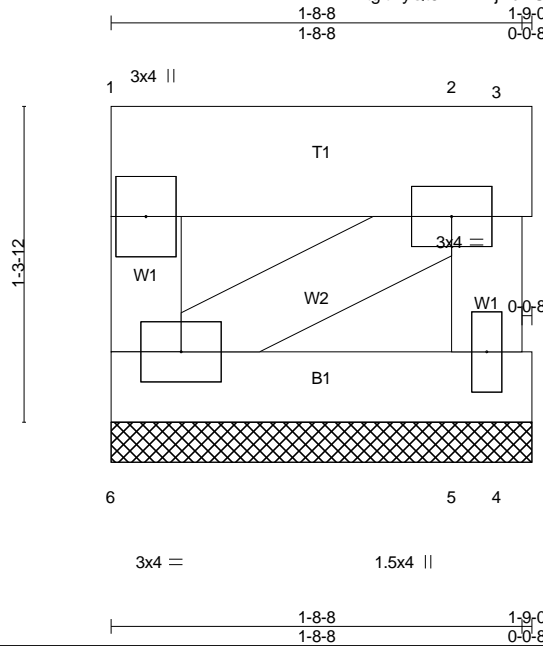


WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-7473 BEFORE USE.
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The Truss Company and Building Supply LLC, Sumner, WA

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Scale = 1:9.6

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0 (Roof Snow=25.0)	2-0-0	TC 0.04	in (loc) l/defl L/d	MT20	185/148
TCDL 8.0	Plate Grip DOL 1.15	BC 0.06	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.14	Vert(CT) n/a - n/a 999		
BCDL 7.0	Rep Stress Incr NO	Matrix-P	Horz(CT) -0.00 3 n/a n/a		
	Code IBC2021/TPI2014			Weight: 9 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 DF SS
BOT CHORD 2x4 HF-N No.1/No.2
WEBS 2x4 DF Stud

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-9-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

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

REACTIONS. (lb/size) 6=55/1-9-0 (min. 0-1-8), 3=13/1-9-0 (min. 0-1-8), 4=-15/1-9-0 (min. 0-1-8), 5=76/1-9-0 (min. 0-1-8)
Max Horz 6=-17(LC 37)
Max Uplift 6=-255(LC 32), 3=-170(LC 35), 4=-37(LC 3), 5=-76(LC 35)
Max Grav 6=263(LC 53), 3=167(LC 52), 5=127(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-363/366
BOT CHORD 5-6=-366/366
WEBS 2-6=-500/491

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=110mph (3-second gust) Vasd=87mph; TC DL=4.2psf; BCDL=4.2psf; 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=1.60 plate grip DOL=1.60
 - 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; Pf=25.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 4) Provide adequate drainage to prevent water ponding.
 - 5) Gable requires continuous bottom chord bearing.
 - 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - 7) Gable studs spaced at 2-0-0 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 23.0psf 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 255 lb uplift at joint 6, 170 lb uplift at joint 3, 37 lb uplift at joint 4 and 76 lb uplift at joint 5.
 - 11) This truss has been designed for a total drag load of 250 plf. Lumber DOL=(1.33) Plate grip DOL=(1.33) Connect truss to resist drag loads along bottom chord from 0-0-0 to 1-9-0 for 250.0 plf.

LOAD CASE(S) Standard



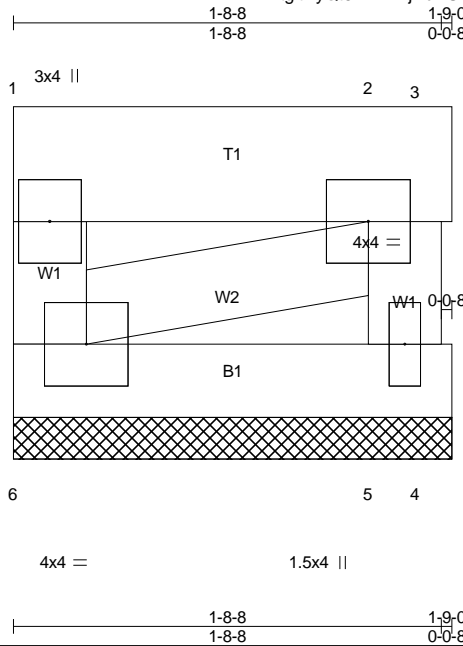
2/04/25

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The Truss Company and Building Supply LLC, Sumner, WA

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BEVEL - VENT - SCREEN
MATCH 2X4

Scale = 1:9.2

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0 (Roof Snow=25.0)	2-0-0	TC 0.04	in (loc) l/defl L/d	MT20	185/148
TCDL 8.0	Plate Grip DOL 1.15	BC 0.06	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.14	Vert(CT) n/a - n/a 999		
BCDL 7.0	Rep Stress Incr NO	Matrix-P	Horz(CT) -0.00 3 n/a n/a		
	Code IBC2021/TPI2014			Weight: 9 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 DF SS
BOT CHORD 2x4 HF-N No.1/No.2
WEBS 2x4 DF Stud

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-9-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

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

REACTIONS. (lb/size) 6=55/1-9-0 (min. 0-1-8), 3=11/1-9-0 (min. 0-1-8), 4=-15/1-9-0 (min. 0-1-8), 5=78/1-9-0 (min. 0-1-8)
Max Horz 6=-16(LC 37)
Max Uplift 6=-236(LC 32), 3=-152(LC 35), 4=-37(LC 3), 5=-74(LC 35)
Max Grav 6=244(LC 53), 3=150(LC 52), 5=127(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-362/365
BOT CHORD 5-6=-366/366
WEBS 2-6=-487/479

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=110mph (3-second gust) Vasd=87mph; TC DL=4.2psf; BCDL=4.2psf; 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=1.60 plate grip DOL=1.60
 - 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; Pf=25.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 4) Provide adequate drainage to prevent water ponding.
 - 5) Gable requires continuous bottom chord bearing.
 - 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - 7) Gable studs spaced at 2-0-0 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 23.0psf 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 236 lb uplift at joint 6, 152 lb uplift at joint 3, 37 lb uplift at joint 4 and 74 lb uplift at joint 5.
 - 11) This truss has been designed for a total drag load of 250 plf. Lumber DOL=(1.33) Plate grip DOL=(1.33) Connect truss to resist drag loads along bottom chord from 0-0-0 to 1-9-0 for 250.0 plf.

LOAD CASE(S) Standard



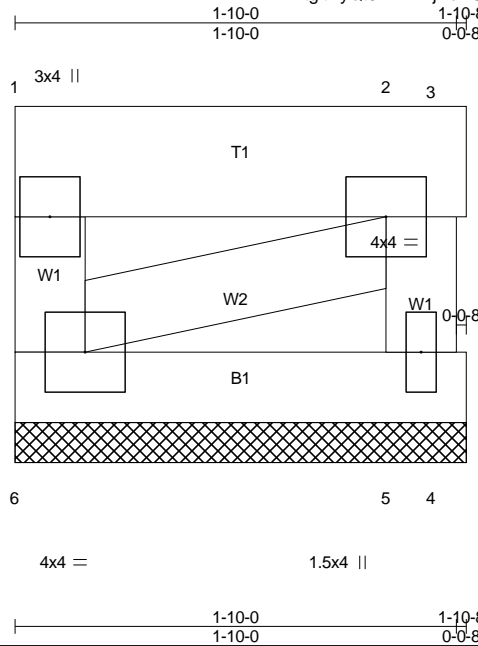
2/04/25

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The Truss Company and Building Supply LLC, Sumner, WA

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BEVEL - VENT - SCREEN
MATCH 2X4

Scale = 1:9.6

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0 (Roof Snow=25.0)	2-0-0	TC 0.04	in (loc) l/defl L/d	MT20	185/148
TCDL 8.0	Plate Grip DOL 1.15	BC 0.07	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.15	Vert(CT) n/a - n/a 999		
BCDL 7.0	Rep Stress Incr NO	Matrix-P	Horz(CT) -0.00 3 n/a n/a		
	Code IBC2021/TPI2014			Weight: 10 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 DF SS
BOT CHORD 2x4 HF-N No.1/No.2
WEBS 2x4 DF Stud

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-10-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

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

REACTIONS. (lb/size) 6=60/1-10-8 (min. 0-1-8), 3=8/1-10-8 (min. 0-1-8), 4=-19/1-10-8 (min. 0-1-8), 5=89/1-10-8 (min. 0-1-8)
Max Horz 6=-17(LC 37)
Max Uplift 6=-255(LC 32), 3=-164(LC 35), 4=-45(LC 3), 5=-80(LC 35)
Max Grav 6=264(LC 53), 3=162(LC 36), 5=142(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-394/397
BOT CHORD 5-6=-394/394
WEBS 2-6=-524/516

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=110mph (3-second gust) Vasd=87mph; TCDL=4.2psf; BCDL=4.2psf; 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=1.60 plate grip DOL=1.60
 - 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; Pf=25.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 4) Provide adequate drainage to prevent water ponding.
 - 5) Gable requires continuous bottom chord bearing.
 - 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - 7) Gable studs spaced at 2-0-0 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 23.0psf 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 255 lb uplift at joint 6, 164 lb uplift at joint 3, 45 lb uplift at joint 4 and 80 lb uplift at joint 5.
 - 11) This truss has been designed for a total drag load of 250 plf. Lumber DOL=(1.33) Plate grip DOL=(1.33) Connect truss to resist drag loads along bottom chord from 0-0-0 to 1-10-8 for 250.0 plf.

LOAD CASE(S) Standard



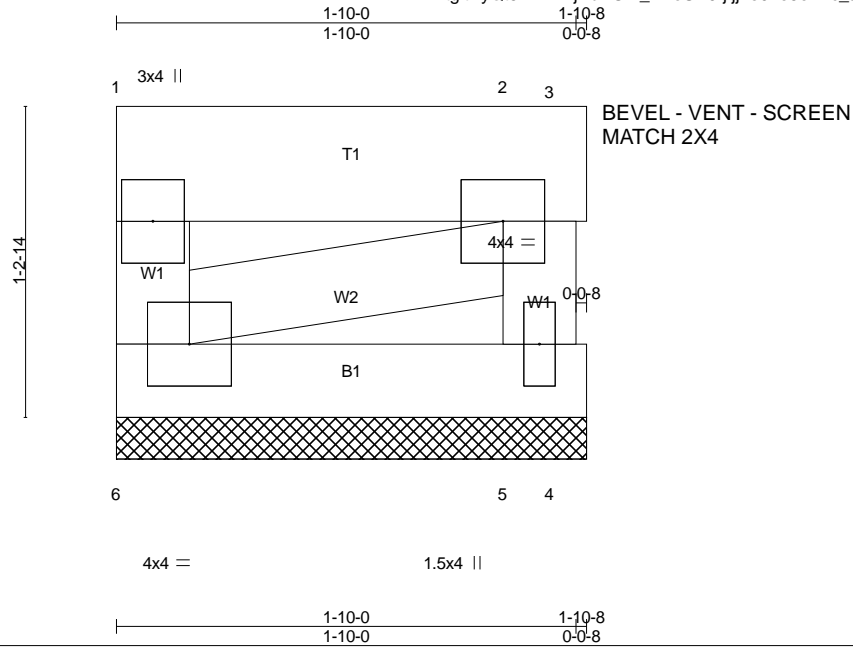
2/04/25

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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0 (Roof Snow=25.0)	2-0-0	TC 0.04	in (loc) l/defl L/d	MT20	185/148
TCDL 8.0	Plate Grip DOL 1.15	BC 0.07	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.15	Vert(CT) n/a - n/a 999		
BCDL 7.0	Rep Stress Incr NO	Matrix-P	Horz(CT) -0.00 3 n/a n/a		
	Code IBC2021/TPI2014			Weight: 9 lb	FT = 20%

LUMBER-
 TOP CHORD 2x6 DF SS
 BOT CHORD 2x4 HF-N No.1/No.2
 WEBS 2x4 DF Stud

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 1-10-8 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

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

REACTIONS. (lb/size) 6=59/1-10-8 (min. 0-1-8), 3=6/1-10-8 (min. 0-1-8), 4=-19/1-10-8 (min. 0-1-8), 5=92/1-10-8 (min. 0-1-8)
 Max Horz 6=-16(LC 37)
 Max Uplift 6=-236(LC 32), 3=-147(LC 35), 4=-45(LC 3), 5=-78(LC 35)
 Max Grav 6=246(LC 53), 3=145(LC 36), 5=142(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-393/396
 BOT CHORD 5-6=-394/394
 WEBS 2-6=-512/505

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=110mph (3-second gust) Vasd=87mph; TC DL=4.2psf; BCDL=4.2psf; 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=1.60 plate grip DOL=1.60
 - 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; Pf=25.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 4) Provide adequate drainage to prevent water ponding.
 - 5) Gable requires continuous bottom chord bearing.
 - 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - 7) Gable studs spaced at 2-0-0 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 23.0psf 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 236 lb uplift at joint 6, 147 lb uplift at joint 3, 45 lb uplift at joint 4 and 78 lb uplift at joint 5.
 - 11) This truss has been designed for a total drag load of 250 plf. Lumber DOL=(1.33) Plate grip DOL=(1.33) Connect truss to resist drag loads along bottom chord from 0-0-0 to 1-10-8 for 250.0 plf.

LOAD CASE(S) Standard



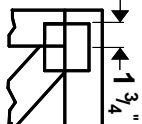
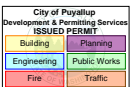
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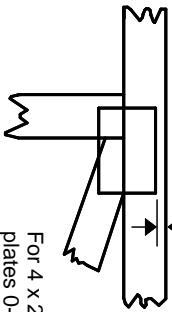


Symbols

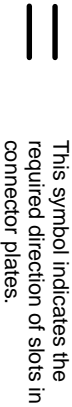
PLATE LOCATION AND ORIENTATION



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- $\frac{1}{16}$ " from outside edge of truss.



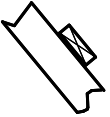
* Plate location details available in **MITek 20/20 software or upon request.**

PLATE SIZE

4 X 4

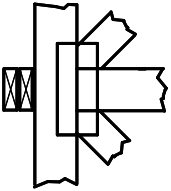
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

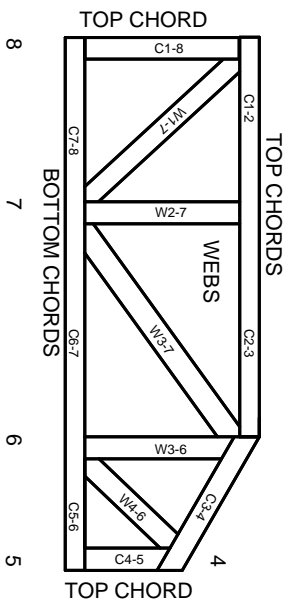


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI 1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing, Building Component Safety Information, Guide to Good Practice for Handling, Installing & 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-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

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 T or 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.



MITteK Engineering Reference Sheet: Mill-7473 rev. 5/19/2020