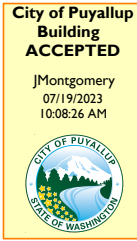




ROOF TRUSSES



Re: J1086674  
HC Homes Inc



Tri-State Engineering, Inc.  
12810 NE 178th Street  
Suite 218  
Woodinville, WA 98072  
425.481.6601

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 (Sumner).

Pages or sheets covered by this seal: I14706691 thru I14706706

My license renewal date for the state of Washington is August 20, 2024.

**REPORT REQUIRED TO BE PROVIDED BY THE PERMITTEE ON SITE FOR ALL INSPECTIONS**



April 17, 2023

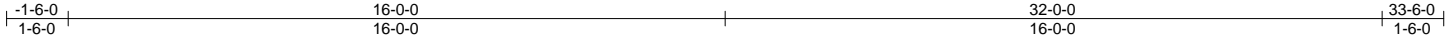
Terry Powell

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 (Sumner), Sumner, WA - 98390,

Job Reference (optional)  
8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Apr 14 16:51:58 2023 Page 1

ID:YLcgXvNjyDRbUpX6?FIHQ?zUjAK-9TGt7hIH\_KQ941Za4Ps\_Jn074rnBJMZjNa0W3zQkq?



Scale = 1:56.1

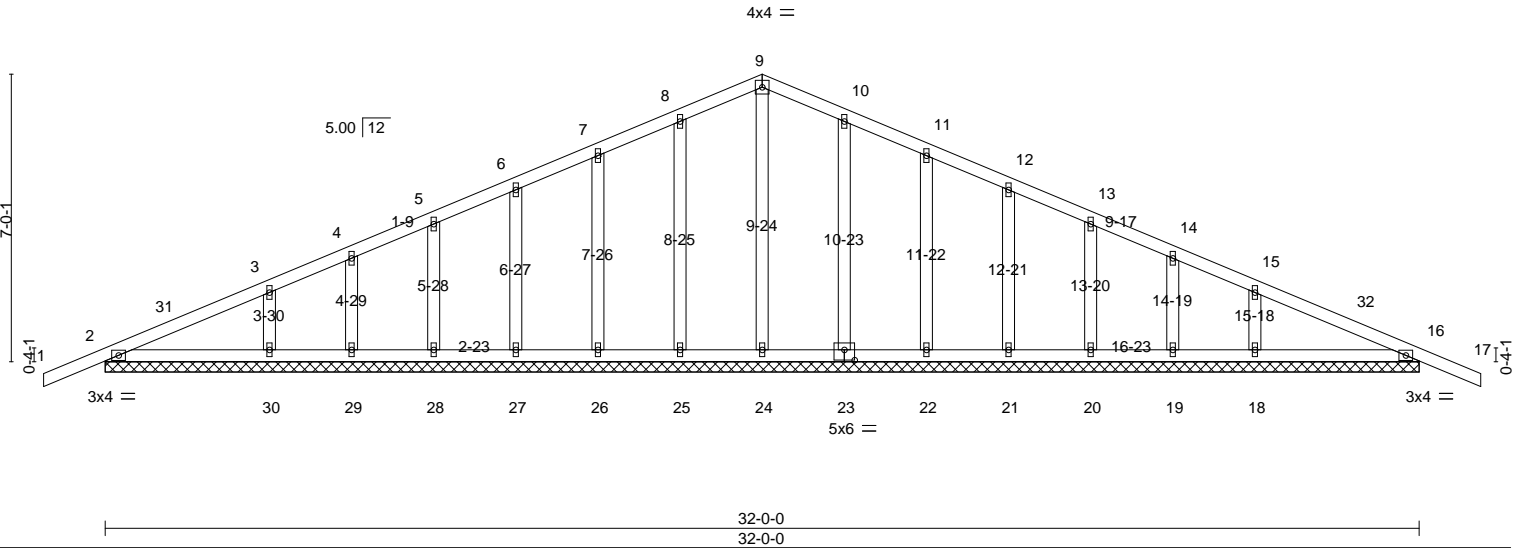


Plate Offsets (X,Y)-- [23-0-3-0-0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0 (Roof Snow=25.0)	2-0-0	TC 0.14	in (loc) l/defl L/d	MT20	185/148
TCDL 8.0	Plate Grip DOL 1.15	BC 0.08	Vert(LL) 0.00 17 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.13	Vert(CT) 0.01 17 n/r 90		
BCDL 7.0	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.00 16 n/a n/a		
	Code IRC2018/TPI2014			Weight: 148 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 HF No.2  
BOT CHORD 2x4 HF No.2  
OTHERS 2x4 DF Stud

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** All bearings 32-0-0.  
(b) - Max Horz 2=71(LC 13)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 25, 26, 27, 28, 29, 30, 23, 22, 21, 20, 19, 18, 16  
Max Grav All reactions 250 lb or less at joint(s) 24, 25, 26, 27, 28, 29, 23, 22, 21, 20, 19 except 2=258(LC 19), 30=286(LC 1), 18=286(LC 1), 16=258(LC 20)

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

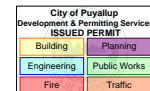
**NOTES-** (13-14)

- 1) Wind: ASCE 7-16; Vult=110mph (3-second gust) Vasd=87mph; TC DL=4.8psf; BCDL=4.2psf; h=12ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-6-0 to 1-8-6, Exterior(2N) 1-8-6 to 12-9-10, Corner(3R) 12-9-10 to 19-2-6, Exterior(2N) 19-2-6 to 30-3-10, Corner(3E) 30-3-10 to 33-6-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 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 16.0 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 requires continuous bottom chord bearing.
- 8) Gable studs spaced at 2-0-0 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 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.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 25, 26, 27, 28, 29, 30, 23, 22, 21, 20, 19, 18, 16.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 13) All dimensions given in feet-inches-sixteenths (FFI/SS) format.
- 14) Notch 4-0-0 o.c.

**LOAD CASE(S)** Standard



April 17, 2023



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

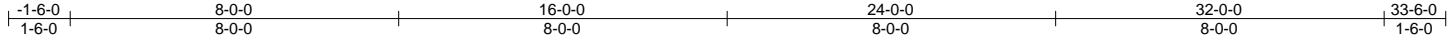
Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral 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 ANS/TPI1 Quality Criteria, DSB-89 and BCS11 Building Component Safety Information available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.



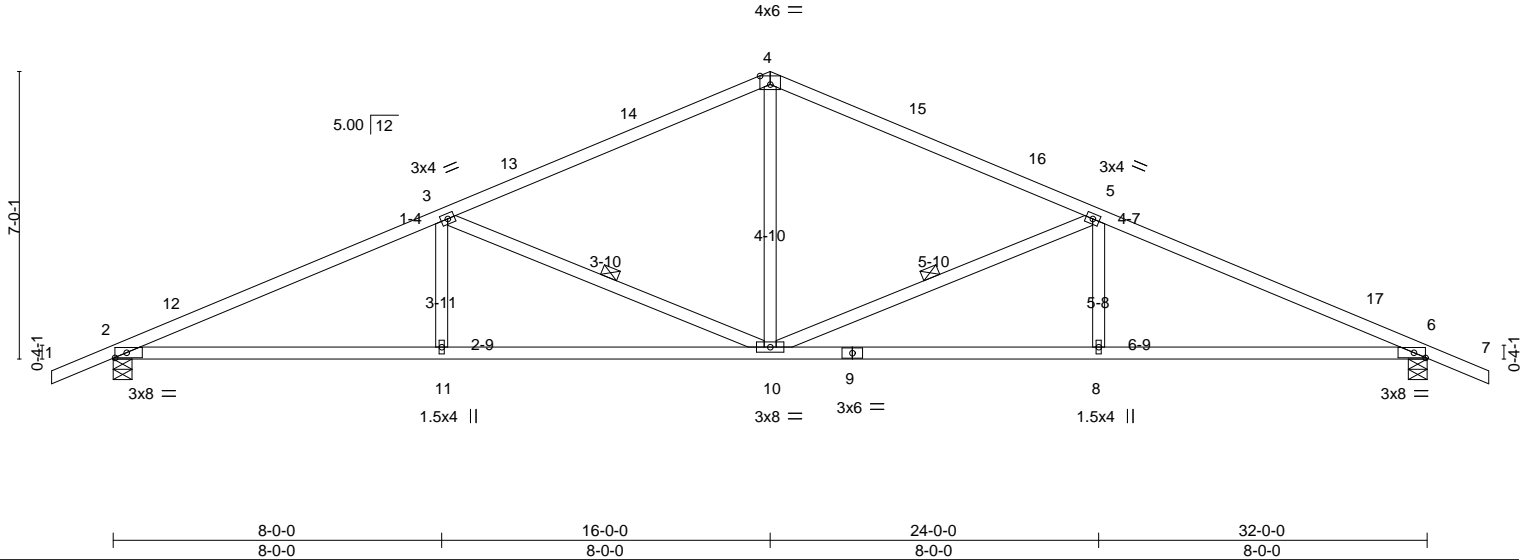
The Truss Company (Sumner), Sumner, WA - 98390,

Job Reference (optional)  
6.630 s Nov 19 2022 MiTek Industries, Inc. Fri Apr 14 16:51:59 2023 Page 1

ID:YlCgXvNjyDRbUpX6?FIHQ?zUjAK-dgqr\_ShN2ISHnEbl8nw5XWK?DU2Lwjmiy1Ka3WzQkq\_



Scale = 1:56.1



<b>LOADING (psf)</b>	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
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 IRC2018/TPI2014	TC 0.95 BC 0.70 WB 0.38 Matrix-SH	in (loc) l/defl L/d Vert(LL) -0.17 10 >999 360 Vert(CT) -0.30 8-10 >999 240 Horz(CT) 0.13 6 n/a n/a	MT20 Weight: 125 lb	185/148 FT = 20%

**LUMBER-**  
TOP CHORD 2x4 DF No.1&Btr  
BOT CHORD 2x4 HF No.2  
WEBS 2x4 DF Stud \*Except\*  
5-10,3-10: 2x4 HF No.2

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 5-10, 3-10

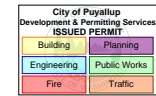
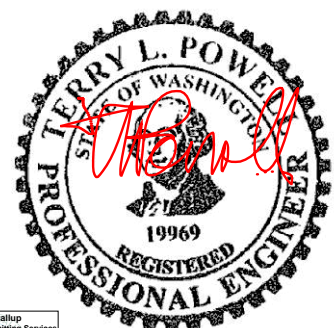
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 2=1376/0-5-8 (min. 0-2-4), 6=1376/0-5-8 (min. 0-2-4)  
Max Horz 2=71(LC 13)  
Max Uplift 2=46(LC 12), 6=46(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-12=-2608/34, 3-12=-2514/61, 3-13=-1746/66, 13-14=-1635/80, 4-14=-1624/92, 4-15=-1624/92, 15-16=-1635/80, 5-16=-1746/66,  
5-17=-2514/61, 6-17=-2608/34  
BOT CHORD 2-11=-61/2319, 10-11=-61/2319, 9-10=0/2319, 8-9=0/2319, 6-8=0/2319  
WEBS 4-10=0/781, 5-10=-1006/109, 5-8=0/284, 3-10=-1006/109, 3-11=0/284

- NOTES-** (9)
- 1) Wind: ASCE 7-16; Vult=110mph (3-second gust) Vasd=87mph; TCDL=4.8psf; BCDL=4.2psf; h=12ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-8-6, Interior(1) 1-8-6 to 12-9-10, Exterior(2R) 12-9-10 to 19-2-6, Interior(1) 19-2-6 to 30-3-10, Exterior(2E) 30-3-10 to 33-6-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 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 16.0 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
  - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 9) All dimensions given in feet-inches-sixteenths (FFI/ISS) format.

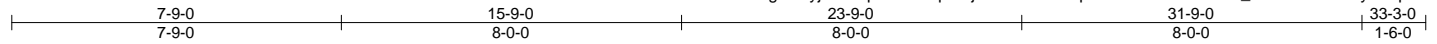
**LOAD CASE(S)** Standard



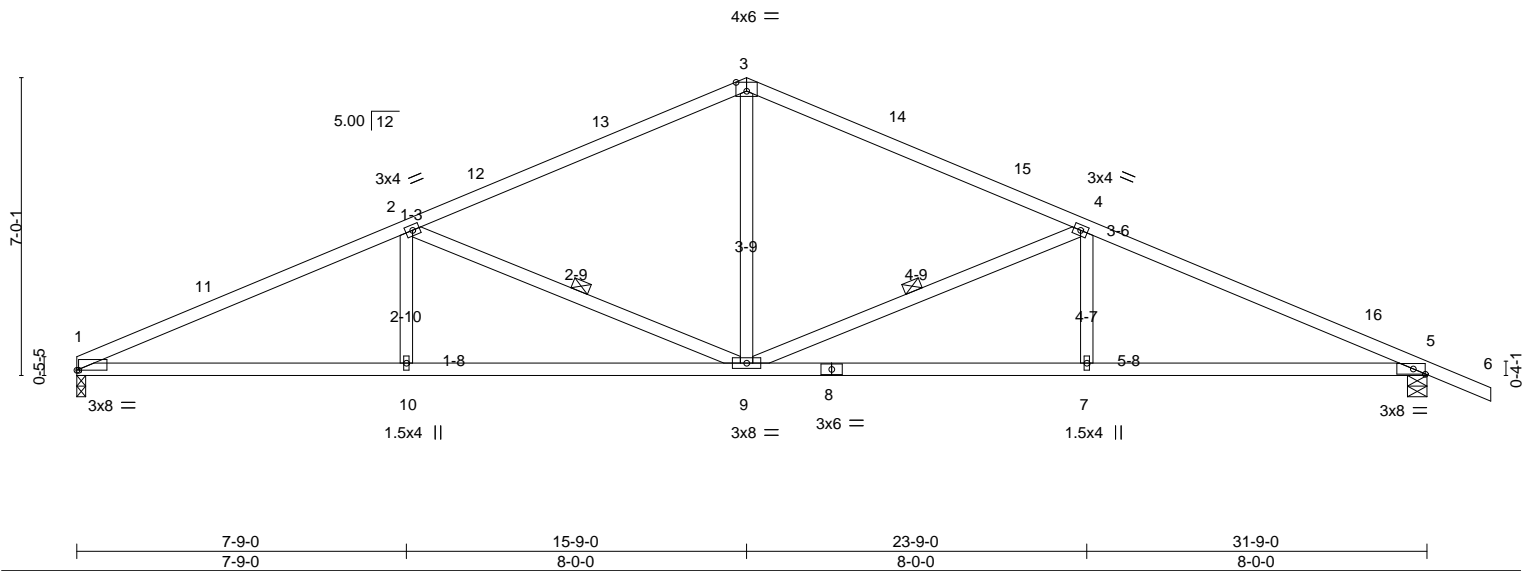
April 17, 2023

The Truss Company (Sumner), Sumner, WA - 98390,

ID:YLcgXvNyjDRbUpX6?FIHQ?zUjAK-5sODBoi?pb8OOAxhVRK3ks9\_uNnfA0rBh37ayzQkpz



Scale = 1:54.2



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
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 IRC2018/TPI2014	TC 0.95 BC 0.75 WB 0.38 Matrix-SH	in (loc) l/defl L/d Vert(LL) -0.17 1-10 >999 360 Vert(CT) -0.30 7-9 >999 240 Horz(CT) 0.13 5 n/a n/a	MT20	185/148
				Weight: 123 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 DF No.1&Btr  
BOT CHORD 2x4 HF No.2  
WEBS 2x4 DF Stud \*Except\*  
4-9,2-9: 2x4 HF No.2

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 4-9, 2-9

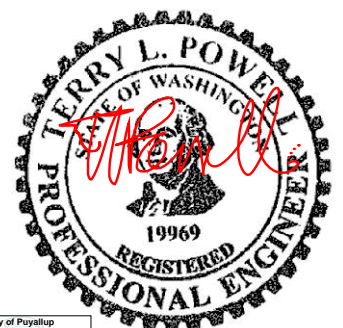
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 1=1254/0-2-8 (min. 0-2-1), 5=1374/0-5-8 (min. 0-2-4)  
Max Horz 1=77(LC 13)  
Max Uplift 1=28(LC 12), 5=-46(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-11=-2596/60, 2-11=-2511/78, 2-12=-1741/70, 12-13=-1629/85, 3-13=-1619/97, 3-14=-1619/97, 14-15=-1629/85, 4-15=-1741/70,  
4-16=-2510/65, 5-16=-2603/39  
BOT CHORD 1-10=-65/2311, 9-10=-65/2311, 8-9=0/2314, 7-8=0/2314, 5-7=0/2314  
WEBS 3-9=0/779, 4-9=-1006/109, 4-7=0/283, 2-9=-1002/113, 2-10=0/283

- NOTES-** (10)
- 1) Wind: ASCE 7-16; Vult=110mph (3-second gust) Vasd=87mph; TCDL=4.8psf; BCDL=4.2psf; h=12ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-4 to 3-3-6, Interior(1) 3-3-6 to 12-6-14, Exterior(2R) 12-6-14 to 18-11-2, Interior(1) 18-11-2 to 30-0-14, Exterior(2E) 30-0-14 to 33-3-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 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 16.0 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) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 1.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5.
  - 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 10) All dimensions given in feet-inches-sixteenths (FFI/ISS) format.

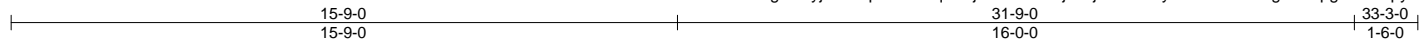
**LOAD CASE(S)** Standard



April 17, 2023

The Truss Company (Sumner), Sumner, WA - 98390,

8.630 s Nov 19 2022 MITek Industries, Inc. Fri Apr 14 16:52:01 2023 Page 1  
 ID:YLcgXvNyjDRbUpX6?FIHq?zUjAK-Z2xbP8jeav?0XI8FCyZcxPWNiIGOG6?PLpg6OzQkpy



Scale = 1:54.5

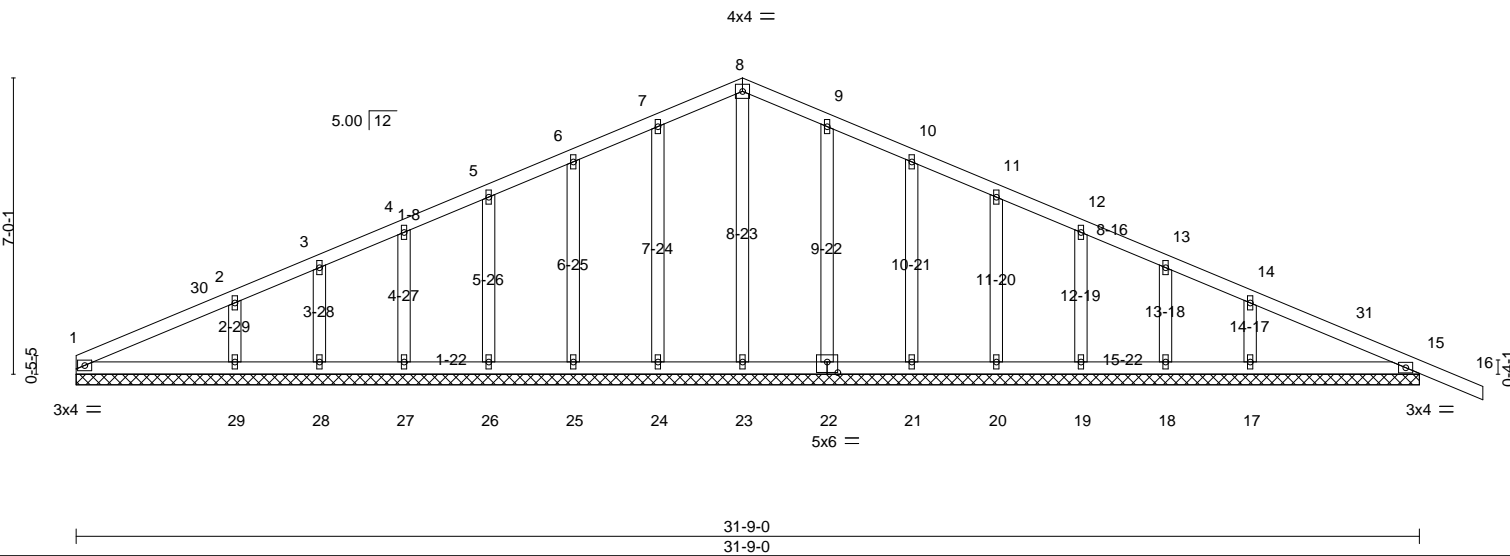


Plate Offsets (X,Y)-- [22:0-3:0,0-3-0]	
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0
TCLL 25.0 (Roof Snow=25.0)	Plate Grip DOL 1.15
TCDL 8.0	Lumber DOL 1.15
BCLL 0.0 *	Rep Stress Incr YES
BCDL 7.0	Code IRC2018/TPI2014
<b>CSL</b>	<b>DEFL.</b> in (loc) l/defl L/d
TC 0.14	Vert(LL) 0.00 16 n/r 120
BC 0.09	Vert(CT) 0.01 16 n/r 90
WB 0.13	Horz(CT) 0.00 15 n/a n/a
Matrix-SH	
<b>PLATES</b>	<b>GRIP</b>
MT20	185/148
Weight: 145 lb FT = 20%	

**LUMBER-**  
 TOP CHORD 2x4 HF No.2  
 BOT CHORD 2x4 HF No.2  
 OTHERS 2x4 DF Stud

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

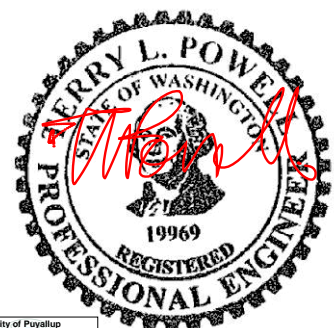
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** All bearings 31-9-0.  
 (lb) - Max Horz 1=77(LC 13)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 24, 25, 26, 27, 28, 29, 22, 21, 20, 19, 18, 17, 15  
 Max Grav All reactions 250 lb or less at joint(s) 1, 23, 24, 25, 26, 27, 28, 22, 21, 20, 19, 18 except 29=306(LC 1), 17=286(LC 1), 15=258(LC 20)

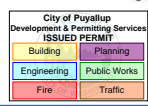
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- NOTES-** (13-14)
- 1) Wind: ASCE 7-16; Vult=110mph (3-second gust) Vasd=87mph; TCDL=4.8psf; BCDL=4.2psf; h=12ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-0-0 to 3-2-2, Exterior(2N) 3-2-2 to 12-6-14, Corner(3R) 12-6-14 to 18-11-2, Exterior(2N) 18-11-2 to 30-0-14, Corner(3E) 30-0-14 to 33-3-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 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 16.0 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 requires continuous bottom chord bearing.
  - 8) Gable studs spaced at 2-0-0 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 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.
  - 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 24, 25, 26, 27, 28, 29, 22, 21, 20, 19, 18, 17, 15.
  - 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 13) All dimensions given in feet-inches-sixteenths (FFI/SS) format.
  - 14) Notch 4-0-0 o.c.

**LOAD CASE(S)** Standard



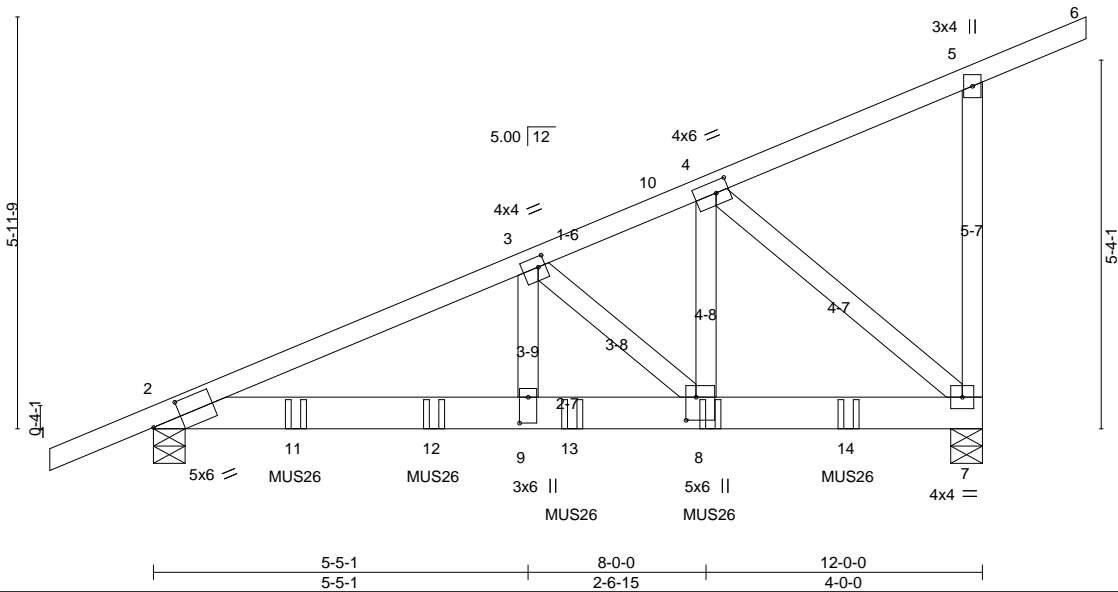
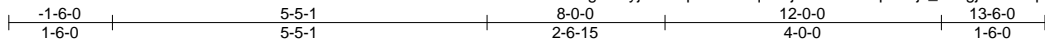
April 17, 2023



**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, 583 D'Onofrio Drive, Madison, WI 53719.





Scale = 1:33.4

Plate Offsets (X,Y)-- [2:0-5-1,0-2-10], [3:0-1-4,0-1-12], [4:0-2-4,0-2-0], [8:0-4-0,0-1-12], [9:0-4-8,0-1-8]

<b>LOADING</b> (psf)	TCLL 25.0 (Roof Snow=25.0) TCDL 8.0 BCLL 0.0 * BCDL 7.0	<b>SPACING-</b>	2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO Code IRC2018/TPI2014	<b>CSI.</b>	TC 0.45 BC 0.80 WB 0.67 Matrix-P	<b>DEFL.</b>	in (loc) l/defl L/d Vert(LL) -0.09 2-9 >999 360 Vert(CT) -0.15 2-9 >921 240 Horz(CT) 0.02 7 n/a n/a	<b>PLATES</b>	<b>GRIP</b>
								MT20	185/148
								Weight: 135 lb	FT = 20%

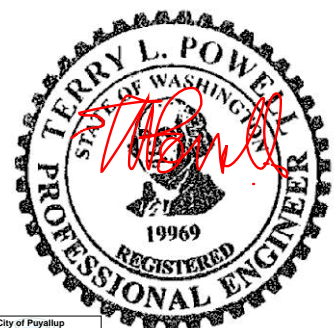
<b>LUMBER-</b>	TOP CHORD 2x4 HF No.2 BOT CHORD 2x6 DF SS WEBS 2x4 DF Stud	<b>BRACING-</b>	TOP CHORD Structural wood sheathing directly applied or 4-4-10 oc purlins, except end verticals. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
----------------	--	-----------------	--

**REACTIONS.** (lb/size) 7=3715/0-5-8 (min. 0-3-3), 2=3713/0-5-8 (min. 0-3-1)  
 Max Horz 2=142(LC 7)  
 Max Uplift 7=245(LC 10), 2=211(LC 10)  
 Max Grav 7=3902(LC 17), 2=3739(LC 17)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=6356/327, 3-10=3713/189, 4-10=3649/198, 5-7=376/58  
 BOT CHORD 2-11=338/5782, 11-12=338/5782, 9-12=338/5782, 9-13=338/5782, 8-13=183/3402, 7-14=183/3402  
 WEBS 3-9=124/2854, 3-8=3147/204, 4-8=220/4025, 4-7=4468/276

- NOTES-** (13)
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Wind: ASCE 7-16; Vult=110mph (3-second gust) Vasd=87mph; TCDL=4.2psf; BCDL=4.2psf; h=12ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 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
  - Unbalanced snow loads have been considered for this design.
  - This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=245, 2=211.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Use MITek MUS26 (With 6-10d nails into Girder & 6-10d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left end to 10-0-12 to connect truss(es) A3 (1 ply 2x6 DF) to front face of bottom chord.
  - Fill all nail holes where hanger is in contact with lumber.
  - All dimensions given in feet-inches-sixteenths (FFI/SS) format.

**LOAD CASE(S)** Standard  
 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-5=-66, 5-6=-66, 2-7=-14  
 Concentrated Loads (lb)  
 Vert: 8=-1255(F) 11=-1255(F) 12=-1255(F) 13=-1255(F) 14=-1255(F)



April 17, 2023

**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, 583 D'Onofrio Drive, Madison, WI 53719.



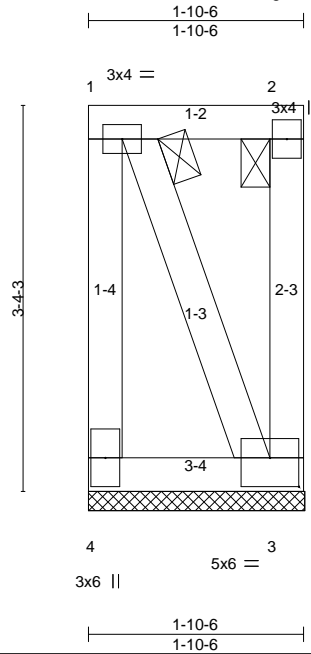


Job J1086674	Truss BP1	Truss Type FLAT SUPPORTED GABLE	Qty 18	Ply 1	HC Homes Inc	PRNSF20230918	114706697
-----------------	--------------	------------------------------------	-----------	----------	--------------	---------------	-----------

The Truss Company (Sumner), Sumner, WA - 98390,

Job Reference (optional)  
8,630 s Nov 19 2022 MiTek Industries, Inc. Fri Apr 14 16:52:11 2023 Page 1

ID:YLcgXvNyjDRbUpX6?FIHQ?zUjAK-GzYVNZrvD\_zaD4W3ri8v0zPDKI2jBBTjvECTpzQkpo



Scale = 1:20.0

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

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 25.0 (Roof Snow=25.0)	2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15	TC 0.25 BC 0.06 WB 0.22 Matrix-P	in (loc) l/defl L/d Vert(LL) n/a - n/a 999 Vert(CT) n/a - n/a 999 Horz(CT) -0.00 3 n/a n/a	MT20	185/148
TCDL 8.0 BCLL 0.0 * BCDL 7.0	Rep Stress Incr NO Code IRC2018/TPI2014			Weight: 16 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 HF No.2  
BOT CHORD 2x4 HF No.2  
WEBS 2x4 DF Stud

**BRACING-**  
TOP CHORD 2-0-0 oc purlins: 1-2, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

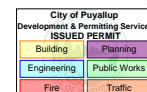
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 4=63/1-10-8 (min. 0-1-8), 3=63/1-10-8 (min. 0-1-8)  
Max Horz 4=65(LC 8)  
Max Uplift 4=831(LC 29), 3=831(LC 32)  
Max Grav 4=838(LC 36), 3=838(LC 33)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-4=827/837, 1-2=378/372  
BOT CHORD 3-4=410/405  
WEBS 1-3=930/930

- NOTES-** (14)
- 1) Wind: ASCE 7-16; Vult=110mph (3-second gust) Vasd=87mph; TCDL=4.8psf; BCDL=4.2psf; h=12ft; 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 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=831, 3=831.
  - 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 12) This truss has been designed for a total drag load of 250 plf. Lumber DOL=(1.60) Plate grip DOL=(1.60) Connect truss to resist drag loads along bottom chord from 0-0-0 to 1-10-6 for 250.0 plf.
  - 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 14) All dimensions given in feet-inches-sixteenths (FFI/SS) format.

**LOAD CASE(S)** Standard



April 17, 2023

**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, 583 D'Onofrio Drive, Madison, WI 53719.





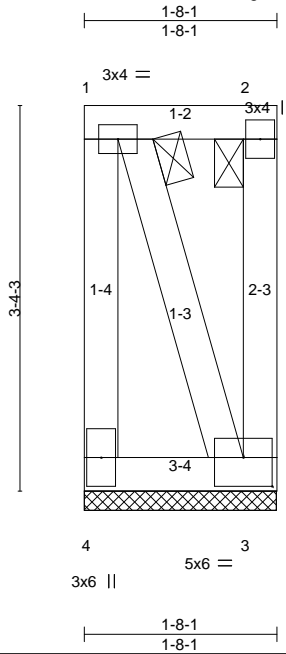
Job J1086674	Truss BP2	Truss Type FLAT SUPPORTED GABLE	Qty 2	Ply 1	HC Homes Inc	PRNSF20230918	114706698
-----------------	--------------	------------------------------------	----------	----------	--------------	---------------	-----------

The Truss Company (Sumner), Sumner, WA - 98390,

Job Reference (optional)

8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Apr 14 16:52:12 2023 Page 1

ID:YLcgXvNjyDRbUpX6?FIHQ?zUjAK-IA6mjvrX\_H5RrE5F00f8YGM0vjeTSeUcxZzm?GzQkpn



Scale = 1:20.0

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

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 25.0 (Roof Snow=25.0)	2-0-0	TC 0.25	in (loc) l/defl L/d	MT20	185/148
TCDL 8.0	Plate Grip DOL 1.15	BC 0.05	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.22	Vert(CT) n/a - n/a 999		
BCDL 7.0	Rep Stress Incr YES	Matrix-P	Horz(CT) -0.00 3 n/a n/a		
	Code IRC2018/TPI2014			Weight: 15 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 HF No.2  
BOT CHORD 2x4 HF No.2  
WEBS 2x4 DF Stud

**BRACING-**  
TOP CHORD 2-0-0 oc purlins: 1-2, 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) 4=55/1-8-0 (min. 0-1-8), 3=55/1-8-0 (min. 0-1-8)  
Max Horz 4=65(LC 7)  
Max Uplift 4=839(LC 29), 3=839(LC 32)  
Max Grav 4=845(LC 36), 3=845(LC 33)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-4=836/845, 1-2=335/329  
BOT CHORD 3-4=367/361  
WEBS 1-3=917/917

- NOTES-** (14)
- 1) Wind: ASCE 7-16; Vult=110mph (3-second gust) Vasd=87mph; TCDL=4.8psf; BCDL=4.2psf; h=12ft; 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) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=839, 3=839.
  - 10) Non Standard bearing condition. Review required.
  - 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 12) This truss has been designed for a total drag load of 250 plf. Lumber DOL=(1.60) Plate grip DOL=(1.60) Connect truss to resist drag loads along bottom chord from 0-0-0 to 1-8-1 for 250.0 plf.
  - 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 14) All dimensions given in feet-inches-sixteenths (FFI/SS) format.

**LOAD CASE(S)** Standard



City of Puyallup Development & Permitting Services ISSUED PERMIT	
Building	Planning
Engineering	Public Works
Fire	Traffic

April 17, 2023

**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 ANSITPI1 Quality Criteria, DSB-89 and BCS11 Building Component Safety Information available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.



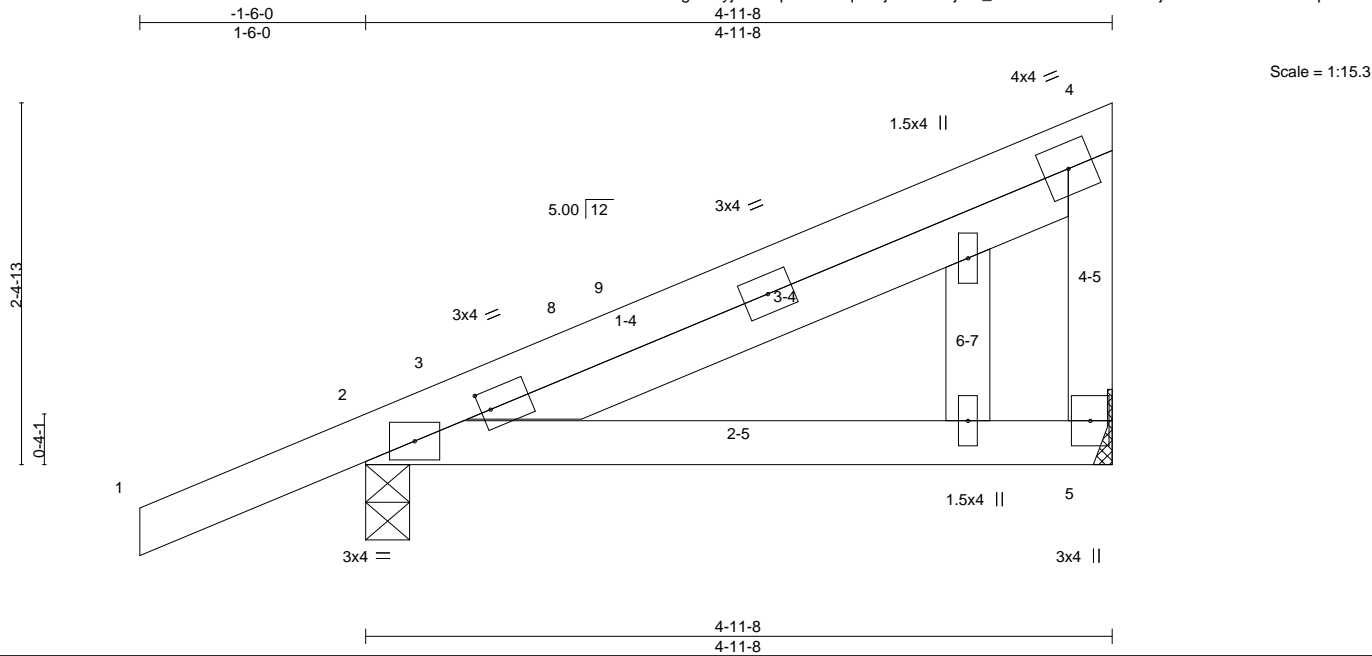


Plate Offsets (X,Y)-- [3:0-0-12,0-1-8]	
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0
TCLL 25.0 (Roof Snow=25.0)	Plate Grip DOL 1.15
TCDL 8.0	Lumber DOL 1.15
BCLL 0.0 *	Rep Stress Incr YES
BCDL 7.0	Code IRC2018/TPI2014
<b>CSL</b>	<b>DEFL.</b>
TC 0.22	in (loc) l/defl L/d
BC 0.20	Vert(LL) -0.03 2-5 >999 360
WB 0.00	Vert(CT) -0.05 2-5 >999 240
Matrix-P	Horz(CT) 0.00 5 n/a n/a
<b>PLATES</b>	<b>GRIP</b>
MT20	185/148
Weight: 25 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 DF No.1&Btr  
 BOT CHORD 2x4 HF No.2  
 WEBS 2x4 DF Stud  
 OTHERS 2x4 DF Stud  
 SLIDER Left 2x4 DF No.1&Btr 4-3-14

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-11-8 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

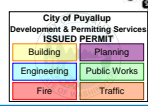
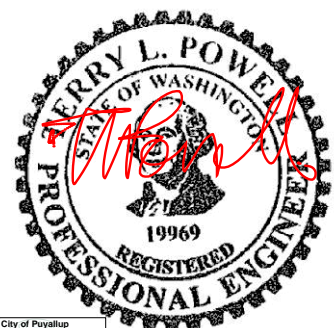
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 5=168/Mechanical, 2=314/0-3-8 (min. 0-1-8)  
 Max Horz 2=56(LC 9)  
 Max Uplift 5=13(LC 12), 2=-26(LC 12)  
 Max Grav 5=239(LC 19), 2=463(LC 19)

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

- NOTES-** (12-13)
- 1) Wind: ASCE 7-16; Vult=110mph (3-second gust) Vasd=87mph; TCDL=4.8psf; BCDL=4.2psf; h=12ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-6-0 to 1-6-0, Exterior(2N) 1-6-0 to 1-9-12, Corner(3E) 1-9-12 to 4-9-12 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 16.0 psf or 1.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
  - 6) Gable studs spaced at 2-0-0 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) Refer to girder(s) for truss to truss connections.
  - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2.
  - 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 12) All dimensions given in feet-inches-sixteenths (FFIISS) format.
  - 13) Notch 4-0-0 o.c.

**LOAD CASE(S)** Standard



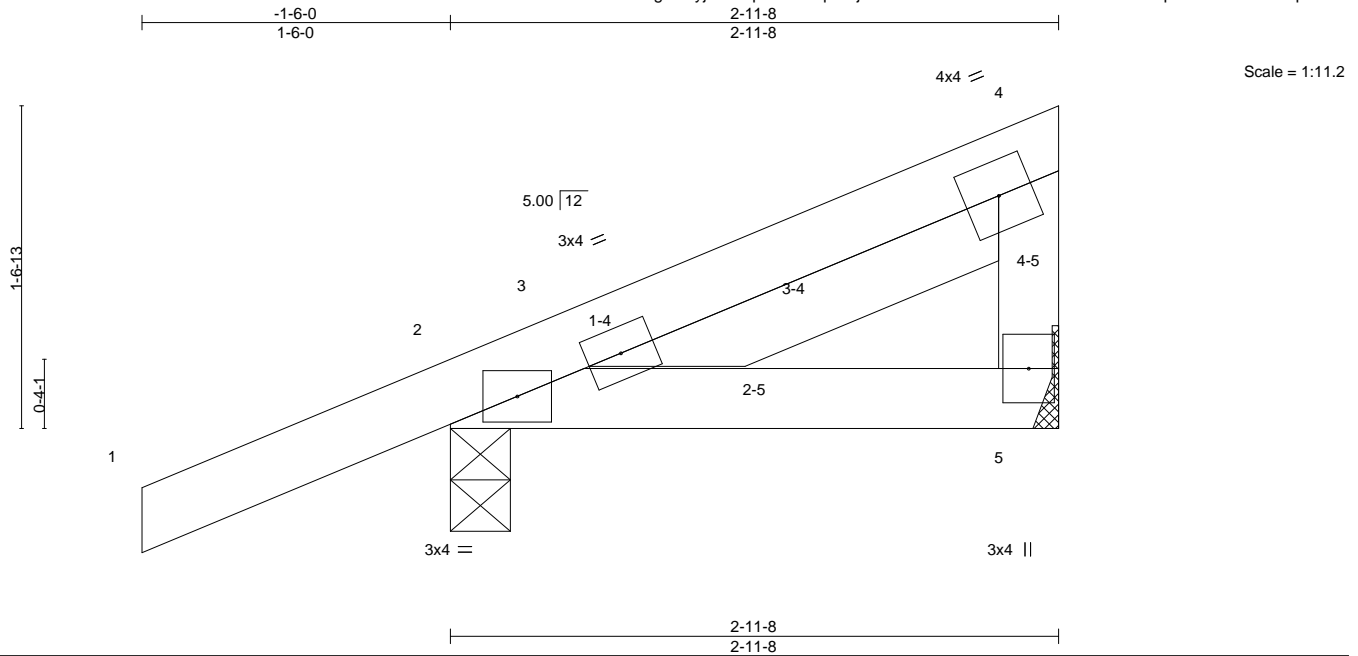
April 17, 2023



Job J1086674	Truss C3	Truss Type MONOPITCH SUPPORTED	Qty 2	Ply 1	HC Homes Inc	PRRNSF20230918	114706701
-----------------	-------------	-----------------------------------	----------	----------	--------------	----------------	-----------

The Truss Company (Sumner), Sumner, WA - 98390,

ID:YLcgXvNyjDRbUpX6?FIHQ?zUjAK-hYEW7btNwVl94XFewRrhcehRITXKpwaQvPtS148zQkpl  
8,630 s Nov 19 2022 MiTek Industries, Inc. Fri Apr 14 16:52:14 2023 Page 1



<b>LOADING</b> (psf) TCLL 25.0 (Roof Snow=25.0) TCDL 8.0 BCLL 0.0 * BCDL 7.0	<b>SPACING-</b> 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	<b>CSI.</b> TC 0.18 BC 0.06 WB 0.00 Matrix-P	<b>DEFL.</b> in (loc) l/defl L/d Vert(LL) -0.00 2-5 >999 360 Vert(CT) -0.01 2-5 >999 240 Horz(CT) 0.00 5 n/a n/a	<b>PLATES</b> MT20 <b>GRIP</b> 185/148 Weight: 14 lb FT = 20%
---	--	--	--	---

**LUMBER-**  
TOP CHORD 2x4 DF No.1&Btr  
BOT CHORD 2x4 HF No.2  
WEBS 2x4 DF Stud  
SLIDER Left 2x4 DF No.1&Btr 2-1-14

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 2-11-8 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

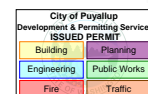
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 5=73/Mechanical, 2=249/0-3-8 (min. 0-1-8)  
Max Horz 2=36(LC 9)  
Max Uplift 5=3(LC 12), 2=29(LC 8)  
Max Grav 5=100(LC 19), 2=363(LC 19)

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

- NOTES-** (10)
- 1) Wind: ASCE 7-16; Vult=110mph (3-second gust) Vasd=87mph; TCDL=4.8psf; BCDL=4.2psf; h=12ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 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 16.0 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) Refer to girder(s) for truss to truss connections.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2.
  - 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 10) All dimensions given in feet-inches-sixteenths (FFI/SS) format.

**LOAD CASE(S)** Standard



April 17, 2023

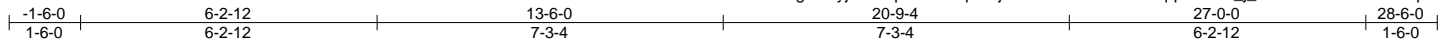
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 BEFORE USE.**  
Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and 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, 583 D'Onofrio Drive, Madison, WI 53719.



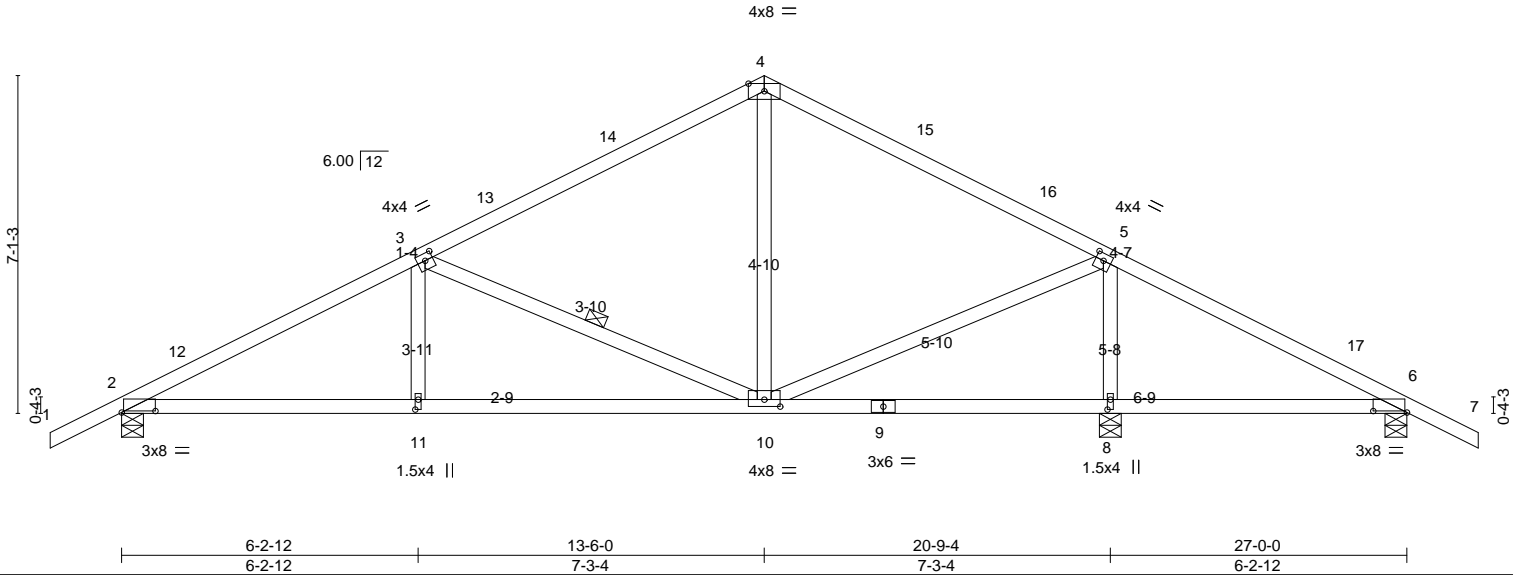
The Truss Company (Sumner), Sumner, WA - 98390,

Job Reference (optional)  
8,630 s Nov 19 2022 MiTek Industries, Inc. Fri Apr 14 16:52:15 2023 Page 1

ID:YLcgXvNjDRbUpX6?FIHq?zUjAK-9louLxuQHCT0ihqq48CrAu\_j\_xVHfw53dXCQcazQkpk



Scale: 1/4"=1'



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 0.97 BC 0.75 WB 0.49 Matrix-SH	in (loc) l/defl L/d Vert(LL) -0.09 11 >999 360 Vert(CT) -0.15 2-11 >999 240 Horz(CT) 0.05 8 n/a n/a	MT20	185/148
TCDL 8.0 BCLL 0.0 * BCDL 7.0	Rep Stress Incr NO Code IRC2018/TPI2014				Weight: 112 lb FT = 20%

**LUMBER-**  
TOP CHORD 2x4 DF 2400F 2.0E  
BOT CHORD 2x4 HF No.2  
WEBS 2x4 DF Stud \*Except\*  
5-10,3-10: 2x4 HF No.2

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-3-12 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
WEBS 1 Row at midpt 3-10

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

**REACTIONS.** (lb/size) 2=1657/0-5-8 (min. 0-2-13), 8=1604/0-5-8 (min. 0-2-10), 6=172/0-5-8 (min. 0-1-8)  
Max Horz 2=74(LC 13)  
Max Uplift 2=87(LC 12), 8=20(LC 13), 6=38(LC 13)  
Max Grav 2=1718(LC 19), 8=1604(LC 1), 6=193(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-12=2728/138, 3-12=2313/141, 3-13=1254/97, 13-14=957/102, 4-14=941/108, 4-15=908/115,  
15-16=957/101, 5-16=1030/87, 5-17=0/400, 6-17=-21/326  
BOT CHORD 2-11=-116/2249, 10-11=-116/2249, 9-10=-307/43, 8-9=-307/43, 6-8=-307/43  
WEBS 4-10=0/289, 5-10=-22/1268, 5-8=-1494/108, 3-10=-1518/141, 3-11=0/251

- NOTES-** (9)
- 1) Wind: ASCE 7-16; Vult=110mph (3-second gust) Vasd=87mph; TCDL=4.8psf; BCDL=4.2psf; h=12ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 10-6-0, Exterior(2R) 10-6-0 to 16-6-0, Interior(1) 16-6-0 to 25-6-0, Exterior(2E) 25-6-0 to 28-6-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 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 16.0 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8, 6.
  - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 9) All dimensions given in feet-inches-sixteenths (FFIIS) format.

**LOAD CASE(S)** Standard  
1) Dead + Snow (balanced); Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-2=-66, 4-7=-66, 2-6=-14  
Trapezoidal Loads (plf)  
Vert: 2=-177-to-4=-118



April 17, 2023

**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, 583 D'Onofrio Drive, Madison, WI 53719.



The Truss Company (Sumner), Sumner, WA - 98390,

Job Reference (optional)  
6,630 s Nov 19 2022 MiTek Industries, Inc. Fri Apr 14 16:52:17 2023 Page 1

ID:YLcgXvNyjDRbUpX6?FIHQ?zUjAK-57vfmcvgoqkx?zDBZFJFJ3CskGD7v2M5qhXgTzQkpi

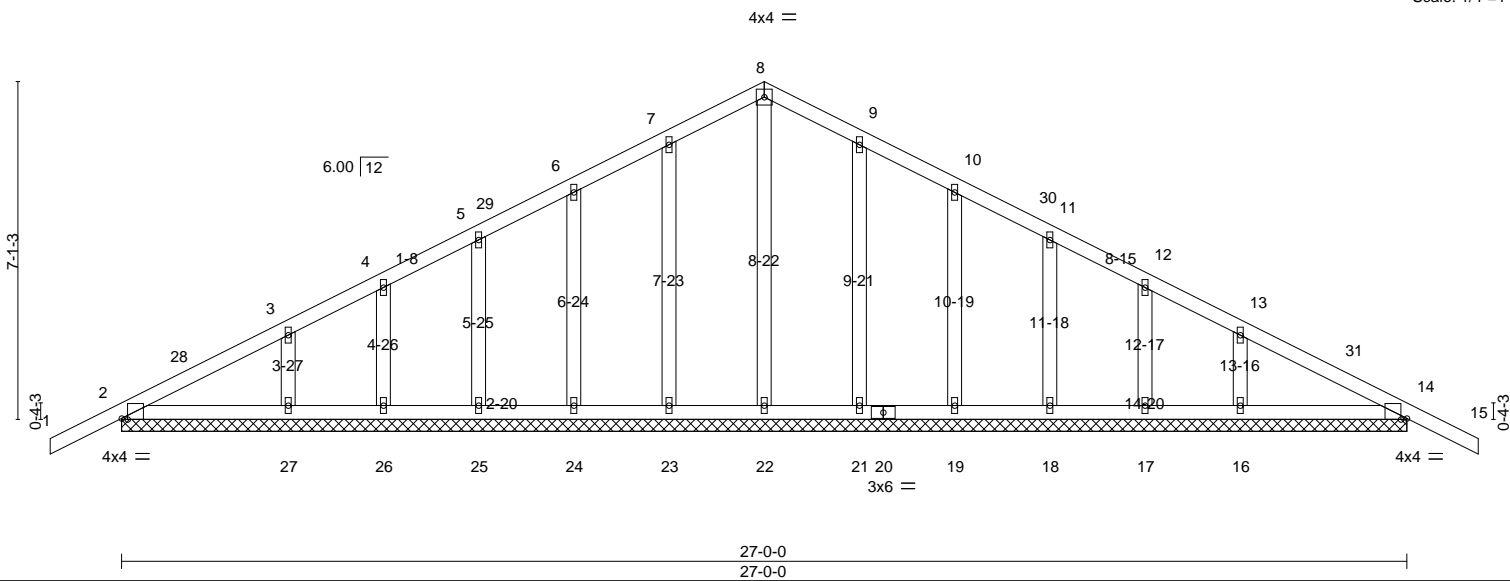
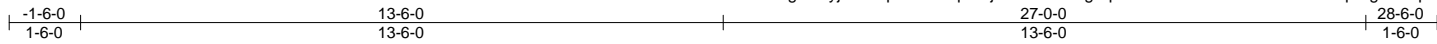


Plate Offsets (X,Y)-- [2:0-1-8,Edge], [14:0-1-8,Edge]

<b>LOADING</b> (psf)	TCLL 25.0 (Roof Snow=25.0) TCDL 8.0 BCLL 0.0 * BCDL 7.0	<b>SPACING-</b>	2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO Code IRC2018/TPI2014	<b>CSI.</b>	TC 0.37 BC 0.33 WB 0.14 Matrix-SH	<b>DEFL.</b>	in (loc) l/defl L/d Vert(LL) 0.00 15 n/r 120 Vert(CT) 0.00 15 n/r 90 Horz(CT) 0.03 22 n/a n/a	<b>PLATES</b>	<b>GRIP</b>
								MT20	185/148
								Weight: 128 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 HF No.2  
BOT CHORD 2x4 HF No.2  
OTHERS 2x4 DF Stud

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 3-8-13 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 4-0-7 oc bracing.

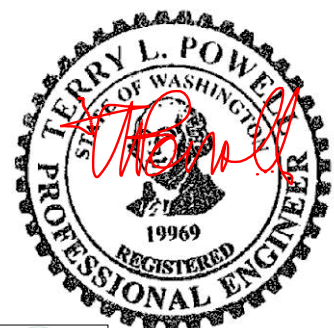
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** All bearings 27-0-0.  
(lb) - Max Horz 2=74(LC 45)  
Max Uplift All uplift 100 lb or less at joint(s) 23, 24, 25, 26, 27, 21, 19, 18, 17, 16 except 2=1038(LC 44), 14=1042(LC 45)  
Max Grav All reactions 250 lb or less at joint(s) 22, 24, 25, 26, 27, 19, 18, 17, 16 except 2=1109(LC 55), 23=252(LC 19), 21=252(LC 20), 14=1109(LC 54)

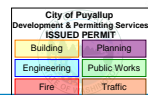
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-28=-2351/2295, 3-28=-2084/2041, 3-4=-1716/1719, 4-5=-1370/1396, 5-29=-1027/1075, 6-29=-893/888, 6-7=-683/755, 7-8=-346/433, 8-9=-346/428, 9-10=-681/738, 10-30=-912/859, 11-30=-1016/1048, 11-12=-1351/1365, 12-13=-1693/1687, 13-31=-2052/2022, 14-31=-2320/2267  
BOT CHORD 2-27=-2023/2095, 26-27=-1503/1570, 25-26=-1203/1270, 24-25=-903/970, 23-24=-603/670, 22-23=-303/370, 21-22=-303/370, 20-21=-333/400, 19-20=-603/670, 18-19=-903/970, 17-18=-1203/1270, 16-17=-1503/1570, 14-16=-2023/2095

- NOTES-** (15)
- 1) Wind: ASCE 7-16; Vult=110mph (3-second gust) Vasd=87mph; TCDL=4.8psf; BCDL=4.2psf; h=12ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-6-0 to 1-6-0, Exterior(2N) 1-6-0 to 10-6-0, Corner(3R) 10-6-0 to 16-6-0, Exterior(2N) 16-6-0 to 25-6-0, Corner(3E) 25-6-0 to 28-6-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 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 16.0 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 requires continuous bottom chord bearing.
  - 8) Gable studs spaced at 2-0-0 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 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.
  - 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 23, 24, 25, 26, 27, 21, 19, 18, 17, 16 except (jt=lb) 2=1038, 14=1042.
  - 12) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 14.
  - 13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 14) This truss has been designed for a total drag load of 150 plf. Lumber DOL=(1.60) Plate grip DOL=(1.60) Connect truss to resist drag loads along bottom chord from 0-0-0 to 27-0-0 for 150.0 plf.
  - 15) All dimensions given in feet-inches-sixteenths (FFI/SS) format.

**LOAD CASE(S)** Standard



April 17, 2023



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

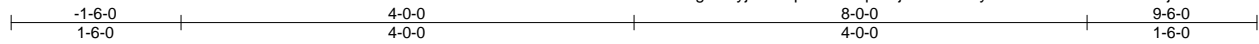
Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral 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, 583 D'Onofrio Drive, Madison, WI 53719.



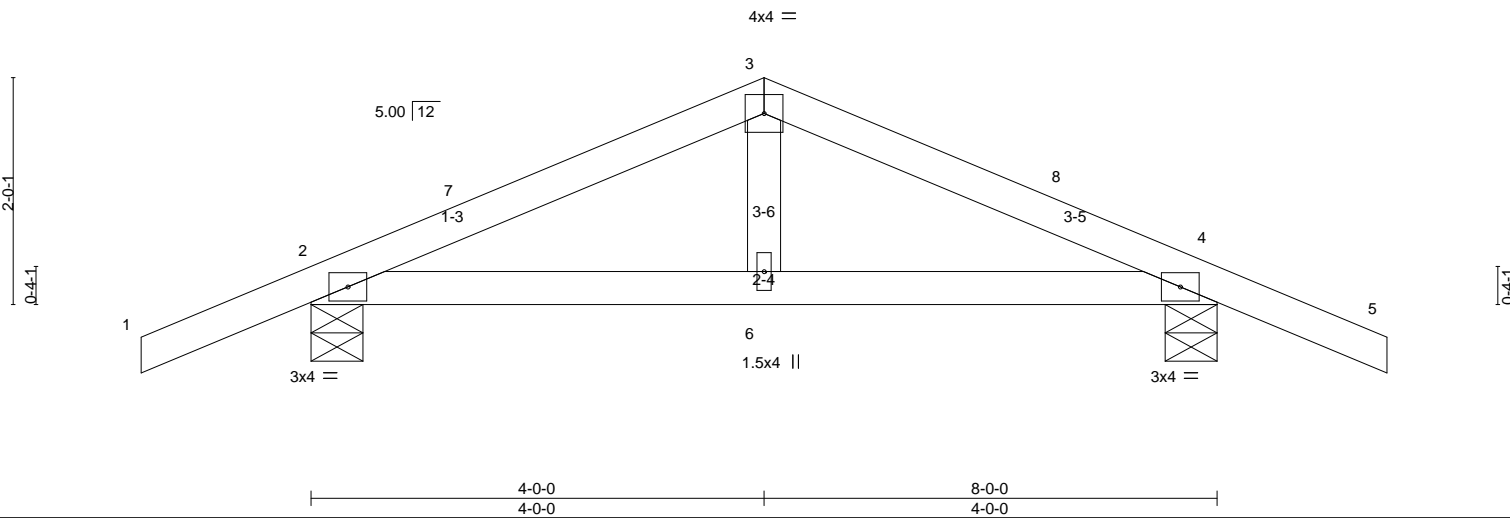
The Truss Company (Sumner), Sumner, WA - 98390,

Job Reference (optional)  
8,630 s Nov 19 2022 MiTek Industries, Inc. Fri Apr 14 16:52:18 2023 Page 1

ID:YLcgXvNjyDRbUpX6?FIHQ?zUjAK-ZKT1zywIz7sbZ9YPIGmYoXcOj8fcsOIVKUQ4DvzQkph



Scale = 1:20.3



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 25.0 (Roof Snow=25.0)	2-0-0	TC 0.30	in (loc) l/defl L/d	MT20	185/148
TCDL 8.0	Plate Grip DOL 1.15	BC 0.13	Vert(LL) -0.01 2-6 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.05	Vert(CT) -0.01 2-6 >999 240		
BCDL 7.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 4 n/a n/a		
	Code IRC2018/TPI2014			Weight: 25 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 HF No.2  
BOT CHORD 2x4 HF No.2  
WEBS 2x4 DF Stud

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

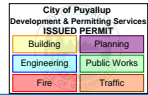
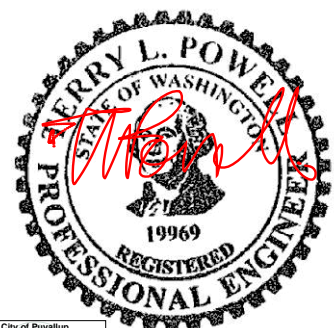
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 2=416/0-5-8 (min. 0-1-8), 4=416/0-5-8 (min. 0-1-8)  
Max Horz 2=22(LC 16)  
Max Uplift 2=-26(LC 12), 4=-26(LC 13)  
Max Grav 2=555(LC 19), 4=555(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-7=-408/60, 3-7=-314/72, 3-8=-314/72, 4-8=-408/60  
BOT CHORD 2-6=0/286, 4-6=0/286

- NOTES-** (9)
- 1) Wind: ASCE 7-16; Vult=110mph (3-second gust) Vasd=87mph; TCDL=4.8psf; BCDL=4.2psf; h=12ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Exterior(2R) 1-6-0 to 6-6-0, Exterior(2E) 6-6-0 to 9-6-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 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 16.0 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
  - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 9) All dimensions given in feet-inches-sixteenths (FFI/SS) format.

**LOAD CASE(S)** Standard



April 17, 2023



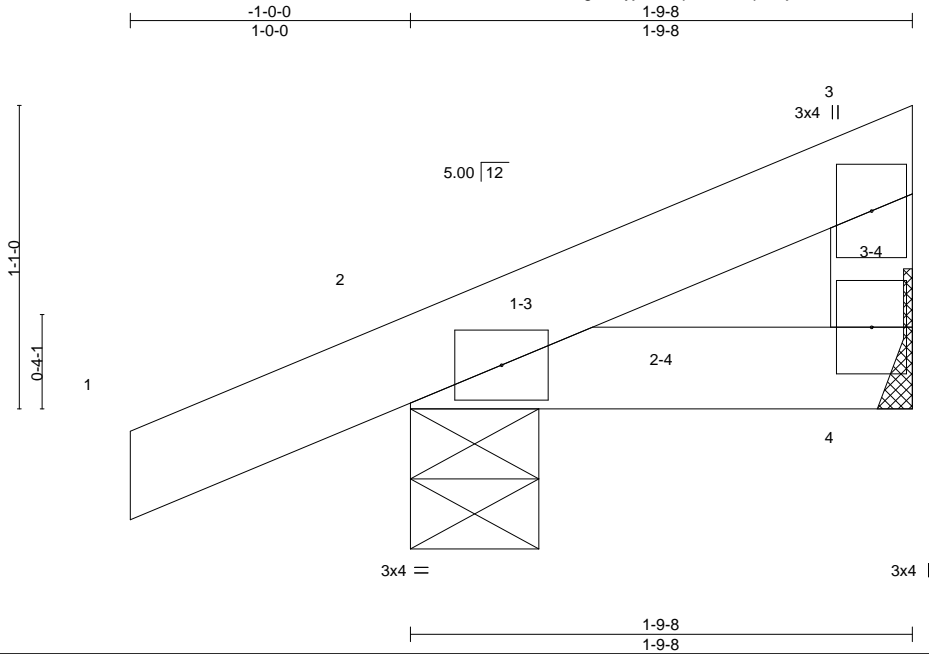


Job J1086674	Truss EJ1	Truss Type MONOPITCH	Qty 8	Ply 1	HC Homes Inc	PRRNSF20230918	114706706
-----------------	--------------	-------------------------	----------	----------	--------------	----------------	-----------

The Truss Company (Sumner), Sumner, WA - 98390,

Job Reference (optional)  
8,630 s Nov 19 2022 MiTek Industries, Inc. Fri Apr 14 16:52:19 2023 Page 1

ID:YLcgXvNyjDRbUpX6?FIHQ?zUjAK-1W1PBIXwKR\_SAJ7bJ\_HnLk9cbY1bbfey8AdIMzQkpg



Scale = 1:8.2

<b>LOADING</b> (psf) TCLL 25.0 (Roof Snow=25.0) TCDL 8.0 BCLL 0.0 * BCDL 7.0	<b>SPACING-</b> 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TP12014	<b>CSI.</b> TC 0.10 BC 0.02 WB 0.00 Matrix-P	<b>DEFL.</b> in (loc) l/defl L/d Vert(LL) -0.00 2 >999 360 Vert(CT) -0.00 2 >999 240 Horz(CT) 0.00 4 n/a n/a	<b>PLATES</b> MT20 Weight: 6 lb	<b>GRIP</b> 185/148 FT = 20%
---	---	--	--	---------------------------------------	------------------------------------

**LUMBER-**  
TOP CHORD 2x4 HF No.2  
BOT CHORD 2x4 HF No.2  
WEBS 2x4 DF Stud

**BRACING-**  
TOP CHORD  
BOT CHORD

Structural wood sheathing directly applied or 1-9-8 oc purlins, except end verticals.  
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) 4=41/Mechanical, 2=156/0-5-8 (min. 0-1-8)  
Max Horz 2=22(LC 9)  
Max Uplift 4=-1(LC 12), 2=-19(LC 8)  
Max Grav 4=53(LC 19), 2=211(LC 19)

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

**NOTES-** (10)

- 1) Wind: ASCE 7-16; Vult=110mph (3-second gust) Vasd=87mph; TCDL=4.8psf; BCDL=4.2psf; h=12ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 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 16.0 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) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TP1 1.
- 10) All dimensions given in feet-inches-sixteenths (FFI/ISS) format.

**LOAD CASE(S)** Standard



April 17, 2023

**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/TP1 Quality Criteria, DSB-89 and BCS11 Building Component Safety Information** available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

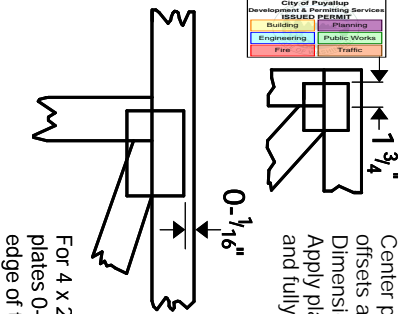


# Symbols

## 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.

PRRNSF20230918



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 MITtek 20/20 software or upon request.

## PLATE SIZE

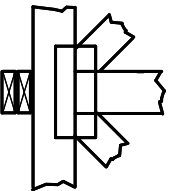
4 X 4

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, I or Eliminator bracing if indicated.

## BEARING

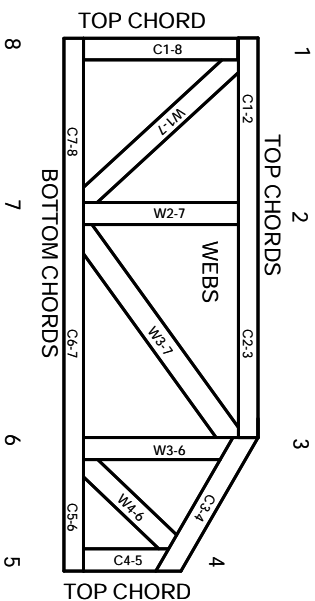


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur.

## Industry Standards:

ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-89: Design Standard for Bracing.  
BCS11: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System



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

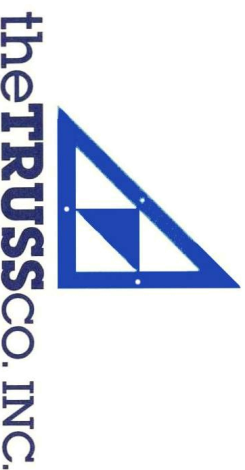
CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

## PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ER-5243, 9604B,  
9730, 95-43, 96-31, 9667A  
NER-487, NER-561  
95110, 84-32, 96-67, ER-3907, 9432A

© 2006 MITtek® All Rights Reserved



# 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 BCS11.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative T, I, or Eliminator 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/TP 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP 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/TP 1 Quality Criteria.