

MiTek, Inc. 16023 Swingley Ridge Rd. Chesterfield, MO 63017 314.434.1200

Re: 240113-84-JH-R Jim Hubbard Insurance

The truss drawing(s) referenced below have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Pinnacle Component Systems, LLC.

Pages or sheets covered by this seal: I67919649 thru I67919662

My license renewal date for the state of Missouri is December 31, 2025.

Missouri COA: Engineering 001193



Sevier, Scott

September 3,2024

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

,Engineer



referenced standard ANSI/TPI 1.



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B=164, F=164.8) 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.



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ww.tpinst.org) Witchevelocity (Mitchevelocity) (Witchevelocity) (Witchevel

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	8-10-0	5-2-0	5-2-0			8-10-0	I.
Plate Offsets (X,Y) [H:0-2	2-9,Edge], [K:0-3-0,0-3-0]						
LOADING (psf) TCLL 25.0 (Roof Snow=25.0) TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2018/TPI2014	CSI. TC 0.78 BC 0.73 WB 0.55 Matrix-S	DEFL. ir Vert(LL) -0.15 Vert(CT) -0.32 Horz(CT) 0.08	i (loc) l/defl H-J >999 H-J >999 H n/a	L/d 240 180 n/a	PLATES MT20 Weight: 148 lb	GRIP 244/190 FT = 20%
LUMBER- TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.2 REACTIONS. (size) B Max Horz B	3=0-5-8, H=0-5-8 }=−129(LC 12)		BRACING- TOP CHORD BOT CHORD	Structural wood 2-0-0 oc purlins Structural wood	l sheathing dir (3-8-15 max.) I sheathing dir	ectly applied or 3-6-5 o): D-F. ectly applied or 10-0-0	oc purlins, except oc bracing.
Max Uplift E Max Grav E FORCES. (Ib) - Max. Comp TOP CHORD B-C=-2348 G-H=-2348 BOT CHORD B-L=-95/18 WEBS C-L=-455/1	B=-164(LC 14), H=-164(LC 14) =1662(LC 33), H=1662(LC 33) D./Max. Ten All forces 250 (lb) or le √218, C-D=-1916/191, D-E=-1624/15 3/218 384, K-L=-38/2049, J-K=-38/2049, H- 122, D-L=-4/605, E-L=-595/58, E-J=-	ss except when shown. 22, E-F=-1624/192, F-G=- J=-95/1884 595/58, F-J=-4/605, G-J=	-455/122				
 NOTES- 1) Wind: ASCE 7-16; Vult=1: II; Exp C; Enclosed; MWF 13-0-15, Interior(1) 13-0-1 exposed ; end vertical left grip DOL=1.60 2) TCLL: ASCE 7-16; Pf=25. 3) Unbalanced snow loads h 4) This truss has been desig non-concurrent with other 5) Provide adequate drainag 6) This truss has been desig 7) * This truss has been desig 7) * This truss has been desig 8) Provide mechanical conne B=164, H=164. 9) This truss is designed in a referenced standard ANSI 10) Graphical purlin represent 	15mph (3-second gust) Vasd=91mpł RS (directional) and C-C Exterior(2E 5 to 19-2-0, Exterior(2R) 19-2-0 to 2 and right exposed;C-C for members 0 psf (Lum DOL=1.15 Plate DOL=1. iave been considered for this design. ned for greater of min roof live load of live loads. the to prevent water ponding. ned for a 10.0 psf bottom chord live load of chord and any other members. ection (by others) of truss to bearing accordance with the 2018 Internation VTPI 1. ntation does not depict the size or the	n; TCDL=6.0psf; BCDL=6) -1-2-8 to 1-9-8, Interior(3-6-2, Interior(1) 23-6-2 to and forces & MWFRS fo 15); Is=1.0; Rough Cat C of 16.0 psf or 1.00 times f load nonconcurrent with a bottom chord in all areas plate capable of withstan al Residential Code section e orientation of the purlin	.0psf; h=25ft; B=45ft; L= 1) 1-9-8 to 8-10-0, Exte 5 29-2-8 zone; cantileve r reactions shown; Lumi ; Partially Exp.; Ce=1.0; lat roof load of 25.0 psf any other live loads. s where a rectangle 3-6- ding 100 lb uplift at joint ons R502.11.1 and R80 along the top and/or bot	28ft; eave=4ft; rior(2R) 8-10-01 r left and right ber DOL=1.60 p Cs=1.00; Ct=1. on overhangs -0 tall by 2-0-0 v (s) except (jt=lb) 2.10.2 and tom chord.	Cat. io late 10 vide	STATE OF M SCOTT SEVI DE PE-20010	$\frac{M_{ISSOUTE}}{ER}$

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcscomponents.com)

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September 3,2024



	6-10-0	14-0-0		21-2-0		28-0-0	
Plate Offsets (X,Y) [H:0-2-	9,Edge], [K:0-3-0,0-3-0]	7-2-0		7-2-0		6-10-0	· · · · · · · · · · · · · · · · · · ·
LOADING (psf) TCLL 25.0 (Roof Snow=25.0) TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0- Plate Grip DOL 1.1 Lumber DOL 1.1 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.68 BC 0.87 WB 0.40 Matrix-S	DEFL. Vert(LL) -0.1 Vert(CT) -0.2 Horz(CT) 0.1	in (loc) l/defl 9 K >999 9 J-K >999 1 H n/a	L/d 240 180 n/a	PLATES MT20 Weight: 142 lb	GRIP 244/190 FT = 20%
LUMBER- TOP CHORD 2x4 SP No.2 * D-F: 2x4 SP 2 WEBS 2x4 SP No.2 WEBS 2x4 SP No.2 REACTIONS. (size) B= Max Horz B= Max Uplift B= Max Grav B=	Except* 400F 2.0E 0-5-8, H=0-5-8 -103(LC 12) -164(LC 14), H=-164(LC 14 1492(LC 33), H=1492(LC 3) 3)	BRACING- TOP CHORD BOT CHORD WEBS	Structural wood except 2-0-0 oc purlins Structural wood 1 Row at midpt	sheathing direc (4-10-3 max.): I sheathing direc E-L	otty applied or 3-5-13 o D-F. ttly applied or 10-0-0 o ., E-J	ic purlins,
FORCES. (lb) - Max. Comp. TOP CHORD B-C=-2331/ G-H=-2331/ BOT CHORD B-L=-87/192 WEBS C-L=-263/11 G-J=-263/11 G-J=-263/11	Max. Ten All forces 250 (98, C-D=-2315/187, D-E=- 198 7, K-L=-104/3081, J-K=-10 3, D-L=0/680, E-L=-1238/8 3	b) or less except when shown. 995/186, E-F=-1995/186, F-G=-2 /3081, H-J=-87/1927 7, E-K=0/290, E-J=-1238/87, F-J=	2315/187, =0/680,				
 NOTES- 1) Wind: ASCE 7-16; Vult=115 II; Exp C; Enclosed; MWFR 11-0-15, Interior(1) 11-0-15 exposed ; end vertical left a grip DOL=1.60 2) TCLL: ASCE 7-16; Pf=25.0 3) Unbalanced snow loads ha 4) This truss has been design non-concurrent with other li 5) Provide adequate drainage (6) This truss has been design will fit between the bottom of 8) Provide mechanical connect B=164, H=164. 9) This truss is designed in ac referenced standard ANSI/ 10) Graphical purlin represent 	Simph (3-second gust) Vasd S (directional) and C-C Ext to 21-2-0, Exterior(2R) 21- ind right exposed;C-C for m psf (Lum DOL=1.15 Plate I ve been considered for this ed for greater of min roof liv ve loads. to prevent water ponding. ed for a 10.0 psf bottom cho ned for a live load of 20.0ps thord and any other membe tion (by others) of truss to t cordance with the 2018 Inte FPI 1. ation does not depict the si	e91mph; TCDL=6.0psf; BCDL=6. prior(2E) -1-2-8 to 1-9-8, Interior(2-0 to 25-4-15, Interior(1) 25-4-15 embers and forces & MWFRS for DOL=1.15); Is=1.0; Rough Cat C; design. a load of 16.0 psf or 1.00 times fla rd live load nonconcurrent with a f on the bottom chord in all areas rs. earing plate capable of withstanc rnational Residential Code section re or the orientation of the purlin a	Opsf; h=25ft; B=45ft; L 1) 1-9-8 to 6-10-0, Ext to 29-2-8 zone; cantil reactions shown; Lur Partially Exp.; Ce=1.0 at roof load of 25.0 psi ny other live loads. where a rectangle 3-0 ding 100 lb uplift at joir ons R502.11.1 and R8 along the top and/or bo	L=28ft; eave=4ft; C erior(2R) 6-10-0 to ever left and right nber DOL=1.60 pla b; Cs=1.00; Ct=1.1 f on overhangs 6-0 tall by 2-0-0 wi ht(s) except (jt=lb) 02.10.2 and bttom chord.	cat. ate 0 de	STATE OF M SCOTT SEVIE NUMBI PE-200101	ISSOLUTE M. R ER ER ER EN CITA

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September 3,2024



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Job	Truss	Truss Type	Qty	Ply	Jim Hubbard Insurance
240112 84 ILL D	16	Llin Cirder			167919655
240113-64-JH-K	Ab		'		Job Reference (optional)
Pinnacle Component System. Ottawa. KS - 66067. 8.730 s Aug 15 2024 MiTek Industries. Inc. Fri Aug 30 09:01:18					g 15 2024 MiTek Industries, Inc. Fri Aug 30 09:01:18 2024 Page 2
ID:fMho?iOfnsÄg8v?c9dNe6lynzBr-J0xwlRqYrbAkrTg4iklCVhtBxSulildEtgLttOyiibF					

NOTES-

14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 359 lb down and 64 lb up at 4-10-0, 254 lb down and 49 lb up at 6-0-0, 254 lb down and 49 lb up at 10-0-0, 254 lb down and 49 lb up at 20-0-0, and 254 lb down and 49 lb up at 22-0-0, and 359 lb down and 64 lb up at 23-2-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

15) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf) Vert: A-C=-70, C-H=-70, H-J=-70, B-I=-20

Concentrated Loads (lb)

Vert: O=-359(B) M=-254(B) K=-359(B) W=-254(B) X=-254(B) Y=-254(B) Z=-254(B) AA=-254(B) AB=-254(B) AC=-254(B) AD=-254(B) A

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Plate Offsets (X,Y) [K:0-:	2-12,0-2-4], [O:0-2-12,0-2-4]			
LOADING (psf) TCLL 25.0 (Roof Snow=25.0) 10.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCodeIRC2018/TPI2014	CSI. TC 0.12 BC 0.04 WB 0.15 Matrix-S	DEFL. in (loc) l/defl L/d Vert(LL) 0.00 A n/r 120 Vert(CT) -0.00 A n/r 120 Horz(CT) 0.00 X n/a n/a	PLATES GRIP MT20 244/190 Weight: 214 lb FT = 20%
LUMBER- TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2	2		BRACING- TOP CHORD Structural wood sheathing dired BOT CHORD Structural wood sheathing dired	tly applied or 6-0-0 oc purlins.

WEBS

1 Row at midpt

BOT CHORD 2x4 SP No 2 2x4 SP No.2 OTHERS

REACTIONS. All bearings 28-0-0.

Max Horz B=194(LC 13) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) B, AI, AK, AL, AM, AN, AO, AP, AQ, AR, AG, AF, AE, AD, AC, AB, AA. Z. Y

Max Grav All reactions 250 lb or less at joint(s) B, AH, AI, AK, AL, AM, AN, AO, AP, AQ, AR, AG, AF, AE, AD, AC, AB, AA, Z, Y, X

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=28ft; eave=2ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3E) -1-2-8 to 2-0-0, Exterior(2N) 2-0-0 to 14-0-0, Corner(3R) 14-0-0 to 17-0-0, Exterior(2N) 17-0-0 to 28-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 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 C; 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 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- 8) Gable studs spaced at 1-4-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 11) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) B, AH, AI, AK, AL, AM, AN, AO, AP, AQ, AR, AG, AF, AE, AD, AC, AB, AA, Z, and Y. This connection is for uplift only and does not consider lateral forces.
- 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/TPL1



Structural wood sheathing directly applied or 10-0-0 oc bracing.

M-AH



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Job	Truss	Truss Type	Qty	Ply	Jim Hubbard Insurance
240113-84- IH-P	CIA	Diagonal Hip Girder	2	1	167919657
240113-04-011-1	CUA		2	'	Job Reference (optional)
Pinnacle Component System, Ottawa, KS - 66067, 8.730 s Aug 15 2024 MiTek Industries, Inc. Fri Aug 30 09:01:19 2024 Page 2					
ID:fMho?iOfnsAg8v?c9dNe6lynzBr-nCVIznrAculbSdFGGRpR2uQUbsMxRueO5K5QPqyiibE					

LOAD CASE(S) Standard Concentrated Loads (Ib)

Vert: I=-62(B) L=-8(B)

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LOADING (psf) TCLL 25.0 (Roof Snow=25.0) TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.18 BC 0.02 WB 0.00 Matrix-P	DEFL. in (loc) l/defl L/d Vert(LL) -0.00 B >999 240 Vert(CT) -0.00 B >999 180 Horz(CT) -0.00 C n/a n/a	PLATES GRIP MT20 244/190 Weight: 9 lb FT = 20%
LUMBER-			BRACING-	

TOP CHORD

BOT CHORD

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LUMBER-
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TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2

WEBS 2x4 SP No.2

REACTIONS. (size) B=0-5-8, D=Mechanical, C=Mechanical Max Horz B=63(LC 14)

Max Uplift B=-66(LC 14), C=-20(LC 18) Max Grav B=272(LC 19), D=31(LC 5), C=27(LC 19)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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 C; 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) 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) B, C.
- 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) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.



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Structural wood sheathing directly applied or 1-8-15 oc purlins.

Structural wood sheathing directly applied or 10-0-0 oc bracing.

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		1	2-8-15		
LOADING (psf) TCLL 25.0 (Roof Snow=25.0) TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.25 BC 0.06 WB 0.00 Matrix-P	DEFL. in (loc) Vert(LL) -0.00 B-D Vert(CT) -0.00 B-D Horz(CT) -0.00 C	l/defl L/d >999 240 >999 180 n/a n/a	PLATES GRIP MT20 244/190 Weight: 13 lb FT = 20%
LUMBER-			BRACING-		

TOP CHORD

BOT CHORD

```
LUMBER-
```

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2

WEBS 2x4 SP No.2

REACTIONS. (size) C=Mechanical, B=0-5-8, D=Mechanical Max Horz B=82(LC 14)

Max Uplift C=-21(LC 11), B=-65(LC 14)

Max Grav C=80(LC 19), B=349(LC 19), D=47(LC 5)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-2-8 to 1-9-8, Interior(1) 1-9-8 to 2-7-3 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) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) 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) C, B.
- 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) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.



Structural wood sheathing directly applied or 2-8-15 oc purlins.

Structural wood sheathing directly applied or 10-0-0 oc bracing.



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			3-8-15	
LOADING (psf) TCLL 25.0 (Roof Snow=25.0) TCDL TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.26 BC 0.13 WB 0.00 Matrix-P	DEFL. in (loc) l/defl L/d Vert(LL) -0.01 B-D >999 240 Vert(CT) -0.02 B-D >999 180 Horz(CT) -0.00 C n/a n/a	PLATES GRIP MT20 244/190 Weight: 17 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2

WEBS 2x4 SP No.2

BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 3-8-15 oc purlins.

Structural wood sheathing directly applied or 10-0-0 oc bracing.

REACTIONS. (size) C=Mechanical, B=0-5-8, D=Mechanical Max Horz B=100(LC 14)

Max Uplift C=-42(LC 14), B=-58(LC 14)

Max Grav C=153(LC 19), B=413(LC 19), D=67(LC 5)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-2-8 to 1-9-8, Interior(1) 1-9-8 to 3-7-3 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) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) 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) C, B.
- 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) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.



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			4-10-0			1		
LOADING (psf) TCLL 25.0 (Roof Snow=25.0) TCDL TCDL 10.0 BCLL 0.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.62 BC 0.23 WB 0.00 Matrix-P	DEFL. Vert(LL) - Vert(CT) - Horz(CT)	in (loc) -0.02 B-D -0.05 B-D 0.00 D	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 22 lb	GRIP 244/190 FT = 20%
	2		BRACING-	0		le e ethice e ulies		0

BOT CHORD

except end verticals.

Structural wood sheathing directly applied or 10-0-0 oc bracing.

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.2

REACTIONS. (size) D=Mechanical, B=0-5-8 Max Horz B=119(LC 11)

Max Uplift D=-29(LC 11), B=-75(LC 14)

Max Grav D=274(LC 19), B=441(LC 19)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-2-8 to 1-9-8, Interior(1) 1-9-8 to 4-8-4 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 C; 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) 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) B.
- 9) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) D. This connection is for uplift only and does not consider lateral forces.
- 10) 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.



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LOADING (psf) TCLL 25.0 (Roof Snow=25.0) TCDL TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2018/TPI2014	CSI. TC 0.08 BC 0.04 WB 0.20 Matrix-S	DEFL. in Vert(LL) n/a Vert(CT) n/a Horz(CT) 0.01	(loc) - - K	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 132 lb	GRIP 244/190 FT = 20%
LUMBER-			BRACING-					

TOP CHORD

BOT CHORD

1 Row at midpt

WEBS

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 2x4 SP No.2 OTHERS

REACTIONS. All bearings 18-2-8.

Max Horz A=-278(LC 10) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) Q, T, O, L except A=-191(LC 10), K=-145(LC 11), R=-106(LC 12), S=-107(LC 12), N=-106(LC 12), M=-104(LC 12)

Max Grav All reactions 250 lb or less at joint(s) A, K, P, Q, R, S, T, O, N, M, L

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

TOP CHORD A-B=-314/283, J-K=-308/274

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-3-13 to 3-1-4, Interior(1) 3-1-4 to 9-1-4, Exterior(2R) 9-1-4 to 12-1-4, Interior(1) 12-1-4 to 17-10-11 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 C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10

3) All plates are 2x4 MT20 unless otherwise indicated.

4) Gable requires continuous bottom chord bearing.

5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) A, K, P, Q, R, S, T O, N, M, and L. This connection is for uplift only and does not consider lateral forces.

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.



Structural wood sheathing directly applied or 6-0-0 oc purlins.

F-P

Structural wood sheathing directly applied or 10-0-0 oc bracing.

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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.
- Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor1 bracing should be considered.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- 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
- 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.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- 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.
- 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.
- Do not cut or alter truss member or plate without prior approval of an engineer.
- 17. Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- 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.