























 1700
 1

 3400
 2

 5100
 3

 6800
 4

 8500
 5

 10200
 6

 11900
 7

 12000
 1

 12000
 1

 12000
 6

 11900
 7

 13600
 8

 125300
 9



MWFRS (envelope) and C-C Exterior(2) 1-1-15 to 6-10-1, Interior(1) 6-10-1 to 17-11-0, Exterior(2) 17-11-0 to 25-11-0, Interior(1) 25-11-0 to 36-11-15 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) 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 30.0psf 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, with BCDL = 10.0psf.

5) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

6) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



5) Gable studs spaced at 1-4-0 oc.

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

7) \* This truss has been designed for a live load of 30.0psf 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, with BCDL = 10.0psf.

 This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

 See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.





will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

7) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



- 2-14=-163/1956, 13-14=0/1435, 11-13=-155/1791 BOT CHORD
- WFBS
- 4-14=-404/287, 6-14=-87/935, 7-13=-86/938, 9-13=-405/287

# NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-15 to 6-10-1, Interior(1) 6-10-1 to 15-11-0, Exterior(2) 15-11-0 to 31-2-12, Interior(1) 31-2-12 to 36-11-15 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.

4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. 5) \* This truss has been designed for a live load of 30.0psf 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, with BCDL = 10.0psf.

6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and

referenced standard ANSI/TPI 1

7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.





LOADING (psf) TCLL         SPACING- Plate Grip DOL         2-0-0 1.15         CSI. TC 0.25         DEFL.         in (loc)         l/defl         L/d         PLATES           TCDL         10.0         Lumber DOL         1.15         TC 0.25         Vert(LL)         -0.10         14-16         >999         360         MT20           BCLL         0.0 *         Rep Stress Incr         YES         WB 0.16         Horz(CT)         0.05         12         n/a         n/a           BCDL         10.0         Code IRC2015/TPI2014         Matrix-S         Wind(LL)         0.03         16         >999         240         Weight: 2           LUMBER- TOP CHORD 2x6 SP No.1         BOT CHORD 2x6 SP No.1         Structural wood sheathing directly applied or except         2-0-0 oc purlins (5-11-11 max.): 6-8.         SDT CHORD         Structural wood sheathing directly applied or 10-0-0 oc b         5-00 oc purling (5-11-11 max.): 6-8.         BOT CHORD         Rigid ceiling directly applied or 10-0-0 oc b         Structural wood sheathing directly applied or 10-0-0 oc b         Structural wood sheathing directly applied or 10-0-0 oc b	
LUMBER-       BRACING-         TOP CHORD 2x6 SP No.1       TOP CHORD 2x6 SP No.1         BOT CHORD 2x6 SP No.1       TOP CHORD 2x6 SP No.1         WEBS 2x4 SP No.2       2x4 SP No.2 -t 3-7-13, Right 2x4 SP No.2 -t 3-7-13         SLIDER       Left 2x4 SP No.2 -t 3-7-13, Right 2x4 SP No.2 -t 3-7-13	GRIP 244/190 80 lb FT = 20%
WEBS T-Brace: 2x4 SPF No.2 - 7 Fasten (2X) T and I braces to narrow edge (0.131"x3") nails, 6in o.c.,with 3in minimum Brace must cover 90% of web length.	or 5-1-13 oc purlins, racing. -16 of web with 10d end distance.

35-10-0

be installed during truss erection, in accordance with Stabilizer

Installation guide.

(size) 2=0-3-8 (min. 0-1-13), 12=0-3-8 (min. 0-1-13) REACTIONS. Max Horz 2=-173(LC 10) Max Grav 2=1517(LC 2), 12=1517(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-4=-2123/379, 4-6=-1924/416, 6-7=-1695/402, 7-8=-1695/402, 8-10=-1924/416, 10-12=-2123/379 BOT CHORD 2-18=-209/1685, 16-18=-81/1444, 14-16=-69/1441, 12-14=-197/1611

WEBS 6-18=-52/463, 6-16=-78/515, 7-16=-414/185, 8-16=-78/515, 8-14=-52/463

#### NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; WWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.

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

5) \* This truss has been designed for a live load of 30.0psf 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, with BCDL = 10.0psf.

6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

9) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.





35-10-0



0- <b>Q</b> -8	10-11-0	18-11-0		25-11-0	35-6-8	35 <sub>г</sub> 9-8
0-0-8	10-10-8	8-0-0	I	7-0-0	9-7-8	0-3-0
Plate Offsets (X,Y)	[2:0-5-4,0-0-4], [6:0-3-0,0-3-8], [8:0-2	-4,0-2-12], [11:0-5-4,0-0-4	.]			000
LOADING (psf) TCLL 20.0 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 IRC2015/TPI2014	CSI. TC 0.24 BC 0.38 WB 1.00 Matrix-S	DEFL. in Vert(LL) -0.10 Vert(CT) -0.20 Horz(CT) 0.05 Wind(LL) 0.05	(loc) I/defl L/d 14-16 >999 360 2-16 >999 240 11 n/a n/a 11 n/a 240	PLATES MT20 Weight: 281 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD 2x6 SP No.1 BOT CHORD 2x6 SP No.1 WEBS 2x4 SP No.2 SLIDER Left 2x4 SP No.2 -t 3-4-3. Right 2x4 SP No.2 -t 3-0-9		2 -t 3-0-9	BRACING- TOP CHORD BOT CHORD	Structural wood sheathing except 2-0-0 oc purlins (5-5-9 ma Rigid ceiling directly applie	directly applied or 5-3 x.): 6-8. ed or 10-0-0 oc bracin	3-13 oc purlins, g.
REACTIONS. (siz Max H Max U Max C	e) 11=0-3-8 (min. 0-1-11), 2=0-3-8 lorz 2=-158(LC 10) lplift11=-30(LC 13) Grav 11=1432(LC 1), 2=1504(LC 1)	(min. 0-1-12)		MiTek recommends that be installed during truss Installation guide.	Stabilizers and requir erection, in accordanc	ed cross bracing e with Stabilizer

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-4=-2013/363, 4-5=-1780/345, 5-6=-1607/357, 6-7=-1881/422, 7-8=-1879/421, TOP CHORD 8-9=-1827/365, 9-11=-2025/383 BOT CHORD 2-16=-197/1607, 14-16=-101/1652, 12-14=-89/1502, 11-12=-211/1523

WEBS 5-16=-244/1429, 6-16=-1115/273, 6-14=-94/462, 7-14=-538/216, 8-14=-110/558, 8-12=0/361

#### NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; 2) Wind: ASCE 7-10, Vitie Transmit (3-second gust) Vasues might, TCDL=6.0pst, bECL=6.0pst, h=201t, Cat. II, Exp. C, Entosed, MWFRS (envelope) and C-C Exterior(2) -1-1-15 to 6-10-1, Interior(1) 6-10-1 to 10-11-0, Exterior(2) 10-11-0 to 11-11-0, Interior(1) 11-11-0 to 25-11-0, Exterior(2) 25-11-0 to 33-11-0, Interior(1) 33-11-0 to 35-10-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 3) Provide adequate drainage to prevent water ponding.
 4) This transmit for the plate grip to the plate drainage to prevent water ponding.

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

5) \* This truss has been designed for a live load of 30.0psf 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, with BCDL = 10.0psf.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11.

7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and

referenced standard ANSI/TPI 1. 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Scale = 1:66.1



0- <u>0-8</u> 0-0-8	<u>10-11-0</u> 10-10-8	<u>13-11-0</u> 3-0-0	20-11-0 7-0-0	27-11-0 7-0-0	35-10-0 <u>35-6-8</u> 35,9-8 7-7-8 0-3-0 0-0-8
Plate Offsets (X,Y)	[2:0-5-4,0-0-4], [6:0-5-4,0-3-8], [8:0-2	2-8,0-2-12]			
LOADING (psf) TCLL 20.0 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 IRC2015/TPI2014	<b>CSI.</b> TC 0.24 BC 0.40 WB 0.39 Matrix-S	<b>DEFL.</b> ii Vert(LL) -0.11 Vert(CT) -0.2 Horz(CT) 0.00 Wind(LL) 0.03	n (loc) l/defl L/d 0 2-16 >999 360 1 2-16 >999 240 6 10 n/a n/a 5 13-14 >999 240	PLATES         GRIP           MT20         244/190           Weight: 274 lb         FT = 20%
LUMBER- TOP CHORD 2x6 SP No.1 BOT CHORD 2x6 SP No.1 WEBS 2x4 SP No.2 SLIDER Left 2x4 SP No.2 -t 3-4-3, Right 2x4 SP No.2 -t 4-9-12		BRACING- TOP CHORD BOT CHORD WEBS	Structural wood sheathing except 2-0-0 oc purlins (5-0-10 ma Rigid ceiling directly applie T-Brace: 2 Fasten (2X) T and I braces (0.131"x3") nails, 6in o.c., w Brace must cover 90% of v	directly applied or 5-3-14 oc purlins, ix.): 6-8. d or 10-0-0 oc bracing. ix4 SPF No.2 - 6-16, 6-13 s to narrow edge of web with 10d with 3in minimum end distance. veb length.	
REACTIONS. (siz Max H	e) 10=0-3-8 (min. 0-1-12), 2=0-3-8 łorz 2=159(LC 9) loiff1030(LC 13)	(min. 0-1-12)		MiTek recommends that s be installed during truss e Installation guide.	Stabilizers and required cross bracing prection, in accordance with Stabilizer

Max Grav 10=1476(LC 2), 2=1504(LC 1)

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

 TOP CHORD
 2-4=-2017/356, 4-5=-1759/336, 5-6=-1746/365, 6-7=-2231/453, 7-8=-2231/453, 8-10=-2114/352

 BOT CHORD
 2-16=-192/1566, 14-16=-202/2111, 13-14=-201/2114, 11-13=-146/1640, 10-11=-148/1631

 WEBS
 5-16=-276/1598, 6-16=-1532/325, 6-13=-56/259, 7-13=-522/201, 8-13=-122/873,

NOTES-

1) Unbalanced roof live loads have been considered for this design.

 Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-15 to 6-10-1, Interior(1) 6-10-1 to 10-11-0, Exterior(2) 10-11-0 to 13-11-0, Interior(1) 13-11-0 to 27-11-0, Exterior(2) 27-11-0 to 35-10-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.

8-11=0/433

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

5) \* This truss has been designed for a live load of 30.0psf 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, with BCDL = 10.0psf.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10.

7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building Contesting Contesting 2

Job	Truss	Truss Type	Qty	Ply	RAY & CHRISTINE HYMBAUGH
J0221-1067	A3A	Roof Special	1	1	
		·			Job Reference (optional)
Comtech, Inc., Fayetteville,	NC 28309, Bob Lewis	Run: 8.300 s	Var 22 2019 Print: 8	.300 s Ma	ar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:44:55 2021 Page 2
			ID:B4lkScsUv1LE	390VBG5	UU_Szjw_W-0sagvevCO8i4t2woq7Anc9w2LDMDTtkczCQZWVzjtEs

NOTES9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



0 0	-0-8 5-7-4 -0-8 5-6-12	10-11-0 5-3-12	16-0-8 5-1-8	23-0-8 7-0-0		<u>30-0-8</u> 7-0-0	<u>35-6-8</u> 5-6-0	35-9-8 0-3-0 0-0-8
Plate Offsets (X,Y	/) [6:0-5-4,0-3-8], [8:0-2-8	3,0-2-12], [12:0-3-8,0-2	-0]					
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2015/T	2-0-0 CS 1.15 TC 1.15 BC NO W PI2014 Ma	SI. C 0.36 C 0.64 B 0.65 atrix-S	DEFL. Vert(LL) -0. Vert(CT) -0. Horz(CT) 0. Wind(LL) 0.	in (loc) l/ .14 13-14 > .28 13-14 > .06 10 .06 13-14 >	/defl L/d 999 360 999 240 n/a n/a 999 240	PLATES MT20 Weight: 539 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD 2x BOT CHORD 2x WEBS 2x SLIDER Le	6 SP No.1 6 SP No.1 4 SP No.2 ft 2x4 SP No.2 -t 3-4-1, Rig	ht 2x4 SP No.2 -t 3-6-	7	BRACING- TOP CHORD BOT CHORD	Structural 2-0-0 oc p Rigid ceil	I wood sheathing dir purlins (6-0-0 max.): ling directly applied c	ectly applied or 6-0 6-8. or 10-0-0 oc bracinç	-0 oc purlins, except j.
REACTIONS. Ma Ma Ma Ma	(size) 10=0-3-8 (min. 0-1 ax Horz 2=159(LC 24) ax Uplift10=-8(LC 9) ax Grav 10=2714(LC 1), 2≕	-10), 2=0-3-8 (min. 0- 2099(LC 1)	1-8)					

4x8 =

35-10-0

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

TOP CHORD 2-4=-2998/0, 4-5=-2711/0, 5-6=-2736/0, 6-7=-5751/0, 7-8=-5752/0, 8-10=-4055/4

- BOT CHORD 2-17=0/2284, 16-17=0/2284, 14-16=0/5078, 13-14=0/5088, 11-13=0/3134, 10-11=0/3130
- WEBS 5-16=0/2587, 6-16=-3768/0, 6-14=0/356, 6-13=-199/897, 7-13=-804/285, 8-13=0/3091,

8-11=0/439

### NOTES-

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
- Top chords connected as follows: 2x6 2 rows staggered at 0-9-0 oc.
- Bottom chords connected as follows: 2x6 2 rows staggered at 0-9-0 oc.
- Webs connected as follows: 2x4 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60

4x8 =

- 5) Provide adequate drainage to prevent water ponding.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10. 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	RAY & CHRISTINE HYMBAUGH
J0221-1067	A3GR	Roof Special Girder	1	2	Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:44:56 2021 Page 2 ID:B4lkScsUv1LB9OVBG5UU\_Szjw\_W-U2826\_wq9SrxVCV?Oqh09NTBCdfjCGymBs963yzjtEr

# NOTES-

12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 145 lb down and 102 lb up at 23-8-12, 145 lb down and 102 lb up at 25-8-12, 145 lb down and 102 lb up at 27-8-12, and 145 lb down and 102 lb up at 29-8-12, and 145 lb down and 121 lb up at 33-8-12 on top chord, and 1129 lb down at 21-11-0, 75 lb down at 23-8-12, 75 lb down at 25-8-12, 75 lb down at 27-8-12, 75 lb down at 23-8-12, and 75 lb down at 33-8-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

# LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-5=-60, 5-6=-60, 6-8=-60, 8-10=-60, 2-10=-20

Concentrated Loads (lb)

Vert: 11=-37(F) 12=-37(F) 18=-105(F) 19=-105(F) 20=-105(F) 21=-105(F) 22=-105(F) 23=-1129(F) 24=-37(F) 25=-37(F) 26=-37(F) 27=-37(F) 26=-37(F) 26=









				33-10-0
0-φ-8	9-1-4	17-11-0	26-8-12	35-6-8 35 <sub>r</sub> 9-8
0-0-8	9-0-12	8-9-12	8-9-12	8-9-12 0-3-0
				0-0-8
Plate Offsets (X,Y)	[6:0-2-0,0-0-4], [10:0-2-0,0-1-8], [1	3:0-1-12,0-0-0], [13:0-0-0,0-2-12	2], [14:0-0-7,0-0-0], [42:0-1-12,0-0-0], [57:0-2-	-0,0-2-0]
LOADING (psf) TCLL 20.0 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 IRC2015/TPI2014	CSI. TC 0.25 BC 0.44 WB 0.16 Matrix-S	DEFL.         in         (loc)         l/defl         L/d           Vert(LL)         -0.11         10-12         >999         360           Vert(CT)         -0.17         10-12         >999         240           Horz(CT)         0.05         9         n/a         n/a           Wind(LL)         0.03         12         >999         240	PLATES         GRIP           MT20         244/190           Weight: 500 lb         FT = 20%
LUMBER- TOP CHORD 2x6 S BOT CHORD 2x6 S WEBS 2x4 S OTHERS 2x4 S SLIDER Left 2	P No.1 P No.1 P No.2 P No.2 x4 SP No.2 -t 3-11-13, Right 2x4 SI	P No.2 -t 3-11-13	BRACING- TOP CHORD Structural wood sheathing 2-0-0 oc purlins (6-0-0 max BOT CHORD Rigid ceiling directly applie WEBS T-Brace: 2 Fasten (2X) T and I braces (0.131"x3") nails, 6in o.c.,w Brace must cover 90% of w	directly applied or 5-1-6 oc purlins, except .): 4-6. d or 10-0-0 oc bracing. x4 SPF No.2 - 5-12 s to narrow edge of web with 10d ith 3in minimum end distance. web length.

25 10 0

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

Installation guide.

REACTIONS.	(size)	1=0-3-8	(min.	0-1-12),	9=0-3-8	(min.	0-1-12)
	Max Horz	:1=184(L	C 11)				
	Max Grav	/1=1481(	LC 19	), 9=148	1(LC 20)		

## **FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-3=-2161/374, 3-4=-1965/442, 4-5=-1590/389, 5-6=-1590/389, 6-7=-1965/442, 7-9=-2161/374

- BOT CHORD 1-14=-209/1745, 12-14=-68/1434, 10-12=-56/1410, 9-10=-197/1647
- WEBS 3-14=-281/228, 4-14=-95/534, 4-12=-75/471, 5-12=-318/140, 6-12=-75/471, 6-10=-95/535, 7-10=-281/228

#### NOTES-

1) Unbalanced roof live loads have been considered for this design.

 Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0 to 8-0-0, Interior(1) 8-0-0 to 13-0-4, Exterior(2) 13-0-4 to 34-1-8, Interior(1) 34-1-8 to 35-10-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 3) 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.
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable studs spaced at 1-4-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 30.0psf 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, with BCDL = 10.0psf.
- 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

dontile and the system (not part of this component design) is always required.

Job	Truss	Truss Type	Qty	Ply	RAY & CHRISTINE HYMBAUGH
J0221-1067	A4B	GABLE	1	1	
					Job Reference (optional)
Comtech, Inc., Fayetteville,	NC 28309, Bob Lewis	Run: 8.300 s Mar 22 20	19 Print: 8.	300 s Ma	r 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:01 2021 Page 2

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:01 2021 Page 2 ID:B4lkScsUv1LB9OVBG5UU\_Szjw\_W-r0xx9h\_z\_\_TEbzNyBNHBsQA4deP0tfnVL8ttk9zjtEm



0- <u>0-8</u> 0-0-8	9-0-12	8-9-12		8-9-12	8-9-12	<u> </u>
LOADING (psf) TCLL 20.0 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 IRC2015/TPI2014	CSI. TC 0.25 BC 0.41 WB 0.16 Matrix-S	DEFL. i Vert(LL) -0.1 Vert(CT) -0.1 Horz(CT) 0.0 Wind(LL) 0.0	n (loc) l/defl L/d 0 10-12 >999 360 6 10-12 >999 240 5 9 n/a n/a 3 12 >999 240	PLATES MT20 Weight: 273 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD 2x6 S BOT CHORD 2x6 S WEBS 2x4 SI SLIDER Left 2	P No.1 P No.1 P No.2 4 SP No.2 -t 3-7-13, Right 2x4 SP N	lo.2 -t 3-7-13	BRACING- TOP CHORD BOT CHORD WEBS	Structural wood sheathing 2-0-0 oc purlins (5-11-9 m Rigid ceiling directly appli T-Brace: Fasten (2X) T and I brace (0.131"x3") nails, 6in o.c., Brace must cover 90% of MiTek recommends that be installed during truss	g directly applied or 5-1 hax.): 4-6. ed or 10-0-0 oc bracing 2x4 SPF No.2 - 5-12 es to narrow edge of w with 3in minimum end web length. t Stabilizers and require eraction in accordance	-8 oc purlins, except J. eb with 10d distance. ed cross bracing to with Stabilizar

Installation guide.

REACTIONS. (size) 1=0-3-8 (min. 0-1-12), 9=0-3-8 (min. 0-1-12) Max Horz 1=169(LC 11) Max Grav 1=1459(LC 2), 9=1459(LC 2)

- FORCES. (Ib) Max. Comp./Max. Ten. All forces 250 (Ib) or less except when shown. 1-3=-2132/386, 3-4=-1933/422, 4-5=-1698/409, 5-6=-1698/409, 6-7=-1933/422, TOP CHORD 7-9=-2132/386
- BOT CHORD 1-14=-220/1694, 12-14=-90/1447, 10-12=-78/1446, 9-10=-208/1621
- WEBS 4-14=-53/471, 4-12=-78/514, 5-12=-411/185, 6-12=-78/514, 6-10=-53/471

# NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 8-0-0, Interior(1) 8-0-0 to 11-11-0, Exterior(2) 11-11-0 to 23-2-12, Interior(1) 23-2-12 to 23-11-0, Exterior(2) 23-11-0 to 35-2-12, Interior(1) 35-2-12 to 35-10-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 3) Provide adequate drainage to prevent water ponding.

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

5) \* This truss has been designed for a live load of 30.0psf 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, with BCDL = 10.0psf.

6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

8) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



0- <u>Q-8</u>	9-11-0	17-11-0	2	5-11-0	35-6-8	35-9-8
0-0-8	9-10-8	8-0-0		3-0-0	9-7-8	0-3-0
Plate Offsets (X,Y)	[1:0-4-0,0-0-4], [4:0-4-0,0-2-6], [6:0-4	4-0,0-2-6], [9:0-5-4,0-0-4]				
LOADING (psf) TCLL 20.0 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 IRC2015/TPI2014	CSI. TC 0.28 BC 0.36 WB 0.44 Matrix-S	DEFL.         ir           Vert(LL)         -0.08           Vert(CT)         -0.18           Horz(CT)         0.06           Wind(LL)         0.04	n (loc) l/defl L/d 3 12-14 >999 360 5 9-10 >999 240 5 9 n/a n/a 4 12 >999 240	PLATES MT20 Weight: 265 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD 2x6 SP No.1 BOT CHORD 2x6 SP No.1 WEBS 2x4 SP No.2 SLIDER Left 2x4 SP No.2 -t 3-0-9, Right 2x4 SP No.2 -t 3-0-9		BRACING- TOP CHORD BOT CHORD WEBS	Structural wood sheath 2-0-0 oc purlins (6-0-0 Rigid ceiling directly ap T-Brace: Fasten (2X) T and I br (0.131"x3") nails, 6in o Brace must cover 90% MiTek recommends t be installed during tru	hing directly applied or 5-3 max.): 4-6. oplied or 10-0-0 oc bracin 2x4 SPF No.2 - 5-14, aces to narrow edge of w c., with 3 in minimum end of web length. hat Stabilizers and requir uss erection, in accordance	3-8 oc purlins, except g. 5-10 /eb with 10d / distance. red cross bracing ce with Stabilizer	
	a) $1-0.2.9$ (min 0.1.11) $0-0.2.9$	(min 0 1 11)		installation guide.		

35-10-0

REACTIONS. (size) 1=0-3-8 (min. 0-1-11), 9=0-3-8 (min. 0-1-11) Max Horz 1=143(LC 9) Max Grav 1=1433(LC 1), 9=1433(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-3=-2026/397, 3-4=-1846/381, 4-5=-1530/360, 5-6=-1530/360, 6-7=-1846/381, 7-9=-2026/397

BOT CHORD 1-14=-223/1550, 12-14=-195/2008, 10-12=-195/2008, 9-10=-222/1522

WEBS 4-14=-58/660, 5-14=-710/128, 5-12=0/499, 5-10=-710/128, 6-10=-58/660

#### NOTES-

1) Unbalanced roof live loads have been considered for this design.

 Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 8-0-0, Interior(1) 8-0-0 to 9-11-0, Exterior(2) 9-11-0 to 21-2-12, Interior(1) 21-2-12 to 25-11-0, Exterior(2) 25-11-0 to 35-10-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.

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

5) \* This truss has been designed for a live load of 30.0psf 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, with BCDL = 10.0psf.

6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

8) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



Scale = 1:67.8

35-10-0



0-0	<b>∂-</b> 8 7-11-0	17-11-0		27-11-0	35-6-8 35 <sub>r</sub> 9-8
0-0	9-8 7-10-8	10-0-0	1	10-0-0	7-7-8 0-3-0
					0-0-8
Plate Offsets (X,Y)	[2:0-5-4,0-0-4], [4:0-4-0,0-2-6], [8:0-	-4-0,0-2-6], [10:0-5-4,0-0-4]			
LOADING (psf) TCLL 20.0 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 IRC2015/TPI2014	CSI. TC 0.35 BC 0.49 WB 0.38 Matrix-S	<b>DEFL.</b> ir Vert(LL) -0.1' Vert(CT) -0.2' Horz(CT) 0.0 Wind(LL) 0.05	n (loc) I/defl L/d   13-15 >999 360   13-15 >999 240 7 10 n/a n/a 5 13 >999 240	PLATES         GRIP           MT20         244/190           Weight: 253 lb         FT = 20%
LUMBER-           TOP CHORD 2x6 SP No.1           BOT CHORD 2x6 SP No.1           WEBS 2x4 SP No.2           SLIDER           Left 2x4 SP No.2 -t 4-9-12, Right 2x4 SP No.2 -t 4-9-12		No.2 -t 4-9-12	BRACING- TOP CHORD BOT CHORD WEBS	Structural wood sheathing a except 2-0-0 oc purlins (4-11-9 ma Rigid ceiling directly applied T-Brace: 2 Fasten (2X) T and I braces (0.131"x3") nails, 6in o.c.,w Brace must cover 90% of w	directly applied or 5-0-12 oc purlins, x.): 4-8. d or 10-0-0 oc bracing. x4 SPF No.2 - 5-15, 7-11 to narrow edge of web with 10d ith 3in minimum end distance. veb length.
REACTIONS. (siz	e) 10=0-3-8 (min 0-1-13) 2=0-3-	8 (min 0-1-14)		be installed during truss e Installation guide.	rection, in accordance with Stabilizer

REACTIONS. (size) 10=0-3-8 (min. 0-1-13), 2=0-3-8 (min. 0-1-14) Max Horz 2=118(LC 9) Max Grav 10=1518(LC 2), 2=1578(LC 2)

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

- TOP CHORD 2-4=-2197/352, 4-5=-1719/356, 5-7=-2453/442, 7-8=-1723/370, 8-10=-2202/362
- BOT CHORD 2-15=-142/1695, 13-15=-268/2345, 11-13=-278/2346, 10-11=-156/1699
- WEBS 4-15=-11/933, 5-15=-893/168, 5-13=0/251, 7-11=-891/162, 8-11=-6/935

# NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-15 to 6-10-1, Interior(1) 6-10-1 to 7-11-0, Exterior(2) 7-11-0 to 19-2-12, Interior(1) 19-2-12 to 27-11-0, Exterior(2) 27-11-0 to 35-10-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.

4) All plates are 4x4 MT20 unless otherwise indicated.

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

6) \* This truss has been designed for a live load of 30.0psf 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, with BCDL = 10.0psf.

7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

 See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.





0- <u>0-8</u> 0-0-8	5-9-8 5-9-0	15-8-8 9-11-0	25-7-8 9-11-0	<u>}</u>	<u>35-6-8</u> 9-11-0	35-10-0 35-9-8 0-3-0 0-0-8	
Plate Offsets (X,Y)	[2:0-5-4,0-0-4], [4:0-4-0,0-2-6]					000	
LOADING (psf) TCLL 20.0 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 NO Code IRC2015/TPI2014	CSI. TC 0.47 BC 0.48 WB 0.90 Matrix-S	DEFL. in Vert(LL) -0.12 Vert(CT) -0.25 Horz(CT) 0.08 Wind(LL) 0.12	(loc) I/defl L/d 11-13 >999 360 11-13 >999 240 10 n/a n/a 11-13 >999 240	PLATES MT20 Weight: 497 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER- TOP CHORD 2x6 SI BOT CHORD 2x6 SI WEBS 2x4 SI SLIDER Left 2x	P No.1 P No.1 P No.2 A SP No.2 -t 3-6-7	i	BRACING- TOP CHORD BOT CHORD WEBS	Structural wood sheathing except end verticals, and 2 Rigid ceiling directly applie T-Brace: Fasten (2X) T and I brace (0.131"x3") nails, 6in o.c.,	directly applied or 6-0- 2-0-0 oc purlins (6-0-0) ed or 10-0-0 oc bracing 2x4 SPF No.2 - 8-10 is to narrow edge of we with 3in minimum end of work loarth	0 oc purlins, nax.): 4-9. b with 10d listance.	
REACTIONS.         (size)         10=0-3-8         (min. 0-1-9), 2=0-3-8         (min. 0-1-10)         Brace must cover 90% of web length.           Max Horz 2=122(LC 8)         Max Uplift10=-502(LC 5), 2=-443(LC 5)         Max Grav 10=2689(LC 1), 2=2711(LC 1)         Max Grav 10=2689(LC 1), 2=2711(LC 1)							
FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown.         TOP CHORD       2-4=-4086/736, 4-5=-3249/626, 5-7=-5584/1017, 7-8=-4557/799, 9-10=-351/134         BOT CHORD       2-15=-618/3185, 13-15=-1099/5392, 11-13=-1115/5524, 10-11=-787/3841         WEBS       4-15=-212/1851, 5-15=-2541/587, 5-13=0/661, 7-13=0/301, 7-11=-1288/422, 8-11=-23/1504, 8-10=-4373/906							
<ul> <li>8-11=-23/1504, 8-10=-43/3/906</li> <li>NOTES- <ol> <li>2-ply truss to be connected together with 10d (0.131"x3") nails as follows: <ul> <li>Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.</li> <li>Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.</li> </ul> </li> <li>Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.</li> <li>2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.</li> <li>3) Unbalanced roof live loads have been considered for this design.</li> <li>4) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60</li> <li>5) Provide adequate drainage to prevent water ponding.</li> <li>6) All plates are 4x4 MT20 unless otherwise indicated.</li> <li>7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.</li> <li>8) * This truss has been designed for a 10.0 psf 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.</li> <li>9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 100=62 2-242</li> </ol></li></ul>							

10=502, 2=443.10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	RAY & CHRISTINE HYMBAUGH
J0221-1067	A4GR	Half Hip Girder	1	2	
					JOD Reference (optional)
Comtech, Inc., Favetteville,	NC 28309. Bob Lewis	Run: 8	8.300 s Mar 22 2019 Print: 8	3.300 s Ma	r 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:08 2021 Page 2

Comtech, Inc., Favetteville, NC 28309, Bob Lewis

ID:B4lkScsUv1LB9OVBG5UU\_Szjw\_W-8Msad43MK8LEx2PI5LvgevyCSTn?0eyXyk3lUFzjtEf

# NOTES-

- 11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult gualified building designer.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

 (a) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 124 lb down and 106 lb up at 5-9-8, 127 lb down and 102 lb up at 7-8-12, 127 lb down and 102 lb up at 11-8-12, 127 lb down and 102 lb up at 13 102 lb up at 25-8-12, 127 lb down and 102 lb up at 27-8-12, 127 lb down and 102 lb up at 29-8-12, 127 lb down and 102 lb up at 31-8-12, and 127 lb down and 102 lb up at 33-8-12, and 50 lb down and 19 lb up at 35-8-4 on top chord, and 350 lb down and 104 lb up at 5-9-8, 75 lb down at 7-8-12, 75 lb down at 9-8-12, 75 lb down at 11-8-12, 75 lb down at 13-8-12, 75 lb down at 15-8-12, 75 lb down at 17-8-12, 75 lb down at 19-8-12, 75 lb down at 21-8-12, 75 lb down at 23-8-12, 75 lb down at 25-8-12, 75 lb down at 27-8-12, 75 lb down at 29-8-12, and 75 lb down at 31-8-12, and 75 lb down at 33-8-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

14) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

#### LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-4=-60, 4-9=-60, 2-10=-20

Concentrated Loads (lb)

Vert: 4=-105(B) 6=-105(B) 9=-31 14=-37(B) 15=-350(B) 13=-37(B) 11=-37(B) 12=-37(B) 16=-105(B) 17=-105(B) 18=-105(B) 19=-105(B) 20=-105(B) 21=-105(B) 21=-1 22=-105(B) 23=-105(B) 24=-105(B) 25=-105(B) 26=-105(B) 27=-105(B) 28=-105(B) 29=-37(B) 30=-37(B) 31=-37(B) 32=-37(B) 33=-37(B) 34=-37(B) 35=-37(B) 36=-37(B) 37=-37(B) 38=-37(B)



7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

 See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



0- 0-	<u>9-8 7-11-0</u> 9-8 7-10-8		<u>15-11-0</u> 8-0-0		<u>23-6-8</u> 7-7-8	<u>23-8-8</u> 0-2-0
Plate Offsets (X,Y)	[4:0-2-8,0-2-6], [5:0-2-8,0-2-6], [7:0-4	1-0,0-0-1]				0-1-8
LOADING (psf) TCLL 20.0 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 IRC2015/TPI2014	<b>CSI.</b> TC 0.33 BC 0.41 WB 0.13 Matrix-S	DEFL.         in         (loc)         //de           Vert(LL)         -0.11         7-8         >99           Vert(CT)         -0.14         7-8         >99           Horz(CT)         0.03         7         n/           Wind(LL)         0.09         2-10         >99	fl L/d 9 360 9 240 a n/a 9 240	PLATES MT20 Weight: 158 lb	<b>GRIP</b> 244/190 FT = 20%

23-10-0

LUMBER-		BRACING-	
TOP CHORD	2x6 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except
BOT CHORD	2x6 SP No.1		2-0-0 oc purlins (6-0-0 max.): 4-5.
WEBS	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
SLIDER	Left 2x4 SP No.2 -t 4-9-12, Right 2x6 SP No.1 -t 4-9-12		MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer
			Installation guide.

REACTIONS. (size) 7=0-3-8 (min. 0-1-8), 2=0-3-8 (min. 0-1-8) Max Horz 2=118(LC 11) Max Grav 7=1140(LC 2), 2=1200(LC 2)

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

2-4=-1581/241, 4-5=-1213/270, 5-7=-1579/239 2-10=-57/1201, 8-10=-55/1213, 7-8=-58/1202 TOP CHORD

BOT CHORD

4-10=0/565, 5-8=0/565 WEBS

#### NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-15 to 6-10-1, Interior(1) 6-10-1 to 7-11-0, Exterior(2) 7-11-0 to 23-10-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.

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

5) \* This truss has been designed for a live load of 30.0psf 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, with BCDL = 10.0psf.

6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Scale = 1:44.5



	0-Q-8 5-11	-0		17-11-0			23-6-8	23 <sub>1</sub> 10-0
	0-0-8 5-10	-8		12-0-0			5-7-8	0-3-8
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- Plate Grip D Lumber DOI Rep Stress Code IRC20	2-0-0 OL 1.15 - 1.15 ncr YES 15/TPI2014	CSI. TC 0.18 BC 0.40 WB 0.43 Matrix-S	DEFL. Vert(LL) -C Vert(CT) -C Horz(CT) C Wind(LL) C	in (loc) 0.12 9-11 0.26 9-11 0.02 8 0.02 9-11	l/defl L/d >999 360 >999 240 n/a n/a >999 240	PLATES MT20 Weight: 165	<b>GRIP</b> 244/190 5 lb FT = 20%
LUMBER- TOP CHORD 2x BOT CHORD 2x WEBS 2x SLIDER Le	6 SP No.1 6 SP No.1 4 SP No.2 ft 2x4 SP No.2 -t 3-5-4	Right 2x4 SP No	5.2 -t 3-5-4	BRACING- TOP CHORD BOT CHORD	) Structur 2-0-0 oc Rigid ce MiTek be ins Installa	ral wood sheat c purlins (6-0-0 siling directly a recommends talled during tr ation guide.	hing directly applied or max.): 4-6. pplied or 10-0-0 oc bra that Stabilizers and req uss erection, in accord	6-0-0 oc purlins, except cing. uired cross bracing ance with Stabilizer

REACTIONS. (size) 8=0-3-8 (min. 0-1-8), 2=0-3-8 (min. 0-1-8) Max Horz 2=92(LC 9) Max Grav 8=952(LC 1), 2=1025(LC 1)

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

TOP CHORD 2-4=-1355/220, 4-5=-978/236, 5-6=-984/240, 6-8=-1337/224

BOT CHORD 2-11=-70/990, 9-11=-198/1280, 8-9=-75/996

WEBS 4-11=0/510, 5-11=-435/156, 5-9=-431/153, 6-9=0/510

#### NOTES-

 Unbalanced roof live loads have been considered for this design.
 Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-15 to 17-2-12, Interior(1) 17-2-12 to 17-11-0, Exterior(2) 17-11-0 to 23-10-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.





Plate Offsets (X,Y)	0- <del>0-8 3-9-8</del> 0-8 3-9-0 [4:0-2-8,0-2-12], [7:0-2-8,0-2-12]	<u>11-11-0</u> 8-1-8		20-0-8 8-1-8	23-10-0 23-6-8 23-9-8 3-6-0 0/340 0-0-8		
LOADING (psf) TCLL 20.0 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 NO Code IRC2015/TPI2014	CSI. TC 0.22 BC 0.17 WB 0.18 Matrix-S	DEFL. in Vert(LL) -0.05 Vert(CT) -0.09 Horz(CT) 0.02 Wind(LL) 0.05	(loc) l/defl L/d 13 >999 360 13 >999 240 9 n/a n/a 13 >999 240	PLATES         GRIP           MT20         244/190           Weight: 331 lb         FT = 20%		
LUMBER- TOP CHORD 2x6 SI BOT CHORD 2x6 SI WEBS 2x4 SI SLIDER Left 2	P No.1 P No.1 P No.2 x4 SP No.2 -t 2-4-0, Right 2x4 SP No	0.2 -t 2-4-0	BRACING- TOP CHORD BOT CHORD	Structural wood sheathing 2-0-0 oc purlins (6-0-0 maz Rigid ceiling directly applie	directly applied or 6-0-0 oc purlins, except x.): 4-7. ed or 10-0-0 oc bracing.		
REACTIONS. (size) 2=0-3-8 (min. 0-1-8), 9=0-3-8 (min. 0-1-8) Max Horz 2=-65(LC 25) Max Upliftz=-213(LC 8), 9=-211(LC 4) Max Grav 2=1451(LC 1), 9=1449(LC 1)							
FORCES. (Ib) - Max. Comp./Max. Ten All forces 250 (Ib) or less except when shown.         TOP CHORD       2-4=-2044/353, 4-6=-2915/554, 6-7=-2915/554, 7-9=-2041/352         BOT CHORD       2-14=-302/1561, 13-14=-299/1576, 11-13=-249/1573, 9-11=-253/1558         WEBS       4-14=0/447, 4-13=-324/1455, 6-13=-793/365, 7-13=-327/1458, 7-11=0/446							
<ul> <li>WEBS 4-14=0/447, 4-13=-324/1455, 6-13=-793/365, 7-13=-327/1458, 7-11=0/446</li> <li>NOTES- <ol> <li>2-ply truss to be connected together with 10d (0.131*x3") nails as follows: Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc. Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.</li> <li>Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.</li> </ol> </li> <li>2) All loads are considered equally applied to all plies, except if noted as (F) or (B), unless otherwise indicated.</li> <li>3) Unbalanced roof live loads have been considered for this design.</li> <li>4) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60</li> <li>5) Provide adequate drainage to prevent water ponding.</li> <li>6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.</li> <li>7) * This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.</li> <li>8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=213, 9=211.</li> <li>9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANS/ITPI 1.</li> <li>10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building</li> </ul>							

Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Continued on page 2
Job	Truss	Truss Type	Qty	Ply	RAY & CHRISTINE HYMBAUGH
J0221-1067	B5GR	Hip Girder	1	2	Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:12 2021 Page 2 ID:B4lkScsUv1LB9OVBG5UU\_Szjw\_W-0765TS6sOMsgPgj4KBzmol7yJ4DkydH6tM1yd0zjtEb

# NOTES-

12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 85 lb down and 78 lb up at 3-9-8, 89 lb down and 75 lb up at 5-10-4, 89 lb down and 75 lb up at 5-10-4, 89 lb down and 75 lb up at 1-10-4, 89 lb down and 75 lb up at 13-10-4, 89 at 15-10-4, and 89 lb down and 75 lb up at 17-10-4, and 85 lb down and 78 lb up at 20-0-8 on top chord, and 182 lb down and 58 lb up at 3-9-8, 35 lb down at 5-10-4, 35 lb down at 13-10-4, 35 lb down at 13-Ib up at 19-11-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

# LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-4=-60, 4-7=-60, 7-10=-60, 2-9=-20 Concentrated Loads (lb)

Vert: 4=-41(B) 12=-17(B) 14=-182(B) 13=-17(B) 6=-41(B) 7=-41(B) 11=-182(B) 15=-41(B) 16=-41(B) 17=-41(B) 18=-41(B) 19=-41(B) 20=-41(B) 21=-17(B) 22=-17(B) 23=-17(B) 24=-17(B) 25=-17(B) 2



Scale = 1:44.5

23-10-0

Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-7.

Rigid ceiling directly applied or 10-0-0 oc bracing.



0-6 0-0		7-11-8 2-1-0	15-9-0 7-9-8	23-6-8 7-9-8	<u>23-</u> 8-8 0-2-0 0-1-8
Plate Offsets (X,Y)	[5:0-5-4,0-3-8]				
LOADING (psf)	<b>SPACING-</b> 2-0-0	CSI.	DEFL. in (loc) I/defl	L/d <b>PLATES</b>	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.19	Vert(LL) -0.07 9-11 >999	360 MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.43	Vert(CT) -0.15 9-11 >999	240	
BCLL 0.0 *	Rep Stress Incr NO	WB 0.35	Horz(CT) 0.01 8 n/a	n/a	
BCDI 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(11) 0.03 9-11 >999	240 Weight: 342 II	b FT = 20%

LUMBER-		BRACING-
TOP CHORD	2x6 SP No.1	TOP CHORE
BOT CHORD	2x6 SP No.1	
WEBS	2x4 SP No.2	BOT CHORE
SLIDER	Left 2x4 SP No.2 -t 3-6-0	

5x5 =

#### REACTIONS. (size) 8=0-3-8 (min. 0-1-8), 2=0-3-8 (min. 0-1-8) Max Horz 2=101(LC 27) Max Uplift8=-108(LC 9) Max Grav 8=1359(LC 1), 2=1284(LC 1)

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

TOP CHORD 2-4=-1682/18, 4-5=-1578/25, 5-6=-2715/121, 6-7=-2713/119, 7-8=-1277/150

BOT CHORD 2-12=0/1257, 11-12=0/2437, 9-11=0/2461



#### NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc. Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.

Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.

2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.

3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60

5) Provide adequate drainage to prevent water ponding.

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

7) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=108.

9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer

11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	RAY & CHRISTINE HYMBAUGH
J0221-1067	B6GR	Roof Special Girder	1	2	Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:13 2021 Page 2 ID:B4lkScsUv1LB9OVBG5UU\_Szjw\_W-UJgTgo7V9g\_X1pIGuvU?Lyg7RUVth1tG60nW9SzjtEa

# NOTES-

12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 89 lb down and 75 lb up at 13-9-12, 89 lb down and 75 lb up at 15-9-12, 89 lb down and 75 lb up at 17-9-12, and 89 lb down and 75 lb up at 19-9-12, and 89 lb down and 75 lb up at 13-9-12, 00 to chord, and 388 lb down at 11-10-8, 35 lb down at 13-9-12, 35 lb down at 15-9-12, 35 lb down at 17-9-12, and 35 lb down at 19-9-12, and 35 lb down at 21-9-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-4=-60, 4-5=-60, 5-7=-60, 2-8=-20

Concentrated Loads (lb)

Vert: 10=-17(F) 6=-41(F) 9=-17(F) 13=-41(F) 14=-41(F) 15=-41(F) 16=-41(F) 17=-388(F) 18=-17(F) 19=-17(F) 20=-17(F)



MWFRS (envelope) and C-C Exterior(2) -0-8-15 to 7-3-1, Interior(1) 7-3-1 to 10-6-0, Exterior(2) 10-6-0 to 18-6-0, Interior(1) 18-6-0 to 21-8-15 zone; cantilever left and right exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

4) \* This truss has been designed for a live load of 30.0psf 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.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.

6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

 See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



# NOTES-

1) Unbalanced roof live loads have been considered for this design.

 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-8-15 to 7-3-1, Interior(1) 7-3-1 to 10-6-0, Exterior(2) 10-6-0 to 18-6-0, Interior(1) 18-6-0 to 21-8-15 zone; cantilever left and right exposed ; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) 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.

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

5) Gable studs spaced at 2-0-0 oc.

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

7) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=109, 6=109.

9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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

TOP CHORD 2-3=-521/390, 3-4=-521/390

- BOT CHORD 2-6=-212/338, 4-6=-212/338
- WEBS 3-6=-282/270

# NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; cantilever left and right exposed ; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

5) Gable studs spaced at 2-0-0 oc.

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

7) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.

9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and

referenced standard ANSI/TPI 1.

10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1
- 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



- 20-8-15 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate
- grip DOL=1.60 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf 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.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2.
- 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and
- referenced standard ANSI/TPI 1.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



referenced standard ANSI/TPI 1. 10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building

10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 8-1-12, Interior(1) 8-1-12 to 10-0-0, Exterior(2) 10-0-0 to 18-0-0, Interior(1) 18-0-0 to 19-10-4 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

4) \* This truss has been designed for a live load of 30.0psf 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.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5.

6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



referenced standard ANSI/TPI 1.

8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



(lb) - Max Horz 2=92(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 2, 14, 15, 12, 11 Max Grav All reactions 250 lb or less at joint(s) 10, 2, 13, 14, 15, 12, 11

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

## NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed;

MWFRS (envelope) and C-C Corner(3) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) 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.

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

5) Gable studs spaced at 2-0-0 oc.

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

7) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 14, 15, 12, 11. 9) Non Standard bearing condition. Review required.

10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



		23-9	9-13		24-1-5
	1	23-9	9-13		0-'3'-8
Plate Offsets (X,Y)	[5:0-3-0,0-1-8], [11:0-3-0,0-1-8], [19:0	-2-8,0-3-0]			
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.05 BC 0.03 WB 0.11	DEFL. ir Vert(LL) n/a Vert(CT) n/a Horz(CT) 0.07	n (loc) l/defl L/d a - n/a 999 a - n/a 999 1 15 n/a n/a	PLATES GRIP MT20 244/190
BCDL 10.0	Code IRC2015/1PI2014	Matrix-S			vveight: 182 lb $FI = 20\%$
LUMBER- TOP CHORD 2x4 SI BOT CHORD 2x4 SI OTHERS 2x4 SI	P No.1 P No.1 P No.2		BRACING- TOP CHORD BOT CHORD WEBS	Structural wood sheathing 2-0-0 oc purlins (6-0-0 max Rigid ceiling directly applie T-Brace: 2 Fasten (2X) T and I brace: (0.131"x3") nails, 6in o.c.,v Brace must cover 90% of v	directly applied or 6-0-0 oc purlins, except (.): 5-11. d or 10-0-0 oc bracing. 2x4 SPF No.2 - 8-21, 7-22, 6-23, 9-20, 10-19 s to narrow edge of web with 10d vith 3in minimum end distance. web length.
				MiTek recommends that	Stabilizers and required cross bracing

be installed during truss erection, in accordance with Stabilizer

Installation guide.

REACTIONS.

All bearings 24-1-5. Max Horz 1=-178(LC 8) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1, 15, 21, 22, 23, 24, 25, 26, 20, 18, 17, 16 Max Grav All reactions 250 lb or less at joint(s) 1, 15, 21, 22, 23, 24, 25, 26, 20, 19, 18, 17, 16

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

#### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 15, 21, 22, 23, 24, 25, 26, 20, 18, 17, 16.

9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

11) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

Job	Truss	Truss Type	Qty	Ply	RAY & CHRISTINE HYMBAUGH
J0221-1067	QA2	GABLE	1	1	
					Job Reference (optional)
Comtech, Inc., Favetteville,	NC 28309. Bob Lewis	Run: 8.300 s Mar 22 201	9 Print: 8.	300 s Ma	r 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:20 2021 Page 1





Installation guide.



Scale = 1:85.2



Plate Offsets (X,Y)	  5:0-2-8.0-3-0], [11:Edge.0-1-8], [15:0	13-10-5 13-10-5 )-3-0.0-1-8]	<u>18-8-518-1</u> 1-13 4-10-0 0-3-8	
LOADING (psf) TCLL 20.0 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 IRC2015/TPI2014	CSI.         DE           TC         0.08         Ve           BC         0.03         Ve           WB         0.25         Hc           Matrix-S         Hc         Hc	EFL. in (loc) l/defl L/d ert(LL) n/a - n/a 999 ert(CT) n/a - n/a 999 orz(CT) 0.01 11 n/a n/a	PLATES         GRIP           MT20         244/190           Weight: 175 lb         FT = 20%
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x4 SF OTHERS 2x4 SF	P No.1 P No.1 P No.2	BR TO BC WE	ACING- IP CHORD Structural wood sheathing ( T CHORD Rigid ceiling directly applied EBS T-Brace: 2 Fasten (2X) T and I braces (0.131"x3") nails, 6in o.c.,w Brace must cover 90% of v MiTek recommends that t be installed during truss e	directly applied or 6-0-0 oc purlins. d or 10-0-0 oc bracing. x4 SPF No.2 - 7-16, 6-17, 5-18, 8-14 s to narrow edge of web with 10d <i>vith</i> 3in minimum end distance. veb length. Stabilizers and required cross bracing rection. in accordance with Stabilizer

REACTIONS. All bearings 18-11-13.

(lb) - Max Horz 1=283(LC 9)

- Max Uplift All uplift 100 lb or less at joint(s) 17, 18, 19, 20, 21, 14, 13, 12 except 11=-202(LC 11), 1=-157(LC 10), 15=-139(LC 13) Max Grav All reactions 250 lb or less at joint(s) 15, 16, 17, 18, 19, 20, 21, 14,
- 13, 12 except 11=292(LC 13), 1=318(LC 12)
- FORCES. (lb) Max. Comp./Max. Ten. All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-502/422, 2-3=-378/306

# NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-3-12 to 8-0-9, Interior(1) 8-0-9 to 12-0-11, Exterior(2) 12-0-11 to 18-9-9 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Bearing at joint(s) 11, 14, 13, 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17, 18, 19, 20, 21, 14, 13, 12 except (jt=lb) 11=202, 1=157, 15=139.
- 9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 11, 14, 13, 12.
- 10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



4-6-7

0-3-8

Scale = 1:37.3

4-9-15



	H		<u>9-4-5</u> 9-4-5	<u> </u>	
LOADING (psf) TCLL 20.0 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 IRC2015/TPI2014	CSI. TC 0.07 BC 0.04 WB 0.05 Matrix-S	<b>DEFL.</b> in Vert(LL) n/a Vert(CT) n/a Horz(CT) 0.00	(loc) l/defl L/d - n/a 999 - n/a 999 5 n/a n/a	PLATES         GRIP           MT20         244/190           Weight: 51 lb         FT = 20%
LUMBER- TOP CHORD 2x4 SP	9 No.1		BRACING- TOP CHORD	Structural wood sheathing of	lirectly applied or 6-0-0 oc purlins.

BOT CHORD 2x4 SP No.1 2x4 SP No.2 OTHERS

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 9-7-13.

(lb) - Max Horz 1=-114(LC 8)

- Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-116(LC 12), 6=-116(LC 13) Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=261(LC 19),
  - 6=261(LC 20)
- FORCES. (Ib) Max. Comp./Max. Ten. All forces 250 (Ib) or less except when shown. WEBS 2-8=-268/243, 4-6=-268/243

#### NOTES-

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=116.6=116.

7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



**REACTIONS.** All bearings 16-1-5.

(lb) - Max Horz 1=-195(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 14, 15, 16, 12, 11, 10 Max Grav All reactions 250 lb or less at joint(s) 1, 9, 13, 14, 15, 16, 12, 11, 10

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-281/223, 8-9=-280/221

 $F \text{ CHORD} \quad 1^{-2} = -201/223, \, 0^{-3} = -200/2$ 

## NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed;

MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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 30.0psf 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) 1, 9, 14, 15, 16, 12, 11, 10.

 This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

9) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



5-7-15

0-3-8

Scale = 1:56.9

8-0-7



Plate Offsets (X,Y)	[8:Edge,0-1-8], [10:0-3-0,0-1-8]	<u></u>	10-13 10-13	1	<u>3-8-5</u> 1-9-8 0-3-8		
LOADING (psf) TCLL 20.0 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 IRC2015/TPI2014	<b>CSI.</b> TC 0.06 BC 0.03 WB 0.16 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) n/a - n/a - 0.00 8	l/defl L/d n/a 999 n/a 999 n/a n/a	PLATES GRIP MT20 244/1 Weight: 103 lb FT	90 = 20%

LUMBER-

TOP CHORD 2x4 SP No.1 BOT CHORD 2x4 SP No.1 OTHERS 2x4 SP No.2

BRACING-TOP CHORD BOT CHORD WEBS

Structural wood sheathing directly applied or 6-0-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing. T-Brace: 2x4 SPF No.2 - 5-12 Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c.,with 3in minimum end distance.

Brace must cover 90% of web length.

13-11-13

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

REACTIONS. All bearings 13-11-13.

(lb) - Max Horz 1=190(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 1, 13, 14, 15, 11 except 8=-117(LC 11), 10=-117(LC 13), 9=-104(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 8, 10, 12, 13, 14, 15, 11, 9

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-317/248

# NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed;
- MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Bearing at joint(s) 8, 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 13, 14, 15, 11 except (jt=lb) 8=117, 10=117, 9=104.

9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 8, 9.

10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

11) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



Installation guide.

REACTIONS. All bearings 27-4-3.

(lb) - Max Horz 1=211(LC 9)

Max Holi Hall uplift 100 lb or less at joint(s) 16, 1, 22, 24, 25, 26, 27, 28, 29, 30, 21, 20, 19, 18, 17 Max Grav All reactions 250 lb or less at joint(s) 16, 1, 22, 24, 25, 26, 27, 28, 29, 30, 21, 20, 19, 18, 17

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 8-9=-240/271, 9-10=-240/272

#### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-15 to 8-7-11, Interior(1) 8-7-11 to 16-7-11, Exterior(2) 16-7-11 to 24-7-11, Interior(1) 24-7-11 to 27-2-7 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 30.0psf 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) 16, 1, 22, 24, 25, 26, 27, 28, 29, 30, 21, 20, 19, 18, 17.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



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

TOP CHORD 5-6=-237/258, 6-7=-238/259

WEBS 5-15=-270/174, 4-16=-261/165, 7-12=-276/177

#### NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-15 to 8-5-15, Interior(1) 8-5-15 to 14-7-11, Exterior(2) 14-7-11 to 22-7-11, Interior(1) 22-7-11 to 25-2-7 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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 30.0psf 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, with BCDL = 10.0psf.

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 1, 15, 16, 17, 12.11.

8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

9) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



	000		2002		000	
LOADING (psf) TCLL 20.0 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 IRC2015/TPI2014	CSI. TC 0.15 BC 0.16 WB 0.25 Matrix-S	<b>DEFL.</b> in Vert(LL) n/a Vert(CT) n/a Horz(CT) 0.00	(loc) l/defl L/d - n/a 999 - n/a 999 8 n/a n/a	PLATES ( MT20 2 Weight: 112 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD 2x4 SI BOT CHORD 2x4 SI WEBS 2x4 SI OTHERS 2x4 SI	P No.1 P No.1 P No.2 P No.2		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing except end verticals. Rigid ceiling directly applie MiTek recommends that S be installed during truss e Installation guide.	directly applied or 6-0-0 d or 10-0-0 oc bracing. Stabilizers and requirec prection, in accordance	) oc purlins, I cross bracing with Stabilizer

#### All bearings 23-3-10. REACTIONS.

(lb) - Max Horz 1=161(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 1, 13, 14, 10, 9 Max Grav All reactions 250 lb or less at joint(s) 1, 8 except 12=479(LC 22), 13=515(LC 19), 14=406(LC 19), 10=534(LC 20), 9=327(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. WEBS 3-13=-263/172, 2-14=-286/184, 5-10=-276/178

#### NOTES-

 Unbalanced roof live loads have been considered for this design.
 Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-15 to 8-7-11, Interior(1) 8-7-11 to 12-7-11, Exterior(2) 12-7-11 to 20-7-11, Interior(1) 20-7-11 to 23-2-7 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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 30.0psf 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, with BCDL = 10.0psf.

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 13, 14, 10, 9. 8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and

referenced standard ANSI/TPI 1.



0- <u>0-9</u>			20-11-15 20-11-6		<u> </u>	
LOADING (psf) TCLL 20.0 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 IRC2015/TPI2014	<b>CSI.</b> TC 0.15 BC 0.19 WB 0.14 Matrix-S	DEFL. ir Vert(LL) n/z Vert(CT) n/z Horz(CT) 0.00	n (loc) l/defl L/d a - n/a 999 a - n/a 999 D 7 n/a n/a	PLATES         GRIP           MT20         244/190           Weight: 93 lb         FT = 20%	
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x4 SF OTHERS 2x4 SF	<sup>2</sup> No.1 <sup>2</sup> No.1 <sup>2</sup> No.2		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing o Rigid ceiling directly applied MiTek recommends that S be installed during truss	directly applied or 6-0-0 oc purlins. d or 10-0-0 oc bracing. Stabilizers and required cross bracing rection in accordance with Stabilizer	

Installation guide.

REACTIONS. All bearings 21-2-5.

(lb) - Max Horz 1=-135(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 1, 12, 13, 10, 8

Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 11=442(LC 19),

12=449(LC 19), 13=273(LC 1), 10=448(LC 20), 8=273(LC 1)

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

3-12=-279/180, 5-10=-279/180

## NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-15 to 8-5-15, Interior(1) 8-5-15 to 10-7-11, Exterior(2) 10-7-11 to 18-7-11, Interior(1) 18-7-11 to 20-9-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 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 30.0psf 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, with BCDL = 10.0psf.

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 12, 13, 10, 8. 8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and

referenced standard ANSI/TPI 1.



	0-@-9 0-0-9	1 1	<u>6-11-15</u>  6-11-6		<u> </u>
LOADING (psf) TCLL 20.0 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 IRC2015/TPI2014	CSI. TC 0.17 BC 0.15 WB 0.08 Matrix-S	DEFL. i Vert(LL) n/ Vert(CT) n/ Horz(CT) 0.0	n (loc) l/defl L/d 'a - n/a 999 'a - n/a 999 0 5 n/a n/a	PLATES         GRIP           MT20         244/190           Weight: 70 lb         FT = 20%
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x4 SF OTHERS 2x4 SF	P No.1 P No.1 P No.2		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing Rigid ceiling directly applie MiTek recommends that be installed during truss of Installation quide	directly applied or 6-0-0 oc purlins. d or 10-0-0 oc bracing. Stabilizers and required cross bracing erection, in accordance with Stabilizer

# REACTIONS. All bearings 17-2-5.

(lb) - Max Horz 1=-108(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 9, 6

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 8=395(LC 19), 9=429(LC 19), 6=429(LC 20)

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

2-9=-304/192, 4-6=-304/192

# WEBS

1) Unbalanced roof live loads have been considered for this design.

 Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Gable requires continuous bottom chord bearing.

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

5) \* This truss has been designed for a live load of 30.0psf 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, with BCDL = 10.0psf.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 6.

7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

Installation guide.

BOT CHORD 2x4 SP No.1 2x4 SP No.2 OTHERS

REACTIONS. All bearings 13-2-5.

(lb) - Max Horz 1=82(LC 11)

Max Uplift All uplift 100 lb or less at joint(s) 1, 8, 6

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=264(LC 1),

8=311(LC 19), 6=310(LC 20)

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

# NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.

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

- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 8, 6.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





REACTIONS. (size) 1=9-2-5 (min. 0-1-8), 3=9-2-5 (min. 0-1-8), 4=9-2-5 (min. 0-1-8) Max Horz 1=-55(LC 10) Max Uplift1=-9(LC 12), 3=-15(LC 13)

Max Grav 1=165(LC 1), 3=165(LC 1), 4=334(LC 1)

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

# NOTES-

2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Gable requires continuous bottom chord bearing.

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

5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

<sup>1)</sup> Unbalanced roof live loads have been considered for this design.



REACTIONS. (size) 1=5-2-5 (min. 0-1-8), 3=5-2-5 (min. 0-1-8), 4=5-2-5 (min. 0-1-8) Max Horz 1=29(LC 11) Max Uplift1=-8(LC 12), 3=-11(LC 13)

Max Grav 1=94(LC 1), 3=94(LC 1), 4=157(LC 1)

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

## NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Gable requires continuous bottom chord bearing.

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

5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



	0-0-9 0-0-9		<u>15-5-15</u> 15-5-6		<u> </u>
LOADING (psf) TCLL 20.0 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 IRC2015/TPI2014	<b>CSI.</b> TC 0.14 BC 0.08 WB 0.07 Matrix-S	DEFL. i Vert(LL) n/ Vert(CT) n/ Horz(CT) 0.0	n (loc) l/defl L/d a - n/a 999 a - n/a 999 0 5 n/a n/a	PLATES         GRIP           MT20         244/190           Weight: 63 lb         FT = 20%
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x4 SF OTHERS 2x4 SF	9 No.1 9 No.1 9 No.2		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing Rigid ceiling directly applied MiTek recommends that S be installed during truss e Installation quide	directly applied or 6-0-0 oc purlins. d or 10-0-0 oc bracing. Stabilizers and required cross bracing rrection, in accordance with Stabilizer

# REACTIONS. All bearings 15-8-5.

(lb) - Max Horz 1=-98(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 8, 6

Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=362(LC 19), 6=362(LC 20)

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

2-8=-276/177, 4-6=-276/177

# NOTES-

1) Unbalanced roof live loads have been considered for this design.

 Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Gable requires continuous bottom chord bearing.

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

5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.

7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



# NOTES-

2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Gable requires continuous bottom chord bearing.

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

5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

<sup>1)</sup> Unbalanced roof live loads have been considered for this design.



Installation guide.

REACTIONS. (size) 1=7-8-5 (min. 0-1-8), 3=7-8-5 (min. 0-1-8), 4=7-8-5 (min. 0-1-8) Max Horz 1=-45(LC 10)

Max Uplift1=-13(LC 12), 3=-17(LC 13)

Max Grav 1=148(LC 1), 3=148(LC 1), 4=248(LC 1)

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

# NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Gable requires continuous bottom chord bearing.

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

5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



3x4 🥢

2x4 ||

3x4 >

	0- <mark>0</mark> -9 0-0-9		3-5-15 3-5-6	
LOADING (psf) TCLL 20.0 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 IRC2015/TPI2014	CSI. TC 0.02 BC 0.01 WB 0.01 Matrix-P	DEFL.in (loc)l/deflVert(LL)n/a-Vert(CT)n/a-Horz(CT)0.003n/a	L/d PLATES GRIP 999 MT20 244/190 999 n/a Weight: 11 lb FT = 20%
LUMBER- TOP CHORD 2x4 SI BOT CHORD 2x4 SI OTHERS 2x4 SI	P No.1 P No.1 P No.2		BRACING- TOP CHORD Structural wood BOT CHORD Rigid ceiling di MiTek recom be installed d Installation g	d sheathing directly applied or 3-9-7 oc purlins. rectly applied or 10-0-0 oc bracing. mends that Stabilizers and required cross bracing uring truss erection, in accordance with Stabilizer lide.

REACTIONS. (size) 1=3-8-5 (min. 0-1-8), 3=3-8-5 (min. 0-1-8), 4=3-8-5 (min. 0-1-8) Max Horz 1=-19(LC 8) Max Uplift1=-5(LC 12), 3=-7(LC 13)

Max Grav 1=61(LC 1), 3=61(LC 1), 4=102(LC 1)

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

# NOTES-

 Unbalanced roof live loads have been considered for this design.
 Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 3) Gable requires continuous bottom chord bearing.

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

5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



# REACTIONS. All bearings 17-3-2.

(lb) - Max Horz 1=130(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 11, 12, 8

- Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=502(LC 19), 11=449(LC 19), 12=268(LC 1), 8=419(LC 20)
- FORCES. (Ib) Max. Comp./Max. Ten. All forces 250 (Ib) or less except when shown. WEBS 3-11=-279/178, 5-8=-253/164

#### NOTES-

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 05-15 to 8-5-15, Interior(1) 8-5-15 to 10-5-3, Exterior(2) 10-5-3 to 17-1-15 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf 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, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 11, 12, 8.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



	0-0-9	14-11-10			0-3-8	
LOADING (psf)           TCLL         20.0           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 IRC2015/TPI2014	CSI.         DE           TC         0.16         Ve           BC         0.14         Ve           WB         0.09         Ho           Matrix-S         Ho         Ho	.FL. in rt(LL) n/a rt(CT) n/a rz(CT) 0.00	(loc) l/defl L/d - n/a 999 - n/a 999 6 n/a n/a	PLATES G MT20 24 Weight: 65 lb	<b>RIP</b> 44/190 FT = 20%
LUMBER- TOP CHORD 2x4 SI BOT CHORD 2x4 SI WEBS 2x4 SI OTHERS 2x4 SI	P No.1 P No.1 P No.2 P No.2	BR TO BO	ACING- P CHORD S T CHORD F	Structural wood sheathing e except end verticals. Rigid ceiling directly applier MiTek recommends that S be installed during truss e Installation guide.	directly applied or 6-0-0 d or 10-0-0 oc bracing. Stabilizers and required rection, in accordance	0 oc purlins, d cross bracing with Stabilizer

# REACTIONS. All bearings 15-3-2.

(lb) - Max Horz 1=105(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 7 Max Grav All reactions 250 lb or less at joint(s) 1, 6 except 8=433(LC 19), 9=409(LC 19), 7=352(LC 20)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. WEBS 2-9=-296/190, 4-7=-257/169

#### NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate

- grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.

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

5) \* This truss has been designed for a live load of 30.0psf 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, with BCDL = 10.0psf.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9, 7.

7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Max Grav 1=236(LC 1), 3=236(LC 1), 4=479(LC 1)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. WEBS 2-4=-303/104

# NOTES-

2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Gable requires continuous bottom chord bearing.

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

5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

<sup>1)</sup> Unbalanced roof live loads have been considered for this design.



	0-0-3	L L L L L L L L L L L L L L L L L L L	J-0-0		0-0-0
LOADING (psf) TCLL 20.0 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 IRC2015/TPI2014	CSI. TC 0.22 BC 0.12 WB 0.03 Matrix-P	DEFL. in Vert(LL) n/a Vert(CT) n/a Horz(CT) 0.00	(loc) l/defl L/d - n/a 999 - n/a 999 3 n/a n/a	PLATES         GRIP           MT20         244/190           Weight: 31 lb         FT = 20%
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x4 SF OTHERS 2x4 SF	2 No.1 2 No.1 2 No.2		BRACING- TOP CHORD S BOT CHORD F	Structural wood sheathing Rigid ceiling directly applie MiTek recommends that S be installed during truss e	directly applied or 6-0-0 oc purlins. d or 10-0-0 oc bracing. Stabilizers and required cross bracing prection, in accordance with Stabilizer

Installation guide.

REACTIONS. (size) 1=8-9-5 (min. 0-1-8), 3=8-9-5 (min. 0-1-8), 4=8-9-5 (min. 0-1-8) Max Horz 1=-53(LC 10) Max Uplift1=-15(LC 12), 3=-20(LC 13)

Max Grav 1=171(LC 1), 3=171(LC 1), 4=288(LC 1)

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

# NOTES-

 Unbalanced roof live loads have been considered for this design.
 Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 3) Gable requires continuous bottom chord bearing.

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

5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



3x4 🖉

2x4 ||

3x4 >

0- <u>0-9</u> 0-0-9		<u>4-6-15</u> 4-6-6			4-10-7	
LOADING (psf) TCLL 20.0 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 IRC2015/TPI2014	CSI. TC 0.05 BC 0.03 WB 0.01 Matrix-P	DEFL. ir Vert(LL) n/a Vert(CT) n/a Horz(CT) 0.00	n (loc) l/defl L/d a - n/a 999 a - n/a 999 3 n/a n/a	PLATES         GRIP           MT20         244/190           Weight: 16 lb         FT = 20%	
LUMBER- TOP CHORD 2x4 SI BOT CHORD 2x4 SI OTHERS 2x4 SI	P No.1 P No.1 P No.2		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing Rigid ceiling directly applie MiTek recommends that be installed during truss Installation quide	directly applied or 4-10-7 oc purlins. ed or 10-0-0 oc bracing. Stabilizers and required cross bracing erection, in accordance with Stabilizer	

(size) 1=4-9-5 (min. 0-1-8), 3=4-9-5 (min. 0-1-8), 4=4-9-5 (min. 0-1-8) REACTIONS. Max Horz 1=-26(LC 10) Max Uplift1=-7(LC 12), 3=-10(LC 13)

Max Grav 1=84(LC 1), 3=84(LC 1), 4=142(LC 1)

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

# NOTES-

 Unbalanced roof live loads have been considered for this design.
 Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 3) Gable requires continuous bottom chord bearing.

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

5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





LOADING (psf) TCLL 20.0 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 IRC2015/TPI2014	CSI. TC 0.04 BC 0.02 WB 0.02 Matrix-P	DEFL. i Vert(LL) n/ Vert(CT) n/ Horz(CT) 0.0	n (loc) l/defl L/d a - n/a 999 a - n/a 999 0 n/a n/a	PLATES         GRIP           MT20         244/190           Weight: 26 lb         FT = 20%
LUMBER- TOP CHORD 2x4 SP BOT CHORD 2x4 SP WEBS 2x4 SP OTHERS 2x4 SP	No.1 No.1 No.2 No.2		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing except end verticals. Rigid ceiling directly applie MiTek recommends that i be installed during truss e	directly applied or 5-7-3 oc purlins, d or 10-0-0 oc bracing. Stabilizers and required cross bracing prection, in accordance with Stabilizer

#### REACTIONS. All bearings 5-7-3.

(lb) - Max Horz 1=90(LC 12)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 6, 7 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 6, 7

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

# NOTES-

1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate

grip DOL=1.60 2) Gable requires continuous bottom chord bearing.

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

4) \* This truss has been designed for a live load of 30.0psf 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.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 6, 7.

6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



3x4 🥢

1

	1					
LOADING (psf) TCLL 20.0 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 IRC2015/TPI2014	<b>CSI.</b> TC 0.12 BC 0.07 WB 0.00 Matrix-P	<b>DEFL.</b> in Vert(LL) n/a Vert(CT) n/a Horz(CT) 0.00	n (loc) l/defi L/d n n/a 999 n n/a 999 n/a n/a	PLATES         GRIP           MT20         244/190           Weight: 13 lb         FT = 20%	
LUMBER-           TOP CHORD 2x4 SP No.1           BOT CHORD 2x4 SP No.1           WEBS 2x4 SP No.2			BRACING- TOP CHORD BOT CHORD	Structural wood sheathing directly applied or 3-7-3 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.		
				MiTek recommends that S be installed during truss e Installation guide.	Stabilizers and required cross bracing prection, in accordance with Stabilizer	

REACTIONS. (size) 1=3-6-10 (min. 0-1-8), 3=3-6-10 (min. 0-1-8) Max Horz 1=54(LC 12) Max Uplift3=-23(LC 12) Max Grav 1=118(LC 1), 3=123(LC 19)

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

# NOTES-

1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate

grip DOL=1.60 2) Gable requires continuous bottom chord bearing.

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

4) \* This truss has been designed for a live load of 30.0psf 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.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.

6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.




Scale = 1:7.7

5x8 🥢

Plate Offsets (X,Y)	[1:0-2-6,0-1-9], [1:0-2-14,0-1-2], [2:0-		0]		
LOADING (psf) TCLL 20.0 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 IRC2015/TPI2014	<b>CSI.</b> TC 0.01 BC 0.01 WB 0.00 Matrix-P	DEFL. ir Vert(LL) n/a Vert(CT) n/a Horz(CT) 0.00	n (loc) l/defl L/d a - n/a 999 a - n/a 999 D n/a n/a	PLATES         GRIP           MT20         244/190           Weight: 5 lb         FT = 20%
LUMBER- TOP CHORD 2x4 SI BOT CHORD 2x4 SI WEBS 2x4 SI	P No.1 P No.1 P No.2		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing o except end verticals. Rigid ceiling directly applied	lirectly applied or 1-7-3 oc purlins, d or 10-0-0 oc bracing.
	a) 1 1 6 10 (min 0 1 0) 2 1 6 10	(min 0, 1, 8)		MiTek recommends that S be installed during truss e Installation guide.	Stabilizers and required cross bracing rection, in accordance with Stabilizer

DNS. (size) 1=1-6-10 (min. 0-1-8), 3=1-6-10 (min. 0-1-8) Max Horz 1=18(LC 12) Max Uplift3=-7(LC 12) Max Grav 1=38(LC 1), 3=40(LC 19)

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

## NOTES-

 Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) Gable requires continuous bottom chord bearing.

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

- 4) \* This truss has been designed for a live load of 30.0psf 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.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.

6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



			5-9-0	
LOADING (psf) TCLL 20.0 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 IRC2015/TPI2014	CSI. TC 0.20 BC 0.13 WB 0.00 Matrix-P	DEFL.         in         (loc)         l/defl         L/d           Vert(LL)         -0.01         2-5         >999         360           Vert(CT)         -0.03         2-5         >999         240           Horz(CT)         0.01         4         n/a         n/a           Wind(LL)         0.00         2         ****         240	PLATES         GRIP           MT20         244/190           Weight: 39 lb         FT = 20%

 COP CHORD
 2x6 SP No.1

 BOT CHORD
 2x6 SP No.1

 SLIDER
 Left 2x4 SP No.2 -t 3-6-7

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-9-8 oc purlins. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 2=0-3-8 (min. 0-1-8), 5=Mechanical Max Horz 2=124(LC 12) Max Uplift4=-88(LC 12)

Max Grav 4=178(LC 19), 2=306(LC 1), 5=115(LC 3)

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

## NOTES-

 Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

3) \* This truss has been designed for a live load of 30.0psf 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.

4) Refer to girder(s) for truss to truss connections.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4.

- 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



Scale = 1:28.5

Comtech, Inc., Fayetteville, NC 28309, Bob Lewis



		1-3-8	5-9-8		
LOADING (psf) TCLL 20.0 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 IRC2015/TPI2014	CSI. TC 0.03 BC 0.01 WB 0.03 Matrix-P	DEFL.         in         (loc)         I/           Vert(LL)         0.00         1         Vert(CT)         -0.00         1           Horz(CT)         0.00         1	'defl L/d n/r 120 n/r 120 n/a n/a	PLATES         GRIP           MT20         244/190           Weight: 48 lb         FT = 20%
LUMBER- TOP CHORD 2x6 SF BOT CHORD 2x6 SF WEBS 2x4 SF OTHERS 2x4 SF	P No.1 P No.1 P No.2 P No.2		BRACING- TOP CHORD Structural except en BOT CHORD Rigid ceili	l wood sheathing nd verticals. ing directly applie	directly applied or 5-9-8 oc purlins, d or 10-0-0 oc bracing.

7-1-0

SLIDER Left 2x4 SP No.2 -t 1-7-3

#### REACTIONS. All bearings 5-9-8.

(lb) - Max Horz 2=122(LC 12)

Max Uplift All uplift 100 lb or less at joint(s) 7, 8, 9 Max Grav All reactions 250 lb or less at joint(s) 7, 2, 8, 9

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

### NOTES-

1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Corner(3) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

-1-2-8

- 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) Gable requires continuous bottom chord bearing.
- 4) Gable studs spaced at 2-0-0 oc.
- 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 8, 9. 8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and

referenced standard ANSI/TPI 1.

9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

Job	Truss	Truss Type	Qty	Ply	RAY & CHRISTINE HYMBAUGH
J0221-1067	X1GR	Jack-Open Girder	1	2	
		-		<b>_</b>	Job Reference (optional)
Comtech, Inc., Fayetteville,	NC 28309, Bob Lewis	Run: 8.300 s Mar 22 201	9 Print: 8.	300 s Mai	22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:37 2021 Page 1

ID:B4lkScsUv1LB9OVBG5UU\_Szjw\_W-nx7Yj?QYV2?7vV7tlxwdJ0fFi9cZJz3odlbn?3zjtEC

Structural wood sheathing directly applied or 5-9-8 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

Scale = 1:27.9

Comtech, Inc., Fayetteville, NC 28309, Bob Lewis



			5-9-8	
LOADING         (psf)           TCLL         20.0           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 NO Code IRC2015/TPI2014	<b>CSI.</b> TC 0.11 BC 0.75 WB 0.01 Matrix-P	DEFL.         in         (loc)         l/defl         L/d           Vert(LL)         -0.06         1-6         >999         360           Vert(CT)         -0.13         1-6         >497         240           Horz(CT)         0.00         n/a         n/a           Wind(LL)         -0.01         1-6         >999         240	PLATESGRIPMT20244/190Weight: 82 lbFT = 20%

- - -

BRACING-TOP CHORD

BOT CHORD

## LUMBER-

TOP CHORD 2x6 SP No.1 BOT CHORD 2x6 SP No.1 2x4 SP No.2 WEBS SLIDER Left 2x4 SP No.2 -t 3-3-7

#### REACTIONS. (size) 1=0-3-8 (min. 0-1-8), 6=Mechanical Max Horz 1=120(LC 8) Max Grav 1=1003(LC 1), 6=1149(LC 1)

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

## NOTES-

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc. Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc. Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed;
- MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 850 lb down at 1-11-12, and 850 b down at 3-11-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

## LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-3=-60, 3-4=-20, 1-5=-20 Concentrated Loads (lb) Vert: 7=-850(B) 8=-850(B)



			<u>3-9-8</u> 3-9-0	
LOADING (psf) TCLL 20.0 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 IRC2015/TPI2014	<b>CSI.</b> TC 0.09 BC 0.05 WB 0.00 Matrix-P	DEFL.         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         4         n/a         n/a           Wind(LL)         0.00         2         *****         240	PLATES         GRIP           MT20         244/190           Weight: 27 lb         FT = 20%

TOP CHORD 2x6 SP No.1 BOT CHORD 2x6 SP No.1 SLIDER Left 2x4 SP No.2 -t 2-4-0 BRACING-

TOP CHORDStructural wood sheathing directly applied or 3-9-8 oc purlins.BOT CHORDRigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 2=0-3-8 (min. 0-1-8), 5=Mechanical Max Horz 2=87(LC 12) Max Uplift4=-61(LC 12) Max Grav 4=112(LC 19), 2=230(LC 1), 5=75(LC 3)

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

## NOTES-

 Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

3) \* This truss has been designed for a live load of 30.0psf 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.

4) Refer to girder(s) for truss to truss connections.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4.

6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



3-9-8
3-9-0

TOP CHORD

BOT CHORD

Structural wood sheathing directly applied or 3-9-8 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

LOADING (psf) TCLL 20.0 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 NO Code IRC2015/TPI2014	<b>CSI.</b> TC 0.03 BC 0.18 WB 0.01 Matrix-P	DEFL.         in         (loc)         l/defl         L/d           Vert(LL)         -0.01         2-7         >999         360           Vert(CT)         -0.01         2-7         >999         240           Horz(CT)         0.00         n/a         n/a           Wind(LL)         -0.00         2         >999         240	<b>PLATES GRIP</b> MT20 244/190 Weight: 61 lb FT = 20%
LUMBER-			BRACING-	

## LUMBER-

TOP CHORD 2x6 SP No.1 BOT CHORD 2x6 SP No.1 2x4 SP No.2 WEBS SLIDER Left 2x4 SP No.2 -t 2-1-0

REACTIONS. (size) 2=0-3-8 (min. 0-1-8), 7=Mechanical Max Horz 2=87(LC 8) Max Grav 2=401(LC 1), 7=407(LC 1)

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

## NOTES-

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc. Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc. Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed;
- MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 447 lb down at 2-1-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

# LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-4=-60, 4-5=-20, 2-6=-20

Concentrated Loads (lb) Vert: 8=-447(B)



			3-8-7 3-7-15	
LOADING (psf) TCLL 20.0 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 IRC2015/TPI2014	CSI. TC 0.09 BC 0.05 WB 0.00 Matrix-P	DEFL.         in         (loc)         l/defl         L/d           Vert(LL)         -0.00         2-5         >999         360           Vert(CT)         -0.00         2-5         >999         240           Horz(CT)         0.00         4         n/a         n/a           Wind(LL)         0.00         2         *****         240	PLATES         GRIP           MT20         244/190           Weight: 27 lb         FT = 20%

TOP CHORD 2x6 SP No.1 BOT CHORD 2x6 SP No.1 SLIDER Left 2x4 SP No.2 -t 2-3-6 BRACING-

TOP CHORDStructural wood sheathing directly applied or 3-8-7 oc purlins.BOT CHORDRigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 2=0-3-8 (min. 0-1-8), 5=Mechanical Max Horz 2=86(LC 12) Max Uplift4=-60(LC 12) Max Grav 4=109(LC 19), 2=226(LC 1), 5=73(LC 3)

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

## NOTES-

1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

3) \* This truss has been designed for a live load of 30.0psf 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.

4) Refer to girder(s) for truss to truss connections.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4.

6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



			1-8-7 1-7-15	
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2015/TPI2014	<b>CSI.</b> TC 0.03 BC 0.01 WB 0.00 Matrix-P	DEFL.         in         (loc)         l/defl         L/d           Vert(LL)         -0.00         2         >999         360           Vert(CT)         -0.00         2         >999         240           Horz(CT)         0.00         3         n/a         n/a           Wind(LL)         0.00         2         *****         240	PLATES         GRIP           MT20         244/190           Weight: 16 lb         FT = 20%

BRACING-TOP CHORD

BOT CHORD

Structural wood sheathing directly applied or 1-8-7 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

## LUMBER-

TOP CHORD 2x6 SP No.1 BOT CHORD 2x6 SP No.1

SLIDER Left 2x6 SP No.1 -t 1-1-10

REACTIONS. (size) 3=Mechanical, 2=0-3-8 (min. 0-1-8), 4=Mechanical Max Horz 2=51(LC 12) Max Uplift3=-33(LC 12) Max Grav 3=36(LC 19), 2=161(LC 1), 4=34(LC 3)

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

## NOTES-

1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

3) \* This truss has been designed for a live load of 30.0psf 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.

4) Refer to girder(s) for truss to truss connections.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.

6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



			1-7-15	
LOADING (psf) TCLL 20.0 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 IRC2015/TPI2014	<b>CSI.</b> TC 0.03 BC 0.01 WB 0.00 Matrix-P	DEFL.         in         (loc)         l/defl         L/d           Vert(LL)         -0.00         2         >999         360           Vert(CT)         -0.00         2         >999         240           Horz(CT)         0.00         3         n/a         n/a           Wind(LL)         0.00         2         ****         240	PLATES         GRIP           MT20         244/190           Weight: 16 lb         FT = 20%

TOP CHORD 2x6 SP No.1 BOT CHORD 2x6 SP No.1

SLIDER Left 2x6 SP No.1 -t 1-1-10

BRACING-TOP CHORD

TOP CHORDStructural wood sheathing directly applied or 1-8-7 oc purlins.BOT CHORDRigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-3-8 (min. 0-1-8), 4=Mechanical Max Horz 2=51(LC 12) Max Uplift3=-33(LC 12) Max Grav 3=36(LC 19), 2=161(LC 1), 4=34(LC 3)

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

## NOTES-

1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

3) \* This truss has been designed for a live load of 30.0psf 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.

4) Refer to girder(s) for truss to truss connections.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.

6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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

TOP CHORD 2-4=-447/32

BOT CHORD 2-9=-87/292, 8-9=-87/292 WEBS 4-8=-352/105

## NOTES-

- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 30.0psf 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.
- 4) Refer to girder(s) for truss to truss connections.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 2.

6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 64 lb down and 37 lb up at 2-5-15, 64 lb down and 37 lb up at 2-5-15, and 94 lb down and 78 lb up at 5-3-15, and 94 lb down and 78 lb up at 5-3-15 on top chord, and at 2-5-15, at 2-5-15, and 19 lb down at 5-3-15, and 19 lb down at 5-3-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

9) 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 + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Continued on page 2

J0221-1067 Z1 Diagonal Hip Girder 1 1	
Job Reference (optin	nal)

Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:41 2021 Page 2 ID:B4lkScsUv1LB9OVBG5UU\_Szjw\_W-giM3YNT3ZGVY07ReXn\_ZUsqx5m83FmSOYMZ?8rzjtE8

LOAD CASE(S) Standard Uniform Loads (plf) Vert: 1-5=-60, 5-6=-20, 2-7=-20 Concentrated Loads (lb) Vert: 11=-27(F=-13, B=-13) 13=-16(F=-8, B=-8)



	[				
LOADING (psf) TCLL 20.0 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 NO Code IRC2015/TPI2014	<b>CSI.</b> TC 0.13 BC 0.10 WB 0.00 Matrix-P	<b>DEFL.</b> in Vert(LL) -0.01 Vert(CT) -0.02 Horz(CT) 0.00 Wind(LL) 0.00	(loc) l/defl L/d 2-7 >999 360 2-7 >999 240 n/a n/a 2 **** 240	PLATES         GRIP           MT20         244/190           Weight: 41 lb         FT = 20%
LUMBER- TOP CHORD 2x6 SI BOT CHORD 2x6 SI WEBS 2x4 SI SLIDER Left 2>	P No.1 P No.1 P No.2 6 SP No.1 -t 2-8-12		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing except end verticals. Rigid ceiling directly applie	directly applied or 5-2-14 oc purlins, d or 10-0-0 oc bracing.
REACTIONS. (siz	e) 7=Mechanical, 2=0-4-15 (min. 0	-1-8)			

Max Horz 2=87(LC 8) Max Uplift7=-32(LC 8), 2=-8(LC 4) Max Grav 7=193(LC 1), 2=317(LC 1)

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

## NOTES-

1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed;

MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60

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

- 3) \* This truss has been designed for a live load of 30.0psf 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.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 2.
- 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and
- referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 64 lb down and 37 lb up at 2-5-15, and 64 lb down and 37 lb up at 2-5-15 on top chord, and at 2-5-15, and at 2-5-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
  - Vert: 1-4=-60, 4-5=-20, 2-6=-20