

### **Trenco**

818 Soundside Rd Edenton, NC 27932

Re: B0318-1099 Wayfare C

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville.

Pages or sheets covered by this seal: E11606856 thru E11606885

My license renewal date for the state of North Carolina is December 31, 2018.

North Carolina COA: C-0844



April 2,2018

Lassiter, Frank

**IMPORTANT NOTE:** Truss Engineer's responsibility is solely for design of individual trusses based upon design parameters shown on referenced truss drawings. Parameters have not been verified as appropriate for any use. Any location identification specified is for file reference only and has not been used in preparing design. Suitability of truss designs for any particular building is the responsibility of the building designer, not the Truss Engineer, per ANSI/TPI-1, Chapter 2.

Job	Truss	Truss Type	Qty	Ply	Wayfare C	١
					E11606856	l
B0318-1099	A01-P	COMMON	2	1		l
					Job Reference (optional)	
Comtech Inc Favette	wille NC 28300		8	130 e Mar	11 2018 MiTek Industries Inc. Mon Apr. 2 06:51:59 2018, Page 1	

omtech, Inc., Fayetteville, NC 28309

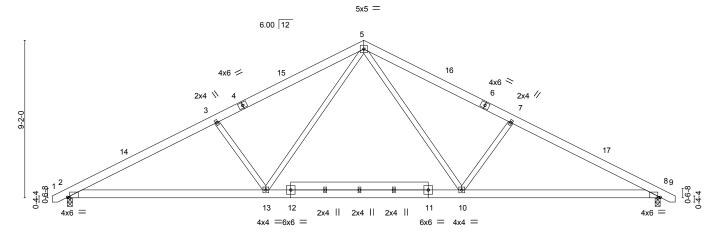
Sand Till 2018 MiTek Industries, Inc. Mon Apr 2 06:51:59 2018 Page 1

ID:WeU20\_wZYqtTA5MeuIVrNIzoaVc-5Adh3gBzz2bmmGqUqvfnbxBG0Hvw3ptxzhrYpdzUqkU

-0-10-8 8-8-6 17-3-0 25-9-10 34-6-0 35-4-8

0-10-8 8-8-6 8-6-10 8-6-10 8-8-6 0-10-8

Scale = 1:67.1



1	11-6-9		22-11-7		4-6-0	
'	11-6-9	<u> </u>	11-4-13	<u>' 1</u>	1-6-9	
Plate Offsets (X,Y)	[2:0-1-10,Edge], [8:0-1-10,Edge]					
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 IRC2009/TPI2007	CSI. TC 0.32 BC 0.84 WB 0.51 Matrix-S	DEFL. in (loc) Vert(LL) -0.48 10-13 Vert(TL) -0.64 10-13 Horz(TL) 0.09 8 Wind(LL) 0.07 2-13	>641 240 n/a n/a		T = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

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

WEBS 2x4 SP No.3 \*Except\*

11-12: 2x6 SP No.1

**REACTIONS.** (lb/size) 2=1762/0-3-8, 8=1762/0-3-8

Max Horz 2=138(LC 7)

Max Uplift 2=-221(LC 7), 8=-221(LC 8)

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

TOP CHORD 2-3=-3245/766, 3-5=-2951/764, 5-7=-2951/764, 7-8=-3245/766

BOT CHORD 2-13=-536/2794, 10-13=-210/1854, 8-10=-548/2794

WEBS 5-10=-215/1242, 7-10=-489/388, 5-13=-215/1242, 3-13=-489/388

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 17-3-0, Exterior(2) 17-3-0 to 21-7-13 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.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 221 lb uplift at joint 2 and 221 lb uplift at joint 8.



Structural wood sheathing directly applied or 4-0-9 oc purlins.

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

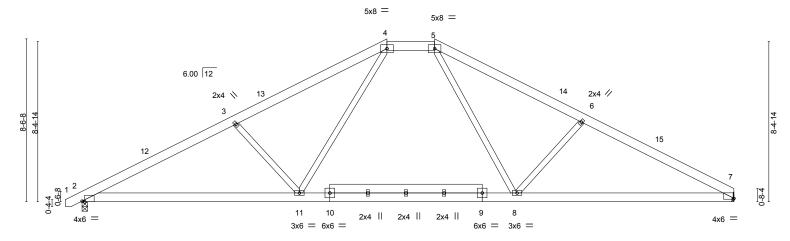
April 2,2018



Job Truss Qty Wavfare C Truss Type E11606857 B0318-1099 A03 HIP Job Reference (optional) Comtech. Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Mon Apr 2 06:52:01 2018 Page 1

ID:WeU20\_wZYqtTA5MeuIVrNIzoaVc-2ZIRULDJVgrU?a\_tyKiFgMHai5bAXk8DR?KeuWzUqkS -0-10-8 0-10-8 8-0-14 16-0-0 18-6-0 26-2-8 34-2-8 8-0-14 2-6-0 8-0-0 7-11-2 7-8-8

Scale = 1:60.5



		11-4-14		22-7-15 11-3-1	+	34-2-8 11-6-9
Plate Offset	s (X,Y)	[2:0-1-10,Edge], [7:0-0-8,0-0-9]	T	I		T
	(psf) 20.0 10.0	SPACING-         2-0-0           Plate Grip DOL         1.15           Lumber DOL         1.15	CSI. TC 0.37 BC 0.85	Vert(LL) -0.47 8-11	l/defl L/d >862 360 >655 240	PLATES         GRIP           MT20         244/190
BCLL BCDL	0.0 * 10.0	Rep Stress Incr YES Code IRC2009/TPI2007	WB 0.47 Matrix-S	Horz(TL) 0.09 7 Wind(LL) 0.09 2-11	n/a n/a >999 240	Weight: 232 lb FT = 20%

BOT CHORD

LUMBER-**BRACING-**TOP CHORD

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

2x4 SP No.3 \*Except\* 9-10: 2x6 SP No.1

REACTIONS. (lb/size) 7=1700/Mechanical, 2=1755/0-3-8

Max Horz 2=133(LC 7)

Max Uplift 7=-169(LC 8), 2=-213(LC 7)

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

TOP CHORD 2-3=-3253/854, 3-4=-2933/791, 4-5=-1975/707, 5-6=-2873/799, 6-7=-3187/839

**BOT CHORD** 2-11=-679/2807, 8-11=-315/1975, 7-8=-642/2733

WEBS 3-11=-478/412, 4-11=-188/1125, 5-8=-176/1083, 6-8=-448/403

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 16-0-0, Exterior(2) 16-0-0 to 18-6-0, Interior(1) 24-8-11 to 34-1-12 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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 169 lb uplift at joint 7 and 213 lb uplift at ioint 2.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied or 4-1-3 oc purlins, except

2-0-0 oc purlins (5-6-2 max.): 4-5.

Rigid ceiling directly applied or 9-5-1 oc bracing.

April 2,2018



Job Qty Wavfare C Truss Truss Type E11606858 B0318-1099 A04 HIP Job Reference (optional) Comtech. Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Mon Apr 2 06:52:02 2018 Page 1

6-6-0

14-0-0

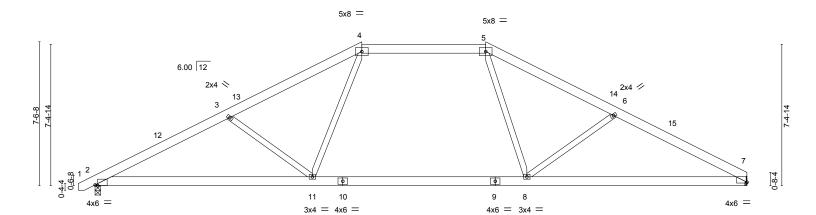
6-11-2

 $ID: We U20\_wZYqtTA5 Meu IVrNIzoaVc-WIJphhDxGzzLdkZ3V2DUDZpmHVyeGDdNfe3CQyzUqkRacket for the property of the$ 20-6-0 27-2-8 34-2-8

6-8-8

Scale = 1:60.5

7-0-0



DI 1 0" 1	<u> </u>	11-4-14	+	22-7-15 11-3-1		34-2-8 11-6-9
Plate Offset	ts (X,Y)	[2:0-1-10,Edge], [7:0-0-8,0-0-9]		T		
LOADING	(psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc)	I/defl L/d	PLATES GRIP
	20.0	Plate Grip DOL 1.15	TC 0.32	, , , , , , , , , , , , , , , , , , , ,	>999 360	MT20 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.71	Vert(TL) -0.49 8-11	>840 240	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.32	Horz(TL) 0.09 7	n/a n/a	
BCDL	10.0	Code IRC2009/TPI2007	Matrix-S	Wind(LL) 0.16 2-11	>999 240	Weight: 208 lb FT = 20%

LUMBER-**BRACING-**TOP CHORD

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

-0-10-8 0-10-8

7-0-14

7-0-14

2x4 SP No 3 **BOT CHORD** Rigid ceiling directly applied or 8-9-4 oc bracing.

REACTIONS. (lb/size) 7=1583/Mechanical, 2=1639/0-3-8

Max Horz 2=119(LC 7)

Max Uplift 7=-156(LC 8), 2=-201(LC 7)

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

TOP CHORD 2-3=-3001/939, 3-4=-2647/806, 4-5=-2013/768, 5-6=-2586/814, 6-7=-2909/918

2-11=-766/2592, 8-11=-419/2013, 7-8=-727/2511 **BOT CHORD** 

**WEBS** 3-11=-463/400, 4-11=-83/779, 5-8=-72/743, 6-8=-429/386

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 14-0-0, Exterior(2) 14-0-0 to 20-6-0, Interior(1) 26-8-11 to 34-1-12 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 156 lb uplift at joint 7 and 201 lb uplift at ioint 2.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied or 4-4-3 oc purlins, except

2-0-0 oc purlins (5-3-11 max.): 4-5.

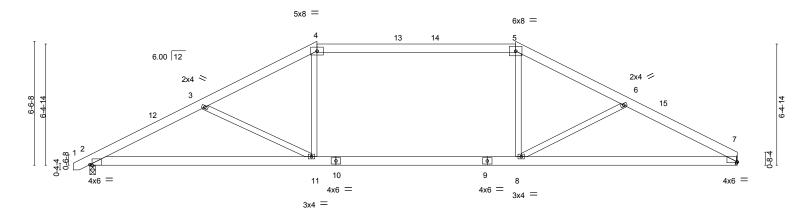


Job Qty Wavfare C Truss Truss Type E11606859 B0318-1099 A05 HIP Job Reference (optional) Comtech. Inc., 8.130 s Mar 11 2018 MiTek Industries, Inc. Mon Apr 2 06:52:03 2018 Page 1

Fayetteville, NC 28309

ID:WeU20\_wZYqtTA5MeuIVrNIzoaVc-\_xtCv1EZ1H5CFu8F3lkjlnMrbvLX?gaWuIpIyOzUqkQ -0-10-8 0-10-8 6-0-14 12-0-0 22-6-0 28-2-8 34-2-8 6-0-14 10-6-0 6-0-0 5-11-2 5-8-8

Scale = 1:60.9



	-	12-0-0 12-0-0		22-6-0 10-6-0	+	34-2-8 11-8-8
Plate Offset	s (X,Y)	[2:0-1-6,Edge], [7:0-0-8,0-0-9]	T	T		T
	(psf) 20.0 10.0 0.0 *	SPACING-         2-0-0           Plate Grip DOL         1.15           Lumber DOL         1.15           Rep Stress Incr         YES	CSI. TC 0.67 BC 0.54 WB 0.34	DEFL.         in (loc)           Vert(LL)         -0.35         2-11           Vert(TL)         -0.56         2-11           Horz(TL)         0.08         7	l/defl L/d >999 360 >732 240 n/a n/a	PLATES         GRIP           MT20         244/190
BCDL	10.0	Code IRC2009/TPI2007	Matrix-S	Wind(LL) 0.20 2-11	>999 240	Weight: 205 lb FT = 20%

LUMBER-**BRACING-**TOP CHORD

TOP CHORD 2x6 SP No.1

Structural wood sheathing directly applied or 4-9-6 oc purlins, except 2x6 SP No.1 **BOT CHORD** 2-0-0 oc purlins (4-3-4 max.): 4-5. 2x4 SP No 3 **BOT CHORD** WFBS Rigid ceiling directly applied or 8-7-3 oc bracing.

REACTIONS. (lb/size) 7=1359/Mechanical, 2=1412/0-3-8

Max Horz 2=104(LC 7)

Max Uplift 7=-140(LC 8), 2=-185(LC 7)

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

TOP CHORD 2-3=-2457/973, 3-4=-2112/802, 4-5=-1821/794, 5-6=-2105/818, 6-7=-2404/937

2-11=-801/2134, 8-11=-488/1821, 7-8=-749/2069 **BOT CHORD WEBS** 3-11=-413/348, 4-11=0/524, 5-8=-3/513, 6-8=-348/320

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 12-0-0, Exterior(2) 12-0-0 to 28-5-9, Interior(1) 28-5-9 to 34-1-12 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 140 lb uplift at joint 7 and 185 lb uplift at ioint 2.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



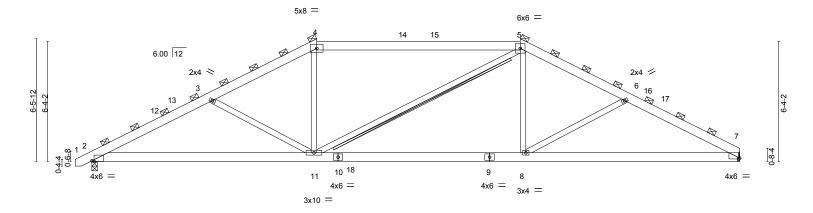


Job Truss Truss Type Qty Wavfare C E11606860 B0318-1099 A05-P HIP Job Reference (optional) 8.130 s Mar 11 2018 MiTek Industries, Inc. Mon Apr 2 06:52:03 2018 Page 1

Comtech. Inc., Fayetteville, NC 28309

ID:WeU20\_wZYqtTA5MeuIVrNIzoaVc-\_xtCv1EZ1H5CFu8F3lkjInMmSvFO?h2WuIpIyOzUqkQ -0-10-8 0-10-8 11-10-8 6-4-6 22-7-8 28-1-10 34-2-8 6-4-6 5-6-2 10-9-0 5-6-2 6-0-14

Scale = 1:60.8



	11-10-8	22-7-8		34-2-8	
I	11-10-8	10-9-0	1	11-7-0	l l
Plate Offsets (X,Y)	[2:0-1-6,Edge], [7:0-0-12,0-0-9]				
LOADING (psf) TCLL 20.0	SPACING- 2-1-8 Plate Grip DOL 1.15	<b>CSI. DEFL</b> TC 0.99 Vert(I	(,	defl L/d <b>PLATE</b> : 989 360 MT20	S GRIP 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.93 Vert(	,	750 240 W120	244/190
BCLL 0.0 * BCDL 10.0	Rep Stress Incr NO Code IRC2009/TPI2007	WB 0.31 Horz( Matrix-S Windo	,	n/a n/a 999 240 Weight:	222 lb FT = 20%

LUMBER-**BRACING-**

TOP CHORD 2x6 SP No.1 2x6 SP No.1 \*Except\* BOT CHORD

9-10: 2x6 SP 2400F 2.0E

WEBS 2x4 SP No.3 TOP CHORD 2-0-0 oc purlins (2-7-9 max.)

(Switched from sheeted: Spacing > 2-0-0). Rigid ceiling directly applied or 8-6-3 oc bracing.

**BOT CHORD** 2x4 SPF No.2 - 5-11 **WEBS** T-Brace:

> 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.

REACTIONS. (lb/size) 7=1788/Mechanical, 2=1831/0-3-8

Max Horz 2=110(LC 7)

Max Uplift 7=-148(LC 8), 2=-196(LC 7)

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

TOP CHORD 2-3=-3375/1028, 3-4=-3047/874, 4-5=-2659/869, 5-6=-3044/861, 6-7=-3319/1006 **BOT CHORD** 2-11=-838/2916, 8-11=-523/2657, 7-8=-801/2862

3-11=-279/332, 4-11=-4/749, 5-8=-4/752, 6-8=-223/318 WEBS

### NOTES-

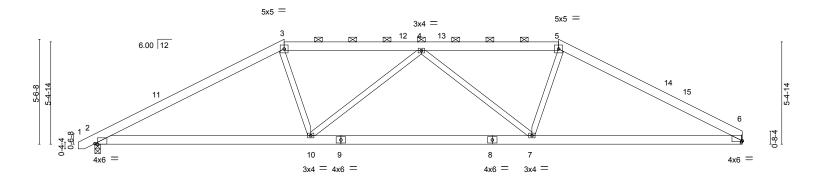
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 11-10-8, Exterior(2) 11-10-8 to 28-10-3, Interior(1) 28-10-3 to 34-1-12 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 with a clearance greater than 4-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 148 lb uplift at joint 7 and 196 lb uplift at
- 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.





Job	Truss	Truss Type	Qty	Ply	Wayfare C	
B0318-1099	A06	HIP	2	1	E1160	6861
					Job Reference (optional)	
Comtech, Inc., Fayette	ville, NC 28309		8	.130 s Mar	11 2018 MiTek Industries, Inc. Mon Apr 2 06:52:04 2018 Page	1
•			ID:WeU20_wZY	qtTA5Meu	ılVrNlzoaVc-S8Ra6NFBobD2s2jSdTFyl_u1mliPk4Rg7yYJUrzUqk	ďΡ
-9-10-8	10-0-0	17-3-0	24	1-6-0	34-2-8	
0-10-8	10-0-0	7-3-0	' 7	-3-0	9-8-8	

Scale = 1:60.9



	11-4-14		23-1-2	1	34-2-8	
	11-4-14	ı	11-8-4	I	11-1-6	
Plate Offsets (X,Y)	[2:0-1-10,Edge], [6:0-0-8,0-0-9]					
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 IRC2009/TPI2007	CSI. TC 0.64 BC 0.50 WB 0.56 Matrix-S	Vert(LL) -0.11 2-10 > Vert(TL) -0.33 2-10 > Horz(TL) 0.08 6	/defl L/d 999 360 999 240 n/a n/a 999 240	PLATES GRIP MT20 244/190 Weight: 205 lb FT = 20%	

**BOT CHORD** 

except

2-0-0 oc purlins (5-3-6 max.): 3-5.

Rigid ceiling directly applied or 9-0-0 oc bracing.

LUMBER-**BRACING-**TOP CHORD

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

2x4 SP No.3 WFBS

REACTIONS. (lb/size) 6=1359/Mechanical, 2=1412/0-3-8

Max Horz 2=90(LC 7)

Max Uplift 6=-123(LC 8), 2=-168(LC 7)

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

TOP CHORD 2-3=-2337/837, 3-4=-2107/867, 4-5=-2085/851, 5-6=-2290/819

BOT CHORD 2-10=-610/1969, 7-10=-751/2362, 6-7=-577/1945

3-10=-25/589, 4-10=-465/237, 4-7=-489/239, 5-7=-22/600 **WEBS** 

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 10-0-0, Exterior(2) 10-0-0 to 30-8-11, Interior(1) 30-8-11 to 34-1-12 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 123 lb uplift at joint 6 and 168 lb uplift at ioint 2.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied or 3-10-14 oc purlins,



Job	Truss	Truss Type	Qty	Ply	Wayfare C	
					E1160686	2
B0318-1099	A07	HIP	2	1		
					Job Reference (optional)	
Comtech, Inc., Fayette	ville, NC 28309		8	.130 s Mar	11 2018 MiTek Industries, Inc. Mon Apr 2 06:52:05 2018 Page 1	
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26-6-0

9-3-0

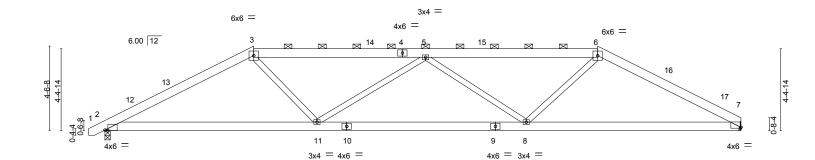
17-3-0

9-3-0

34-2-8

Scale = 1:62.0

7-8-8



	_	11-4-14				22-7-15					34-2-8	
	'	11-4-14		'		11-3-1					11-6-9	
Plate Offse	ets (X,Y)	[2:0-1-14,Edge], [3:0-0-0,0	0-0-0], [6:0-0-0	0,0-0-0], [7:0-	0-8,0-0-9]							
LOADING TCLL	20.Ó	SPACING- Plate Grip DOL	2-0-0 1.15	_	0.39	DEFL. Vert(LL)	in -0.13	(loc) 7-8	l/defl >999	L/d 360	PLATES MT20	<b>GRIP</b> 244/190
TCDL BCLL	10.0 0.0 *	Lumber DOL Rep Stress Incr	1.15 YES		0.53 0.64	Vert(TL) Horz(TL)	-0.38 0.09	7-8 7	>999 n/a	240 n/a		
BCDL	10.0	Code IRC2009/TP	-	Matrix-		Wind(LL)		8-11	>999	240	Weight: 202 lb	FT = 20%

TOP CHORD

**BOT CHORD** 

except

2-0-0 oc purlins (4-6-1 max.): 3-6.

Rigid ceiling directly applied or 7-9-11 oc bracing.

LUMBER- BRACING-

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

WEBS 2x4 SP No.3

-0-10-8 0-10-8 8-0-0

8-0-0

REACTIONS. (lb/size) 7=1359/Mechanical, 2=1412/0-3-8

Max Horz 2=76(LC 7)

Max Uplift 7=-152(LC 5), 2=-158(LC 6)

 $\textbf{FORCES.} \quad \text{(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.}$ 

TOP CHORD 2-3=-2403/893, 3-5=-2556/946, 5-6=-2583/939, 6-7=-2365/890

BOT CHORD 2-11=-682/2074, 8-11=-1008/3027, 7-8=-656/2031 WEBS 3-11=-88/789, 5-11=-653/359, 5-8=-628/355, 6-8=-96/846

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 8-0-0, Exterior(2) 8-0-0 to 32-8-11, Interior(1) 32-8-11 to 34-1-12 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 152 lb uplift at joint 7 and 158 lb uplift at joint 2.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



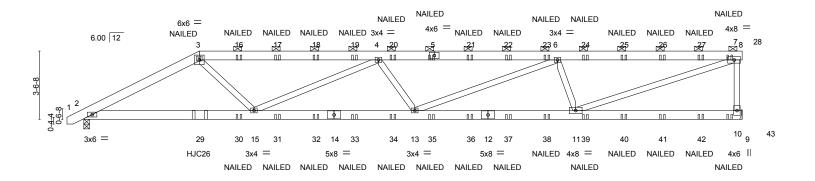
Structural wood sheathing directly applied or 4-6-11 oc purlins,

April 2,2018



Job Qty Wavfare C Truss Truss Type Plv E11606863 B0318-1099 A08 Half Hip Girder Job Reference (optional) Comtech. Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Mon Apr 2 06:52:07 2018 Page 1  $ID: We U20\_wZYqtTA5 Meu IVrNIzoaVc-sj6 il PH44WbdjVS1 IbpfwdWVhWiDxPz6pwnz59zUqkMachinery was also believed by the property of the property$ -0-10-8 6-0-0 15-3-11 34-2-8 24-7-5 0-10-8 9-3-11 6-0-0 9-3-11 9-7-3

Scale = 1:59.9



	8-10-1	17-2-6	25-6-11	34-2-8
	8-10-1	8-4-5	8-4-5	8-7-13
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 NO	CSI. TC 0.79 BC 0.62 WB 0.70	DEFL.         in (loc)         l/defl         L/d           Vert(LL)         -0.20 11-13         >999         360           Vert(TL)         -0.50 11-13         >814         240           Horz(TL)         0.09         10         n/a         n/a	<b>PLATES GRIP</b> MT20 244/190
BCDL 10.0	Code IRC2009/TPI2007	Matrix-S	Wind(LL) 0.23 11-13 >999 240	Weight: 435 lb FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.3 \*E:

2x4 SP No.3 \*Except\* 7-11: 2x4 SP No.2

**REACTIONS.** (lb/size) 10=2730/Mechanical, 2=2584/0-3-8

Max Horz 2=138(LC 11)

Max Uplift 10=-773(LC 4), 2=-657(LC 5)

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

TOP CHORD 2-3=-4876/1376, 3-4=-5642/1484, 4-6=-7268/1999, 6-7=-5515/1516, 7-10=-2529/860

BOT CHORD 2-15=-1260/4290, 13-15=-2189/7422, 11-13=-1751/6020

WEBS 3-15=-342/1990, 4-15=-1973/809, 4-13=-294/363, 6-13=-268/1352, 6-11=-1720/802,

7-11=-1559/5704

### 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) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise); Lumber DOL=1.60 plate grip DOL=1.60
- 4) Provide adequate drainage to prevent water ponding.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 773 lb uplift at joint 10 and 657 lb uplift at joint 2.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 10) Use USP HJC26 (With 16d nails into Girder & 10d nails into Truss) or equivalent at 6-0-6 from the left end to connect truss(es) to back face of bottom chord.
- 11) Fill all nail holes where hanger is in contact with lumber.
- 12) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.

### LOAD CASE(S) Standard

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



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

except end verticals, and 2-0-0 oc purlins (5-11-3 max.): 3-8.

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

April 2,2018

### Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and property incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPIQ Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Edenton, NC 27932

Job Truss Truss Type Qty Ply Wayfare C E11606863 B0318-1099 80A Half Hip Girder Job Reference (optional)

Fayetteville, NC 28309 Comtech, Inc.,

8.130 s Mar 11 2018 MiTek Industries, Inc. Mon Apr 2 06:52:07 2018 Page 2 ID:WeU20\_wZYqtTA5MeulVrNlzoaVc-sj6ilPH44WbdjVS1lbpfwdWVhWiDxPz6pwnz59zUqkM

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-3=-60, 3-7=-60, 7-8=-20, 2-9=-20

Concentrated Loads (lb)

Vert: 3=-108(B) 5=-108(B) 16=-108(B) 17=-108(B) 18=-108(B) 19=-108(B) 20=-108(B) 21=-108(B) 22=-108(B) 23=-108(B) 24=-108(B) 25=-108(B) 26=-108(B) 26=-108 27=-108(B) 28=-124(B) 29=-373(B) 30=-38(B) 31=-38(B) 32=-38(B) 33=-38(B) 33=-38(B) 35=-38(B) 35=

41=-38(B) 42=-38(B) 43=-41(B)





Job Qty Wavfare C Truss Truss Type E11606864 B0318-1099 A09-P HIP Job Reference (optional)

2-6-0

16-0-0

7-11-2

Comtech, Inc., Fayetteville, NC 28309

8-0-14

8-0-14

-0-10-8 0-10-8

8.130 s Mar 11 2018 MiTek Industries, Inc. Mon Apr 2 06:52:07 2018 Page 1  $ID: WeU20\_wZYqtTA5 MeuIVrNIzoaVc-sj6 iIPH44WbdjVS1 IbpfwdWc5WeGxSe6pwnz59zUqkMarket MeuIVrNIzoaVc-sj6 iIPH44WbdjWc5WeGxSe6pwnz59zUqkMarket MeuIVrNIzoaVc-sj6 iIPH44WbdjWc5WeGxSe6pwnz59zUqkMarket MeuIVrNIzoaVc-sj6 iIPH44WbdjWc5WegxSefwayWc5WegxSefwayWc5WegxSefwayWc5WegxSefwayWc5WegxSefwayWc$ 18-6-0 34-6-0 35-4-8 0-10-8 26-5-2

8-0-14

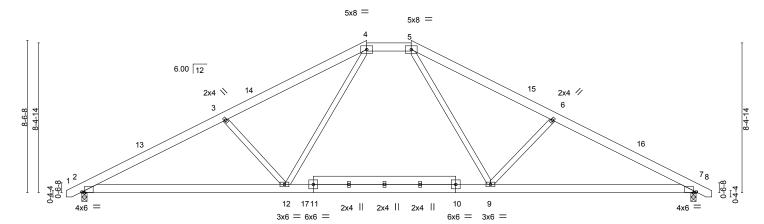
Structural wood sheathing directly applied or 4-1-6 oc purlins, except

2-0-0 oc purlins (5-5-11 max.): 4-5.

Rigid ceiling directly applied or 9-6-15 oc bracing.

7-11-2

Scale = 1:64.7



$\vdash$	11-6-9 11-6-9		22-11-7 11-4-13	+	34-6-0 11-6-9
Plate Offsets (X,Y)	[2:0-1-10,Edge], [7:0-1-10,Edge]				
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 IRC2009/TPI2007	CSI. TC 0.38 BC 0.87 WB 0.46 Matrix-S	DEFL.         in (loc)           Vert(LL)         -0.49         9-12           Vert(TL)         -0.65         9-12           Horz(TL)         0.09         7           Wind(LL)         0.09         2-12	l/defl L/d >835 360 >629 240 n/a n/a >999 240	PLATES GRIP MT20 244/190 Weight: 235 lb FT = 20%

**BOT CHORD** 

LUMBER-**BRACING-**TOP CHORD

TOP CHORD 2x6 SP No.1 2x6 SP No.1 **BOT CHORD** 2x4 SP No.3 \*Except\* WFBS

10-11: 2x6 SP No.1

**REACTIONS.** (lb/size) 2=1755/0-3-8, 7=1759/0-3-8

Max Horz 2=128(LC 7)

Max Uplift 2=-214(LC 7), 7=-214(LC 8)

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

TOP CHORD 2-3=-3256/852, 3-4=-2937/796, 4-5=-1988/706, 5-6=-2931/790, 6-7=-3260/854

**BOT CHORD** 2-12=-656/2810, 9-12=-293/1988, 7-9=-654/2814

WEBS 3-12=-476/411, 4-12=-186/1111, 5-9=-178/1122, 6-9=-483/413

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 16-0-0, Exterior(2) 16-0-0 to 18-6-0, Interior(1) 24-8-11 to 35-2-10 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 with a clearance greater than 5-0-0 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 214 lb uplift at joint 2 and 214 lb uplift at joint 7.
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.





Job	Truss	Truss Type	Qty	Ply	Wayfare C	
					E11606865	
B0318-1099	A10-P	HIP	1	1		
					Job Reference (optional)	
Canada ala Inna Carratta	.:II- NO 00000			400 - 14	44 0040 MiTab laduatrias las Mas Ass 0.00:50:00.0040 Dass 4	

20-4-8

6-3-0

27-4-6

6-11-14

2-0-0 oc purlins (4-0-4 max.)

(Switched from sheeted: Spacing > 2-0-0).

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

14-1-8

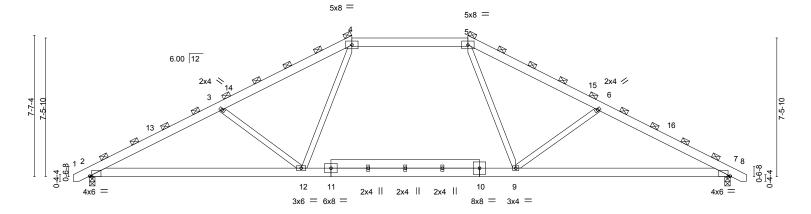
6-11-14

Scale = 1:62.0

35-4-8 0-10-8

34-6-0

7-1-10



	<u> </u>	11-6-9 11-6-9		-		22-11-7 11-4-13			+		34-6-0 11-6-9	
Plate Offsets (2	X,Y)	[2:0-1-6,Edge], [7:0-1-6,E	dge]								T	
LOADING (ps TCLL 20. TCDL 10.	.Ó .0	SPACING- Plate Grip DOL Lumber DOL	2-1-8 1.15 1.15	CSI. TC BC	0.45 0.57	Vert(LL)	in -0.44 -0.58		I/defl >924 >703	L/d 360 240	PLATES MT20	<b>GRIP</b> 244/190
BCLL 0. BCDL 10.	.0 *	Rep Stress Incr Code IRC2009/TP	NO 12007	WB Matrix	0.41 -S	Horz(TL) Wind(LL)	0.08 0.15	7 2-12	n/a >999	n/a 240	Weight: 230 lb	FT = 20%

**BOT CHORD** 

LUMBER-**BRACING-**TOP CHORD 2x6 SP No.1 TOP CHORD

2x6 SP 2400F 2.0E **BOT CHORD** 

-0-10-8

0-10-8

7-1-10

7-1-10

2x4 SP No.3 \*Except\* WFBS 10-11: 2x6 SP No.1

**REACTIONS.** (lb/size) 2=1876/0-3-8, 7=1874/0-3-8

Max Horz 2=122(LC 7)

Max Uplift 2=-214(LC 7), 7=-214(LC 8)

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

TOP CHORD 2-3=-3504/988, 3-4=-3134/863, 4-5=-2368/811, 5-6=-3121/861, 6-7=-3497/990

**BOT CHORD** 2-12=-783/3030, 9-12=-416/2368, 7-9=-781/3024 WEBS 3-12=-477/426, 4-12=-88/984, 5-9=-85/978, 6-9=-482/427

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 14-1-8, Exterior(2) 14-1-8 to 20-4-8, Interior(1) 26-7-3 to 35-2-10 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 with a clearance greater than 5-0-0 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 214 lb uplift at joint 2 and 214 lb uplift at joint 7.
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Job Truss Type Qty Wavfare C Truss PΙν E11606866 B0318-1099 В1 COMMON SUPPORTED GAB Job Reference (optional) Comtech. Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Mon Apr 2 06:52:09 2018 Page 1 ID:qBVty8JxTR2c0jvIHgLUvLzeJa3-p5ET95JKc7rLzpbPQ0r7?2c0tJW5PS4PGEG3A2zUqkK 70-10-8 0-10-8 12-5-15 17-8-0 18-6-8 12-5-15 0-10-8 5-2-1

> 8 25 <sub>9</sub> <sup>10</sup> 26 6.00 12 24 6 23 9-9-0 3x4 =22 21 20 19 16 15 13 18 17 14 4x6 = 17-8-0

		I .			17-8-0						
LOADING TCLL	20.Ó	SPACING- 2-0-0 Plate Grip DOL 1.15	TC (	0.10	<b>DEFL.</b> Vert(LL)	in -0.00	(loc) 12	l/defl n/r	L/d 120	PLATES MT20	<b>GRIP</b> 244/190
TCDL	10.0	Lumber DOL 1.15		0.02	Vert(TL)	-0.00	12	n/r	120		
BCLL	0.0 *	Rep Stress Incr YES	WB (	0.08	Horz(TL)	0.00	13	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007	Matrix-S	S						Weight: 125 lb	FT = 20%

LUMBER- BRACING-

TOP CHORD 2x4 SP No.1 BOT CHORD 2x6 SP No.1 WEBS 2x4 SP No.3 OTHERS 2x4 SP No.3 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins,

except end verticals.

4x4 =

BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS.** All bearings 17-8-0.

(lb) - Max Horz 2=266(LC 7)

Max Grav All reactions 250 lb or less at joint(s) 13, 2, 16, 17, 19, 20, 21, 22, 15, 14

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

TOP CHORD 7-8=-30/259, 8-9=-29/271

WEBS 3-22=-138/255

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Corner(3) -0-10-8 to 3-6-5, Exterior(2) 3-6-5 to 12-5-15, Corner(3) 12-5-15 to 16-10-11 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 requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 17, 19, 20, 21, 15, 14 except (jt=lb) 13=130, 22=117.
- 10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.



April 2,2018

Scale = 1:42.0



Job Truss Qty Wavfare C Truss Type E11606867 B0318-1099 B2 COMMON Job Reference (optional) Fayetteville, NC 28309 Comtech. Inc., 8.130 s Mar 11 2018 MiTek Industries, Inc. Mon Apr 2 06:52:09 2018 Page 1 ID:qBVty8JxTR2c0jvIHgLUvLzeJa3-p5ET95JKc7rLzpbPQ0r7?2cyjJStPIGPGEG3A2zUqkK -0-10-8 0-10-8 6-3-14 12-5-15 17-8-0 18-6-8 6-3-14 6-2-1 0-10-8 5-2-1 Scale = 1:42.5 5x8 = 2x4 || 6.00 12 13 5 2x4 📏 9 8 4x6 =6x6 = 3x4 =

				8-9-2					8-10-14			
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.04	7-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(TL)	-0.10	2-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.71	Horz(TL)	0.01	7	n/a	n/a		
BCDL	10.0	Code IRC2009/TP	12007	Matrix	k-S	Wind(LL)	0.03	2-9	>999	240	Weight: 107 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.1 **BOT CHORD** 2x6 SP No.1 2x4 SP No.3 **WEBS** 

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-8-9 oc purlins,

except end verticals.

**BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing

17-8-0

(lb/size) 7=756/0-3-8, 2=756/0-3-8 REACTIONS.

Max Horz 2=196(LC 7)

Max Uplift 7=-112(LC 8), 2=-145(LC 7)

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

TOP CHORD 2-3=-1080/360, 3-4=-844/340, 5-7=-231/273

**BOT CHORD** 2-9=-367/885, 7-9=-120/386

3-9=-356/295, 4-9=-132/586, 4-7=-588/182 **WEBS** 

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 12-5-15, Exterior(2) 12-5-15 to 16-10-11 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

8-9-2

- 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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) except (jt=lb) 7=112, 2=145.





Job Qty Ply Wavfare C Truss Truss Type E11606868 B0318-1099 ВЗ Common Girder Job Reference (optional) Comtech, Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Mon Apr 2 06:52:10 2018 Page 1 ID:qBVty8JxTR2c0jvIHgLUvLzeJa3-HlorNQKyNRzCazAbzjMMXF85ejdD8jDYVu?diUzUqkJ -0-10-8 0-10-8 12-5-15 6-5-14 17-8-0 6-5-14 6-0-1 5-2-1 Scale = 1:43.8 6x8 || 3x6 || 6.00 12 2x4 \ 9 10 12 13 THD28-2 MSH29 8x8 =MSH29 MSH29 6x10 M18SHS = 6x12 || MSH29 MSH29 8-11-2 17-8-0 8-11-2 8-8-14 [2:0-11-6,0-2-1], [8:0-8-0,0-2-8] Plate Offsets (X,Y)--LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defl I/d **PLATES** GRIP Plate Grip DOL TC Vert(LL) -0.12 244/190 TCLL 20.0 1.15 0.48 6-8 >999 360 MT20 244/190 TCDL 10.0 Lumber DOL 1.15 BC 0.98 Vert(TL) -0.276-8 >777 240 M18SHS **BCLL** 0.0 WB 0.86 6 Rep Stress Incr NO Horz(TL) 0.03 n/a BCDL 10.0 Code IRC2009/TPI2007 Matrix-S Wind(LL) 0.09 2-8 >999 Weight: 303 lb FT = 20% LUMBER-BRACING-TOP CHORD 2x6 SP No.1 TOP CHORD Structural wood sheathing directly applied or 5-5-9 oc purlins, except end verticals.

**BOT CHORD** 

**WEBS** 

Rigid ceiling directly applied or 10-0-0 oc bracing. T-Brace: 2x4 SPF No.2 - 4-6

Brace must cover 90% of web length.

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.

2x10 SP No.1 \*Except\* BOT CHORD

2-7: 2x10 SP 2400F 2.0E

WEBS 2x4 SP No.3 \*Except\*

4-8: 2x4 SP No.1, 5-6: 2x6 SP No.1

REACTIONS. (lb/size) 6=6736/0-3-8 (req. 0-4-0), 2=4670/0-3-8

Max Horz 2=206(LC 5)

Max Uplift 6=-922(LC 5), 2=-892(LC 5)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-8845/1464, 3-4=-8591/1439, 4-5=-506/115, 5-6=-383/115

**BOT CHORD** 2-8=-1423/7869, 6-8=-561/3344

WEBS 3-8=-377/241, 4-8=-1407/8552, 4-6=-4734/836

### 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: 2x10 - 2 rows staggered at 0-4-0 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 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise); Lumber DOL=1.60 plate grip DOL=1.60
- 5) All plates are MT20 plates unless otherwise indicated.
- 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 8) WARNING: Required bearing size at joint(s) 6 greater than input bearing size.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=922, 2=892.
- 10) Use USP THD28-2 (With 16d nails into Girder & 10d nails into Truss) or equivalent at 6-1-8 from the left end to connect truss(es) to back face of bottom chord.
- 11) Use USP MSH29 (With 10d nails into Girder & 10d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 8-0-12 from the left end to 16-0-12 to connect truss(es) to back face of bottom chord.
- 12) Fill all nail holes where hanger is in contact with lumber.
- 13) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



April 2,2018

### (LOAD CASE(SheStandard

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



JobTrussTruss TypeQtyPlyWayfare CB0318-1099B3Common Girder12
Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Mon Apr 2 06:52:10 2018 Page 2 ID:qBVty8JxTR2c0jvIHgLUvLzeJa3-HlorNQKyNRzCazAbzjMMXF85ejdD8jDYVu?diUzUqkJ

### LOAD CASE(S) Standard

1) Dead + Roof Live (balanced) + Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)

Vert: 1-4=-60, 4-5=-60, 2-6=-20

Concentrated Loads (lb)

Vert: 9=-2711(B) 10=-1339(B) 11=-1339(B) 12=-1339(B) 13=-1563(B) 14=-1680(B)



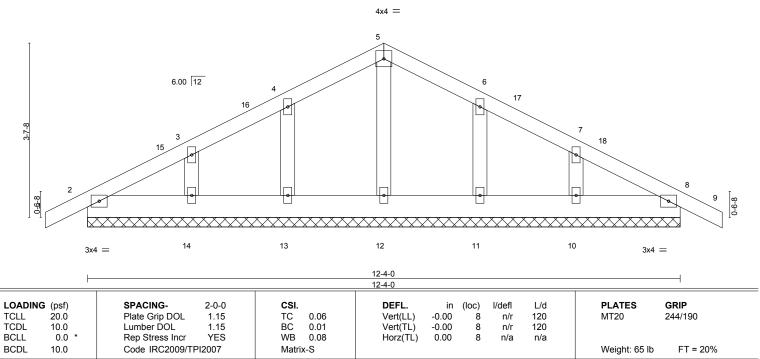
Job Truss Qty Wavfare C Truss Type PΙν E11606869 B0318-1099 C1 COMMON SUPPORTED GAB Job Reference (optional) Comtech. Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Mon Apr 2 06:52:11 2018 Page 1

ID:qBVty8JxTR2c0jvIHgLUvLzeJa3-IUMDamKa8k63C6loXRtb4ThMy7CatMjikYIAExzUqkI 12-4-0 13-2-8 6-2-0 0-10-8

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

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

Scale: 1/2"=1"



**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

2x4 SP No.1 TOP CHORD **BOT CHORD** 2x6 SP No.1

-0-10-8

0-10-8

2x4 SP No.3 **OTHERS** 

REACTIONS. All bearings 12-4-0 Max Horz 2=-69(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 13, 14, 11, 10

Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

6-2-0

6-2-0

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. **WEBS** 4-13=-128/254, 3-14=-123/254, 6-11=-128/254, 7-10=-123/254

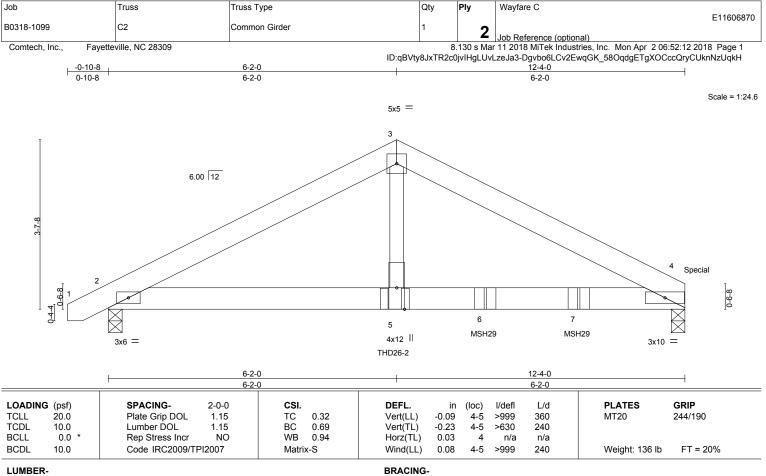
### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Corner(3) -0-10-8 to 3-6-5, Exterior(2) 3-6-5 to 6-2-0, Corner(3) 6-2-0 to 10-6-13 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 requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8, 13, 14, 11, 10.
- 10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 8.



April 2,2018





TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x6 SP No.1 **BOT CHORD** 2x6 SP 2400F 2.0E 2x4 SP No.3 WEBS

REACTIONS. (lb/size) 4=5594/0-3-8, 2=2586/0-3-8

Max Horz 2=63(LC 13)

Max Uplift 4=-829(LC 6), 2=-579(LC 5)

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

TOP CHORD 2-3=-5479/1138, 3-4=-5409/1128 2-5=-952/4776, 4-5=-952/4776 **BOT CHORD** 

**WEBS** 3-5=-898/4546

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 0-4-0 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 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise); Lumber DOL=1.60 plate grip DOL=1.60

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

- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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) except (jt=lb) 4=829 2=579
- 8) Use USP THD26-2 (With 16d nails into Girder & 10d nails into Truss) or equivalent at 6-1-8 from the left end to connect truss(es) to front face of bottom chord.
- 9) Use USP MSH29 (With 10d nails into Girder & 10d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 8-0-12 from the left end to 10-0-12 to connect truss(es) to front face of bottom chord.

10) Fill all nail holes where hanger is in contact with lumber

11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1775 lb down and 156 lb up at 12-2-4 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: 1-3=-60, 3-4=-60, 2-4=-20



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

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

April 2,2018

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Wayfare C Job Truss Truss Type Qty Ply E11606870 B0318-1099 C2 Common Girder Job Reference (optional)

Fayetteville, NC 28309 Comtech, Inc.,

8.130 s Mar 11 2018 MITek Industries, Inc. Mon Apr 2 06:52:12 2018 Page 2 ID:qBVty8JxTR2c0jvIHgLUvLzeJa3-Dgvbo6LCv2EwqGK\_58OqdgETgXOCccQryCUknNzUqkH

LOAD CASE(S) Standard Concentrated Loads (lb)

Vert: 4=-1775(F) 5=-2711(F) 6=-1339(F) 7=-1339(F)



April 2,2018

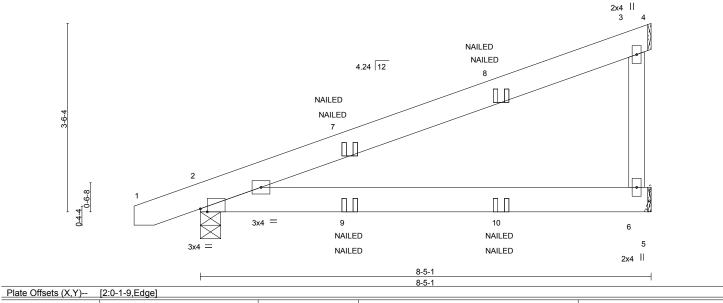


JobTrussTruss TypeQtyPlyWayfare CB0318-1099CJ08Diagonal Hip Girder21Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309

C 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Mon Apr 2 06:52:12 2018 Page 1
ID:qBVty8JxTR2c0jvIHgLUvLzeJa3-Dgvbo6LCv2EwqGK\_58OqdgERsXTscq7ryCUknNzUqkH
4-1-12 8-5-1
1-2-14 4-1-12 4-3-5

Scale = 1:21.5



LOADING (psf) TCLL 20.0 TCDL 10.0	SPACING-         2-0-0           Plate Grip DOL         1.15           Lumber DOL         1.15	CSI. TC 0.50 BC 0.33	<b>DEFL.</b> in (loc) I/defl Vert(LL) -0.06 2-6 >999 Vert(TL) -0.16 2-6 >610	L/d 360 240	PLATES GRIP MT20 244/190
BCLL 0.0 *	Rep Stress Incr NO	WB 0.00	Horz(TL) 0.00 n/a	n/a	Weight: 48 lb FT = 20%
BCDL 10.0	Code IRC2009/TPI2007	Matrix-P	Wind(LL) 0.00 2 ****	240	

**BRACING-**

LUMBER-

REACTIONS.

WFBS

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

 2x6 SP No.1
 TOP CHORD

 2x6 SP No.1
 EXECUTE: TOP CHORD

 2x4 SP No.3
 BOT CHORD

(lb/size) 6=364/Mechanical, 2=417/0-4-9 Max Horz 2=136(LC 3)

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

Max Uplift 6=-109(LC 3), 2=-117(LC 3)

TOP CHORD 3-6=-266/168

### NOTES-

- 1) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise); 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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) except (jt=lb) 6=109, 2=117.
- 6) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 7) 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

Uniform Loads (plf)

Vert: 1-3=-60, 3-4=-20, 2-5=-20

Concentrated Loads (lb)

Vert: 8=-40(F=-20, B=-20) 10=-19(F=-9, B=-9)



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

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

except end verticals.



Job	Truss	Truss Type	Qty	Ply	Wayfare C	
					E11606872	
B0318-1099	G1	COMMON	2	1		
					Job Reference (optional)	
Comtech Inc Favette	ville NC 28300		8	130 c Mar	11 2018 MiTek Industries Inc. Mon Apr. 2 06:52:13 2018 Page 1	-

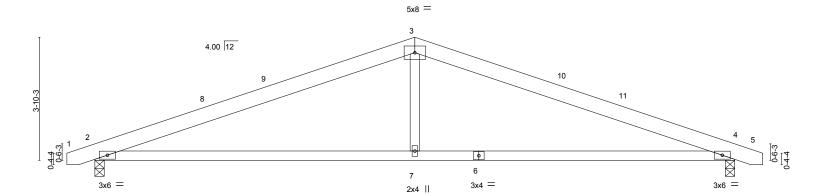
 $ID:qBVty8JxTR2c0jvIHgLUvLzeJa3-htT\_?SMqgMMnRQvAfsv39umaCxi7LFg\_BsEHJpzUqkG$ 10-0-0

Structural wood sheathing directly applied or 5-0-13 oc purlins.

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

20-0-0 20-10-8 0-10-8

Scale = 1:36.0



	-	10-0-0					20-0-0		
		10-0-0					10-0-0		
LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (lo	c) I/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.59	Vert(LL)	-0.17 2	7 >999	360	MT20	244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.78	Vert(TL)	-0.48 2	7 >491	240		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.17	Horz(TL)	0.05	4 n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007	Matrix-S	Wind(LL)	0.07 2-	7 >999	240	Weight: 88 lb	FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x6 SP No.1 **BOT CHORD** 2x4 SP No.1 2x4 SP No.3 WEBS

<sub>-</sub>0-10-8

0-10-8

REACTIONS. (lb/size) 4=838/0-3-8, 2=838/0-3-8

Max Horz 2=54(LC 7)

Max Uplift 4=-161(LC 6), 2=-161(LC 5)

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

2-3=-1438/474, 3-4=-1438/474 TOP CHORD **BOT CHORD** 2-7=-330/1294, 4-7=-330/1294

WEBS 3-7=0/455

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -0-8-3 to 3-8-10, Interior(1) 3-8-10 to 10-0-0, Exterior(2) 10-0-0 to 14-4-13 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.

10-0-0

10-0-0

- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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) except (jt=lb) 4=161, 2=161
- 6) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



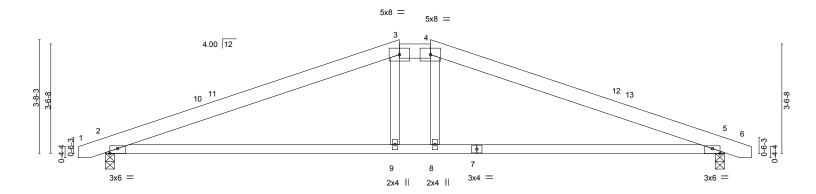
April 2,2018



Job	Truss	Truss Type	Qty	Ply	Wayfare C	
					E11606873	
B0318-1099	G2	HIP	1	1		
					Job Reference (optional)	
Comtach Inc Equation	villa NC 28300		Ω	130 c Mar	11 2018 MiTek Industries Inc. Mon Apr. 2 06:52:14 2018, Page 1	_

			ID	:qBVty8JxTR2c0jvIHgLUvLzeJa3-931MDoNTRfUe3aUNCZRIi5JmhK4f4jG8Q'	NzqrGzU∈	ąkF
Т	0-10-8	9-6-0	10-6-0	20-0-0	20-10-8	
(	0-10-8	9-6-0	1-0-0	9-6-0	0-10-8	

Scale = 1:37.2



$\vdash$	9-6-0 9-6-0		10-6-0	20-0-0 9-6-0	
Plate Offsets (X,Y)-	[2:0-3-0,Edge], [5:0-3-0,Edge]				
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 0.55 BC 0.63 WB 0.09	<b>DEFL.</b> in Vert(LL) -0.16 Vert(TL) -0.45 Horz(TL) 0.05	(loc) I/defl L/d 2-9 >999 360 2-9 >523 240 5 n/a n/a	PLATES GRIP MT20 244/190
BCDL 10.0	Code IRC2009/TPI2007	Matrix-S	Wind(LL) 0.08	2-9 >999 240	Weight: 92 lb FT = 20%

LUMBER-**BRACING-**

TOP CHORD 2x6 SP No.1 TOP CHORD 2x4 SP No.1 **BOT CHORD** 

2-0-0 oc purlins (6-0-0 max.): 3-4. **WEBS** 2x4 SP No.3 **BOT CHORD** Rigid ceiling directly applied or 9-8-5 oc bracing.

REACTIONS. (lb/size) 5=838/0-3-8, 2=838/0-3-8

Max Horz 2=51(LC 7)

Max Uplift 5=-164(LC 6), 2=-164(LC 5)

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

TOP CHORD 2-3=-1482/536, 3-4=-1335/570, 4-5=-1482/536 BOT CHORD 2-9=-393/1341, 8-9=-396/1335, 5-8=-395/1341

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -0-8-3 to 3-8-10, Interior(1) 3-8-10 to 9-6-0, Exterior(2) 9-6-0 to 10-6-0, Interior(1) 16-8-11 to 20-8-3 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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) except (jt=lb) 5=164, 2=164.
- 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.



Structural wood sheathing directly applied or 5-3-2 oc purlins, except

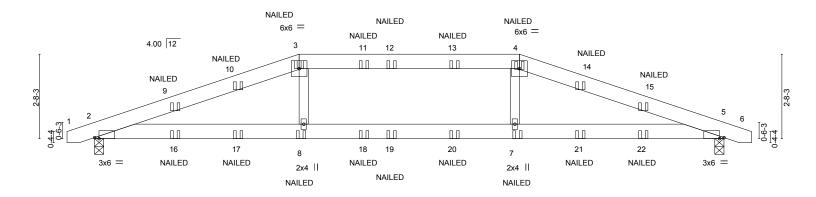
April 2,2018



Job Qty Truss Truss Type Wavfare C E11606874 B0318-1099 G3 HIP GIRDER Job Reference (optional) Comtech. Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Mon Apr 2 06:52:15 2018 Page 1

20-10-8 -0-10-8 13-6-0 6-6-0 20-0-0 0-10-8 7-0-0 0-10-8 6-6-0 6-6-0

Scale = 1:36.6



<u> </u>	6-6-0 6-6-0	-	13-6-0 7-0-0	+	20-0-0 6-6-0
Plate Offsets (X,Y)	[2:0-1-11,Edge], [5:0-1-11,Edge]		7-0-0		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 NO Code IRC2009/TPI2007	CSI. TC 0.44 BC 0.44 WB 0.16 Matrix-S	DEFL.         in (loc)           Vert(LL)         -0.08         8           Vert(TL)         -0.19         7-8           Horz(TL)         0.05         5           Wind(LL)         0.08         7-8	l/defl L/d >999 360 >999 240 n/a n/a >999 240	PLATES GRIP MT20 244/190 Weight: 105 lb FT = 20%

**BOT CHORD** 

LUMBER-**BRACING-**TOP CHORD

TOP CHORD 2x6 SP No.1 2x6 SP No.1 **BOT CHORD** 2x4 SP No 3

> (lb/size) 2=1131/0-3-8, 5=1128/0-3-8 Max Horz 2=40(LC 5)

Max Uplift 2=-270(LC 3), 5=-269(LC 4)

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

2-3=-2495/552, 3-4=-2304/543, 4-5=-2494/551 TOP CHORD 2-8=-484/2290, 7-8=-475/2304, 5-7=-482/2289 **BOT CHORD** 

3-8=0/414, 4-7=0/414 **WEBS** 

### NOTES-

WFBS

REACTIONS.

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise); 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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) except (jt=lb) 2=270. 5=269.
- 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) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 10) 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 Uniform Loads (plf)

Vert: 1-3=-60, 3-4=-60, 4-6=-60, 2-5=-20

Concentrated Loads (lb)

Vert: 3=-46(B) 4=-46(B) 8=-18(B) 7=-18(B) 9=-41(B) 10=-37(B) 11=-46(B) 12=-46(B) 13=-46(B) 14=-37(B) 15=-41(B) 16=-26(B) 17=-29(B) 18=-18(B) 19=-18(B) 20=-18(B) 21=-29(B) 22=-26(B)



Structural wood sheathing directly applied or 4-7-7 oc purlins, except

2-0-0 oc purlins (4-7-4 max.): 3-4.

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

April 2,2018

⚠ WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

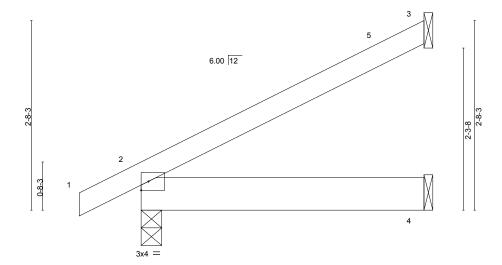


Edenton, NC 27932

Job Truss Qty Wavfare C Truss Type E11606875 B0318-1099 GJ1 Jack-Open 5 Job Reference (optional) Comtech. Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Mon Apr 2 06:52:15 2018 Page 1 ID:qBVty8JxTR2c0jvIHgLUvLzeJa3-dFbkQ8O5CzcVhk3ZmGyXEJs0SkZwpAtHfAjONizUqkEID:qBVty8JxTR2c0jvIHgLUvLzeJa3-dFbkQ8O5CzcVhk3ZmGyXEJs0SkZwpAtHfAjONizUqkEID:qBVty8JxTR2c0jvIHgLUvLzeJa3-dFbkQ8O5CzcVhk3ZmGyXEJs0SkZwpAtHfAjONizUqkEID:qBVty8JxTR2c0jvIHgLUvLzeJa3-dFbkQ8O5CzcVhk3ZmGyXEJs0SkZwpAtHfAjONizUqkEID:qBVty8JxTR2c0jvIHgLUvLzeJa3-dFbkQ8O5CzcVhk3ZmGyXEJs0SkZwpAtHfAjONizUqkEID:qBVty8JxTR2c0jvIHgLUvLzeJa3-dFbkQ8O5CzcVhk3ZmGyXEJs0SkZwpAtHfAjONizUqkEID:qBVty8JxTR2c0jvIHgLUvLzeJa3-dFbkQ8O5CzcVhk3ZmGyXEJs0SkZwpAtHfAjONizUqkEID:qBVty8JxTR2c0jvIHgLUvLzeJa3-dFbkQ8O5CzcVhk3ZmGyXEJs0SkZwpAtHfAjONizUqkEID:qBVty8JxTR2c0jvIHgLUvLzeJa3-dFbkQ8O5CzcVhk3ZmGyXEJs0SkZwpAtHfAjONizUqkEID:qBVty8JxTR2c0jvIHgLUvLzeJa3-dFbkQ8O5CzcVhk3ZmGyXEJs0SkZwpAtHfAjONizUqkEID:qBVty8JxTR2c0jvIHgLUvLzeJa3-dFbkQ8O5CzcVhk3ZmGyXEJs0SkZwpAtHfAjONizUqkEID:qBVty8JxTR2c0jvIHgLUvLzeJa3-dFbkQ8O5CzcVhk3ZmGyXEJs0SkZwpAtHfAjONizUqkEID:qBVty8JxTR2c0jvIHgLUvLzeJa3-dFbkQ8O5CzcVhk3ZmGyXEJs0SkZwpAtHfAjONizUqkEID:qBVty8JxTR2c0jvIHgLUvLzeJa3-dFbkQ8O5CzcVhk3ZmGyXEJs0SkZwpAtHfAjONizUqkEID:qBVty8JxTR2c0jvIHgLUvLzeJa3-dFbkQ8O5CzcVhk3ZmGyXEJs0Shyty8JxTR2c0jvIHgLUvLzeJa3-dFbkQ8O5CzcVhk3ZmGyXEJs0Shyty8JxTR2c0jvIHgLUvLzeJa3-dFbkQ8O5CzcVhk3ZmGyXEJs0Shyty8JxTR2c0jvIHgLUvLzeJa3-dFbkQ8O5CzcVhk3ZmGyXEJs0Shyty8JxTR2c0jvIHglUvLzeJa3-dFbkQ8O5CzcVhk3ZmGyXEJs0Shyty8JxTR2c0jvIHglUvLzeJa3-dFbkQ8O5CzcVhk3ZmGyXEJs0Shyty8JxTR2c0jvIHglUvLzeJa3-dFbkQ8O5CzcVhk3ZmGyXEJs0Shyty8JxTr2c0jvIHglUvLzeJa3-dFbkQ8O5CzcVhk3ZmGyXEJs0Shyty8JxTr2c0jvIHglUvLzeJa3-dFbkQ8O5CzcVhk3ZmGyXEJs0Shyty8JxTr2c0jvIHglUvLzeJa3-dFbkQ8O5CzcVhyty8JxTr2c0jvIHglUvLzeJa3-dFbkQ8O5CzcVhyty8JxTr2c0jvIHglUvLzeJa3-dFbkQ8O5CzcVhyty8JxTr2c0jvIHglUvLzeJa3-dFbkQ8O5CzcVhyty8JxTr2c0jvIHglUvLzeJa3-dFbkQ8O5CzcVhyty8JxTr2c0jvIHglUvLzeJa3-dFbkQ8O5CzcVhyty8JxTr2c0jvIHglUvLzeJa3-dFbkQ8O5CzcVhyty8JxTr2c0jvIHglUvLzeJa3-dFbkQ8O5CzcVhyty8JxTr2c0jvIHglUvLzeJa3-dFbkQ8O5CzcVhyty8JxTr2c0jvIHglUvLzeJa3-dFbkQ8O5CzcVhyty8JxTr2c0jvIHglUvLzeJa3-dFbkQ8O5CzcVhyty8JxTr2c0jvIHglUvLzeJa3-dFbkQ8O5CzcVhyty8JxTr2c0jvIHglUvLzeJa3-dFbkQ8O5CzcVhyty8JxTr2c0jvIHglUvLzeJa3-dF

-0-10-8 4-0-0 0-10-8 4-0-0

Scale = 1:16.3



4-0-0 LOADING (psf) DEFL. SPACING-2-0-0 CSI. in (loc) I/defl L/d **PLATES GRIP** 20.0 **TCLL** Plate Grip DOL 1.15 TC BC 0.22 Vert(LL) -0.002-4 >999 360 MT20 244/190 0.05 TCDI 10.0 Lumber DOL 1 15 Vert(TL) -0.01 2-4 >999 240 WB 0.00 **BCLL** 0.0 Rep Stress Incr YES Horz(TL) -0.003 n/a n/a BCDL 10.0 Code IRC2009/TPI2007 Matrix-P Wind(LL) 0.00 2 240 Weight: 18 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.1 **BOT CHORD** 2x6 SP No.1 **BRACING-**

4-0-0

TOP CHORD **BOT CHORD**  Structural wood sheathing directly applied or 4-0-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. 3=106/Mechanical, 2=221/0-3-8, 4=38/Mechanical (lb/size)

Max Horz 2=97(LC 7)

Max Uplift 3=-70(LC 7), 2=-59(LC 7)

Max Grav 3=106(LC 1), 2=221(LC 1), 4=76(LC 2)

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

- 1) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 3-11-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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, 2.
- 6) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building





Job Truss Qty Wavfare C Truss Type E11606876 B0318-1099 GJ2 JACK-OPEN Job Reference (optional) Comtech. Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Mon Apr 2 06:52:17 2018 Page 1 ID:qBVty8JxTR2c0jvIHgLUvLzeJa3-aejUrqPLkasCw2Dyuh\_?JkxNXYFFH4Na6UCVSazUqkC 2-8-0 -0-10-8 4-0-0 0-10-8 2-8-0 1-4-0 Scale = 1:12.9 4x4 6.00 12 2 5 4-0-0 4-0-0 Plate Offsets (X,Y)--[3:0-2-0,Edge] LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) I/defl I/d **PLATES** GRIP Plate Grip DOL 1.15 TC 0.12 Vert(LL) -0.00 244/190 TCLL 20.0 2-5 >999 360 MT20 BC TCDL 10.0 Lumber DOL 1.15 0.06 Vert(TL) -0.01 2-5 >999 240 Rep Stress Incr **BCLL** 0.0 WB 0.00 Horz(TL) 0.01 4 YES n/a n/a

Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

0.00

2-5

>999

2-0-0 oc purlins: 3-4.

240

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

Weight: 21 lb

Structural wood sheathing directly applied or 4-0-0 oc purlins, except

FT = 20%

LUMBER-

BCDL

TOP CHORD 2x6 SP No.1 \*Except\*

10.0

3-4: 2x4 SP No.1
BOT CHORD 2x6 SP No.1

REACTIONS. (lb/size) 4=97/Mechanical, 2=209/0-3-8, 5=49/Mechanical

Max Horz 2=69(LC 7) Max Uplift 4=-39(LC 6), 2=-61(LC 7)

Max Grav 4=97(LC 1), 2=209(LC 1), 5=73(LC 2)

Ode IRC2009/TPI2007

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

### NOTES-

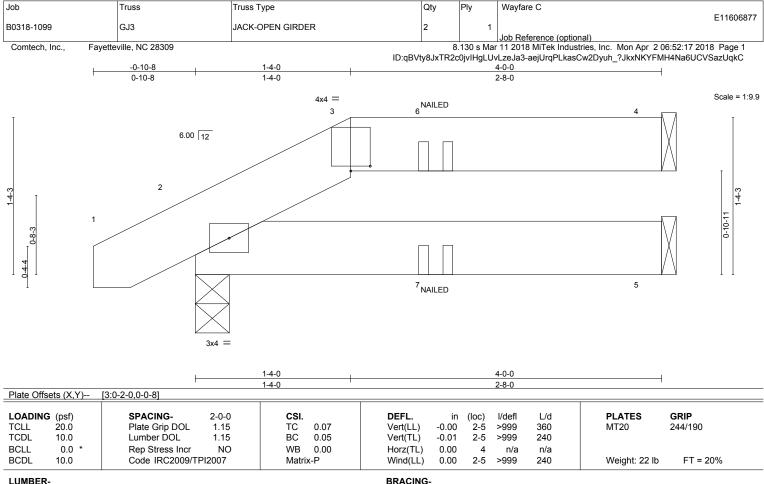
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

Matrix-P

- 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
- 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.







TOP CHORD

BOT CHORD

2-0-0 oc purlins: 3-4.

LUMBER-

REACTIONS.

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

(lb/size) 4=101/Mechanical, 2=211/0-3-8, 5=46/Mechanical

Max Horz 2=45(LC 5)

Max Uplift 4=-43(LC 4), 2=-64(LC 5)

Max Grav 4=101(LC 1), 2=211(LC 1), 5=73(LC 2)

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

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise); 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
- 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.
- 10) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 11) 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

Uniform Loads (plf)

Vert: 1-3=-60, 3-4=-60, 2-5=-20

Concentrated Loads (lb) Vert: 7=-3(B)

030652

Structural wood sheathing directly applied or 4-0-0 oc purlins, except

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

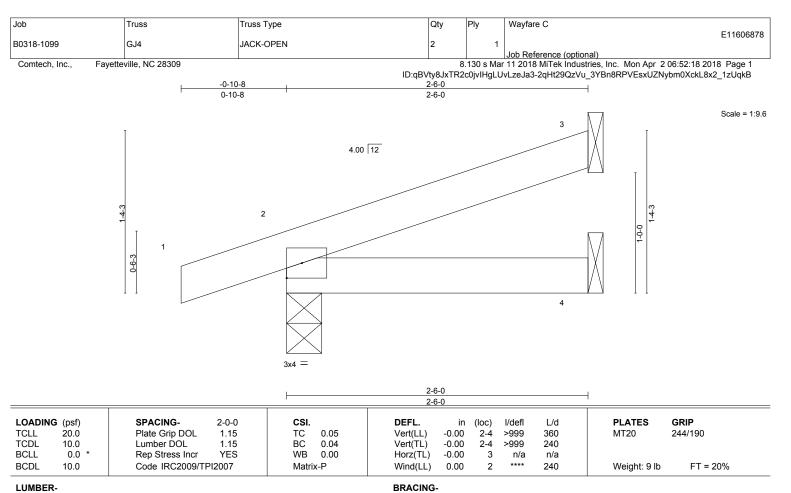
April 2,2018

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

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TOP CHORD

**BOT CHORD** 

LUMBER-

REACTIONS.

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

> 3=55/Mechanical, 2=167/0-3-8, 4=23/Mechanical (lb/size)

Max Horz 2=45(LC 5)

Max Uplift 3=-28(LC 5), 2=-70(LC 5)

Max Grav 3=55(LC 1), 2=167(LC 1), 4=46(LC 2)

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

- 1) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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, 2.
- 6) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



Structural wood sheathing directly applied or 2-6-0 oc purlins.

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



Job Truss Qty Wavfare C Truss Type E11606879 B0318-1099 J1 Jack-Open 30 Job Reference (optional) Comtech. Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Mon Apr 2 06:52:18 2018 Page 1 ID:qBVty8JxTR2c0jvIHgLUvLzeJa3-2qHt29QzVu\_3YBn8RPVEsxURMyZN0XckL8x2\_1zUqkB -0-10-8 6-0-0 0-10-8 6-0-0 Scale = 1:20.4 6.00 12 0-6-8

6-0-0 LOADING (psf) SPACING-DEFL. 2-0-0 CSI. in (loc) I/defl L/d **PLATES GRIP** 20.0 **TCLL** Plate Grip DOL 1.15 TC BC 0.57 Vert(LL) -0.022-4 >999 360 MT20 244/190 TCDI 10.0 Lumber DOL 1 15 0.13 Vert(TL) -0.042-4 >999 240 WB **BCLL** 0.0 Rep Stress Incr YES 0.00 Horz(TL) -0.003 n/a n/a BCDL 10.0 Code IRC2009/TPI2007 Matrix-P Wind(LL) 0.00 2 240 Weight: 26 lb FT = 20%

6-0-0

LUMBER-

TOP CHORD 2x4 SP No.1 BOT CHORD 2x6 SP No.1 BRACING-

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

REACTIONS. (lb/size) 3=168/Mechanical, 2=298/0-3-8, 4=58/Mechanical

Max Horz 2=139(LC 7)

Max Uplift 3=-106(LC 7), 2=-66(LC 7)

Max Grav 3=168(LC 1), 2=298(LC 1), 4=116(LC 2)

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

### NOTES

- 1) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 5-11-4 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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) 2 except (jt=lb) 3=106.



April 2,2018

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

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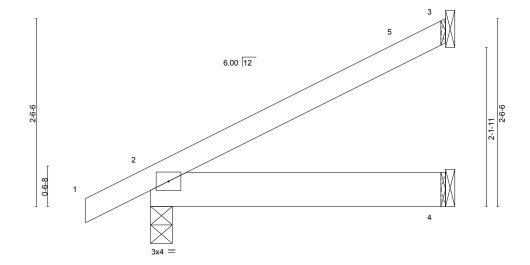
Job Truss Qty Wavfare C Truss Type E11606880 B0318-1099 J2 JACK-OPEN Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Mon Apr 2 06:52:19 2018 Page 1 ID:qBVty8JxTR2c0jvIHgLUvLzeJa3-W0rFGVRbFB6w9LMK?60TP90hfLxsl\_stZohbWTzUqkA



Scale = 1:15.5



				3-11-11	
LOADING	\	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP	
TCLL	20.0	Plate Grip DOL 1.15	TC 0.21	Vert(LL) -0.00 2-4 >999 360 MT20 244/190	
TCDL	10.0	Lumber DOL 1.15	BC 0.05	Vert(TL) -0.01 2-4 >999 240	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.00	Horz(TL) -0.00 3 n/a n/a	
BCDL	10.0	Code IRC2009/TPI2007	Matrix-P	Wind(LL) 0.00 2 **** 240 Weight: 18 lb FT = 20%	

LUMBER-

TOP CHORD 2x4 SP No.1 **BOT CHORD** 2x6 SP No.1 **BRACING-**

3-11-11

TOP CHORD **BOT CHORD**  Structural wood sheathing directly applied or 3-11-11 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. 3=105/Mechanical, 2=220/0-3-8, 4=38/Mechanical (lb/size)

Max Horz 2=99(LC 7)

Max Uplift 3=-66(LC 7), 2=-63(LC 7)

Max Grav 3=105(LC 1), 2=220(LC 1), 4=75(LC 2)

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

- 1) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 3-10-15 zone; C-C for members and forces & MWFRS for reactions shown; Lumber 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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, 2.





 Job
 Truss
 Truss Type
 Qty
 Ply
 Wayfare C

 B0318-1099
 J3
 JACK-OPEN
 4
 1
 Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309

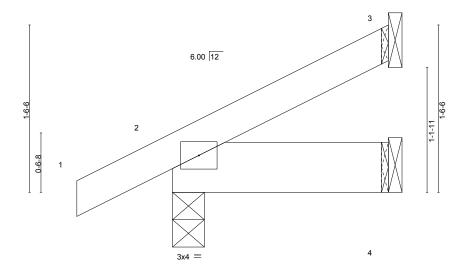
8.130 s Mar 11 2018 MiTek Industries, Inc. Mon Apr 2 06:52:19 2018 Page 1 ID:qBVty8JxTR2c0jvIHgLUvLzeJa3-W0rFGVRbFB6w9LMK?60TP90kGLxTI\_stZohbWTzUqkA

Structural wood sheathing directly applied or 1-11-11 oc purlins.

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

-0-10-8 | 1-11-11 | 0-10-8 | 1-11-11

Scale = 1:10.5



1-11-11 1-11-11

**BRACING-**

TOP CHORD

**BOT CHORD** 

LOADING	G (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (	(loc) I	I/defl L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.04	Vert(LL)	-0.00	2 >	>999 360	MT20	244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.01	Vert(TL)	-0.00	2 >	>999 240		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.00	Horz(TL)	-0.00	3	n/a n/a		
BCDL	10.0	Code IRC2009/TPI2007	Matrix-P	Wind(LL)	0.00	2	**** 240	Weight: 10 lb	FT = 20%

LUMBER-

REACTIONS.

TOP CHORD 2x4 SP No.1 BOT CHORD 2x6 SP No.1

(lb/size) 3=45/Mechanical, 2=144/0-3-8, 4=19/Mechanical

Max Horz 2=62(LC 7)

Max Uplift 3=-27(LC 7), 2=-58(LC 7)

Max Grav 3=45(LC 1), 2=144(LC 1), 4=39(LC 2)

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

### NOTES

- 1) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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, 2.



April 2,2018



Job Qty Wavfare C Truss Truss Type E11606882 B0318-1099 М1 **GABLE** Job Reference (optional)

Fayetteville, NC 28309

-0-10-8

0-10-8

8.130 s Mar 11 2018 MiTek Industries, Inc. Mon Apr 2 06:52:20 2018 Page 1 ID:qBVty8JxTR2c0jvIHgLUvLzeJa3-\_DOdTrRD0VEnnVxWZqXixMZlvID8UR60oSQ93vzUqk9 6-0-0 6-0-0

Scale: 3/4"=1'

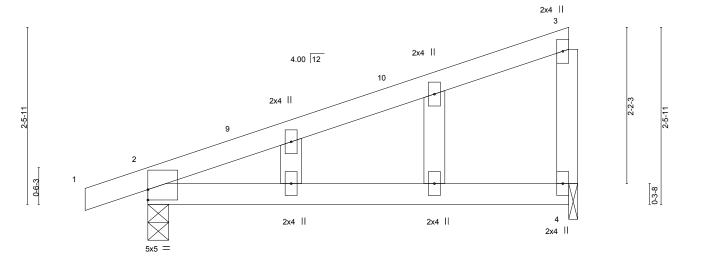


Plate Offsets (X,Y) [2:0-0-0,0-1-12]											
LOADING (psf) TCLL 20.0 TCDL 10.0	SPACING-         2-0-0           Plate Grip DOL         1.15           Lumber DOL         1.15	CSI. TC 0.69 BC 0.30	Vert(LL)         -0.06         2-4         >999         360         MT20         2-           Vert(TL)         -0.14         2-4         >492         240	<b>GRIP</b> 44/190							
BCLL 0.0 * BCDL 10.0	Rep Stress Incr YES Code IRC2009/TPI2007	WB 0.00 Matrix-P	Horz(TL) -0.00 4 n/a n/a Wind(LL) 0.00 2 **** 240 Weight: 25 lb	FT = 20%							

LUMBER-BRACING-

TOP CHORD 2x4 SP No.1 **BOT CHORD** 2x4 SP No.1 2x4 SP No.3 WFBS 2x4 SP No.3 OTHERS

Comtech. Inc.,

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.

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

**REACTIONS.** (lb/size) 2=295/0-3-8, 4=221/0-1-8

Max Horz 2=127(LC 5)

Max Uplift 2=-142(LC 5), 4=-107(LC 5)

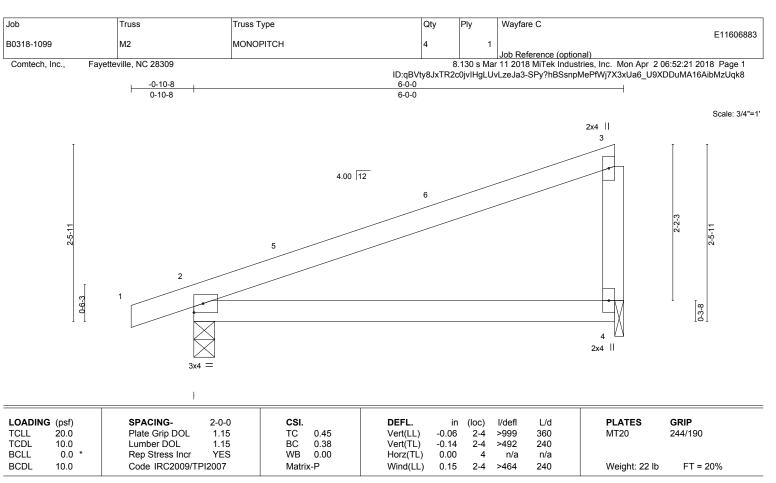
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 3-4=-164/349

- 1) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Corner(3) -0-10-8 to 3-6-5, Exterior(2) 3-6-5 to 5-9-15 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) Gable studs spaced at 2-0-0 oc.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 6) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=142 4=107
- 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.







LUMBER-

TOP CHORD 2x4 SP No.1 BOT CHORD 2x4 SP No.1 WEBS 2x4 SP No.3 BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins,

except end verticals.

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

**REACTIONS.** (lb/size) 2=295/0-3-8, 4=221/0-1-8

Max Horz 2=89(LC 5)

Max Uplift 2=-168(LC 5), 4=-140(LC 5)

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

### NOTES

- 1) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 5-9-15 zone; porch left exposed; 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=168, 4=140.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



April 2,2018



E11606884 B0318-1099 MP1 **GABLE** Job Reference (optional) Comtech. Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Mon Apr 2 06:52:21 2018 Page 1 ID:qBVty8JxTR2c0jvIHgLUvLzeJa3-SPy?hBSsnpMePfWj7X3xUa61R9cWDs7A16AibMzUqk8 -0-10-8 8-10-8 0-10-8 8-0-0 Scale = 1:19.4 2x4 || 2x4 || 4.00 12 2x4 || 3 0-6-3 2x4 || 2x4 || 2x4 || 3x4 = -0-10-8 8-10-8 0-10-8 8-0-0 LOADING (psf) SPACING-**GRIP** 2-0-0 CSI. DEFL. in (loc) I/defl L/d **PLATES** TCLI 20.0 Plate Grip DOL 1.15 TC BC 0.19 Vert(LL) 0.00 n/r 120 MT20 244/190 0.04 TCDI 10.0 Lumber DOL 1 15 Vert(TL) 0.00 n/r 120 WB **BCLL** 0.0 Rep Stress Incr YES 0.14 Horz(TL) -0.00 5 n/a n/a BCDL 10.0 Code IRC2009/TPI2007 Matrix-P Weight: 40 lb FT = 20%

Qty

Wavfare C

LUMBER-

Job

Truss

Truss Type

TOP CHORD 2x4 SP No.1 BOT CHORD 2x6 SP No.1 WEBS 2x4 SP No.3 OTHERS 2x4 SP No.3 BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins,

except end verticals.

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

**REACTIONS.** All bearings 7-10-8.

(lb) - Max Horz 2=166(LC 5)

Max Uplift All uplift 100 lb or less at joint(s) 5, 2 except 7=-192(LC 5)

Max Grav All reactions 250 lb or less at joint(s) 5, 2, 6 except 7=366(LC 1)

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

WEBS 3-7=-285/481

### NOTES-

- 1) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Corner(3) -0-10-8 to 3-6-5, Exterior(2) 3-6-5 to 7-9-15 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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) 5, 2 except (jt=lb) 7=192
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.





Job Truss Qty Wavfare C Truss Type E11606885 B0318-1099 MP2 Monopitch Job Reference (optional) Comtech. Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Mon Apr 2 06:52:22 2018 Page 1 ID:qBVty8JxTR2c0jvIHgLUvLzeJa3-wbWNuXTUY6UV1p5vgEaA0ne2RZujyLcJGmvG7ozUqk7 -0-10-8 8-0-0 0-10-8 8-0-0 Scale = 1:19.4 2x4 || 3 4.00 12 3-1-11 0-6-3 0-5-8 2x4 || 3x4 =LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defl L/d **PLATES GRIP TCLL** 20.0 Plate Grip DOL 1.15 TC BC 0.88 Vert(LL) -0.052-4 >999 360 MT20 244/190

LUMBER-

TCDI

**BCLL** 

BCDL

TOP CHORD 2x4 SP No.1 **BOT CHORD** 2x6 SP No.1 2x4 SP No.3 WEBS

10.0

10.0

0.0

Wind(LL) **BRACING-**

Vert(TL)

Horz(TL)

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins,

240

n/a

240

Weight: 36 lb

FT = 20%

except end verticals.

2-4

2-4

4

>775

>743

n/a

-0.12

0.00

0.12

**BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing

REACTIONS. (lb/size) 2=374/0-3-8, 4=303/0-1-8

Max Horz 2=116(LC 5)

Max Uplift 2=-209(LC 5), 4=-189(LC 5)

Lumber DOL

Rep Stress Incr

Code IRC2009/TPI2007

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

TOP CHORD 3-4=-226/258

### NOTES-

1) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 7-9-15 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

0.30

0.00

WB

Matrix-P

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

1 15

YES

- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer



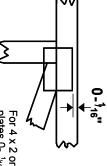


## **Symbols**

# PLATE LOCATION AND ORIENTATION



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



edge of truss. plates 0- ¹/₁ℰ' from outside or 4 x 2 orientation, locate

connector plates required direction of slots in This symbol indicates the

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

### **PLATE SIZE**



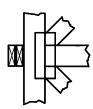
the length parallel to slots. to slots. Second dimension is width measured perpendicular The first dimension is the plate

## LATERAL BRACING LOCATION



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

### **BEARING**



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

## Industry Standards:

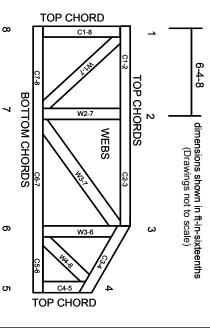
ANSI/TP11: National Design Specification for Metal Design Standard for Bracing.

Building Component Safety Information. Plate Connected Wood Truss Construction

DSB-89: BCSI:

Installing & Bracing of Metal Plate Connected Wood Trusses. Guide to Good Practice for Handling,

# Numbering System



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988 ER-3907, ESR-2362, ESR-1397, ESR-3282

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

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

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MiTek Engineering Reference Sheet: MII-7473 rev. 10/03/2015

# General Safety Notes

## Damage or Personal Injury Failure to Follow Could Cause Property

- Ņ Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves
- ω bracing should be considered may require bracing, or alternative Tor I
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- designer, erection supervisor, property owner and all other interested parties. Provide copies of this truss design to the building

4.

- Cut members to bear tightly against each other
- joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1. Place plates on each face of truss at each

6 5

- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.

œ

- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- <u>,</u> Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- 11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements
- Lumber used shall be of the species and size, and in all respects, equal to or better than that
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted
- Connections not shown are the responsibility of others
- Do not cut or alter truss member or plate without prior approval of an engineer.
- Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable project engineer before use. environmental, health or performance risks. Consult with
- Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
- 20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria