

RE: J0320-0960

Weaver /1481 Lawrence Road/Johnston

Trenco

818 Soundside Rd Edenton, NC 27932

Site Information:

Customer: Project Name: J0320-0960

Lot/Block: Model:
Address: Subdivision:
City: State:

### General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: IRC2009/TPI2007 Design Program: MiTek 20/20 8.3

Wind Code: ASCE 7-05 Wind Speed: 100 mph Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 21 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	E14244372	a1	3/31/2020	21	E14244392	pbge	3/31/2020
2	E14244373	a1se	3/31/2020				
3	E14244374	a2	3/31/2020				
4	E14244375	a3	3/31/2020				
5	E14244376	a4	3/31/2020				
6	E14244377	a5	3/31/2020				
7	E14244378	a6	3/31/2020				
8	E14244379	a7	3/31/2020				
9	E14244380	a8	3/31/2020				
10	E14244381	a9	3/31/2020				
11	E14244382	a9ge	3/31/2020				
12	E14244383	b1	3/31/2020				
13	E14244384	b1ge	3/31/2020				
14	E14244385	c1	3/31/2020				
15	E14244386	c2	3/31/2020				
16	E14244387	c3	3/31/2020				
17	E14244388	g1	3/31/2020				
18	E14244389	g1ge	3/31/2020				
19	E14244390	g2	3/31/2020				
20	E14244391	pb	3/31/2020				

The truss drawing(s) referenced above have been prepared by

Truss Engineering Co. under my direct supervision

based on the parameters provided by Comtech, Inc - Fayetteville.

Truss Design Engineer's Name: Gilbert, Eric

My license renewal date for the state of North Carolina is December 31, 2020

North Carolina COA: C-0844

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



Job Truss Truss Type Qty Weaver /1481 Lawrence Road/Johnston E14244372 J0320-0960 Α1 PIGGYBACK BASE Job Reference (optional) 8.330 s Mar 23 2020 MiTek Industries, Inc. Tue Mar 31 08:25:35 2020 Page 1 ID:FKRF2G2VvSGFSXRUG\_ubJqzaK1d-j08QoHQl3K6xhDBhrXXV3SxfcPLgai7v35mzPszVTYk Comtech, Inc. Fayetteville, NC - 28314, 44-0-0 -0<sub>1</sub>10<sub>1</sub>8 0-10-8 44-10-8 9-7-8 19-3-0 24-9-0 34-4-8 9-7-8 9-7-8 5-5-15 0-10-8 Scale = 1:82.8 8x8 = 8x8 = 8.00 12 6 4x8 / 4x8 💸 20 4x8 / 4x8 < 3 ₩ 17 4x6 23 16 24 15 14 26 13 27 12 29 11 4x6 2x6 // 4x8 = 4x6 = 4x8 4x4 2x6 \\ 4x4 6-1-12 13-1-12 22-0-0 30-10-4 37-10-4 44-0-0 6-1-12 7-0-0 8-10-4 7-0-0 8-10-4 6-1-12 Plate Offsets (X,Y)-[3:0-3-6,0-2-1], [5:0-3-12,0-3-12], [6:0-3-12,0-3-12], [8:0-3-6,0-2-0] LOADING (psf) SPACING-CSI. DEFL. **PLATES** GRIP 2-0-0 in (loc) I/defI I/d TCLL 20.0 Plate Grip DOL 1.15 TC 0.48 Vert(LL) -0.10 12-14 >999 360 244/190 MT20 BC TCDL 10.0 Lumber DOL 1.15 0.45 Vert(CT) -0.17 12-14 >999 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.68 Horz(CT) 0.05 9 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-S Wind(LL) 0.04 12 >999 240 Weight: 395 lb FT = 20%**BRACING-**2x6 SP No.1 TOP CHORD Structural wood sheathing directly applied or 4-7-3 oc purlins, except

LUMBER-

**WEBS** 

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

2x6 SP No.1 \*Except\*

3-17,3-16,8-12,8-11: 2x4 SP No.2

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

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

6-0-0 oc bracing: 2-17.

WEBS T-Brace: 2x4 SPF No.2 - 3-17

2x6 SPF No.2 - 5-16, 6-14 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. (size) 17=0-3-8, 9=0-3-8

Max Horz 17=-320(LC 10)

Max Uplift 17=-108(LC 12), 9=-94(LC 13) Max Grav 17=2255(LC 2), 9=1725(LC 20)

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

TOP CHORD 2-3=-405/688, 3-5=-1444/385, 5-6=-1256/435, 6-8=-2202/565, 8-9=-2628/426 2-17=-458/455, 16-17=-181/968, 14-16=-6/1238, 12-14=0/1314, 11-12=-218/1927, BOT CHORD

9-11=-190/2042

3-17=-2295/704, 3-16=-19/655, 8-12=-744/366, 8-11=0/310, 5-16=-278/131,

6-14=-283/186, 5-14=-75/684, 6-12=-236/1034

### NOTES-

WFBS

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-9 to 3-8-4, Interior(1) 3-8-4 to 19-3-14, Exterior(2) 19-3-14 to 30-10-13, Interior(1) 30-10-13 to 44-8-9 zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 108 lb uplift at joint 17 and 94 lb uplift at
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 8) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

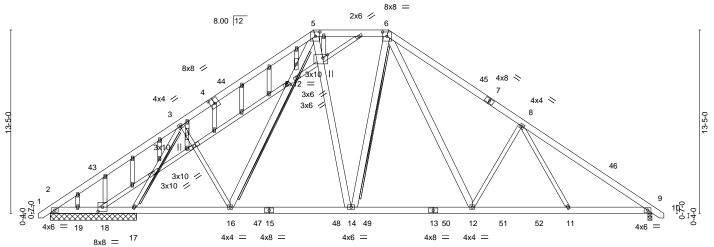


March 31,2020

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 fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Qua Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.





	1	6-1-12	13-1-12	1	22-0-0	1	30-10-4	1	37-10-4	1 44-0-0	1
		6-1-12	7-0-0	1	8-10-4	1	8-10-4	ı	7-0-0	6-1-12	
Plate Of	fsets (X,Y)	[4:0-4-0,0-4-8], [5:0-3-12	2,0-3-12], [6:0-3-	12,0-3-12],	[18:0-4-0,0-3	-12], [21:0-4-4,0-2	2-12]				
LOADIN	IG (psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc	) I/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.42	Vert(LL)	-0.10 12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.17 12-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.05	9 n/a	n/a		
BCDL	10.0	Code IRC2015/T	PI2014	Matri	x-S	Wind(LL)	0.05 12	2 >999	240	Weight: 455 lb	FT = 20%

LUMBER-**BRACING-**

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

6-14,5-14,5-16,6-12: 2x6 SP No.1

**OTHERS** 

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

TOP CHORD Structural wood sheathing directly applied or 4-6-15 oc purlins,

except

2-0-0 oc purlins (6-0-0 max.): 5-6. Rigid ceiling directly applied or 6-0-0 oc bracing.

T-Brace: 2x4 SPF No.2 - 3-17 2x6 SPF No.2 - 6-14, 5-16

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. All bearings 6-3-8 except (jt=length) 9=0-3-8.

Max Horz 2=-400(LC 10) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 2 except 17=-365(LC 12), 9=-324(LC

13), 18=-120(LC 1), 19=-200(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 2, 18 except 17=1945(LC 19), 9=1735(LC 20), 19=350(LC 19)

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

TOP CHORD 2-3=-170/365, 3-5=-1480/491, 5-6=-1288/476, 6-8=-2209/608, 8-9=-2635/468 **BOT CHORD** 

 $2-19 = -272/297,\ 18-19 = -272/297,\ 17-18 = -272/297,\ 16-17 = -226/1062,\ 14-16 = -76/1251,$ 

12-14=0/1309, 11-12=-266/1937, 9-11=-238/2046

**WEBS** 3-17=-2059/467, 3-16=-25/580, 8-12=-743/486, 8-11=0/309, 6-14=-272/221,

5-16=-258/131, 5-14=-110/687, 6-12=-350/1055

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-8-9 to 3-8-4, Interior(1) 3-8-4 to 19-3-14, Exterior(2) 19-3-14 to 30-10-13, Interior(1) 30-10-13 to 44-8-9 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable studs spaced at 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 17=365, 9=324, 18=120, 19=200.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 11) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required



March 31,2020

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 Design Valid for use only with release controlled in the controlle

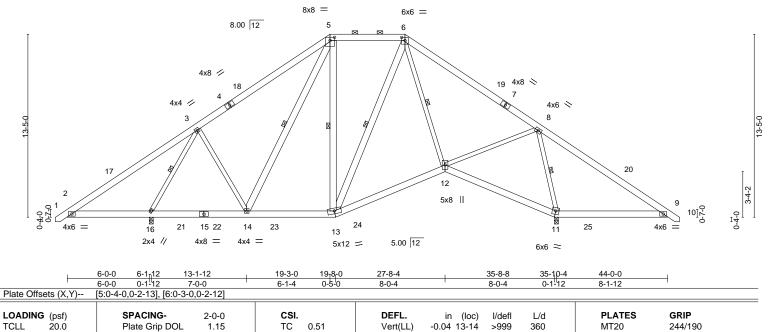


Job Truss Truss Type Qty Weaver /1481 Lawrence Road/Johnston E14244374 J0320-0960 A2 PIGGYBACK BASE Job Reference (optional)

Comtech, Inc. Fayetteville, NC - 28314, 8.330 s Mar 23 2020 MiTek Industries, Inc. Tue Mar 31 08:25:38 2020 Page 1 ID:FKRF2G2VvSGFSXRUG\_ubJqzaK1d-8bqZQJTAMFUWYhwGXg5Ch5ZAUcQDn63Lm2?d0BzVTYh

-0<sub>7</sub>10<sub>7</sub>8 0-10-8 24-9-0 34-4-8 44-0-0 44<sub>r</sub>10<sub>r</sub>8 9-7-8 19-3-0 9-7-8 5-5-15 0-10-8

Scale = 1:84.5



LUMBER-

TCDL

**BCLL** 

BCDL

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

10.0

0.0

10.0

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

5-13,5-14,6-13: 2x6 SP No.1

Wind(LL) **BRACING-**

Vert(CT)

Horz(CT)

-0.09 12-13

0.02 13-14

11

0.03

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

Weight: 381 lb

FT = 20%

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

240

n/a

240

**BOT CHORD** Rigid ceiling directly applied or 6-0-0 oc bracing. WEBS 1 Row at midpt 3-16, 5-13, 6-12, 8-11, 5-14, 6-13

>999

>999

n/a

REACTIONS. (size) 11=0-3-8, 16=0-3-8

Max Horz 16=-320(LC 10)

Max Uplift 11=-118(LC 13), 16=-112(LC 12) Max Grav 11=1938(LC 1), 16=1673(LC 2)

Lumber DOL

Rep Stress Incr

Code IRC2015/TPI2014

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-408/688, 3-5=-889/255, 5-6=-703/289, 6-8=-853/102, 8-9=-484/769 **BOT CHORD** 

2-16=-459/457, 14-16=-211/657, 13-14=-60/673, 12-13=-29/726, 11-12=-306/483,

1.15

YES

9-11=-511/519

WEBS 3-16=-1650/574, 8-12=-6/825, 6-12=-53/432, 3-14=-37/358, 8-11=-1687/540

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- $2) \ \ Wind: ASCE \ 7-10; \ \ Vult=130mph \ (3-second \ gust) \ \ Vasd=103mph; \ TCDL=6.0psf; \ BCDL=6.0psf; \ h=15ft; \ Cat. \ II; \ Exp. \ C; \ Enclosed; \ School \ Schoo$ MWFRS (envelope) and C-C Exterior(2) -0-8-9 to 3-8-4, Interior(1) 3-8-4 to 19-3-0, Exterior(2) 19-3-0 to 30-11-10, Interior(1) 30-11-10 to 44-8-9 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

BC

WB

Matrix-S

0.21

0.41

- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=118, 16=112,
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.





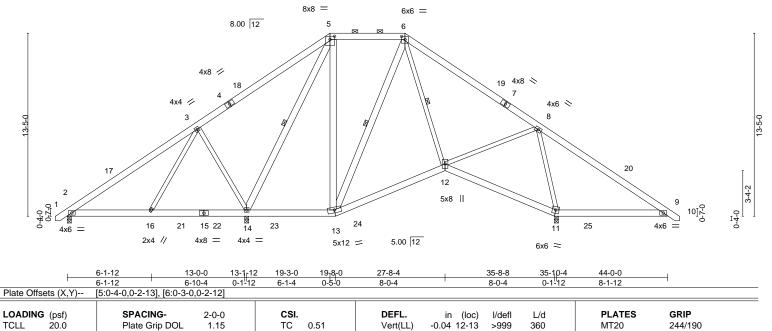
Job Truss Truss Type Qty Weaver /1481 Lawrence Road/Johnston E14244375 J0320-0960 АЗ PIGGYBACK BASE Job Reference (optional)

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Mar 23 2020 MiTek Industries, Inc. Tue Mar 31 08:25:40 2020 Page 1 ID:FKRF2G2VvSGFSXRUG\_ubJqzaK1d-4\_xJr\_UQuskEn\_4ee47gmWeWyQ6kFtbeDMUk54zVTYf

44-0-0 -0<sub>7</sub>10<sub>7</sub>8 0-10-8 24-9-0 44-10-8 9-7-8 19-3-0 34-4-8 9-7-8 0-10-8 5-5-15

Scale = 1:84.5



Vert(CT)

Horz(CT)

Wind(LL)

**BRACING-**

TOP CHORD

**BOT CHORD** 

WEBS

-0.08 12-13

11

0.01

0.02 2-16 240

n/a

240

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

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

Weight: 381 lb

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

6-12, 5-14, 6-13

FT = 20%

>999

>999

1 Row at midpt

n/a

LUMBER-

TCDL

**BCLL** 

BCDL

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

10.0

0.0

10.0

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

5-13,5-14,6-13: 2x6 SP No.1

REACTIONS. (size) 2=0-3-8, 11=0-3-8, 14=0-3-8 Max Horz 14=-320(LC 10)

Lumber DOL

Rep Stress Incr

Code IRC2015/TPI2014

Max Uplift 2=-56(LC 9), 11=-121(LC 13), 14=-141(LC 9) Max Grav 2=483(LC 23), 11=1674(LC 1), 14=1546(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-455/240, 3-5=-59/369, 5-6=-384/210, 6-8=-493/69, 8-9=-484/769

**BOT CHORD** 2-16=-71/274, 13-14=-121/314, 12-13=-125/434, 11-12=-361/496, 9-11=-511/519 **WEBS** 

3-16=-292/330, 8-12=0/547, 5-13=-30/367, 6-12=-87/438, 3-14=-745/533,

1.15

YES

8-11=-1400/466, 5-14=-859/143, 6-13=-255/25

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-9 to 3-8-4, Interior(1) 3-8-4 to 19-3-0, Exterior(2) 19-3-0 to 30-11-10, Interior(1) 30-11-10 to 44-8-9 zone; cantilever right exposed; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

BC

WB

Matrix-S

0.20

0.99

- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb)
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 31,2020

M 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 MTI-sky 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/TPI Quality Criteria, DSB-89 and BCSI Building Component
Safety Information, available from Truse Plate petitive 218 N. Lea Street, Stitle 312, Alexandria, VA. 23314. fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Qua Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Job Weaver /1481 Lawrence Road/Johnston Truss Truss Type Qty E14244376 J0320-0960 A4 ROOF SPECIAL Job Reference (optional)

Comtech, Inc. Fayetteville, NC - 28314, 8.330 s Mar 23 2020 MiTek Industries, Inc. Tue Mar 31 08:25:41 2020 Page 1 ID:FKRF2G2VvSGFSXRUG\_ubJqzaK1d-YAVh2KV2fAs5P8erCoevJjBkCpNR\_SBoS0DHdWzVTYe

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

10-12, 3-10, 3-12

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

23<sub>7</sub>10<sub>7</sub>8 0-10-8 9-3-8 15-1-10 23-0-0 8-3-8 5-10-2 7-10-6



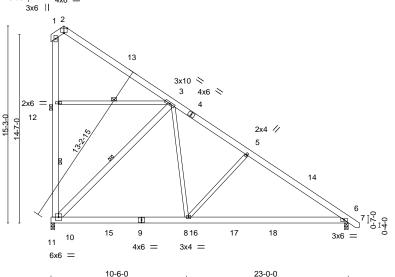


Plate Offsets (X,Y)--[2:0-3-0,Edge] LOADING (psf) SPACING-CSI. DEFL. **PLATES** GRIP 2-0-0 in (loc) I/defI I/d Plate Grip DOL TCLL 20.0 1.15 TC 0.29 Vert(LL) -0.13 6-8 >999 360 244/190 MT20 BC TCDL 10.0 Lumber DOL 1.15 0.56 Vert(CT) -0.286-8 >970 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.45 Horz(CT) 0.02 6 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-S Wind(LL) 0.03 6-8 >999 240 Weight: 219 lb FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

**WEBS** 

JOINTS

12-6-0

except end verticals.

1 Brace at Jt(s): 12

1 Row at midpt

LUMBER-

REACTIONS.

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

1-10,3-10: 2x6 SP No.1

(size) 10=0-3-8, 6=0-3-8

Max Horz 10=-482(LC 13) Max Uplift 10=-236(LC 13)

Max Grav 10=1177(LC 20), 6=1071(LC 20)

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

8.00 12

TOP CHORD 3-5=-1052/0, 5-6=-1298/0, 10-12=-259/166, 1-12=-259/166

BOT CHORD 8-10=0/743, 6-8=0/987

**WEBS** 5-8=-424/234, 3-10=-1116/335, 3-8=-26/850

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 5-4-13, Interior(1) 5-4-13 to 23-8-9 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)





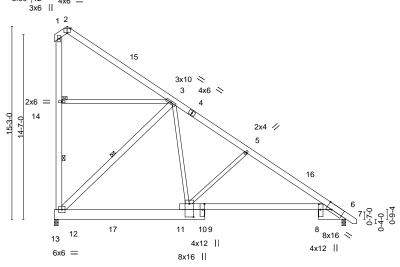
Weaver /1481 Lawrence Road/Johnston Job Truss Truss Type Qty E14244377 J0320-0960 Α5 ROOF SPECIAL Job Reference (optional)

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Mar 23 2020 MiTek Industries, Inc. Tue Mar 31 08:25:42 2020 Page 1  $ID:FKRF2G2VvSGFSXRUG\_ubJqzaK1d-0M33GgWhQT\_y1ID1mV98rxjtcDkgjvVxggzq9yzVTYd$ 

1<sub>-</sub>0-0 1-0-0 15-1-10 23-0-0 23<sub>1</sub>10<sub>1</sub>8 0-10-8 9-3-8 8-3-8 7-10-6 5-10-2

Scale = 1:91.0 4x6 =



10-6-0 11-10-8 20-10-0 23-0-0 10-6-0 1-4-8 8-11-8 2-2-0

**BRACING-**

TOP CHORD

**BOT CHORD** 

**WEBS** 

JOINTS

		10 0 0	1 7 0
Plate Offsets (X,Y)	[2:0-3-0,Edge], [6:0-5-0,Edge], [8:0-5-4,0	0-1-8], [9:0-5-8,Edge], [1	0:1-0-8,0-4-0]
			T
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.
TCLL 20.0	Plate Grip DOL 1.15	TC 0.37	Vert(LL
TCDL 10.0	Lumber DOL 1.15	BC 0.49	Vert(C7
BCLL 0.0 *	Rep Stress Incr YES	WB 0.45	Horz(C
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(L

8.00 12

DEFL. in (loc) I/defI I/d Vert(LL) -0.12 6-10 >999 360 Vert(CT) -0.30 6-10 >887 240 Horz(CT) 0.08 6 n/a n/a Wind(LL) 0.05 6-10 >999 240

except end verticals.

1 Brace at Jt(s): 14

1 Row at midpt

244/190 MT20

**PLATES** 

Structural wood sheathing directly applied or 5-11-14 oc purlins,

12-14, 3-12

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

Weight: 245 lb FT = 20%

GRIP

LUMBER-

**WEBS** 

TOP CHORD 2x6 SP No.1

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

6-11: 2x6 SP No.1 2x4 SP No.2 \*Except\*

1-12,3-12: 2x6 SP No.1

REACTIONS.

(size) 6=0-3-8, 12=0-3-8 Max Horz 12=-481(LC 13)

Max Uplift 12=-233(LC 13)

Max Grav 6=979(LC 20), 12=1127(LC 20)

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

TOP CHORD 3-5=-1079/0, 5-6=-1350/0, 12-14=-256/166, 1-14=-257/166

**BOT CHORD** 10-12=0/827, 6-10=0/1044

WEBS 5-10=-432/206, 3-12=-1146/302, 3-10=0/874

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 5-4-13, Interior(1) 5-4-13 to 23-8-9 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=233.



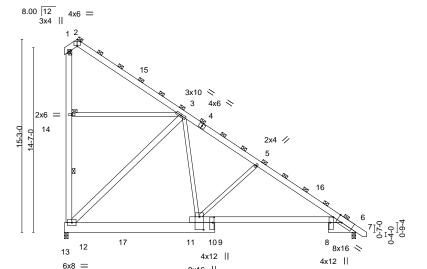


Job Truss Truss Type Qty Weaver /1481 Lawrence Road/Johnston E14244378 J0320-0960 A6 ROOF SPECIAL 2 Job Reference (optional)

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Mar 23 2020 MiTek Industries, Inc. Tue Mar 31 08:25:43 2020 Page 1 ID:FKRF2G2VvSGFSXRUG\_ubJqzaK1d-UYdST0XJBn6pfSoDJDgNO8G2Jd3BSJe4vKiOhPzVTYc

1<sub>-</sub>0-0 1-0-0 15-1-10 23-0-0 23<sub>1</sub>10<sub>1</sub>8 0-10-8 9-3-8 8-3-8 5-10-2 7-10-6



10-6-0 11-10-8 20-10-0 23-0-0 10-6-0 1-4-8' [2:0-3-0.Edae], [6:0-5-0.Edge], [8:0-5-4,Edge], [9:0-5-4,0-1-4], [10:1-0-4,0-4-0] 8-11-8 2-2-0

DEFL.

8x16 ||

Plate Offsets (A, f)	[2.0-3-0,Euge], [6.0-3-0,Euge], [6.0-3-4,Euge], [9.0-3-4,0-1-4],							
LOADING (psf)	SPACING-	3-6-0	CSI.					
TCLL 20.0	Plate Grip DOL	1.15	TC 0.37					
TCDL 10.0	Lumber DOL	1.15	BC 0.47					
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.65					
BCDL 10.0	Code IRC2015/TI	PI2014	Matrix-S					

Vert(LL) -0.11 6-10 360 >999 Vert(CT) -0.276-10 >999 240 Horz(CT) 0.07 6 n/a n/a Wind(LL) 0.05 6-10 >999 240

I/defI

in (loc) **PLATES** GRIP 244/190 MT20

Weight: 490 lb FT = 20%

Scale = 1:91.0

LUMBER-

Plata Officate (V V)

TOP CHORD 2x6 SP No.1

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

6-11: 2x6 SP No.1

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

1-12,3-12: 2x6 SP No.1

**BRACING-**TOP CHORD

2-0-0 oc purlins (6-0-0 max.), except end verticals (Switched from sheeted: Spacing > 2-8-0).

I/d

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

**WEBS** 1 Row at midpt 12-14 JOINTS 1 Brace at Jt(s): 2, 1, 14

REACTIONS. (size) 6=0-3-8, 12=0-3-8

> Max Horz 12=-842(LC 13) Max Uplift 12=-407(LC 13)

Max Grav 6=1713(LC 20), 12=1971(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-333/223, 2-3=-379/107, 3-5=-1889/0, 5-6=-2362/0, 12-14=-448/290,

1-14=-449/291

**BOT CHORD** 10-12=0/1448, 6-10=0/1827

5-10=-757/361, 3-12=-2006/528, 3-10=0/1529 **WEBS** 

### 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 0-9-0 oc, 2x6 2 rows staggered at 0-9-0 oc.
  - Webs connected as follows: 2x4 1 row at 0-9-0 oc, 2x6 2 rows staggered at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 5-4-13, Interior(1) 5-4-13 to 23-8-9 zone; C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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 in-jury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see 

ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Qua Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Job Truss Truss Type Qty Weaver /1481 Lawrence Road/Johnston E14244379 J0320-0960 Α7 ROOF SPECIAL 2 Job Reference (optional)

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Mar 23 2020 MiTek Industries, Inc. Tue Mar 31 08:25:44 2020 Page 1  $ID:FKRF2G2VvSGFSXRUG\_ubJqzaK1d-ylBqhMXxy5EgGcNQtwCcwMpD31PQBmuE8\_SxErzVTYb$ 

2-0-0 oc purlins (6-0-0 max.), except end verticals

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

12-14

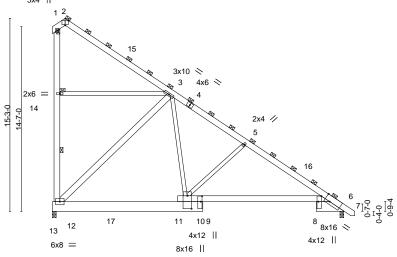
(Switched from sheeted: Spacing > 2-8-0).

1 Row at midpt

1 Brace at Jt(s): 2, 1, 14

1<sub>-</sub>0-0 1-0-0 15-1-10 23-0-0 23<sub>7</sub>10<sub>7</sub>8 0-10-8 9-3-8 8-3-8 5-10-2 7-10-6

8.00 12 Scale = 1:91.0 4x6 =3x4 ||



23-0-0 10-6-0 11-10-8 20-10-0 10-6-0 1-4-8 8-11-8 2-2-0 Plate Offsets (X,Y)-- [2:0-3-0.Edge], [6:0-5-0.Edge], [8:0-5-4.Edge], [9:0-5-4.0-1-4], [10:1-0-4.0-4-0]

- 1010 0110011	: tate enests (x, x, y) [2.15 of 5] 2 3gg, [6.15 of 1, 2 3gg]; [6.15 of 1, 5 1, 7]; [6.17 of 1, 5 1, 7]											
LOADING (	(psf)	SPACING-	3-6-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 2	20.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.11	6-10	>999	360	MT20	244/190
TCDL 1	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.27	6-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.65	Horz(CT)	0.07	6	n/a	n/a		
BCDL 1	10.0	Code IRC2015/TF	PI2014	Matri	x-S	Wind(LL)	0.05	6-10	>999	240	Weight: 490 lb	FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

**WEBS** 

JOINTS

LUMBER-

WEBS

2x6 SP No.1 TOP CHORD

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

6-11: 2x6 SP No.1 2x4 SP No.2 \*Except\*

1-12,3-12: 2x6 SP No.1

REACTIONS. (size) 6=0-3-8, 12=0-3-8

> Max Horz 12=-842(LC 13) Max Uplift 12=-407(LC 13)

Max Grav 6=1713(LC 20), 12=1971(LC 20)

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

TOP CHORD 1-2=-333/223, 2-3=-379/107, 3-5=-1889/0, 5-6=-2362/0, 12-14=-448/290,

1-14=-449/291

**BOT CHORD** 10-12=0/1448, 6-10=0/1827

5-10=-757/361, 3-12=-2006/528, 3-10=0/1529 **WEBS** 

### 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 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.

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

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 5-4-13, Interior(1) 5-4-13 to 23-8-9 zone; C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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 in-jury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see 

ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Qua Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Weaver /1481 Lawrence Road/Johnston Job Truss Truss Type Qty E14244380 J0320-0960 Α8 **ROOF TRUSS** 2 Job Reference (optional)

Comtech, Inc. Fayetteville, NC - 28314, 8.330 s Mar 23 2020 MiTek Industries, Inc. Tue Mar 31 08:25:45 2020 Page 1 ID:FKRF2G2VvSGFSXRUG\_ubJqzaK1d-QxlCuiYZiOMXumycRejrTZLIDRnzwGmNNeBVmHzVTYa

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

12-14

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

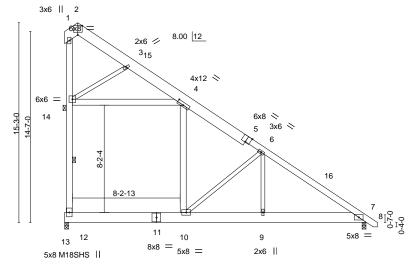
except end verticals.

1 Brace at Jt(s): 14

1 Row at midpt

4-8-7 15-1-10 23-0-0 23<sub>r</sub>10<sub>r</sub>8 3-8-7 7-10-6 10-5-3

Scale = 1:87.9



9-0-9 10-9-15 15-1-10 23-0-0 7-10-6 9-0-9 1-9-6 4-3-11

Plate Offsets (X,Y)	[2:0-4-0,Edge], [4:0-6-0,0-2-8], [5:0-4-0,	Edgej		
LOADING (psf)	SPACING- 2-8-0	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP	
TCLL 20.0	Plate Grip DOL 1.15	TC 0.73	Vert(LL) -0.21 10 >999 360 MT20 244/190	
TCDL 10.0	Lumber DOL 1.15	BC 0.33	Vert(CT) -0.46 10 >587 240 M18SHS 244/190	
BCLL 0.0 *	Rep Stress Incr NO	WB 0.48	Horz(CT) 0.01 7 n/a n/a	
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.17 10 >999 240 Weight: 563 lb FT = 20%	

**BRACING-**

TOP CHORD

**BOT CHORD** 

**WEBS** 

JOINTS

LUMBER-

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

5-8: 2x6 SP No.1 **BOT CHORD** 2x10 SP 2400F 2.0E **WEBS** 2x6 SP No.1 \*Except\*

6-9,6-10,3-14: 2x4 SP No.2

REACTIONS. (size) 12=0-3-8, 7=0-3-8

Max Horz 12=-633(LC 13) Max Uplift 12=-7(LC 13)

Max Grav 12=2288(LC 21), 7=1482(LC 21)

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

TOP CHORD 3-4=-808/104, 4-6=-829/128, 6-7=-2233/92, 12-14=-1091/133 **BOT CHORD** 10-12=-119/629, 9-10=0/1720, 7-9=0/1720

4-14=-184/957, 6-9=0/1086, 4-10=0/833, 6-10=-2198/295, 3-14=-1790/225 WEBS

### NOTES-

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

Top chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.

Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc. Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 5-4-13, Interior(1) 5-4-13 to 23-8-9 zone; C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Ceiling dead load (10.0 psf) on member(s). 4-14; Wall dead load (5.0psf) on member(s).4-10
- 9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 10-12
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12.
- 11) Attic room checked for L/360 deflection.



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 permanent. 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.



Job Weaver /1481 Lawrence Road/Johnston Truss Truss Type Qty E14244381 J0320-0960 A9 **ROOF TRUSS** Job Reference (optional)

Comtech, Inc. Fayetteville, NC - 28314, 8.330 s Mar 23 2020 MiTek Industries, Inc. Tue Mar 31 08:25:46 2020 Page 1 ID:FKRF2G2VvSGFSXRUG\_ubJqzaK1d-v7Ja52ZBTiUOWvXo?LE4?nuQTq6LfhAXblx2lkzVTYZ

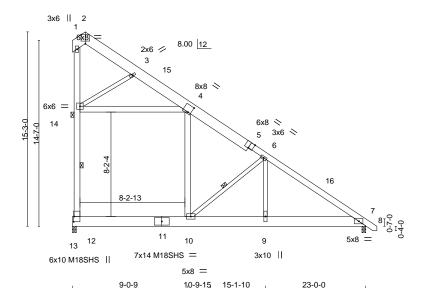
Structural wood sheathing directly applied, except end verticals.

12-14, 6-10

Rigid ceiling directly applied or 8-6-0 oc bracing.

23<sub>-</sub>10<sub>-</sub>8 0-10-8 1-0-0 1-0-0 15-1-10 4-8-6 23-0-0 3-8-6 7-10-6 10-5-4

Scale = 1:90.4



9-0-9 1-9-6 4-3-11 [2:0 4 0 Edgo] [4:0 2 12 0 6 9] [5:0 4 0 Edgo]

Plate Offsets (X, Y)	[2:0-4-0,Eage], [4:0-2-12,0-6-8], [5:0-4-0	J,Eagej, [12:0-5-0,0-0-8]		
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 0.96	Vert(LL) -0.32 10 >844 360 MT20 244/190	
TCDL 10.0	Lumber DOL 1.15	BC 0.45	Vert(CT) -0.69 10 >392 240 M18SHS 244/190	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.60	Horz(CT) 0.01 7 n/a n/a	
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.26 10 >999 240 Weight: 282 lb FT = 20%	)

**BRACING-**

WEBS

**JOINTS** 

TOP CHORD

**BOT CHORD** 

7-10-6

1 Row at midpt

1 Brace at Jt(s): 14

LUMBER-

TOP CHORD 2x10 SP No.1 \*Except\* 5-8: 2x6 SP No.1

2x10 SP 2400F 2.0E **BOT CHORD WEBS** 2x6 SP No.1 \*Except\*

6-9,6-10,3-14: 2x4 SP No.2

REACTIONS. (size) 12=0-3-8, 7=0-3-8

Max Horz 12=-475(LC 13) Max Uplift 12=-5(LC 13)

Max Grav 12=1716(LC 21), 7=1111(LC 21)

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

TOP CHORD 3-4=-606/78, 4-6=-622/96, 6-7=-1675/69, 12-14=-818/100 **BOT CHORD** 10-12=-89/471, 9-10=0/1290, 7-9=0/1290

4-14=-138/718, 6-9=0/815, 4-10=0/624, 6-10=-1648/221, 3-14=-1342/169 WEBS

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 5-4-13, Interior(1) 5-4-13 to 23-8-9 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are MT20 plates unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Ceiling dead load (10.0 psf) on member(s). 4-14; Wall dead load (5.0psf) on member(s).4-10
- 7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 10-12
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12.
- 9) Attic room checked for L/360 deflection.



March 31,2020

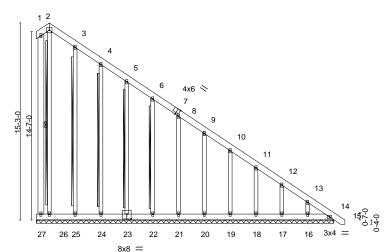


Job Truss Truss Type Qty Weaver /1481 Lawrence Road/Johnston E14244382 J0320-0960 A9GE COMMON SUPPORTED GAB Job Reference (optional)

Comtech. Inc. Fayetteville, NC - 28314, 8.330 s Mar 23 2020 MiTek Industries, Inc. Tue Mar 31 08:25:47 2020 Page 1 ID:FKRF2G2VvSGFSXRUG\_ubJqzaK1d-NKsyJOapE0dE736\_Y3IJY\_RpAEYaOFHgqygbqAzVTYY

23-0-0 23<sub>7</sub>10<sub>7</sub>8 0-10-8 22-0-0

8.00 12 Scale = 1:89.2 5x5 =



23-0-0 23-0-0

Plate Off	sets (X,Y)	[7:0-2-9,Edge], [23:0-4-0	,0-4-8]										
LOADIN	(I - )	SPACING-	2-0-0	CSI.	2.22	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	20.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	0.00	14	n/r	120	MT20	244/190	
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	0.00	14	n/r	120			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.01	14	n/a	n/a			
BCDL	10.0	Code IRC2015/Ti	PI2014	Matri	x-S						Weight: 280 lb	FT = 20%	

**BRACING-**

LUMBER-TOP CHORD 2x6 SP No.1

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

> Max Uplift All uplift 100 lb or less at joint(s) 27, 26, 25, 24, 23, 22, 21, 20, 19, 18, 17 except 16=-116(LC 13), 14=-100(LC 11) Max Grav All reactions 250 lb or less at joint(s) 27, 26, 25, 24, 23, 22, 21, 20,

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

Rigid ceiling directly applied or 10-0-0 oc bracing. 1 Row at midpt 1-27

2x4 SPF No.2 - 3-25, 4-24, 5-23, 6-22 T-Brace:

2x6 SPF No.2 - 2-26

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.

19, 18, 17, 16 except 14=414(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD  $5-6 = -254/197, \ 6-8 = -329/256, \ 8-9 = -404/314, \ 9-10 = -479/373, \ 10-11 = -554/432, \ 10-11 = -55$ 

11-12=-629/491, 12-13=-705/550, 13-14=-794/626

**BOT CHORD** 26-27=-536/694, 25-26=-536/694, 24-25=-536/694, 23-24=-536/694, 22-23=-536/694,

21-22=-536/694, 20-21=-536/694, 19-20=-536/694, 18-19=-536/694, 17-18=-536/694,

16-17=-536/694, 14-16=-536/694

### NOTES-

REACTIONS.

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-4-4 to 5-4-13, Exterior(2) 5-4-13 to 23-8-9 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.

All bearings 23-0-0. Max Horz 27=-695(LC 13)

- 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 27, 26, 25, 24, 23, 22, 21, 20, 19, 18, 17 except (jt=lb) 16=116, 14=100.
- 10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



March 31,2020

M 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 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 permanent. 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.



Weaver /1481 Lawrence Road/Johnston Job Truss Truss Type Qty E14244383 J0320-0960 B1 COMMON SUPPORTED GAB Job Reference (optional)

14-0-0

6-9-15

Comtech, Inc. Fayetteville, NC - 28314,

-0<sub>1</sub>10<sub>1</sub>8 0-10-8

7-2-2

8.330 s Mar 23 2020 MiTek Industries, Inc. Tue Mar 31 08:25:49 2020 Page 1 ID:FKRF2G2VvSGFSXRUG\_ubJqzaK1d-Ji\_jk3b4mdtyNNGNgTnndPW6m20cs0hzHG9iv2zVTYW 40<sub>t</sub>10<sub>t</sub>8 20-0-0 32-9-15 40-0-0 26-0-0 6-0-0 0-10-8 6-0-0 6-9-15 7-2-1

Scale = 1:87.8

Structural wood sheathing directly applied or 4-7-8 oc purlins.

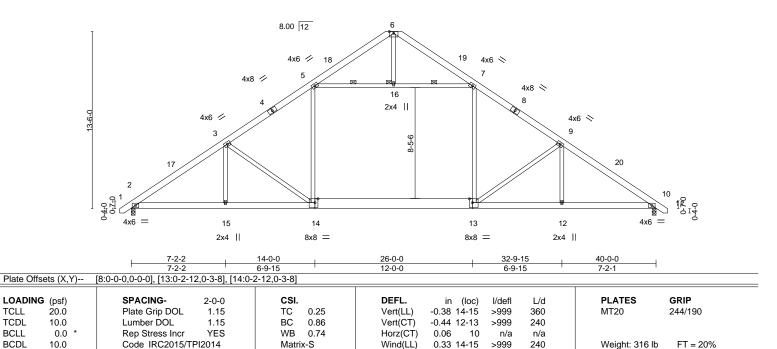
5-16, 7-16

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

1 Row at midpt

1 Brace at Jt(s): 16





**BRACING-**

WEBS

**JOINTS** 

TOP CHORD

**BOT CHORD** 

LUMBER-

TCLL

TCDL

**BCLL** 

BCDL

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

13-14: 2x10 SP No.1

**WEBS** 2x4 SP No.2

REACTIONS. (size) 2=0-3-8, 10=0-3-8 Max Horz 2=331(LC 11)

> Max Uplift 2=-96(LC 12), 10=-96(LC 13) Max Grav 2=1796(LC 19), 10=1796(LC 20)

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

TOP CHORD 2-3=-2750/460, 3-5=-2355/477, 5-6=-484/192, 6-7=-484/192, 7-9=-2357/477,

**BOT CHORD** 2-15=-245/2414, 14-15=-245/2414, 13-14=-82/1966, 12-13=-247/2167, 10-12=-247/2167

5-14=-6/763, 7-13=-6/764, 5-16=-1571/395, 7-16=-1571/395, 3-15=-43/260, WEBS

3-14=-642/238, 9-12=-48/260, 9-13=-642/240

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-9 to 3-8-4, Interior(1) 3-8-4 to 20-0-0, Exterior(2) 20-0-0 to 24-4-13, Interior(1) 24-4-13 to 40-8-9 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10.



M 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 MTI-sky 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/TPI Quality Criteria, DSB-89 and BCSI Building Component
Safety Information, available from Truse Plate petitive 218 N. Lea Street, Stitle 312, Alexandria, VA. 23314. fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Qua Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

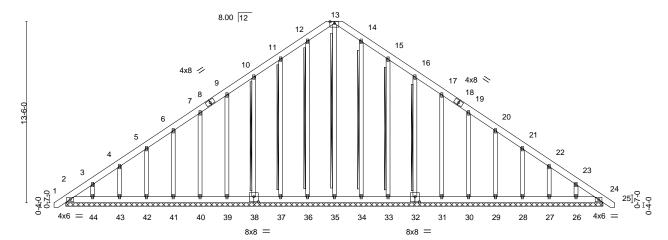


Job Truss Truss Type Qty Weaver /1481 Lawrence Road/Johnston E14244384 J0320-0960 B1GE COMMON SUPPORTED GAB Job Reference (optional)

Comtech. Inc. Fayetteville, NC - 28314,

8.330 s Mar 23 2020 MiTek Industries, Inc. Tue Mar 31 08:25:51 2020 Page 1 ID:FKRF2G2VvSGFSXRUG\_ubJqzaK1d-F56T9ldKIE7gchPmnuqFiqbVBrv\_K2pGlaep\_xzVTYU 40<sub>r</sub>10<sub>r</sub>8 0-10-8 -0<sub>1</sub>10<sub>1</sub>8 0-10-8 40-0-0 20-0-0 20-0-0

Scale = 1:85.8



5x8 =

40-0-0 40-0-0

Plate Offsets (X,Y)	[32:0-4-0,0-4-8], [38:0-4-0,0-4-8]			
LOADING (psf) TCLL 20.0	SPACING- 2-0-0 Plate Grip DOL 1.15	<b>CSI.</b> TC 0.06	<b>DEFL.</b> in (loc) I/defl L/d Vert(LL) 0.00 24 n/r 120	PLATES GRIP MT20 244/190
			, , , , , , , , , , , , , , , , , , , ,	M1120 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.03	Vert(CT) 0.00 24 n/r 120	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.25	Horz(CT) 0.01 24 n/a n/a	
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S		Weight: 399 lb FT = 20%

LUMBER-

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

TOP CHORD **BOT CHORD** WEBS

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

T-Brace: 2x4 SPF No.2 - 13-35, 12-36, 11-37, 10-38

, 14-34, 15-33, 16-32

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. All bearings 40-0-0.

Max Horz 2=414(LC 11) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 35, 36, 38, 39, 40, 41, 42, 43, 34,

32, 31, 30, 29, 28, 27, 24 except 2=-110(LC 8), 37=-102(LC 12), 44=-105(LC

12), 33=-106(LC 13), 26=-102(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 2, 36, 37, 38, 39, 40, 41, 42, 43,

44, 34, 33, 32, 31, 30, 29, 28, 27, 26, 24 except 35=277(LC 13)

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

TOP CHORD 2-3=-441/318, 3-4=-357/284, 4-5=-292/257, 10-11=-216/283, 11-12=-284/333,

12-13=-310/354, 13-14=-310/354, 14-15=-284/319, 22-23=-263/167, 23-24=-346/238 BOT CHORD  $2-44 = -212/326,\ 43-44 = -212/326,\ 42-43 = -212/326,\ 41-42 = -212/326,\ 40-41 = -212/326,$ 

39-40=-212/326, 38-39=-212/326, 37-38=-212/326, 36-37=-212/326, 35-36=-212/326, 34-35=-212/326, 33-34=-212/326, 32-33=-212/326, 31-32=-212/326, 30-31=-212/326,

 $29 - 30 = -212/326,\ 28 - 29 = -212/326,\ 27 - 28 = -212/326,\ 26 - 27 = -212/326,\ 24 - 26 = -212/326$ 

13-35=-256/167

### **WEBS** NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-8-9 to 3-8-4, Exterior(2) 3-8-4 to 20-0-0, Corner(3) 20-0-0 to 24-4-13, Exterior(2) 24-4-13 to 40-8-9 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 35, 36, 38, 39, 40, 41, 42, 43, 34, 32, 31, 30, 29, 28, 27, 24 except (jt=lb) 2=110, 37=102, 44=105, 33=106, 26=102.
- 10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required



March 31,2020

M 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 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 permanent. 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.



Job Weaver /1481 Lawrence Road/Johnston Truss Truss Type Qty E14244385 J0320-0960 C1 ATTIC Job Reference (optional)

Comtech. Inc. Fayetteville, NC - 28314, 8.330 s Mar 23 2020 MiTek Industries, Inc. Tue Mar 31 08:25:53 2020 Page 1 ID:FKRF2G2VvSGFSXRUG\_ubJqzaK1d-BUEEZReaqsNOr\_Z8vJsjoFhmTfTxoxQZCu7w2qzVTYS

-0-11-0 0-11-0 14-0-3 16-10-4 22-3-0 23-2-0 0-11-0 8-2-13 11-1-8 2-10-1 2-10-11 2-10-11 2-10-1

> Scale = 1:81 1 6x8 =

> > 12

3x6 ||

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

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

6 12.00 12 2x6 = 2x6 =2x6 || 2x6 || a 6x8 // 6x8 \ 8-2-4 9 5-9-11 4x6 🚿 4x6 // 11-0-0 0-4-12 2-0-8 14

> 16-10-4 22-3-0 11-5-8 5-4-12

> > **BRACING-**

TOP CHORD

**BOT CHORD** 

13

10x10 =

except end verticals.

6x8 =

Plate Offsets (X,Y)	[2:0-1-8,0-2-0], [3:0-4-0,Edge], [6:0-4-0,	,Edge], [9:0-4-0,Edge], [10	0:0-1-8,0-2-0], [13:0-5-0,0-7-0], [15:0-5-0,0-7-0]	
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 0.33	Vert(LL) -0.12 13-15 >999 360	MT20 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.58	Vert(CT) -0.19 13-15 >999 240	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.31	Horz(CT) 0.01 12 n/a n/a	
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.05 15 >999 240	Weight: 268 lb FT = 20%

15

10x10 =

16

3x6 ||

LUMBER-

TOP CHORD 2x10 SP No.1 \*Except\* 1-3,9-11: 2x6 SP No.1

**BOT CHORD** 2x10 SP No.1 **WEBS** 2x6 SP No.1 \*Except\* 2-15,10-13: 2x4 SP No.2

REACTIONS. (size) 16=0-3-8, 12=0-3-8

Max Horz 16=-419(LC 10)

Max Grav 16=1469(LC 21), 12=1469(LC 20)

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

TOP CHORD 2-4=-1675/22, 4-5=-1045/187, 7-8=-1045/187, 8-10=-1675/21, 2-16=-1615/65,

10-12=-1616/65

**BOT CHORD** 15-16=-425/555, 13-15=0/1123

**WEBS** 5-7=-1194/265, 4-15=0/744, 8-13=0/744, 2-15=-1/1037, 10-13=-10/1044

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- $2) \ Wind: ASCE 7-10; \ Vult=130mph \ (3-second \ gust) \ Vasd=103mph; \ TCDL=6.0psf; \ BCDL=6.0psf; \ h=15ft; \ Cat. \ II; \ Exp. \ C; \ Enclosed; \ Long \ Control \ Cat. \ Long \ Control \ Control \ Cat. \ Long \ Control \ C$ MWFRS (envelope) gable end zone and C-C Corner(3) -0-9-0 to 3-7-13, Exterior(2) 3-7-13 to 11-2-0, Corner(3) 11-2-0 to 15-6-13, Exterior(2) 15-6-13 to 23-1-0 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Ceiling dead load (10.0 psf) on member(s). 4-5, 7-8, 5-7; Wall dead load (5.0psf) on member(s).4-15, 8-13
- 6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 13-15
- 7) Attic room checked for L/360 deflection.



March 31,2020



Weaver /1481 Lawrence Road/Johnston Job Truss Truss Type Qty E14244386 J0320-0960 C2 ATTIC Job Reference (optional)

Comtech, Inc. Fayetteville, NC - 28314, 8.330 s Mar 23 2020 MiTek Industries, Inc. Tue Mar 31 08:25:54 2020 Page 1 ID:FKRF2G2VvSGFSXRUG\_ubJqzaK1d-ggocnnfCb9VFT88LT1NyKTDx03o8WOaiRYtTaGzVTYR

5-4-12

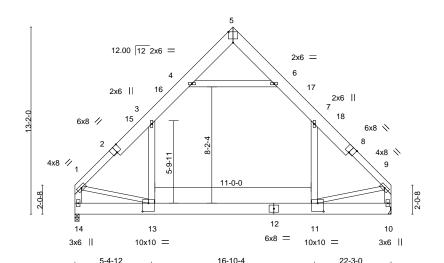
except end verticals.

16-10-4 14-0-3 22-3-0 5-4-12 8-2-13 11-1-8 2-10-11 2-10-1 2-10-11 2-10-1

> Scale = 1:81 1 6x8 =

> > Structural wood sheathing directly applied or 5-8-7 oc purlins,

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



11-5-8 Plate Offsets (X,Y)--[2:0-4-0,Edge], [5:0-4-0,Edge], [8:0-4-0,Edge], [11:0-5-0,0-7-0], [13:0-5-0,0-7-0]

LOADIN	(1 - )	SPACING- 2-0-0	CSI.	,	loc) I/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.34	Vert(LL) -0.12 11	-13 >999	360	MT20	244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.58	Vert(CT) -0.20 11	-13 >999	240		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.31	Horz(CT) 0.01	10 n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.04	13 >999	240	Weight: 262 lb	FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x10 SP No.1 \*Except\* 1-2,8-9: 2x6 SP No.1

2x10 SP No.1 **BOT CHORD WEBS** 2x6 SP No.1 \*Except\*

1-13,9-11: 2x4 SP No.2

REACTIONS. (size) 14=0-3-8, 10=Mechanical

Max Horz 14=-256(LC 8)

Max Grav 14=1434(LC 21), 10=1434(LC 20)

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

TOP CHORD 1-3=-1657/0, 3-4=-1042/150, 6-7=-1042/150, 7-9=-1657/0, 1-14=-1567/0, 9-10=-1568/0

BOT CHORD 13-14=-284/368, 11-13=0/1079

**WEBS** 4-6=-1225/195, 3-13=0/728, 7-11=0/728, 1-13=0/1036, 9-11=0/1039

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-3-4 to 4-8-1, Interior(1) 4-8-1 to 11-2-0, Exterior(2) 11-2-0 to 15-6-13, Interior(1) 15-6-13 to 22-0-12 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Ceiling dead load (10.0 psf) on member(s). 3-4, 6-7, 4-6; Wall dead load (5.0psf) on member(s).3-13, 7-11
- 6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 11-13
- 7) Refer to girder(s) for truss to truss connections.
- 8) Attic room checked for L/360 deflection.





 Job
 Truss
 Truss Type
 Qty
 Ply
 Weaver /1481 Lawrence Road/Johnston

 J0320-0960
 C3
 ATTIC
 1
 2

 Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Mar 23 2020 MiTek Industries, Inc. Tue Mar 31 08:25:55 2020 Page 1 ID:FKRF2G2VvSGFSXRUG\_ubJqzaK1d-8sL\_\_7gqMTd65ljX0kuBtgm5FT6WFr1sgCc07izVTYQ

5-4-12 8-2-13 11-1-8 14-0-3 16-10-4 22-3-0 5-4-12 2-10-1 2-10-11 2-10-1 5-4-12

6x8 = Scale = 1:81.1

5-4-12

2-0-0 oc purlins (6-0-0 max.), except end verticals

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

(Switched from sheeted: Spacing > 2-8-0).

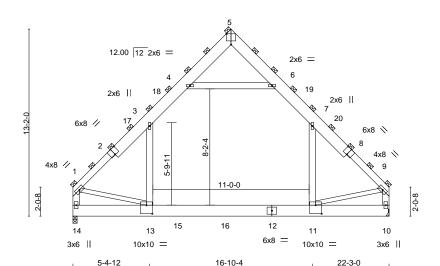


Plate Offsets (X,Y)-- [2:0-4-0,Edge], [5:0-4-0,Edge], [8:0-4-0,Edge], [11:0-5-0,0-7-4], [13:0-5-0,0-7-4]

LOADIN	G (psf)	SPACING- 3-0-0	CSI.	DEFL. in (loc	) l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.44	Vert(LL) -0.14 11-1:	3 >999	360	MT20	244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.76	Vert(CT) -0.22 11-13	3 >999	240		
BCLL	0.0 *	Rep Stress Incr NO	WB 0.24	Horz(CT) 0.01 1	0 n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.04 11-13	3 >999	240	Weight: 525 lb	FT = 20%

11-5-8

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x10 SP No.1 \*Except\* 1-2,8-9: 2x6 SP No.1 BOT CHORD 2x10 SP No.1 WEBS 2x6 SP No.1 \*Except\*

1-13,9-11: 2x4 SP No.2

REACTIONS. (size) 14=0-3-8, 10=Mechanical

Max Horz 14=-384(LC 8)

Max Grav 14=2783(LC 21), 10=2577(LC 20)

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

TOP CHORD 1-3=-3251/46, 3-4=-1860/268, 4-5=-57/484, 5-6=-61/417, 6-7=-1926/277, 7-9=-3167/41,

1-14=-3094/67, 9-10=-3003/54 13-14=-426/576, 11-13=0/2085

BOT CHORD 13-14=-426/576, 11-13=0/2085 WEBS 4-6=-2511/389, 3-13=0/1662, 7-11=0/1480, 1-13=0/1970, 9-11=0/2076

### 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, 2x10 - 2 rows staggered at 0-9-0 oc.

Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc.

Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 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

All loads are considered equally applied to all piles, except if noted as front (F) or back (B) face in the LOAL ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.

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

4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-3-4 to 4-8-1, Interior(1) 4-8-1 to 11-2-0, Exterior(2) 11-2-0 to 15-6-13, Interior(1) 15-6-13 to 22-0-12 zone; C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Ceiling dead load (10.0 psf) on member(s). 3-4, 6-7, 4-6; Wall dead load (5.0psf) on member(s).3-13, 7-11
- 8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 11-13

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

- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 529 lb down and 76 lb up at 7-4-8, and 529 lb down and 76 lb up at 10-8-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 12) Attic room checked for L/360 deflection.

### LOAD CASE(S) Standard

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





Job	Truss	Truss Type	Qty	Ply	Weaver /1481 Lawrence Road/Johnston
	00				E14244387
	C3	ATTIC	1	2	Joh Poforonos (antional)

Comtech, Inc.

Fayetteville, NC - 28314,

8.330 s Mar 23 2020 MiTek Industries, Inc. Tue Mar 31 08:25:56 2020 Page 2 ID:FKRF2G2VvSGFSXRUG\_ubJqzaK1d-c3vMCThT7nlziSljaRPQPuJG?sRI\_IG?usMaf8zVTYP

### LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 13-14=-30, 11-13=-60, 10-11=-30, 1-3=-90, 3-4=-120, 4-5=-90, 5-6=-90, 6-7=-120, 7-9=-90, 4-6=-30

Drag: 3-13=-15, 7-11=-15

Concentrated Loads (lb)

Vert: 15=-300(B) 16=-300(B)



Job Weaver /1481 Lawrence Road/Johnston Truss Truss Type Qty E14244388 J0320-0960 G1 FINK Job Reference (optional)

Comtech. Inc. Fayetteville, NC - 28314,

8.330 s Mar 23 2020 MiTek Industries, Inc. Tue Mar 31 08:25:57 2020 Page 1 ID:FKRF2G2VvSGFSXRUG\_ubJqzaK1d-4FTkPoh5u4tqKctv89xfy5rOUGsPjkb87W57BbzVTYO

24-0-0

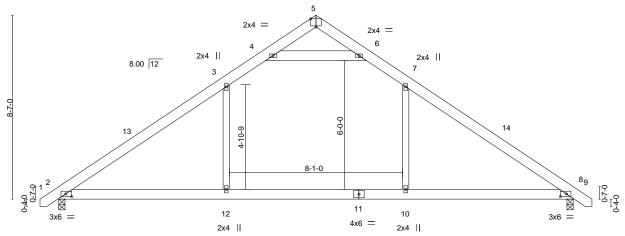
Rigid ceiling directly applied or 10-0-0 oc bracing.

Structural wood sheathing directly applied or 5-8-12 oc purlins.

24-0-0 24-10-8 0-10-8 -0-10-8 0-10-8 12-0-0 7-9-12 16-2-4 7-9-12 4-2-4 4-2-4

4x6 =





		7-9-12	ı	8-4-8	7-9-12		
Plate Offsets (X,Y) [2:0-3-6,0-1-8], [5:0-3-0,Edge], [8:0-3-6,0-1-8]							
LOADING	(psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc	c) I/defl L/d	PLATES GRIP	
TCLL	20.0	Plate Grip DOL 1.15	TC 0.59	Vert(LL) -0.17 10-1	2 >999 360	MT20 244/190	
TCDL	10.0	Lumber DOL 1.15	BC 0.41	Vert(CT) -0.24 10-1	2 >999 240		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.30	Horz(CT) 0.02	8 n/a n/a		
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.15 2-1	2 >999 240	Weight: 155 lb FT = 20%	

**BRACING-**

TOP CHORD

**BOT CHORD** 

16-2-4

LUMBER-

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

4-6: 2x6 SP No.1

REACTIONS. (size) 2=0-3-8, 8=0-3-8

Max Horz 2=-203(LC 10) Max Uplift 2=-62(LC 12), 8=-62(LC 13) Max Grav 2=1118(LC 19), 8=1118(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1548/251, 3-4=-1077/310, 4-5=-98/433, 5-6=-98/433, 6-7=-1077/310,

7-9-12

7-8=-1548/251

**BOT CHORD** 2-12=-54/1187, 10-12=-54/1187, 8-10=-54/1187 3-12=0/469, 7-10=0/469, 4-6=-1618/472

### WEBS NOTES-

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

- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-9 to 3-8-4, Interior(1) 3-8-4 to 12-0-0, Exterior(2) 12-0-0 to 16-2-4, Interior(1) 16-2-4 to 24-8-9 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.



🗥 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 MTI-sky 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/TPI Quality Criteria, DSB-89 and BCSI Building Component
Safety Information, available from Truse Plate petitive 218 N. Lea Street, Stitle 312, Alexandria, VA. 23314. fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Qua Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Job Weaver /1481 Lawrence Road/Johnston Truss Truss Type Qty E14244389 J0320-0960 G1GE GABLE Job Reference (optional) Comtech. Inc. Fayetteville, NC - 28314,

8.330 s Mar 23 2020 MiTek Industries, Inc. Tue Mar 31 08:25:58 2020 Page 1 ID:FKRF2G2VvSGFSXRUG\_ubJqzaK1d-YR17d8ijfO?hylS6isSuVJOhrgloSD2IMArhj1zVTYN -0-10-8 0-10-8 12-0-0 24-0-0

24-10-8 0-10-8

Scale = 1:54 1

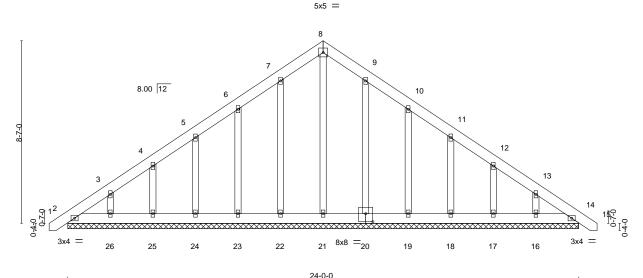


Plate Offsets (X,Y)--[20:0-4-0,0-4-8] LOADING (psf) SPACING-CSI. DEFL. **PLATES** GRIP 2-0-0 in (loc) I/defI I/d TCLL 20.0 Plate Grip DOL 1.15 TC 0.03 Vert(LL) 0.00 120 244/190 14 n/r MT20 TCDL BC 10.0 Lumber DOL 1.15 0.02 Vert(CT) 0.00 14 n/r 120 **BCLL** 0.0 Rep Stress Incr YES WB 0.16 Horz(CT) 0.00 14 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-S Weight: 195 lb FT = 20%

24-0-0

LUMBER-

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

**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. All bearings 24-0-0.

(lb) - Max Horz 2=-254(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 2, 14, 22, 23, 24, 25, 26, 20, 19, 18, 17, 16 Max Grav All reactions 250 lb or less at joint(s) 2, 14, 21, 22, 23, 24, 25, 26, 20, 19, 18, 17, 16

12-0-0

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 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-8-9 to 3-8-4, Exterior(2) 3-8-4 to 12-0-0, Corner(3) 12-0-0 to 16-4-13, Exterior(2) 16-4-13 to 24-8-9 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOI = 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 14, 22, 23, 24, 25, 26, 20, 19, 18, 17, 16.



March 31,2020

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

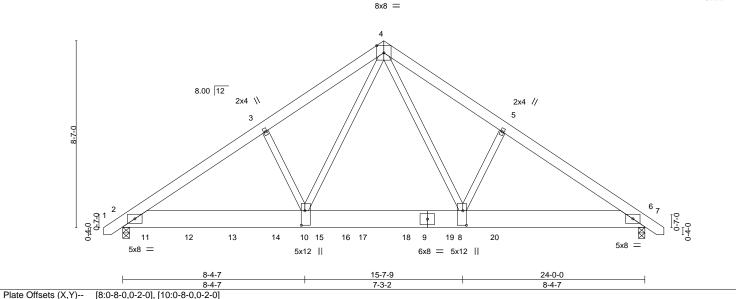
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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 permanent. 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.



Job Truss Truss Type Qty Weaver /1481 Lawrence Road/Johnston E14244390 J0320-0960 G2 FINK Job Reference (optional) Comtech. Inc. Fayetteville, NC - 28314, 8.330 s Mar 23 2020 MiTek Industries, Inc. Tue Mar 31 08:26:00 2020 Page 1 ID:FKRF2G2VvSGFSXRUG\_ubJqzaK1d-Uq9t1qkzA?FOB3bUpHUMakTxzUsFwyNbpUKnowzVTYL -0-10-8 0-10-8 6-6-10 12-0-0 17-5-5 24-0-0 24-10-8 0-10-8

5-5-5

Scale = 1.53.0



LOADING (psf) SPACING-CSI. DEFL. **PLATES** GRIP 2-0-0 in (loc) I/defI I/d TCLL 20.0 Plate Grip DOL TC 0.44 Vert(LL) -0.12 8-10 360 244/190 1.15 >999 MT20 BC 0.53 TCDL 10.0 Lumber DOL 1.15 Vert(CT) -0.248-10 >999 240 **BCLL** 0.0 Rep Stress Incr NO WB 0.87 Horz(CT) 0.04 6 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-S Wind(LL) -0.01 10 >999 240 Weight: 407 lb FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x6 SP No.1 **BOT CHORD** 2x10 SP 2400F 2.0E **WEBS** 2x4 SP No.2

REACTIONS.

(size) 2=0-3-12, 6=0-3-8 Max Horz 2=203(LC 7)

Max Grav 2=9019(LC 2), 6=6408(LC 2)

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

6-6-10

TOP CHORD 2-3=-11364/0, 3-4=-11231/0, 4-5=-10548/0, 5-6=-10714/0

**BOT CHORD** 2-10=0/9409, 8-10=0/6355, 6-8=0/8815

**WEBS** 3-10=-342/199, 4-10=0/7095, 4-8=0/5752, 5-8=-315/247

### 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 0-3-0 oc.

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

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1382 lb down at 1-0-12, 1381 lb down at 3-0-12, 1381 lb down at 5-0-12, 1381 lb down at 7-0-12, 1381 lb down at 9-0-12, 1381 lb down at 11-0-12, 1381 lb down at 13-0-12, and 1381 lb down at 15-0-12, and 2464 lb down at 17-1-8 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: 2-6=-20, 1-4=-60, 4-7=-60

Concentrated Loads (lb)

Vert: 11=-1147(B) 12=-1146(B) 13=-1146(B) 14=-1146(B) 15=-1146(B) 17=-1146(B) 18=-1146(B) 19=-1146(B) 20=-1961(B)



Structural wood sheathing directly applied or 4-6-6 oc purlins.

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

March 31,2020

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 Design Valid for use only with release controlled in the controlle



Job Weaver /1481 Lawrence Road/Johnston Truss Truss Type Qty E14244391 J0320-0960 РΒ **PIGGYBACK** Job Reference (optional) 8.330 s Mar 23 2020 MiTek Industries, Inc. Tue Mar 31 08:26:01 2020 Page 1 ID:FKRF2G2VvSGFSXRUG\_ubJqzaK1d-y0jFFAkbxJNFpDAhN??b6x0CrtlafcDk273LKMzVTYK Comtech. Inc. Fayetteville, NC - 28314, 2-9-0 5-5-15 2-9-0 Scale = 1:13.1 3x4 = 3 8.00 12 1-10-0 0-4-7 0-1-10 0-1-10 2x4 = 2x4 = 5-5-15 5-5-15 Plate Offsets (X,Y)--[3:0-2-0,Edge] LOADING (psf) SPACING-CSI. DEFL. **PLATES** GRIP 2-0-0 in (loc) I/defI I/d TCLL 20.0 Plate Grip DOL 1.15 TC 0.05 Vert(LL) 0.00 120 244/190 n/r MT20 BC TCDL 10.0 Lumber DOL 1.15 0.14 Vert(CT) 0.00 5 n/r 120 BCLL 0.0 Rep Stress Incr YES WB 0.00 Horz(CT) 0.00 4 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-P Weight: 16 lb FT = 20%

LUMBER-

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

TOP CHORD Structural wood sheathing directly applied or 5-5-15 oc purlins. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=3-11-11, 4=3-11-11

Max Horz 2=-40(LC 10)

Max Uplift 2=-16(LC 12), 4=-16(LC 13) Max Grav 2=189(LC 1), 4=189(LC 1)

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

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate arip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building



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 permanent. 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.



E14244392 J0320-0960 **PBGE** GABLE Job Reference (optional) 8.330 s Mar 23 2020 MiTek Industries, Inc. Tue Mar 31 08:26:01 2020 Page 1 ID:FKRF2G2VvSGFSXRUG\_ubJqzaK1d-y0jFFAkbxJNFpDAhN??b6x0CrtKLfc3k273LKMzVTYK Comtech. Inc. Fayetteville, NC - 28314, 2-9-0 5-5-15 2-9-0 Scale = 1:13.4 4x4 =3 8.00 12 -10-0 2 0-4-7 0-1-10 6 2x4 = 2x4 || 2x4 = 5-5-15 5-5-15 LOADING (psf) SPACING-**PLATES** GRIP CSI. DEFL. 2-0-0 in (loc) I/defl L/d **TCLL** 20.0 Plate Grip DOL Vert(LL) 0.00 244/190 1 15 TC 0.05 4 n/r 120 MT20 TCDL BC 0.03 Vert(CT) 0.00 120 10.0 Lumber DOL 1.15 5 n/r 0.0 WB Horz(CT) BCLL Rep Stress Incr YES 0.01 0.00 n/a n/a Code IRC2015/TPI2014 BCDL 10.0 Matrix-P Weight: 17 lb FT = 20%LUMBER-**BRACING-**

TOP CHORD

**BOT CHORD** 

Qty

Weaver /1481 Lawrence Road/Johnston

Structural wood sheathing directly applied or 5-5-15 oc purlins.

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

Job

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

REACTIONS.

(size) 2=3-11-11, 4=3-11-11, 6=3-11-11

Max Horz 2=50(LC 11)

Truss

Truss Type

Max Uplift 2=-45(LC 12), 4=-52(LC 13)

Max Grav 2=119(LC 1), 4=119(LC 1), 6=139(LC 1)

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

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



Design valid for use only with MTI-sky 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/TPI Quality Criteria, DSB-89 and BCSI Building Component
Safety Information, available from Truse Plate petitive 218 N. Lea Street, Stitle 312, Alexandria, VA. 23314. fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Qua Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

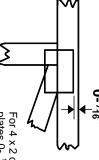


## **Symbols**

# PLATE LOCATION AND ORIENTATION



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



plates 0- 1/16" from outside For 4 x 2 orientation, locate edge of truss.

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

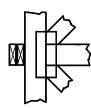
to slots. Second dimension is the length parallel to slots. width measured perpendicular The first dimension is the plate

# LATERAL BRACING LOCATION



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

### **BEARING**



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

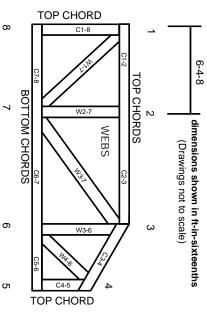
## Industry Standards:

National Design Specification for Metal

DSB-89: ANSI/TPI1:

Guide to Good Practice for Handling **Building Component Safety Information** Design Standard for Bracing. Connected Wood Trusses. Installing & Bracing of Metal Plate Plate Connected Wood Truss Construction.

# Numbering System



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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# General Safety Notes

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

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- Ņ Truss bracing must be designed by an engineer. For bracing should be considered may require bracing, or alternative Tor I wide truss spacing, individual lateral braces themselves
- 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
- Cut members to bear tightly against each other

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- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
- 7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.

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