

Trenco 818 Soundside Rd Edenton, NC 27932

Re: J0720-3500

Weaver / Old US 421 / Harnett

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: E14686840 thru E14686868

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

North Carolina COA: C-0844



July 31,2020

Gilbert, Eric

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

37-3-0

47-6-0

10-3-0

47-6-0

2-0-0 oc purlins (6-0-0 max.): 5-7.

6-0-0 oc bracing: 17-18,11-13.

1 Row at midpt 2 Rows at 1/3 pts 55-0-0

7-6-0

52-10-4

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

5-18, 3-18

5-17, 9-16, 6-17, 7-17, 9-13

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

61-6-0

29-6-0

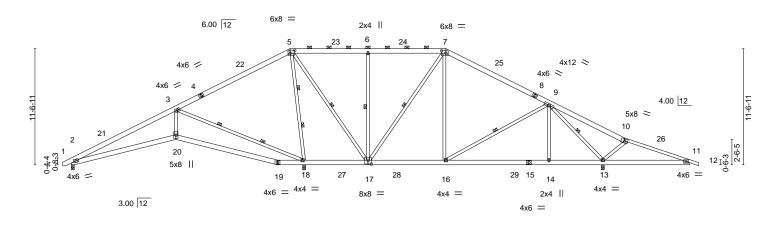
7-9-0

Scale = 1:114.6

62-4-8 0-10-8

61-6-0

6-6-0



	·	10-4-12	10-1-4	2-7-12	6-4-4	7-9-0	<u> </u>	10-3-0	· .	5-4-4 8-7-	12
Plate Offs	sets (X,Y)	[5:0-5-8,0-3-8], [7:0-5-4,0	0-3-0], [17:0-4-0	0,0-4-8]							
LOADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	I/defI	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC 0.6	1	Vert(LL)	-0.12 19-20	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC 0.36	6	Vert(CT)	-0.25 19-20	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB 0.9	1	Horz(CT)	0.07 18	n/a	n/a		
BCDL	10.0	Code IRC2015/T	PI2014	Matrix-S		Wind(LL)	0.07 2-20	>999	240	Weight: 450 lb	FT = 20%
						- ( )					

**BRACING-**

TOP CHORD

**BOT CHORD** 

**WEBS** 

LUMBER-

REACTIONS.

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

10-12: 2x4 SP No.1

**BOT CHORD** 2x6 SP No 1

WEBS 2x4 SP No.2

(size) 2=0-3-8, 18=0-3-8, 13=0-3-8

Max Horz 2=-149(LC 10)

10-4-12

10-4-12 10-4-12

Max Uplift 2=-13(LC 13), 18=-240(LC 12), 13=-202(LC 13) Max Grav 2=517(LC 23), 18=2820(LC 1), 13=1887(LC 24)

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

 $2\hbox{-}3\hbox{-}672/0, \, 3\hbox{-}5\hbox{-}-197/1068, \, 5\hbox{-}6\hbox{-}-210/319, \, 6\hbox{-}7\hbox{-}-210/319, \, 7\hbox{-}9\hbox{-}-745/251, \, 3\hbox{-}670/2012, \, 3\hbox{-}70/2012, \,$ TOP CHORD

9-10=-854/1240, 10-11=-844/957

BOT CHORD 2-20=0/645, 19-20=0/644, 18-19=0/573, 17-18=-1110/486, 16-17=0/560, 14-16=-12/582,

21-9-0 11-4-4

20-6-0

23-1-12<sub>1</sub>

29-6-0

13-14=-12/582, 11-13=-845/853

WEBS 5-18=-2170/546, 5-17=-307/1550, 9-14=0/331, 6-17=-501/224, 7-17=-815/122,

7-16=0/482, 3-18=-1413/281, 3-20=0/727, 9-13=-2034/731

### 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) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 21-9-0, Exterior(2) 21-9-0 to 26-1-13, Interior(1) 26-1-13 to 37-3-0, Exterior(2) 37-3-0 to 41-7-12, Interior(1) 41-7-12 to 62-4-8 zone; cantilever right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
- 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.
- \* 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) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 13 lb uplift at joint 2, 240 lb uplift at joint 18 and 202 lb uplift at joint 13.
- 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building



Continued on page 2 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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-juny and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANS/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	Weaver / Old US 421 / Harnett
					E14686840
J0720-3500	A1	PIGGYBACK BASE	5	1	
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

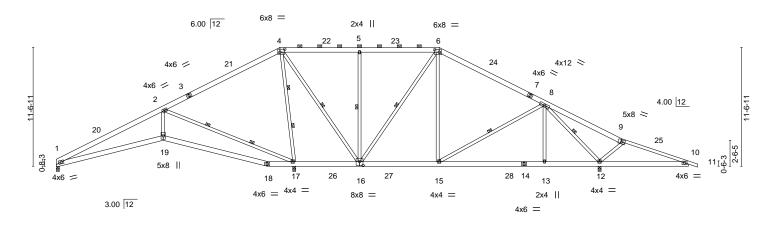
8.330 s May 6 2020 MiTek Industries, Inc. Fri Jul 31 10:23:38 2020 Page 2 ID:Jh9ByfjRPPU?mMRDxzGWXKyZ53p-LM5u7nEO8YBwFPLC\_0BMlnh6ar5QBz1eLljZWJysaC3

### NOTES-

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



Scale = 1:112.1



		23-1-12							
10-4-12	20-6-0	21-9-0	29-6-0	37-3-0	47-6-0	52-10-4	55-0-0 <sub>1</sub>	61-6-0	1
10-4-12	10-1-4	1-3-0	6-4-4	7-9-0	10-3-0	5-4-4	2-1-12	6-6-0	$\neg$
		1-4-12							

Plate Offsets (X,Y)	[4:0-5-8,0-3-8], [6:0-5-4,0-3-0], [16:0-4-6	),0-4-8]		
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 0.61 BC 0.37 WB 0.92	DEFL.         in (loc)         I/defl         L/d           Vert(LL)         -0.12 18-19         >999         360           Vert(CT)         -0.25 18-19         >999         240           Horz(CT)         0.07         17         n/a         n/a	PLATES         GRIP           MT20         244/190
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.06 1-19 >999 240	Weight: 448 lb FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

**WEBS** 

LUMBER-

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

9-11: 2x4 SP No.1

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

WEBS 2x4 SP No.2

REACTIONS. (size) 1=0-3-8, 17=0-3-8, 12=0-3-8

Max Horz 1=-149(LC 10)

Max Uplift 1=-11(LC 13), 17=-241(LC 12), 12=-202(LC 13) Max Grav 1=463(LC 23), 17=2824(LC 1), 12=1886(LC 24)

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

TOP CHORD 1-2=-672/0. 2-4=-198/1071. 4-5=-209/320. 5-6=-209/320. 6-8=-745/250. 8-9=-854/1240.

9-10=-844/957

BOT CHORD 1-19=0/645, 18-19=0/643, 17-18=0/572, 16-17=-1113/493, 15-16=0/559, 13-15=-11/581,

12-13=-11/581, 10-12=-845/853

WEBS 4-17=-2171/551, 4-16=-313/1551, 8-13=0/331, 5-16=-501/225, 6-16=-816/127,

6-15=0/483, 2-17=-1418/287, 2-19=0/730, 8-12=-2033/731

### 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) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 21-9-0, Exterior(2) 21-9-0 to 26-1-13, Interior(1) 26-1-13 to 37-3-0, Exterior(2) 37-3-0 to 41-7-12, Interior(1) 41-7-12 to 62-4-8 zone; cantilever right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
- 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.
- \* 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) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 11 lb uplift at joint 1, 241 lb uplift at joint 17 and 202 lb uplift at joint 12.
- 9) 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 6-0-0 oc purlins, except

4-17, 2-17

4-16, 8-15, 5-16, 6-16, 8-12

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

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

6-0-0 oc bracing: 16-17,10-12.

1 Row at midpt

2 Rows at 1/3 pts

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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-juny and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANS/TP11 Quality Criteria, DSB-89 and BCSI Building Component fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANS/TPI1 Qu Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



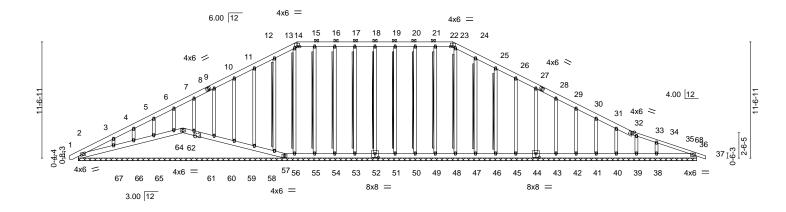
Job Truss Truss Type Qty Ply Weaver / Old US 421 / Harnett E14686842 A1GE GABLE J0720-3500 1 Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc.

8.330 s May 6 2020 MiTek Industries, Inc. Fri Jul 31 10:23:46 2020 Page 1

ID:Jh9ByfjRPPU?mMRDxzGWXKyZ53p-6vawoWKPG?CnCeykShKE4T0cP4vA3nBqAXf\_nrysaBx 22-7-8 21-9-0 55-10-8 62-4-8 63-3<sub>-</sub>0 0-10-8 15-5-15 17-9-0 6-6-0

Scale = 1:114.6



	0-10-8	10-4-12	10-1-4						-0-0			0-10-8
Plate Off	sets (X,Y)	[44:0-4-0,0-4-8], [52:0-4	1-0,0-4-8]									
LOADING	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	0.11	Vert(LL)	0.00	37	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	0.00	37	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.01	36	n/a	n/a		
BCDL	10.0	Code IRC2015/	TPI2014	Matr	ix-S						Weight: 574 lb	FT = 20%

LUMBER-

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

33-37: 2x4 SP No.1 BOT CHORD 2x6 SP No 1

-0-10-8

11-3-4

OTHERS 2x4 SP No.2 **BRACING-**TOP CHORD

BOT CHORD **WEBS** 

Rigid ceiling directly applied or 10-0-0 oc bracing. T-Brace:

2-0-0 oc purlins (6-0-0 max.): 14-22.

62-4-8

2x4 SPF No.2 - 18-52, 17-53, 16-54, 15-55 , 13-56, 12-58, 19-51, 20-50, 21-49, 23-48,

63-3-0

24-47, 25-46

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

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 61-6-0.

Max Horz 2=228(I C 12)

Max Uplift All uplift 100 lb or less at joint(s) 2, 57, 52, 53, 54, 55, 58, 59, 60, 61, 62, 64, 65, 66, 51, 50, 49, 47, 46, 45, 44, 43, 42, 41, 40, 39, 36 except

21-4-8

67=-142(LC 12), 38=-117(LC 13)

All reactions 250 lb or less at joint(s) 2, 63, 57, 52, 53, 54, 55, 56, 58, 59, 60, 61, 62, 64, 65, 66, 51, 50, 49, 48, 47, 46, 45, 44, 43, 42, 41, 40, 39, 36 except 67=274(LC 23), 38=316(LC 24)

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

TOP CHORD 2-3=-308/128, 9-10=-90/270, 10-11=-110/328, 11-12=-131/388, 12-13=-150/441,

13-14=-141/400, 14-15=-138/425, 15-16=-138/425, 16-17=-138/425, 17-18=-138/425, 18-19=-138/425, 19-20=-138/425, 20-21=-138/425, 21-22=-138/425, 22-23=-141/400,

23-24=-150/429, 24-25=-131/376, 25-26=-110/316, 26-27=-90/258

**WEBS** 3-67=-194/267

### 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) -0-8-10 to 3-6-0, Exterior(2) 3-6-0 to 21-9-0, Corner(3) 21-9-0 to 26-1-13, Exterior(2) 26-1-13 to 37-3-0, Corner(3) 37-3-0 to 41-6-0, Exterior(2) 41-6-0 to 62-4-8 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) WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or
- 5) Provide adequate drainage to prevent water ponding.



Design valid for use only with MiTek® connectors. This design is based only upon parameters and properly incorporate this design in the overall 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/P11 Quality Criteria, DSB-89 and BCSI Building Component fabrication, storage, delivery, erection and bracing of trusses and truss systems, see \*\*ANSVTP/1 Qu Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



July 31,2020

SEAL

036322

Job	Truss	Truss Type	Qty	Ply	Weaver / Old US 421 / Harnett
J0720-3500	A1GE	GABLE	1	1	E14686842
00120 0000	,	0,1522			Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s May 6 2020 MiTek Industries, Inc. Fri Jul 31 10:23:47 2020 Page 2 ID:Jh9ByfjRPPU?mMRDxzGWXKyZ53p-a58l0sL10JKeqnXw0PsTchYn8UFPoERzPBOYKlysaBw

### NOTES-

- 7) Gable requires continuous bottom chord bearing.
- 8) Gable studs spaced at 2-0-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) \* This truss has been designed for a live load of 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.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 57, 52, 53, 54, 55, 58, 59, 60, 61, 62, 64, 65, 66, 51, 50, 49, 47, 46, 45, 44, 43, 42, 41, 40, 39, 36 except (jt=lb) 67=142, 38=117.
- 12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 14) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



7-9-0

Scale = 1:112.1

6-1-12

55-0-0

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

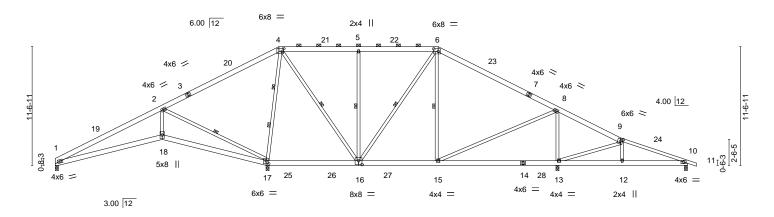
4-16, 6-16, 5-16, 6-15, 2-17

ORTH

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

6-6-0

61-6-0



7-9-0

TCLL         20.0         Plate Grip DOL         1.15         TC         0.61         Vert(LL)         -0.11 16-17         >999         360         MT20         24           TCDL         10.0         Lumber DOL         1.15         BC         0.35         Vert(CT)         -0.22 1-18         >999         240	CSI.         DEFL.         in (loc)         l/defl         L/d         PLATES         GRIP           TC         0.61         Vert(LL)         -0.11         16-17         >999         360         MT20         244/190		10-4-12 10-1-4	0-1 <del>"</del> 12 8-10-4	7-9-0	11-7-4	6-1-12 6-6-0
TCLL 20.0 Plate Grip DOL 1.15 TC 0.61 Vert(LL) -0.11 16-17 >999 360 MT20 24 TCDL 10.0 Lumber DOL 1.15 BC 0.35 Vert(CT) -0.22 1-18 >999 240	TC 0.61	Plate Offsets (X,Y)	[4:0-2-0,0-3-8], [6:0-5-4,0-3-0], [9:0-2-8	3,0-2-8], [16:0-4-0,0-4-8], [17:	0-3-0,0-3-8]		
TCDL 10.0 Lumber DOL 1.15 BC 0.35 Vert(CT) -0.22 1-18 >999 240	BC 0.35 Vert(CT) -0.22 1-18 >999 240 WB 0.78 Horz(CT) 0.04 17 n/a n/a	LOADING (psf)	SPACING- 2-0-0	CSI.	<b>DEFL.</b> in	(loc) I/defl L/d	PLATES GRIP
	WB 0.78 Horz(CT) 0.04 17 n/a n/a	TCLL 20.0	Plate Grip DOL 1.15	TC 0.61	Vert(LL) -0.11 16	6-17 >999 360	MT20 244/190
3CLL 0.0 * Rep Stress Incr YES WB 0.78 Horz(CT) 0.04 17 n/a n/a		ΓCDL 10.0	Lumber DOL 1.15	BC 0.35	Vert(CT) -0.22	1-18 >999 240	
	Matrix-S Wind(LL) 0.05 1-18 >999 240 Weight: 442 lb FT = 20%	3CLL 0.0 *	Rep Stress Incr YES	WB 0.78	Horz(CT) 0.04	17 n/a n/a	
BCDL 10.0 Code IRC2015/TPI2014 Matrix-S Wind(LL) 0.05 1-18 >999 240 Weight: 442 lb		BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.05	1-18 >999 240	Weight: 442 lb FT = 20%

37-3-0

TOP CHORD

**BOT CHORD** 

**WEBS** 

48-10-4

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

6-0-0 oc bracing: 16-17,13-15.

1 Row at midpt

2 Rows at 1/3 pts

LUMBER-TOP CHORD

20-6-0

20-7-12

29-6-0

2x6 SP No.1 \*Except\* 9-11: 2x4 SP No.1

10-4-12

10-4-12

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

WEBS 2x4 SP No.2

REACTIONS. All bearings 0-3-8. (lb) - Max Horz 1=-149(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 1, 10 except 17=-169(LC 12), 13=-154(LC 13)

All reactions 250 lb or less at joint(s) except 1=429(LC 23), 17=2553(LC 2), 13=1754(LC 26), 10=414(LC Max Grav 24)

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

TOP CHORD  $1-2 = -510/122, \ 2-4 = -102/978, \ 4-5 = -461/293, \ 5-6 = -461/293, \ 6-8 = -795/269, \ 8-9 = -19/423, \ 8-9 = -19/423, \ 8-9$ 

9-10=-421/76

**BOT CHORD** 1-18=-61/422, 17-18=-60/415, 16-17=-547/285, 15-16=0/584, 13-15=-270/148,

12-13=-12/324, 10-12=-9/332

4-17=-1853/455, 4-16=-229/1238, 6-16=-392/82, 8-15=-18/821, 8-13=-1309/410, **WEBS** 

5-16=-494/217, 2-17=-1269/344, 2-18=0/539, 9-13=-546/147

### 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) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 21-9-0, Exterior(2) 21-9-0 to 26-1-13, Interior(1) 26-1-13 to 37-3-0, Exterior(2) 37-3-0 to 41-7-12, Interior(1) 41-7-12 to 62-4-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
- 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
- \* 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) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 10 except (jt=lb) 17=169, 13=154.

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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-juny and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANS/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Edenton, NC 27932

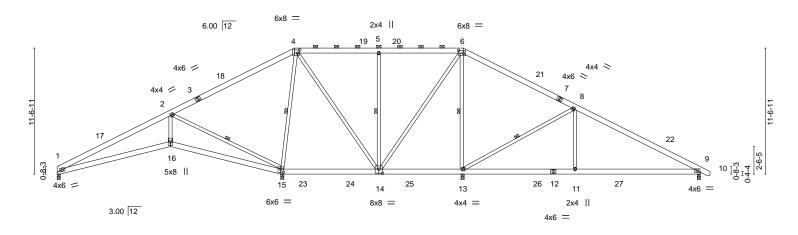
July 31,2020

SEAL

036322

Job Truss Truss Type Qty Ply Weaver / Old US 421 / Harnett E14686844 J0720-3500 А3 PIGGYBACK BASE Job Reference (optional) Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Fri Jul 31 10:23:52 2020 Page 1 Comtech, Inc. ID:Jh9ByfjRPPU?mMRDxzGWXKyZ53p-x2xB3ZPArryxwZQuoyReJkGVsVsoSJiiZT6I?VysaBr 10-4-12 21-9-0 29-6-0 37-3-0 47-6-0 59-0-0 59<sub>1</sub>10-8 0-10-8 10-4-12 7-9-0 7-9-0 10-3-0 11-6-0

Scale = 1:105.7



	)-4-12  -4-12	20-6-0 10-1-4	29-6-0 9-0-0	37-4-0 7-10-0	+	47-6-0 10-2-0	59-0-0 11-6-0	——
Plate Offsets (X,Y)	[4:0-2-4,0-3-8], [6:0-5	4,0-3-0], [14:0-4-	),0-4-8], [15:0-3-0,0-3-8]					
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Inc Code IRC2018	1.15 r YES	CSI. TC 0.62 BC 0.42 WB 0.84 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in (loc) -0.11 14-15 -0.23 9-11 0.04 15 0.06 9-11	I/defl L/d >999 360 >999 240 n/a n/a >999 240	PLATES MT20 Weight: 424 lb	<b>GRIP</b> 244/190 FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

**WEBS** 

LUMBER-

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

2x4 SP No.2 WFBS

REACTIONS. All bearings 0-3-8. (lb) -

Max Horz 1=-147(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 1, 13 except 15=-191(LC 12), 9=-108(LC 13)

All reactions 250 lb or less at joint(s) except 1=415(LC 23), 15=2077(LC 23), 13=1990(LC 26), 9=745(LC Max Grav

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

TOP CHORD 1-2=-456/105, 2-4=-98/1036, 4-5=0/408, 5-6=0/408, 6-8=0/729, 8-9=-881/171 **BOT CHORD** 1-16=-77/369, 15-16=-76/364, 14-15=-656/313, 13-14=-545/306, 11-13=-30/706,

9-11=-30/706

**WEBS** 2-16=0/503, 2-15=-1246/362, 4-15=-1388/385, 4-14=-96/575, 5-14=-510/237,

6-14=-106/547, 6-13=-1038/306, 8-13=-1317/354, 8-11=0/654

- 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) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 21-9-0, Exterior(2) 21-9-0 to 27-11-11, Interior(1) 27-11-11 to 37-3-0, Exterior(2) 37-3-0 to 43-5-10, Interior(1) 43-5-10 to 59-8-10 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
- \* 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) Bearing at joint(s) 1 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 capable of withstanding 100 lb uplift at joint(s) 1, 13 except (it=lb) 15=191, 9=108.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



2-15, 4-15, 5-14, 6-13, 8-13

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

2-0-0 oc purlins (10-0-0 max.): 4-6.

1 Row at midpt

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

July 31,2020

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

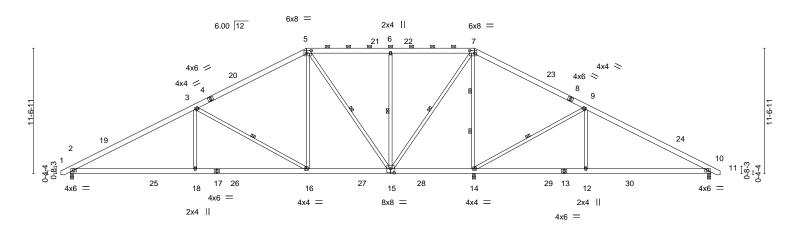
Design valid for use only with MTI-sky connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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/PTI Quality Criteria, DSB-89 and BCSI Building Component Safety Information, pushed from Trus Plate persons. fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANS/TPI1 Qu Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Weaver / Old US 421 / Harnett E14686845 J0720-3500 A4 PIGGYBACK BASE 2 1 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Fri Jul 31 10:23:54 2020 Page 1 Comtech, Inc. ID:Jh9ByfjRPPU?mMRDxzGWXKyZ53p-tR3xUFQQNTCf9sZGwNU6P9LrxIVzwCW?0nbP3OysaBp -0-10-8 0-10-8 21-9-0 29-6-0 37-3-0 47-6-0 59-0-0 59<sub>7</sub>10-8 0-10-8 11-6-0 10-3-0 11-6-0 7-9-0 7-9-0 10-3-0 11-6-0

Scale = 1:106.2



	11-6-0	10-3-0	7-9-0	7-8-4	4 0-0 <del>-</del> 12	10-3-0	11-6-0	
Plate Offsets (X,Y)	[5:0-5-4,0-3-0], [7:0-5-	3,0-3-0], [15:0-4-0	),0-4-8]					
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2015,		CSI. TC 0.58 BC 0.57 WB 0.95 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in (loc) -0.15 2-18 -0.30 2-18 0.05 10 0.09 2-18	I/defl L/d >999 360 >999 240 n/a n/a >999 240	_	<b>GRIP</b> 244/190 FT = 20%

29-6-0

LUMBER-

TOP CHORD 2x6 SP No 1

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

13-15: 2x6 SP 2400F 2.0E

**WEBS** 2x4 SP No.2 **BRACING-**TOP CHORD

37-2-4

37-3-0

Structural wood sheathing directly applied or 4-3-0 oc purlins, except

2-0-0 oc purlins (6-0-0 max.): 5-7.

47-6-0

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

6-0-0 oc bracing: 14-15.

**WEBS** 1 Row at midpt 3-16, 5-15, 6-15, 7-15, 9-14 2 Rows at 1/3 pts 7-14

REACTIONS.

(size) 2=0-3-8, 14=0-3-8, 10=0-3-8 Max Horz 2=146(LC 11)

11-6-0

Max Uplift 2=-109(LC 12), 14=-21(LC 13), 10=-98(LC 13) Max Grav 2=1479(LC 25), 14=3257(LC 2), 10=692(LC 24)

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

TOP CHORD  $2-3=-2456/491,\ 3-5=-1288/415,\ 5-6=-481/344,\ 6-7=-480/344,\ 7-9=0/850,\ 9-10=-731/150$ **BOT CHORD** 2-18=-314/2101, 16-18=-314/2101, 15-16=-51/1047, 14-15=-696/331, 12-14=-11/540,

21-9-0

3-18=0/651, 3-16=-1278/347, 5-16=-64/968, 5-15=-1074/205, 6-15=-512/242, 7-15=-397/1884, 7-14=-2272/540, 9-14=-1312/355, 9-12=0/645

### NOTES-

**WEBS** 

- 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) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 21-9-0, Exterior(2) 21-9-0 to 27-11-11, Interior(1) 27-11-11 to 37-3-0, Exterior(2) 37-3-0 to 43-5-10, Interior(1) 43-5-10 to 59-8-10 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.
- \* 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) 14, 10 except (it=lb) 2=109
- 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.



59-0-0

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED WILLIA REPEARANCE FROM MILES OF THIS AND INCLUDED WILLIA REPEARANCE FROM MILES OF AN INDIVIDUAL SECTION OF THIS AND INCLUDED WILLIAM SECTION OF THE WILLIAM SECTIO fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANS/TPI1 Qu Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

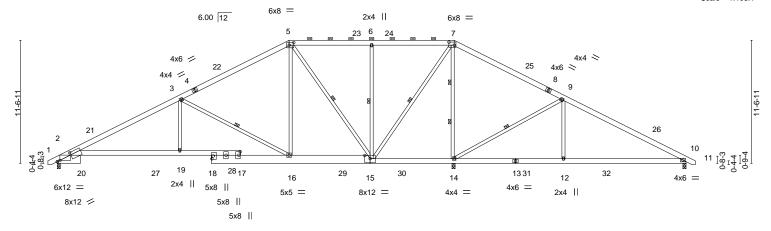


Edenton, NC 27932

Job Truss Truss Type Qty Ply Weaver / Old US 421 / Harnett E14686846 J0720-3500 PIGGYBACK BASE 5 A4A Job Reference (optional) Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Fri Jul 31 10:23:55 2020 Page 1 Comtech, Inc.

ID:Jh9ByfjRPPU?mMRDxzGWXKyZ53p-LddJhbR28mKWn08TU4?LxMu?cipufeK8FRKzcqysaBo -0-10-8 0-10-8 11-6-0 21-9-0 29-6-0 37-3-0 47-6-0 59-0-0 59<sub>1</sub>10-8 0-10-8 10-3-0 11-6-0 7-9-0 7-9-0 10-3-0 11-6-0

Scale = 1:108.1



		11-0-0	21-3-0	23-0-0	31-2-4	31-φ-0	<del>-11-0-0</del>	33-0-0	
		11-6-0	10-3-0	7-9-0	7-8-4	0-0 <del>-</del> 12	10-3-0	11-6-0	1
Plate Offs	ets (X,Y)	[2:1-4-15,0-2-13], [2:0-	2-15,0-1-6], [5:0-	5-4,0-3-0], [7:0-6-0,0-3-8],	[15:0-6-0,0-3-8],	[17:0-4-0,0-1-	8], [18:0-4-0,0-1-8]		
LOADING	i (pst)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	I/defl L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC 0.65	Vert(LL)	-0.21 2-19	>999 360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC 0.65	Vert(CT)	-0.45 2-19	>995 240		
BCLL	0.0 *	Rep Stress Incr	YES	WB 0.97	Horz(CT)	0.11 14	n/a n/a		
BCDL	10.0	Code IRC2015	/TPI2014	Matrix-S	Wind(LL)	0.16 2-19	>999 240	Weight: 464 lb	FT = 20%

37-2-4

37-3-0

47-6-0

2-0-0 oc purlins (6-0-0 max.): 5-7.

50\_0\_0

Structural wood sheathing directly applied or 4-3-12 oc purlins,

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

21-0-0

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

2-20,15-18: 2x10 SP No.1

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

**BOT CHORD** Rigid ceiling directly applied or 6-0-0 oc bracing. 6-15,7-14: 2x4 SP No.1 **WEBS** 3-16, 5-15, 6-15, 7-15, 9-14 1 Row at midpt 2 Rows at 1/3 pts

20-6-0

REACTIONS. (size) 2=0-3-8, 14=0-3-8, 10=0-3-8

11-6-0

Max Horz 2=148(LC 11)

Max Uplift 2=-93(LC 12), 14=-49(LC 12), 10=-126(LC 13) Max Grav 2=1214(LC 23), 14=3684(LC 2), 10=515(LC 24)

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

TOP CHORD 2-3=-2213/484, 3-5=-822/343, 5-6=-46/264, 6-7=-58/270, 7-9=-107/1502,

9-10=-352/675

**BOT CHORD** 2-19=-321/1902, 16-19=-305/1902, 15-16=-39/650, 14-15=-1279/434, 12-14=-543/192,

WEBS 3-19=0/738, 3-16=-1515/407, 5-16=-56/851, 5-15=-1178/237, 6-15=-513/242,

7-15=-431/2040, 7-14=-2661/613, 9-14=-1323/357, 9-12=0/647

### 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) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 21-9-0, Exterior(2) 21-9-0 to 27-11-11, Interior(1) 27-11-11 to 37-3-0, Exterior(2) 37-3-0 to 43-5-10, Interior(1) 43-5-10 to 59-8-10 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 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, 14 except (it=lb) 10=126.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 31,2020

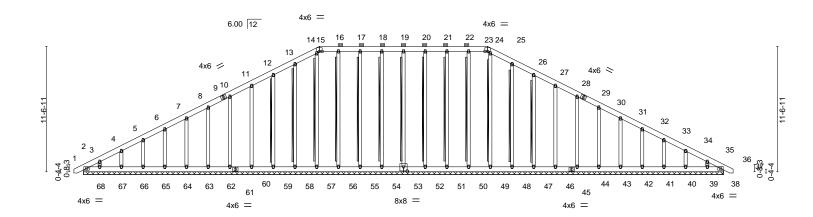


> 38-1-8 15-5-15

> > Scale = 1:106.2

60-9-0 0-10-8

60-9-0



0-10-8			59-0-0	0-10-8
Plate Offsets (X,Y)	[53:0-4-0,0-4-8]			
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 0.06	Vert(LL) -0.00 36 n/r 120	MT20 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.02	Vert(CT) 0.00 36 n/r 120	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.13	Horz(CT) 0.01 36 n/a n/a	
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S		Weight: 585 lb FT = 20%

59-10-8

LUMBER-

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

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

-0-10-8 0-10-8 22-7-8 21-9-0

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

BOT CHORD WEBS Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 15-23.

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

T-Brace: 2x4 SPF No.2 - 19-53

ID:Jh9ByfjRPPU?mMRDxzGWXKyZ53p-ibQCkIVBzJzoun1QGebWeQb0ZjgwK7ntOj2kH1ysaBj

<u>59-10-8</u>

21-9-0

2x4 SPF No.2 - 19-53, 18-54, 17-55, 16-56 , 14-57, 13-58, 12-59, 20-52, 21-51, 22-50,

24-49, 25-48, 26-47

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 59-0-0.

(lb) - Max Horz 2=228(LC 16)

Max Uplift All uplift 100 lb or less at joint(s) 2, 53, 54, 55, 56, 58, 59, 60, 62, 63, 64, 65, 66, 67, 68, 52, 51, 50, 48, 47, 46, 44, 43, 42, 41, 40, 39, 38 Max Grav All reactions 250 lb or less at joint(s) 2, 36, 53, 54, 55, 56, 57, 58, 59, 60, 62, 63, 64, 65, 66, 67, 68, 52, 51, 50, 49, 48, 47, 46, 44, 43, 42, 41, 40, 39, 38

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

TOP CHORD 2-3=-338/109, 3-4=-272/105, 10-11=-86/256, 11-12=-107/314, 12-13=-128/374,

13-14=-146/427, 14-15=-138/389, 15-16=-135/413, 16-17=-135/413, 17-18=-135/413, 18-19=-135/413, 19-20=-135/413, 20-21=-135/413, 21-22=-135/413, 22-23=-135/413.

23-24=-138/389, 24-25=-146/430, 25-26=-128/377, 26-27=-107/317, 27-28=-86/259

### 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) -0-8-10 to 3-6-0, Exterior(2) 3-6-0 to 21-9-0, Corner(3) 21-9-0 to 26-1-13, Exterior(2) 26-1-13 to 37-3-0, Corner(3) 37-3-0 to 41-6-0, Exterior(2) 41-6-0 to 59-8-10 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 requires continuous bottom chord bearing.
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) \* This truss has been designed for a live load of 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.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 53, 54, 55, 56, 58, 59, 60, 62, 63, 64, 65, 66, 67, 68, 52, 51, 50, 48, 47, 46, 44, 43, 42, 41, 40, 39, 38.



Continued on page 2

🗥 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MITEMS 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 labrication, storage, delivery, erection and bracing of trusses and truss systems, see 

ANSITYPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20801



Job	Truss	Truss Type	Qty	Ply	Weaver / Old US 421 / Harnett
J0720-3500	A4GE	GABLE			E14686847
30720-3500	A4GE	GABLE		'	Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s May 6 2020 MiTek Industries, Inc. Fri Jul 31 10:24:00 2020 Page 2 ID:Jh9ByfjRPPU?mMRDxzGWXKyZ53p-ibQCkIVBzJzoun1QGebWeQb0ZjgwK7ntOj2kH1ysaBj

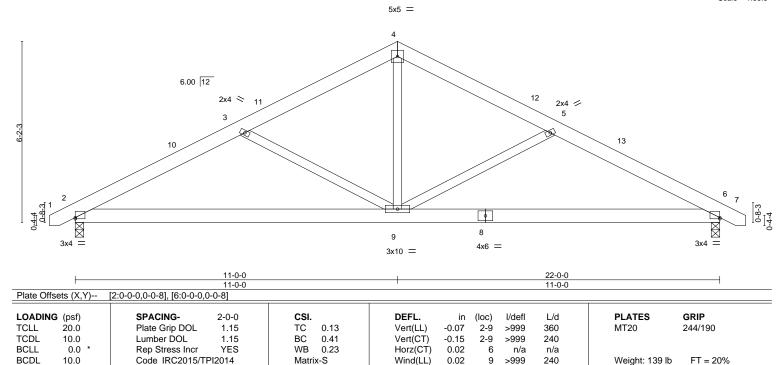
### NOTES-

- 11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



Job Truss Truss Type Qty Ply Weaver / Old US 421 / Harnett E14686848 J0720-3500 G1 QUEENPOST 6 1 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Fri Jul 31 10:24:03 2020 Page 1 Comtech, Inc. ID:Jh9ByfjRPPU?mMRDxzGWXKyZ53p-6A6LNKX3FELNIFI?ym8DG2DVIwcUXSxK5hGOuMysaBg 0-10-8 0-10-8 11-0-0 22-0-0 22-10-8 0-10-8 5-9-8 5-2-8 5-9-8

Scale = 1:39.3



**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

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

REACTIONS. (size) 6=0-3-8, 2=0-3-8

Max Horz 2=76(LC 11)

Max Uplift 6=-64(LC 13), 2=-64(LC 12) Max Grav 6=920(LC 1), 2=920(LC 1)

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

TOP CHORD 2-3=-1396/380, 3-4=-1066/288, 4-5=-1066/288, 5-6=-1396/380

**BOT CHORD** 2-9=-252/1183, 6-9=-257/1183

WFBS 3-9=-364/241, 4-9=-74/619, 5-9=-364/241

### 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) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 11-0-0, Exterior(2) 11-0-0 to 15-4-13, Interior(1) 15-4-13 to 22-8-10 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 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 6-0-0 oc purlins.

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

July 31,2020

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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/PTI Quality Criteria, DSB-89 and BCSI Building Component Safety Information, pushed from Trus Plate persons. fabrication, storage, delivery, erection and bracing of trusses and truss systems, see \*\*ANSVTP/1 Qu Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

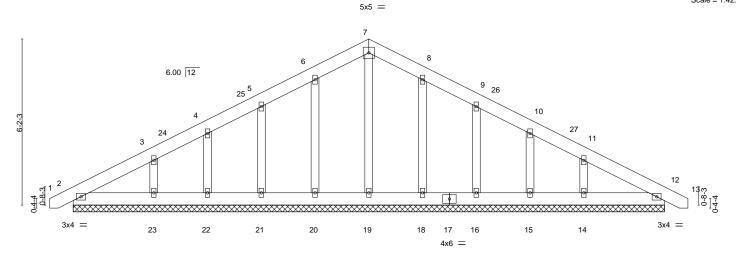


Job	Truss	Truss Type	Qty	Ply	Weaver / Old US 421 / Harnett	
10700 0500	0405	0.00				E14686849
J0720-3500	G1GE	GABLE	1	1	Job Reference (optional)	
Comtech Inc Favettey	ille NC - 28314				av 6 2020 MiTek Industries Inc. Fri Jul 31 10:24:06 202	) Page 1

ID:Jh9ByfjRPPU?mMRDxzGWXKyZ53p-WlnU?MayY9jyciUaduhwuhr1V8kGksMmnfV2VhysaBd <u>22-10-8</u> 23-9-0 0-10-8

Scale = 1:42.9

23-0-0



0-10-8			22-0-0								0-10-8		
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	0.03	Vert(LL)	0.00	12	n/r	120	MT20	244/190		
TCDL 10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	12	n/r	120				
BCLL 0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	12	n/a	n/a				
BCDL 10.0	Code IRC2015/TF	PI2014	Matri	k-S	, ,					Weight: 155 lb	FT = 20%		

22-10-8

LUMBER-

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

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

-0-10-8

-0-10-8 0-10-8

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 22-0-0.

Max Horz 2=119(LC 16) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 12, 2, 20, 21, 22, 18, 16, 15 except 23=-111(LC 12),

Max Grav All reactions 250 lb or less at joint(s) 12, 2, 19, 20, 21, 22, 23, 18, 16, 15, 14

11-10-8

11-0-0

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) -0-8-10 to 3-8-3, Exterior(2) 3-8-3 to 11-0-0, Corner(3) 11-0-0 to 15-4-13, Exterior(2) 15-4-13 to 22-8-10 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip
- 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) 12, 2, 20, 21, 22, 18, 16, 15 except (jt=lb) 23=111, 14=108.
- 10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



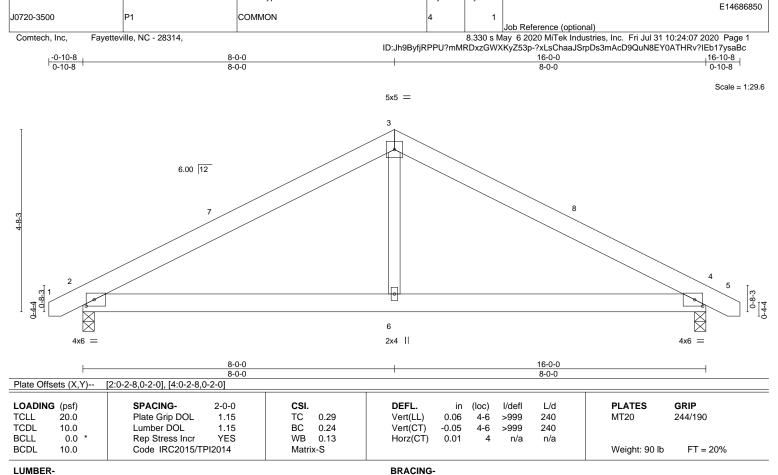
MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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 

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Edenton, NC 27932



TOP CHORD

**BOT CHORD** 

Qty

Ply

Weaver / Old US 421 / Harnett

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

Rigid ceiling directly applied or 9-5-12 oc bracing.

LUMBER-

Job

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

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

Max Horz 2=-57(LC 10)

Truss

Truss Type

Max Uplift 2=-142(LC 9), 4=-142(LC 8) Max Grav 2=680(LC 1), 4=680(LC 1)

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

TOP CHORD 2-3=-876/845, 3-4=-876/843

**BOT CHORD** 2-6=-619/679, 4-6=-619/679

WFBS 3-6=-478/381

### 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) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 8-0-0, Exterior(2) 8-0-0 to 12-4-13, Interior(1) 12-4-13 to 16-8-10 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
- 6) 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. 5/19/2020 BEFORE USE.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED WILLIA REPEARANCE FROM MILES OF THIS AND INCLUDED WILLIA REPEARANCE FROM MILES OF AN INDIVIDUAL SECTION OF THIS AND INCLUDED WILLIAM SECTION OF THE WILLIAM SECTIO fabrication, storage, delivery, erection and bracing of trusses and truss systems, see \*\*ANSVTP/1 Qu Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Weaver / Old US 421 / Harnett E14686851 P1GE GABLE J0720-3500 1 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Fri Jul 31 10:24:10 2020 Page 1 Comtech, Inc. ID:Jh9ByfjRPPU?mMRDxzGWXKyZ53p-PW1\_rjdTcNDO4KoLskms2X?fUl2tgevMiGTFeSysaBZ

16-0-0

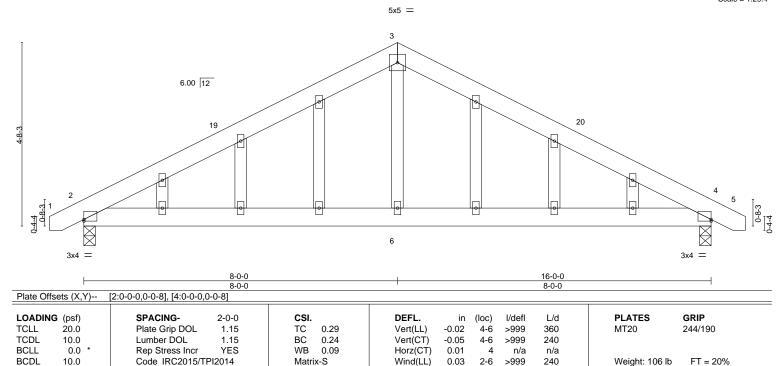
8-0-0

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

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

Scale = 1:29.4

0-10-8



**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

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

0-10-8 0-10-8

REACTIONS.

(size) 2=0-3-8, 4=0-3-8 Max Horz 2=-88(LC 13) Max Uplift 2=-153(LC 12), 4=-153(LC 13)

Max Grav 2=680(LC 1), 4=680(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-876/238, 3-4=-876/237

**BOT CHORD** 2-6=-78/679, 4-6=-78/679

**WEBS** 3-6=0/381

### 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 Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 8-0-0, Exterior(2) 8-0-0 to 12-4-13, Interior(1) 12-4-13 to 16-8-10 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

8-0-0

8-0-0

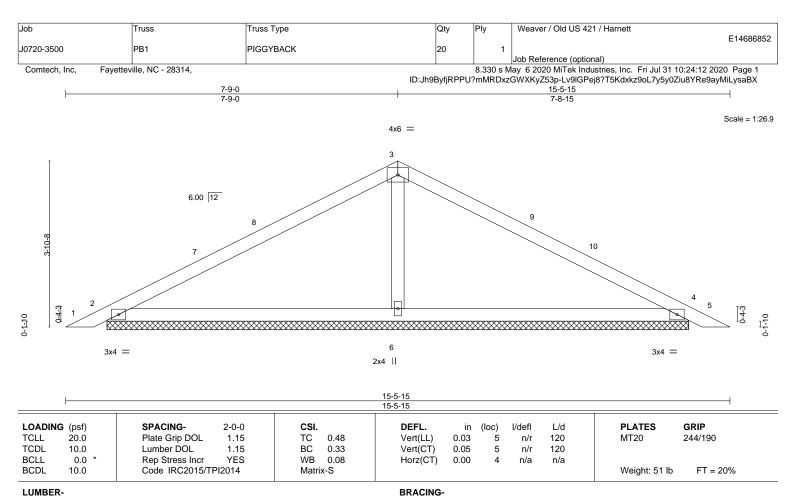
- 7) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=153, 4=153,
- 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

(size) 2=13-6-13, 4=13-6-13, 6=13-6-13

Max Horz 2=-48(LC 10)

Max Uplift 2=-42(LC 12), 4=-51(LC 13)

Max Grav 2=291(LC 23), 4=291(LC 24), 6=586(LC 1)

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

**WEBS** 3-6=-379/187

### 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) 0-3-15 to 4-8-11, Interior(1) 4-8-11 to 7-9-0, Exterior(2) 7-9-0 to 12-1-12, Interior(1) 12-1-12 to 15-2-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 7) 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 6-0-0 oc purlins.

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

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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Job Truss Truss Type Qty Ply Weaver / Old US 421 / Harnett E14686853 PB1GE GABLE J0720-3500 1 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Fri Jul 31 10:24:13 2020 Page 1 Comtech, Inc. ID:Jh9ByfjRPPU?mMRDxzGWXKyZ53p-p5i7TlfLvlcyxnWwXsJag9dD8y6ft0JoOEhwEnysaBW

4x4 =

15-5-15

7-8-15

Scale = 1:26.1

5 6.00 12 17 16 3 18 15 14 13 12 11 10 3x4 = 3x4 = 15-5-15 Plate Offsets (X,Y)--[6:0-0-0,0-0-0], [7:0-0-0,0-0-0]

DEFL.

Vert(LL)

Vert(CT)

Horz(CT)

**BRACING-**

TOP CHORD

**BOT CHORD** 

in (loc)

0.00

0.00

0.00

I/defl

n/r

n/r

n/a

8

9

8

L/d

120

120

n/a

**PLATES** 

Weight: 61 lb

MT20

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

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

GRIP

244/190

FT = 20%

LUMBER-

LOADING (psf)

TCLL

TCDL

**BCLL** 

BCDL

0-1-10

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

20.0

10.0

0.0

10.0

OTHERS 2x4 SP No.2

REACTIONS. All bearings 13-6-13. (lb) - Max Horz 2=75(LC 16)

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

1.15

1.15

YES

7-9-0

7-9-0

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.

SPACING-

Plate Grip DOL

Rep Stress Incr

Code IRC2015/TPI2014

Lumber DOL

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) 0-3-15 to 4-8-11, Exterior(2) 4-8-11 to 7-9-0, Corner(3) 7-9-0 to 12-1-12, Exterior(2) 12-1-12 to 15-2-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip

CSI.

TC

вс

WB

Matrix-S

0.07

0.04

0.04

- 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.
- Gable requires continuous bottom chord bearing.
- 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, 8, 13, 14, 11,
- 10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.





MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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Job Truss Truss Type Qty Ply Weaver / Old US 421 / Harnett E14686854 J0720-3500 VA1 GABLE 1 Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc.

8.330 s May 6 2020 MiTek Industries, Inc. Fri Jul 31 10:24:14 2020 Page 1 ID: Jh9By fjRPPU? mMRDxzGWXKyZ53p-HHGVg5gzgckpZx565 arpCNAP3MStcQ1xcuRTnDysaBVg5gzgckpZx565 arpCNAP3MStcQ1xcuRTnDysaBVg5gygchyZx565 arpCNAP3MStcQ1xcuRTnDysAVg5gygchyZx565 arpCNAP3M

11-9-8 23-7-0 11-9-8 11-9-8

> Scale = 1:72.2 4x4 =

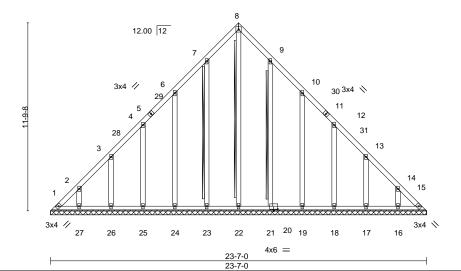


Plate Offsets (X,Y)--LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) I/defl L/d **PLATES** GRIP **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.06 Vert(LL) n/a n/a 999 MT20 244/190 **TCDL** 10.0 Lumber DOL 1.15 вс 0.04 Vert(CT) n/a n/a 999 **BCLL** 0.0 Rep Stress Incr YES WB 0.21 0.01 15 Horz(CT) n/a n/a BCDL Code IRC2015/TPI2014 Weight: 178 lb FT = 20% 10.0 Matrix-S

LUMBER-

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

TOP CHORD **BOT CHORD** WFBS

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 - 8-22, 7-23, 9-21

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 23-7-0.

(lb) - Max Horz 1=-343(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 22 except 1=-167(LC 10), 23=-132(LC 12), 24=-145(LC 12), 25=-138(LC 12), 26=-141(LC 12), 27=-133(LC 12), 21=-128(LC 13), 19=-147(LC 13), 18=-137(LC 13), 17=-141(LC 13), 16=-133(LC 13), 15=-109(LC 11)

Max Grav All reactions 250 lb or less at joint(s) 23, 24, 25, 26, 27, 21, 19, 18, 17, 16 except 1=327(LC 12), 22=306(LC 13), 15=288(LC 13)

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

TOP CHORD 1-2=-480/290, 2-3=-362/246, 7-8=-246/261, 13-14=-307/196, 14-15=-425/290 **BOT CHORD** 

1-27=-217/324, 26-27=-217/324, 25-26=-217/324, 24-25=-217/324, 23-24=-217/324, 22-23=-217/324, 21-22=-217/324, 19-21=-217/324, 18-19=-217/324, 17-18=-217/324,

16-17=-217/324, 15-16=-217/324

**WEBS** 8-22=-282/209

- 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) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 11-9-8, Exterior(2) 11-9-8 to 16-2-5, Interior(1) 16-2-5 to 23-2-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 22 except (jt=lb) 1 = 167, 23 = 132, 24 = 145, 25 = 138, 26 = 141, 27 = 133, 21 = 128, 19 = 147, 18 = 137, 17 = 141, 16 = 133, 15 = 109.
- 8) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



July 31,2020



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED WILLIA REPEARANCE FROM MILES OF THIS AND INCLUDED WILLIA REPEARANCE FROM MILES OF AN INDIVIDUAL SECTION OF THIS AND INCLUDED WILLIAM SECTION OF THE WILLIAM SECTIO Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Weaver / Old US 421 / Harnett E14686855 VALLEY J0720-3500 VA2 1 Job Reference (optional)

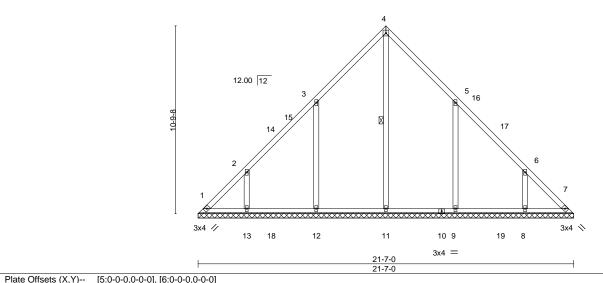
Fayetteville, NC - 28314, Comtech, Inc.

8.330 s May 6 2020 MiTek Industries, Inc. Fri Jul 31 10:24:22 2020 Page 1 ID:Jh9ByfjRPPU?mMRDxzGWXKyZ53p-2qlXMqm\_n3khWAifZF\_hX3VkVb9uU1m7S8Nu3mysaBN

10-9-8 21-7-0 10-9-8 10-9-8

4x4 =

Scale = 1:66.2



1 1010 011	0010 (71, 17	[0.0 0 0,0 0 0]; [0.0 0 0,0 0 0]			
LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.16	Vert(LL) n/a - n/a 999	MT20 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.16	Vert(CT) n/a - n/a 999	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.29	Horz(CT) 0.01 7 n/a n/a	
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S		Weight: 116 lb FT = 20%

LUMBER-

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

**BRACING-**TOP CHORD

BOT CHORD WFBS

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

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

1 Row at midpt 4-11

REACTIONS. All bearings 21-7-0

(lb) - Max Horz 1=-250(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 12=-183(LC 12), 13=-144(LC 12), 9=-183(LC 13), 8=-144(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 11=422(LC 22), 12=578(LC 19), 13=359(LC 19), 9=578(LC 20), 8=359(LC 20)

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

TOP CHORD 1-2=-273/217. 6-7=-250/217

WEBS 3-12=-403/307, 2-13=-326/262, 5-9=-403/307, 6-8=-326/262

### 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 4-9-0, Interior(1) 4-9-0 to 10-9-8, Exterior(2) 10-9-8 to 15-2-5, Interior(1) 15-2-5 to 21-2-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7 except (jt=lb) 12=183, 13=144, 9=183, 8=144.





Job Truss Truss Type Qty Ply Weaver / Old US 421 / Harnett E14686856 J0720-3500 VA3 VALLEY 1 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Fri Jul 31 10:24:24 2020 Page 1 Comtech, Inc. ID:Jh9ByfjRPPU?mMRDxzGWXKyZ53p-?CtHnWnFJh\_OmTs1gg09cUa4wOrxyyXPwSs?7eysaBL

4x4 =

9-9-8 19-7-0 9-9-8 9-9-8

Scale = 1:60.1

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

4-11

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

1 Row at midpt

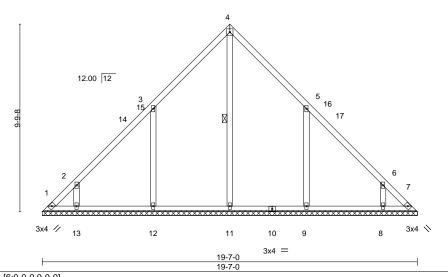


Plate Offsets (X,Y)--[5:0-0-0,0-0-0], [6:0-0-0,0-0-0] LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defl L/d **PLATES** GRIP TCLL 20.0 Plate Grip DOL 1.15 TC 0.16 Vert(LL) n/a n/a 999 MT20 244/190 TCDL вс 10.0 Lumber DOL 1.15 0.19 Vert(CT) n/a n/a 999 **BCLL** 0.0 Rep Stress Incr YES WB 0.20 0.00 Horz(CT) n/a n/a **BCDL** 10.0 Code IRC2015/TPI2014 Matrix-S Weight: 102 lb FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

WFBS

LUMBER-

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

2x4 SP No 2 OTHERS

REACTIONS. All bearings 19-7-0

(lb) - Max Horz 1=226(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 7 except 1=-125(LC 10), 12=-185(LC 12), 13=-132(LC 12),

9=-185(LC 13), 8=-132(LC 13)

All reactions 250 lb or less at joint(s) 1, 7 except 11=435(LC 22), 12=490(LC 19), 13=280(LC 19), Max Grav 9=490(LC 20), 8=280(LC 20)

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

TOP CHORD 1-2=-267/225 6-7=-259/225

WEBS 3-12=-406/309, 2-13=-307/258, 5-9=-406/309, 6-8=-307/259

### 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 4-9-0, Interior(1) 4-9-0 to 9-9-8, Exterior(2) 9-9-8 to 14-2-5, Interior(1) 14-2-5 to 19-2-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 1=125, 12=185, 13=132, 9=185, 8=132.



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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/PTI Quality Criteria, DSB-89 and BCSI Building Component Safety Information, pushed from Trus Plate persons. fabrication, storage, delivery, erection and bracing of trusses and truss systems, see \*\*ANSVTP/1 Qu Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Weaver / Old US 421 / Harnett E14686857 VALLEY J0720-3500 VA4 1 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Fri Jul 31 10:24:28 2020 Page 1 Comtech, Inc. ID:Jh9ByfjRPPU?mMRDxzGWXKyZ53p-t\_6octrlNvUqE5ApvW55nKll6?CyumL?q4qCGQysaBH 8-9-8 17-7-0 8-9-8 Scale = 1:58.0 4x4 = 3 12.00 12 2x4 || 2x4 || 11 3x4 // 3x4 \ 9 8 7 6 2x4 || 2x4 || 3x4 = 2x4 || 17-7-0 Plate Offsets (X,Y)-- [4:0-0-0,0-0-0]

LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TP	12014	Matri	x-S						Weight: 87 lb	FT = 20%

LUMBER-

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

**BRACING-**

TOP CHORD BOT CHORD WFBS

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

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

1 Row at midpt 3-8

REACTIONS. All bearings 17-7-0.

(lb) - Max Horz 1=-202(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1 except 9=-213(LC 12), 6=-213(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 8=414(LC 22), 9=550(LC 19), 6=550(LC 20)

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

WEBS 2-9=-457/338, 4-6=-457/338

### 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 4-9-8, Interior(1) 4-9-8 to 8-9-8, Exterior(2) 8-9-8 to 13-2-5, Interior(1) 13-2-5 to 17-2-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 9=213, 6=213.



🗥 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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ANSI/PTI Quality Criteria, DSB-89 and BCSI Building Component Safety Information, pushed from Trus Plate persons. fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANS/TPI1 Qu Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Weaver / Old US 421 / Harnett E14686858 J0720-3500 VA5 VALLEY Job Reference (optional) Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Fri Jul 31 10:24:33 2020 Page 1 Comtech, Inc. ID:Jh9ByfjRPPU?mMRDxzGWXKyZ53p-ExwhgauuBR77Ls2mi3gGUNSdf0v4Z1wk\_LXzydysaBC 7-9-8 15-7-0 7-9-8 Scale: 1/4"=1' 4x4 = 3 12.00 12 2x4 || 2x4 || 2 12 9 (<del>)</del> 3x4 // 3x4 \ 8 13 7 146 2x4 || 2x4 || 2x4 | 15-7-0 15-7-0

Plate Off	sets (X,Y)			
LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.16	Vert(LL) n/a - n/a 999 MT20 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.18	Vert(CT) n/a - n/a 999
BCLL	0.0 *	Rep Stress Incr YES	WB 0.13	Horz(CT) 0.00 5 n/a n/a
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S	Weight: 75 lb FT = 20%

LUMBER-

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

**BRACING-**

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

REACTIONS. All bearings 15-7-0.

(lb) - Max Horz 1=-178(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-186(LC 12), 6=-186(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=416(LC 22), 8=472(LC 19), 6=472(LC 20)

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

WEBS 2-8=-402/309, 4-6=-402/309

### 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 4-9-0, Interior(1) 4-9-0 to 7-9-8, Exterior(2) 7-9-8 to 12-2-5, Interior(1) 12-2-5 to 15-2-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=186, 6=186.



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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/PTI Quality Criteria, DSB-89 and BCSI Building Component Safety Information, pushed from Trus Plate persons. fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANS/TPI1 Qu Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Weaver / Old US 421 / Harnett E14686859 J0720-3500 VA6 VALLEY Job Reference (optional) Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Fri Jul 31 10:24:35 2020 Page 1 Comtech, Inc.

4x4 =

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Scale = 1:42.5

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

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

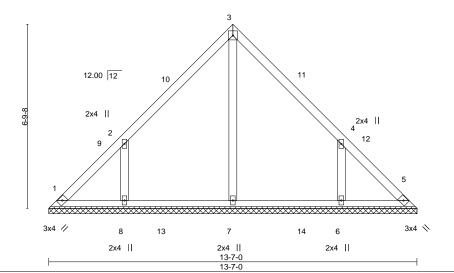


Plate Off	Plate Offsets (X,Y) [4:0-0-0,0-0-0]											
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2015/T	PI2014	Matri	x-S						Weight: 63 lb	FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

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

2x4 SP No.2 OTHERS

REACTIONS. All bearings 13-7-0.

(lb) - Max Horz 1=-154(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-166(LC 12), 6=-166(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=395(LC 19), 8=391(LC 19), 6=390(LC 20)

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

WEBS 2-8=-364/291, 4-6=-364/291

### 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 4-9-0, Interior(1) 4-9-0 to 6-9-8, Exterior(2) 6-9-8 to 11-2-5, Interior(1) 11-2-5 to 13-2-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=166, 6=166.



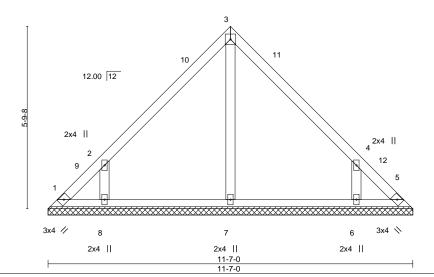


Edenton, NC 27932

Job Truss Truss Type Qty Ply Weaver / Old US 421 / Harnett E14686860 VALLEY J0720-3500 VA7 1 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Fri Jul 31 10:24:38 2020 Page 1 Comtech, Inc. ID:Jh9ByfjRPPU?mMRDxzGWXKyZ53p-avjajly10\_IPRdxkVcGRBRATk1ejEJ5T8dFkdqysaB7

4x4 =

Scale = 1:36.6



LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	n/a		n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TI	PI2014	Matri	x-S	, ,					Weight: 52 lb	FT = 20%

LUMBER-

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

Plate Offsets (X.Y)-- [4:0-0-0.0-0-0]

2x4 SP No.2

**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 11-7-0.

(lb) - Max Horz 1=-130(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-162(LC 12), 6=-161(LC 13) Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=339(LC 19), 6=339(LC 20)

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

WEBS 2-8=-361/303, 4-6=-361/303

### 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 4-9-0, Interior(1) 4-9-0 to 5-9-8, Exterior(2) 5-9-8 to 10-2-5, Interior(1) 10-2-5 to 11-2-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=162, 6=161.



July 31,2020

🔼 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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/PTI Quality Criteria, DSB-89 and BCSI Building Component Safety Information, pushed from Trus Plate persons. fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANS/TPI1 Qu Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



VALLEY J0720-3500 VA8 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Fri Jul 31 10:24:42 2020 Page 1 Comtech, Inc. ID:Jh9ByfjRPPU?mMRDxzGWXKyZ53p-Tgz5Zf?X3CFrwEEVkSLNLHK8af\_nA8E32FDymcysaB3 4-9-8 9-7-0 4-9-8 Scale = 1:30.9 4x4 = 2 12.00 12 2x4 // 4 2x4 \ 2x4 || 9-7-0 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 0.22 Vert(LL) n/a n/a 999 MT20 244/190 TCDL 10.0 Lumber DOL 1.15 вс 0.15 Vert(CT) n/a n/a 999 **BCLL** WB 0.06 0.0 Rep Stress Incr YES Horz(CT) 0.00 3 n/a n/a Code IRC2015/TPI2014 **BCDL** 10.0 Matrix-S Weight: 39 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

Qty

Ply

Weaver / Old US 421 / Harnett

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

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

E14686861

LUMBER-

REACTIONS.

Job

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

(size) 1=9-7-0, 3=9-7-0, 4=9-7-0

Max Horz 1=106(LC 11)

Truss

Truss Type

Max Uplift 1=-26(LC 13), 3=-26(LC 13)

Max Grav 1=201(LC 1), 3=201(LC 1), 4=308(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 grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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Job Truss Truss Type Qty Ply Weaver / Old US 421 / Harnett E14686862 J0720-3500 VALLEY VA9 1 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Fri Jul 31 10:24:43 2020 Page 1 Comtech, Inc. ID:Jh9ByfjRPPU?mMRDxzGWXKyZ53p-xsWTm?09qWNiYOphHAscuUtJb2LwvbzCHvyVl2ysaB2 3-9-8 7-7-0 3-9-8 3-9-8 Scale = 1:24.9 4x4 = 2 12.00 12 2x4 // 2x4 📏 2x4 || 7-7-0 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 0.20 Vert(LL) n/a n/a 999 MT20 244/190 TCDL 10.0 Lumber DOL 1.15 вс 0.09 Vert(CT) n/a n/a 999 **BCLL** WB 0.03 0.0 Rep Stress Incr YES Horz(CT) 0.00 3 n/a n/a Code IRC2015/TPI2014 **BCDL** 10.0 Matrix-P Weight: 31 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

(size) 1=7-7-0, 3=7-7-0, 4=7-7-0 Max Horz 1=82(LC 9)

Max Uplift 1=-30(LC 13), 3=-30(LC 13)

Max Grav 1=168(LC 1), 3=168(LC 1), 4=215(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 grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



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

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



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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ANSI/PTI Quality Criteria, DSB-89 and BCSI Building Component Safety Information, pushed from Trus Plate persons. fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANS/TPI1 Qu Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Weaver / Old US 421 / Harnett E14686863 J0720-3500 VALLEY VA10 1 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Fri Jul 31 10:24:17 2020 Page 1 Comtech, Inc. ID:Jh9ByfjRPPU?mMRDxzGWXKyZ53p-isyeJ6isyX6OQPqhmiOWq?ovlaUWpqmOJsf7NYysaBS 2-9-8 2-9-8 5-7-0 Scale = 1:20.1 4x4 = 2 12.00 12 2x4 // 2x4 \ 2x4 || 5-7-0 5-7-0 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 0.10 Vert(LL) n/a n/a 999 MT20 244/190 TCDL 10.0 Lumber DOL 1.15 вс 0.04 Vert(CT) n/a n/a 999 **BCLL** WB 0.01 0.0 Rep Stress Incr YES Horz(CT) 0.00 3 n/a n/a Code IRC2015/TPI2014 **BCDL** 10.0 Matrix-P Weight: 22 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

(size) 1=5-7-0, 3=5-7-0, 4=5-7-0

Max Horz 1=58(LC 11)

Max Uplift 1=-21(LC 13), 3=-21(LC 13)

Max Grav 1=119(LC 1), 3=119(LC 1), 4=153(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 grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



Structural wood sheathing directly applied or 5-7-0 oc purlins.

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





Design valid for use only with MTReks connectors. This design is based only upon parameters shown, and is for an individual building ocomponent, 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/THI Quality Criteria, DSB-89 and BCSI Building Component Sector Members and Possible Sector Truss Plate betties 2570 Crisis Historyca. Suits 232 Wolderf, MD 200610. fabrication, storage, delivery, erection and bracing of trusses and truss systems, see \*\*ANSVTP/1 Qu Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Weaver / Old US 421 / Harnett E14686864 VALLEY J0720-3500 VA11 1 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Fri Jul 31 10:24:18 2020 Page 1 Comtech, Inc. ID:Jh9ByfjRPPU?mMRDxzGWXKyZ53p-A3W0WSjUjrEF2YPuKQvINDL5VzpKYHDXXWPhw?ysaBR 1-9-8 3-7-0 1-9-8 1-9-8 3x4 Scale = 1:11.8 12.00 12 3 2x4 // 2x4 📏 3-7-0 3-7-0 Plate Offsets (X,Y)--[2:0-2-0,Edge] LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) I/defl L/d **PLATES** GRIP TCLL 20.0 Plate Grip DOL 1.15 TC 0.03 Vert(LL) n/a n/a 999 MT20 244/190 TCDL вс 0.07 10.0 Lumber DOL 1.15 Vert(CT) n/a n/a 999 WB **BCLL** 0.0 Rep Stress Incr YES 0.00 0.00 3 Horz(CT) n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-P Weight: 12 lb FT = 20%

LUMBER-

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

**BRACING-**

TOP CHORD **BOT CHORD**  Structural wood sheathing directly applied or 3-7-0 oc purlins.

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

REACTIONS. (size) 1=3-7-0, 3=3-7-0

Max Horz 1=35(LC 9)

Max Uplift 1=-4(LC 12), 3=-4(LC 12) Max Grav 1=115(LC 1), 3=115(LC 1)

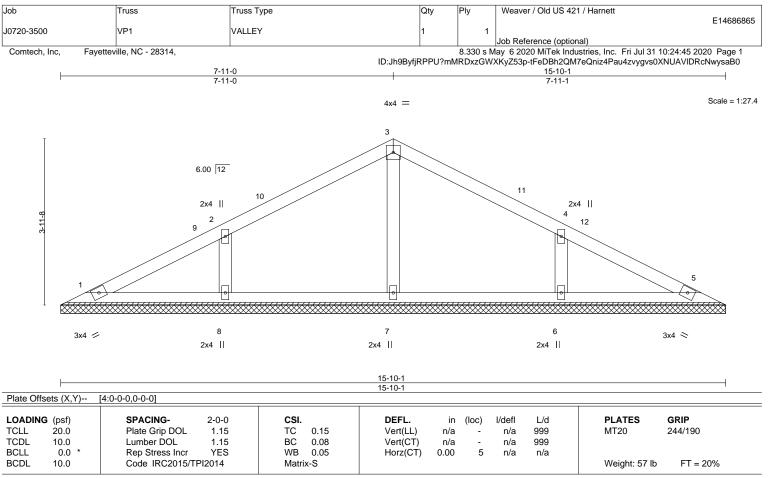
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

### 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 grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.







LUMBER-

TOP CHORD 2x4 SP No 1

BOT CHORD 2x4 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 15-10-1.

(lb) - Max Horz 1=-48(LC 10)

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

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=271(LC 1), 8=346(LC 23), 6=346(LC 24)

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

WEBS 2-8=-261/201, 4-6=-261/201

### 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) 0-7-7 to 5-0-3, Interior(1) 5-0-3 to 7-11-0, Exterior(2) 7-11-0 to 12-3-13, Interior(1) 12-3-13 to 15-2-10 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 8, 6.
- 6) Non Standard bearing condition. Review required.



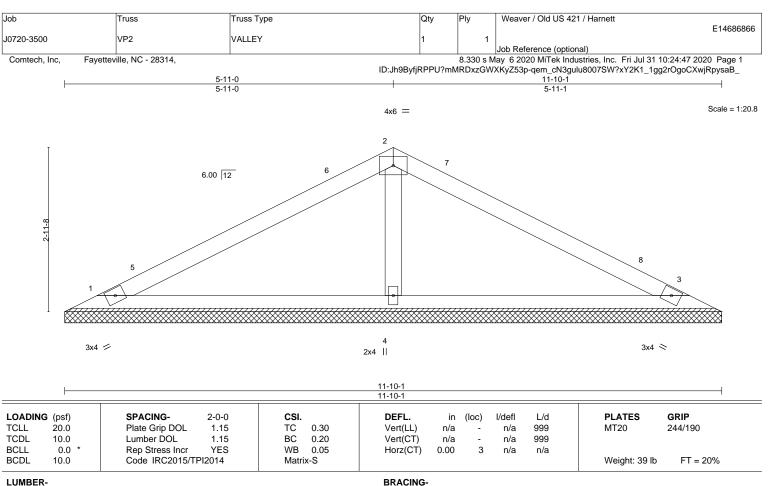


MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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ANSI/PTI Quality Criteria, DSB-89 and BCSI Building Component Safety Information, pushed from Trus Plate persons. fabrication, storage, delivery, erection and bracing of trusses and truss systems, see \*\*ANSVTP/1 Qu Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

(size) 1=11-10-1, 3=11-10-1, 4=11-10-1

Max Horz 1=35(LC 9) Max Uplift 1=-26(LC 12), 3=-32(LC 13)

Max Grav 1=196(LC 23), 3=196(LC 24), 4=460(LC 1)

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

**WEBS** 2-4=-304/188

### 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) 0-7-7 to 5-0-3, Interior(1) 5-0-3 to 5-11-0, Exterior(2) 5-11-0 to 10-3-13, Interior(1) 10-3-13 to 11-2-10 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 6) Non Standard bearing condition. Review required.



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

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

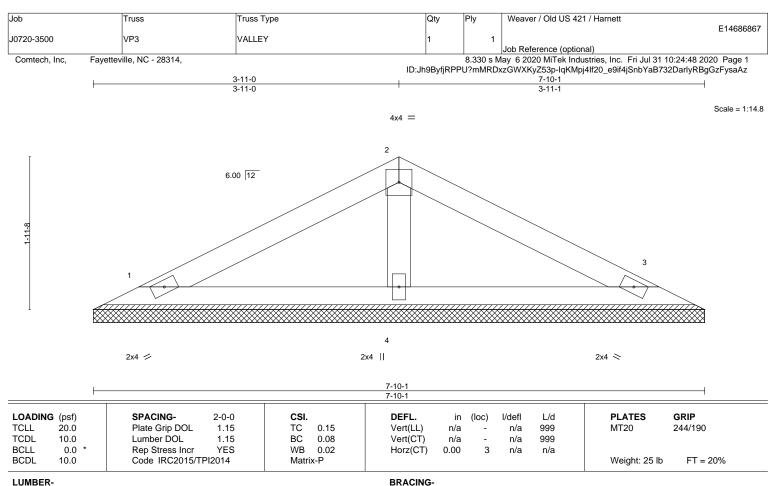
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available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

(size) 1=7-10-1, 3=7-10-1, 4=7-10-1

Max Horz 1=21(LC 9)

Max Uplift 1=-21(LC 12), 3=-25(LC 13)

Max Grav 1=134(LC 1), 3=134(LC 1), 4=260(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 grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 6) Non Standard bearing condition. Review required.



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

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

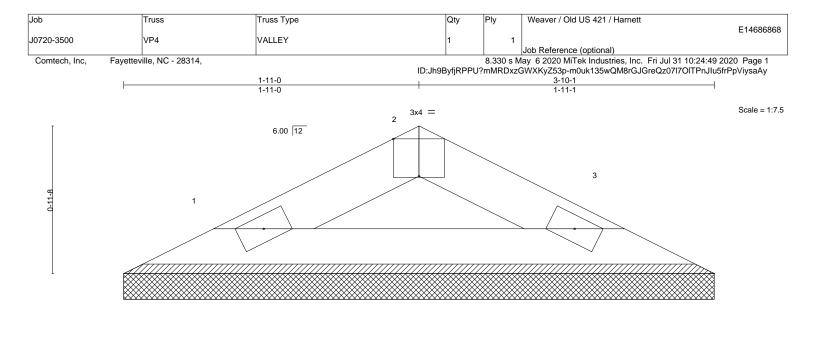
818 Soundside Road Edenton, NC 27932

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2x4 🖊 2x4 >

3-10-1 3-10-1 Plate Offsets (X Y)-- [2:0-2-0 Edge]

Tiate Gildete (X, T)	[Z.o Z o, Lugo]			
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 0.03	Vert(LL) n/a - n/a 999	MT20 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.06	Vert(CT) n/a - n/a 999	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00 3 n/a n/a	
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P		Weight: 10 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 3-10-1 oc purlins. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-10-1, 3=3-10-1

Max Horz 1=-8(LC 10)

Max Uplift 1=-6(LC 12), 3=-6(LC 13) Max Grav 1=104(LC 1), 3=104(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 grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 6) Non Standard bearing condition. Review required.



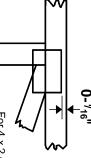


### Symbols

## PLATE LOCATION AND ORIENTATION



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



For 4 x 2 orientation, locate plates 0-  $\frac{1}{16}$ " from outside edge of truss.

?

This symbol indicates the required direction of slots in connector plates.

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

### PLATE SIZE



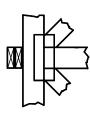
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



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

### BEARING



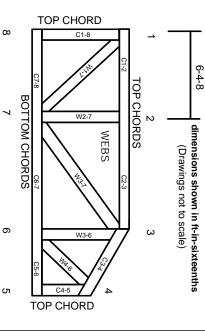
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

### Industry Standards:

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

ANSI/TPI1: DSB-89:

## **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

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

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

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MiTek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

# **General Safety Notes**

# Failure to Follow Could Cause Property Damage or Personal Injury

- Damage or Personal Injury

  1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- Cut members to bear tightly against each other
- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.

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Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.

7.

- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- 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 specified.
- 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.
- 17. Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- 21. The design does not take into account any dynamic or other loads other than those expressly stated.