

RE: J0321-1586  
 Lot 14 Forest Ridge

Trenco  
 818 Soundside Rd  
 Edenton, NC 27932

**Site Information:**

Customer: Project Name: J0321-1586  
 Lot/Block: Model:  
 Address: Subdivision:  
 City: State:

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

Design Code: IRC2015/TPI2014 Design Program: MiTek 20/20 8.3  
 Wind Code: ASCE 7-10 Wind Speed: 130 mph  
 Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 23 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	E15485331	A01	3/11/2021	21	E15485351	M2	3/11/2021
2	E15485332	A02	3/11/2021	22	E15485352	P1	3/11/2021
3	E15485333	A03	3/11/2021	23	E15485353	P2	3/11/2021
4	E15485334	A04	3/11/2021				
5	E15485335	A05	3/11/2021				
6	E15485336	A06	3/11/2021				
7	E15485337	A07	3/11/2021				
8	E15485338	A08	3/11/2021				
9	E15485339	A09	3/11/2021				
10	E15485340	A10	3/11/2021				
11	E15485341	A11	3/11/2021				
12	E15485342	A12	3/11/2021				
13	E15485343	CJ1	3/11/2021				
14	E15485344	CJ1-T	3/11/2021				
15	E15485345	J1	3/11/2021				
16	E15485346	J1-T	3/11/2021				
17	E15485347	J2	3/11/2021				
18	E15485348	J2-T	3/11/2021				
19	E15485349	J3	3/11/2021				
20	E15485350	M1	3/11/2021				

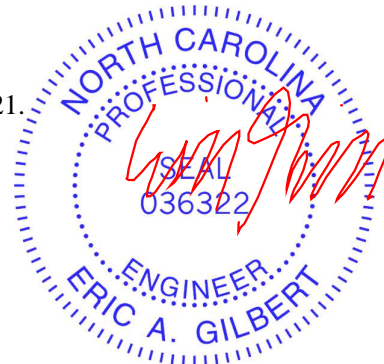
The truss drawing(s) referenced above have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville.

Truss Design Engineer's Name: Gilbert, Eric

My license renewal date for the state of North Carolina is December 31, 2021.

North Carolina COA: C-0844

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



March 11, 2021

Job	Truss	Truss Type	Qty	Ply	Lot 14 Forest Ridge	E15485331
J0321-1586	A01	COMMON	3	1		

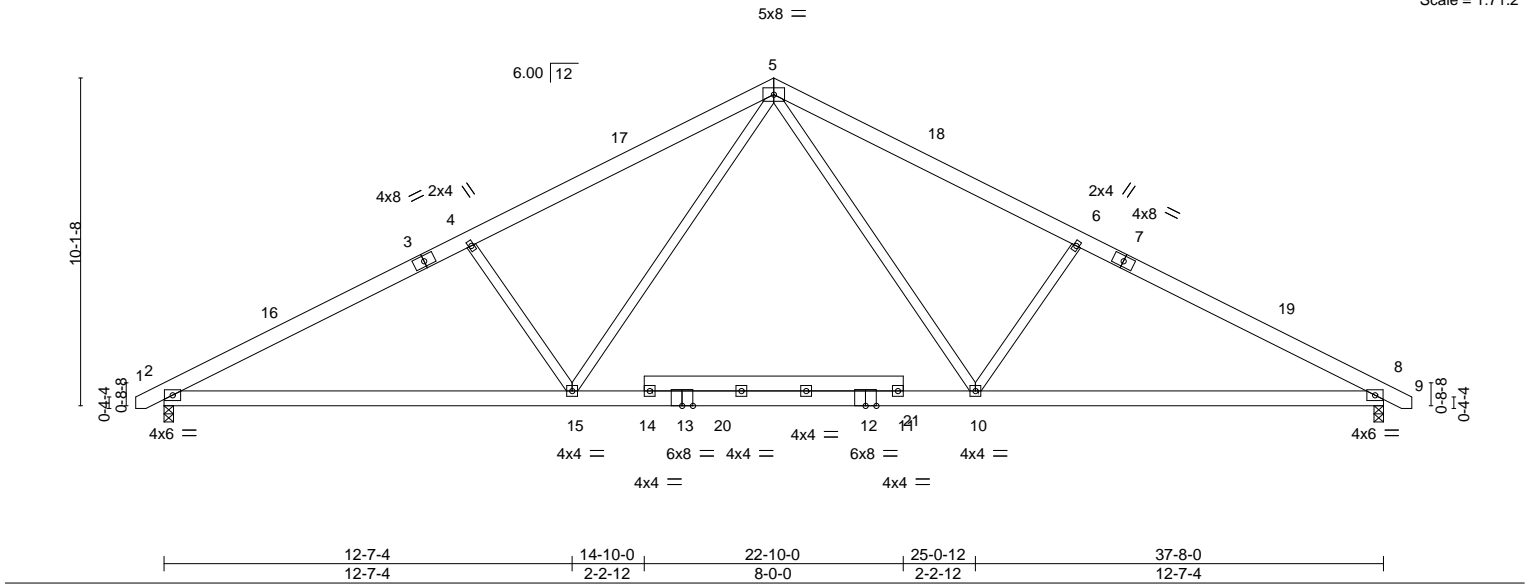
Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Mar 10 13:31:33 2021 Page 1

ID:UseLIZXJndaeTVmvuhGihGzcPnY-qzxeTTTIVe3QMBULqCwC9jgP5i8PDONM7gSNWaXzcJ9e

0-10-8 9-5-14 18-10-0 28-2-2 37-8-0 38-6-8  
 0-10-8 9-5-14 9-4-2 9-4-2 9-5-14 0-10-8

Scale = 1:71.2



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.38	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.68	Vert(LL) -0.21 10-15 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.31	Vert(CT) -0.41 10-15 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.09 8 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.07 10-15 >999 240	Weight: 260 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 11-14: 2x6 SP No.1

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-2-15 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 8=0-3-8  
 Max Horz 2=127(LC 11)  
 Max Uplift 2=-2(LC 12), 8=-2(LC 13)  
 Max Grav 2=1647(LC 1), 8=1647(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-2876/347, 4-5=-2638/359, 5-6=-2638/359, 6-8=-2876/347  
 BOT CHORD 2-15=-176/2526, 10-15=-6/1683, 8-10=-179/2477  
 WEBS 5-10=-24/1116, 6-10=-526/336, 5-15=-24/1116, 4-15=-526/336

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - 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 18-10-0, Exterior(2) 18-10-0 to 23-2-13, Interior(1) 23-2-13 to 38-4-10 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 200.0lb AC unit load placed on the bottom chord, 18-10-0 from left end, supported at two points, 5-0-0 apart.
  - 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2 lb uplift at joint 2 and 2 lb uplift at joint 8.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



March 10, 2021

Job	Truss	Truss Type	Qty	Ply	Lot 14 Forest Ridge	E15485332
J0321-1586	A02	COMMON	2	1	Job Reference (optional)	

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ID:UseLIZXJndaeTVmvuhGIhGzcPnY-nM3Pu9mlAhg4RnSDJLEdo5VMXy5isHOQ7msdfPzcJ9c

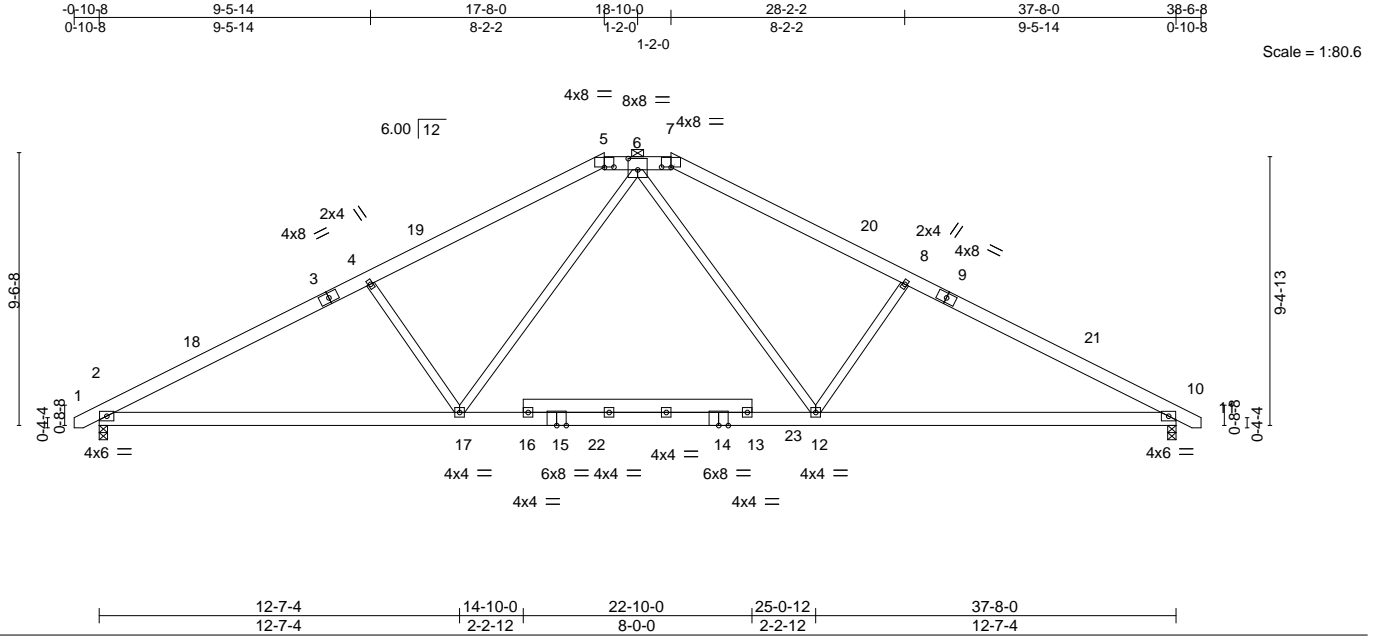


Plate Offsets (X,Y)-- [5:0-4-0,0-0-2], [6:0-4-0,0-4-12], [7:0-4-0,0-0-2]

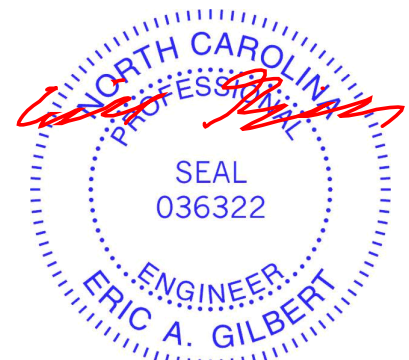
LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.68	Vert(LL) -0.22	12-17	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.68	Vert(CT) -0.42	12-17	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.27	Horz(CT) 0.09	10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.07	12-17	>999	240	Weight: 257 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-1-7 oc purlins, except
BOT CHORD 2x6 SP No.1	2-0-0 oc purlins (4-0-10 max.): 5-7.
WEBS 2x4 SP No.2 *Except* 13-16: 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8  
 Max Horz 2=119(LC 11)  
 Max Grav 2=1647(LC 1), 10=1647(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-2862/397, 4-5=-2629/398, 7-8=-2629/398, 8-10=-2862/397, 5-6=-2241/427,  
 6-7=-2241/427  
 BOT CHORD 2-17=-250/2479, 12-17=-62/1675, 10-12=-240/2460  
 WEBS 6-12=-37/1083, 8-12=-466/347, 6-17=-37/1083, 4-17=-466/347

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - 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 17-8-0, Exterior(2) 17-8-0 to 26-2-11, Interior(1) 26-2-11 to 38-4-10 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 200.0lb AC unit load placed on the bottom chord, 18-10-0 from left end, supported at two points, 5-0-0 apart.
  - Provide adequate drainage to prevent water ponding.
  - 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 10, 2021

Job	Truss	Truss Type	Qty	Ply	Lot 14 Forest Ridge	E15485333
J0321-1586	A03	HIP	2	1	Job Reference (optional)	

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ID:UseLIZXJndaeTVmvuhGhGzcPnY-nM3Pu9mlAhg4RnSDJLEdo5VRMy5hsG9Q7msdfPzcJ9c

0-10-8 8-0-14 16-0-0 21-8-0 29-7-2 37-8-0 38-6-8  
 0-10-8 8-0-14 7-11-2 5-8-0 7-11-2 8-0-14 0-10-8

Scale = 1:69.0

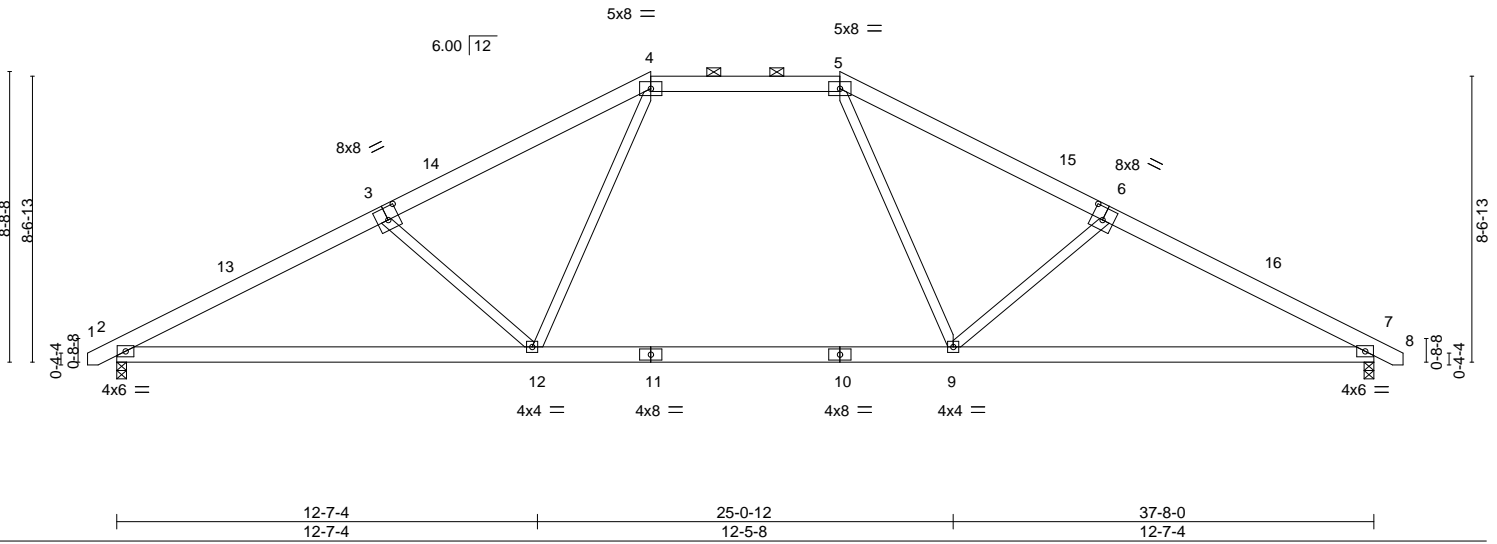


Plate Offsets (X,Y)-- [3:0-4-0,0-4-8], [6:0-4-0,0-4-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.37	Vert(LL) -0.38	9-12	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.68	Vert(CT) -0.50	9-12	>890	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.35	Horz(CT) 0.07	7	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.15	2-12	>999	240		
							Weight: 233 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-6-4 oc purlins, except 2-0-0 oc purlins (5-10-0 max.): 4-5.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 7=0-3-8  
 Max Horz 2=108(LC 10)  
 Max Uplift 2=-88(LC 12), 7=-88(LC 13)  
 Max Grav 2=1547(LC 1), 7=1547(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2707/677, 3-4=-2429/617, 4-5=-1786/588, 5-6=-2420/615, 6-7=-2703/679  
 BOT CHORD 2-12=-516/2333, 9-12=-248/1786, 7-9=-507/2329  
 WEBS 3-12=-515/334, 4-12=-64/798, 5-9=-61/794, 6-9=-519/335

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=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 16-0-0, Exterior(2) 16-0-0 to 27-10-11, Interior(1) 27-10-11 to 38-4-10 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 88 lb uplift at joint 2 and 88 lb uplift at joint 7.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 10, 2021

**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 injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



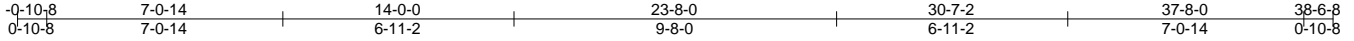
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 14 Forest Ridge	E15485334
J0321-1586	A04	HIP	2	1	Job Reference (optional)	

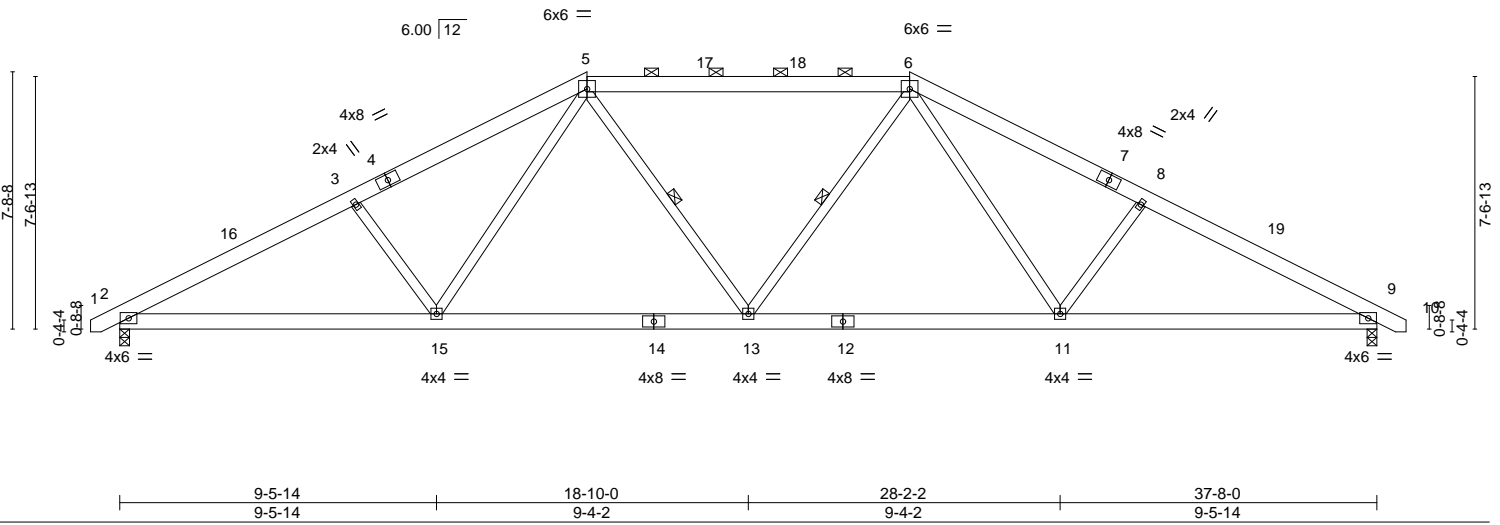
Comtech, Inc. Fayetteville, NC - 28314,

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ID:UseLIZXJndaeTVmvuhGhGzcPnY-jkA9lqo0ilxog5cbRmH5tWak6lpYKDoja4LkjlzcJ9a



Scale = 1:69.0



	9-5-14 9-5-14	18-10-0 9-4-2	28-2-2 9-4-2	37-8-0 9-5-14	
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.54	Vert(LL) -0.15 11-13 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.52	Vert(CT) -0.25 13-15 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.15	Horz(CT) 0.08 9 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.06 13 >999 240		
				Weight: 250 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-4-6 oc purlins, except 2-0-0 oc purlins (4-5-2 max.): 5-6.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 5-13, 6-13

**REACTIONS.**

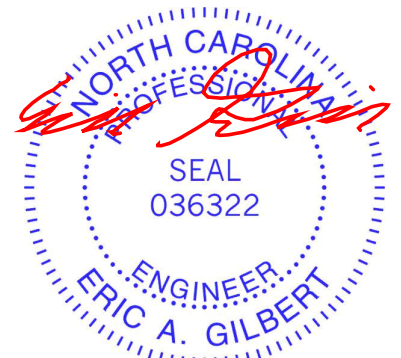
(size) 2=0-3-8, 9=0-3-8  
 Max Horz 2=-95(LC 10)  
 Max Uplift 2=-76(LC 12), 9=-76(LC 13)  
 Max Grav 2=1632(LC 2), 9=1632(LC 2)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2927/683, 3-5=-2756/689, 5-6=-2256/581, 6-8=-2756/689, 8-9=-2927/683  
 BOT CHORD 2-15=-526/2522, 13-15=-332/2085, 11-13=-324/2085, 9-11=-518/2522  
 WEBS 3-15=-302/248, 5-15=-100/636, 5-13=-18/401, 6-13=-18/401, 6-11=-100/636, 8-11=-302/248

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- 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 14-0-0, Exterior(2) 14-0-0 to 20-2-11, Interior(1) 20-2-11 to 23-8-0, Exterior(2) 23-8-0 to 29-10-11, Interior(1) 29-10-11 to 38-4-10 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 76 lb uplift at joint 2 and 76 lb uplift at joint 9.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 10, 2021

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

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



818 Soundside Road  
 Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	Lot 14 Forest Ridge	E15485335
J0321-1586	A05	HIP	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

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ID:UseLIZXJndaeTVmvuhGhGzcPnY-BxkXWApeTc3fIFAn?ToKQk7vf9783Ztspk5HGkzcJ9Z

0-10-8	2-9-4	6-0-0	12-0-0	15-4-12	25-8-0	31-7-2	37-8-0	38-6-8
0-10-8	2-9-4	3-2-12	6-0-0	3-4-12	10-3-4	5-11-2	6-0-14	0-10-8

Scale = 1:69.5

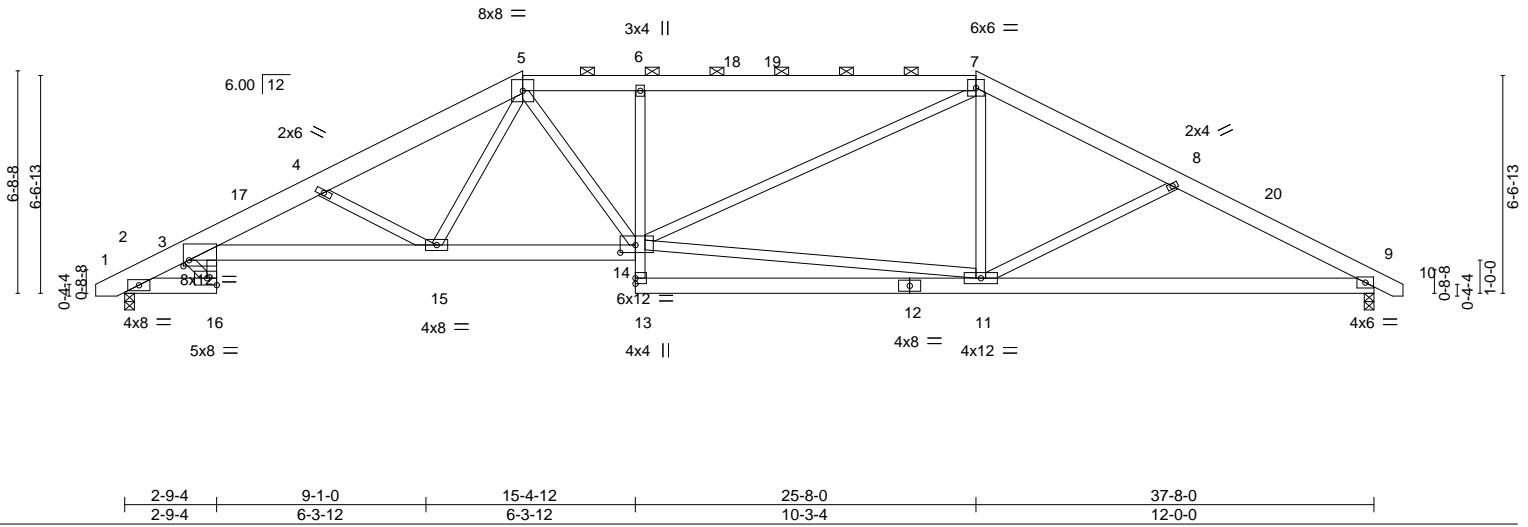


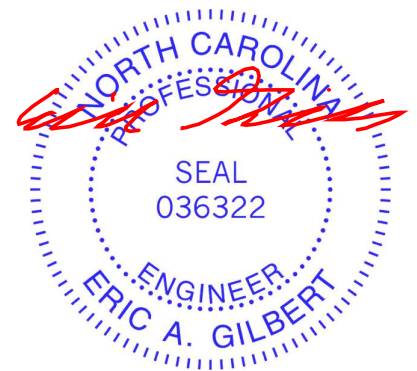
Plate Offsets (X,Y)--	[3:0-2-0,0-2-2], [14:0-5-8,0-2-12]				
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.56	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.63	Vert(LL) -0.17 14-15 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.61	Vert(CT) -0.34 14-15 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.21 9 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.13 14-15 >999 240	Weight: 282 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1 *Except* 1-5: 2x8 SP 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied or 4-7-5 oc purlins, except 2-0-0 oc purlins (3-11-0 max.): 5-7.
BOT CHORD 2x6 SP No.1 *Except* 3-16,6-13: 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 2-16 8-3-10 oc bracing: 3-15.
WEBS 2x4 SP No.2	

**REACTIONS.** (size) 2=0-3-8, 9=0-3-8  
 Max Horz 2=82(LC 11)  
 Max Uplift 2=-50(LC 12), 9=-62(LC 13)  
 Max Grav 2=1552(LC 1), 9=1548(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-777/235, 3-4=-3847/1020, 4-5=-3136/794, 5-6=-2709/795, 6-7=-2704/801,  
 7-8=-2350/622, 8-9=-2649/737  
 BOT CHORD 3-15=-897/3642, 14-15=-441/2351, 6-14=-590/301, 11-13=-28/322, 9-11=-572/2274  
 WEBS 4-15=-1053/444, 5-15=-142/804, 5-14=-206/732, 11-14=-322/1722, 7-14=-240/855,  
 7-11=0/407, 8-11=-274/254

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-6-10 to 3-10-2, Interior(1) 3-10-2 to 12-0-0, Exterior(2) 12-0-0 to 18-2-11, Interior(1) 18-2-11 to 25-8-0, Exterior(2) 25-8-0 to 31-10-3, Interior(1) 31-10-3 to 38-4-10 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 50 lb uplift at joint 2 and 62 lb uplift at joint 9.
  - 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.



Job	Truss	Truss Type	Qty	Ply	Lot 14 Forest Ridge	E15485336
J0321-1586	A06	HIP	1	1		

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Mar 10 13:31:39 2021 Page 1

ID:UseLIZXJndaeTVmvuhGhGzcPnY-f7IwjWpGEvBWvPL\_YBJZyxf4iZRho0R02OqqoAzczJ9Y

0-10-8	2-9-4	10-0-0	15-4-12	21-6-6	27-8-0	32-6-4	37-8-0	38-6-8
0-10-8	2-9-4	7-2-12	5-4-12	6-1-10	6-1-10	4-10-4	5-1-12	0-10-8

Scale = 1:70.8

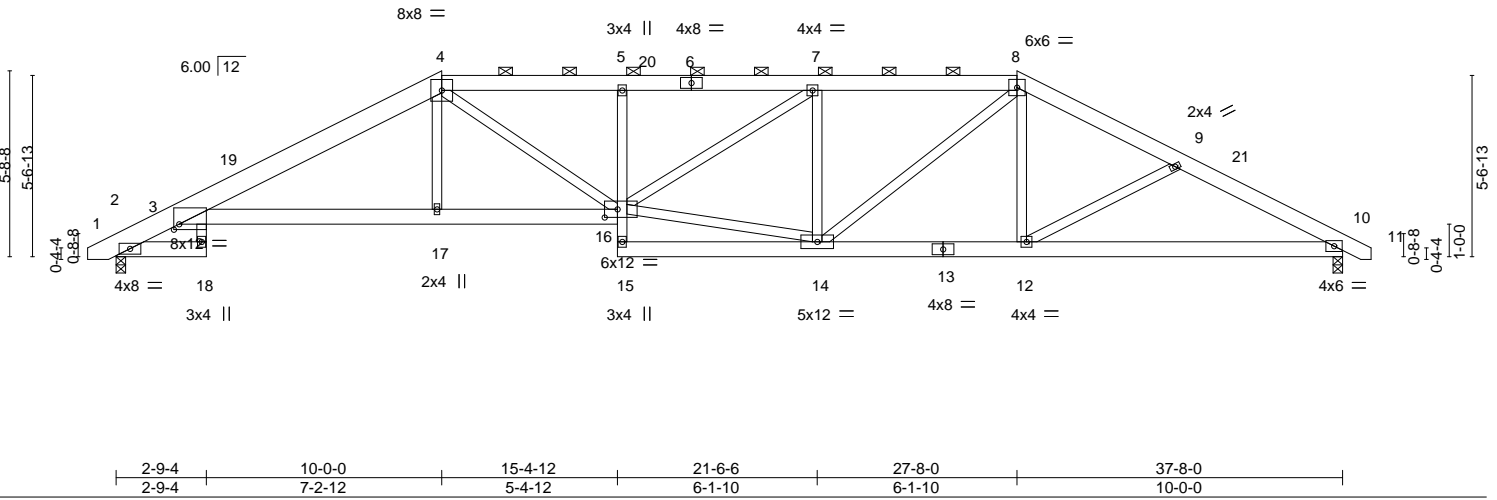


Plate Offsets (X,Y)--	[3:0-1-15,0-2-0], [16:0-4-12,0-3-0]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.54	Vert(LL) -0.21	16	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.74	Vert(CT) -0.44	3-17	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.59	Horz(CT) 0.27	10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.17	3-17	>999	240	Weight: 272 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1 *Except* 1-4: 2x8 SP 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied or 4-8-3 oc purlins, except 2-0-0 oc purlins (4-1-9 max.): 4-8.
BOT CHORD 2x6 SP No.1 *Except* 3-18,5-15: 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 2-18.
WEBS 2x4 SP No.2	

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8  
 Max Horz 2=69(LC 11)  
 Max Uplift 2=43(LC 9), 10=53(LC 8)  
 Max Grav 2=1552(LC 1), 10=1548(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-777/239, 3-4=-3097/740, 4-5=-3268/875, 5-7=-3252/872, 7-8=-2715/767,  
 8-9=-2458/651, 9-10=-2674/747  
 BOT CHORD 3-17=-541/2783, 16-17=-543/2772, 5-16=-307/174, 14-15=-66/350, 12-14=-395/2141,  
 10-12=-586/2291  
 WEBS 4-17=0/413, 4-16=-189/760, 14-16=-476/2396, 7-16=-130/684, 7-14=-820/297,  
 8-14=-220/833, 8-12=0/376

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - 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) 0-6-10 to 3-10-2, Interior(1) 3-10-2 to 10-0-0, Exterior(2) 10-0-0 to 16-2-11, Interior(1) 16-2-11 to 27-8-0, Exterior(2) 27-8-0 to 33-10-11, Interior(1) 33-10-11 to 38-4-10 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 43 lb uplift at joint 2 and 53 lb uplift at joint 10.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



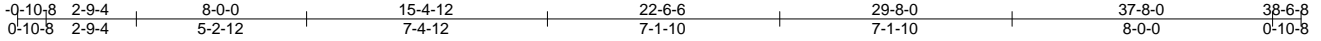
March 10, 2021

Job	Truss	Truss Type	Qty	Ply	Lot 14 Forest Ridge	E15485337
J0321-1586	A07	HIP	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Mar 10 13:31:40 2021 Page 1

ID:UseLIZXJndaeTVmvuhGhGzcPnY-7Jslxsqu?DJNXZKA6uqoV9CFczn?XR19H2aOKdzcJ9X



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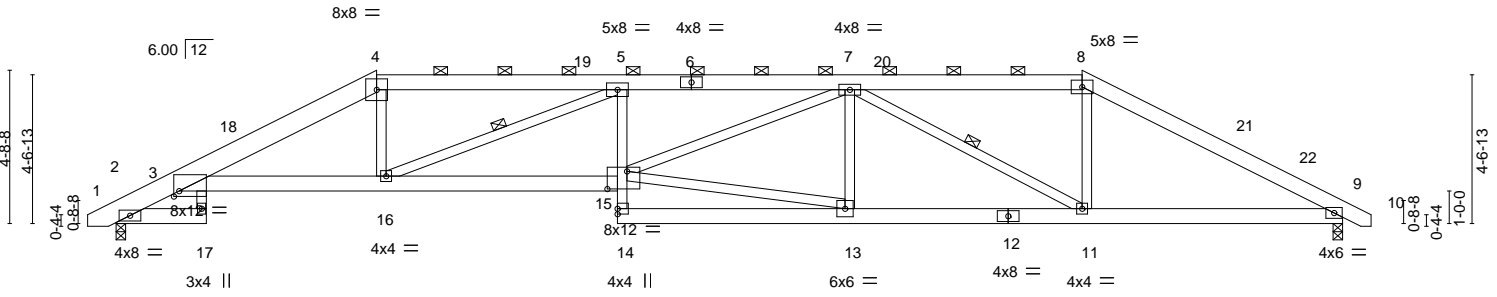


Plate Offsets (X,Y)--	[3:0-1-15,0-2-0], [15:0-7-4,0-6-8]
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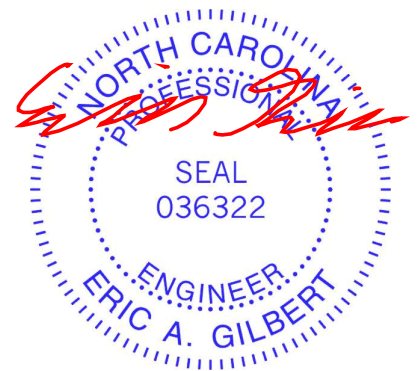
LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.53	Vert(LL) -0.30	14	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.73	Vert(CT) -0.61	15	>741	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.74	Horz(CT) 0.30	9	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.23	14	>999	240		
							Weight: 260 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1 *Except* 1-4: 2x8 SP 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied or 4-4-1 oc purlins, except 2-0-0 oc purlins (3-5-4 max.): 4-8.
BOT CHORD 2x6 SP No.1 *Except* 3-17,5-14: 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.2	WEBS 1 Row at midpt 5-16, 7-11

**REACTIONS.** (size) 2=0-3-8, 9=0-3-8  
 Max Horz 2=56(LC 11)  
 Max Uplift 2=69(LC 9), 9=79(LC 8)  
 Max Grav 2=1552(LC 1), 9=1548(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-777/243, 3-4=-3423/805, 4-5=-3171/822, 5-7=-4660/1167, 7-8=-2274/663, 8-9=-2711/657  
 BOT CHORD 3-16=-630/3134, 15-16=-977/4715, 5-15=0/356, 13-14=-78/354, 11-13=-683/3325, 9-11=-459/2300  
 WEBS 4-16=-66/794, 5-16=-1766/425, 13-15=-615/3017, 7-15=-326/1443, 7-13=-424/212, 7-11=-1307/285, 8-11=-66/819

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - 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) -0-6-10 to 3-10-2, Interior(1) 3-10-2 to 8-0-0, Exterior(2) 8-0-0 to 14-2-11, Interior(1) 14-2-11 to 29-8-0, Exterior(2) 29-8-0 to 35-10-11, Interior(1) 35-10-11 to 38-4-10 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 69 lb uplift at joint 2 and 79 lb uplift at joint 9.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 10, 2021



Job	Truss	Truss Type	Qty	Ply	Lot 14 Forest Ridge	E15485338
J0321-1586	A08	HIP GIRDER	1	2	Job Reference (optional)	

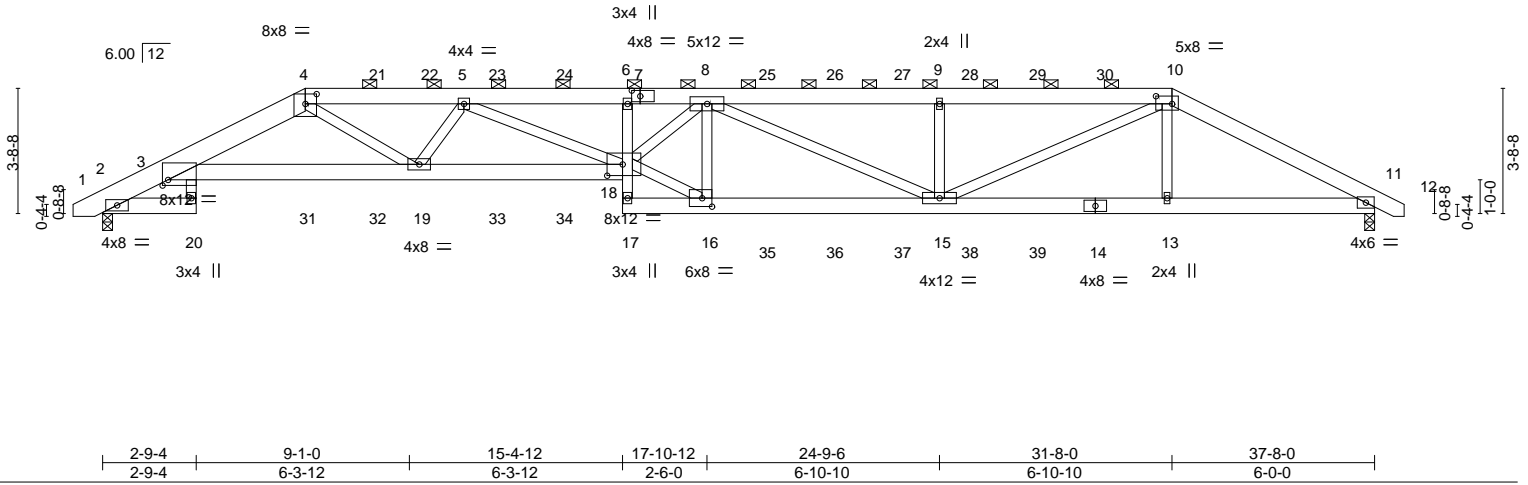
Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Mar 10 13:31:43 2021 Page 1

ID:UseLIZXJndaeTVmvuhGhGzcPnY-YuXQZusnI8hxO03In0OV7nqj4AoLkoQbz0o2xxzcJ9U

0-10-8	2-9-4	6-0-0	10-8-6	15-4-12	17-10-12	24-9-6	31-8-0	37-8-0	38-6-8
0-10-8	2-9-4	3-2-12	4-8-6	4-8-6	2-6-0	6-10-10	6-10-10	6-0-0	0-10-8

Scale = 1:68.2



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.64	Vert(LL) -0.37 18 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.82	Vert(CT) -0.74 18 >606 240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.72	Horz(CT) 0.28 11 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.34 18 >999 240	Weight: 510 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1 *Except* 1-4: 2x8 SP 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (4-5-11 max.): 4-10.
BOT CHORD 2x6 SP No.1 *Except* 3-20,6-17: 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 2-20.
WEBS 2x4 SP No.2 *Except* 16-18: 2x4 SP No.1	

**REACTIONS.** (size) 2=0-3-8, 11=0-3-8  
 Max Horz 2=44(LC 26)  
 Max Uplift 2=-390(LC 5), 11=-479(LC 4)  
 Max Grav 2=2974(LC 1), 11=2917(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1534/240, 3-4=-7406/1152, 4-5=-9803/1472, 5-6=-11983/1987, 6-8=-11832/1963,  
 8-9=-7968/1444, 9-10=-7969/1444, 10-11=-5597/1002  
 BOT CHORD 3-19=-1066/7001, 18-19=-1638/10468, 16-17=-175/858, 15-16=-1476/8808,  
 13-15=-824/4859, 11-13=-825/4832  
 WEBS 4-19=-469/3377, 5-19=-1350/424, 5-18=-374/1705, 16-18=-1414/8638, 8-18=-621/4183,  
 8-16=-3280/707, 8-15=-956/104, 9-15=-830/407, 10-15=-641/3493, 10-13=0/679

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 390 lb uplift at joint 2 and 479 lb uplift at joint 11.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 10, 2021

Job	Truss	Truss Type	Qty	Ply	Lot 14 Forest Ridge	E15485338
J0321-1586	A08	HIP GIRDER	1	2	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Mar 10 13:31:43 2021 Page 2  
 ID:UseLIZXJndaeTVmvuhGhGzcPnY-YuXQZusnI8hxO03In0OV7nqj4AoLkoQbz0o2xxzcJ9U

**NOTES-**

11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 125 lb down and 72 lb up at 6-0-0, 107 lb down and 72 lb up at 8-0-12, 107 lb down and 72 lb up at 9-7-4, 107 lb down and 72 lb up at 11-7-4, 107 lb down and 72 lb up at 13-7-4, 110 lb down and 100 lb up at 15-7-4, 110 lb down and 100 lb up at 17-7-4, 110 lb down and 100 lb up at 19-7-4, 110 lb down and 100 lb up at 21-7-4, 110 lb down and 100 lb up at 23-7-4, 110 lb down and 100 lb up at 25-7-4, 110 lb down and 100 lb up at 27-7-4, and 110 lb down and 100 lb up at 29-7-4, and 129 lb down and 100 lb up at 31-8-0 on top chord, and 403 lb down and 63 lb up at 6-0-0, 53 lb down at 8-0-12, 53 lb down at 9-7-4, 53 lb down at 11-7-4, 53 lb down at 13-7-4, 76 lb down at 15-6-8, 76 lb down at 17-7-4, 76 lb down at 19-7-4, 76 lb down at 21-7-4, 76 lb down at 23-7-4, 76 lb down at 25-7-4, 76 lb down at 27-7-4, and 76 lb down at 29-7-4, and 371 lb down and 98 lb up at 31-7-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-3=-60, 3-4=-60, 4-10=-60, 10-12=-60, 2-20=-20, 3-18=-20, 11-17=-20

Concentrated Loads (lb)

Vert: 4=-107(B) 10=-110(B) 18=-38(B) 6=-110(B) 14=-38(B) 19=-48(B) 16=-38(B) 8=-110(B) 13=-371(B) 21=-107(B) 22=-107(B) 23=-107(B) 24=-107(B) 25=-110(B) 26=-110(B) 27=-110(B) 28=-110(B) 29=-110(B) 30=-110(B) 31=-403(B) 32=-48(B) 33=-48(B) 34=-48(B) 35=-38(B) 36=-38(B) 37=-38(B) 38=-38(B) 39=-38(B)

**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 injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road  
 Edenton, NC 27932

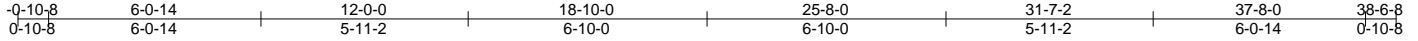
Job	Truss	Truss Type	Qty	Ply	Lot 14 Forest Ridge	E15485339
J0321-1586	A09	HIP	1	1		

Job Reference (optional)

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Mar 10 13:31:44 2021 Page 1

ID:UseLIZXJndaeTVmvuhGihGzcPnY-055pnEtP3Spo0AexLkvkf?NvkaCpTLgIBfybTOzcJ9T



Scale = 1:65.9

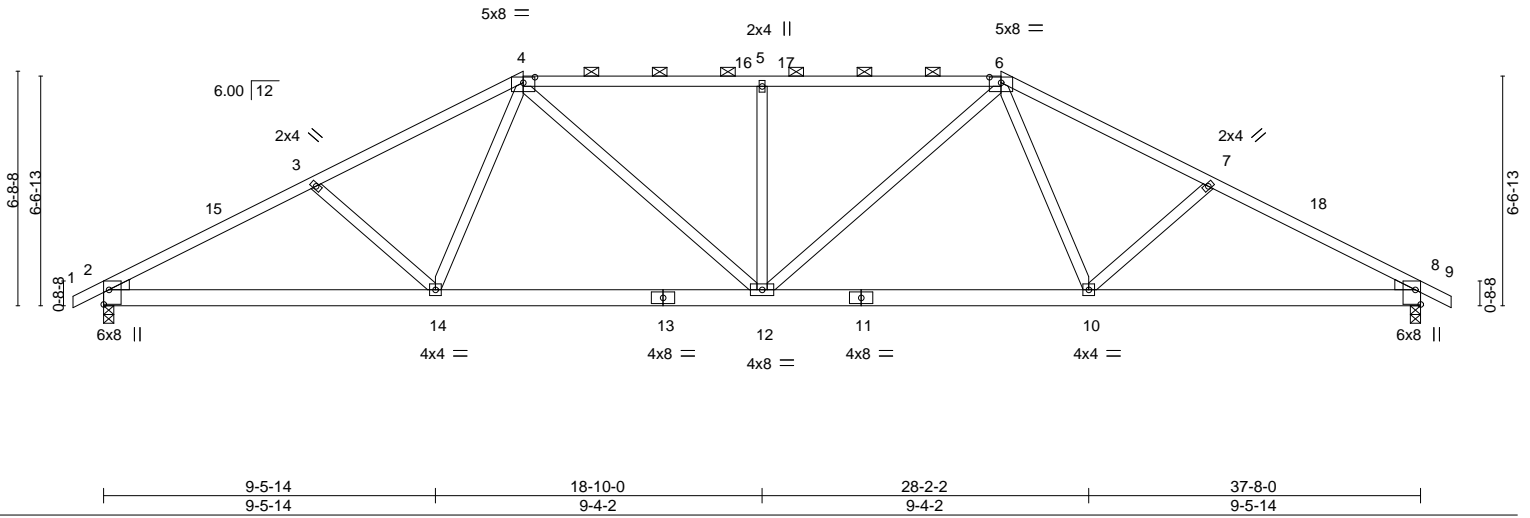


Plate Offsets (X,Y)--	[2:Edge,0-1-13], [2:0-0-15,0-6-8], [2:0-0-7,0-0-15], [4:0-4-0,0-1-15], [6:0-4-0,0-1-15], [8:0-0-7,0-0-15], [8:0-0-15,0-6-8], [8:Edge,0-1-13]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.58	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.48	Vert(LL) -0.12 12 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.33	Vert(CT) -0.25 12-14 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.07 8 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.09 12 >999 240	Weight: 221 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 3-6-15 oc purlins, except
BOT CHORD 2x6 SP No.1	2-0-0 oc purlins (3-6-8 max.): 4-6.
WEBS 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEDGE	
Left: 2x4 SP No.2 , Right: 2x4 SP No.2	

**REACTIONS.** (size) 2=0-3-8, 8=0-3-8  
 Max Horz 2=-83(LC 10)  
 Max Uplift 2=-64(LC 12), 8=-64(LC 13)  
 Max Grav 2=1556(LC 1), 8=1556(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2649/703, 3-4=-2408/657, 4-5=-2316/690, 5-6=-2316/690, 6-7=-2408/657, 7-8=-2649/703  
 BOT CHORD 2-14=-548/2239, 12-14=-363/1943, 10-12=-353/1943, 8-10=-539/2239  
 WEBS 4-14=-42/456, 4-12=-130/620, 5-12=-506/252, 6-12=-130/620, 6-10=-42/456

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 12-0-0, Exterior(2) 12-0-0 to 18-2-11, Interior(1) 18-2-11 to 25-8-0, Exterior(2) 25-8-0 to 31-8-9, Interior(1) 31-8-9 to 38-6-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 64 lb uplift at joint 2 and 64 lb uplift at joint 8.
  - 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 10, 2021

Job	Truss	Truss Type	Qty	Ply	Lot 14 Forest Ridge	E15485340
J0321-1586	A10	HIP	1	1		

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Mar 10 13:31:45 2021 Page 1

ID:UseLIZXJndaeTVmvuhGihGzcPnY-UHfB\_Zu1qlxfDKD8vRQzCCv86\_ZeCntuQJH9?zqcj9S

0-10-8	5-0-14	10-0-0	18-10-0	27-8-0	32-7-2	37-8-0	38-6-8
0-10-8	5-0-14	4-11-2	8-10-0	8-10-0	4-11-2	5-0-14	0-10-8

Scale = 1:69.2

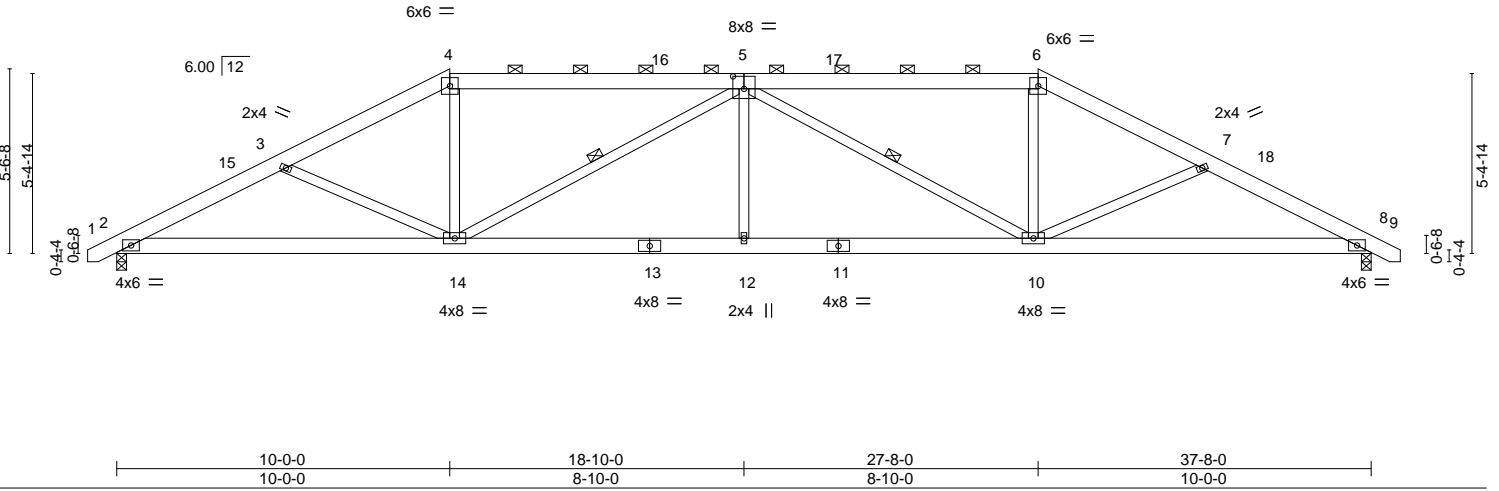


Plate Offsets (X,Y)-- [4:0-0-0,0-0-0], [5:0-4-0,0-4-8], [6:0-0-0,0-0-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.35	Vert(LL) -0.13	12	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.45	Vert(CT) -0.26	12-14	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.40	Horz(CT) 0.09	8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.10	12	>999	240		
							Weight: 251 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-6-15 oc purlins, except 2-0-0 oc purlins (4-10-10 max.); 4-6.  
 BOT CHORD Rigid ceiling directly applied or 9-10-2 oc bracing.  
 WEBS 1 Row at midpt 5-14, 5-10

**REACTIONS.**

(size) 2=0-3-8, 8=0-3-8  
 Max Horz 2=-69(LC 10)  
 Max Uplift 2=-54(LC 9), 8=-54(LC 8)  
 Max Grav 2=1547(LC 1), 8=1547(LC 1)

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

TOP CHORD 2-3=-2792/784, 3-4=-2536/661, 4-5=-2246/650, 5-6=-2246/648, 6-7=-2536/660, 7-8=-2792/781  
 BOT CHORD 2-14=-630/2428, 12-14=-587/2922, 10-12=-587/2922, 8-10=-625/2428  
 WEBS 4-14=-77701, 5-14=-886/239, 5-12=0/306, 5-10=-886/239, 6-10=-77701

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- 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 10-0-0, Exterior(2) 10-0-0 to 16-2-11, Interior(1) 16-2-11 to 27-8-0, Exterior(2) 27-8-0 to 33-10-11, Interior(1) 33-10-11 to 38-4-10 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 54 lb uplift at joint 2 and 54 lb uplift at joint 8.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 10, 2021

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

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



818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 14 Forest Ridge	E15485341
J0321-1586	A11	HIP	1	1		

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Mar 10 13:31:47 2021 Page 1

ID:UseLIZXJndaeTvmvuhGhGzcPnY-QfnxPFwHLMBNtdMW0sSRhd?U6nEGgZYBudmG4jzcJ9Q

0-10-8	8-0-0	15-2-11	22-5-5	29-8-0	37-8-0	38-6-8
0-10-8	8-0-0	7-2-11	7-2-11	7-2-11	8-0-0	0-10-8

Scale = 1:69.2

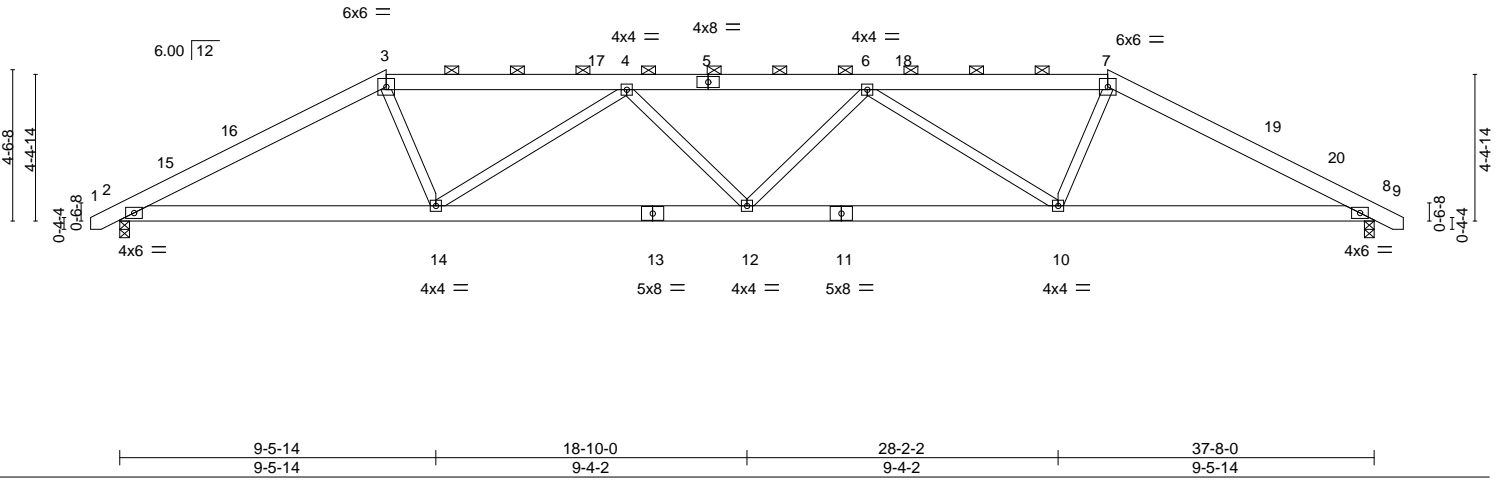


Plate Offsets (X,Y)-- [3:0-0-0,0-0-0], [7:0-0-0,0-0-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.38	Vert(LL) -0.16	12	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.50	Vert(CT) -0.32	10-12	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.90	Horz(CT) 0.10	8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.12	12	>999	240		
							Weight: 232 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-3-4 oc purlins, except 2-0-0 oc purlins (4-0-10 max.): 3-7.  
 BOT CHORD Rigid ceiling directly applied or 9-1-12 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 8=0-3-8  
 Max Horz 2=-56(LC 10)  
 Max Uplift 2=-80(LC 9), 8=-80(LC 8)  
 Max Grav 2=1547(LC 1), 8=1547(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2752/681, 3-4=-2649/706, 4-6=-3512/874, 6-7=-2649/706, 7-8=-2752/681  
 BOT CHORD 2-14=490/2361, 12-14=-732/3436, 10-12=-737/3436, 8-10=-485/2361  
 WEBS 3-14=-73/854, 4-14=-1042/309, 6-10=-1042/309, 7-10=-73/854

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - 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 14-2-11 to 29-8-0, Interior(2) 29-8-0 to 35-10-11, Interior(1) 35-10-11 to 38-4-10 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 80 lb uplift at joint 2 and 80 lb uplift at joint 8.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 10, 2021

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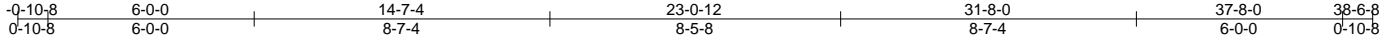


Job	Truss	Truss Type	Qty	Ply	Lot 14 Forest Ridge	E15485342
J0321-1586	A12	HIP GIRDER	1	2	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Mar 10 13:31:49 2021 Page 1

ID:UseLIZXJndaeTVmvuhGhGzcPnY-M2viqxxXt\_R56xWv8HUvM24mobub8ZYULxFM9bcJ9O



Scale = 1:67.0

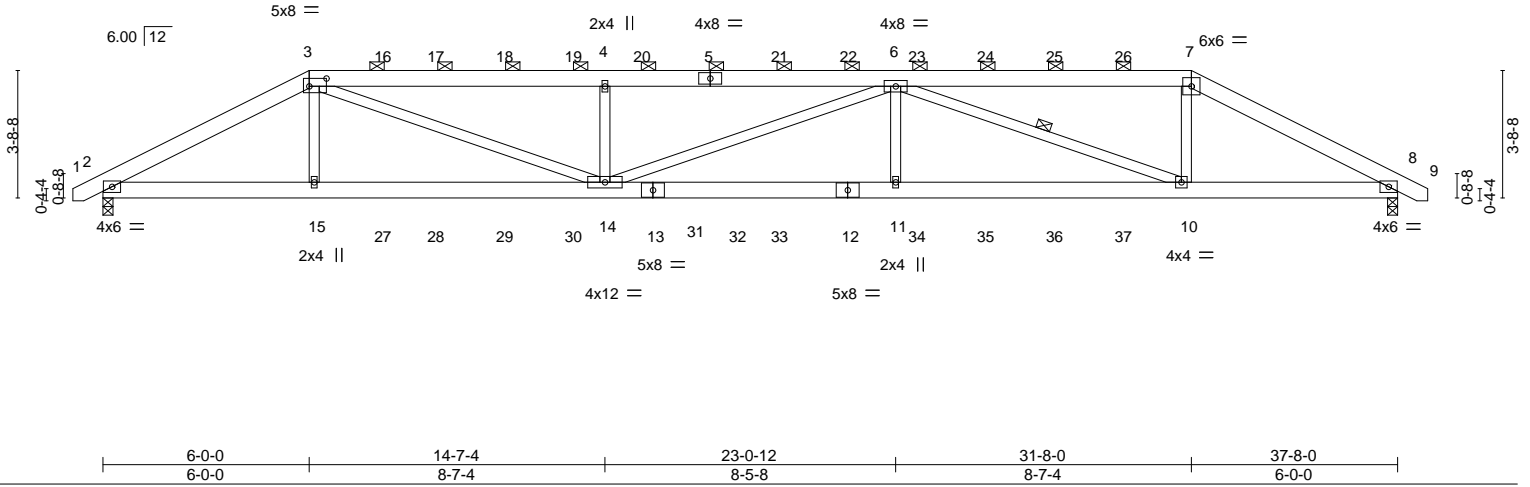


Plate Offsets (X,Y)--	[3:0-6-0,0-2-12]
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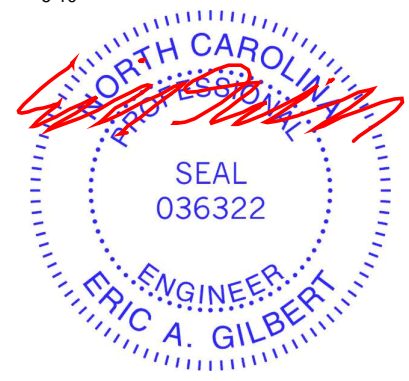
LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.63	Vert(LL) -0.25	11-14	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.64	Vert(CT) -0.51	11-14	>875	240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.55	Horz(CT) 0.11	8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.25	11-14	>999	240		
							Weight: 479 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except
BOT CHORD 2x6 SP No.1	2-0-0 oc purlins (4-11-7 max.): 3-7.
WEBS 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
	WEBS 1 Row at midpt 6-10

**REACTIONS.** (size) 2=0-3-8, 8=0-3-8  
 Max Horz 2=-44(LC 25)  
 Max Uplift 2=-521(LC 5), 8=-516(LC 4)  
 Max Grav 2=2923(LC 1), 8=2905(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-5664/1090, 3-4=-8456/1696, 4-6=-8455/1696, 6-7=-4949/984, 7-8=-5620/1077  
 BOT CHORD 2-15=-948/4900, 14-15=-945/4928, 11-14=-1638/8433, 10-11=-1638/8433,  
 8-10=-895/4860  
 WEBS 3-15=0/784, 3-14=-809/3829, 4-14=-1020/489, 6-11=0/662, 6-10=-3793/805,  
 7-10=-231/1968

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 521 lb uplift at joint 2 and 516 lb uplift at joint 8.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 10, 2021

Job	Truss	Truss Type	Qty	Ply	Lot 14 Forest Ridge	E15485342
J0321-1586	A12	HIP GIRDER	1	2	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Mar 10 13:31:50 2021 Page 2  
 ID:UseLIZXJndaeTvmvuhGhGzcPnY-qET41HyAeHZyk555i?08vGcxY?Eq?odab?wh1zcJ9N

**NOTES-**

11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 129 lb down and 100 lb up at 6-0-0, 110 lb down and 100 lb up at 8-0-12, 110 lb down and 100 lb up at 9-7-4, 110 lb down and 100 lb up at 11-7-4, 110 lb down and 100 lb up at 13-7-4, 110 lb down and 100 lb up at 15-7-4, 110 lb down and 100 lb up at 17-7-4, 110 lb down and 100 lb up at 19-7-4, 110 lb down and 100 lb up at 21-7-4, 110 lb down and 100 lb up at 23-7-4, 110 lb down and 100 lb up at 25-7-4, 110 lb down and 100 lb up at 27-7-4, and 110 lb down and 100 lb up at 29-7-4, and 129 lb down and 100 lb up at 31-8-0 on top chord, and 371 lb down and 98 lb up at 6-0-0, 76 lb down at 8-0-12, 76 lb down at 9-7-4, 76 lb down at 11-7-4, 76 lb down at 13-7-4, 76 lb down at 15-7-4, 76 lb down at 17-7-4, 76 lb down at 19-7-4, 76 lb down at 21-7-4, 76 lb down at 23-7-4, 76 lb down at 25-7-4, 76 lb down at 27-7-4, and 76 lb down at 29-7-4, and 371 lb down and 98 lb up at 31-7-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

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

Concentrated Loads (lb)

Vert: 3=-110(F) 5=-110(F) 7=-110(F) 15=-371(F) 10=-371(F) 12=-38(F) 16=-110(F) 17=-110(F) 18=-110(F) 19=-110(F) 20=-110(F) 21=-110(F) 22=-110(F) 23=-110(F) 24=-110(F) 25=-110(F) 26=-110(F) 27=-38(F) 28=-38(F) 29=-38(F) 30=-38(F) 31=-38(F) 32=-38(F) 33=-38(F) 34=-38(F) 35=-38(F) 36=-38(F) 37=-38(F)

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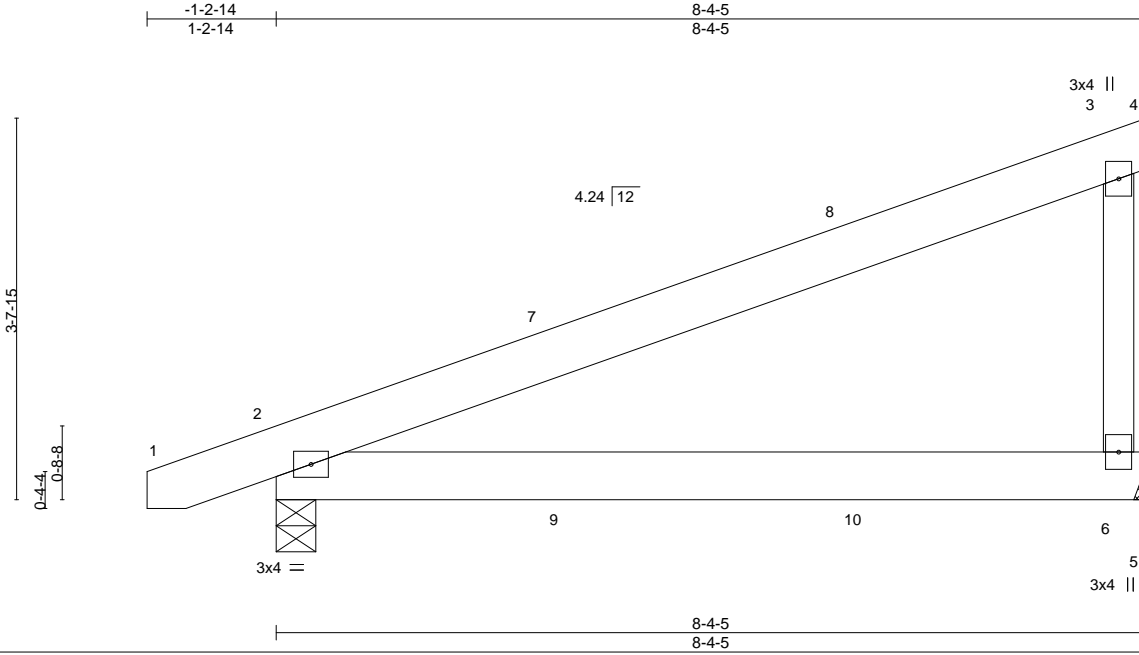


818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 14 Forest Ridge	E15485343
J0321-1586	CJ1	DIAGONAL HIP GIRDER	3	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Mar 10 13:31:50 2021 Page 1  
 ID:UseLIZXJndaeTVmvuhGIhGzcPnY-qET41HyAeHZyk555i?08vGzc?It7Kdab?wh1zcJ9N



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.49	Vert(LL) -0.06	2-6	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.32	Vert(CT) -0.12	2-6	>789	240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.00	Horz(CT) 0.00		n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P	Wind(LL) 0.00	2	****	240	Weight: 48 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	

**REACTIONS.** (size) 6=Mechanical, 2=0-4-9  
 Max Horz 2=110(LC 4)  
 Max Uplift 6=-85(LC 8), 2=-76(LC 4)  
 Max Grav 6=361(LC 1), 2=414(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 3-6=-264/143

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
  - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 85 lb uplift at joint 6 and 76 lb uplift at joint 2.
  - 6) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
  - 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 18 lb down and 28 lb up at 2-9-8, 18 lb down and 28 lb up at 2-9-8, and 44 lb down and 68 lb up at 5-7-7, and 44 lb down and 68 lb up at 5-7-7 on top chord, and 2 lb down at 2-9-8, 2 lb down at 2-9-8, and 20 lb down at 5-7-7, and 20 lb down at 5-7-7 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)  
 Vert: 1-3=-60, 3-4=-20, 2-5=-20

Concentrated Loads (lb)  
 Vert: 8=-40(F=-20, B=-20) 10=-17(F=-9, B=-9)



March 10, 2021

Job	Truss	Truss Type	Qty	Ply	Lot 14 Forest Ridge	E15485344
J0321-1586	CJ1-T	DIAGONAL HIP GIRDER	1	1		

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8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Mar 10 13:31:51 2021 Page 1

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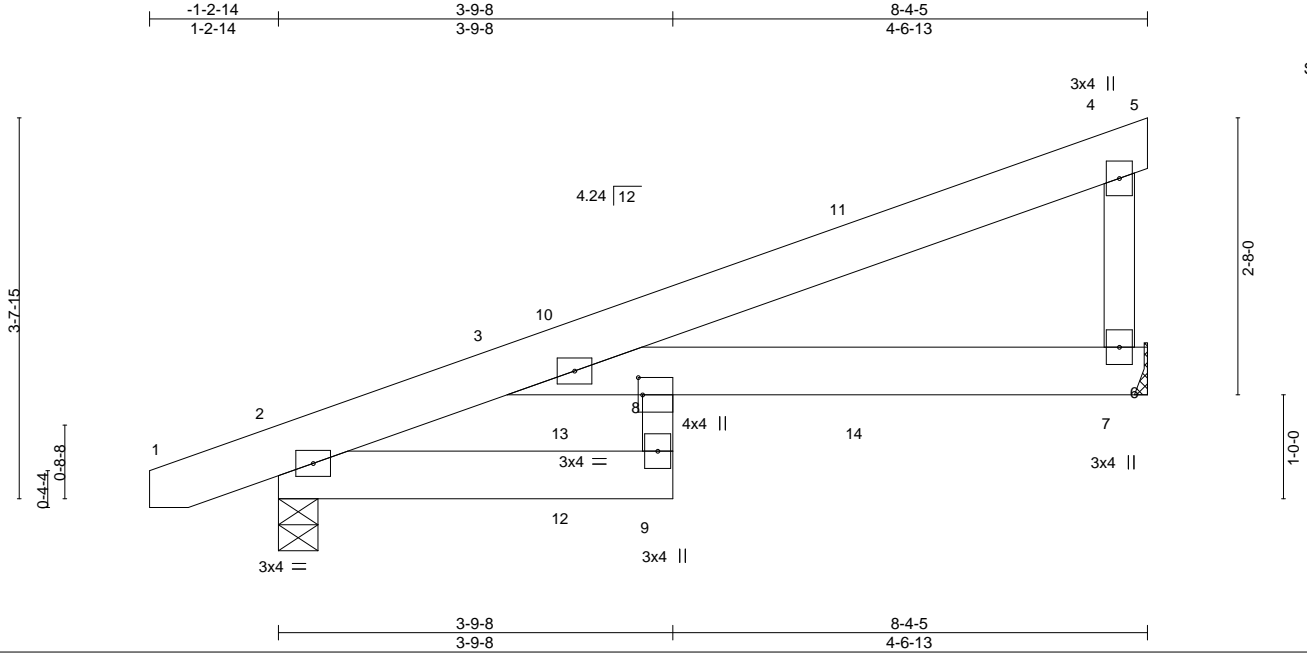


Plate Offsets (X,Y)-- [8:0-2-0,0-0-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.30	Vert(LL) -0.04	8	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.43	Vert(CT) -0.10	7-8	>990	240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.00	Horz(CT) 0.03	7	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-R	Wind(LL) 0.04	8	>999	240		
							Weight: 51 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1 \*Except\*  
 8-9: 2x4 SP No.2  
 WEBS 2x4 SP No.2

**BRACING-**

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

**REACTIONS.**

(size) 7=Mechanical, 2=0-4-9  
 Max Horz 2=110(LC 4)  
 Max Uplift 7=-45(LC 8), 2=-58(LC 4)  
 Max Grav 7=383(LC 1), 2=424(LC 1)

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

TOP CHORD 2-3=-370/4

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 45 lb uplift at joint 7 and 58 lb uplift at joint 2.
- 6) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 18 lb down and 28 lb up at 2-9-8, 18 lb down and 28 lb up at 2-9-8, and 44 lb down and 45 lb up at 5-7-7, and 44 lb down and 45 lb up at 5-7-7 on top chord, and 2 lb down at 2-9-8, 2 lb down at 2-9-8, and 34 lb down at 5-7-7, and 34 lb down at 5-7-7 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-4=-60, 4-5=-20, 2-9=-20, 6-8=-20  
 Concentrated Loads (lb)  
 Vert: 11=-22(F=-11, B=-11) 14=-68(F=-34, B=-34)



March 10, 2021

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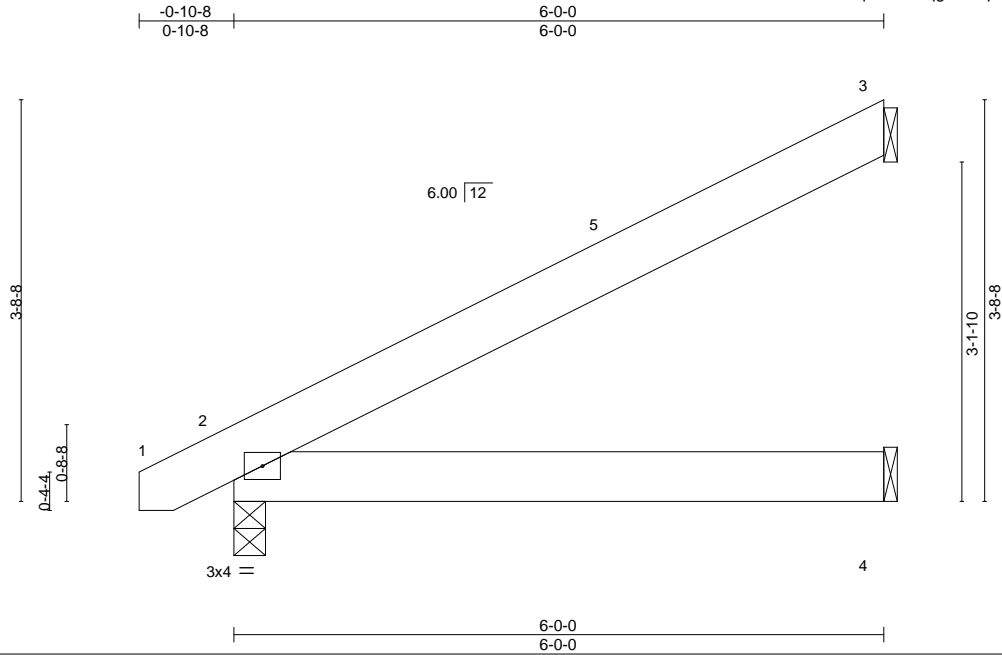
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 14 Forest Ridge	E15485345
J0321-1586	J1	JACK-OPEN	23	1		

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8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Mar 10 13:31:52 2021 Page 1

ID:UseLIZXJndaeTvmvuhGhGzcPnY-ndaqSzzQAvqgzPFUpP2c\_hiNio0BL1qw1vU1lwzcJ9L



LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.20	Vert(LL) -0.02	2-4	>999	360		MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.13	Vert(CT) -0.03	2-4	>999	240			
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	Wind(LL) 0.00	2	****	240			
								Weight: 32 lb	FT = 20%

**LUMBER-**

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

**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.**

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
Max Horz 2=108(LC 12)  
Max Uplift 3=-87(LC 12), 2=-9(LC 12)  
Max Grav 3=170(LC 1), 2=287(LC 1), 4=116(LC 3)

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

**NOTES-**

- 1) 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 5-11-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 87 lb uplift at joint 3 and 9 lb uplift at joint 2.
- 6) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



March 10, 2021

**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 injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



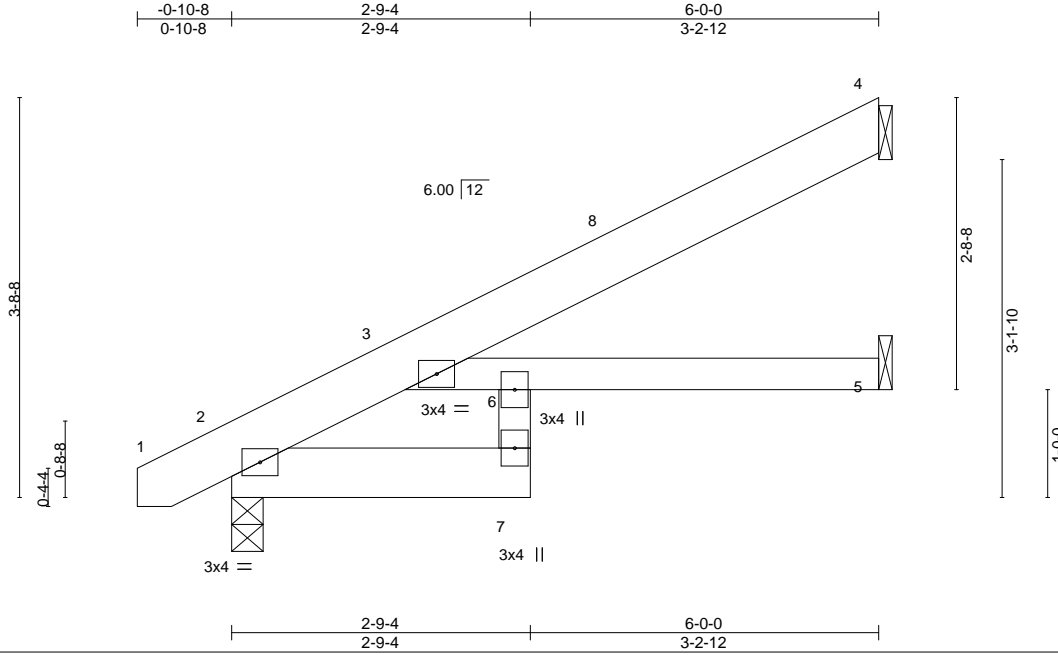
818 Soundside Road  
Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	Lot 14 Forest Ridge	E15485346
J0321-1586	J1-T	JACK-OPEN	5	1		

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Mar 10 13:31:53 2021 Page 1  
 ID:UseLIZXJndaeTVmvuhGIhGzcPnY-Fp8Cfl\_2xCyXbYqgN7ZrXuEZJCL74U44GZDaImzcJ9K



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.18	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.21	Vert(LL) -0.02 5-6 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.06 5-6 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-R	Horz(CT) 0.02 5 n/a n/a	Weight: 32 lb	FT = 20%
	Code IRC2015/TPI2014		Wind(LL) 0.04 5-6 >999 240		

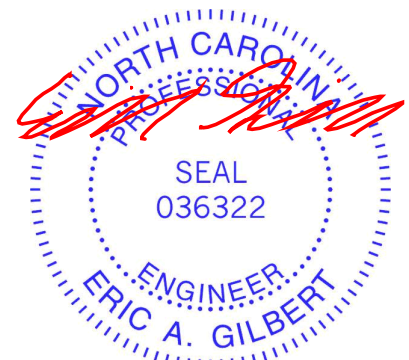
**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1 \*Except\*  
 6-7: 2x4 SP No.2, 3-5: 2x4 SP No.1

**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.** (size) 4=Mechanical, 2=0-3-8, 5=Mechanical  
 Max Horz 2=108(LC 12)  
 Max Uplift 4=59(LC 12), 2=-1(LC 12)  
 Max Grav 4=167(LC 1), 2=301(LC 1), 5=93(LC 3)

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

- NOTES-**
- 1) 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 5-11-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 59 lb uplift at joint 4 and 1 lb uplift at joint 2.
  - 6) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

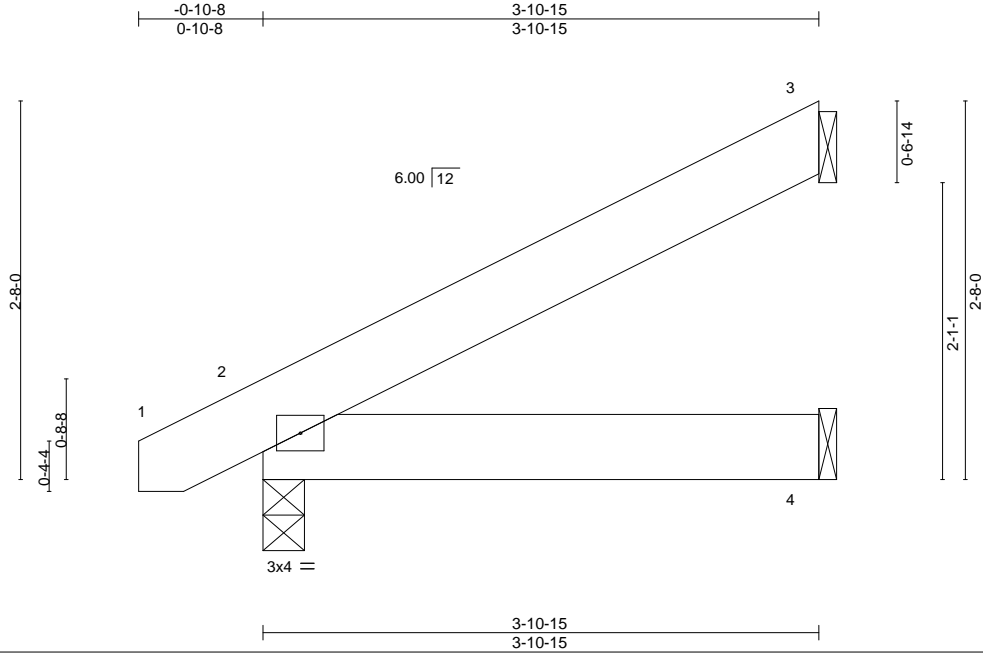


March 10, 2021

Job	Truss	Truss Type	Qty	Ply	Lot 14 Forest Ridge	E15485347
J0321-1586	J2	JACK-OPEN	6	1		

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Mar 10 13:31:53 2021 Page 1  
 ID:UseLIZXJndaeTVmvuhGhGzcPnY-Fp8Cfl\_2xCyXbYqgN7ZrXuEaRCoi4U44GZDaIMzcJ9K



Scale = 1:16.2

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.07	Vert(LL) -0.00	2-4	>999	360		MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.05	Vert(CT) -0.01	2-4	>999	240			
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	Wind(LL) 0.00	2	****	240			

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 3-10-15 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
 Max Horz 2=73(LC 12)  
 Max Uplift 3=57(LC 12), 2=-9(LC 12)  
 Max Grav 3=105(LC 1), 2=206(LC 1), 4=74(LC 3)

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

- NOTES-**
- 1) 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
  - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 57 lb uplift at joint 3 and 9 lb uplift at joint 2.
  - 6) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

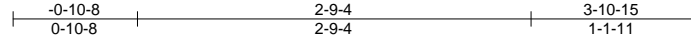


March 10, 2021

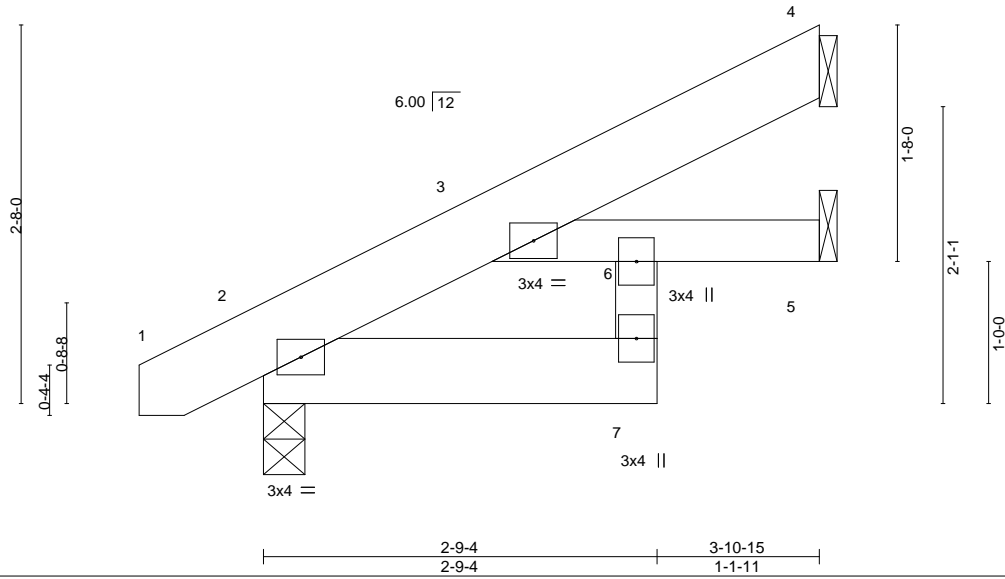
Job	Truss	Truss Type	Qty	Ply	Lot 14 Forest Ridge	E15485348
J0321-1586	J2-T	JACK-OPEN	2	1		

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Mar 10 13:31:54 2021 Page 1  
 ID:UseLIZXJndaeTVmvuhGhGzcPnY-j0iate?giW4ODIPsxq4436nmZcJpxKDz7qz7cJ9J



Scale = 1:16.2



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.05	Vert(LL) -0.00	7	>999	360		MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.11	Vert(CT) -0.01	7	>999	240			
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00	5	n/a	n/a			
BCDL 10.0	Code IRC2015/TPI2014	Matrix-R	Wind(LL) 0.00	7	>999	240		Weight: 24 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1 \*Except\*  
 6-7: 2x4 SP No.2, 3-5: 2x4 SP No.1

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 3-10-15 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 4=Mechanical, 2=0-3-8, 5=Mechanical  
 Max Horz 2=73(LC 12)  
 Max Uplift 4=-32(LC 12), 2=-3(LC 12)  
 Max Grav 4=91(LC 1), 2=215(LC 1), 5=78(LC 3)

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

**NOTES-**

- 1) 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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 32 lb uplift at joint 4 and 3 lb uplift at joint 2.
- 6) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



March 10, 2021

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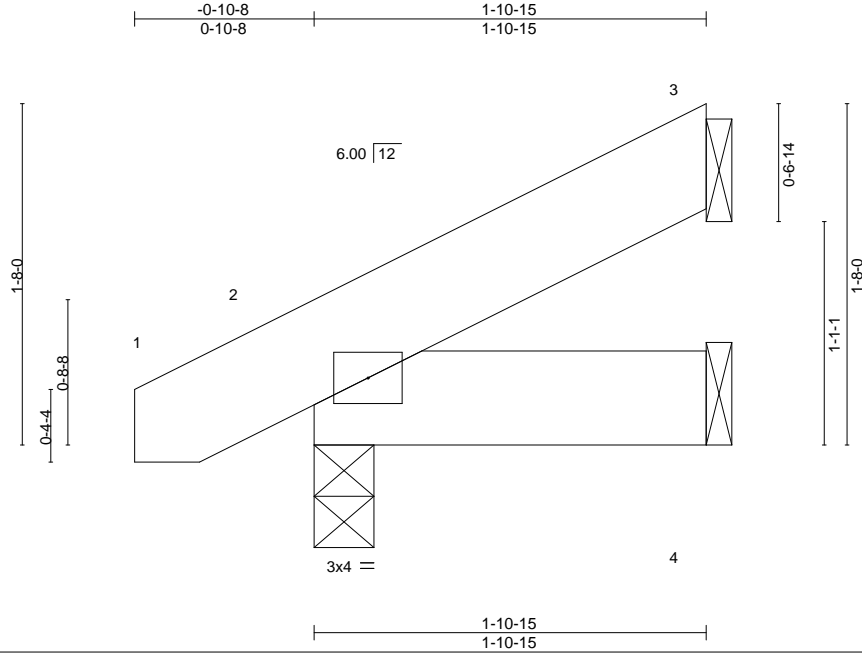
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 14 Forest Ridge	E15485349
J0321-1586	J3	JACK-OPEN	8	1		

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8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Mar 10 13:31:54 2021 Page 1

ID:UseLIZXJndaeTVmvuhGIhGzcPnY-j0iate?giW4ODiPsxq4436nm4ckXpxKDVdZ7qpczJ9J



Scale = 1:11.2

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.02	Vert(LL)	-0.00	2	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.01	Vert(CT)	-0.00	2	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P	Wind(LL)	0.00	2	****	Weight: 12 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 1-10-15 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

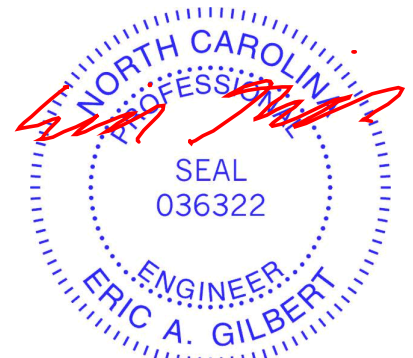
**REACTIONS.**

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
Max Horz 2=42(LC 12)  
Max Uplift 3=-29(LC 12), 2=-9(LC 12)  
Max Grav 3=47(LC 1), 2=128(LC 1), 4=37(LC 3)

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

**NOTES-**

- 1) 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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 3 and 9 lb uplift at joint 2.
- 6) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



March 10, 2021

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

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

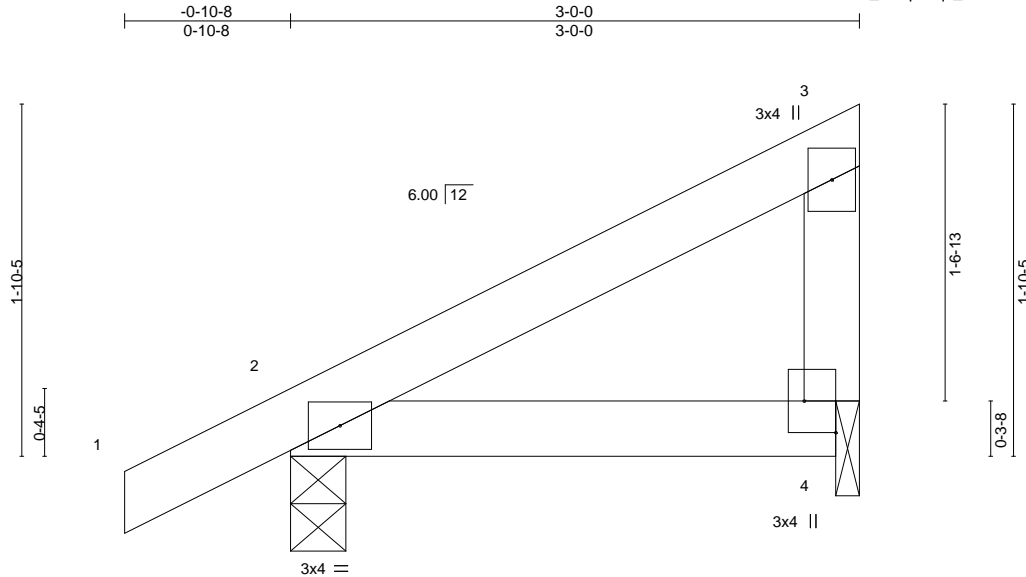


818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 14 Forest Ridge	E15485350
J0321-1586	M1	MONOPITCH	2	1		

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8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Mar 10 13:31:55 2021 Page 1  
 ID:UseLIZXJndaeTVmvuhGIhGzcPnY-BCGz4\_0ITqCEqs\_3UYbJcJKwK04?YOZMjtihMFzcJ9I



Scale = 1:12.2

Plate Offsets (X,Y)-- [4:Edge,0-2-0]

LOADING (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	2-4	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	-0.01	2-4	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00		n/a	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-P	Wind(LL)	0.00	2	****	240	Weight: 13 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 3-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 2=0-3-8, 4=0-1-8  
 Max Horz 2=85(LC 12)  
 Max Uplift 2=-47(LC 12), 4=-43(LC 12)  
 Max Grav 2=181(LC 1), 4=97(LC 1)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 47 lb uplift at joint 2 and 43 lb uplift at joint 4.



March 10, 2021

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

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



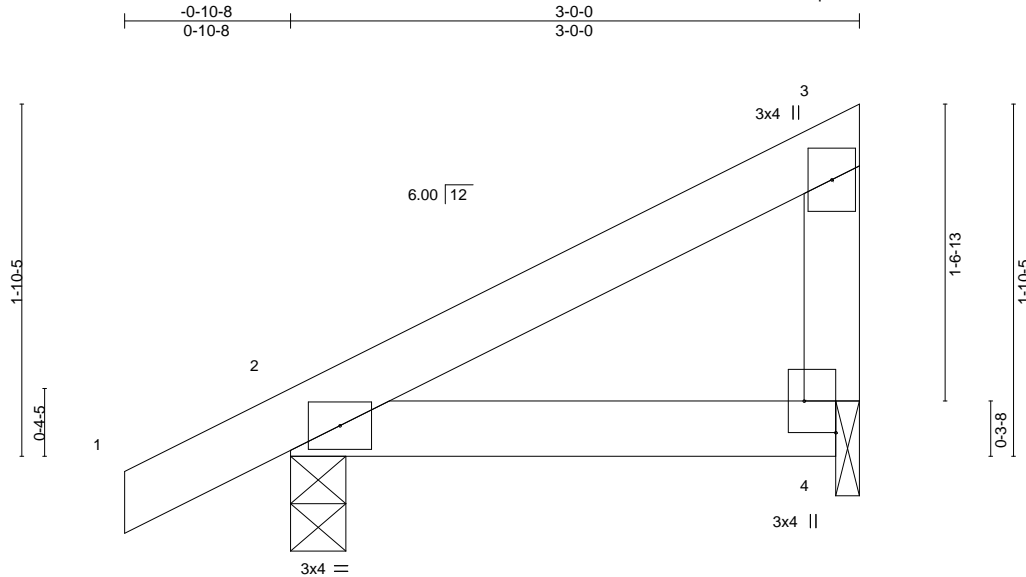
818 Soundside Road  
 Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	Lot 14 Forest Ridge	E15485351
J0321-1586	M2	Monopitch	4	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Mar 10 13:31:56 2021 Page 1  
 ID:UseLIZXJndaeTVmvuhGhGzcPnY-fOqLIK1wE7K5S0ZF2F7Y8Xs5hPQEhrpWyXSEuhzcJ9H



Scale = 1:12.2

Plate Offsets (X,Y)-- [4:Edge,0-2-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	-0.00	2-4	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	-0.01	2-4	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00		n/a	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-P	Wind(LL)	0.00	2	****	240	Weight: 13 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 3-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 2=0-3-8, 4=0-1-8  
 Max Horz 2=58(LC 12)  
 Max Uplift 2=-16(LC 12), 4=-21(LC 12)  
 Max Grav 2=181(LC 1), 4=97(LC 1)

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

**NOTES-**

- 1) 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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 16 lb uplift at joint 2 and 21 lb uplift at joint 4.



March 10, 2021

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

**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

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



818 Soundside Road  
 Edenton, NC 27932

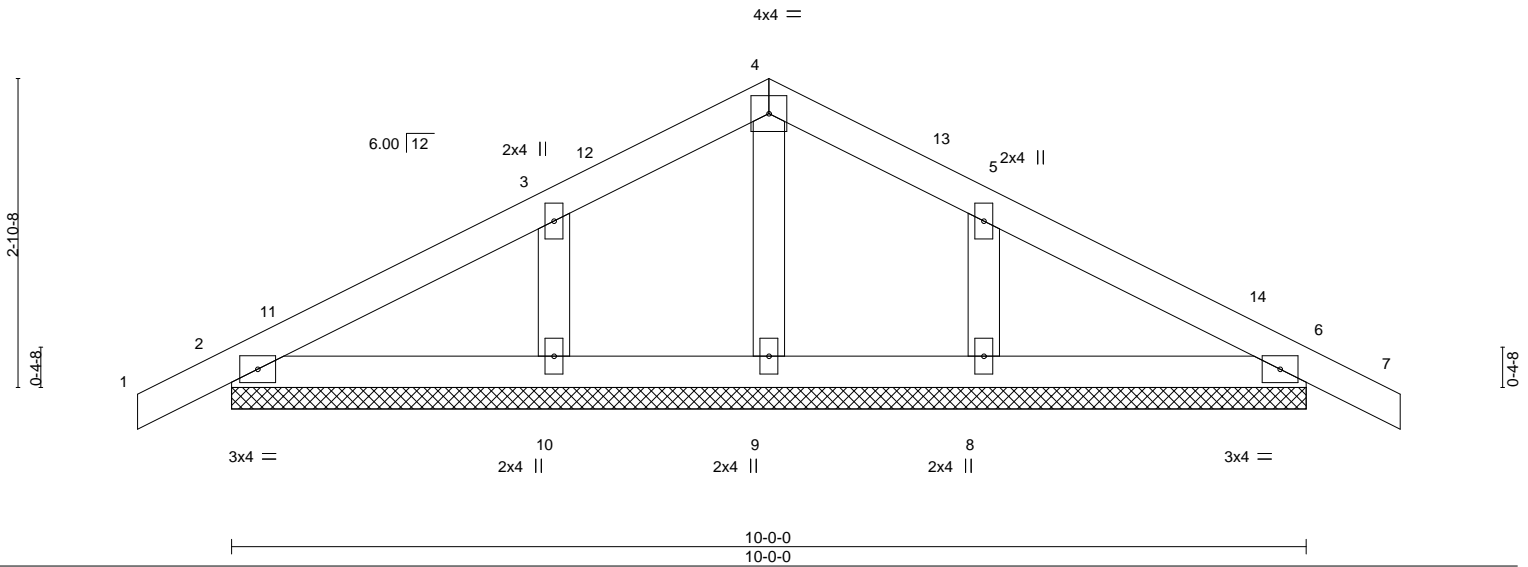
Job	Truss	Truss Type	Qty	Ply	Lot 14 Forest Ridge	E15485352
J0321-1586	P1	GABLE	1	1		

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Mar 10 13:31:57 2021 Page 1  
 ID:UseLiZXJndaeTVmvuhGIhGzcPnY-7bOjVg1Z?RSy4A7RczenhkPG5plg0lFBBBnR7zcJ9G



Scale = 1:21.4



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in	(oc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	0.00	6	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	0.00	7	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						Weight: 42 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.2	

**REACTIONS.** All bearings 10-0-0.  
 (lb) - Max Horz 2=59(LC 16)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 10=-104(LC 12), 8=-103(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9, 10, 8

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 3-10=-175/298, 5-8=-175/298

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - 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) -0-10-8 to 3-6-5, Exterior(2) 3-6-5 to 5-0-0, Corner(3) 5-0-0 to 9-4-13, Exterior(2) 9-4-13 to 10-10-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6 except (jt=lb) 10=104, 8=103.



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ENGINEERING BY  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932

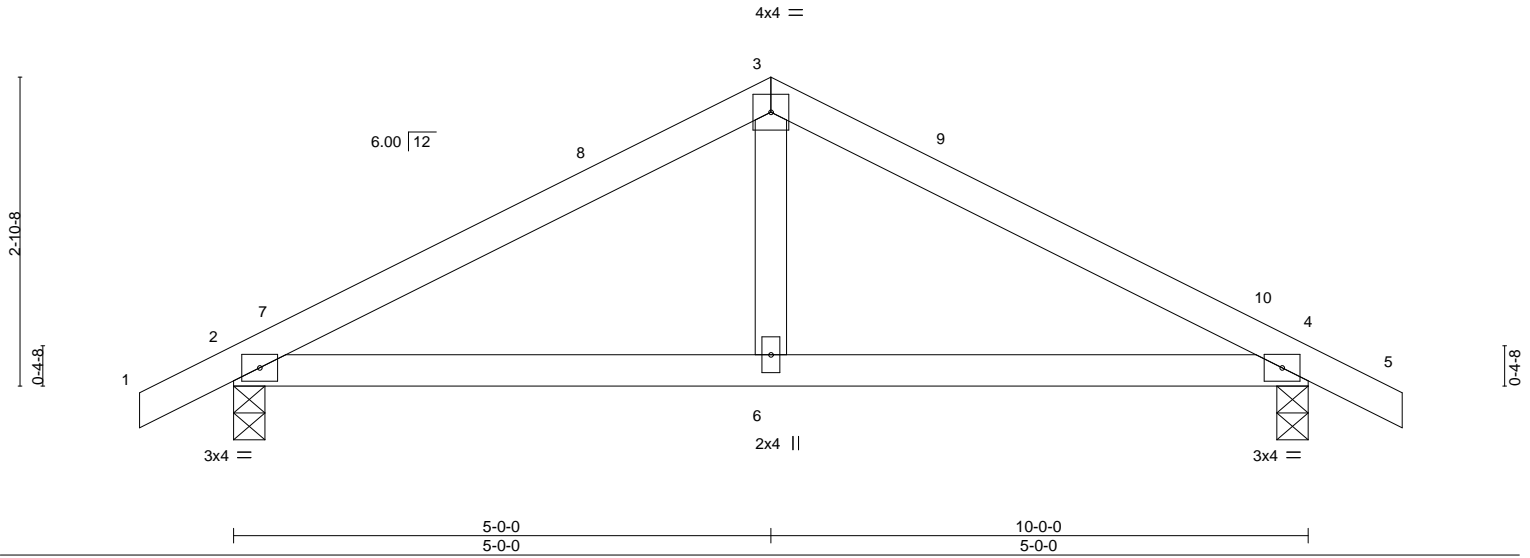
Job J0321-1586	Truss P2	Truss Type COMMON	Qty 4	Ply 1	Lot 14 Forest Ridge Job Reference (optional)	E15485353
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Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Mar 10 13:31:57 2021 Page 1  
ID:UseLIZXJndaeTVmvuhGhGzcPnY-7bOjVg1Z?RSy4A7RczenhkPEwpil0IFBbBnR7zcJ9G



Scale = 1:21.4



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.23	Vert(LL)	-0.01	4-6	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.20	Vert(CT)	-0.03	4-6	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.05	Horz(CT)	0.01	4	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.01	4-6	>999	240	Weight: 38 lb	FT = 20%
	Code IRC2015/TPI2014								

**LUMBER-**

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

**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.**

(size) 2=0-3-8, 4=0-3-8  
Max Horz 2=-38(LC 10)  
Max Uplift 2=-38(LC 12), 4=-38(LC 13)  
Max Grav 2=450(LC 1), 4=450(LC 1)

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

TOP CHORD 2-3=-532/201, 3-4=-532/202  
BOT CHORD 2-6=-66/412, 4-6=-66/412

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- 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) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 5-0-0, Exterior(2) 5-0-0 to 9-4-13, Interior(1) 9-4-13 to 10-10-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.



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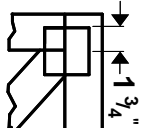
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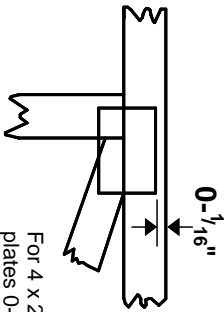
818 Soundside Road  
Edenton, NC 27932

# 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- 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

4 X 4

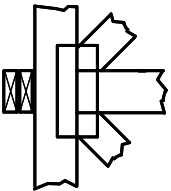
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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



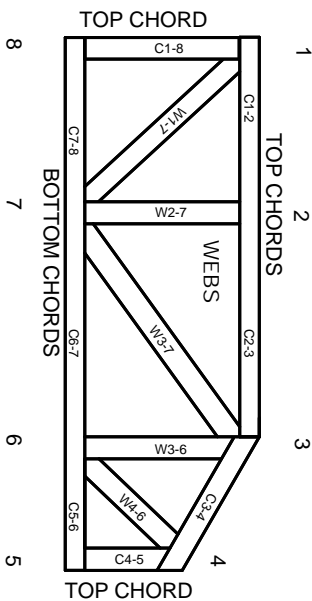
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

### Industry Standards:

ANSI/TPI 1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-89: Design Standard for Bracing, Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System

6-4-8  
dimensions shown in ft-in-sixteenths  
(Drawings not to scale)



**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: Mill-7473 rev. 5/19/2020



# General Safety Notes

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

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. 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.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.