

Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: J0420-1841  
Lot 5 Stevenson Farm

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: E14350253 thru E14350267

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

North Carolina COA: C-0844



April 29, 2020

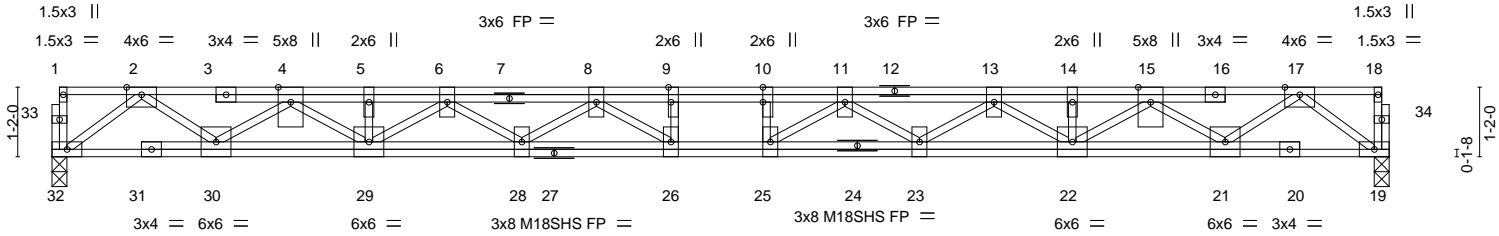
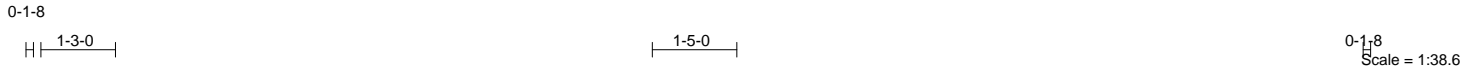
Gilbert, Eric

**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.

Job J0420-1841	Truss F1	Truss Type FLOOR	Qty 8	Ply 1	Lot 5 Stevenson Farm Job Reference (optional)	E14350253
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Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Mar 23 2020 MiTek Industries, Inc. Wed Apr 29 12:51:02 2020 Page 1  
ID:BoL?hgXglYppqdOiyUmcQyz41fz-nP7f1szfvaxeltu?TlvvOXSnBFxo5RCdJRqC8qzLrxt



2-9-0	7-10-8	14-6-8	19-8-0	22-5-0
2-9-0	5-1-8	6-8-0	5-1-8	2-9-0

Plate Offsets (X,Y)-- [9:0-3-0,Edge], [10:0-3-0,0-0-0]

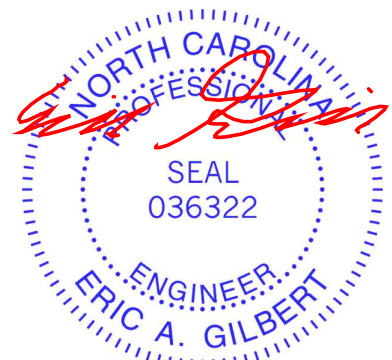
<b>LOADING</b> (psf)	<b>SPACING-</b>	1-7-3	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>	
TCLL 40.0	Plate Grip DOL	1.00	TC 0.12	Vert(LL)	-0.30	25-26	>889	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.31	Vert(CT)	-0.41	25-26	>646	360	M18SHS	244/190
BCLL 0.0	Rep Stress Incr	YES	WB 0.63	Horz(CT)	0.06	19	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-S							
									Weight: 164 lb	FT = 20%F, 11%E

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP 2400F 2.0E(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP 2400F 2.0E(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (size) 32=0-3-0, 19=0-3-0  
Max Grav 32=970(LC 1), 19=970(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**TOP CHORD** 2-4=-2267/0, 4-5=-4172/0, 5-6=-4172/0, 6-8=-5247/0, 8-9=-5785/0, 9-10=-5785/0, 10-11=-5785/0, 11-13=-5247/0, 13-14=-4172/0, 14-15=-4172/0, 15-17=-2267/0  
**BOT CHORD** 30-32=0/1227, 29-30=0/3336, 28-29=0/4843, 26-28=0/5628, 25-26=0/5785, 23-25=0/5628, 22-23=0/4843, 21-22=0/3336, 19-21=0/1227  
**WEBS** 17-19=-1536/0, 2-32=-1536/0, 17-21=0/1317, 2-30=0/1317, 15-21=-1329/0, 4-30=-1329/0, 15-22=0/1021, 4-29=0/1021, 13-22=-819/0, 6-29=-819/0, 13-23=0/501, 6-28=0/501, 11-23=-483/0, 8-28=-483/0, 11-25=-216/559, 8-26=-216/559

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are MT20 plates unless otherwise indicated.
  - 3) All plates are 3x6 MT20 unless otherwise indicated.
  - 4) Plates checked for a plus or minus 1 degree rotation about its center.
  - 5) Required 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



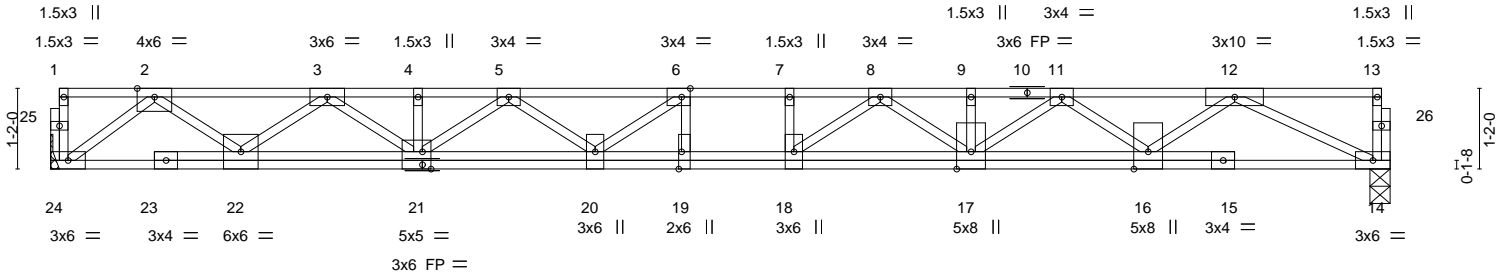
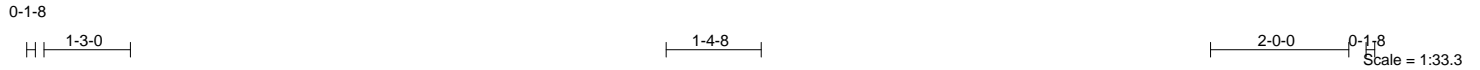
April 29, 2020

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>ENGINEERING BY <b>TRENCO</b> A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job J0420-1841	Truss F3	Truss Type FLOOR	Qty 7	Ply 1	Lot 5 Stevenson Farm Job Reference (optional)	E14350254
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Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Mar 23 2020 MiTek Industries, Inc. Wed Apr 29 12:51:05 2020 Page 1  
ID:BoL?hgXglYpqwdOiyUmcQyz41fz-Czpoft?YCVJD9Kca8uSc?94DEtXGloC3?O3GI9zLrxq



	10-3-12	11-4-8	19-4-8
	10-3-12	1-0-12	8-0-0
Plate Offsets (X,Y)--	[6:0-1-8,Edge], [19:0-3-0,Edge], [21:0-1-8,Edge]		

<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 40.0	Plate Grip DOL	1.00	TC 0.39	Vert(LL)	-0.28	19	>826	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.32	Vert(CT)	-0.38	19	>602		
BCLL 0.0	Rep Stress Incr	YES	WB 0.61	Horz(CT)	0.05	14	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 120 lb	FT = 20%F, 11%E

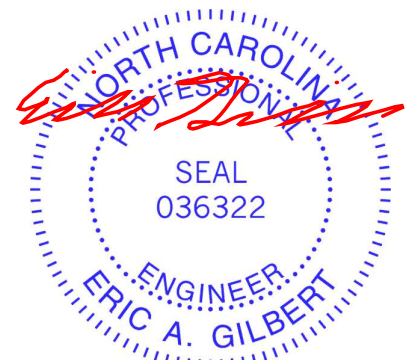
**LUMBER-**  
TOP CHORD 2x4 SP 2400F 2.0E(flat)  
BOT CHORD 2x4 SP 2400F 2.0E(flat)  
WEBS 2x4 SP No.3(flat)

**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) 24=Mechanical, 14=0-3-8  
Max Grav 24=1046(LC 1), 14=1046(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2347/0, 3-4=-4043/0, 4-5=-4040/0, 5-6=-4852/0, 6-7=-5063/0, 7-8=-5063/0,  
8-9=-4353/0, 9-11=-4353/0, 11-12=-2866/0  
BOT CHORD 22-24=0/1335, 21-22=0/3312, 20-21=0/4601, 19-20=0/5063, 18-19=0/5063, 17-18=0/4812,  
16-17=0/3736, 14-16=0/1964  
WEBS 2-24=-1673/0, 2-22=0/1285, 3-22=-1226/0, 3-21=0/897, 5-21=-713/0, 5-20=0/445,  
6-20=-593/162, 6-19=-277/217, 12-14=-2182/0, 12-16=0/1147, 11-16=-1105/0,  
11-17=0/769, 8-17=-605/0, 8-18=-83/605

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) Plates checked for a plus or minus 1 degree rotation about its center.
  - 3) Refer to girder(s) for truss to truss connections.
  - 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



April 29, 2020

Job J0420-1841	Truss F4	Truss Type FLOOR	Qty 3	Ply 1	Lot 5 Stevenson Farm Job Reference (optional)	E14350255
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Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Mar 23 2020 MiTek Industries, Inc. Wed Apr 29 12:51:06 2020 Page 1  
ID:BoL?hgXglYpqwdOiyUmcQyz41fz-gANAtD0AzpR4nUBmbizrYNdJVs9W1IACE2opHczLrxp

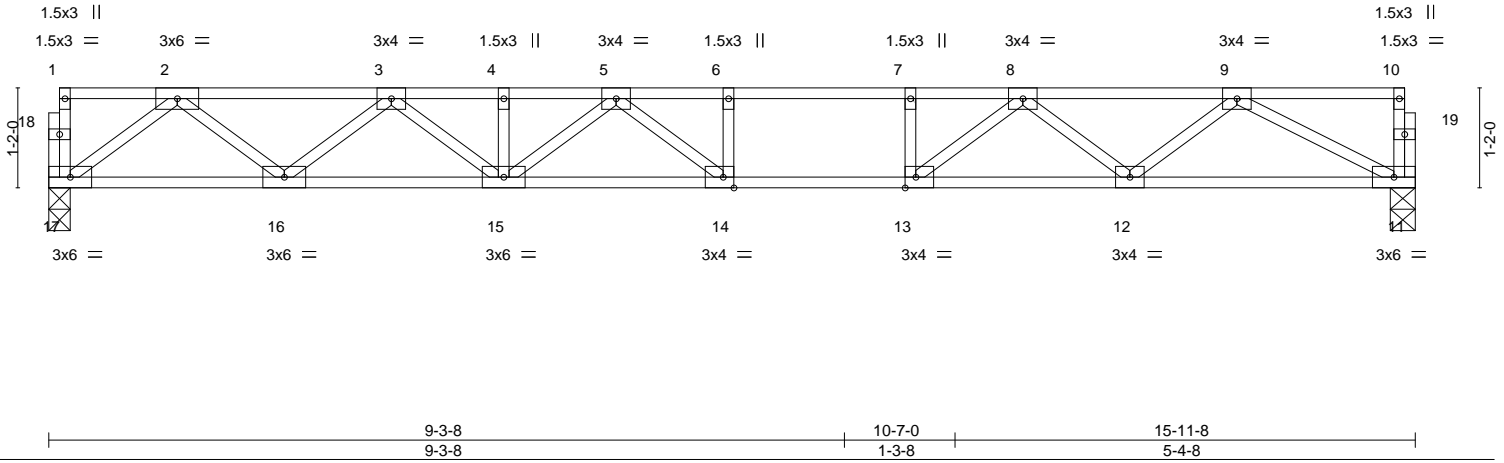
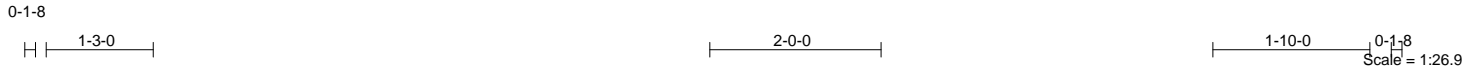


Plate Offsets (X,Y)--	[13:0-1-8,Edge], [14:0-1-8,Edge]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL 1.00	TC 0.74	Vert(LL) -0.24 14-15 >785 480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.90	Vert(CT) -0.33 14-15 >570 360		
BCLL 0.0	Rep Stress Incr YES	WB 0.44	Horz(CT) 0.05 11 n/a n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S		Weight: 80 lb	FT = 20%F, 11%E

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.1 (flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1 (flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 (flat)	

**REACTIONS.** (size) 17=0-3-0, 11=0-3-8  
Max Grav 17=858(LC 1), 11=858(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1774/0, 3-4=-2887/0, 4-5=-2887/0, 5-6=-3157/0, 6-7=-3157/0, 7-8=-3157/0, 8-9=-2067/0  
BOT CHORD 16-17=0/1070, 15-16=0/2453, 14-15=0/3153, 13-14=0/3157, 12-13=0/2674, 11-12=0/1453  
WEBS 2-17=-1340/0, 2-16=0/916, 3-16=-884/0, 3-15=0/554, 5-15=-340/0, 5-14=-241/390, 9-11=-1641/0, 9-12=0/799, 8-12=-790/0, 8-13=0/814, 7-13=-365/0

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) Plates checked for a plus or minus 1 degree rotation about its center.
  - 3) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



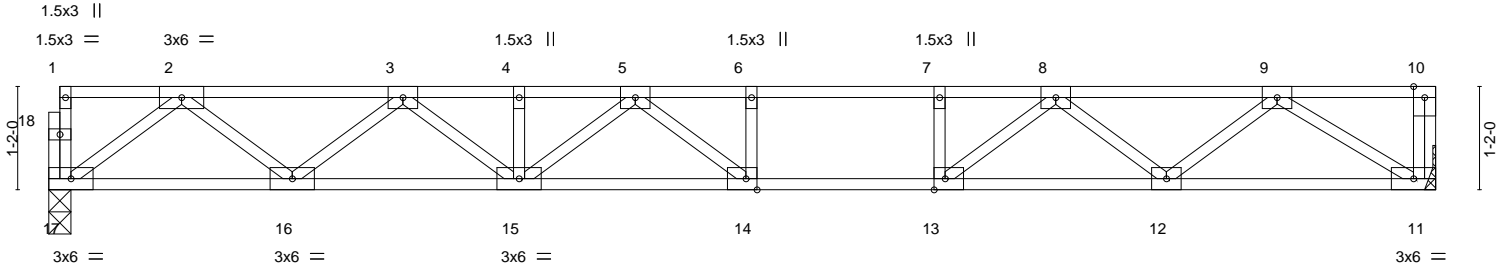
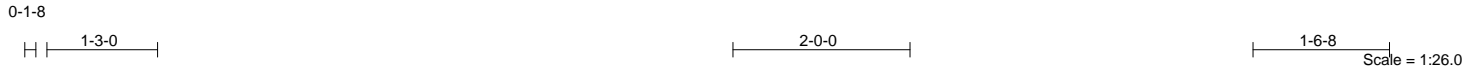
April 29, 2020

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>ENGINEERING BY <b>TRENCO</b> A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job J0420-1841	Truss F5	Truss Type FLOOR	Qty 6	Ply 1	Lot 5 Stevenson Farm Job Reference (optional)	E14350256
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Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Mar 23 2020 MiTek Industries, Inc. Wed Apr 29 12:51:06 2020 Page 1  
ID:BoL?hgXglYpqwdOiyUmcQyz41fz-gANAtD0AzpR4nUBmbizrYnDJS8N1IMCE2opHczLrxp



9-1-12		10-3-8	15-8-0
9-1-12		1-1-12	5-4-8
Plate Offsets (X,Y)-- [13:0-1-8,Edge], [14:0-1-8,Edge]			
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d
TCLL 40.0	Plate Grip DOL 1.00	TC 0.76	Vert(LL) -0.24 14-15 >776 480
TCDL 10.0	Lumber DOL 1.00	BC 0.90	Vert(CT) -0.33 14-15 >566 360
BCLL 0.0	Rep Stress Incr YES	WB 0.42	Horz(CT) 0.05 11 n/a n/a
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S	
			<b>PLATES</b> MT20
			<b>GRIP</b> 244/190
			Weight: 79 lb FT = 20%F, 11%E

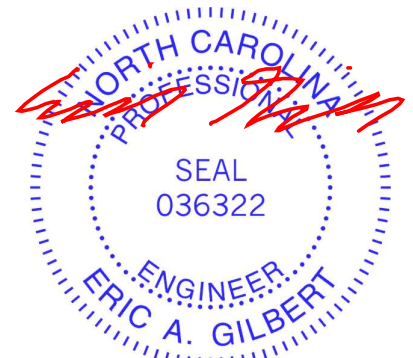
**LUMBER-**  
TOP CHORD 2x4 SP No.1 (flat)  
BOT CHORD 2x4 SP No.1 (flat)  
WEBS 2x4 SP No.3 (flat)

**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) 17=0-3-0, 11=Mechanical  
Max Grav 17=842(LC 1), 11=848(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1733/0, 3-4=-2808/0, 4-5=-2808/0, 5-6=-3022/0, 6-7=-3022/0, 7-8=-3022/0, 8-9=-1871/0  
BOT CHORD 16-17=0/1049, 15-16=0/2394, 14-15=0/3053, 13-14=0/3022, 12-13=0/2502, 11-12=0/1241  
WEBS 2-17=-1313/0, 2-16=0/891, 3-16=-861/0, 3-15=0/528, 5-15=-314/0, 5-14=-267/352, 9-11=-1463/0, 9-12=0/821, 8-12=-822/0, 8-13=0/841, 7-13=-375/0

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are 3x4 MT20 unless otherwise indicated.
  - 3) Plates checked for a plus or minus 1 degree rotation about its center.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 6) CAUTION, Do not erect truss backwards.



April 29, 2020

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**  
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

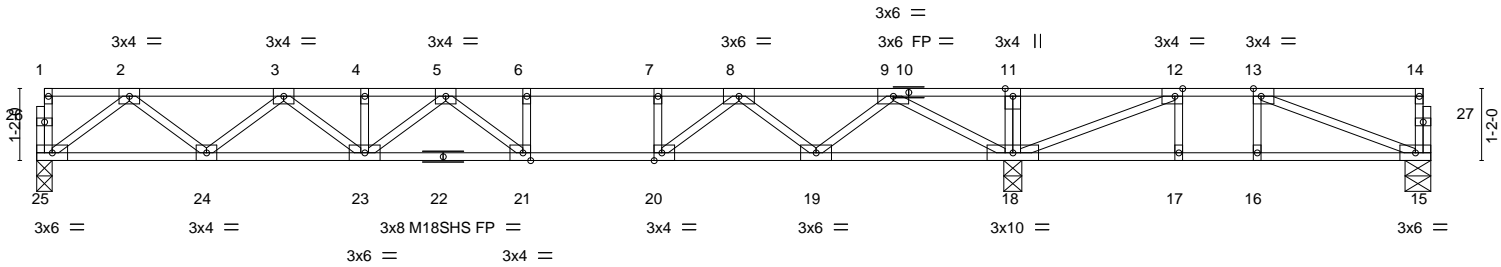


818 Soundside Road  
Edenton, NC 27932

Job J0420-1841	Truss F6	Truss Type FLOOR	Qty 1	Ply 1	Lot 5 Stevenson Farm	E14350257
					Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Mar 23 2020 MiTek Industries, Inc. Wed Apr 29 12:51:07 2020 Page 1  
ID:BoL?hgXglYpqqwOiyUmcQyz41fz-8MxY4Z1ok7ZwPenzFJU44a9TsGUAmIQMtiYmp2zLrxo



	9-3-6	10-6-12	15-9-12	22-7-0
	9-3-6	1-3-6	5-3-0	6-9-4
Plate Offsets (X,Y)--	[12:0-1-8,Edge],	[13:0-1-8,Edge],	[20:0-1-8,Edge],	[21:0-1-8,Edge]

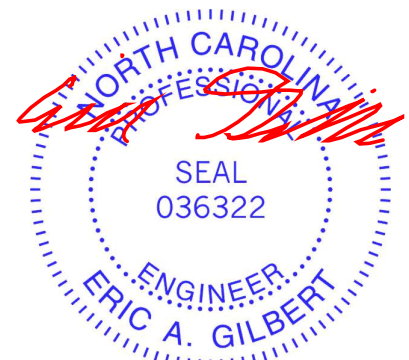
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL	1.00	TC 0.83	Vert(LL)	-0.24 21-23	>783	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.93	Vert(CT)	-0.33 21-23	>568	360	M18SHS	244/190
BCLL 0.0	Rep Stress Incr	YES	WB 0.44	Horz(CT)	0.04 15	n/a	n/a		
BCDL 5.0	Code IRC2015/TP12014		Matrix-S						
								Weight: 113 lb	FT = 20%F, 11%E

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.1 (flat)	TOP CHORD Structural wood sheathing directly applied or 5-8-12 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1 (flat)	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 2x4 SP No.3 (flat)	

**REACTIONS.** (size) 25=0-3-0, 18=0-3-8, 15=0-5-0  
 Max Uplift 15=-52(LC 3)  
 Max Grav 25=802(LC 10), 18=1452(LC 1), 15=308(LC 4)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1634/0, 3-4=-2617/0, 4-5=-2617/0, 5-6=-2689/0, 6-7=-2689/0, 7-8=-2689/0,  
 8-9=-1399/0, 9-11=0/1071, 11-12=0/1075, 12-13=-444/311  
 BOT CHORD 24-25=0/996, 23-24=0/2251, 21-23=0/2810, 20-21=0/2689, 19-20=0/2082, 18-19=0/726,  
 17-18=-311/444, 16-17=-311/444, 15-16=-311/444  
 WEBS 2-25=-1248/0, 2-24=0/830, 3-24=-803/0, 3-23=0/467, 5-21=-347/212, 9-18=-1758/0,  
 9-19=0/906, 8-19=-935/0, 8-20=0/916, 7-20=-404/0, 12-18=-1130/0, 13-15=-468/336

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are MT20 plates unless otherwise indicated.
  - 3) All plates are 1.5x3 MT20 unless otherwise indicated.
  - 4) Plates checked for a plus or minus 1 degree rotation about its center.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15.
  - 6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 7) CAUTION, Do not erect truss backwards.



April 29, 2020

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>ENGINEERING BY  <b>TRENCO</b>  <small>A MiTek Affiliate</small></p> <p>818 Soundside Road        Edenton, NC 27932</p>
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Job J0420-1841	Truss F7	Truss Type FLOOR	Qty 3	Ply 1	Lot 5 Stevenson Farm Job Reference (optional)	E14350258
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Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Mar 23 2020 MiTek Industries, Inc. Wed Apr 29 12:51:08 2020 Page 1  
ID:BoL?hgXglYpqwdOiyUmcQyz41fz-cYVwHv2QVQhn0oL9p00JdoimvgvoVDXVhMHwMUZLrxn

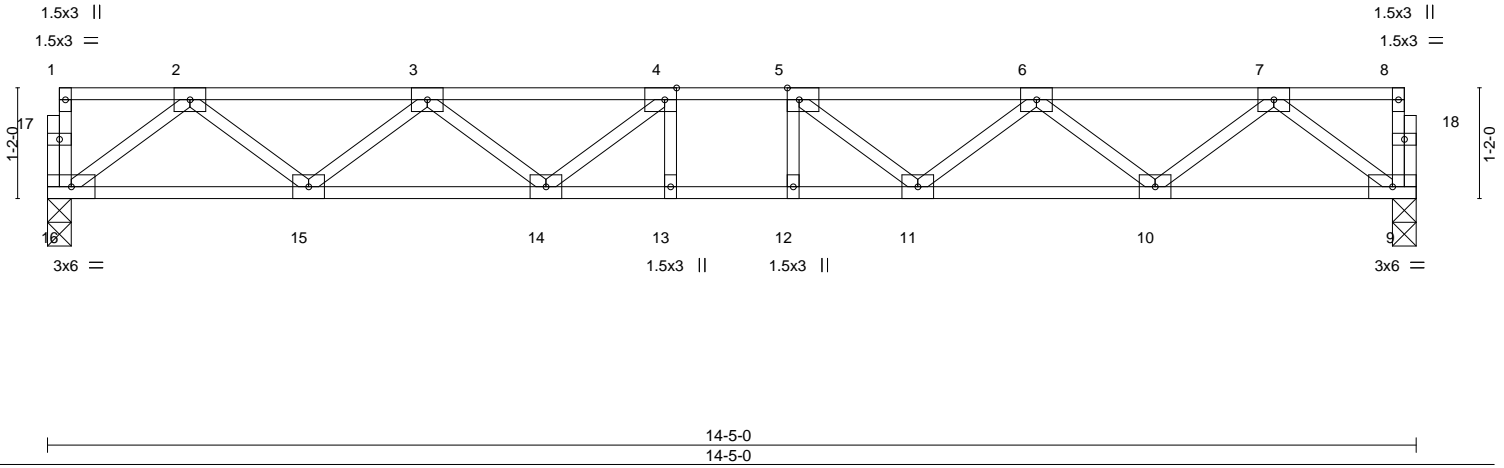
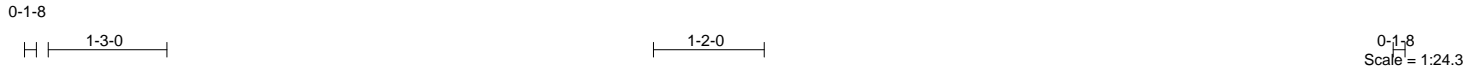


Plate Offsets (X,Y)--	[4:0-1-8,Edge], [5:0-1-8,Edge]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL 1.00	TC 0.30	Vert(LL) -0.12 12-13 >999 480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.59	Vert(CT) -0.17 12-13 >999 360		
BCLL 0.0	Rep Stress Incr YES	WB 0.38	Horz(CT) 0.04 9 n/a n/a		
BCDL 5.0	Code IRC2015/TP12014	Matrix-S		Weight: 73 lb	FT = 20%F, 11%E

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.1 (flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1 (flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 (flat)	

**REACTIONS.** (size) 16=0-3-0, 9=0-3-0  
Max Grav 16=773(LC 1), 9=773(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1570/0, 3-4=-2405/0, 4-5=-2647/0, 5-6=-2405/0, 6-7=-1570/0  
BOT CHORD 15-16=0/955, 14-15=0/2151, 13-14=0/2647, 12-13=0/2647, 11-12=0/2647, 10-11=0/2151, 9-10=0/955  
WEBS 7-9=-1195/0, 7-10=0/801, 6-10=-756/0, 6-11=0/386, 5-11=-454/0, 2-16=-1195/0, 2-15=0/801, 3-15=-756/0, 3-14=0/386, 4-14=-454/0

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are 3x4 MT20 unless otherwise indicated.
  - 3) Plates checked for a plus or minus 1 degree rotation about its center.
  - 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



Job J0420-1841	Truss F8	Truss Type FLOOR GIRDER	Qty 1	Ply 2	Lot 5 Stevenson Farm	E14350259
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Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Mar 23 2020 MiTek Industries, Inc. Wed Apr 29 12:51:09 2020 Page 1  
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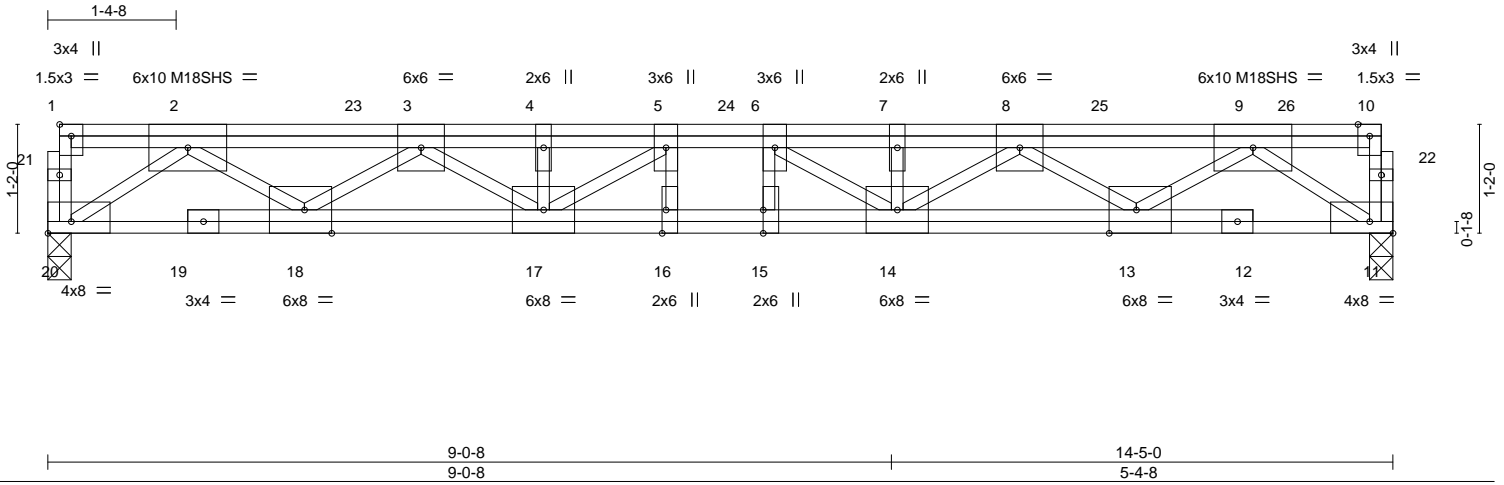
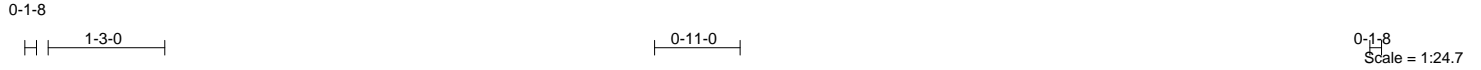


Plate Offsets (X,Y)--	[1:Edge,0-1-8], [11:Edge,0-1-8], [13:0-3-8,Edge], [15:0-3-0,0-0-0], [16:0-3-0,Edge], [18:0-3-8,Edge], [20:Edge,0-1-8]								
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSL</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL	1.00	TC 0.30	Vert(LL)	-0.19	15	>903	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.48	Vert(CT)	-0.26	15-16	>651	M18SHS	244/190
BCLL 0.0	Rep Stress Incr	NO	WB 0.81	Horz(CT)	0.06	11	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 221 lb	FT = 20%F, 11%E

**LUMBER-**  
TOP CHORD 2x4 SP 2400F 2.0E(flat)  
BOT CHORD 2x4 SP 2400F 2.0E(flat)  
WEBS 2x4 SP No.3(flat) \*Except\*  
2-18,9-13: 2x4 SP No.2(flat)

**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) 20=0-3-0, 11=0-3-0  
Max Grav 20=4019(LC 1), 11=4153(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 10-11=-255/0, 2-3=-9312/0, 3-4=-14910/0, 4-5=-14910/0, 5-6=-15908/0, 6-7=-14837/0, 7-8=-14837/0, 8-9=-9126/0  
BOT CHORD 18-20=0/5647, 17-18=0/12930, 16-17=0/15908, 15-16=0/15908, 14-15=0/15908, 13-14=0/12661, 11-13=0/5549  
WEBS 2-20=-6930/0, 2-18=0/4544, 3-18=-4487/0, 3-17=0/2416, 4-17=-649/0, 5-17=-1297/0, 9-11=-6793/0, 9-13=0/4437, 8-13=-4384/0, 8-14=0/2654, 7-14=-690/0, 6-14=-1406/0

- NOTES-**
- 1) Fasten trusses together to act as a single unit as per standard industry detail, or loads are to be evenly applied to all plies.
  - 2) Unbalanced floor live loads have been considered for this design.
  - 3) All plates are MT20 plates unless otherwise indicated.
  - 4) Plates checked for a plus or minus 1 degree rotation about its center.
  - 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1026 lb down at 1-4-8, 1026 lb down at 3-4-8, 1026 lb down at 5-4-8, 971 lb down at 7-4-8, 1026 lb down at 9-4-8, and 1026 lb down at 11-4-8, and 1027 lb down at 13-4-8 on top chord. The design/selection of such connection device(s) is the responsibility of others.
  - 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard  
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 11-20=-10, 1-10=-100  
Concentrated Loads (lb)  
Vert: 2=-946(F) 4=-946(F) 7=-946(F) 23=-946(F) 24=-946(F) 25=-946(F) 26=-953(F)



April 29, 2020



Job J0420-1841	Truss F9	Truss Type FLOOR	Qty 3	Ply 1	Lot 5 Stevenson Farm	E14350260
Comtech, Inc., Fayetteville, NC - 28314,					Job Reference (optional)	

8.330 s Mar 23 2020 MiTek Industries, Inc. Wed Apr 29 12:51:10 2020 Page 1  
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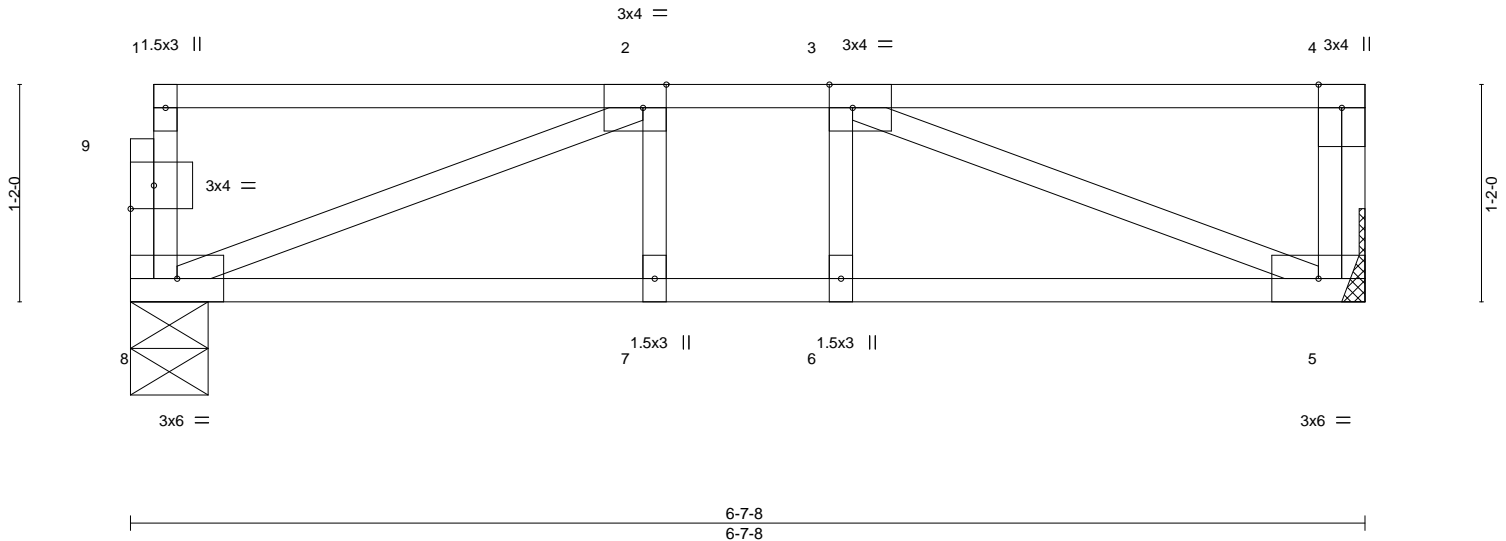


Plate Offsets (X,Y)-- [2:0-1-8,Edge], [3:0-1-8,Edge], [9:0-1-8,0-1-8]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.35	Vert(LL) -0.03	5-6	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.20	Vert(CT) -0.03	5-6	>999	360		
BCLL 0.0	Rep Stress Incr YES	WB 0.17	Horz(CT) 0.01	5	n/a	n/a		
BCDL 5.0	Code IRC2015/TP12014	Matrix-S					Weight: 35 lb	FT = 20%F, 11%E

**LUMBER-**  
 TOP CHORD 2x4 SP No.1 (flat)  
 BOT CHORD 2x4 SP No.1 (flat)  
 WEBS 2x4 SP No.3 (flat)

**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) 8=0-5-0, 5=Mechanical  
 Max Grav 8=344(LC 1), 5=351(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-578/0  
 BOT CHORD 7-8=0/578, 6-7=0/578, 5-6=0/578  
 WEBS 2-8=-613/0, 3-5=-620/0

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) Plates checked for a plus or minus 1 degree rotation about its center.
  - 3) Refer to girder(s) for truss to truss connections.
  - 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 5) CAUTION, Do not erect truss backwards.



April 29, 2020

Job J0420-1841	Truss F10	Truss Type FLOOR GIRDER	Qty 1	Ply 1	Lot 5 Stevenson Farm	E14350261
Comtech, Inc., Fayetteville, NC - 28314,					Job Reference (optional)	

8.330 s Mar 23 2020 MiTek Industries, Inc. Wed Apr 29 12:51:02 2020 Page 1  
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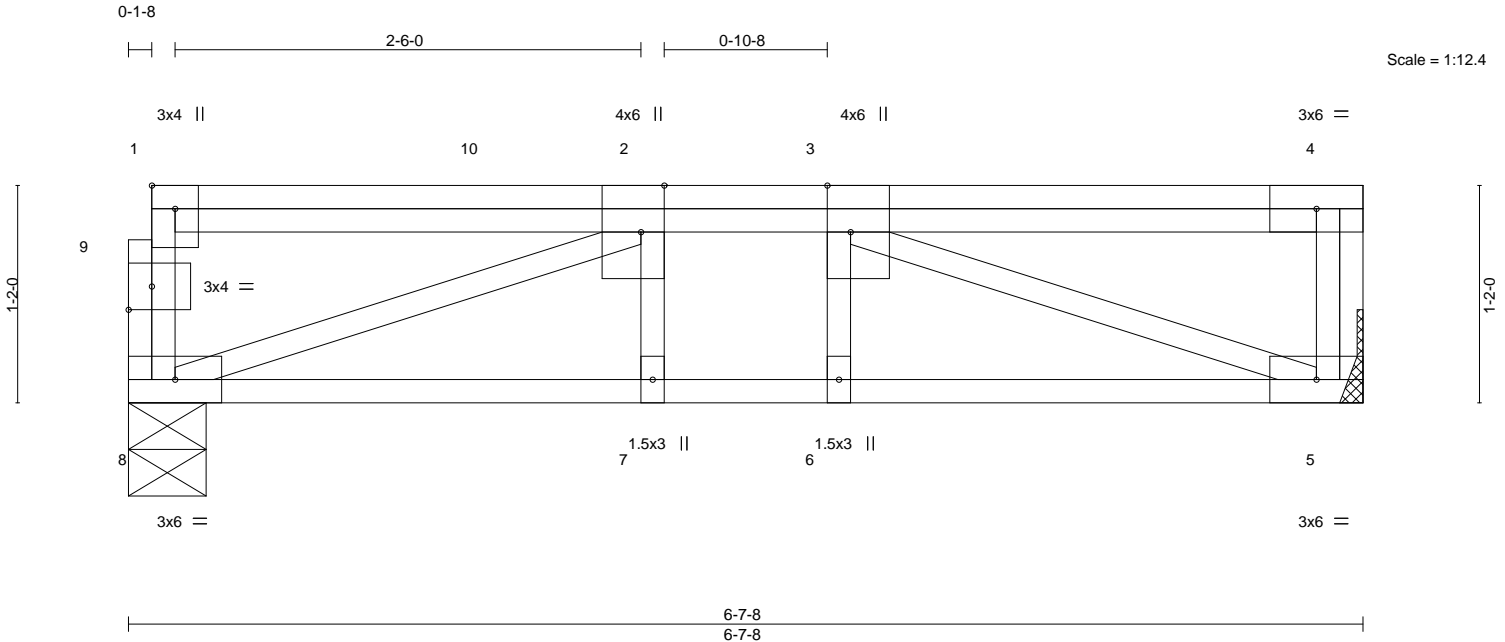


Plate Offsets (X,Y)--	[1:Edge,0-1-8], [2:0-3-0,Edge], [3:0-3-0,Edge], [9:0-1-8,0-1-8]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL 1.00	TC 0.22	Vert(LL) -0.02 7-8 >999 480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.22	Vert(CT) -0.03 7-8 >999 360		
BCLL 0.0	Rep Stress Incr NO	WB 0.22	Horz(CT) 0.01 5 n/a n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S		Weight: 44 lb	FT = 20%F, 11%E

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.1 (flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1 (flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 (flat)	

**REACTIONS.** (size) 8=0-5-0, 5=Mechanical  
Max Grav 8=440(LC 1), 5=403(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-773/0  
BOT CHORD 7-8=0/773, 6-7=0/773, 5-6=0/773  
WEBS 2-8=-813/0, 3-5=-822/0

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) Plates checked for a plus or minus 1 degree rotation about its center.
  - 3) Refer to girder(s) for truss to truss connections.
  - 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 5) CAUTION, Do not erect truss backwards.
  - 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 149 lb down at 1-11-8, and 101 lb down at 3-1-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
  - 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

- 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 5-8=-10, 1-4=-100  
Concentrated Loads (lb)  
Vert: 2=-73(B) 10=-75(B)

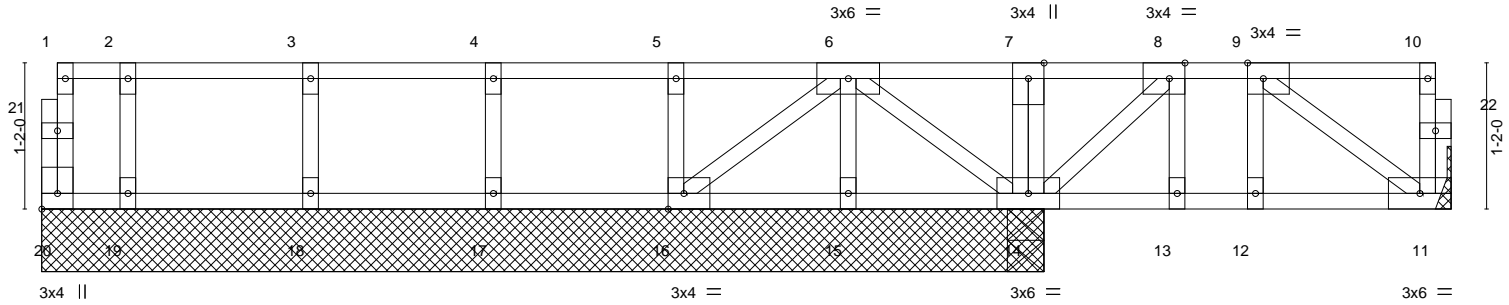
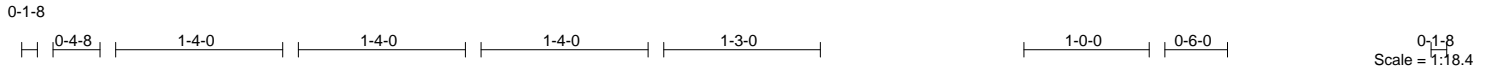


April 29, 2020

Job J0420-1841	Truss F11	Truss Type FLOOR	Qty 1	Ply 1	Lot 5 Stevenson Farm Job Reference (optional)	E14350262
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Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Mar 23 2020 MiTek Industries, Inc. Wed Apr 29 12:51:03 2020 Page 1  
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	7-10-8	8-0-0	11-3-0
	7-10-8	0-1-8	3-3-0
Plate Offsets (X,Y)--	[8:0-1-8,Edge], [9:0-1-8,Edge], [16:0-1-8,Edge], [20:Edge,0-1-8]		

<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 40.0	Plate Grip DOL	1.00	TC 0.08	Vert(LL)	-0.00	12	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.06	Vert(CT)	-0.00	12	>999	360		
BCLL 0.0	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	11	n/a	n/a		
BCDL 5.0	Code	IRC2015/TPI2014	Matrix-S							
									Weight: 59 lb	FT = 20%F, 11%E

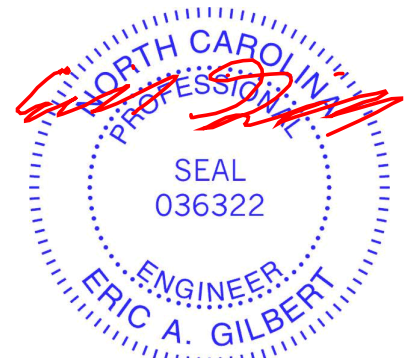
**LUMBER-**  
TOP CHORD 2x4 SP No.1 (flat)  
BOT CHORD 2x4 SP No.1 (flat)  
WEBS 2x4 SP No.3 (flat)

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

**REACTIONS.** All bearings 8-0-0 except (jt=length) 11=Mechanical.  
(lb) - Max Uplift All uplift 100 lb or less at joint(s) 20  
Max Grav All reactions 250 lb or less at joint(s) 11, 15, 16, 17, 18, 19 except 14=278(LC 15), 14=265(LC 1)

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

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are 1.5x3 MT20 unless otherwise indicated.
  - 3) Plates checked for a plus or minus 1 degree rotation about its center.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20.
  - 6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 7) CAUTION, Do not erect truss backwards.



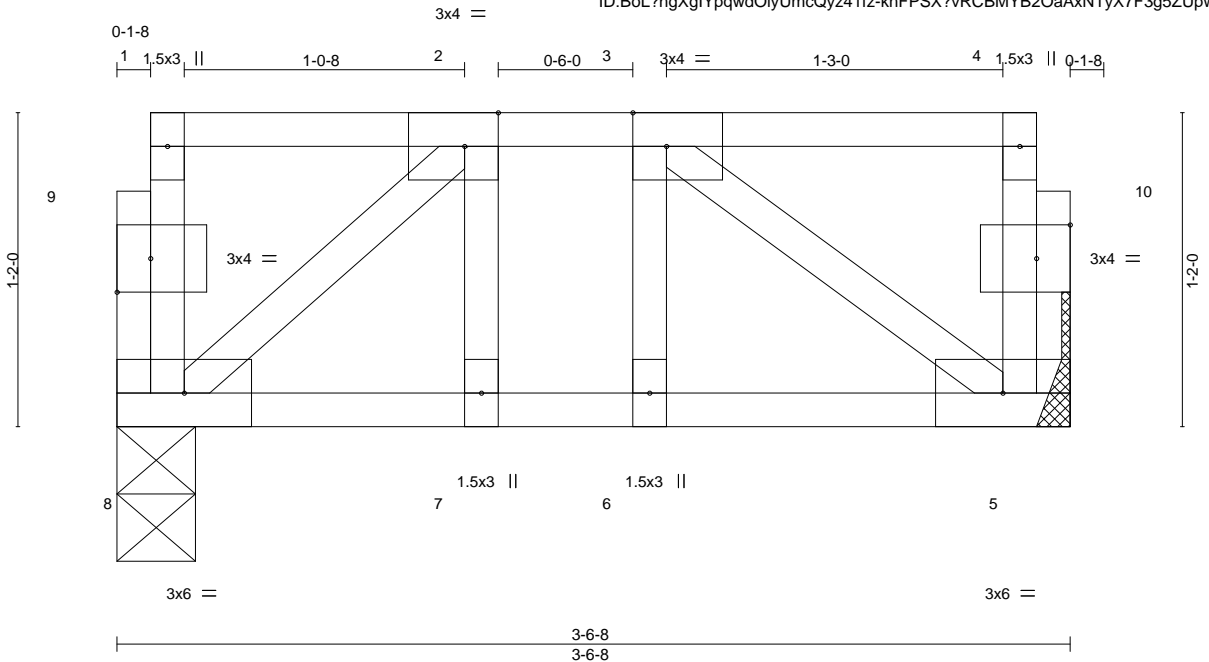
April 29, 2020

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**  
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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

Job J0420-1841	Truss F12	Truss Type FLOOR	Qty 1	Ply 1	Lot 5 Stevenson Farm	E14350263
Comtech, Inc., Fayetteville, NC - 28314,					Job Reference (optional)	

8.330 s Mar 23 2020 MiTek Industries, Inc. Wed Apr 29 12:51:04 2020 Page 1  
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Scale = 1:8.6

Plate Offsets (X,Y)-- [2:0-1-8,Edge], [3:0-1-8,Edge], [9:0-1-8,0-1-8], [10:0-1-8,0-1-8]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.09	Vert(LL) -0.00	6	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.06	Vert(CT) -0.00	6	>999	360		
BCLL 0.0	Rep Stress Incr YES	WB 0.04	Horz(CT) 0.00	5	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S					Weight: 22 lb	FT = 20%F, 11%E

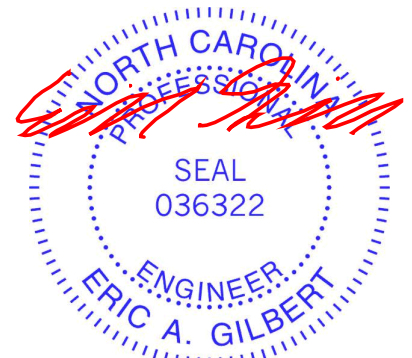
**LUMBER-**  
 TOP CHORD 2x4 SP No.1 (flat)  
 BOT CHORD 2x4 SP No.1 (flat)  
 WEBS 2x4 SP No.3 (flat)

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 3-6-8 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 8=0-3-8, 5=Mechanical  
 Max Grav 8=175(LC 1), 5=175(LC 1)

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

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) Plates checked for a plus or minus 1 degree rotation about its center.
  - 3) Refer to girder(s) for truss to truss connections.
  - 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



April 29, 2020

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**  
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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

Job J0420-1841	Truss KW	Truss Type FLOOR SUPPORTED GABL	Qty 1	Ply 1	Lot 5 Stevenson Farm Job Reference (optional)	E14350264
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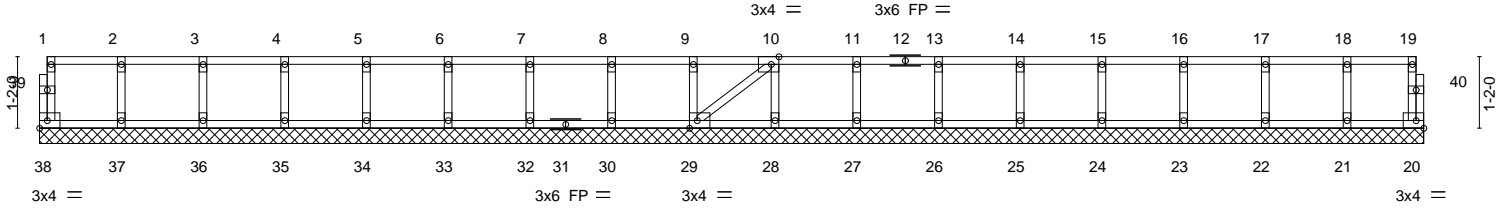
Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Mar 23 2020 MiTek Industries, Inc. Wed Apr 29 12:51:11 2020 Page 1  
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0-1/8

0-1/8

Scale = 1:37.6



22-7-0  
22-7-0

Plate Offsets (X,Y)-- [10:0-1-8,Edge], [29:0-1-8,Edge]

<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 40.0	Plate Grip DOL	1.00	TC 0.06	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.01	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	20	n/a		
BCDL 5.0	Code IRC2015/TP12014		Matrix-S						
								Weight: 96 lb	FT = 20%F, 11%E

**LUMBER-**  
TOP CHORD 2x4 SP No.1 (flat)  
BOT CHORD 2x4 SP No.1 (flat)  
WEBS 2x4 SP No.3 (flat)  
OTHERS 2x4 SP No.3 (flat)

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

**REACTIONS.** All bearings 22-7-0.  
(lb) - Max Grav All reactions 250 lb or less at joint(s) 38, 20, 37, 36, 35, 34, 33, 32, 30, 29, 28, 27, 26, 25, 24, 23, 22, 21

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

- NOTES-**
- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
  - 2) Plates checked for a plus or minus 1 degree rotation about its center.
  - 3) Gable requires continuous bottom chord bearing.
  - 4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - 5) Gable studs spaced at 1-4-0 oc.
  - 6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



April 29, 2020

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**  
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



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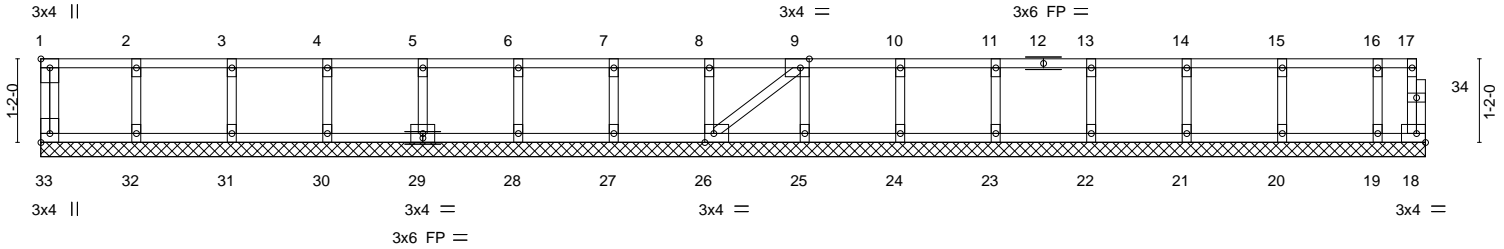
Job J0420-1841	Truss KW1	Truss Type FLOOR SUPPORTED GABL	Qty 1	Ply 1	Lot 5 Stevenson Farm Job Reference (optional)	E14350265
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Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Mar 23 2020 MiTek Industries, Inc. Wed Apr 29 12:51:11 2020 Page 1  
ID:BoL?hgXglYpqwdOiyUmcQyz41fz-07A3wx4loL4MuF4kU8Z1FQKkt3aifkxNKWaypzLrxk

0-1/8

Scale: 3/8"=1'



19'-4"  
19'-4"

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [9:0-1-8,Edge], [26:0-1-8,Edge], [33:Edge,0-1-8]

LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.06	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.01	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr YES	WB 0.03	Horz(CT)	0.00	18	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S					Weight: 84 lb	FT = 20%F, 11%E

**LUMBER-**  
TOP CHORD 2x4 SP No.1 (flat)  
BOT CHORD 2x4 SP No.1 (flat)  
WEBS 2x4 SP No.3 (flat)  
OTHERS 2x4 SP No.3 (flat)

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

**REACTIONS.** All bearings 19'-4-0.  
(lb) - Max Grav All reactions 250 lb or less at joint(s) 33, 18, 32, 31, 30, 29, 28, 27, 26, 25, 24, 23, 22, 21, 20, 19

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

- NOTES-**
- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
  - 2) Plates checked for a plus or minus 1 degree rotation about its center.
  - 3) Gable requires continuous bottom chord bearing.
  - 4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - 5) Gable studs spaced at 1'-4" oc.
  - 6) Recommend 2x6 strongbacks, on edge, spaced at 10'-0" oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 7) CAUTION, Do not erect truss backwards.



April 29, 2020

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

Job J0420-1841	Truss KW2	Truss Type FLOOR SUPPORTED GABL	Qty 1	Ply 1	Lot 5 Stevenson Farm Job Reference (optional)	E14350266
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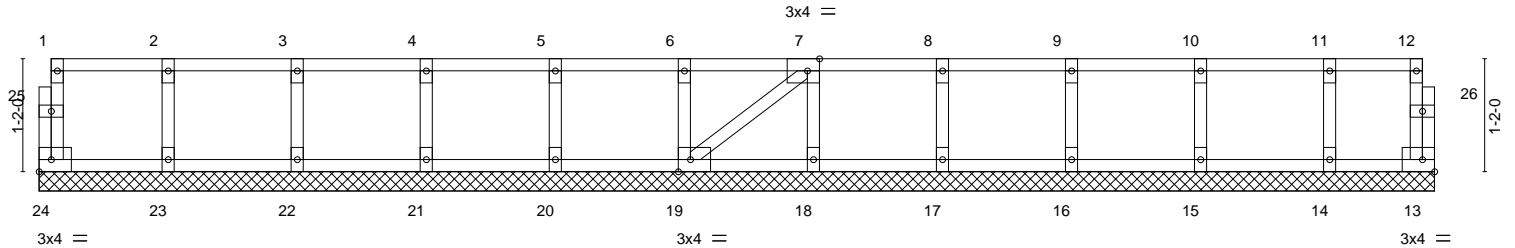
Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Mar 23 2020 MiTek Industries, Inc. Wed Apr 29 12:51:12 2020 Page 1  
ID:BoL?hgXglYpqwdOiyUmcQyz41fz-VKkR7G5xZfCDVPfw2s4GnetVgHPpR6?5c\_G7VFzLrxj

0-1-8

0-1-8

Scale: 1/2"=1'



14-5-0  
14-5-0

Plate Offsets (X,Y)-- [7:0-1-8,Edge], [19:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.06	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.01	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr YES	WB 0.03	Horz(CT)	0.00	13	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S					Weight: 63 lb	FT = 20%F, 11%E

**LUMBER-**  
TOP CHORD 2x4 SP No.1 (flat)  
BOT CHORD 2x4 SP No.1 (flat)  
WEBS 2x4 SP No.3 (flat)  
OTHERS 2x4 SP No.3 (flat)

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

**REACTIONS.** All bearings 14-5-0.  
(lb) - Max Grav All reactions 250 lb or less at joint(s) 24, 13, 23, 22, 21, 20, 19, 18, 17, 16, 15, 14

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

- NOTES-**
- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
  - 2) Plates checked for a plus or minus 1 degree rotation about its center.
  - 3) Gable requires continuous bottom chord bearing.
  - 4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - 5) Gable studs spaced at 1-4-0 oc.
  - 6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



April 29, 2020

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

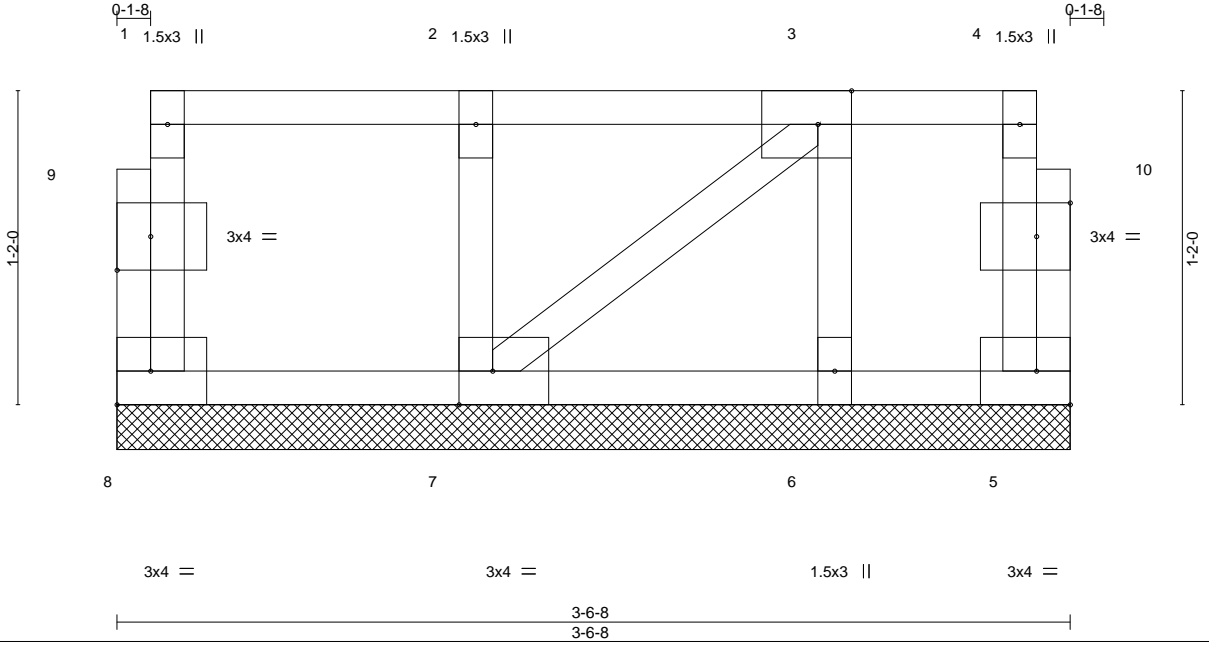
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



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Job J0420-1841	Truss KW3	Truss Type FLOOR SUPPORTED GABL	Qty 1	Ply 1	Lot 5 Stevenson Farm	E14350267
Comtech, Inc., Fayetteville, NC - 28314,					Job Reference (optional)	

8.330 s Mar 23 2020 MiTek Industries, Inc. Wed Apr 29 12:51:13 2020 Page 1  
 ID:BoL?hgXglYpqwdOiyUmcQyz41fz-zWlpLc6ZKyK47ZE6cZbVKrPgNhl1AZDEre?h1izLrxi



Scale = 1:8.6

Plate Offsets (X,Y)-- [3:0-1-8,Edge], [7:0-1-8,Edge], [9:0-1-8,0-1-8], [10:0-1-8,0-1-8]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.06	Vert(LL) n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.01	Vert(CT) n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr YES	WB 0.03	Horz(CT) 0.00	5	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-P					Weight: 20 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 3-6-8 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	
OTHERS 2x4 SP No.3(flat)	

**REACTIONS.** All bearings 3-6-8.  
 (lb) - Max Grav All reactions 250 lb or less at joint(s) 8, 5, 7, 6

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

- NOTES-**
- 1) Plates checked for a plus or minus 1 degree rotation about its center.
  - 2) Gable requires continuous bottom chord bearing.
  - 3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - 4) Gable studs spaced at 1-4-0 oc.
  - 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



April 29, 2020

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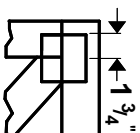


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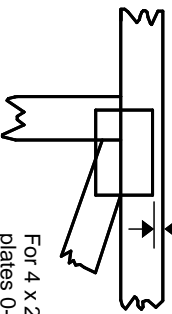


# Symbols

## 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.

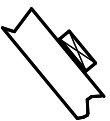
\* Plate location details available in **MITrak 20/20 software or upon request.**

## PLATE SIZE

4 X 4

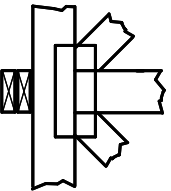
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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



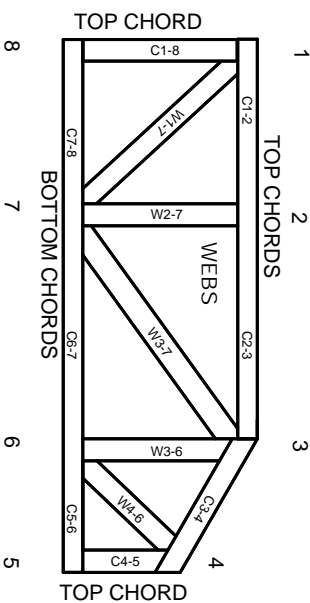
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-89: Design Standard for Bracing.  
BCSI: 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/TP1 section 6.3 These truss designs rely on lumber values established by others.

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



# 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/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 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/TP1 1 Quality Criteria.