

RE: J0124-0332  
 Lot 166 Duncans Creek

Trenco  
 818 Soundside Rd  
 Edenton, NC 27932

**Site Information:**

Customer: Project Name: J0124-0332  
 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 8.4  
 Wind Code: N/A Wind Speed: N/A mph  
 Roof Load: N/A psf Floor Load: 55.0 psf

This package includes 19 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date
1	I62601229	2F01	12/18/2023
2	I62601230	2F02	12/18/2023
3	I62601231	2F03	12/18/2023
4	I62601232	2F04	12/18/2023
5	I62601233	2F05	12/18/2023
6	I62601234	2F06	12/18/2023
7	I62601235	2F07	12/18/2023
8	I62601236	2F08	12/18/2023
9	I62601237	2F09	12/18/2023
10	I62601238	2F10-GR	12/18/2023
11	I62601239	2F11	12/18/2023
12	I62601240	2F11A	12/18/2023
13	I62601241	2F12	12/18/2023
14	I62601242	2F13	12/18/2023
15	I62601243	2F14-GR	12/18/2023
16	I62601244	2F15	12/18/2023
17	I62601245	2FKW1	12/18/2023
18	I62601246	2FKW2	12/18/2023
19	I62601247	2FKW3	12/18/2023

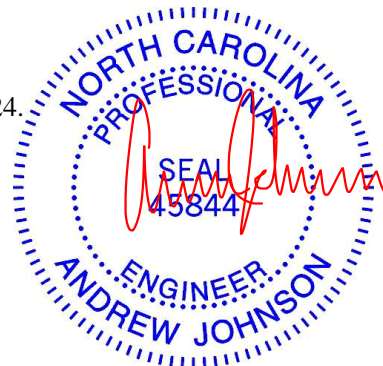
The truss drawing(s) referenced above have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville.

Truss Design Engineer's Name: Johnson, Andrew

My license renewal date for the state of North Carolina is December 31, 2024.

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.



December 18, 2023

Job	Truss	Truss Type	Qty	Ply	Lot 166 Duncans Creek
J0124-0332	2F01	Floor	11	1	62601229
					Job Reference (optional)

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Dec 18 05:09:12 2023 Page 1  
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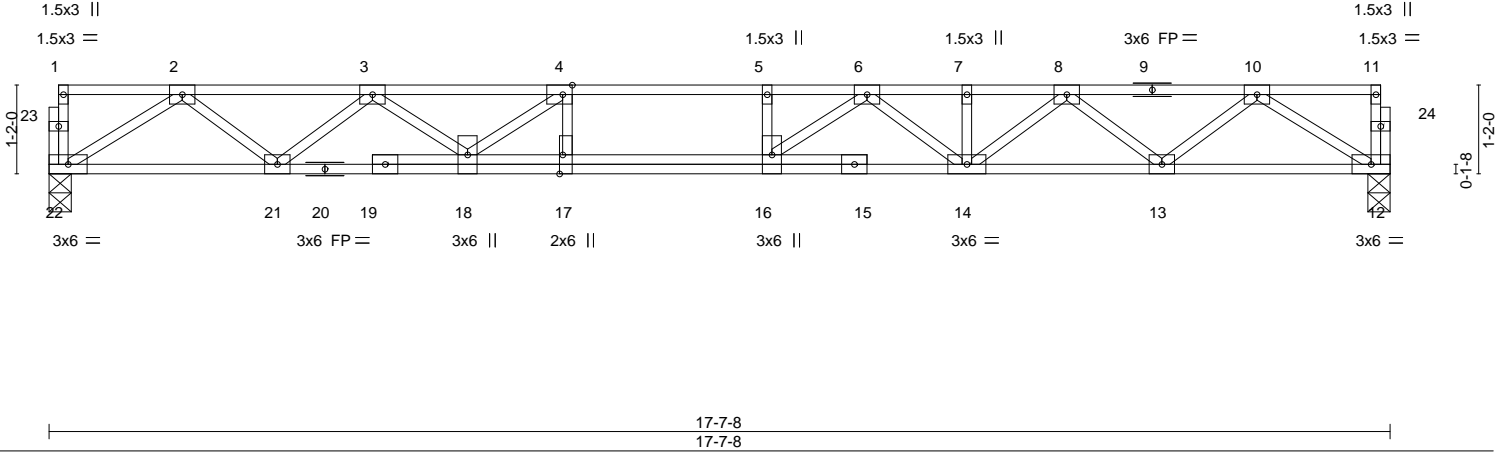
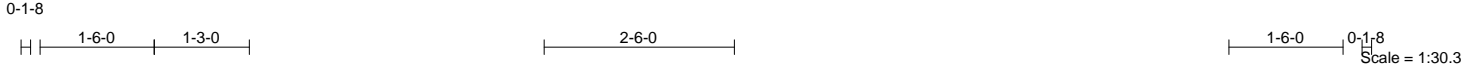


Plate Offsets (X,Y)--	[4:0-1-8,Edge], [17:0-3-0,Edge]
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LOADING (psf)	SPACING-	1-7-3	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00		TC 0.52	Vert(LL) -0.20	16-17	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00		BC 0.63	Vert(CT) -0.28	16-17	>750	360		
BCLL 0.0	Rep Stress Incr YES		WB 0.39	Horz(CT) 0.05	12	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 96 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
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) 22=0-3-8, 12=0-3-8  
 Max Grav 22=759(LC 1), 12=759(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1725/0, 3-4=-2780/0, 4-5=-3282/0, 5-6=-3282/0, 6-7=-2723/0, 7-8=-2723/0, 8-10=-1733/0  
 BOT CHORD 21-22=0/1098, 18-21=0/2361, 17-18=0/3282, 16-17=0/3282, 14-16=0/3056, 13-14=0/2322, 12-13=0/1106  
 WEBS 2-22=-1301/0, 2-21=0/817, 3-21=-827/0, 3-18=0/535, 4-18=-791/0, 4-17=-73/304, 10-12=-1311/0, 10-13=0/816, 8-13=-767/0, 8-14=0/512, 6-14=-429/0, 6-16=0/513

**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	Truss	Truss Type	Qty	Ply	Lot 166 Duncans Creek	62601230
J0124-0332	2F02	Floor	4	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Dec 18 05:09:13 2023 Page 1  
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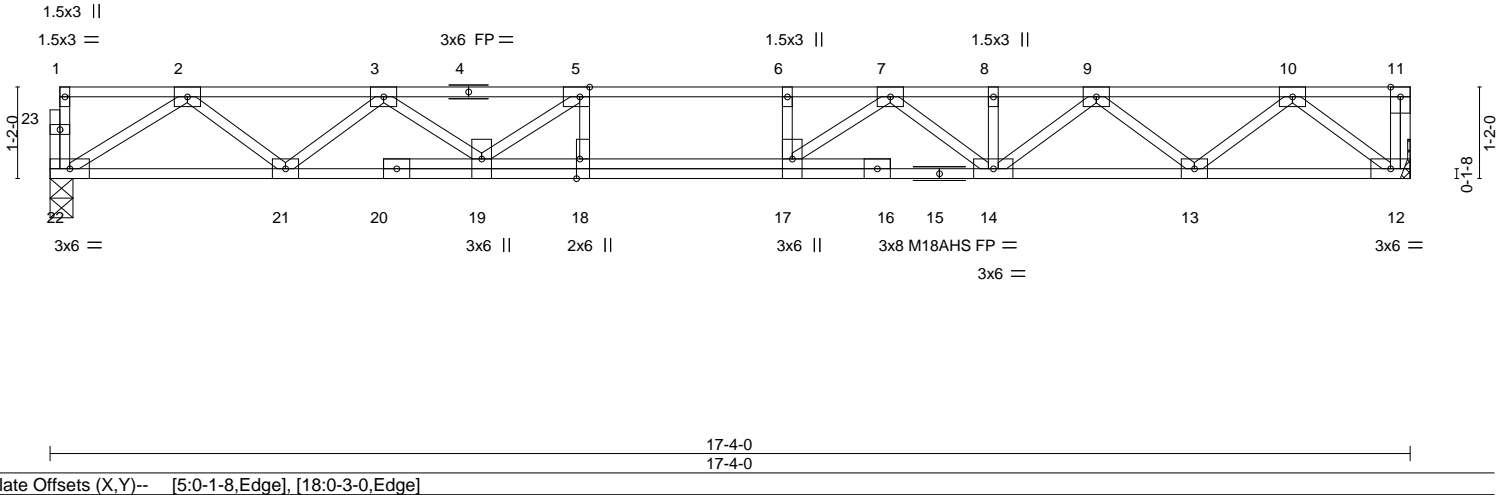


Plate Offsets (X,Y)--	[5:0-1-8,Edge], [18:0-3-0,Edge]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 1-7-3	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL 1.00	TC 0.34	Vert(LL) -0.19 17-18 >999 480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.62	Vert(CT) -0.26 17-18 >797 360	M18AHS	186/179
BCLL 0.0	Rep Stress Incr YES	WB 0.39	Horz(CT) 0.04 12 n/a n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S		Weight: 95 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) 22=0-3-8, 12=Mechanical  
 Max Grav 22=746(LC 1), 12=751(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1690/0, 3-5=-2712/0, 5-6=-3178/0, 6-7=-3178/0, 7-8=-2588/0, 8-9=-2588/0, 9-10=-1575/0  
 BOT CHORD 21-22=0/1078, 19-21=0/2311, 18-19=0/3178, 17-18=0/3178, 14-17=0/2935, 13-14=0/2176, 12-13=0/939  
 WEBS 2-22=-1277/0, 2-21=0/797, 3-21=-808/0, 3-19=0/515, 5-19=-748/0, 5-18=-83/283, 10-12=-1178/0, 10-13=0/829, 9-13=-781/0, 9-14=0/526, 7-14=-443/0, 7-17=0/520

- 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 3x4 MT20 unless otherwise indicated.
  - 4) Plates checked for a plus or minus 1 degree rotation about its center.
  - 5) Refer to girder(s) for truss to truss connections.
  - 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.



December 18, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**  
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPH Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate

818 Soundside Road  
 Edenton, NC 27932

Job J0124-0332	Truss 2F03	Truss Type Floor	Qty 1	Ply 1	Lot 166 Duncans Creek 162601231
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Dec 18 05:09:14 2023 Page 1  
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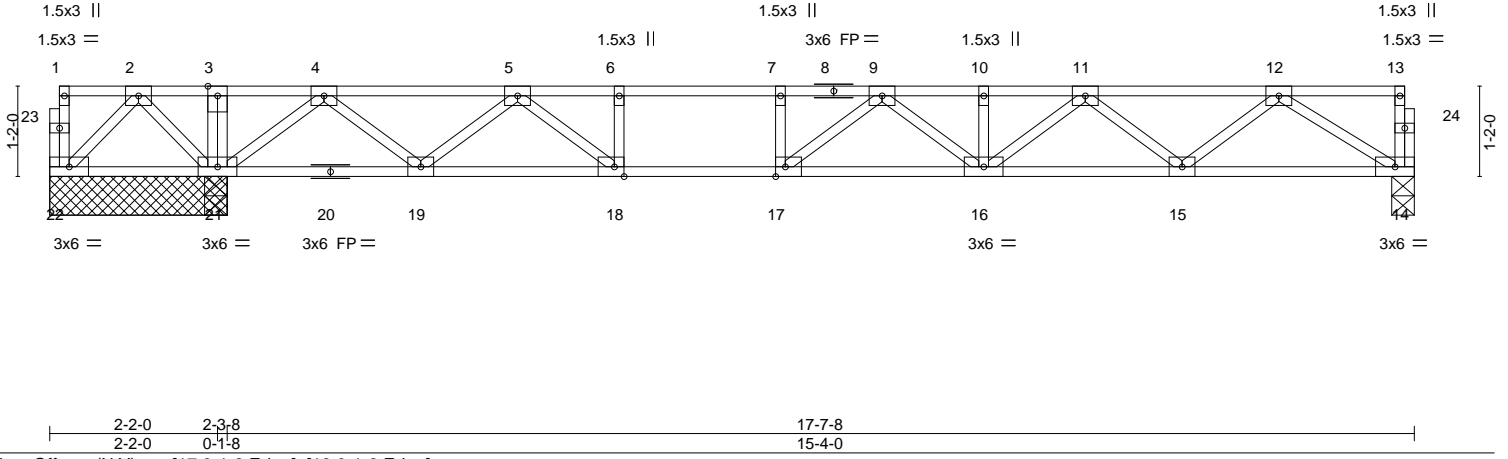
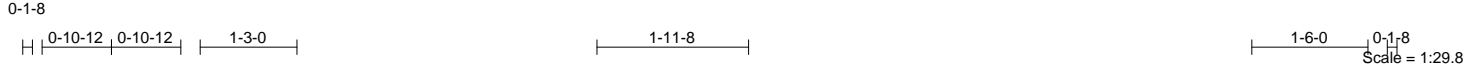


Plate Offsets (X,Y)--	[17:0-1-8,Edge], [18:0-1-8,Edge]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 1-7-3	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL 1.00	TC 0.74	Vert(LL) -0.20 16-17 >921 480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.79	Vert(CT) -0.28 16-17 >668 360		
BCLL 0.0	Rep Stress Incr YES	WB 0.40	Horz(CT) 0.02 14 n/a n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S			
				Weight: 91 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, Except: 6-0-0 oc bracing: 21-22,19-21.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (size) 22=2-3-8, 21=2-3-8, 21=2-3-8, 14=0-3-8  
 Max Uplift 22=526(LC 4)  
 Max Grav 21=1389(LC 1), 21=1389(LC 1), 14=595(LC 4)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=0/1055, 3-4=0/1056, 4-5=449/0, 5-6=-1717/0, 6-7=-1717/0, 7-9=-1717/0, 9-10=-1898/0, 10-11=-1898/0, 11-12=-1275/0  
 BOT CHORD 21-22=-521/0, 18-19=0/1089, 17-18=0/1717, 16-17=0/1964, 15-16=0/1690, 14-15=0/847  
 WEBS 2-22=0/745, 2-21=-812/0, 12-14=-1003/0, 12-15=0/557, 11-15=-540/0, 11-16=0/266, 9-17=-379/41, 4-21=-1139/0, 4-19=0/780, 5-19=-835/0, 5-18=0/830, 6-18=-361/0

- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 22=526.
  - 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.



December 18, 2023

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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/TPH Quality Criteria and DSB-22</b> available from Truss Plate Institute (www.tpinst.org) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (www.sbcacomponents.com)</p>	<p>818 Soundside Road Edenton, NC 27932</p>
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Job J0124-0332	Truss 2F04	Truss Type Floor	Qty 8	Ply 1	Lot 166 Duncans Creek 162601232
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Dec 18 05:09:15 2023 Page 1  
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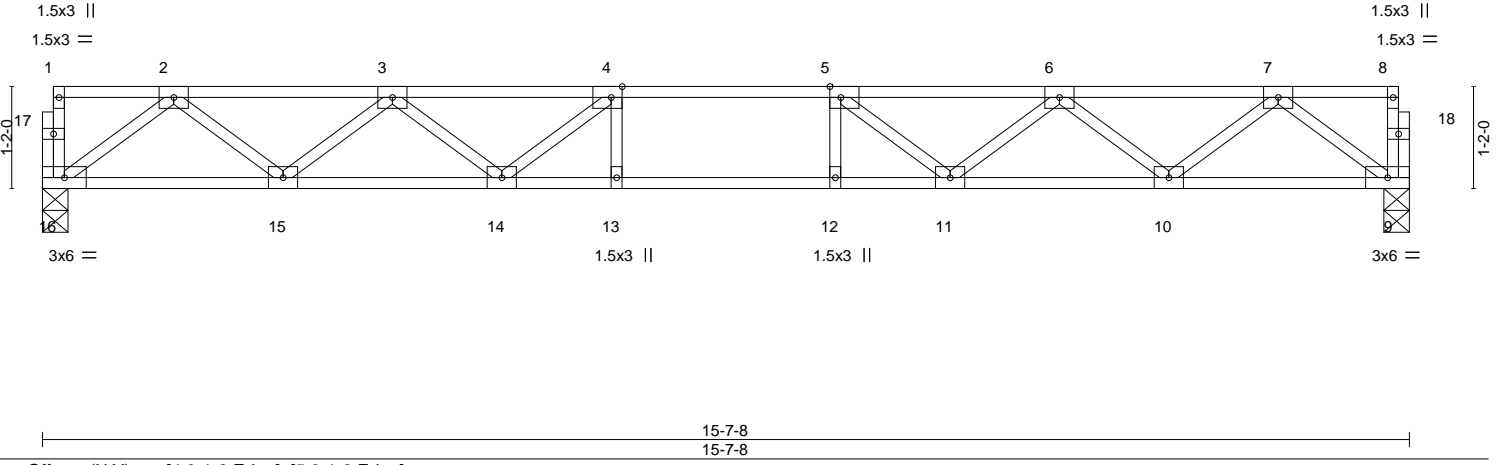
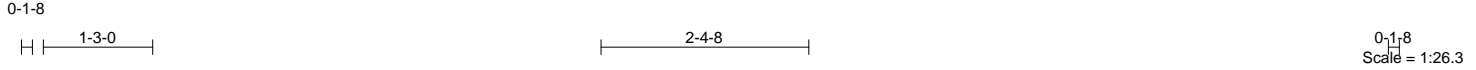


Plate Offsets (X,Y)--	[4:0-1-8,Edge], [5:0-1-8,Edge]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 1-7-3	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL 1.00	TC 0.35	Vert(LL) -0.15 13-14 >999 480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.67	Vert(CT) -0.20 13-14 >925 360		
BCLL 0.0	Rep Stress Incr YES	WB 0.34	Horz(CT) 0.04 9 n/a n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S		Weight: 77 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=0-3-8, 9=0-3-8  
Max Grav 16=671(LC 1), 9=671(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1387/0, 3-4=-2187/0, 4-5=-2459/0, 5-6=-2187/0, 6-7=-1387/0  
BOT CHORD 15-16=0/834, 14-15=0/1913, 13-14=0/2459, 12-13=0/2459, 11-12=0/2459, 10-11=0/1913, 9-10=0/834  
WEBS 2-16=-1044/0, 2-15=0/720, 3-15=-684/0, 3-14=0/407, 4-14=-507/0, 7-9=-1044/0, 7-10=0/720, 6-10=-684/0, 6-11=0/407, 5-11=-507/0

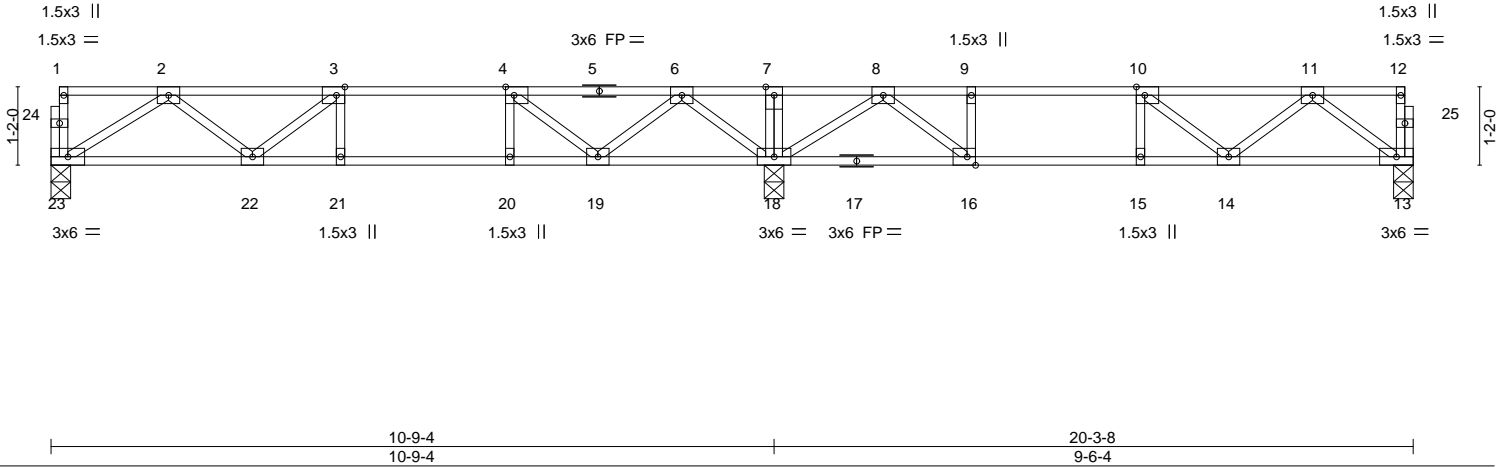
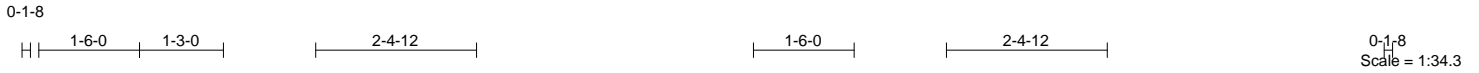
- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are 3x4 MT20 unless otherwise indicated.
  - 3) Plates checked for a plus or minus 1 degree rotation about its center.
  - 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each 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	Truss	Truss Type	Qty	Ply	Lot 166 Duncans Creek	162601233
J0124-0332	2F05	Floor	2	1		

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Dec 18 05:09:16 2023 Page 1  
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 40.0	1-7-3	TC 0.37	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.41	Vert(LL) -0.07 15 >999 480		
BCLL 0.0	Lumber DOL 1.00	WB 0.26	Vert(CT) -0.09 15 >999 360		
BCDL 5.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.02 13 n/a n/a		
	Code IRC2015/TPI2014			Weight: 99 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, Except: 6-0-0 oc bracing: 16-18.

**REACTIONS.** (size) 23=0-3-8, 13=0-3-8, 18=0-3-8  
 Max Grav 23=461(LC 10), 13=415(LC 7), 18=913(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-912/0, 3-4=-1157/0, 4-6=-849/0, 6-7=-87/301, 7-8=-86/302, 8-9=-922/0, 9-10=-922/0, 10-11=-739/0  
 BOT CHORD 22-23=0/644, 21-22=0/1157, 20-21=0/1157, 19-20=0/1157, 18-19=0/540, 16-18=-2/590, 15-16=0/922, 14-15=0/922, 13-14=0/509  
 WEBS 2-23=-762/0, 2-22=0/349, 3-22=-313/0, 6-18=-715/0, 6-19=0/453, 4-19=-491/0, 11-13=-637/0, 11-14=0/300, 8-18=-683/0, 8-16=0/542, 9-16=-257/0

- 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.
  - 5) CAUTION, Do not erect truss backwards.



Job	Truss	Truss Type	Qty	Ply	Lot 166 Duncans Creek
J0124-0332	2F06	Floor	1	1	162601234
					Job Reference (optional)

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Dec 18 05:09:17 2023 Page 1  
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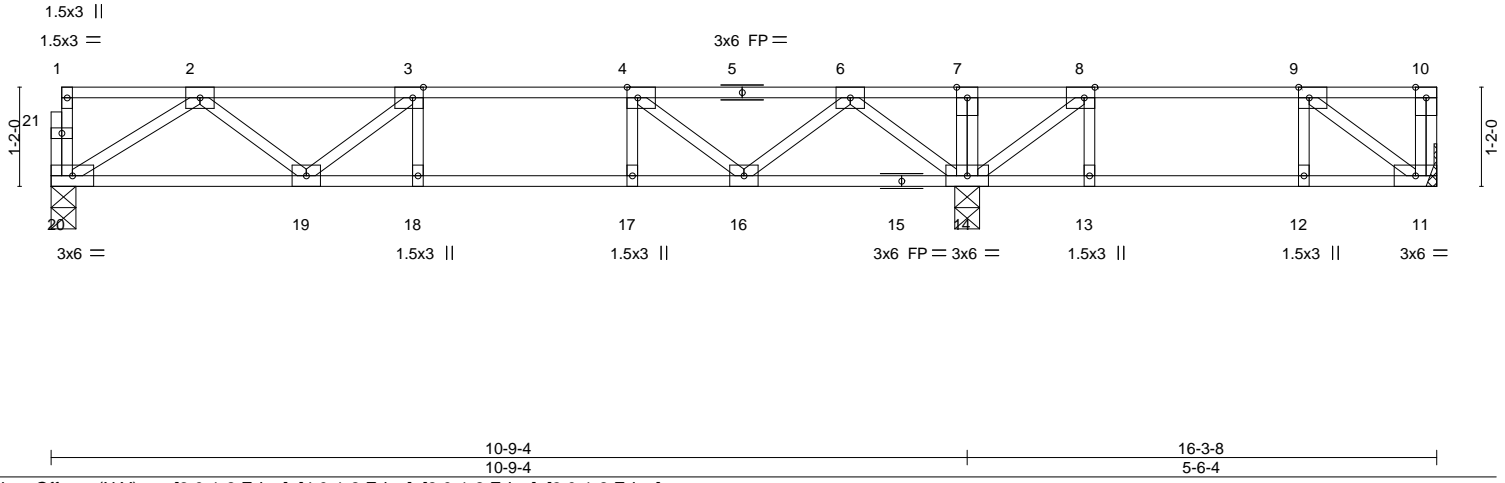
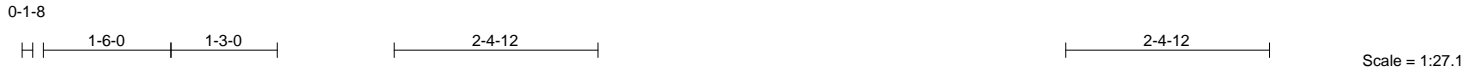


Plate Offsets (X,Y)--	[3:0-1-8,Edge], [4:0-1-8,Edge], [8:0-1-8,Edge], [9:0-1-8,Edge]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 1-7-3	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL 1.00	TC 0.26	Vert(LL) -0.06 18 >999 480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.40	Vert(CT) -0.08 18 >999 360		
BCLL 0.0	Rep Stress Incr YES	WB 0.20	Horz(CT) 0.01 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) 20=0-3-8, 11=Mechanical, 14=0-3-8  
 Max Grav 20=456(LC 10), 11=239(LC 7), 14=744(LC 9)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-897/0, 3-4=-1129/0, 4-6=-807/0, 8-9=-280/0  
 BOT CHORD 19-20=0/637, 18-19=0/1129, 17-18=0/1129, 16-17=0/1129, 14-16=0/496, 13-14=0/280,  
 12-13=0/280, 11-12=0/280  
 WEBS 2-20=-754/0, 2-19=0/339, 3-19=-307/0, 6-14=-718/0, 6-16=0/422, 4-16=-443/0,  
 9-11=-345/0, 8-14=-471/0

- 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.



Job	Truss	Truss Type	Qty	Ply	Lot 166 Duncans Creek
J0124-0332	2F07	Floor	4	1	62601235
					Job Reference (optional)

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Dec 18 05:09:18 2023 Page 1  
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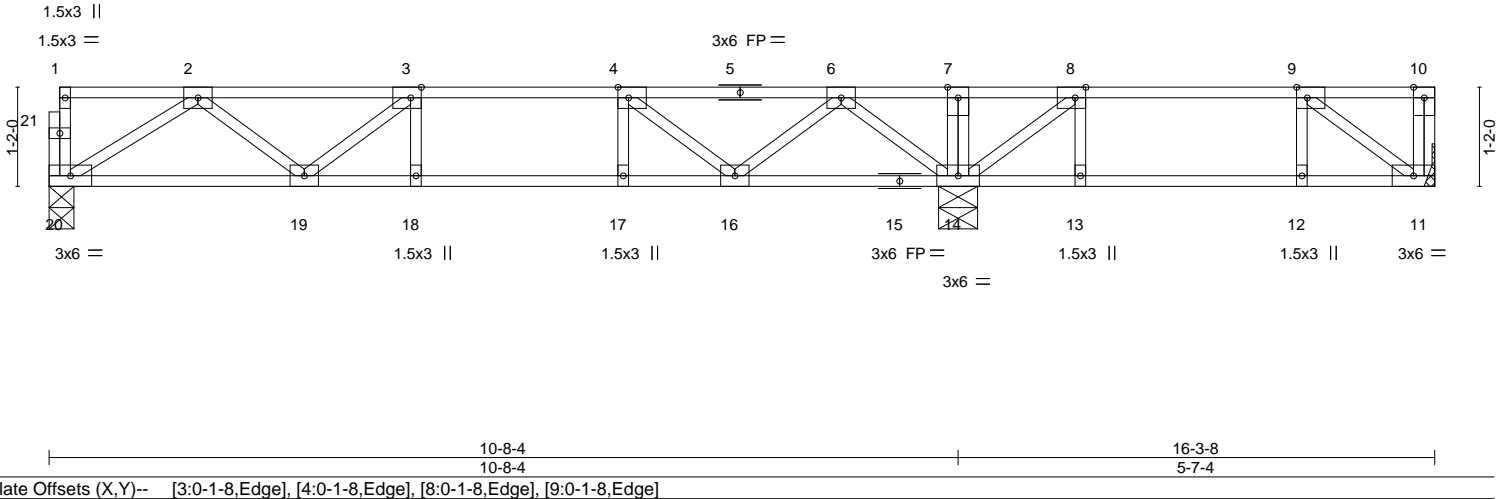


Plate Offsets (X,Y)--	[3:0-1-8,Edge], [4:0-1-8,Edge], [8:0-1-8,Edge], [9:0-1-8,Edge]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 1-7-3	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL 1.00	TC 0.27	Vert(LL) -0.06 18 >999 480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.39	Vert(CT) -0.08 18 >999 360		
BCLL 0.0	Rep Stress Incr YES	WB 0.20	Horz(CT) 0.01 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) 20=0-3-8, 11=Mechanical, 14=0-5-8  
 Max Grav 20=452(LC 10), 11=242(LC 7), 14=743(LC 9)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-887/0, 3-4=-1115/0, 4-6=-801/0, 8-9=-284/0  
 BOT CHORD 19-20=0/632, 18-19=0/1115, 17-18=0/1115, 16-17=0/1115, 14-16=0/496, 13-14=0/284,  
 12-13=0/284, 11-12=0/284  
 WEBS 2-20=-748/0, 2-19=0/333, 3-19=-303/0, 6-14=-713/0, 6-16=0/415, 4-16=-434/0,  
 9-11=-351/0, 8-14=-474/0

- 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.

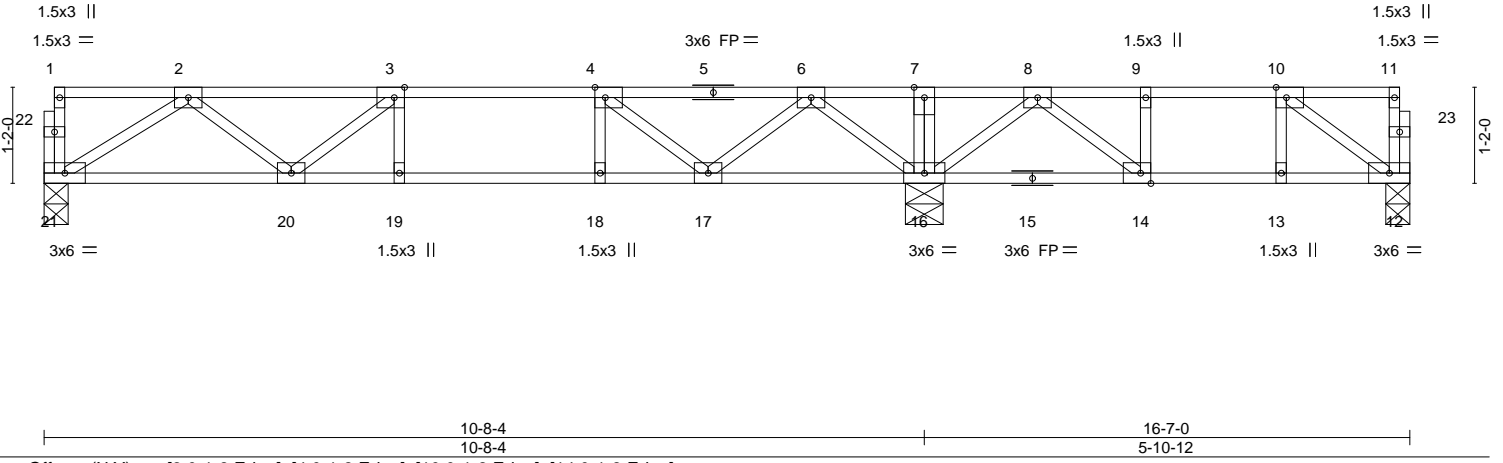




Job	Truss	Truss Type	Qty	Ply	Lot 166 Duncans Creek	62601236
J0124-0332	2F08	Floor	1	1		

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Dec 18 05:09:20 2023 Page 1  
 ID:POCeVkyg?KNuaGv8nieHHzJsMR-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



LOADING (psf)	SPACING-	1-7-3	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.25	Vert(LL)	-0.06	19	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.43	Vert(CT)	-0.08	19	>999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.21	Horz(CT)	0.01	12	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 83 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
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 6-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (size) 21=0-3-8, 12=0-3-8, 16=0-5-8  
 Max Grav 21=436(LC 3), 12=228(LC 7), 16=815(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-841/0, 3-4=-1029/0, 4-6=-673/0, 6-7=0/463, 7-8=0/463, 8-9=-277/6, 9-10=-277/6  
 BOT CHORD 20-21=0/609, 19-20=0/1029, 18-19=0/1029, 17-18=0/1029, 16-17=-32/345, 13-14=-6/277, 12-13=-6/277  
 WEBS 2-21=-721/0, 2-20=0/301, 6-16=-721/0, 6-17=0/451, 4-17=-498/0, 10-12=-339/9, 8-16=-450/0, 8-14=0/302

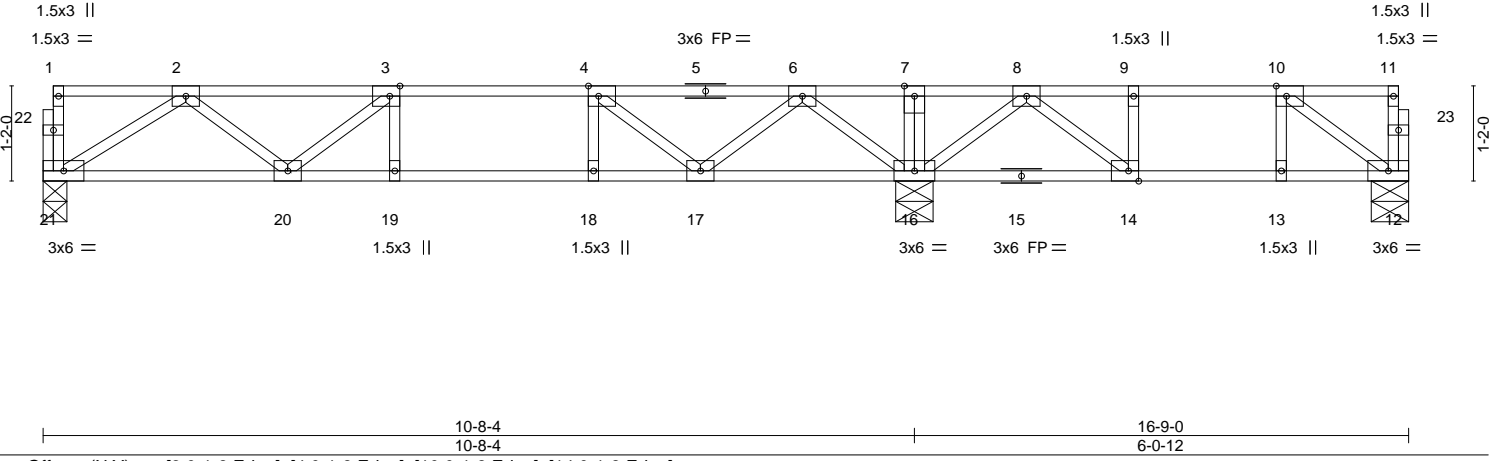
- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are 3x4 MT20 unless otherwise indicated.
  - 3) Plates checked for a plus or minus 1 degree rotation about its center.
  - 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each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



Job	Truss	Truss Type	Qty	Ply	Lot 166 Duncans Creek	62601237
J0124-0332	2F09	Floor	4	1		

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Dec 18 05:09:21 2023 Page 1  
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LOADING (psf)	SPACING-	1-7-3	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.25	Vert(LL)	-0.06	19	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.43	Vert(CT)	-0.08	19	>999	360		
BCLL 0.0	Rep Stress Incr	YES	WB 0.22	Horz(CT)	0.01	12	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-S							
									Weight: 84 lb	FT = 20%F, 11%E

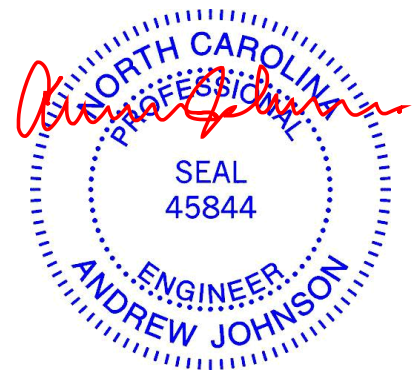
**LUMBER-**  
 TOP CHORD 2x4 SP No.1(flat)  
 BOT CHORD 2x4 SP No.1(flat)  
 WEBS 2x4 SP No.3(flat)

**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, Except: 6-0-0 oc bracing: 16-17,14-16.

**REACTIONS.** (size) 21=0-3-8, 16=0-5-8, 12=0-5-8  
 Max Grav 21=437(LC 3), 16=821(LC 1), 12=232(LC 7)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-843/0, 3-4=-1034/0, 4-6=-680/0, 6-7=0/457, 7-8=0/457, 8-9=-286/0, 9-10=-286/0  
 BOT CHORD 20-21=0/611, 19-20=0/1034, 18-19=0/1034, 17-18=0/1034, 16-17=-44/352, 13-14=0/286, 12-13=0/286  
 WEBS 2-21=-723/0, 2-20=0/302, 6-16=-722/0, 6-17=0/452, 4-17=-499/0, 8-16=-456/0, 8-14=0/312, 10-12=-351/0

- 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.
  - 5) CAUTION, Do not erect truss backwards.



December 18, 2023

Job	Truss	Truss Type	Qty	Ply	Lot 166 Duncans Creek	162601238
J0124-0332	2F10-GR	FLOOR GIRDER	1	1		
						Job Reference (optional)

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Dec 18 05:09:22 2023 Page 1  
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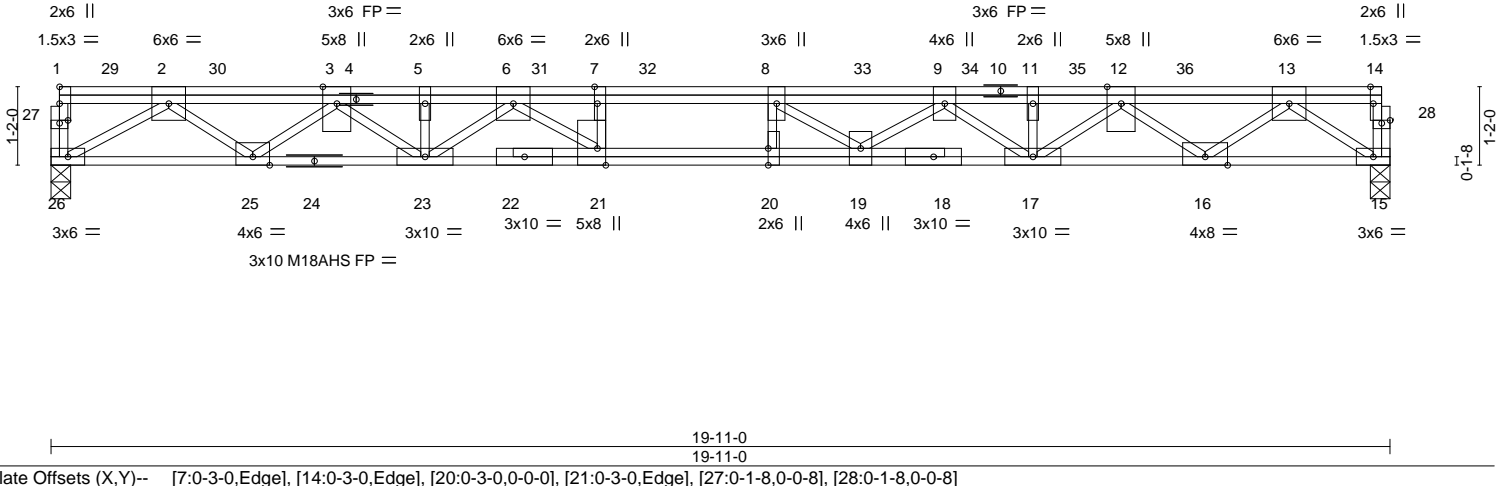
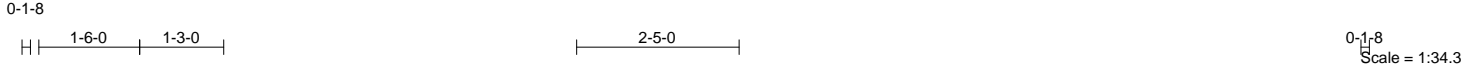


Plate Offsets (X,Y)--	[7:0-3-0,Edge], [14:0-3-0,Edge], [20:0-3-0,0-0-0], [21:0-3-0,Edge], [27:0-1-8,0-0-8], [28:0-1-8,0-0-8]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 1-7-3	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL 1.00	TC 0.26	Vert(LL) -0.33 20 >707 480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.98	Vert(CT) -0.47 20 >500 360	M18AHS	186/179
BCLL 0.0	Rep Stress Incr NO	WB 0.76	Horz(CT) 0.09 15 n/a n/a	Weight: 135 lb FT = 20%F, 11%E	
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S			

**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) 26=0-3-8, 15=0-3-8  
Max Grav 26=1339(LC 1), 15=1309(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-3284/0, 3-5=-5330/0, 5-6=-5330/0, 6-7=-6956/0, 7-8=-6956/0, 8-9=-6522/0, 9-11=-5156/0, 11-12=-5156/0, 12-13=-3032/0  
BOT CHORD 25-26=0/2067, 23-25=0/4440, 21-23=0/6083, 20-21=0/6956, 19-20=0/6956, 17-19=0/6045, 16-17=0/4235, 15-16=0/1777  
WEBS 2-26=-2406/0, 2-25=0/1547, 3-25=-1468/0, 3-23=0/1111, 6-23=-939/0, 6-21=0/1172, 7-21=-491/0, 13-15=-2179/0, 13-16=0/1593, 12-16=-1528/0, 12-17=0/1149, 9-17=-1109/0, 9-19=0/652, 8-19=-660/0

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are MT20 plates 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.
  - 5) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 130 lb down at 0-11-0, 130 lb down at 2-6-3, 130 lb down at 4-1-6, 130 lb down at 5-8-9, 128 lb down at 7-3-12, 79 lb down at 8-10-15, 95 lb down at 10-6-2, 128 lb down at 12-1-5, 128 lb down at 13-8-8, 128 lb down at 15-3-11, and 128 lb down at 16-10-14, and 128 lb down at 18-6-1 on top chord. The design/selection of such connection device(s) is the responsibility of others.
  - 6) 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: 15-26=-8, 1-14=-80  
Concentrated Loads (lb)  
Vert: 3=-78(F) 5=-78(F) 13=-76(F) 8=-76(F) 29=-81(F) 30=-78(F) 31=-76(F) 32=-76(F) 33=-76(F) 34=-76(F) 35=-76(F) 36=-76(F)



Job J0124-0332	Truss 2F11	Truss Type FLOOR	Qty 8	Ply 1	Lot 166 Duncans Creek 162601239
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Dec 18 05:09:23 2023 Page 1  
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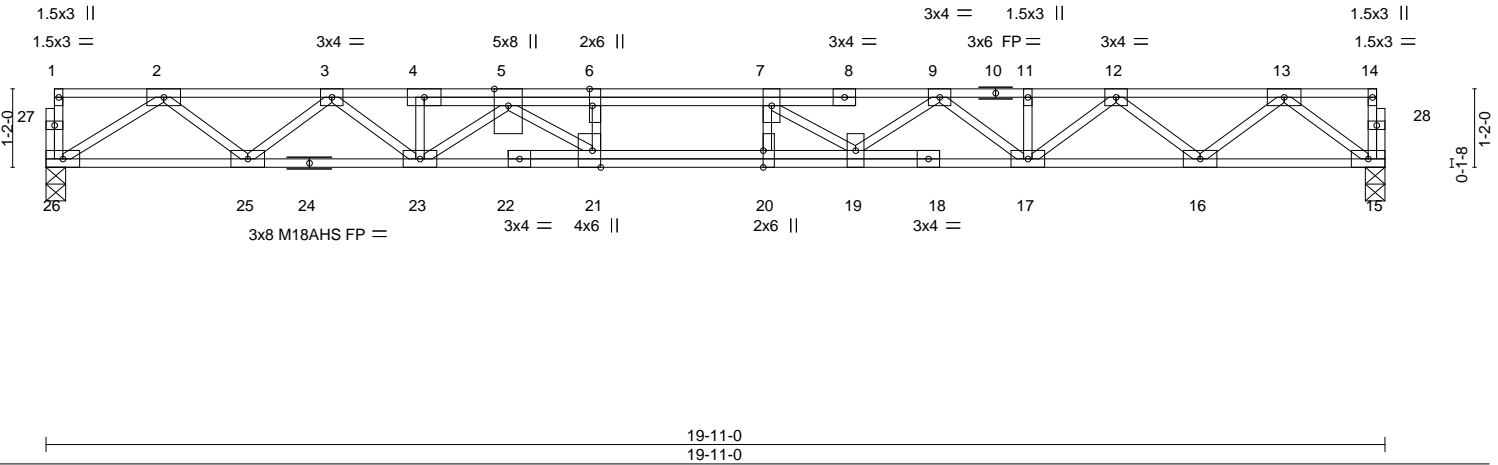


Plate Offsets (X,Y)--	[6:0-3-0,Edge], [20:0-3-0,0-0-0], [21:0-3-0,Edge]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 1-7-3	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL 1.00	TC 0.23	Vert(LL) -0.24 20 >999 480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.52	Vert(CT) -0.32 20 >729 360	M18AHS	186/179
BCLL 0.0	Rep Stress Incr YES	WB 0.48	Horz(CT) 0.05 15 n/a n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S			
				Weight: 117 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) 26=0-3-8, 15=0-3-8  
Max Grav 26=860(LC 1), 15=860(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2012/0, 3-4=-3235/0, 4-5=-3239/0, 5-6=-4476/0, 6-7=-4476/0, 7-9=-4052/0, 9-11=-3147/0, 11-12=-3147/0, 12-13=-1861/0  
 BOT CHORD 25-26=0/1263, 23-25=0/2714, 21-23=0/3915, 20-21=0/4476, 19-20=0/4476, 17-19=0/3648, 16-17=0/2594, 15-16=0/1087  
 WEBS 2-26=-1498/0, 2-25=0/974, 3-25=-914/0, 3-23=0/665, 13-15=-1362/0, 13-16=0/1007, 12-16=-955/0, 12-17=0/706, 9-17=-639/0, 9-19=0/558, 7-19=-717/0, 5-23=-848/0, 5-21=0/903, 6-21=-367/0

- 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) 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 J0124-0332	Truss 2F11A	Truss Type Floor	Qty 2	Ply 1	Lot 166 Duncans Creek 162601240
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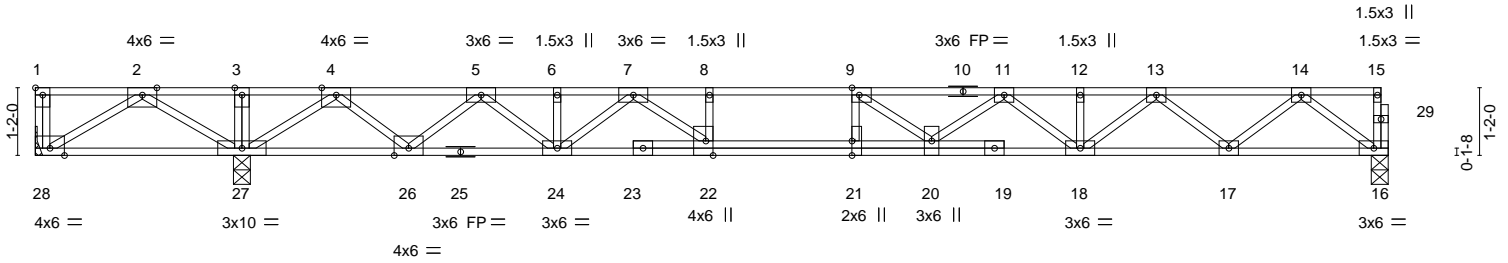
8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Dec 18 05:09:25 2023 Page 1

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Job Reference (optional)



Scale = 1:39.7



3-6-12	23-4-0
3-6-12	19-9-4

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [9:0-1-8,Edge], [21:0-3-0,0-0-0], [22:0-3-0,Edge]

<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 0.58	Vert(LL)	-0.26	20-21	>916	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.72	Vert(CT)	-0.35	20-21	>669		
BCLL 0.0	Rep Stress Incr	YES	WB 0.71	Horz(CT)	0.03	16	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 127 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, Except: 6-0-0 oc bracing: 27-28,26-27.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (size) 28=Mechanical, 27=0-3-8, 16=0-3-8  
 Max Uplift 28=757(LC 4)  
 Max Grav 27=1957(LC 1), 16=720(LC 4)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=0/2592, 3-4=0/2592, 4-5=0/266, 5-6=-1328/0, 6-7=-1328/0, 7-8=-2750/0, 8-9=-2750/0, 9-11=-2920/0, 11-12=-2443/0, 12-13=-2443/0, 13-14=-1510/0  
 BOT CHORD 27-28=-1280/0, 26-27=-1147/0, 24-26=0/638, 22-24=0/2033, 21-22=0/2750, 20-21=0/2750, 18-20=0/2815, 17-18=0/2077, 16-17=0/903  
 WEBS 2-28=0/1497, 2-27=-1656/0, 4-27=-1724/0, 4-26=0/1187, 5-26=-1125/0, 5-24=0/882, 7-24=-896/0, 7-22=0/969, 8-22=-260/0, 14-16=-1131/0, 14-17=0/790, 13-17=-739/0, 13-18=0/466, 11-18=-476/0, 11-20=0/259, 9-20=-209/412, 9-21=-382/6

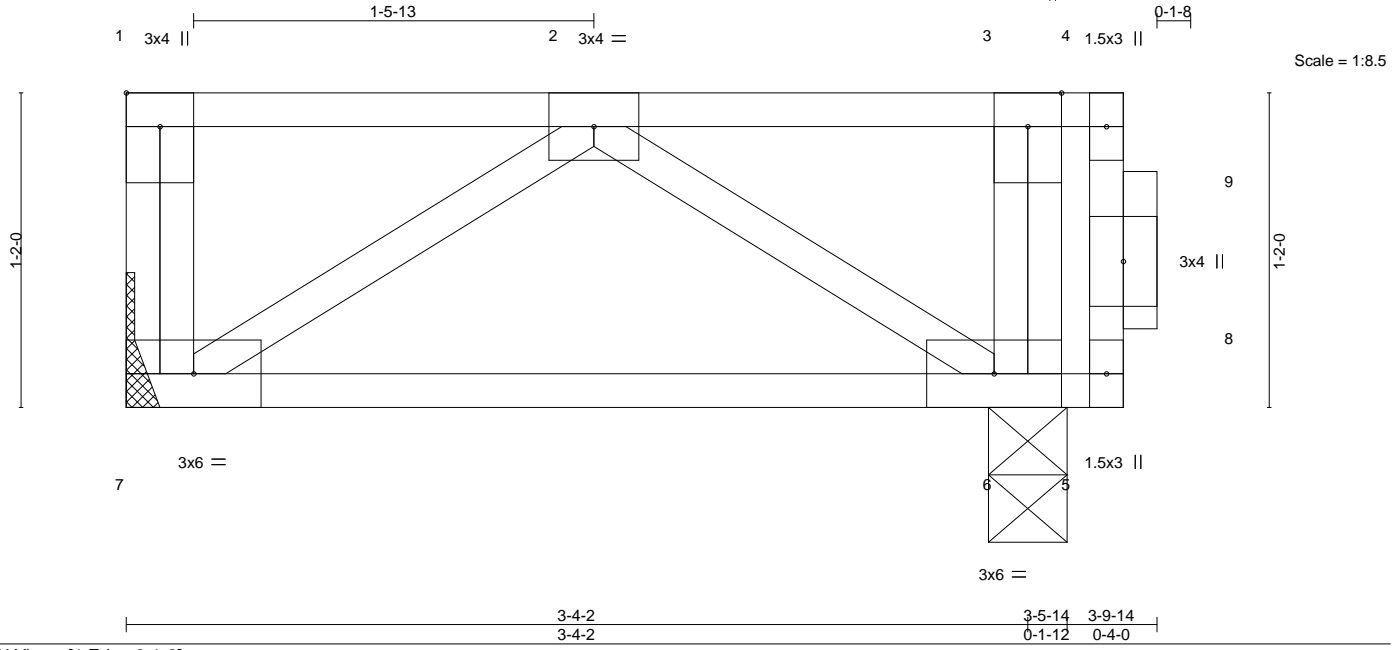
- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are 3x4 MT20 unless otherwise indicated.
  - 3) Plates checked for a plus or minus 1 degree rotation about its center.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 28=757.
  - 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.



Job J0124-0332	Truss 2F12	Truss Type Floor	Qty 8	Ply 1	Lot 166 Duncans Creek Job Reference (optional)	162601241
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Dec 18 05:09:26 2023 Page 1  
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 40.0	1-7-3	TC 0.11	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.06	Vert(LL) 0.00 7 >999 480		
BCLL 0.0	Lumber DOL 1.00	WB 0.23	Vert(CT) -0.01 6-7 >999 360		
BCDL 5.0	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.00 6 n/a n/a		
	Code IRC2015/TPI2014			Weight: 24 lb	FT = 20%F, 11%E

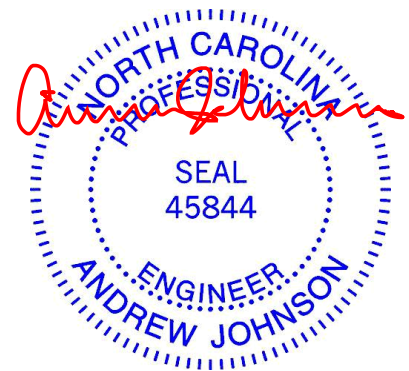
LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 3-9-14 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (size) 7=Mechanical, 6=0-3-8  
Max Grav 7=140(LC 1), 6=2168(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 3-6=-2047/0

- NOTES-**
- 1) Plates checked for a plus or minus 1 degree rotation about its center.
  - 2) Refer to girder(s) for truss to truss connections.
  - 3) Magnitude of user added load(s) on this truss have been applied uniformly across all gravity load cases with no adjustments.
  - 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.

**LOAD CASE(S)** Standard  
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 5-7=-8, 1-4=-80  
Concentrated Loads (lb)  
Vert: 3=-2000

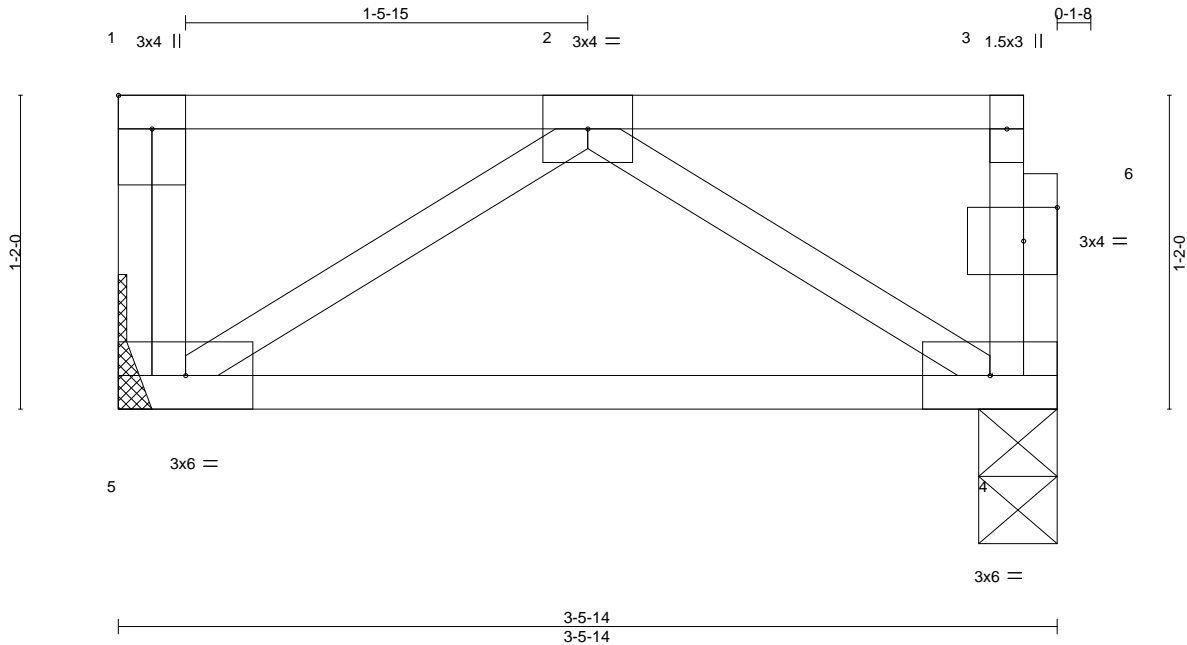


December 18, 2023

Job J0124-0332	Truss 2F13	Truss Type Floor	Qty 4	Ply 1	Lot 166 Duncans Creek Job Reference (optional)	162601242
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Dec 18 05:09:26 2023 Page 1  
ID:POCeVkyg?KNuaGv8nieIHzJsMR-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:8.6

Plate Offsets (X,Y)--	[1:Edge,0-1-8], [6:0-1-8,0-1-8]				
<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 0.09	Vert(LL) 0.00 5 **** 480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.08	Vert(CT) -0.01 4-5 >999 360		
BCLL 0.0	Rep Stress Incr YES	WB 0.04	Horz(CT) 0.00 4 n/a n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-P		Weight: 21 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 3-5-14 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) 5=Mechanical, 4=0-3-8  
Max Grav 5=142(LC 1), 4=137(LC 1)

**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) Refer to girder(s) for truss to truss connections.
  - 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.
  - 4) CAUTION, Do not erect truss backwards.



December 18, 2023

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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/TP1 Quality Criteria and DSB-22</b> available from Truss Plate Institute (<a href="http://www.tpinst.org">www.tpinst.org</a>) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (<a href="http://www.sbcacomponents.com">www.sbcacomponents.com</a>)</p>	<p>ENGINEERING BY</p> <p><b>TRENCO</b></p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job J0124-0332	Truss 2F14-GR	Truss Type FLOOR GIRDER	Qty 1	Ply 1	Lot 166 Duncans Creek Job Reference (optional)	162601243
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Dec 18 05:09:27 2023 Page 1  
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0-1-8

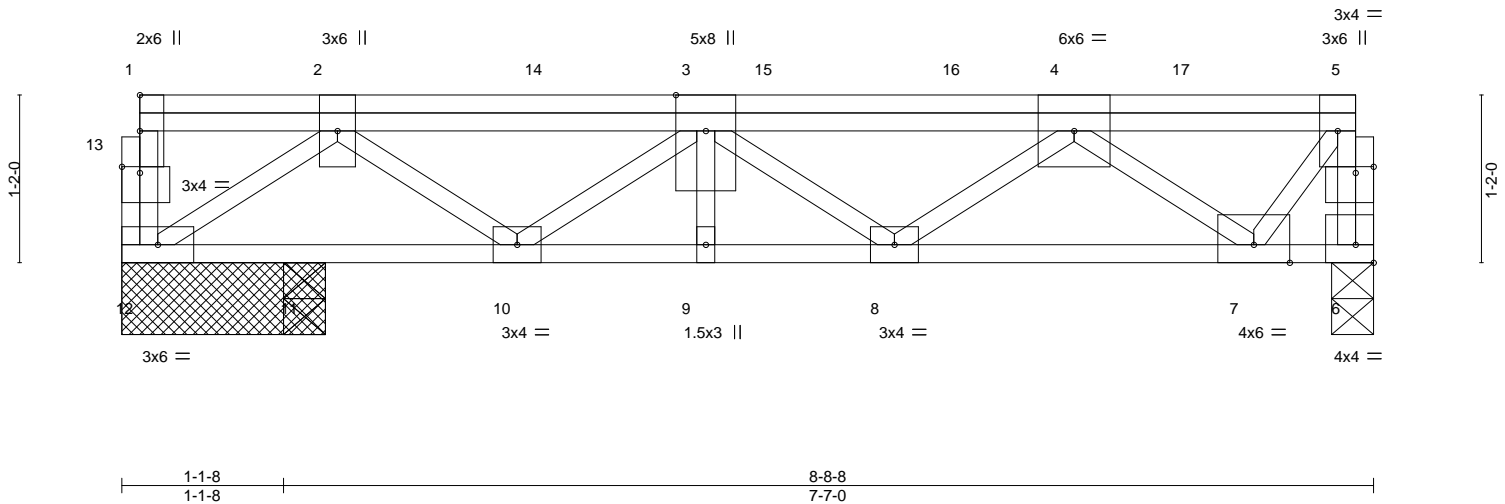
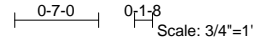
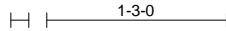


Plate Offsets (X,Y)--	[5:0-1-8,0-0-8], [6:Edge,0-1-8], [13:0-1-8,0-0-8]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 1-7-3	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL 1.00	TC 0.47	Vert(LL) -0.03 9 >999 480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.44	Vert(CT) -0.04 9 >999 360		
BCLL 0.0	Rep Stress Incr NO	WB 0.60	Horz(CT) 0.01 6 n/a n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-P		Weight: 59 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 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 6-7.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (size) 6=0-3-8, 12=1-5-0, 11=0-3-8  
Max Uplift 6=-944(LC 9), 12=-29(LC 9), 11=-12(LC 9)  
Max Grav 6=581(LC 4), 12=705(LC 1), 11=68(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 5-6=-581/936, 2-3=-1362/425, 3-4=-1420/1175, 4-5=-388/559  
BOT CHORD 11-12=-96/990, 10-11=-96/990, 9-10=-810/1796, 8-9=-810/1796, 7-8=-1548/1037  
WEBS 2-12=-1213/120, 2-10=-417/483, 3-10=-551/481, 3-8=-571/0, 4-8=0/588, 4-7=-825/1259, 5-7=-937/652

- NOTES-**
- Unbalanced floor live loads have been considered for this design.
  - Plates checked for a plus or minus 1 degree rotation about its center.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 11 except (jt=lb) 6=944.
  - 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.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 207 lb down at 1-4-7, 229 lb down at 2-11-10, 229 lb down at 4-6-13, 174 lb down at 4-10-4, 821 lb up at 5-10-8, 229 lb down at 6-2-0, and 821 lb up at 7-5-11, and 226 lb down at 7-9-3 on top chord. The design/selection of such connection device(s) is the responsibility of others.
  - 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: 6-12=-8, 1-5=-80  
Concentrated Loads (lb)  
Vert: 2=-178(F) 14=-178(F) 15=-288(F=-178, B=-110) 16=13(F=-178, B=191) 17=16(F=-175, B=191)

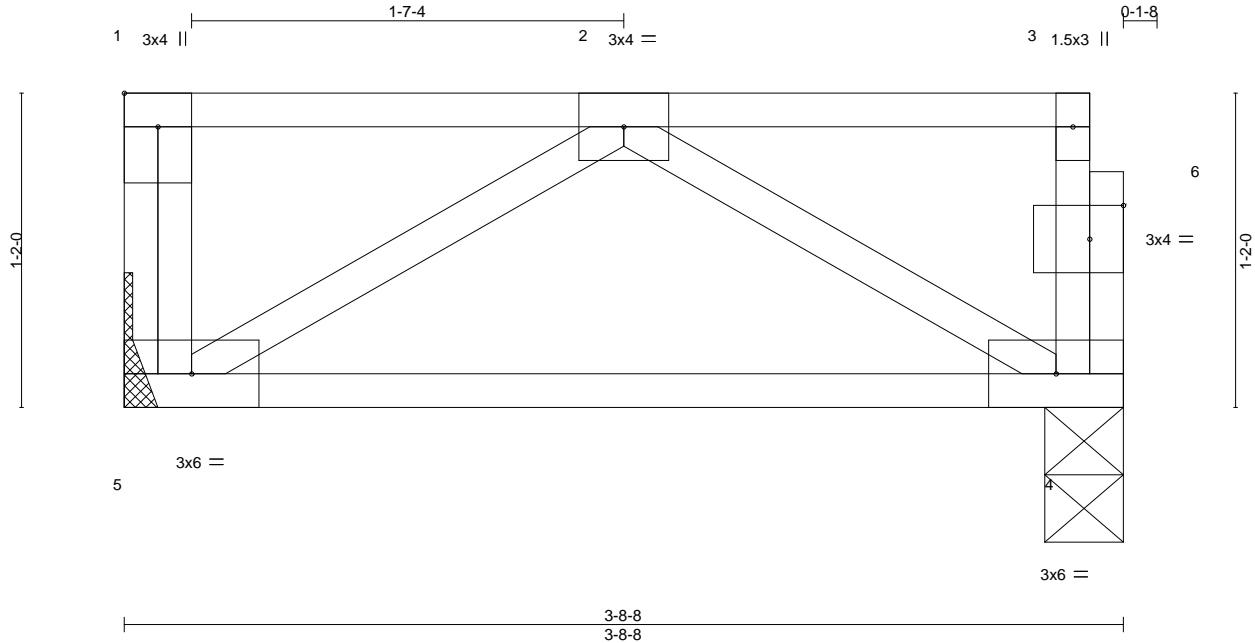




Job J0124-0332	Truss 2F15	Truss Type Floor	Qty 1	Ply 1	Lot 166 Duncans Creek Job Reference (optional)	162601244
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Dec 18 05:09:28 2023 Page 1  
ID:POCeVkyg?KNuaGv8nieHHzJsMR-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:8.6

Plate Offsets (X,Y)--	[1:Edge,0-1-8], [6:0-1-8,0-1-8]				
<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 0.13	Vert(LL) 0.00 5 **** 480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.11	Vert(CT) -0.02 4-5 >999 360		
BCLL 0.0	Rep Stress Incr YES	WB 0.05	Horz(CT) 0.00 4 n/a n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-P		Weight: 22 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 3-8-8 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)	

**REACTIONS.** (size) 5=Mechanical, 4=0-3-8  
Max Grav 5=190(LC 1), 4=184(LC 1)

**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) Refer to girder(s) for truss to truss connections.
  - 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.
  - 4) CAUTION, Do not erect truss backwards.



December 18, 2023

Job J0124-0332	Truss 2FKW1	Truss Type Floor Supported Gable	Qty 1	Ply 1	Lot 166 Duncans Creek Job Reference (optional)	162601245
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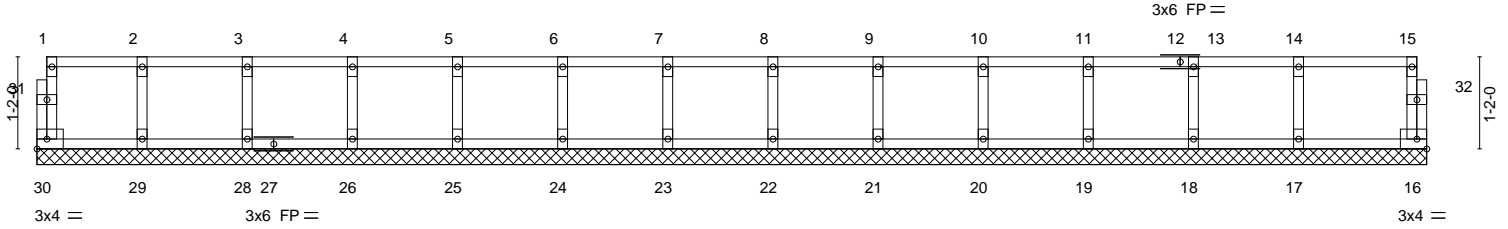
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8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Dec 18 05:09:29 2023 Page 1  
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0-1/8

0-1/8

Scale = 1:29.2



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(CT)	n/a	-	n/a	999	Weight: 73 lb FT = 20%F, 11%E		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	16	n/a	n/a			
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-R									

LUMBER-		BRACING-	
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)		
OTHERS	2x4 SP No.3(flat)		

**REACTIONS.** All bearings 17-7-8.  
(lb) - Max Grav All reactions 250 lb or less at joint(s) 30, 16, 29, 28, 26, 25, 24, 23, 22, 21, 20, 19, 18, 17

**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.



Job	Truss	Truss Type	Qty	Ply	Lot 166 Duncans Creek
J0124-0332	2FKW2	Floor Supported Gable	1	1	162601246
					Job Reference (optional)

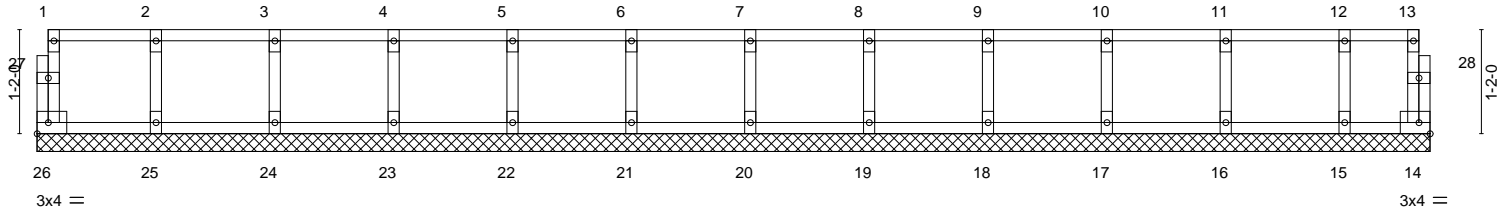
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Dec 18 05:09:30 2023 Page 1  
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0-1/8

0-1/8

Scale = 1:25.8



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL	40.0	Plate Grip DOL	2-0-0	TC	0.06	in	(loc)	l/defl	L/d	MT20	244/190		
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(LL)	n/a	-	n/a				
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Vert(CT)	n/a	-	n/a				
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-R		Horz(CT)	0.00	14	n/a				
										Weight: 66 lb	FT = 20%F, 11%E		

LUMBER-		BRACING-	
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)		
OTHERS	2x4 SP No.3(flat)		

**REACTIONS.** All bearings 15-7-8.  
 (lb) - Max Grav All reactions 250 lb or less at joint(s) 26, 14, 25, 24, 23, 22, 21, 20, 19, 18, 17, 16, 15

**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.



December 18, 2023

Job J0124-0332	Truss 2FKW3	Truss Type Floor Supported Gable	Qty 1	Ply 1	Lot 166 Duncans Creek Job Reference (optional)	162601247
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Dec 18 05:09:31 2023 Page 1  
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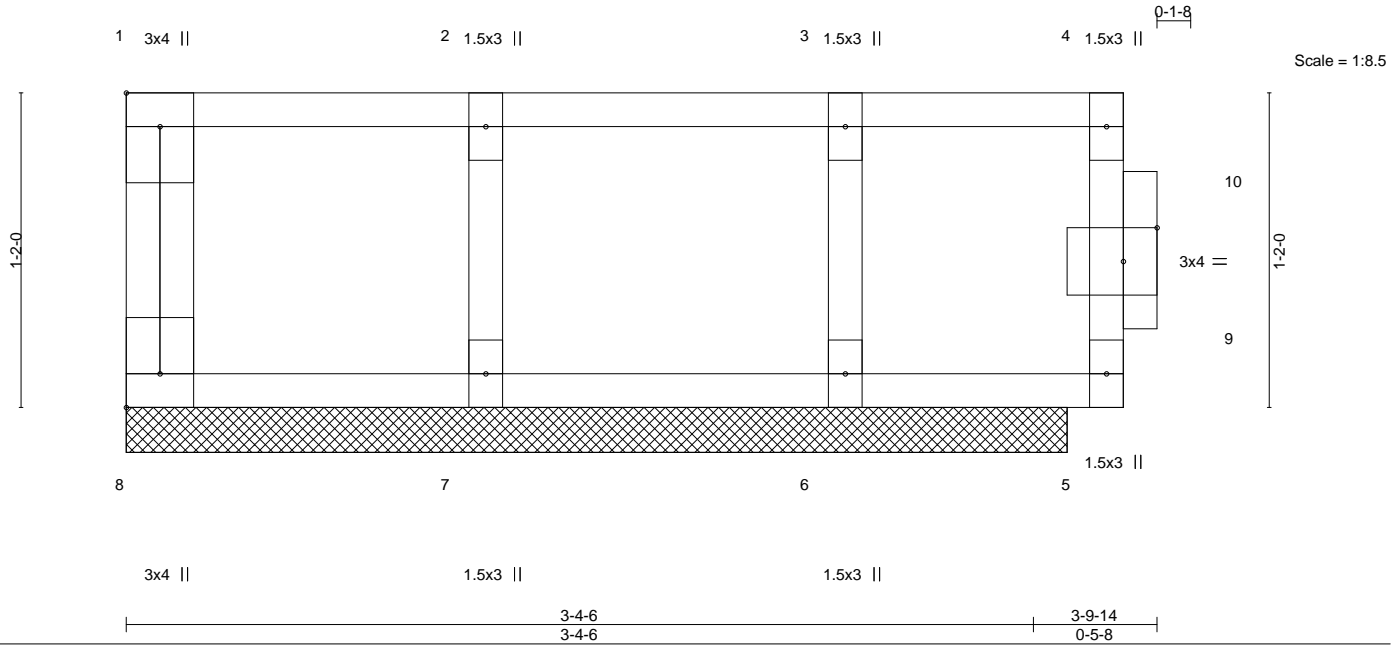


Plate Offsets (X,Y)--	[1:Edge,0-1-8], [8:Edge,0-1-8], [9:0-1-8,0-1-8]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL 1.00	TC 0.30	Vert(LL) n/a - n/a 999	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.18	Vert(CT) n/a - n/a 999		
BCLL 0.0	Rep Stress Incr NO	WB 0.07	Horz(CT) -0.00 6 n/a n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-R			
				Weight: 19 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 3-9-14 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS.** (size) 8=3-5-14, 7=3-5-14, 6=3-5-14  
Max Grav 8=24(LC 1), 7=119(LC 1), 6=418(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 3-6=-310/0

- NOTES-**
- 1) Plates checked for a plus or minus 1 degree rotation about its center.
  - 2) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - 3) Gable studs spaced at 1-4-0 oc.
  - 4) N/A
  - 5) Magnitude of user added load(s) on this truss have been applied uniformly across all gravity load cases with no adjustments.
  - 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.

**LOAD CASE(S)** Standard  
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 5-8=-10, 1-3=-100, 3-4=-280



December 18, 2023

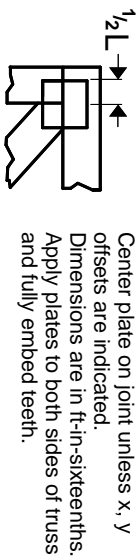
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**  
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before 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/TP1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



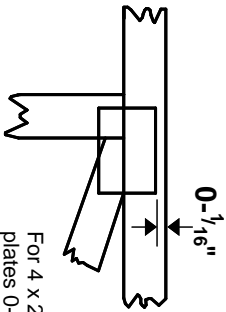
818 Soundside Road  
Edenton, NC 27932

# 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 software or upon request.

## PLATE SIZE

4 X 4

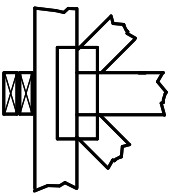
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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/letter where bearings occur. Min size shown is for crushing only.

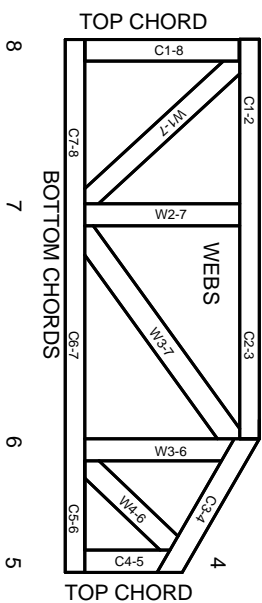
## Industry Standards:

ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-22: Design Standard for Bracing.  
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System



1 TOP CHORDS  
2 JOINT ID TYP.



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-1988, ESR-2362, ESR-2685, ESR-3282  
ESR-4722, ESL-1388

# Design General Notes

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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# 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.
21. The design does not take into account any dynamic or other loads other than those expressly stated.

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