

Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: J0322-1382  
Southern Touch / 17 Mitchell Manor

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: I51219981 thru I51219993

My license renewal date for the state of North Carolina is December 31, 2022.

North Carolina COA: C-0844



April 7, 2022

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	Truss	Truss Type	Qty	Ply	Southern Touch / 17 Mitchell Manor	I51219981
J0322-1382	F1	Floor	3	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Apr 6 14:24:25 2022 Page 1  
ID:z9tQeuaeEwTQ6FgPNEM81tzKtIE-mgpEG4gQoqbAdufvcUE43nCMrTAS49mntnUY5bizTPkK

0-1-8

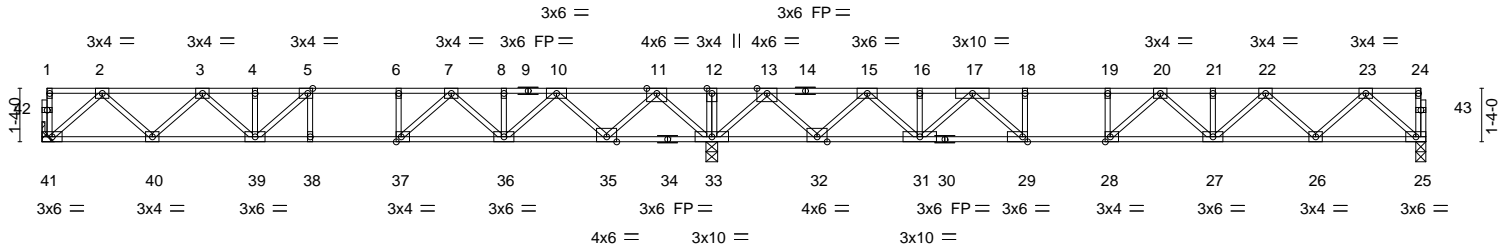


Plate Offsets (X,Y)--	[5:0-1-8,Edge], [28:0-1-8,Edge], [29:0-1-8,Edge], [37:0-1-8,Edge]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.89	Vert(LL)	-0.20 27-28	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.88	Vert(CT)	-0.28 27-28	>757	360		
BCLL 0.0	Rep Stress Incr	YES	WB 0.60	Horz(CT)	0.05 25	n/a	n/a		
BCDL 5.0	Code	IRC2015/TPI2014	Matrix-S						
								Weight: 181 lb	FT = 20%F, 11%E

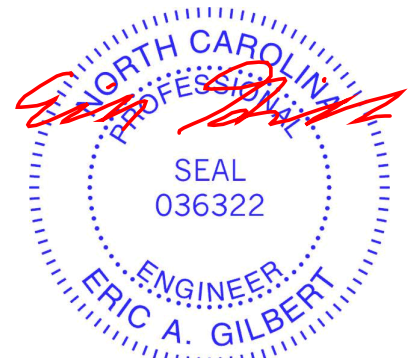
**LUMBER-**  
TOP CHORD 2x4 SP No.1 (flat)  
BOT CHORD 2x4 SP No.1 (flat)  
WEBS 2x4 SP No.3 (flat)

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS.** (size) 41=Mechanical, 33=0-3-8, 25=0-3-0  
Max Grav 41=789(LC 3), 33=2249(LC 1), 25=852(LC 4)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1384/0, 3-4=-2195/0, 4-5=-2195/0, 5-6=-2335/0, 6-7=-2335/0, 7-8=-1590/423,  
8-10=-1590/423, 10-11=-292/959, 11-12=0/2550, 12-13=0/2550, 13-15=-341/872,  
15-16=-1759/327, 16-17=-1759/327, 17-18=-2687/0, 18-19=-2687/0, 19-20=-2687/0,  
20-21=-2465/0, 21-22=-2465/0, 22-23=-1518/0  
BOT CHORD 40-41=0/847, 39-40=0/1894, 38-39=0/2335, 37-38=0/2335, 36-37=-209/2008,  
35-36=-676/1040, 33-35=-1467/0, 32-33=-1368/0, 31-32=-585/1146, 29-31=-112/2243,  
28-29=0/2687, 27-28=0/2689, 26-27=0/2097, 25-26=0/917  
WEBS 2-41=-1126/0, 2-40=0/747, 3-40=-708/0, 3-39=0/410, 5-39=-216/325, 11-33=-1564/0,  
11-35=0/1181, 10-35=-1137/0, 10-36=0/851, 7-36=-680/0, 7-37=0/826, 6-37=-390/0,  
13-33=-1638/0, 13-32=0/1251, 15-32=-1204/0, 15-31=0/922, 17-31=-753/0, 17-29=0/942,  
18-29=-454/0, 23-25=-1218/0, 23-26=0/836, 22-26=-806/0, 22-27=0/499,  
20-27=-305/45, 20-28=-406/158

- 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) 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 7, 2022

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Southern Touch / 17 Mitchell Manor	I51219982
J0322-1382	F1A	GABLE	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Apr 16 2021 MiTek Industries, Inc. Wed Apr 6 14:24:26 2022 Page 1  
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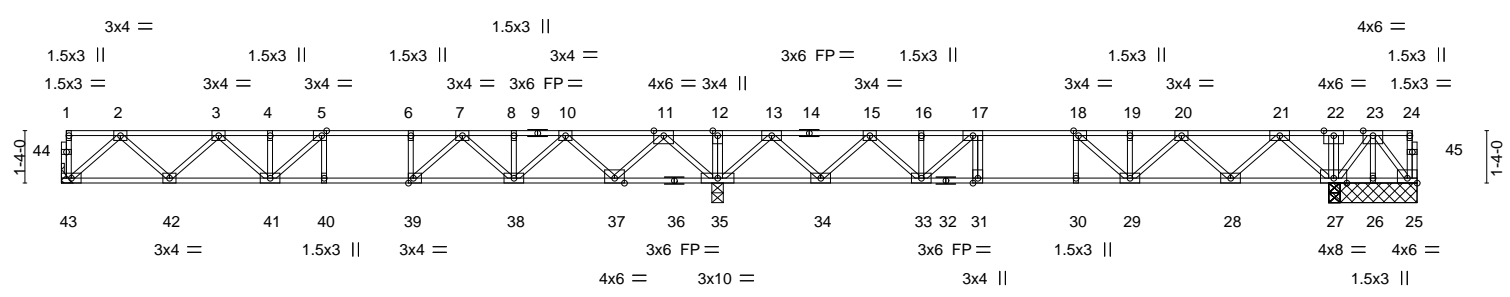


Plate Offsets (X, Y)--	[5:0-1-8,Edge], [18:0-1-8,Edge], [25:Edge,0-1-8], [39:0-1-8,Edge]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.59	Vert(LL)	-0.14	40	>999	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.67	Vert(CT)	-0.19	40	>999		
BCLL 0.0	Rep Stress Incr NO	WB 0.54	Horz(CT)	0.03	35	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S						
							Weight: 186 lb	FT = 20%F, 11%E

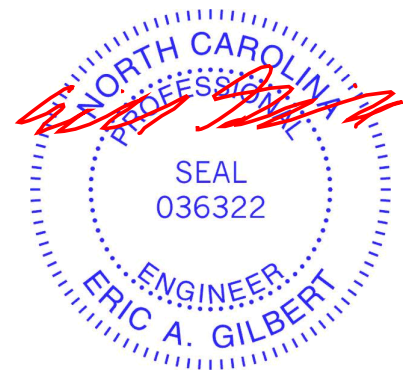
LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1 (flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1 (flat)	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3 (flat)	

**REACTIONS.** All bearings 2-3-0 except (jt=length) 43=Mechanical, 35=0-3-8.  
 (lb) - Max Uplift All uplift 100 lb or less at joint(s) 26 except 25=667(LC 1)  
 Max Grav All reactions 250 lb or less at joint(s) 26 except 43=800(LC 3), 35=1978(LC 1), 27=5511(LC 4), 27=5484(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1409/0, 3-4=-2241/0, 4-5=-2241/0, 5-6=-2407/0, 6-7=-2407/0, 7-8=-1696/150, 8-10=-1696/150, 10-11=-421/628, 11-12=0/2121, 12-13=0/2121, 13-15=-213/857, 15-16=-1129/463, 16-17=-1129/463, 17-18=-1375/205, 18-19=-1053/101, 19-20=-1053/101, 21-22=0/1509, 22-23=0/1483  
 BOT CHORD 42-43=0/860, 41-42=0/1929, 40-41=0/2407, 39-40=0/2407, 38-39=0/2102, 37-38=-372/1158, 35-37=-981/0, 34-35=-1162/0, 33-34=-634/777, 31-33=-205/1375, 30-31=-205/1375, 29-30=-205/1375, 28-29=-143/675, 27-28=-659/0, 26-27=-616/0, 25-26=-616/0  
 WEBS 22-27=-3652/0, 2-43=-1143/0, 2-42=0/763, 3-42=-724/0, 3-41=0/424, 11-35=-1517/0, 11-37=0/1135, 10-37=-1094/0, 10-38=0/805, 7-38=-630/0, 7-39=0/550, 6-39=-289/0, 13-35=-1276/0, 13-34=0/909, 15-34=-871/0, 15-33=0/553, 17-33=-519/0, 21-27=-1229/0, 21-28=0/859, 20-28=-826/0, 20-29=0/514, 18-29=-429/139, 23-27=-1353/0, 23-25=0/972

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are 3x6 MT20 unless otherwise indicated.
  - 3) Plates checked for a plus or minus 1 degree rotation about its center.
  - 4) Gable studs spaced at 1-4-0 oc.
  - 5) Refer to girder(s) for truss to truss connections.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 26 except (jt=lb) 25=667.
  - 7) 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.
  - 8) CAUTION, Do not erect truss backwards.

**LOAD CASE(S)** Standard  
 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00



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Continued on page 2

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b>          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, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	 818 Soundside Road Edenton, NC 27932
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Job	Truss	Truss Type	Qty	Ply	Southern Touch / 17 Mitchell Manor	I51219982
J0322-1382	F1A	GABLE	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Apr 6 14:24:27 2022 Page 2  
 ID:z9tQeuaeEwTQ6FgPNEM81tzKtIE-i3x?hmgkSrutColjvHY9CH9hGJDY37AEo1CfbzTPkI

**LOAD CASE(S)** Standard  
 Uniform Loads (plf)  
 Vert: 25-43=-10, 1-22=-100, 22-24=-225  
 Concentrated Loads (lb)  
 Vert: 22=-3508

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818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Southern Touch / 17 Mitchell Manor	I51219983
J0322-1382	F2	Floor	4	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Apr 6 14:24:28 2022 Page 1  
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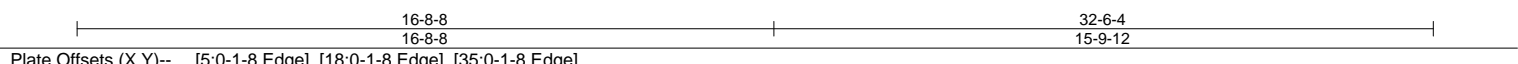
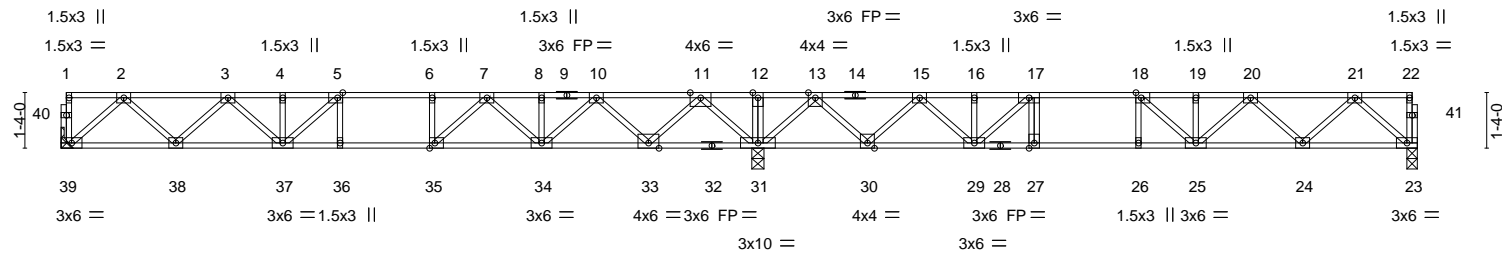
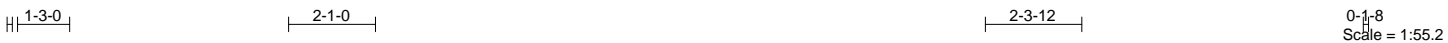


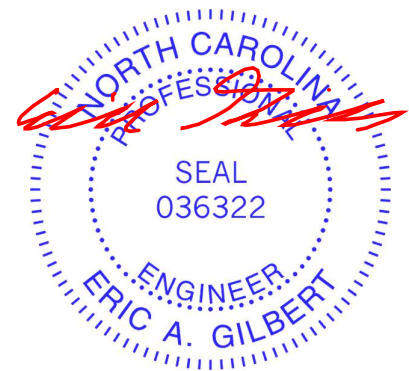
Plate Offsets (X,Y)-- [5:0-1-8,Edge], [18:0-1-8,Edge], [35:0-1-8,Edge]					
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL 1.00	TC 0.78	Vert(LL) -0.17 25-26 >999 480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.93	Vert(CT) -0.23 25-26 >822 360		
BCLL 0.0	Rep Stress Incr YES	WB 0.54	Horz(CT) 0.05 23 n/a n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S			Weight: 172 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 2-2-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (size) 39=Mechanical, 31=0-3-8, 23=0-3-0  
Max Grav 39=802(LC 3), 31=2088(LC 1), 23=762(LC 4)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**TOP CHORD** 2-3=-1412/0, 3-4=-2247/0, 4-5=-2247/0, 5-6=-2415/0, 6-7=-2415/0, 7-8=-1709/111, 8-10=-1709/111, 10-11=-436/580, 11-12=0/2127, 12-13=0/2127, 13-15=-511/762, 15-16=-1632/302, 16-17=-1632/302, 17-18=-2147/0, 18-19=-2087/0, 19-20=-2087/0, 20-21=-1324/0  
**BOT CHORD** 38-39=0/862, 37-38=0/1934, 36-37=0/2415, 35-36=0/2415, 34-35=0/2113, 33-34=-329/1172, 31-33=-1021/0, 30-31=-1159/0, 29-30=-504/1184, 27-29=0/2147, 26-27=0/2147, 25-26=0/2147, 24-25=0/1807, 23-24=0/816  
**WEBS** 2-39=-1145/0, 2-38=0/765, 3-38=-726/0, 3-37=0/425, 5-37=-324/223, 11-31=-1518/0, 11-33=0/1135, 10-33=-1095/0, 10-34=0/806, 7-34=-631/0, 7-35=0/737, 6-35=-352/0, 13-31=-1448/0, 13-30=0/1077, 15-30=-1029/0, 15-29=0/687, 17-29=-1018/0, 21-23=-1084/0, 21-24=0/706, 20-24=-672/0, 20-25=0/381, 18-25=-126/351

- 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 7, 2022

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Job	Truss	Truss Type	Qty	Ply	Southern Touch / 17 Mitchell Manor	I51219984
J0322-1382	F3	Floor	3	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Apr 6 14:24:29 2022 Page 1  
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0-1-8



0-1-8  
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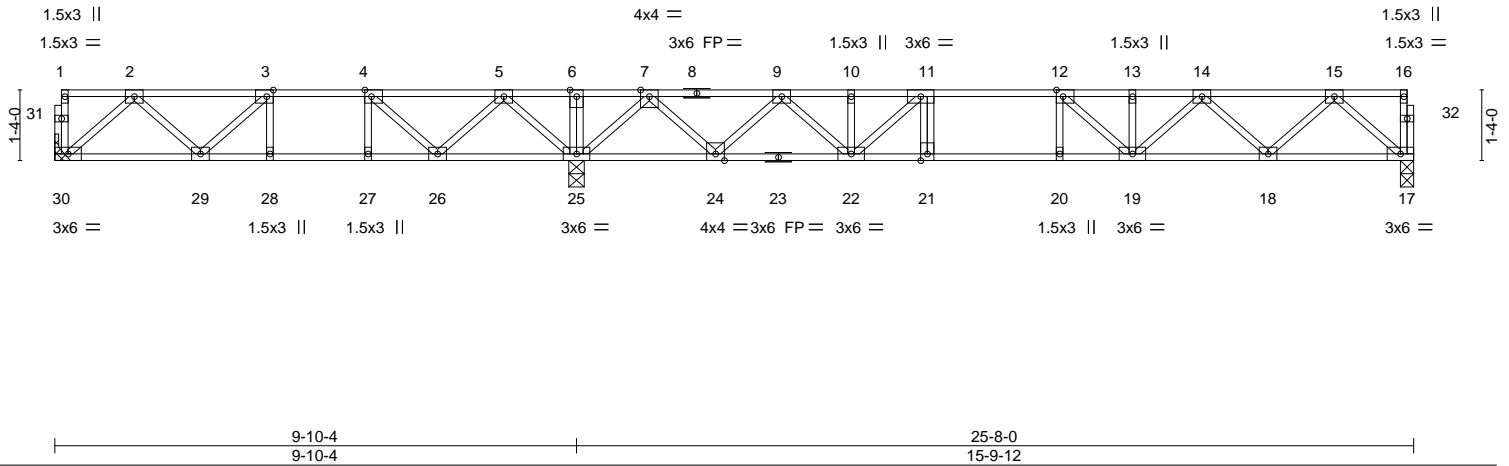


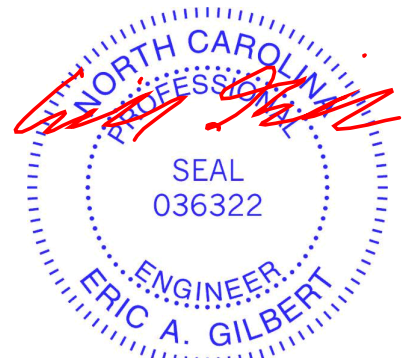
Plate Offsets (X,Y)--		[3:0-1-8,Edge], [4:0-1-8,Edge], [12:0-1-8,Edge]	
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>
TCLL 40.0	2-0-0	TC 0.58	in (loc) l/defl L/d
TCDL 10.0	Plate Grip DOL 1.00	BC 0.78	Vert(LL) -0.16 19-20 >999 480
BCLL 0.0	Lumber DOL 1.00	WB 0.47	Vert(CT) -0.21 19-20 >883 360
BCDL 5.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.04 17 n/a n/a
	Code IRC2015/TPI2014		
			<b>PLATES</b> <b>GRIP</b>
			MT20 244/190
			Weight: 136 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.
WEBS 2x4 SP No.3 (flat)	

**REACTIONS.** (size) 30=Mechanical, 25=0-3-8, 17=0-3-0  
Max Grav 30=472(LC 3), 25=1623(LC 1), 17=789(LC 7)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**TOP CHORD** 2-3=-694/33, 3-4=-841/189, 4-5=-483/471, 5-6=0/1221, 6-7=0/1221, 7-9=-802/0, 9-10=-1875/0, 10-11=-1875/0, 11-12=-2323/0, 12-13=-2198/0, 13-14=-2198/0, 14-15=-1384/0  
**BOT CHORD** 29-30=0/498, 28-29=-189/841, 27-28=-189/841, 26-27=-189/841, 25-26=-693/155, 24-25=-273/129, 22-24=0/1450, 21-22=0/2323, 20-21=0/2323, 19-20=0/2323, 18-19=0/1894, 17-18=0/847  
**WEBS** 2-30=-661/0, 2-29=-82/273, 5-25=-903/0, 5-26=0/604, 4-26=-710/0, 15-17=-1125/0, 15-18=0/746, 14-18=-710/0, 14-19=0/413, 12-19=-365/113, 7-25=-1350/0, 7-24=0/980, 9-24=-939/0, 9-22=0/611, 11-22=-780/0

- 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 7, 2022

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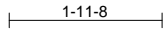
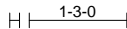


Job	Truss	Truss Type	Qty	Ply	Southern Touch / 17 Mitchell Manor	I51219985
J0322-1382	F5	Floor	2	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Apr 6 14:24:29 2022 Page 1  
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0-1-8



0-1-8  
Scale = 1:29.5

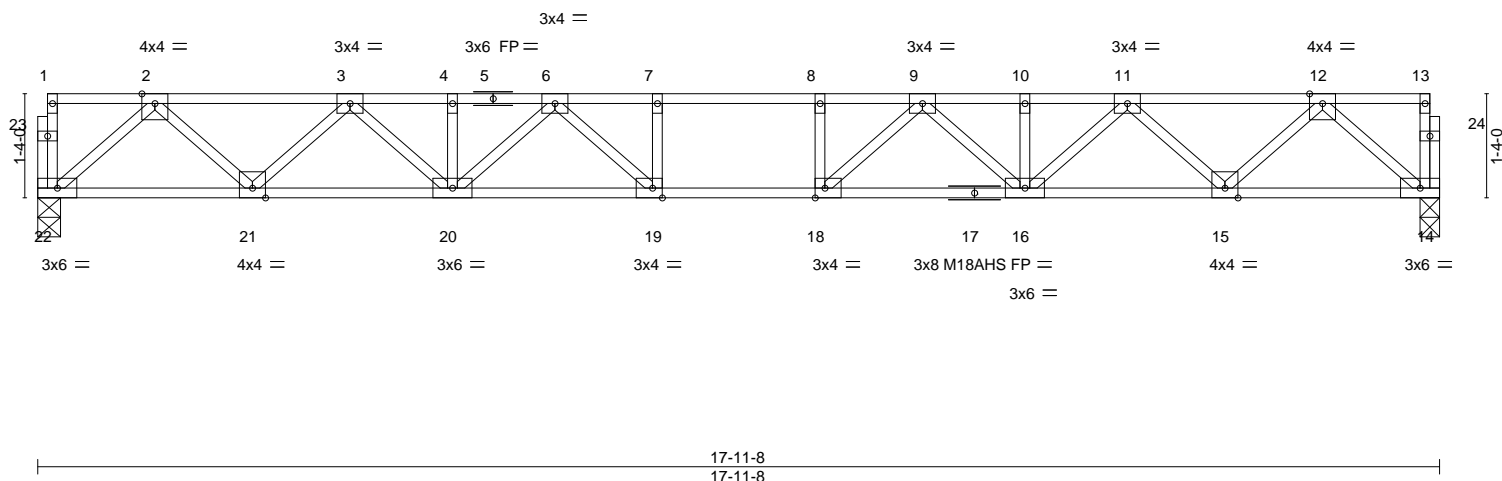


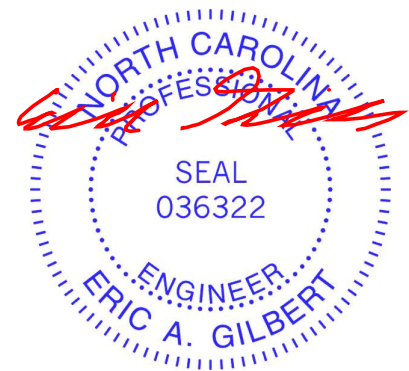
Plate Offsets (X,Y)--	[18:0-1-8,Edge], [19:0-1-8,Edge]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL 1.00	TC 0.53	Vert(LL) -0.22 18-19 >976 480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.75	Vert(CT) -0.30 18-19 >710 360	M18AHS	186/179
BCLL 0.0	Rep Stress Incr YES	WB 0.48	Horz(CT) 0.06 14 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, 14=0-3-0  
Max Grav 22=968(LC 1), 14=968(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1772/0, 3-4=-2955/0, 4-6=-2955/0, 6-7=-3534/0, 7-8=-3534/0, 8-9=-3534/0, 9-10=-2955/0, 10-11=-2955/0, 11-12=-1772/0  
BOT CHORD 21-22=0/1050, 20-21=0/2464, 19-20=0/3311, 18-19=0/3534, 16-18=0/3311, 15-16=0/2464, 14-15=0/1050  
WEBS 2-22=-1395/0, 2-21=0/1004, 3-21=-963/0, 3-20=0/668, 6-20=-483/0, 6-19=-63/605, 7-19=-303/0, 12-14=-1395/0, 12-15=0/1004, 11-15=-963/0, 11-16=0/668, 9-16=-483/0, 9-18=-63/605, 8-18=-303/0

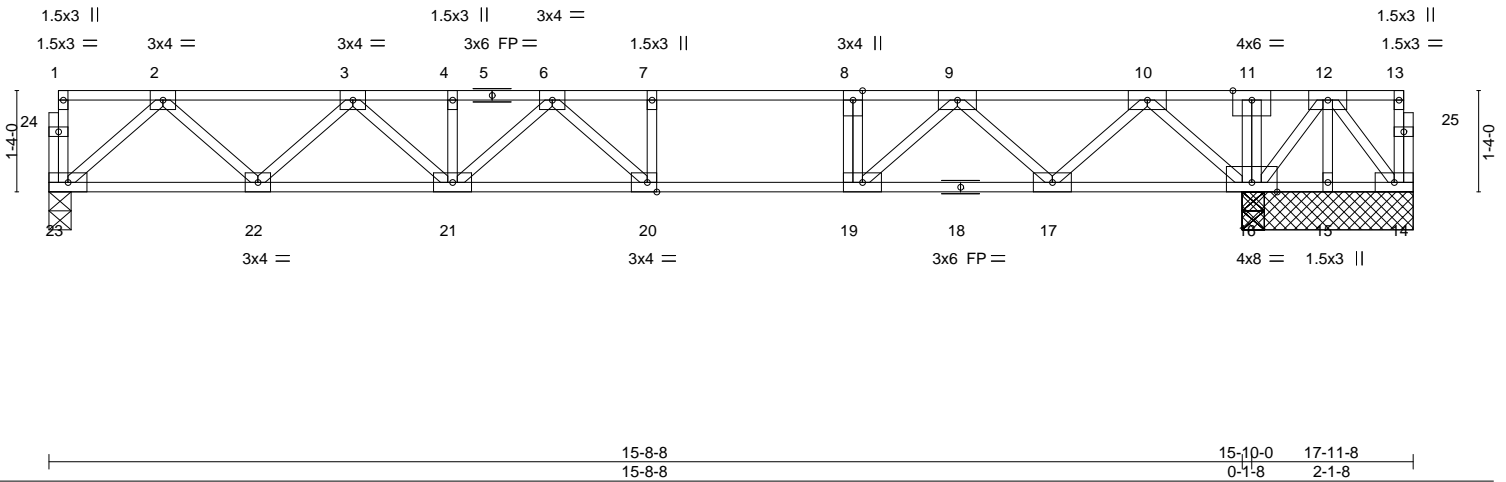
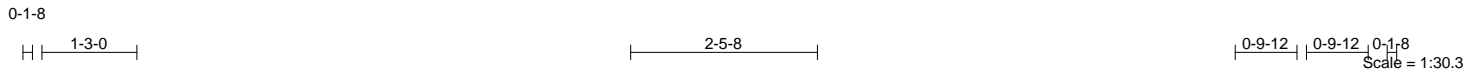
**NOTES-**  
1) Unbalanced floor live loads have been considered for this design.  
2) All plates are MT20 plates unless otherwise indicated.  
3) All plates are 1.5x3 MT20 unless otherwise indicated.  
4) Plates checked for a plus or minus 1 degree rotation about its center.  
5) Recommend 2x6 strongbacks, 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	Truss	Truss Type	Qty	Ply	Southern Touch / 17 Mitchell Manor	I51219986
J0322-1382	F5A	GABLE	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Apr 6 14:24:30 2022 Page 1  
ID:z9tQeuaeEwTQ6FgPNEM81tzKtIE-6ed7JojZcNDSkfXtO1qFmrvgrULwISYcxIGsGvzTPkF



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.62	Vert(LL)	-0.22 20-21 >869 480	MT20	244/190		
TCDL	10.0	Lumber DOL	1.00	BC	0.60	Vert(CT)	-0.30 20-21 >631 360				
BCLL	0.0	Rep Stress Incr	NO	WB	0.43	Horz(CT)	0.03 16 n/a n/a			Weight: 99 lb	FT = 20%F, 11%E
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							

LUMBER-		BRACING-	
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, Except: 6-0-0 oc bracing: 15-16,14-15.
WEBS	2x4 SP No.3(flat)		

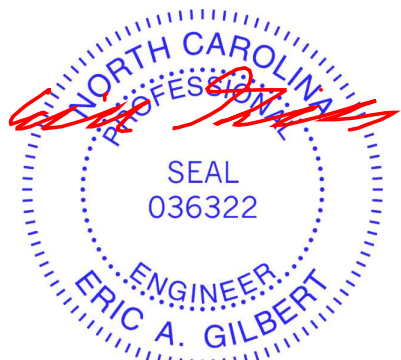
**REACTIONS.** All bearings 2-3-0 except (jt=length) 23=0-3-8.  
 (lb) - Max Uplift All uplift 100 lb or less at joint(s) except 14=-179(LC 1)  
 Max Grav All reactions 250 lb or less at joint(s) 15 except 23=809(LC 1), 16=4995(LC 1), 16=4995(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1423/0, 3-4=-2292/0, 4-6=-2292/0, 6-7=-2318/0, 7-8=-2318/0, 8-9=-2318/0, 9-10=-974/0, 10-11=0/603, 11-12=0/577  
 BOT CHORD 22-23=0/867, 21-22=0/1967, 20-21=0/2457, 19-20=0/2318, 17-19=0/1636, 16-17=0/357  
 WEBS 11-16=-3643/0, 2-23=-1151/0, 2-22=0/774, 3-22=-756/0, 3-21=0/442, 10-16=-1282/0, 10-17=0/858, 9-17=-921/0, 9-19=0/908, 8-19=-443/0, 12-14=0/338, 12-16=-571/0

- NOTES-**
- All plates are 3x6 MT20 unless otherwise indicated.
  - Plates checked for a plus or minus 1 degree rotation about its center.
  - Gable studs spaced at 1'-4" oc.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 179 lb uplift at joint 14.
  - 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.
  - CAUTION, Do not erect truss backwards.

**LOAD CASE(S)** Standard

- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
 Uniform Loads (plf)  
 Vert: 14-23=-10, 1-11=-100, 11-13=-225  
 Concentrated Loads (lb)  
 Vert: 11=-3527



April 7, 2022

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





Job	Truss	Truss Type	Qty	Ply	Southern Touch / 17 Mitchell Manor	I51219987
J0322-1382	F6	Floor	2	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Apr 6 14:24:31 2022 Page 1  
ID:z9tQeuaeEwTQ6FgPNEM81tzKtIE-aqAVW8kBNgMJLp63ykLUJ2St5ufNUVfM9P?PoMzTPKE

0-1-8



0-1-8  
Scale = 1:26.1

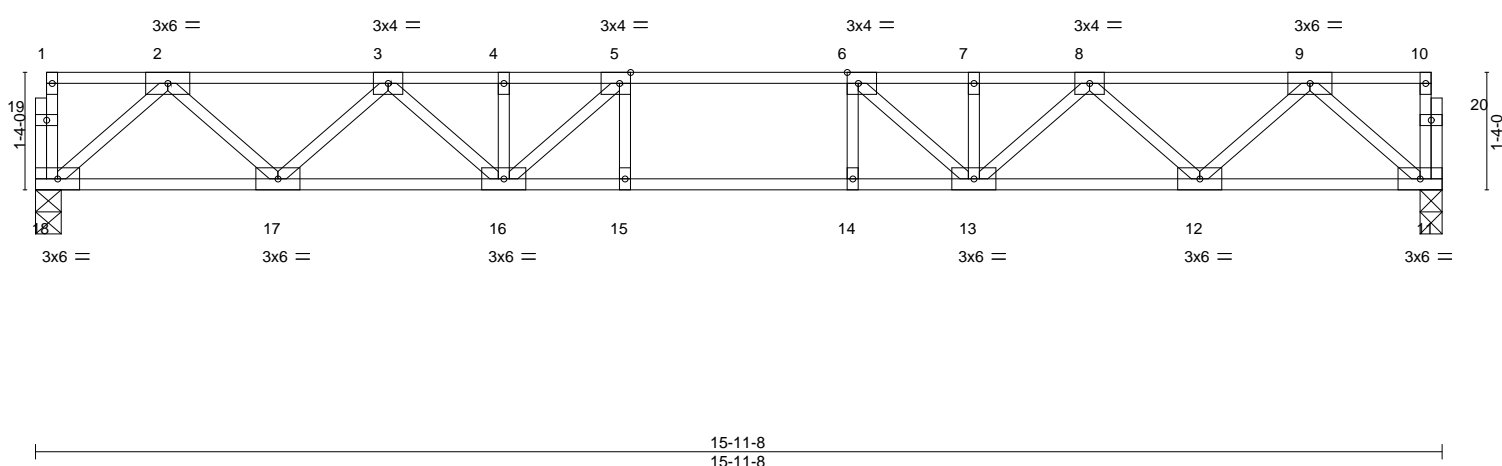


Plate Offsets (X,Y)-- [5:0-1-8,Edge], [6:0-1-8,Edge]

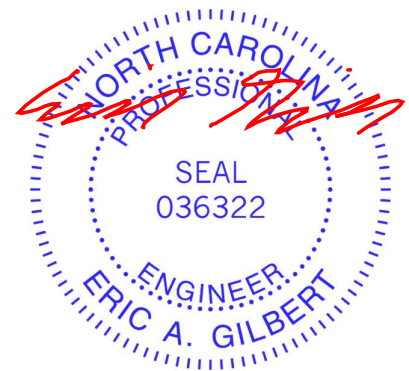
LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	2-0-0	TC 0.50	Vert(LL)	-0.16	15-16	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.72	Vert(CT)	-0.21	15-16	>892		
BCLL 0.0	Lumber DOL 1.00	WB 0.40	Horz(CT)	0.04	11	n/a		
BCDL 5.0	Rep Stress Incr YES	Matrix-S						
	Code IRC2015/TPI2014						Weight: 84 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) 18=0-3-8, 11=0-3-0  
Max Grav 18=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=-1534/0, 3-4=-2477/0, 4-5=-2477/0, 5-6=-2763/0, 6-7=-2477/0, 7-8=-2477/0, 8-9=-1534/0  
BOT CHORD 17-18=0/925, 16-17=0/2113, 15-16=0/2763, 14-15=0/2763, 13-14=0/2763, 12-13=0/2113, 11-12=0/925  
WEBS 2-18=-1229/0, 2-17=0/847, 3-17=-805/0, 3-16=0/494, 5-16=-660/0, 9-11=-1229/0, 9-12=0/847, 8-12=-805/0, 8-13=0/494, 6-13=-660/0

**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) 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 7, 2022

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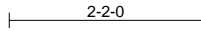
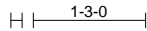
**ENGINEERING BY**  
**TRENCO**  
A MiTek Affiliate  
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Southern Touch / 17 Mitchell Manor	I51219988
J0322-1382	F7	Floor	6	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Apr 6 14:24:31 2022 Page 1  
ID:z9tQeuaeEwTQ6FgPNEM81tzKtIE-aqAVW8kBNgMJLp63ykLUJ2SuDugCUvQm9P?PoMzTPkE

0-1-8



0-1-8  
Scale = 1:25.6

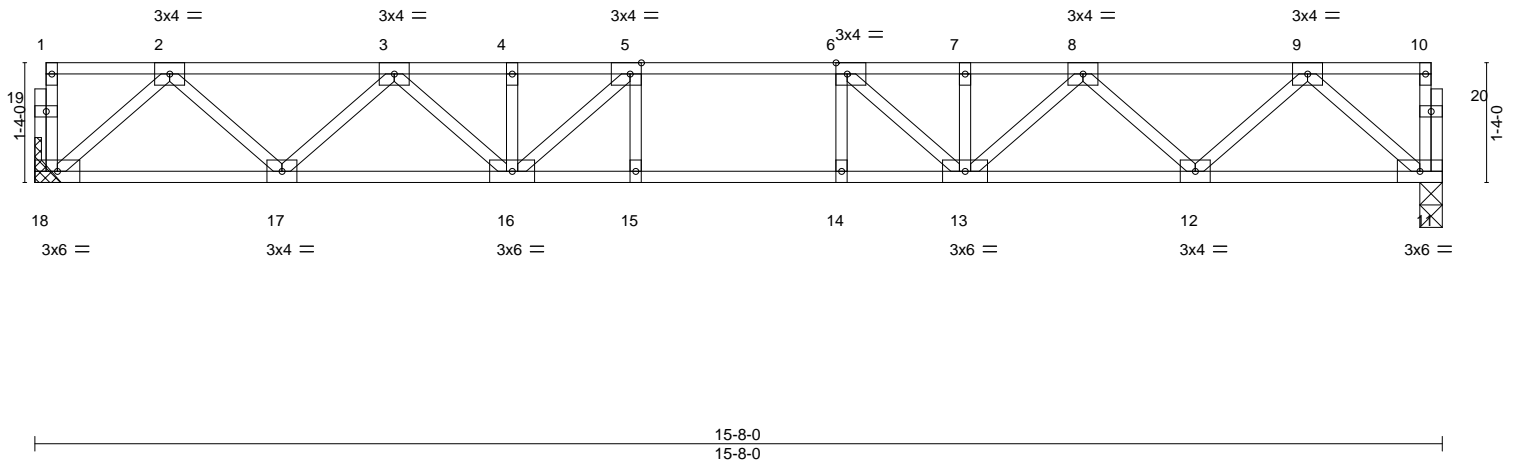


Plate Offsets (X,Y)-- [5:0-1-8,Edge], [6:0-1-8,Edge]

<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 0.43	Vert(LL)	-0.14 13-14	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.67	Vert(CT)	-0.18 15-16	>999	360		
BCLL 0.0	Rep Stress Incr	YES	WB 0.39	Horz(CT)	0.04 11	n/a	n/a		
BCDL 5.0	Code	IRC2015/TPI2014	Matrix-S					Weight: 83 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) 18=Mechanical, 11=0-3-0  
Max Grav 18=842(LC 1), 11=842(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1500/0, 3-4=-2410/0, 4-5=-2410/0, 5-6=-2668/0, 6-7=-2410/0, 7-8=-2410/0, 8-9=-1500/0  
BOT CHORD 17-18=0/907, 16-17=0/2061, 15-16=0/2668, 14-15=0/2668, 13-14=0/2668, 12-13=0/2061, 11-12=0/907  
WEBS 2-18=-1205/0, 2-17=0/824, 3-17=-781/0, 3-16=0/474, 9-11=-1205/0, 9-12=0/824, 8-12=-781/0, 8-13=0/474, 6-13=-606/0, 5-16=-606/0

**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) 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 7, 2022

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

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818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Southern Touch / 17 Mitchell Manor	I51219989
J0322-1382	F8	Floor	6	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Apr 6 14:24:32 2022 Page 1  
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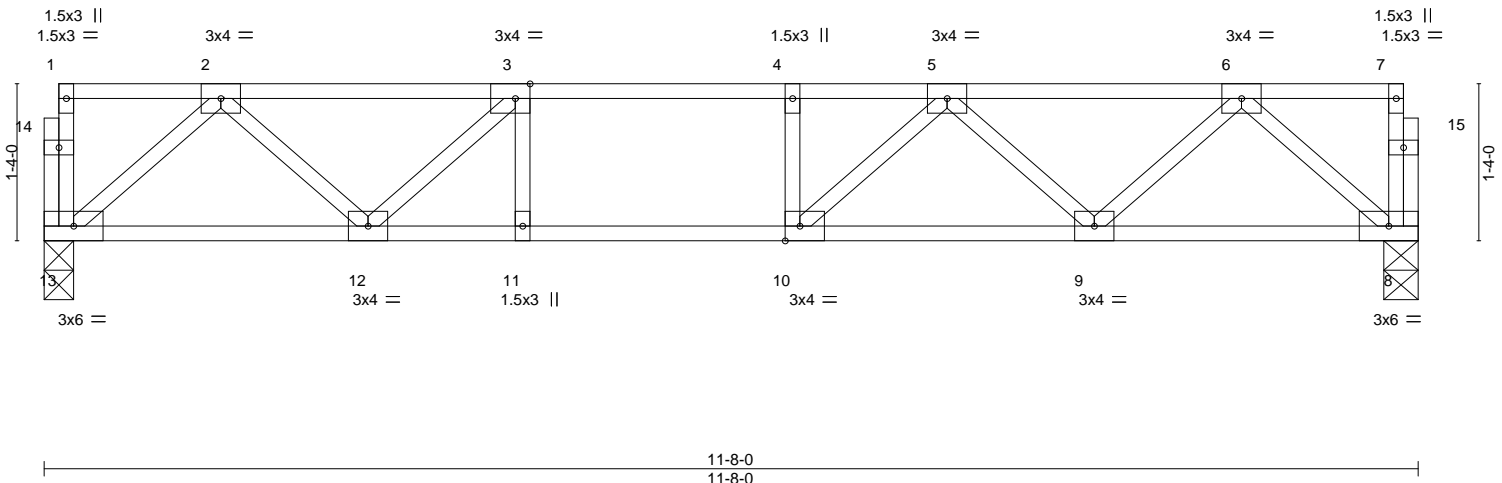


Plate Offsets (X,Y)-- [3:0-1-8,Edge], [10:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	2-0-0	TC 0.45	Vert(LL)	-0.11	9-10	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.57	Vert(CT)	-0.13	9-10	>999		
BCLL 0.0	Lumber DOL 1.00	WB 0.25	Horz(CT)	0.02	8	n/a		
BCDL 5.0	Rep Stress Incr YES	Matrix-S					Weight: 61 lb	FT = 20%F, 11%E
	Code IRC2015/TPI2014							

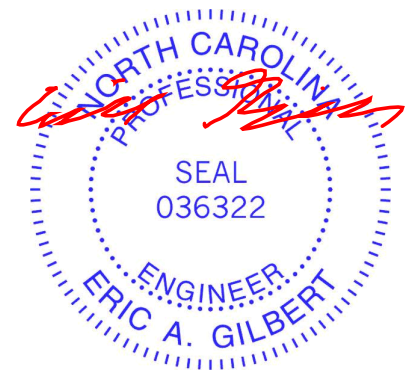
**LUMBER-**  
 TOP CHORD 2x4 SP No.1 (flat)  
 BOT CHORD 2x4 SP No.1 (flat)  
 WEBS 2x4 SP No.3 (flat)

**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) 13=0-3-0, 8=0-3-8  
 Max Grav 13=622(LC 1), 8=622(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1027/0, 3-4=-1436/0, 4-5=-1436/0, 5-6=-1029/0  
 BOT CHORD 12-13=0/646, 11-12=0/1436, 10-11=0/1436, 9-10=0/1353, 8-9=0/660  
 WEBS 2-13=-857/0, 2-12=0/531, 3-12=-577/0, 6-8=-876/0, 6-9=0/514, 5-9=-449/0, 5-10=-38/328

**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.



**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
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Job	Truss	Truss Type	Qty	Ply	Southern Touch / 17 Mitchell Manor	I51219990
J0322-1382	F9	GABLE	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Apr 6 14:24:32 2022 Page 1  
ID:z9tQeuaeEwTQ6FgPNEM81tzKtIE-21kukTlp8\_UAzzhFWSsjrG?5gH0nDK6vO3lyKozTPkD

0-1-8



0-1-8  
Scale = 1:19.0

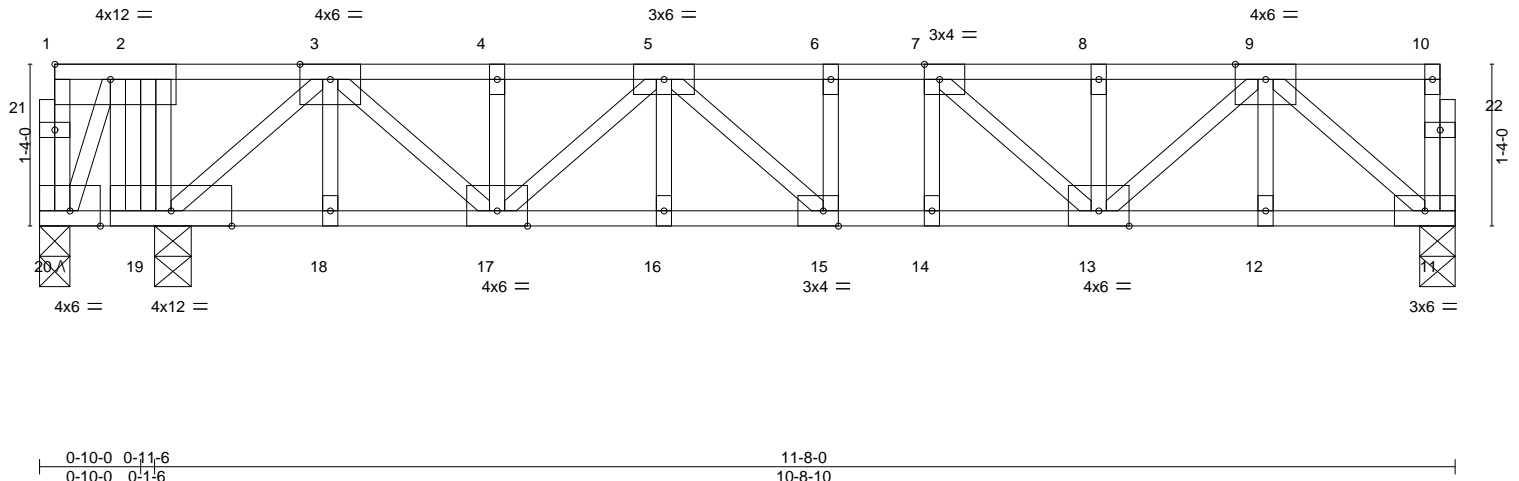


Plate Offsets (X,Y)--		[1:Edge,0-1-8], [7:0-1-8,Edge], [15:0-1-8,Edge]	
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>
TCLL 40.0	2-0-0	TC 0.32	in (loc) l/defl L/d
TCDL 10.0	Plate Grip DOL 1.00	BC 0.64	Vert(LL) -0.07 15-16 >999 480
BCLL 0.0	Lumber DOL 1.00	WB 0.56	Vert(CT) -0.10 15-16 >999 360
BCDL 5.0	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.03 11 n/a n/a
	Code IRC2015/TPI2014		
			<b>PLATES</b> <b>GRIP</b>
			MT20 244/190
			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. Except: 6-0-0 oc bracing: 19-20.
WEBS 2x4 SP No.3 (flat)	
<b>REACTIONS.</b> (size) 20=0-3-0, 11=0-3-8, 19=0-3-10	
Max Uplift 20=REL	
Max Grav 11=1192(LC 4), 19=7176(LC 1)	

<b>FORCES.</b> (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=0/398, 3-4=-1900/0, 4-5=-1900/0, 5-6=-2527/0, 6-7=-2527/0, 7-8=-2048/0, 8-9=-2048/0
BOT CHORD 18-19=0/1024, 17-18=0/1024, 16-17=0/2439, 15-16=0/2439, 14-15=0/2527, 13-14=0/2527, 12-13=0/1267, 11-12=0/1267
WEBS 2-19=-6023/0, 3-19=-1787/0, 3-17=0/1169, 4-17=-284/0, 5-17=-720/0, 5-15=-21/298, 9-11=-1646/0, 9-13=0/1041, 8-13=-309/0, 7-13=-698/0

- NOTES-**
- Unbalanced floor live loads have been considered for this design.
  - All plates are 1.5x3 MT20 unless otherwise indicated.
  - Plates checked for a plus or minus 1 degree rotation about its center.
  - "A" indicates Released bearing: allow for upward movement at joint(s) 20.
  - 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.
  - CAUTION, Do not erect truss backwards.

<b>LOAD CASE(S)</b> Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 11-20=-10, 1-10=-225
Concentrated Loads (lb)
Vert: 2=-5711



April 7, 2022

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Job	Truss	Truss Type	Qty	Ply	Southern Touch / 17 Mitchell Manor	I51219991
J0322-1382	KW3	GABLE	1	1	Job Reference (optional)	

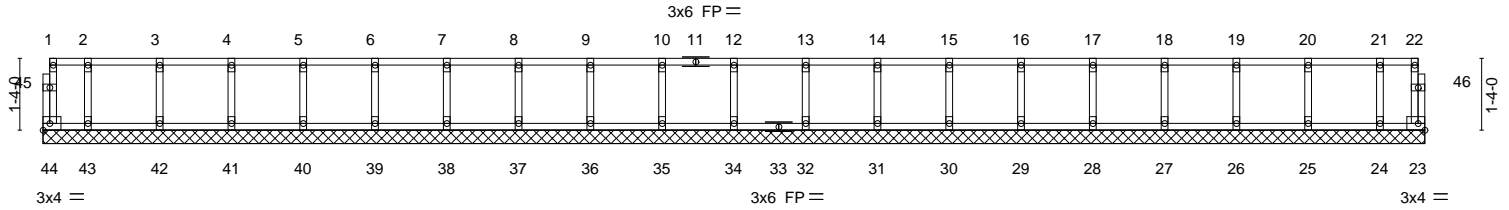
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Apr 6 14:24:33 2022 Page 1  
ID:z9tQeuaeEwTQ6FgPNEM81tzKtIE-XDIGxpmRv1c1b7GS49NyOTXKThWyyvZ3djUWtEzTPkC

0-1-8

0-1-8

Scale = 1:42.8



0-10-0	2-2-0	3-6-0	4-10-0	6-2-0	7-6-0	8-10-0	10-2-0	11-6-0	12-10-0	14-2-0	15-6-0	16-10-0	18-2-0	19-6-0	20-10-0	22-2-0	23-6-0	24-10-0	25-8-0
0-10-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	0-10-0

<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	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	23	n/a	n/a		
BCDL 5.0	Code	IRC2015/TPI2014	Matrix-R						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 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 25-8-0.  
(lb) - Max Grav All reactions 250 lb or less at joint(s) 44, 23, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 32, 31, 30, 29, 28, 27, 26, 25, 24

**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 7, 2022

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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	Southern Touch / 17 Mitchell Manor	I51219992
J0322-1382	KW7	GABLE	1	1	Job Reference (optional)	

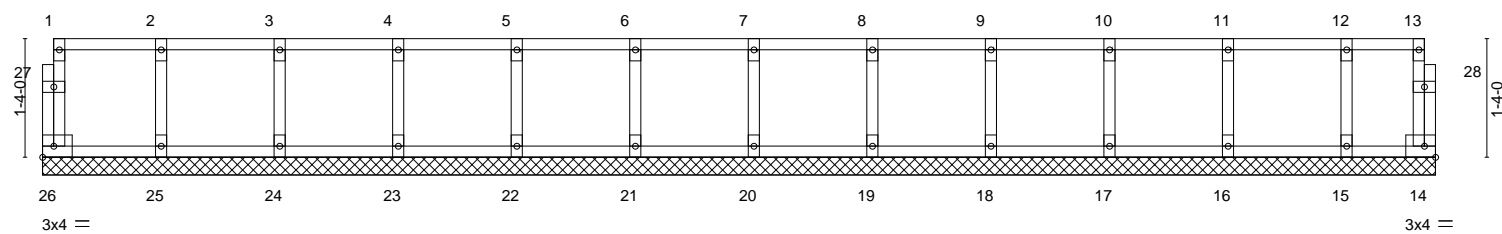
Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Apr 6 14:24:34 2022 Page 1  
 ID:z9tQeuaeEwTQ6FgPNEM81tzKtIE-?Pse99n3gbkuCHredtvBxg4VD5s8hMpCrNE3PhzTPKB

0-1/8

0-1/8

Scale = 1:25.9



1-4-0	2-8-0	4-0-0	5-4-0	6-8-0	8-0-0	9-4-0	10-8-0	12-0-0	13-4-0	14-8-0	15-8-0
1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-0-0

<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	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	14	n/a	n/a		
BCDL 5.0	Code	IRC2015/TPI2014	Matrix-R						Weight: 70 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)	
OTHERS 2x4 SP No.3(flat)	

**REACTIONS.** All bearings 15-8-0.  
 (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.



April 7, 2022

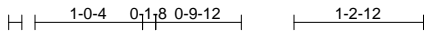
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss 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, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</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	Truss	Truss Type	Qty	Ply	Southern Touch / 17 Mitchell Manor	I51219993
J0322-1382	KW8	GABLE	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Apr 6 14:24:34 2022 Page 1  
ID:z9tQeuaeEwTQ6FgPNEM81tzKtIE-?Pse99n3gbkuCHredtvBxg4Uh5rDhJCrNE3PhzTPkB

0-1-8



0-1-8  
Scale = 1:21.9

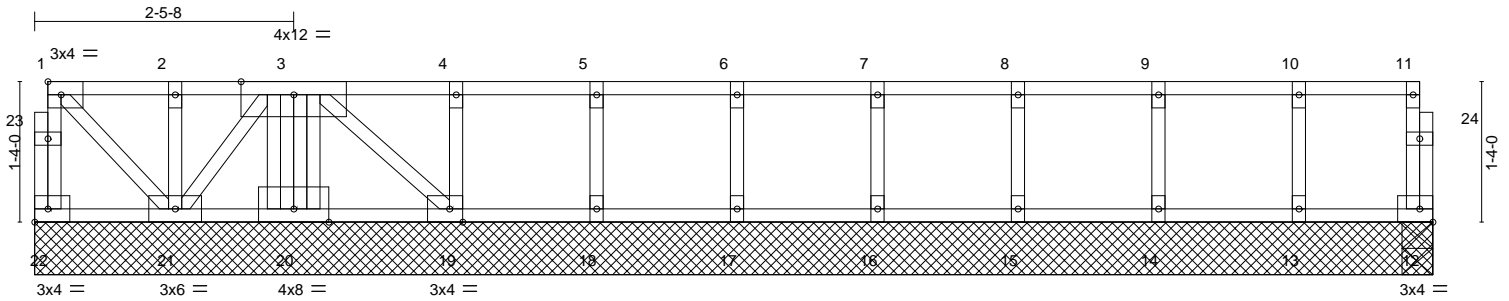


Plate Offsets (X,Y)-- [19:0-1-8,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.09	Vert(LL)	0.00	13	****	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.07	Vert(CT)	-0.00	20	>999	360		
BCLL 0.0	Rep Stress Incr	NO	WB 0.29	Horz(CT)	0.00	12	n/a	n/a		
BCDL 5.0	Code	IRC2015/TPI2014	Matrix-S							
									Weight: 71 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, Except: 6-0-0 oc bracing: 21-22.

**REACTIONS.** All bearings 13-3-4.  
(lb) - Max Uplift All uplift 100 lb or less at joint(s) 22  
Max Grav All reactions 250 lb or less at joint(s) 12, 12, 18, 17, 16, 15, 14, 13 except 20=5238(LC 1), 21=607(LC 1), 19=422(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
BOT CHORD 20-21=0/283, 19-20=0/318  
WEBS 3-20=-5225/0, 3-21=-525/0, 3-19=-403/0

- NOTES-**
- All plates are 1.5x3 MT20 unless otherwise indicated.
  - Plates checked for a plus or minus 1 degree rotation about its center.
  - Gable studs spaced at 1-4-0 oc.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 22.
  - 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.
  - 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: 12-22=-10, 1-11=-100  
Concentrated Loads (lb)  
Vert: 3=-5736



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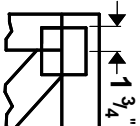
**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601  
**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**



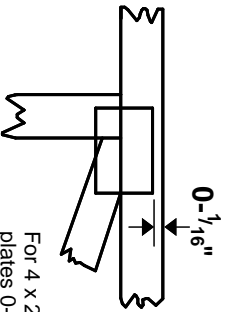
818 Soundside Road  
Edenton, NC 27932

# Symbols

## PLATE LOCATION AND ORIENTATION



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



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



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

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

## PLATE SIZE

**4 X 4**

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

## LATERAL BRACING LOCATION



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

## BEARING



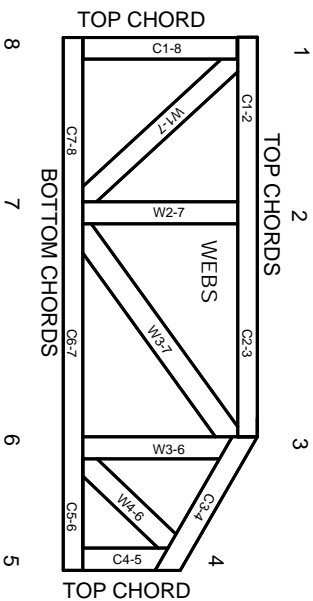
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

### Industry Standards:

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

# Numbering System

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



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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



# General Safety Notes

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

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/TFP 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TFP 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. Rewriting pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TFP 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.