

Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: J0724-4219  
Lot 9 Heritage @ NC

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: I67288102 thru I67288120

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

North Carolina COA: C-0844



August 5, 2024

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	Lot 9 Heritage @ NC	167288102
J0724-4219	F01	FLOOR	5	1		
Comtech, Inc. Fayetteville, NC - 28314,						Job Reference (optional)

Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 2 08:19:57 2024 Page 1  
 ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

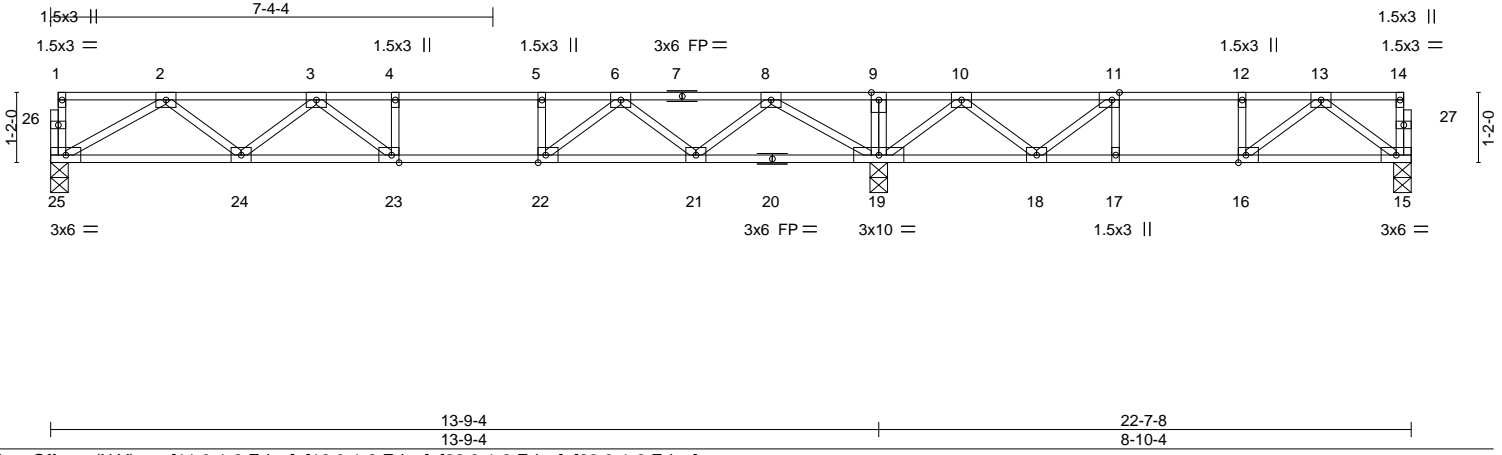


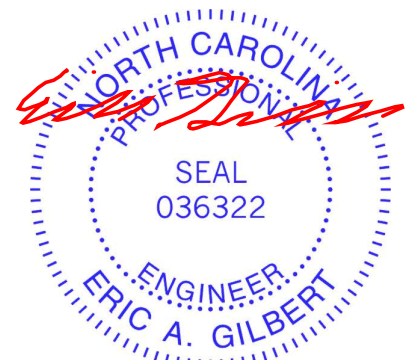
Plate Offsets (X, Y)--	[11:0-1-8,Edge], [16:0-1-8,Edge], [22:0-1-8,Edge], [23:0-1-8,Edge]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL 1.00	TC 0.59	Vert(LL) -0.14 23-24 >999 480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.62	Vert(CT) -0.19 23-24 >859 360		
BCLL 0.0	Rep Stress Incr YES	WB 0.37	Horz(CT) 0.03 15 n/a n/a		
BCDL 5.0	Code IRC2015/TP12014	Matrix-S			
				Weight: 111 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) 25=0-3-8, 15=0-3-8, 19=0-3-8  
 Max Grav 25=686(LC 10), 15=405(LC 4), 19=1439(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1506/0, 3-4=-2025/0, 4-5=-2025/0, 5-6=-2025/0, 6-8=-1060/2, 8-9=0/1109, 9-10=0/1108, 10-11=-407/304, 11-12=-714/61, 12-13=-714/61  
 BOT CHORD 24-25=0/1057, 23-24=0/1898, 22-23=0/2025, 21-22=0/1621, 19-21=-201/491, 18-19=-505/86, 17-18=-61/714, 16-17=-61/714, 15-16=0/450  
 WEBS 2-25=-1219/0, 2-24=0/584, 3-24=-510/0, 3-23=-86/307, 8-19=-1462/0, 8-21=0/781, 6-21=-784/0, 6-22=0/723, 5-22=-333/0, 13-15=-561/0, 13-16=-101/336, 10-19=-886/0, 10-18=0/544, 11-18=-584/0

- 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.



August 5, 2024

<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	Truss	Truss Type	Qty	Ply	Lot 9 Heritage @ NC	167288103
J0724-4219	F02	FLOOR	2	1		
Comtech, Inc. Fayetteville, NC - 28314,						8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 2 08:19:57 2024 Page 1
						ID:6XJu5EDhIOLdYBK4rF8nKyOFED-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

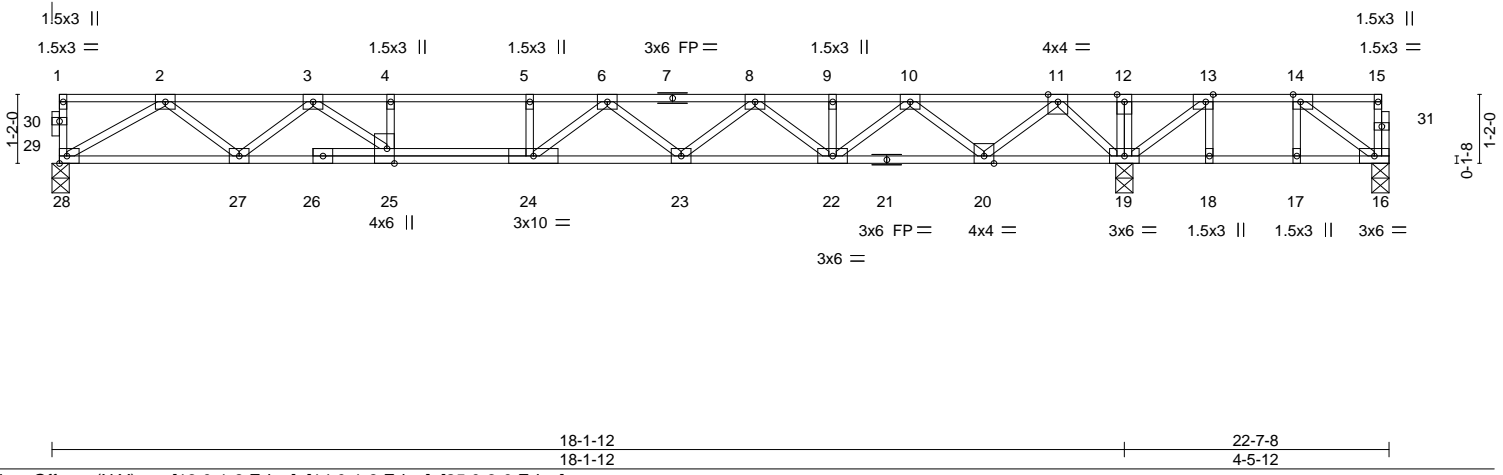


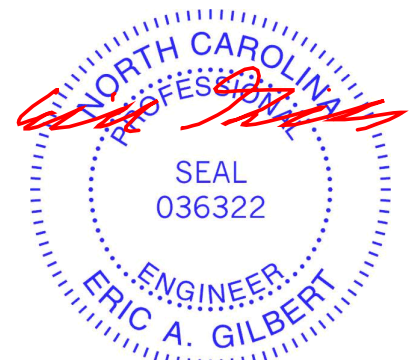
Plate Offsets (X,Y)--	[13:0-1-8,Edge], [14:0-1-8,Edge], [25:0-3-0,Edge]					
<b>LOADING</b> (psf)	<b>SPACING-</b> 1-7-3	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>	
TCLL 40.0	Plate Grip DOL 1.00	TC 0.79	Vert(LL) -0.22 23-24 >973 480	MT20	244/190	
TCDL 10.0	Lumber DOL 1.00	BC 0.76	Vert(CT) -0.30 23-24 >709 360			
BCLL 0.0	Rep Stress Incr YES	WB 0.50	Horz(CT) 0.04 19 n/a n/a			
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S				Weight: 118 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) 28=0-3-8, 16=0-3-8, 19=0-3-8  
 Max Uplift 16=249(LC 3)  
 Max Grav 28=719(LC 10), 16=101(LC 4), 19=1357(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1630/0, 3-4=-2766/0, 4-5=-2766/0, 5-6=-2766/0, 6-8=-2581/0, 8-9=-1826/0, 9-10=-1826/0, 10-11=-492/0, 11-12=0/1325, 12-13=0/1324, 13-14=-15/569  
 BOT CHORD 27-28=0/1085, 25-27=0/2240, 24-25=0/2768, 23-24=0/2786, 22-23=0/2322, 20-22=0/1251, 19-20=-387/0, 18-19=-569/15, 17-18=-569/15, 16-17=-569/15  
 WEBS 2-28=-1267/0, 2-27=0/710, 3-27=-792/0, 3-25=0/792, 11-19=-1283/0, 11-20=0/1046, 10-20=-997/0, 10-22=0/742, 8-22=-640/0, 8-23=0/344, 6-23=-276/0, 6-24=-180/296, 14-16=-14/710, 13-19=-1050/0, 13-18=0/255

- 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) 16=249.
  - 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.



August 5, 2024

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Job	Truss	Truss Type	Qty	Ply	Lot 9 Heritage @ NC	167288104
J0724-4219	F03	FLOOR	4	1		

Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 2 08:19:58 2024 Page 1  
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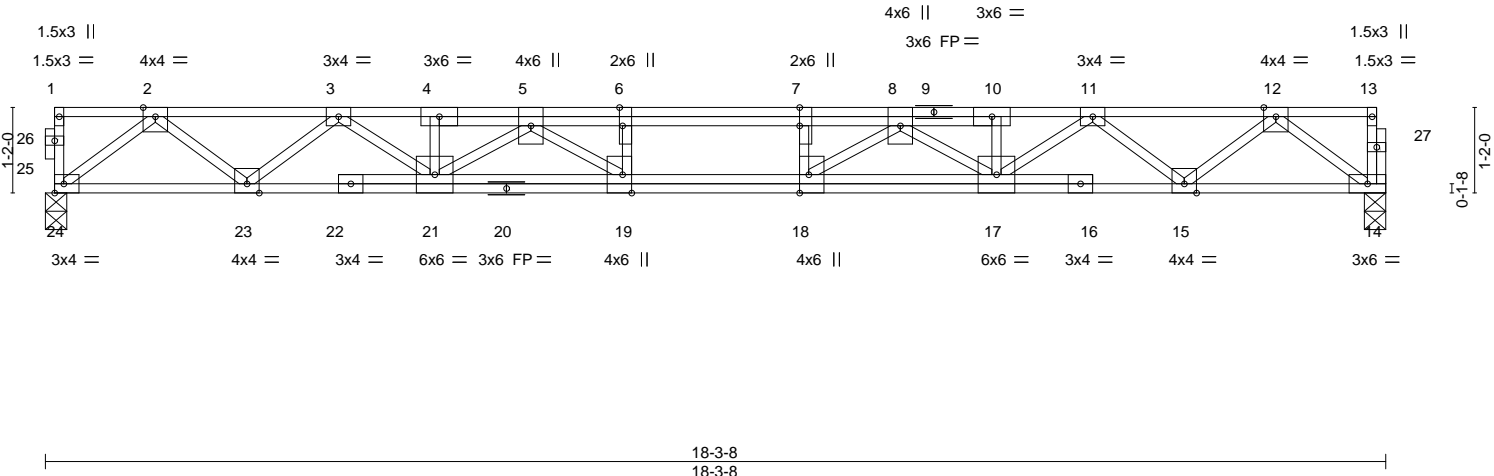
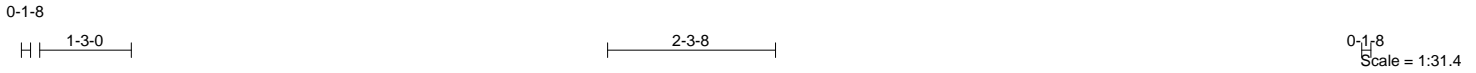


Plate Offsets (X, Y)--	[6:0-3-0,Edge], [7:0-3-0,0-0-0], [18:0-3-0,Edge], [19:0-3-0,Edge]
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LOADING (psf)	SPACING-	1-7-3	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.21	Vert(LL)	-0.18	18-19	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.52	Vert(CT)	-0.25	18-19	>870		
BCLL 0.0	Rep Stress Incr	YES	WB 0.42	Horz(CT)	0.04	14	n/a		
BCDL 5.0	Code	IRC2015/TPI2014	Matrix-S						

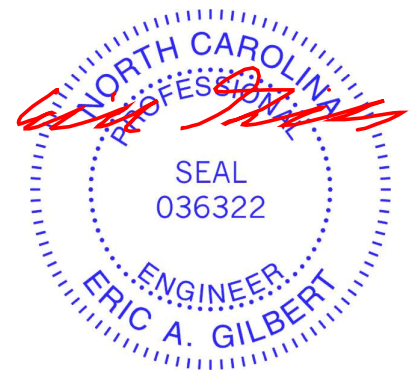
Weight: 116 lb FT = 20%F, 11%E

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) 24=0-3-8, 14=0-3-8  
 Max Grav 24=791(LC 1), 14=786(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1627/0, 3-4=-2887/0, 4-5=-2892/0, 5-6=-3790/0, 6-7=-3790/0, 7-8=-3790/0, 8-10=-2916/0, 10-11=-2912/0, 11-12=-1660/0  
 BOT CHORD 23-24=0/942, 21-23=0/2336, 19-21=0/3487, 18-19=0/3790, 17-18=0/3528, 15-17=0/2362, 14-15=0/982  
 WEBS 2-24=-1203/0, 2-23=0/891, 3-23=-923/0, 3-21=0/687, 5-21=-732/0, 5-19=0/638, 6-19=-268/0, 12-14=-1230/0, 12-15=0/883, 11-15=-914/0, 11-17=0/686, 8-17=-750/0, 8-18=-30/607

- 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.



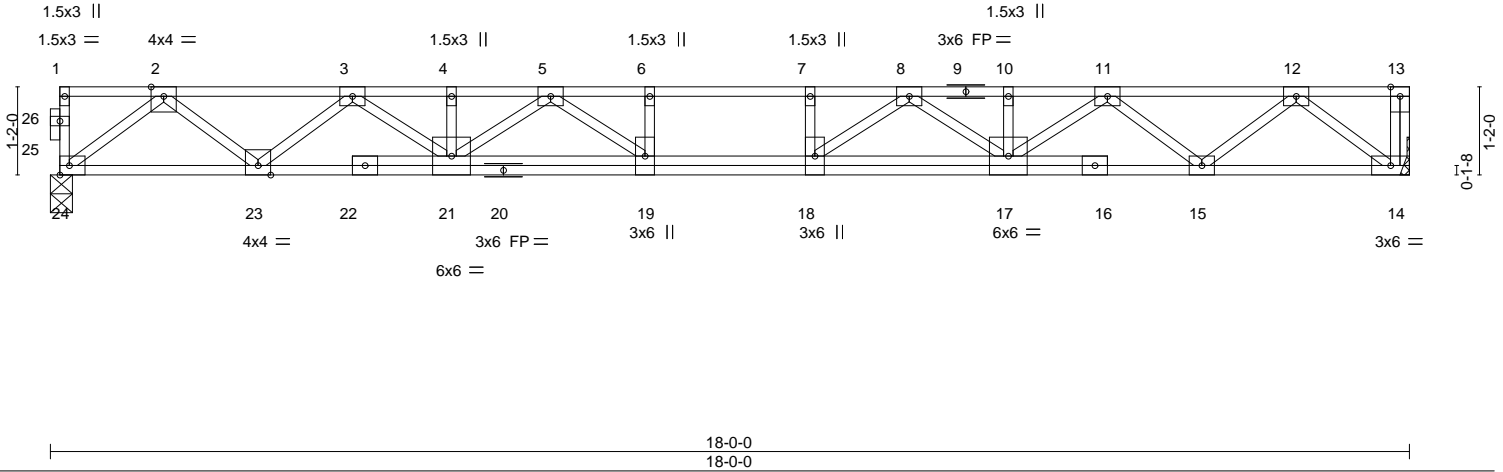
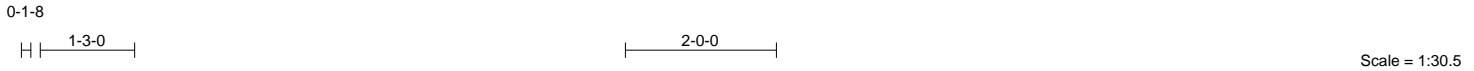
August 5, 2024

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Job	Truss	Truss Type	Qty	Ply	Lot 9 Heritage @ NC
J0724-4219	F04	FLOOR	3	1	167288105

Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 2 08:19:58 2024 Page 1  
 ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 40.0	1-7-3	TC 0.32	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.50	Vert(LL) -0.20 18-19 >999 480		
BCLL 0.0	Lumber DOL 1.00	WB 0.41	Vert(CT) -0.28 18-19 >763 360		
BCDL 5.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.04 14 n/a n/a		
	Code IRC2015/TPI2014			Weight: 104 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) 24=0-3-8, 14=Mechanical  
 Max Grav 24=778(LC 1), 14=778(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1596/0, 3-4=-2819/0, 4-5=-2819/0, 5-6=-3453/0, 6-7=-3453/0, 7-8=-3453/0, 8-10=-2840/0, 10-11=-2840/0, 11-12=-1629/0  
 BOT CHORD 23-24=0/927, 21-23=0/2286, 19-21=0/3208, 18-19=0/3453, 17-18=0/3220, 15-17=0/2313, 14-15=0/966  
 WEBS 2-24=-1183/0, 2-23=0/871, 3-23=-899/0, 3-21=0/665, 5-21=-485/0, 5-19=0/530, 12-14=-1212/0, 12-15=0/863, 11-15=-891/0, 11-17=0/657, 8-17=-475/0, 8-18=-4/520

- 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.



August 5, 2024

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Job	Truss	Truss Type	Qty	Ply	Lot 9 Heritage @ NC
J0724-4219	F05	FLOOR	1	1	167288106
					Job Reference (optional)

Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 2 08:19:58 2024 Page 1  
ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



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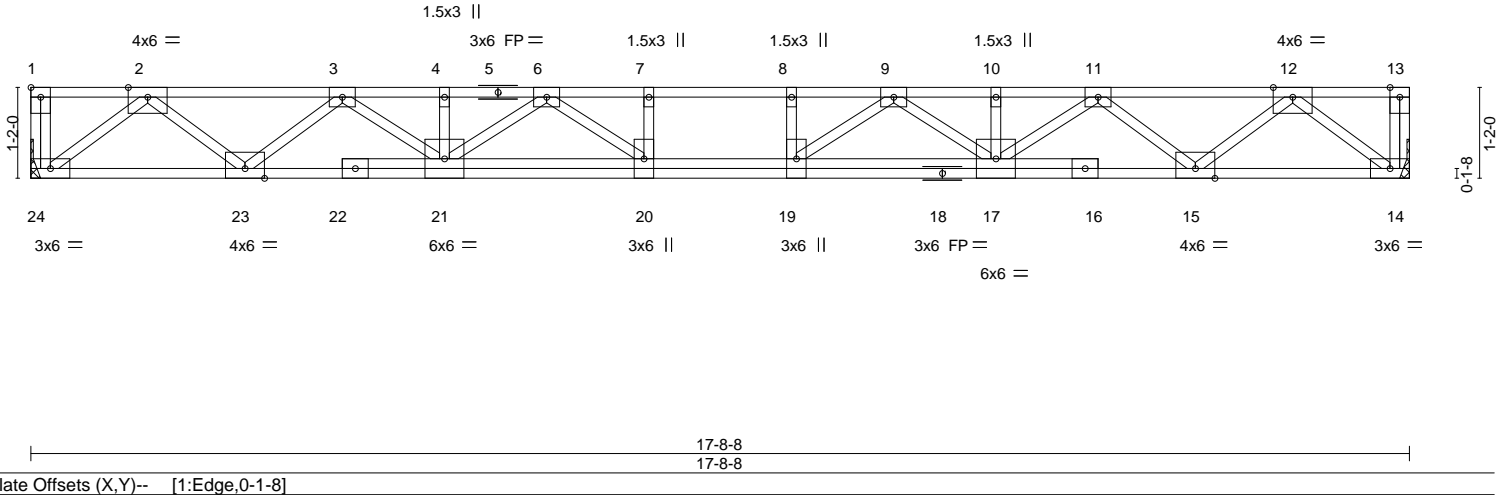


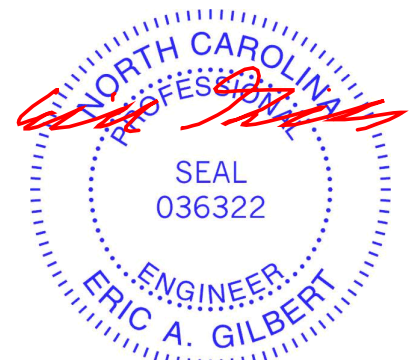
Plate Offsets (X,Y)--	[1:Edge,0-1-8]					CSL	DEFL.	PLATES	GRIP
LOADING (psf)	SPACING-	2-0-0	TC	0.39	in (loc)	l/defl	L/d	MT20	244/190
TCLL 40.0	Plate Grip DOL	1.00	BC	0.62	Vert(LL)	-0.24 19-20	>869	480	
TCDL 10.0	Lumber DOL	1.00	WB	0.50	Vert(CT)	-0.33 19-20	>632	360	
BCLL 0.0	Rep Stress Incr	YES	Matrix-S		Horz(CT)	0.05 14	n/a	n/a	
BCDL 5.0	Code IRC2015/TPI2014								Weight: 104 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) 24=Mechanical, 14=Mechanical  
Max Grav 24=960(LC 1), 14=960(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2006/0, 3-4=-3486/0, 4-6=-3486/0, 6-7=-4216/0, 7-8=-4216/0, 8-9=-4216/0, 9-10=-3486/0, 10-11=-3486/0, 11-12=-2006/0  
BOT CHORD 23-24=0/1192, 21-23=0/2846, 20-21=0/3948, 19-20=0/4216, 17-19=0/3948, 15-17=0/2846, 14-15=0/1192  
WEBS 2-24=-1495/0, 2-23=0/1060, 3-23=-1093/0, 3-21=0/798, 12-14=-1495/0, 12-15=0/1060, 11-15=-1093/0, 11-17=0/798, 9-17=-576/0, 9-19=-26/606, 6-21=-576/0, 6-20=-26/606

- 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.



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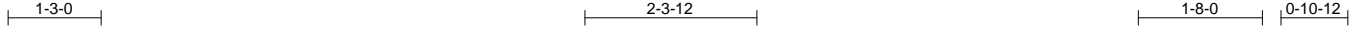
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Job	Truss	Truss Type	Qty	Ply	Lot 9 Heritage @ NC
J0724-4219	F06	Floor	1	1	167288107
					Job Reference (optional)

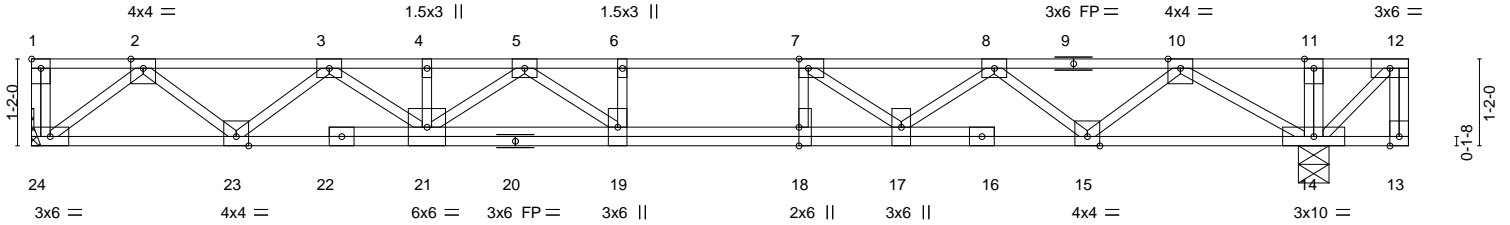
Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 2 08:19:59 2024 Page 1

ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:31.0



	17-2-12	18-6-0
	17-2-12	1-3-4
Plate Offsets (X,Y)--	[1:Edge,0-1-8], [7:0-1-8,Edge], [18:0-3-0,Edge]	

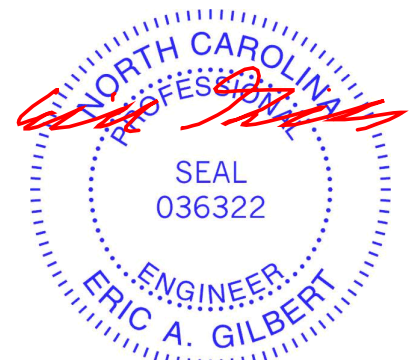
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL	1.00	TC 0.59	Vert(LL)	-0.23	19	>894	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.61	Vert(CT)	-0.32	19	>650		
BCLL 0.0	Rep Stress Incr	YES	WB 0.49	Horz(CT)	0.05	14	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 107 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) 24=Mechanical, 14=0-4-15  
Max Grav 24=938(LC 3), 14=1072(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1950/0, 3-4=-3382/0, 4-5=-3382/0, 5-6=-4002/0, 6-7=-4002/0, 7-8=-3429/0, 8-10=-2179/0  
 BOT CHORD 23-24=0/1162, 21-23=0/2767, 19-21=0/3788, 18-19=0/4002, 17-18=0/4002, 15-17=0/2941, 14-15=0/1437  
 WEBS 10-14=-1652/0, 10-15=0/972, 8-15=-997/0, 8-17=0/633, 7-17=-921/0, 7-18=-108/349, 2-24=-1458/0, 2-23=0/1025, 3-23=-1064/0, 3-21=0/767, 5-21=-529/0, 5-19=-45/573

- 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.



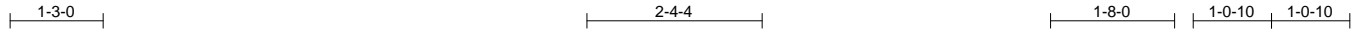
August 5, 2024

<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 (<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>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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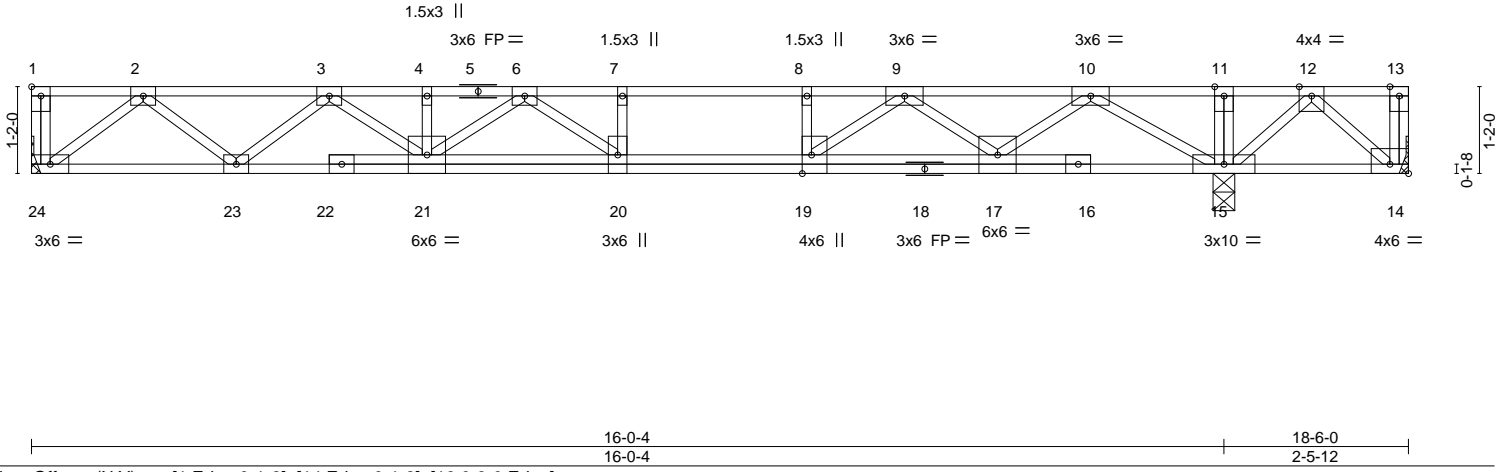
Job J0724-4219	Truss F07	Truss Type Floor	Qty 5	Ply 1	Lot 9 Heritage @ NC 167288108
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Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 2 08:19:59 2024 Page 1  
ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCdoi7J4zJC?f



Scale = 1:31.0



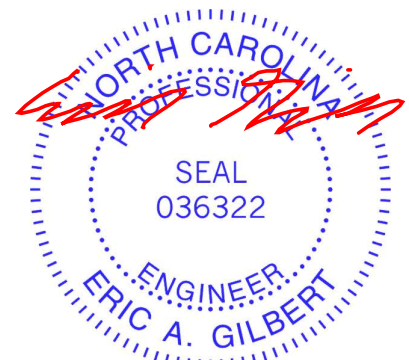
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 40.0	2-0-0	TC 0.53	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.64	Vert(LL) -0.19 20-21 >999 480		
BCLL 0.0	Lumber DOL 1.00	WB 0.53	Vert(CT) -0.26 20-21 >739 360		
BCDL 5.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.02 15 n/a n/a		
	Code IRC2015/TP12014			Weight: 109 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, Except: 6-0-0 oc bracing: 15-17,14-15.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (size) 24=Mechanical, 14=Mechanical, 15=0-3-8  
Max Uplift 14=726(LC 3)  
Max Grav 24=760(LC 3), 15=1882(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1499/0, 3-4=-2496/0, 4-6=-2496/0, 6-7=-2350/0, 7-8=-2350/0, 8-9=-2350/0, 9-10=-607/0, 10-11=0/1683, 11-12=0/1681  
BOT CHORD 23-24=0/926, 21-23=0/2113, 20-21=0/2558, 19-20=0/2350, 17-19=0/1536, 14-15=-833/0  
WEBS 2-24=-1162/0, 2-23=0/746, 3-23=-798/0, 3-21=0/479, 6-20=-364/149, 10-15=-1716/0, 10-17=0/1027, 9-17=-1181/0, 9-19=0/1074, 8-19=-305/0, 12-14=0/1113, 12-15=-1207/0

- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=726.
  - 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.



August 5, 2024

<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>	 818 Soundside Road Edenton, NC 27932
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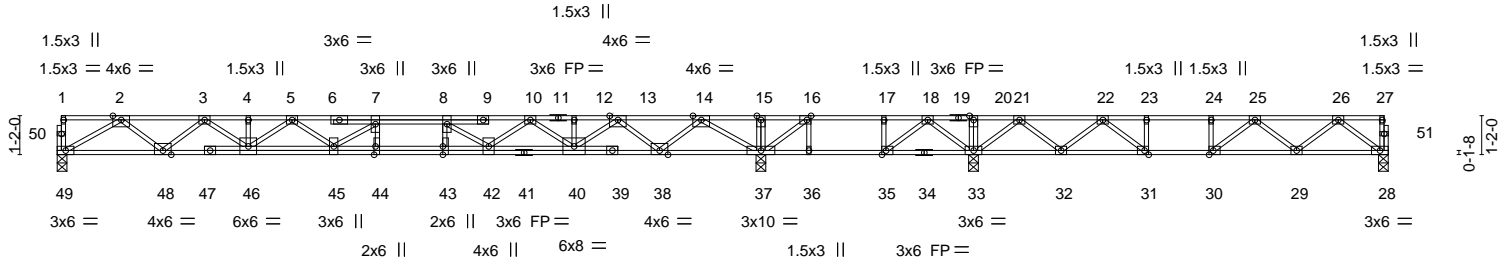
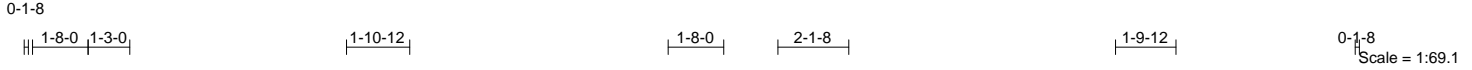


Job	Truss	Truss Type	Qty	Ply	Lot 9 Heritage @ NC	167288109
J0724-4219	F08	Floor	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

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ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



	21-1-4	27-5-12	39-11-0
	21-1-4	6-4-8	12-5-4
Plate Offsets (X, Y)--	[16:0-1-8,Edge], [30:0-1-8,Edge], [31:0-1-8,Edge], [35:0-1-8,Edge], [43:0-3-0,0-0-0], [44:0-3-0,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 0.69	Vert(LL)	-0.35	44	>728	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.72	Vert(CT)	-0.47	44	>534		
BCLL 0.0	Rep Stress Incr	YES	WB 0.71	Horz(CT)	0.06	37	n/a		
BCDL 5.0	Code IRC2015/TP12014		Matrix-S						
								Weight: 221 lb	FT = 20%F, 11%E

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.1(flat) *Except* 11-19: 2x4 SP 2400F 2.0E(flat)	TOP CHORD Structural wood sheathing directly applied or 5-8-9 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 0-3-8.  
(lb) - Max Grav All reactions 250 lb or less at joint(s) except 49=1029(LC 3), 37=1749(LC 3), 28=573(LC 4), 33=1169(LC 4)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**TOP CHORD** 2-3=-2484/0, 3-4=-4050/0, 4-5=-4050/0, 5-7=-4909/0, 7-8=-5090/0, 8-10=-4343/0, 10-12=-2926/0, 12-13=-2926/0, 13-14=-803/0, 14-15=0/2643, 15-16=0/2643, 16-17=0/2152, 17-18=0/2152, 18-20=0/1999, 20-21=0/1999, 21-22=-384/908, 22-23=-1389/254, 23-24=-1389/254, 24-25=-1389/254, 25-26=-1074/0  
**BOT CHORD** 48-49=0/1633, 46-48=0/3363, 45-46=0/4564, 44-45=0/5090, 43-44=0/5090, 42-43=0/5090, 40-42=0/3695, 38-40=0/1939, 37-38=-637/0, 36-37=-2152/0, 35-36=-2152/0, 33-35=-1885/0, 32-33=-1181/0, 31-32=-611/965, 30-31=-254/1389, 29-30=-30/1386, 28-29=0/700  
**WEBS** 2-49=-1885/0, 2-48=0/1108, 3-48=-1143/0, 3-46=0/858, 5-46=-640/0, 5-45=0/515, 7-45=-576/242, 7-44=-318/118, 14-37=-2373/0, 14-38=0/1498, 13-38=-1498/0, 13-40=0/1249, 10-40=-979/0, 10-42=0/832, 8-42=-1124/0, 8-43=-104/330, 16-37=-986/0, 18-33=-500/116, 18-35=-341/271, 26-28=-876/0, 26-29=-1/487, 25-29=-407/95, 25-30=-351/3, 21-33=-1284/0, 21-32=0/845, 22-32=-891/0, 22-31=0/859, 23-31=-373/0

- 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.

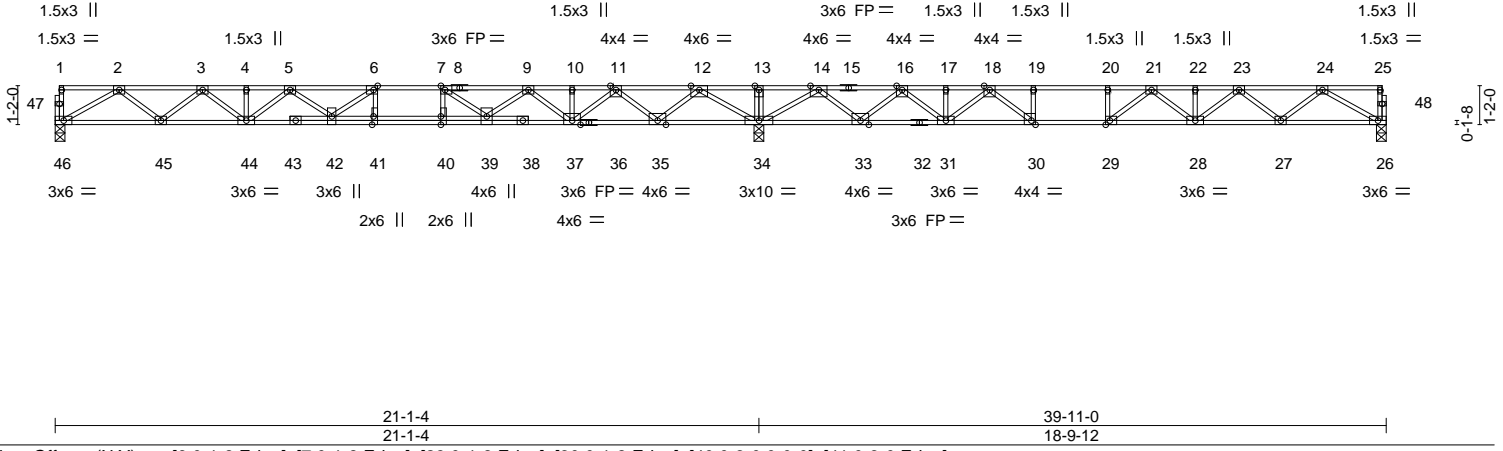
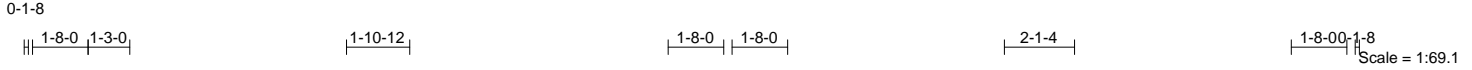


August 5, 2024

Job	Truss	Truss Type	Qty	Ply	Lot 9 Heritage @ NC
J0724-4219	F09	FLOOR	6	1	167288110
					Job Reference (optional)

Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 2 08:20:01 2024 Page 1  
ID:6XJu5EDhIOLdYBK4rF8nKyOFED-RIC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?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 0.97	Vert(LL)	-0.31	41	>813	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.90	Vert(CT)	-0.40	41-42	>626		
BCLL 0.0	Rep Stress Incr	YES	WB 0.62	Horz(CT)	0.05	26	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 209 lb	FT = 20%F, 11%E

**LUMBER-**  
 TOP CHORD 2x4 SP No.1 (flat)  
 BOT CHORD 2x4 SP No.1 (flat) \*Except\*  
 38-43: 2x4 SP 2400F 2.0E (flat)  
 WEBS 2x4 SP No.3 (flat)

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

**REACTIONS.** (size) 46=0-3-8, 34=0-3-8, 26=0-3-8  
 Max Grav 46=797(LC 3), 34=2118(LC 1), 26=700(LC 4)

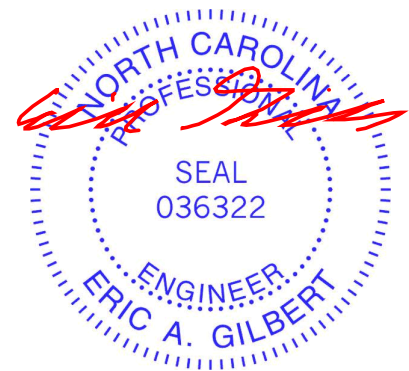
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**TOP CHORD**  
 2-3=-1926/0, 3-4=-2962/0, 4-5=-2962/0, 5-6=-3542/0, 6-7=-3615/0, 7-9=-2987/80,  
 9-10=-1852/535, 10-11=-1852/535, 11-12=-211/1163, 12-13=0/3489, 13-14=0/3489,  
 14-16=-230/1470, 16-17=-1620/850, 17-18=-1620/850, 18-19=-2601/209,  
 19-20=-2601/209, 20-21=-2601/209, 21-22=-2471/0, 22-23=-2471/0, 23-24=-1636/0

**BOT CHORD**  
 45-46=0/1270, 44-45=0/2542, 42-44=0/3375, 41-42=0/3615, 40-41=0/3615, 39-40=0/3615,  
 37-39=-293/2524, 35-37=-833/1122, 34-35=-1789/0, 33-34=-1909/0, 31-33=-1148/1012,  
 30-31=-585/2111, 29-30=-209/2601, 28-29=0/2654, 27-28=0/2152, 26-27=0/1100

**WEBS**  
 2-46=-1466/0, 2-45=0/854, 3-45=-801/0, 3-44=0/537, 5-44=-526/0, 6-42=-217/430,  
 6-41=-401/39, 12-34=-2002/0, 12-35=0/1309, 11-35=-1279/0, 11-37=0/1024,  
 9-37=-925/0, 9-39=0/677, 7-39=-1060/0, 7-40=0/488, 14-34=-1849/0, 14-33=0/1186,  
 16-33=-1139/0, 16-31=0/903, 24-26=-1269/0, 24-27=0/698, 23-27=-671/0,  
 23-28=-44/408, 21-29=-532/15, 18-31=-763/0, 18-30=0/1035, 19-30=-455/0

- 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.



August 5, 2024

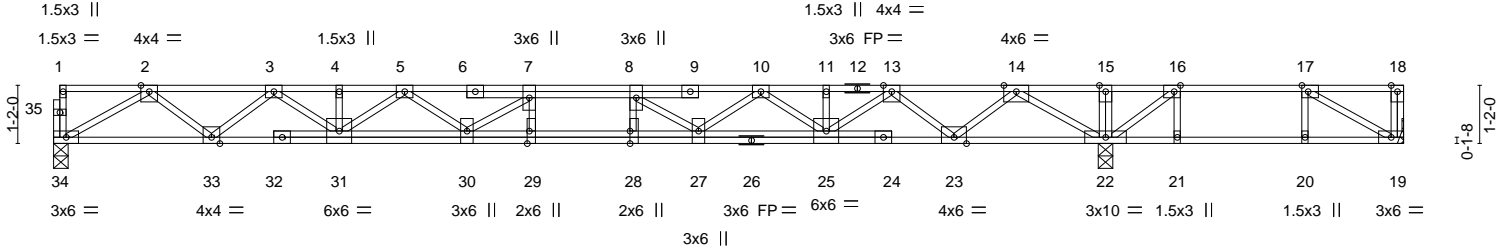
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**  
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before 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)



Job	Truss	Truss Type	Qty	Ply	Lot 9 Heritage @ NC
J0724-4219	F11	Floor	2	1	I67288111
					Job Reference (optional)

Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 2 08:20:02 2024 Page 1  
ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RIC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



	21-1-4	27-1-0
	21-1-4	5-11-12
Plate Offsets (X,Y)--	[16:0-1-8,Edge], [17:0-1-8,Edge], [28:0-3-0,0-0-0], [29:0-3-0,Edge]	

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 0.77	Vert(LL)	-0.29	29	>856	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.43	Vert(CT)	-0.40	29	>623		
BCLL 0.0	Rep Stress Incr	YES	WB 0.53	Horz(CT)	0.05	22	n/a		
BCDL 5.0	Code IRC2015/TP12014		Matrix-S						
								Weight: 158 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 2400F 2.0E(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 21-22,20-21,19-20.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (size) 34=0-3-8, 22=0-3-8, 19=Mechanical  
 Max Uplift 19=93(LC 3)  
 Max Grav 34=876(LC 10), 22=1382(LC 9), 19=222(LC 4)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2140/0, 3-4=-3531/0, 4-5=-3531/0, 5-7=-4367/0, 7-8=-4658/0, 8-10=-4169/0, 10-11=-3135/0, 11-13=-3135/0, 13-14=-1553/0, 14-15=0/976, 15-16=0/976, 16-17=-224/391  
 BOT CHORD 33-34=0/1396, 31-33=0/2908, 30-31=0/4001, 29-30=0/4658, 28-29=0/4658, 27-28=0/4658, 25-27=0/3697, 23-25=0/2408, 22-23=0/709, 21-22=-391/224, 20-21=-391/224, 19-20=-391/224  
 WEBS 2-34=-1611/0, 2-33=0/968, 3-33=-1000/0, 3-31=0/778, 14-22=-1796/0, 14-23=0/1111, 13-23=-1124/0, 13-25=0/916, 10-25=-711/0, 10-27=0/607, 8-27=-799/0, 5-31=-586/0, 5-30=0/508, 7-30=-623/58, 16-22=-932/0, 17-19=-257/448

- 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 93 lb uplift at joint 19.
  - 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.



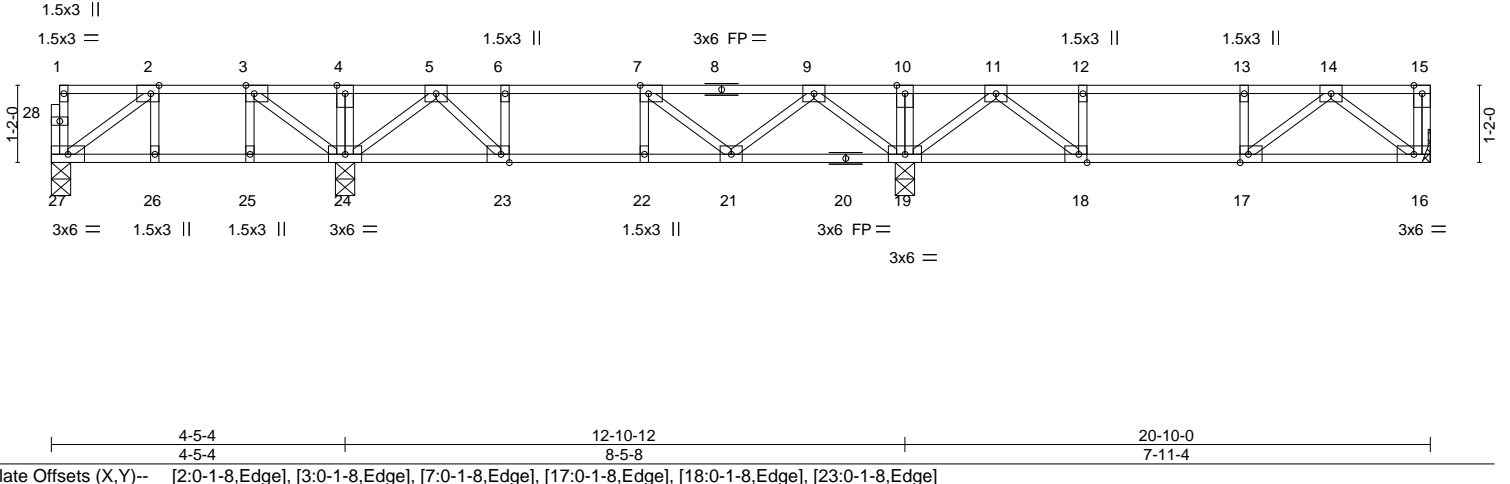
August 5, 2024

<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 (www.tpinst.org) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (www.sbcacomponents.com)</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	Lot 9 Heritage @ NC
J0724-4219	F12	FLOOR	1	1	67288112
					Job Reference (optional)

Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 2 08:20:02 2024 Page 1  
 ID:6XJu5EDhIOLdYBK4rF8nKyOFED-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL 40.0	1-7-3	TC 0.31	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.25	Vert(LL) -0.03 16-17 >999 480		
BCLL 0.0	Lumber DOL 1.00	WB 0.22	Vert(CT) -0.05 16-17 >999 360		
BCDL 5.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 16 n/a n/a		
	Code IRC2015/TPI2014			Weight: 106 lb	FT = 20%F, 11%E

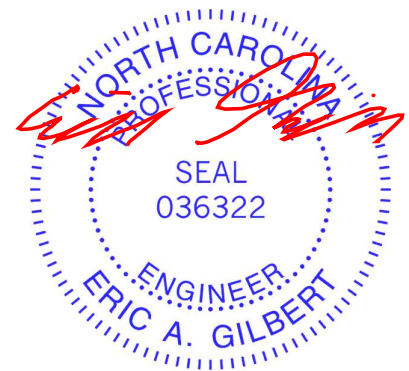
**LUMBER-**  
 TOP CHORD 2x4 SP No.1(flat)  
 BOT CHORD 2x4 SP No.1(flat)  
 WEBS 2x4 SP No.3(flat)

**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: 19-21,18-19.

**REACTIONS.** All bearings 0-3-8 except (jt=length) 16=Mechanical.  
 (lb) - Max Grav All reactions 250 lb or less at joint(s) 27 except 24=530(LC 16), 16=324(LC 5), 19=804(LC 11)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 5-6=-635/0, 6-7=-635/0, 7-9=-479/0, 9-10=0/421, 10-11=0/421, 11-12=-538/0, 12-13=-538/0, 13-14=-538/0  
 BOT CHORD 23-24=0/395, 22-23=0/635, 21-22=0/635, 19-21=-16/273, 18-19=-131/253, 17-18=0/538, 16-17=0/350  
 WEBS 2-27=-260/0, 3-24=-281/0, 5-24=-456/0, 5-23=0/339, 9-19=-615/0, 9-21=0/306, 7-21=-262/0, 14-16=-439/0, 11-19=-535/0, 11-18=0/453

- 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.



August 5, 2024

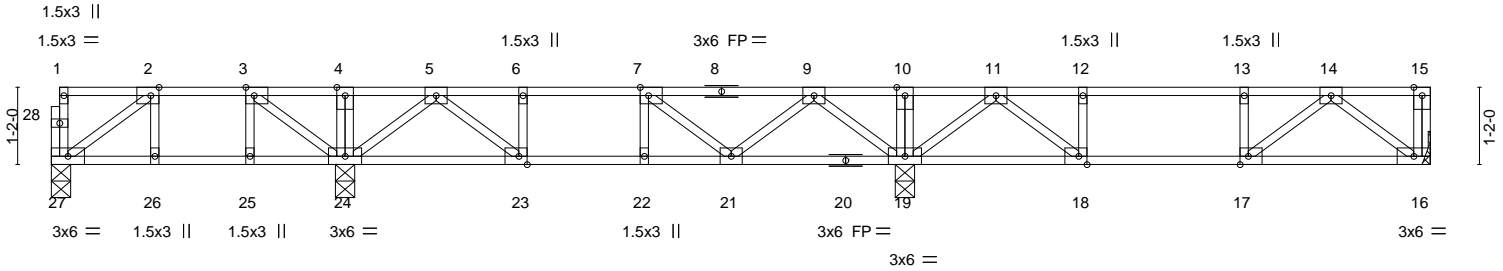
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**  
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before 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)



Job	Truss	Truss Type	Qty	Ply	Lot 9 Heritage @ NC
J0724-4219	F13	FLOOR	1	1	67288113
					Job Reference (optional)

Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 2 08:20:03 2024 Page 1  
 ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



	4-5-4	12-10-12	20-10-0
	4-5-4	8-5-8	7-11-4
Plate Offsets (X, Y)--	[2:0-1-8,Edge], [3:0-1-8,Edge], [7:0-1-8,Edge], [17:0-1-8,Edge], [18:0-1-8,Edge], [23:0-1-8,Edge]		

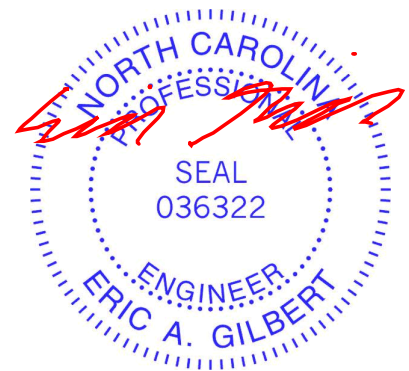
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL	1.00	TC 0.37	Vert(LL)	-0.04	16-17	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.30	Vert(CT)	-0.05	16-17	>999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.26	Horz(CT)	0.01	16	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 106 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: 19-21,18-19.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** All bearings 0-3-8 except (jt=length) 16=Mechanical.  
 (lb) - Max Grav All reactions 250 lb or less at joint(s) 27 except 24=689(LC 16), 16=406(LC 5), 19=991(LC 11)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 5-6=-795/0, 6-7=-795/0, 7-9=-614/0, 9-10=0/492, 10-11=0/492, 11-12=-678/0, 12-13=-678/0, 13-14=-678/0  
 BOT CHORD 23-24=0/456, 22-23=0/795, 21-22=0/795, 19-21=-14/373, 18-19=-128/324, 17-18=0/678, 16-17=0/439  
 WEBS 2-27=-303/0, 3-24=-366/0, 5-24=-594/0, 5-23=0/433, 9-19=-755/0, 9-21=0/367, 7-21=-317/0, 14-16=-551/0, 14-17=-13/305, 11-19=-661/0, 11-18=0/550, 12-18=-285/0

- 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.



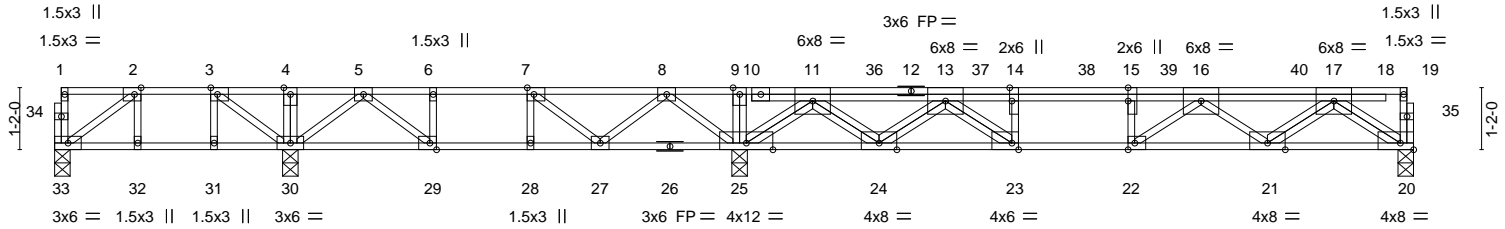
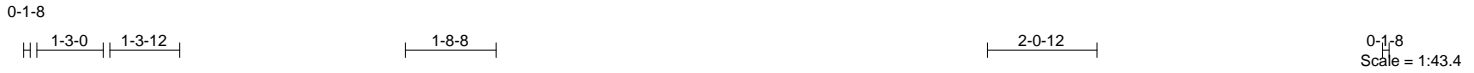
August 5, 2024

<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 (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	Truss	Truss Type	Qty	Ply	Lot 9 Heritage @ NC
J0724-4219	F14-GR	Floor Girder	1	1	67288114
					Job Reference (optional)

Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 2 08:20:04 2024 Page 1  
ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RIC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



4-5-4	12-10-12	25-7-0
4-5-4	8-5-8	12-8-4
Plate Offsets (X, Y)-- [2:0-1-8,Edge], [3:0-1-8,Edge], [7:0-1-8,Edge], [14:0-3-0,Edge], [15:0-3-0,0-0-0], [20:Edge,0-1-8], [22:0-1-8,Edge], [23:0-1-8,Edge], [29:0-1-8,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 0.75	Vert(LL)	0.16	22	>945	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.84	Vert(CT)	0.19	22-23	>804		
BCLL 0.0	Rep Stress Incr	NO	WB 0.86	Horz(CT)	-0.04	20	n/a		
BCDL 5.0	Code IRC2015/TP12014		Matrix-S						
								Weight: 159 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP 2400F 2.0E(flat) *Except* 1-12: 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) *Except* 20-26: 2x4 SP 2400F 2.0E(flat)	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** All bearings 0-3-8.  
(lb) - Max Uplift All uplift 100 lb or less at joint(s) except 20=-1611(LC 25), 25=-1386(LC 27)  
Max Grav All reactions 250 lb or less at joint(s) except 33=292(LC 36), 20=349(LC 5), 30=771(LC 25), 25=934(LC 11)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-362/0, 3-4=-264/168, 4-5=-264/168, 5-6=-1528/0, 6-7=-1528/0, 7-8=-1637/7,  
8-9=-1319/714, 9-11=-1319/715, 11-13=-306/2937, 13-14=-883/5579, 14-15=-883/5579,  
15-16=-883/5579, 16-17=-683/3721  
BOT CHORD 32-33=0/362, 31-32=0/362, 30-31=0/362, 29-30=0/896, 28-29=0/1528, 27-28=0/1528,  
25-27=-112/1594, 24-25=-1260/94, 23-24=-4663/502, 22-23=-5579/883, 21-22=-5164/966,  
20-21=-2438/374  
WEBS 2-33=-444/0, 3-30=-379/66, 8-25=-790/10, 5-30=-840/0, 8-27=-159/402, 5-29=0/813,  
7-27=-377/327, 6-29=-345/0, 11-25=-488/2967, 11-24=-2130/320, 13-24=-306/2193,  
13-23=-1144/735, 14-23=-367/695, 17-20=-454/3002, 17-21=-1661/400, 16-21=-354/1802,  
16-22=-550/1, 15-22=-1/356

- 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 1611 lb uplift at joint 20 and 1386 lb uplift at joint 25.
  - 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.
  - 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 826 lb up at 15-5-4, 826 lb up at 17-5-4, 826 lb up at 19-5-4, 361 lb down at 20-11-12, and 826 lb up at 21-5-4, and 826 lb up at 23-5-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
  - 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard



August 5, 2024

Continued on page 2

<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	Truss	Truss Type	Qty	Ply	Lot 9 Heritage @ NC	I67288114
J0724-4219	F14-GR	Floor Girder	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 2 08:20:04 2024 Page 2  
 ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

**LOAD CASE(S)** Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 20-33=-10, 1-19=-100

Concentrated Loads (lb)

Vert: 16=192(B) 36=192(B) 37=192(B) 38=192(B) 39=-297(F) 40=192(B)

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

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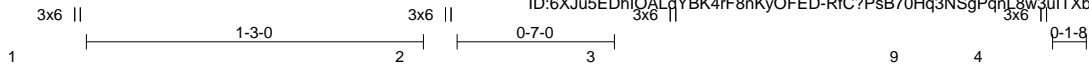


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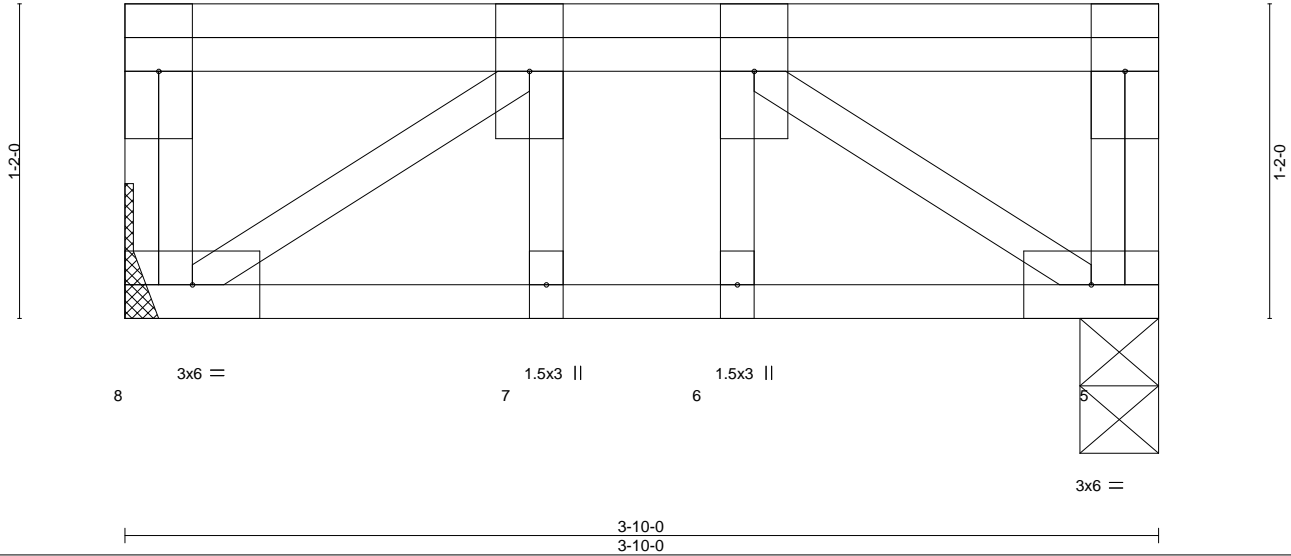
Job J0724-4219	Truss F15-GR	Truss Type FLOOR GIRDER	Qty 1	Ply 1	Lot 9 Heritage @ NC Job Reference (optional)	I67288115
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Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 2 08:20:04 2024 Page 1



Scale = 1:8.5



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.12	Vert(LL) -0.00	7	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.11	Vert(CT) -0.01	7	>999	360		
BCLL 0.0	Rep Stress Incr NO	WB 0.12	Horz(CT) 0.00	5	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S					Weight: 29 lb	FT = 20%F, 11%E

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

(size) 8=Mechanical, 5=0-3-8  
 Max Grav 8=377(LC 1), 5=543(LC 1)

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

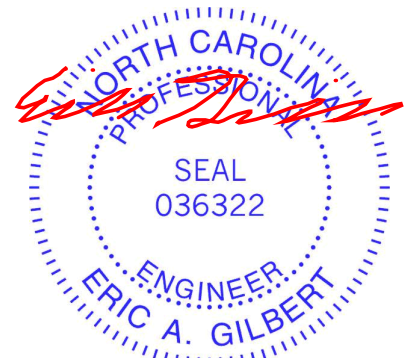
TOP CHORD 2-3=-429/0  
 BOT CHORD 7-8=0/429, 6-7=0/429, 5-6=0/429  
 WEBS 3-5=-519/0, 2-8=-519/0

**NOTES-**

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Plates checked for a plus or minus 1 degree rotation about its center.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.
- 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 363 lb down at 1-4-12, and 315 lb down at 3-4-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

- 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
 Uniform Loads (plf)  
 Vert: 5-8=-8, 1-4=-80  
 Concentrated Loads (lb)  
 Vert: 2=-326(F) 9=-279(F)



August 5, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

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818 Soundside Road  
 Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	Lot 9 Heritage @ NC
J0724-4219	F16	Floor	3	1	167288116

Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 2 08:20:05 2024 Page 1  
 ID:6XJu5EDhIOLdYBK4rF8nKyOFED-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

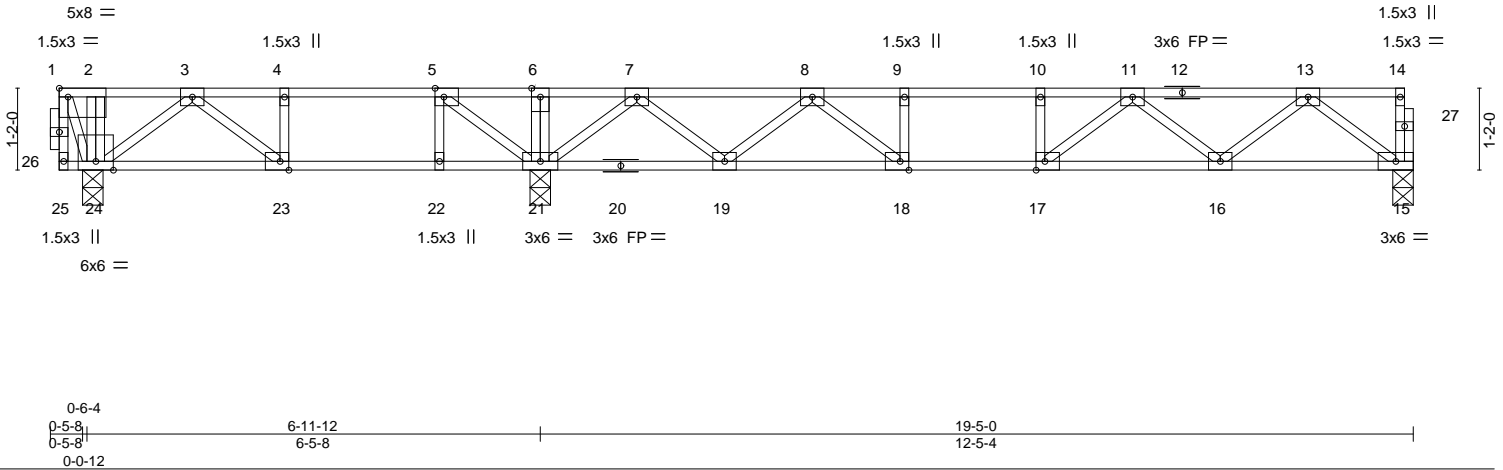


Plate Offsets (X, Y)-- [1:Edge,0-1-8], [5:0-1-8,Edge], [17:0-1-8,Edge], [18:0-1-8,Edge], [23:0-1-8,Edge]									
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL	1.00	TC 0.47	Vert(LL)	-0.08	16-17	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.48	Vert(CT)	-0.11	16-17	>999		
BCLL 0.0	Rep Stress Incr	NO	WB 0.49	Horz(CT)	0.02	15	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 100 lb	FT = 20%F, 11%E

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

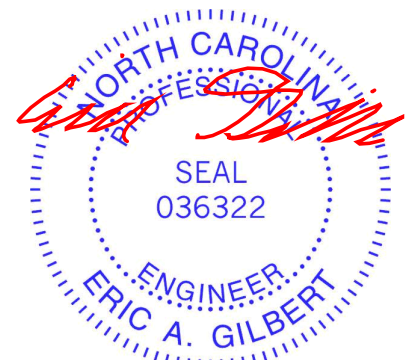
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS.** (size) 21=0-3-8, 15=0-3-8, 24=0-3-8  
 Max Grav 21=1073(LC 4), 15=644(LC 11), 24=2437(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=0/983, 2-3=0/985, 3-4=-313/808, 4-5=-313/808, 5-6=0/865, 6-7=0/865,  
 7-8=-1058/13, 8-9=-1808/0, 9-10=-1808/0, 10-11=-1808/0, 11-13=-1244/0  
 BOT CHORD 23-24=-894/124, 22-23=-808/313, 21-22=-808/313, 19-21=-197/551, 18-19=0/1537,  
 17-18=0/1808, 16-17=0/1653, 15-16=0/793  
 WEBS 3-24=-547/0, 3-23=0/413, 5-21=-652/0, 13-15=-992/0, 13-16=0/587, 11-16=-532/0,  
 11-17=-28/376, 7-21=-1143/0, 7-19=0/724, 8-19=-714/0, 8-18=0/501, 1-24=-2128/0

- NOTES-**
- Unbalanced floor live loads have been considered for this design.
  - All plates are 3x4 MT20 unless otherwise indicated.
  - Plates checked for a plus or minus 1 degree rotation about its center.
  - 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: 15-25=-10, 1-14=-100  
 Concentrated Loads (lb)  
 Vert: 1=-1940



August 5, 2024

Job	Truss	Truss Type	Qty	Ply	Lot 9 Heritage @ NC
J0724-4219	FKW1	Floor Supported Gable	1	1	167288117
					Job Reference (optional)

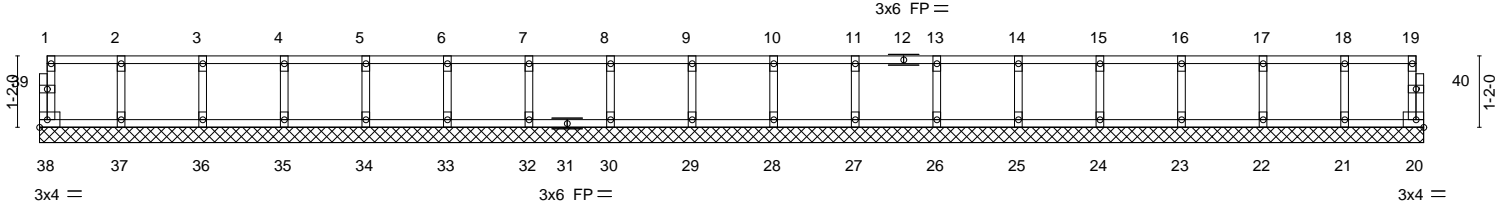
Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 2 08:20:05 2024 Page 1  
ID:6XJu5EDhIOLdYBK4rF8nKyOFED-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

0-1-8

0-1-8

Scale = 1:37.7



22-7-8  
22-7-8

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	2-0-0 Plate Grip DOL 1.00	TC 0.06	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.01	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr YES	WB 0.03	Horz(CT)	0.00	20	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-R					Weight: 94 lb	FT = 20%F, 11%E

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

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

**REACTIONS.** All bearings 22-7-8.  
(lb) - Max Grav All reactions 250 lb or less at joint(s) 38, 20, 37, 36, 35, 34, 33, 32, 30, 29, 28, 27, 26, 25, 24, 23, 22, 21

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

**NOTES-**

- All plates are 1.5x3 MT20 unless otherwise indicated.
- Plates checked for a plus or minus 1 degree rotation about its center.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.
- 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.



August 5, 2024

**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)



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Edenton, NC 27932

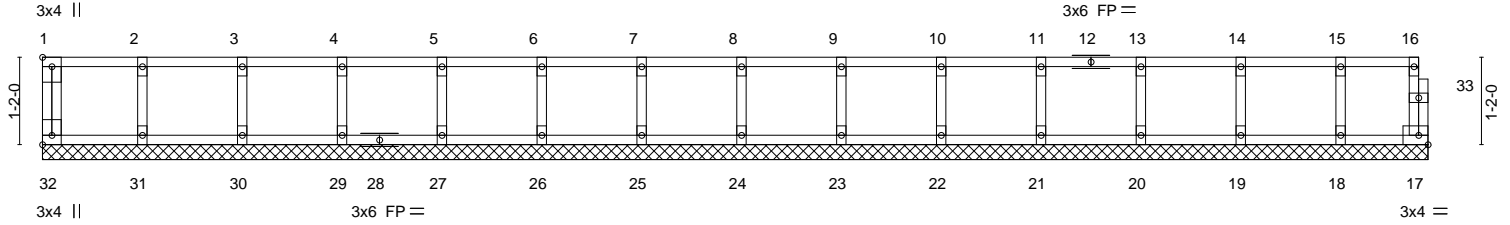
Job	Truss	Truss Type	Qty	Ply	Lot 9 Heritage @ NC
J0724-4219	FKW2	Floor Supported Gable	1	1	167288118
					Job Reference (optional)

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8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 2 08:20:06 2024 Page 1  
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0-1/8

Scale = 1:30.8



18-6-0  
18-6-0

Plate Offsets (X, Y)--	[1:Edge,0-1-8], [32:Edge,0-1-8]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL 1.00	TC 0.06	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 17 n/a n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-R		Weight: 78 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 18-6-0.  
 (lb) - Max Grav All reactions 250 lb or less at joint(s) 32, 17, 31, 30, 29, 27, 26, 25, 24, 23, 22, 21, 20, 19, 18

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

- NOTES-**
- All plates are 1.5x3 MT20 unless otherwise indicated.
  - Plates checked for a plus or minus 1 degree rotation about its center.
  - Gable requires continuous bottom chord bearing.
  - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 1-4-0 oc.
  - 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.



August 5, 2024

**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)

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 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 9 Heritage @ NC
J0724-4219	FKW3	Floor Supported Gable	1	1	I67288119
					Job Reference (optional)

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8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 2 08:20:06 2024 Page 1  
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0-1/8

0-1/8

Scale = 1:20.7

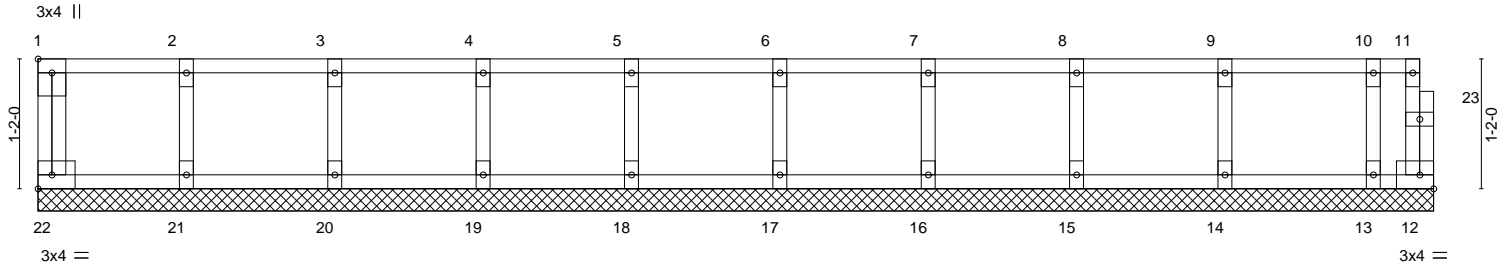


Plate Offsets (X,Y)-- [1:Edge,0-1-8]		12-6-8		12-6-8	
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	2-0-0	TC 0.06	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.02	Vert(LL) n/a - n/a 999		
BCLL 0.0	Lumber DOL 1.00	WB 0.03	Vert(CT) n/a - n/a 999		
BCDL 5.0	Rep Stress Incr YES	Matrix-R	Horz(CT) 0.00 12 n/a n/a		
	Code IRC2015/TPI2014			Weight: 55 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 12-6-8.  
 (lb) - Max Grav All reactions 250 lb or less at joint(s) 22, 12, 21, 20, 19, 18, 17, 16, 15, 14, 13

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

- NOTES-**
- All plates are 1.5x3 MT20 unless otherwise indicated.
  - Plates checked for a plus or minus 1 degree rotation about its center.
  - Gable requires continuous bottom chord bearing.
  - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 1-4-0 oc.
  - 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.



August 5, 2024

Job J0724-4219	Truss FKW4	Truss Type Floor Supported Gable	Qty 1	Ply 1	Lot 9 Heritage @ NC Job Reference (optional)	167288120
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8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 2 08:20:06 2024 Page 1  
ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RIC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

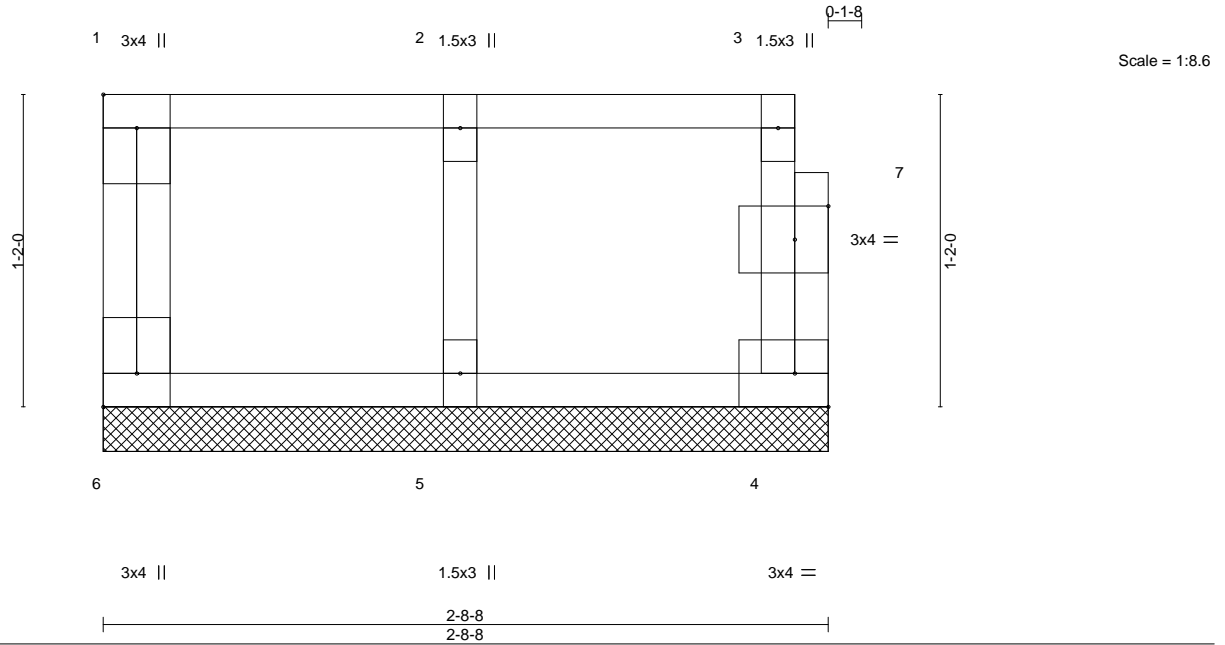


Plate Offsets (X,Y)--	[1:Edge,0-1-8], [6:Edge,0-1-8], [7:0-1-8,0-1-8]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL 1.00	TC 0.07	Vert(LL) n/a - n/a 999	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.01	Vert(CT) n/a - n/a 999		
BCLL 0.0	Rep Stress Incr YES	WB 0.03	Horz(CT) 0.00 4 n/a n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-R		Weight: 14 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 2-8-8 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)	
OTHERS 2x4 SP No.3(flat)	

**REACTIONS.** (size) 6=2-8-8, 4=2-8-8, 5=2-8-8  
Max Grav 6=65(LC 1), 4=61(LC 1), 5=139(LC 1)

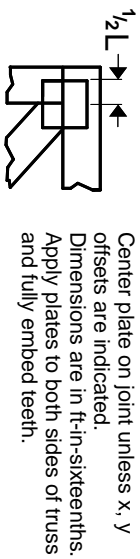
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

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

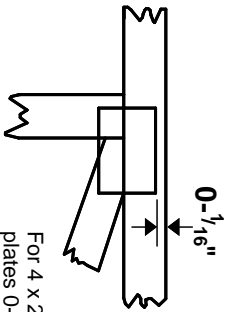


# Symbols

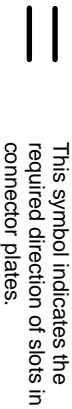
## PLATE LOCATION AND ORIENTATION



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 SIZE

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

**4 X 4**

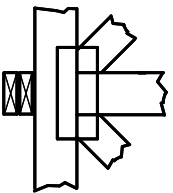
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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

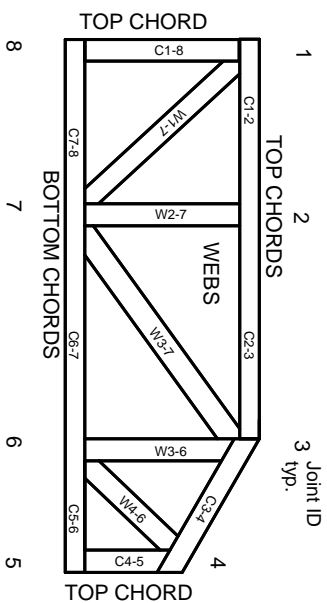


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

## 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



**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.

**MITek**

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**TRENGO**  
A MITek Affiliate

MITek Engineering Reference Sheet: MIL-7473 rev. 1/2/2023