

Trenco 818 Soundside Rd Edenton, NC 27932

Re: J1123-6664

Lot 17 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: I62214232 thru I62214247

My license renewal date for the state of North Carolina is December 31, 2023.

North Carolina COA: C-0844



November 28,2023

Gilbert, Eric

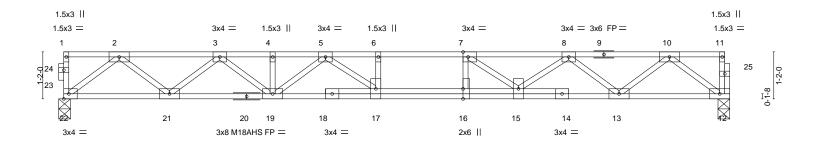
**IMPORTANT NOTE:** The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), 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 17 Heritage @ NC
					162214232
J1123-6664	F01	Floor	4	1	
					Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc.

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Nov 27 16:15:26 2023 Page 1 ID:JQb1igK2ne3CQdqy3dwnCxyStrD-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f





			16-8-0	
Plate Offsets (X,Y)	[7:0-1-8,Edge], [16:0-3-0,Edge]			
LOADING (psf) TCLL 40.0 TCDL 10.0 BCLL 0.0	SPACING-         2-0-0           Plate Grip DOL         1.00           Lumber DOL         1.00           Rep Stress Incr         YES	CSI. TC 0.41 BC 0.71 WB 0.47	DEFL.         in (loc)         l/defl         L/d           Vert(LL)         -0.20         16-17         >997         480           Vert(CT)         -0.27         16-17         >724         360           Horz(CT)         0.05         12         n/a         n/a	PLATES GRIP MT20 244/190 M18AHS 186/179
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S		Weight: 91 lb FT = 20%F, 11%E

16-8-0

LUMBER-**BRACING-**

2x4 SP No.1(flat) TOP CHORD TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins,

BOT CHORD 2x4 SP No.1(flat) except end verticals. WEBS 2x4 SP No.3(flat) **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 22=0-3-8, 12=0-3-8 Max Grav 22=899(LC 1), 12=893(LC 1)

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

TOP CHORD 2-3=-1833/0, 3-4=-3019/0, 4-5=-3019/0, 5-6=-3644/0, 6-7=-3644/0, 7-8=-3099/0, 8-10=-1861/0

BOT CHORD

 $21-22=0/1076,\ 19-21=0/2545,\ 17-19=0/3409,\ 16-17=0/3644,\ 15-16=0/3644,\ 13-15=0/2622,$ 

12-13=0/1109

WFBS 2-22=-1374/0, 2-21=0/985, 3-21=-927/0, 3-19=0/605, 10-12=-1389/0, 10-13=0/979, 8-13=-991/0, 8-15=0/605, 7-15=-853/0, 7-16=-95/331, 5-19=-498/0, 5-17=0/550

### NOTES-

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



November 28,2023



Job	Truss	Truss Type	Qty	Ply	Lot 17 Heritage @ NC
					l62214233
J1123-6664	F02	FLOOR	3	1	
					Job Reference (optional)

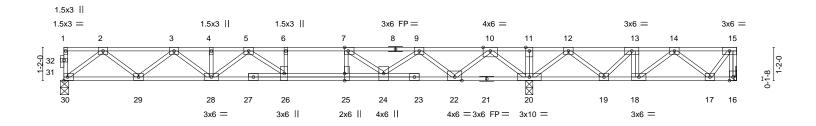
8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Nov 27 16:15:27 2023 Page 1 ID:JQb1igK2ne3CQdqy3dwnCxyStrD-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f





0-11-12

0-8-4 Scale = 1:40.5



				16-6-0					3-8-12	3-6-	
Plate Offs	sets (X,Y)	[7:0-1-8,Edge], [25:0-3-0	,Edge]	_							
LOADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	I/defI	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.52	Vert(LL)	-0.16 26-28	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.61	Vert(CT)	-0.22 26-28	>905	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.56	Horz(CT)	0.03 20	n/a	n/a		
BCDL	5.0	Code IRC2015/T	PI2014	Matrix	<-S					Weight: 131 lb	FT = 20%F, 11%E

LUMBER-

BRACING-TOP CHORD

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

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) 16=Mechanical, 30=0-3-8, 20=0-3-0

Max Uplift 16=-185(LC 3)

Max Grav 16=290(LC 4), 30=769(LC 3), 20=1741(LC 1)

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

TOP CHORD 15-16=-292/183, 2-3=-1508/0, 3-4=-2396/0, 4-5=-2396/0, 5-6=-2504/0, 6-7=-2504/

7-9=-1669/0, 10-11=0/2111, 11-12=0/2111, 12-13=-146/1105, 13-14=-367/766

 $29-30=0/909,\ 28-29=0/2076,\ 26-28=0/2563,\ 25-26=0/2504,\ 24-25=0/2504,\ 22-24=0/1052,\ 20-22=-842/0,\ 19-20=-1502/0,\ 18-19=-766/367,\ 17-18=-424/377$ BOT CHORD

13-18=0/280, 2-30=-1161/0, 2-29=0/779, 3-29=-740/0, 3-28=0/408, 10-20=-1592/0,

WEBS 10-22=0/1180, 9-22=-1150/0, 9-24=0/796, 7-24=-1099/0, 7-25=0/453, 12-20=-1049/0,

12-19=0/671, 13-19=-609/0, 14-18=-430/0, 14-17=-283/349, 15-17=-254/259

- 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) 16=185.
- 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.



November 28,2023

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPII 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 17 Heritage @ NC	1
					162214234	
J1123-6664	F03	FLOOR	3	1		
					Job Reference (optional)	
Comtach Inc Equation	illo NC - 28314		Q	130 c lan	6 2022 MiTok Industries, Inc. Mon Nov 27 16:15:20 2023, Page 1	

1-3-0

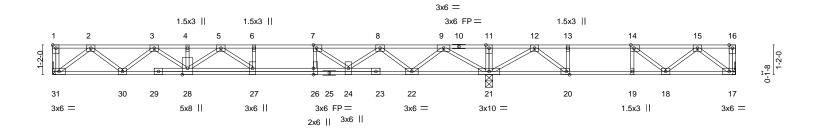
ID:JQb1igK2ne3CQdqy3dwnCxyStrD-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Structural wood sheathing directly applied or 6-0-0 oc purlins,

6-0-0 oc bracing: 20-21,19-20,18-19.

1-8-0 2-5-0

Scale = 1:45.4



	17-2-	4		1		26-10-12	
1	17-2-	4		1		9-8-8	ı
Plate Offsets (X,Y)	[1:Edge,0-1-8], [7:0-1-8,Edge], [14:0-1-8	3,Edge], [20:0-1-8,Edge],	[26:0-3-0,Edge]				
LOADING (psf) TCLL 40.0 TCDL 10.0 BCLL 0.0 BCDL 5.0	SPACING- 1-7-3 Plate Grip DOL 1.00 Lumber DOL 1.00 Rep Stress Incr YES Code IRC2015/TPI2014	CSI. TC 0.59 BC 0.59 WB 0.42 Matrix-S	DEFL. in Vert(LL) -0.17 2 Vert(CT) -0.23 2 Horz(CT) 0.04		L/d 480 360 n/a	PLATES MT20 Weight: 145 lb	<b>GRIP</b> 244/190 FT = 20%F, 11%E

LUMBER-BRACING-

2-3-4

TOP CHORD 2x4 SP No.1(flat) TOP CHORD

**BOT CHORD** 2x4 SP No.1(flat) except end verticals. WEBS 2x4 SP No.3(flat) **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

REACTIONS. (size) 31=Mechanical, 21=0-3-8, 17=Mechanical Max Grav 31=706(LC 10), 21=1322(LC 1), 17=395(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1449/0, 3-4=-2485/0, 4-5=-2485/0, 5-6=-2806/0, 6-7=-2806/0, 7-8=-2250/0,

8-9=-1182/0, 9-11=0/1057, 11-12=0/1057, 12-13=-797/230, 13-14=-797/230,

14-15=-675/43

**BOT CHORD**  $30 - 31 = 0/872,\ 28 - 30 = 0/2051,\ 27 - 28 = 0/2730,\ 26 - 27 = 0/2806,\ 24 - 26 = 0/2806,\ 22 - 24 = 0/1823,\ 24 - 26 = 0/2806,\ 24 - 26 = 0/$ 

21-22=0/528, 20-21=-555/405, 19-20=-230/797, 18-19=-230/797, 17-18=0/483 2-31=-1094/0, 2-30=0/752, 3-30=-784/0, 3-28=0/541, 5-28=-323/0, 5-27=-119/336, 9-21=-1448/0, 9-22=0/883, 8-22=-864/0, 8-24=0/576, 7-24=-817/0, 7-26=-21/322,

12-21=-859/0, 12-20=0/714, 15-17=-606/0, 15-18=-94/251, 13-20=-327/0

WEBS

- 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.



November 28,2023



Job Truss Truss Type Qty Ply Lot 17 Heritage @ NC 162214235 J1123-6664 F04 **FLOOR** 3 Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

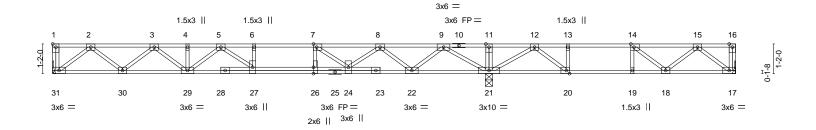
1-3-0

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Structural wood sheathing directly applied or 6-0-0 oc purlins,

1-8-0 2-5-0

Scale = 1:45.4



	17-2-4							1			26-10-12	
			17-2-	4				1			9-8-8	ı
Plate Offse	ts (X,Y)	[1:Edge,0-1-8], [7:0-1-8,Edg	ge], [14:0-1-8	3,Edge], [20:	0-1-8,Edge],	[26:0-3-0,Edge]						
TCDL	40.0 10.0	Plate Grip DOL Lumber DOL	1-7-3 1.00 1.00	CSI. TC BC	0.60 0.60	DEFL. Vert(LL) Vert(CT)	in -0.17 -0.23	(loc) 27 27	l/defl >999 >888	L/d 480 360	PLATES MT20	<b>GRIP</b> 244/190
BCLL BCDL	0.0 5.0	Rep Stress Incr Code IRC2015/TPI2	YES 2014	WB Matrix	0.42 <-S	Horz(CT)	0.04	17	n/a	n/a	Weight: 142 lb	FT = 20%F, 11%E

LUMBER-BRACING-

2-3-4

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

except end verticals. 2x4 SP No.3(flat) **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 20-21,19-20,18-19.

TOP CHORD

REACTIONS. (size) 31=Mechanical, 21=0-3-8, 17=Mechanical Max Grav 31=704(LC 10), 21=1328(LC 1), 17=394(LC 4)

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

TOP CHORD 2-3=-1456/0, 3-4=-2361/0, 4-5=-2361/0, 5-6=-2767/0, 6-7=-2767/0, 7-8=-2226/0,

8-9=-1155/0, 9-11=0/1086, 11-12=0/1086, 12-13=-792/248, 13-14=-792/248,

14-15=-673/52

30-31=0/876, 29-30=0/2005, 27-29=0/2631, 26-27=0/2767, 24-26=0/2767, 22-24=0/1799, **BOT CHORD** 

21-22=0/497, 20-21=-581/398, 19-20=-248/792, 18-19=-248/792, 17-18=0/482 2-31=-1099/0, 2-30=0/755, 3-30=-714/0, 3-29=0/455, 5-29=-344/0, 5-27=-53/378, 9-21=-1451/0, 9-22=0/887, 8-22=-868/0, 8-24=0/576, 7-24=-808/0, 7-26=-23/320,

12-21=-866/0, 12-20=0/725, 15-17=-605/0, 14-18=-152/250, 13-20=-332/0

WEBS

- 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.



November 28,2023



Job Truss Truss Type Qty Ply Lot 17 Heritage @ NC 162214236 J1123-6664 F05 **FLOOR** 3 Job Reference (optional)

2-3-4

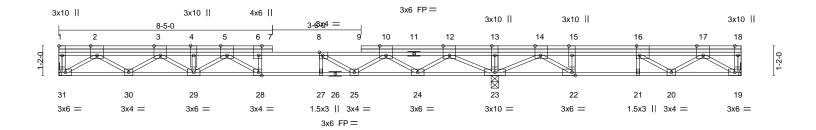
Fayetteville, NC - 28314, Comtech, Inc.

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1-8-0 2-5-0

Scale = 1:45.4



<u></u>				'-2-4 '-2-4				-			26-10-12 9-8-8	
Plate Offse	e Offsets (X,Y) [1:Edge,0-1-8], [2:0-3-0,Edge], [3:0-3-0,Edge], [5:0-3-0,Edge], [6:0-4-8,Edge], [8:0-1-8,Edge], [10:0-3-0,Edge], [12:0-1-8,Edge], [17:0-3-0,Edge], [22:0-1-8,Edge]							ge], [12:0-3-		],		
LOADING	(psf)	SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.52	Vert(LL)	-0.15	28	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.52	Vert(CT)	-0.20	28	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.61	Horz(CT)	0.03	23	n/a	n/a		
BCDL	5.0	Code IRC2015/TI	PI2014	Matri	x-S						Weight: 195 lb	FT = 20%F, 11%E

LUMBER-**BRACING-**

> TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins,

except end verticals.

**BOT CHORD** 2x4 SP No.1(flat) WEBS 2x4 SP No.3(flat) **BOT CHORD** Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 31=Mechanical, 19=Mechanical, 23=0-3-8

Max Uplift 19=-95(LC 3)

TOP CHORD 2x4 SP No.1(flat)

Max Grav 31=632(LC 3), 19=346(LC 4), 23=1522(LC 1)

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

TOP CHORD  $2\text{-}3\text{=-}1384/0,\ 3\text{-}4\text{=-}2261/0,\ 4\text{-}5\text{=-}2261/0,\ 5\text{-}6\text{=-}2402/0,\ 6\text{-}8\text{=-}2413/0,\ 8\text{-}10\text{=-}1620/0,\ 6\text{-}8\text{--}2413/0,\ 8\text{-}10\text{=-}1620/0,\ 8\text{-}10\text{=-}1$ 

12-13=0/2117, 13-14=0/2117, 14-15=-611/863, 15-16=-611/863, 16-17=-557/444

30-31=0/848, 29-30=0/1891, 28-29=0/2316, 27-28=0/2402, 25-27=0/2402, 24-25=0/945, 23-24=-775/0, 22-23=-1573/0, 21-22=-863/611, 20-21=-863/611, 19-20=-93/466

2-31=-1019/0, 2-30=0/665, 3-30=-628/0, 3-29=0/452, 5-28=-126/335, 12-23=-1543/0,

12-24=0/1019, 10-24=-970/0, 10-25=0/833, 8-25=-967/0, 17-19=-560/111,

17-20=-435/113, 16-20=-66/511, 14-23=-979/0, 14-22=0/1284, 15-22=-682/0,

13-23=-359/0

### NOTES-

**WEBS** 

BOT CHORD

- 1) Unbalanced floor live loads have been considered for this design.
- All plates are 6x6 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) 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.



November 28,2023



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Job	Truss	Truss Type	Qty	Ply	Lot 17 Heritage @ NC
					162214237
J1123-6664	F06	Floor	4	1	
					Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc.

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Nov 27 16:15:34 2023 Page 1 ID:JQb1igK2ne3CQdqy3dwnCxyStrD-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

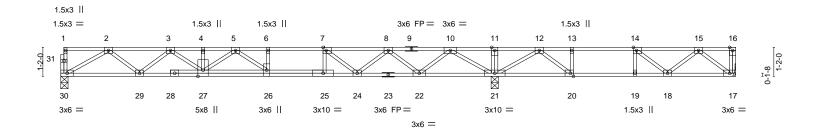
Structural wood sheathing directly applied or 6-0-0 oc purlins,







Scale = 1:46.4



	17-5	o-12		27-2-4
II .	17-5	5-12	l	9-8-8
Plate Offsets (X,Y)	[7:0-1-8,Edge], [14:0-1-8,Edge], [20:0-1	-8,Edge]		
, , ,	, , , , , , , , , , , , , , , , , , , ,			
LOADING (psf)	<b>SPACING-</b> 1-7-3	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.59	Vert(LL) -0.22 26-27 >931 480	MT20 244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.98	Vert(CT) -0.31 26-27 >678 360	
BCLL 0.0	Rep Stress Incr YES	WB 0.43	Horz(CT) 0.04 17 n/a n/a	
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S		Weight: 142 lb FT = 20%F, 11%E

TOP CHORD

LUMBER-**BRACING-**

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

except end verticals. 2x4 SP No.3(flat) **BOT CHORD** Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS. (size) 30=0-3-8, 21=0-3-8, 17=Mechanical

Max Grav 30=714(LC 10), 21=1337(LC 1), 17=394(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1666/0, 3-4=-2669/0, 4-5=-2669/0, 5-6=-2760/0, 6-7=-2760/0, 7-8=-2231/0,

8-10=-1211/0, 10-11=0/1075, 11-12=0/1075, 12-13=-794/239, 13-14=-794/239,

14-15=-674/47

**BOT CHORD** 

21-22=0/541, 20-21=-569/401, 19-20=-239/794, 18-19=-239/794, 17-18=0/482 2-30=-1289/0, 2-29=0/715, 3-29=-764/0, 3-27=0/518, 10-21=-1483/0, 10-22=0/902, 8-22=-842/0, 8-24=0/560, 7-24=-757/0, 7-25=-16/262, 5-27=-272/0, 5-26=-300/248,

12-21=-865/0, 12-20=0/720, 13-20=-329/0, 15-17=-605/0

WEBS

- 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.



November 28,2023



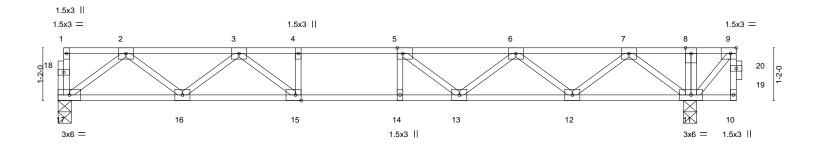
Job	Truss	Truss Type	Qty	Ply	Lot 17 Heritage @ NC
		_			162214238
J1123-6664	F07	Floor	3	1	
					Job Reference (optional)

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Nov 27 16:15:35 2023 Page 1 ID:JQb1igK2ne3CQdqy3dwnCxyStrD-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



2-1-8

0-9-0 0-1-8 Scale = 1:25.5



<del> </del>	14-0-0 14-0-0								
Plate Offsets (X,Y)	[5:0-1-8,Edge], [9:0-1-8,Edge], [15:0-1-	8,Edge]							
LOADING (psf) TCLL 40.0 TCDL 10.0 BCLL 0.0 BCDL 5.0	SPACING- 2-0-0 Plate Grip DOL 1.00 Lumber DOL 1.00 Rep Stress Incr NO Code IRC2015/TPI2014	CSI. TC 0.50 BC 0.74 WB 0.40 Matrix-S	Vert(LL) -0.14 13-14 >9 Vert(CT) -0.18 13-14 >9	defl L/d 999 480 919 360 n/a n/a	PLATES GRIP MT20 244/190  Weight: 77 lb FT = 20%F, 11%E				

TOP CHORD

LUMBER-**BRACING-**

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

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: 11-12.

REACTIONS. (size) 17=0-3-8, 11=0-3-8 Max Grav 17=721(LC 3), 11=1405(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1426/0, 3-4=-2264/0, 4-5=-2264/0, 5-6=-2030/0, 6-7=-1140/0, 7-8=0/484,

8-9=0/484

BOT CHORD 16-17=0/892, 15-16=0/1941, 14-15=0/2264, 13-14=0/2264, 12-13=0/1751,

11-12=-203/506

WFBS 2-17=-1117/0, 2-16=0/695, 3-16=-670/0, 3-15=0/595, 7-11=-1196/0, 7-12=0/830,

6-12=-800/0, 6-13=0/451, 5-13=-521/0, 4-15=-256/0, 9-11=-718/0

### 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) Magnitude of user added load(s) on this truss have been applied uniformly across all gravity load cases with no adjustments.
- 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.

### LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf) Vert: 10-17=-10, 1-9=-100

Concentrated Loads (lb) Vert: 9=-500



November 28,2023



Job Truss Truss Type Qty Lot 17 Heritage @ NC 162214239 J1123-6664 Floor F08 Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Nov 27 16:15:36 2023 Page 1

Fayetteville, NC - 28314, Comtech, Inc.

1-3-0

ID:JQb1igK2ne3CQdqy3dwnCxyStrD-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Structural wood sheathing directly applied or 6-0-0 oc purlins,

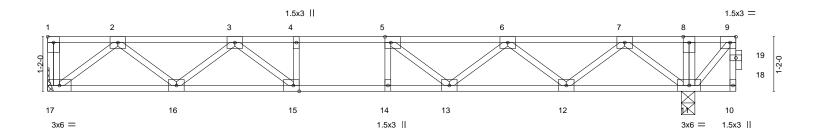
Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

except end verticals.

6-0-0 oc bracing: 11-12.

1-10-0 0-9-0 0118

Scale = 1:24.6



				0-1-8 1-0-0						
Plate Offsets (X,Y) [1:Edge,0-1-8], [5:0-1-8,Edge], [9:0-1-8,Edge] [15:0-1-8,Edge]										
LOADING (psf) TCLL 40.0 TCDL 10.0 BCLL 0.0 BCDL 5.0	SPACING- 2-0-0 Plate Grip DOL 1.00 Lumber DOL 1.00 Rep Stress Incr NO Code IRC2015/TPI2014	CSI. TC 0.42 BC 0.68 WB 0.38 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) -0.12 13-14 -0.15 13-14 0.03 11	l/defl >999 >999 n/a	L/d 480 360 n/a	PLATES MT20 Weight: 76 lb	<b>GRIP</b> 244/190 FT = 20%F, 11%E		

TOP CHORD

**BOT CHORD** 

LUMBER-BRACING-

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

REACTIONS. (size) 17=Mechanical, 11=0-3-8

Max Grav 17=710(LC 3), 11=1390(LC 1)

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

TOP CHORD 2-3=-1385/0, 3-4=-2168/0, 4-5=-2168/0, 5-6=-1955/0, 6-7=-1102/0, 7-8=0/484,

8-9=0/484

BOT CHORD 16-17=0/870, 15-16=0/1880, 14-15=0/2168, 13-14=0/2168, 12-13=0/1696,

11-12=-208/485

2-17=-1092/0, 2-16=0/670, 3-16=-644/0, 3-15=0/542, 7-11=-1171/0, 7-12=0/807, WFBS

6-12=-777/0, 6-13=0/423, 5-13=-482/0, 9-11=-718/0

### 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) Magnitude of user added load(s) on this truss have been applied uniformly across all gravity load cases with no adjustments.
- 6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 7) CAUTION, Do not erect truss backwards.

### LOAD CASE(S) Standard

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

Vert: 10-17=-10, 1-9=-100

Concentrated Loads (lb) Vert: 9=-500



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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/TP11 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 Lot 17 Heritage @ NC 162214240 J1123-6664 F09 Floor 3 Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Nov 27 16:15:37 2023 Page 1 ID:JQb1igK2ne3CQdqy3dwnCxyStrD-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

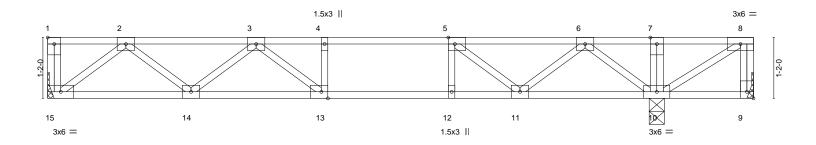
Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

1-3-0 2-3-12 1-5-12

Scale = 1:22.1



<u> </u>				11-8- 11-8-					+	13-6-8 1-10-4
Plate Off	sets (X,Y)	[1:Edge,0-1-8], [5:0-1-8,E	dge], [9:Edge	e,0-1-8], [13:0-1-8,Ed@	e]					
LOADIN	G (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC 0.48	Vert(LL)	-0.12 13-14	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC 0.62	Vert(CT)	-0.16 13-14	>886	360		
BCLL	0.0	Rep Stress Incr	YES	WB 0.31	Horz(CT)	0.02 9	n/a	n/a		
BCDL	5.0	Code IRC2015/TF	PI2014	Matrix-S					Weight: 70 lb	FT = 20%F, 11%E

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

REACTIONS.

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

WEBS 2x4 SP No.3(flat)

(size) 9=Mechanical, 15=Mechanical, 10=0-3-8

Max Uplift 9=-282(LC 8)

Max Grav 9=138(LC 7), 15=604(LC 3), 10=1070(LC 8)

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

8-9=-135/283, 2-3=-1138/0, 3-4=-1507/0, 4-5=-1507/0, 5-6=-934/0, 6-7=-110/581, TOP CHORD

7-8=-109/582

14-15=0/735, 13-14=0/1474, 12-13=0/1507, 11-12=0/1507, 10-11=0/497 **BOT CHORD** WFBS

2-15=-922/0, 2-14=0/525, 3-14=-437/0, 6-10=-966/0, 6-11=0/650, 5-11=-735/0,

8-10=-680/127

### 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) 9=282
- 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.



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Job Truss Truss Type Qty Ply Lot 17 Heritage @ NC 162214241 J1123-6664 F10 **FLOOR** 5 Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Nov 27 16:15:38 2023 Page 1 Fayetteville, NC - 28314, Comtech, Inc.

ID:JQb1igK2ne3CQdqy3dwnCxyStrD-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Structural wood sheathing directly applied or 6-0-0 oc purlins,

except end verticals.

2-0-8 0<sub>1</sub>1<sub>7</sub>8

Scale = 1:17.1

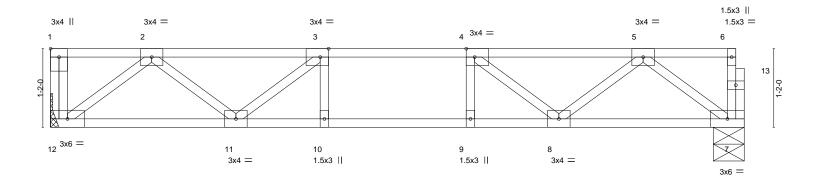


Plate Offsets (X,Y)--[1:Edge,0-1-8], [3:0-1-8,Edge], [4:0-1-8,Edge] LOADING (psf) SPACING-CSI. DEFL. in (loc) I/defI L/d **PLATES** GRIP **TCLL** 40.0 Plate Grip DOL 1.00 TC 0.19 Vert(LL) -0.05 9 >999 480 244/190 MT20 TCDL 10.0 Lumber DOL 1.00 BC 0.33 Vert(CT) -0.06 9 >999 360 **BCLL** 0.0 Rep Stress Incr YES WB 0.16 Horz(CT) 0.01 n/a n/a BCDL Code IRC2015/TPI2014 FT = 20%F, 11%E 5.0 Matrix-S Weight: 52 lb

TOP CHORD

10-3-8

LUMBER-**BRACING-**

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

1-3-0

WEBS 2x4 SP No.3(flat) **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 12=Mechanical, 7=0-5-8 Max Grav 12=442(LC 1), 7=437(LC 1)

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

TOP CHORD 2-3=-795/0, 3-4=-1047/0, 4-5=-794/0

**BOT CHORD** 11-12=0/531, 10-11=0/1047, 9-10=0/1047, 8-9=0/1047, 7-8=0/530

2-12=-666/0, 2-11=0/343, 3-11=-355/0, 5-7=-663/0, 5-8=0/344, 4-8=-355/0 WEBS

### 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.



November 28,2023



Job Truss Truss Type Qty Lot 17 Heritage @ NC 162214242 Floor F11 J1123-6664 5 Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Nov 27 16:15:39 2023 Page 1 ID:JQb1igK2ne3CQdqy3dwnCxyStrD-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Structural wood sheathing directly applied or 6-0-0 oc purlins,

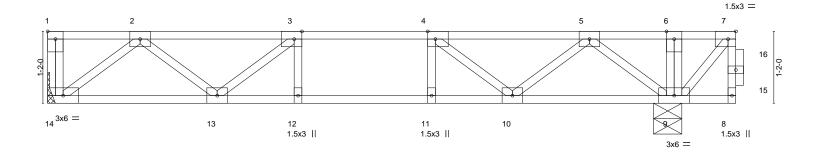
Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

except end verticals.

6-0-0 oc bracing: 9-10.

1-3-0 2-0-8 0-9-0 0<sub>1</sub>1<sub>3</sub>8

Scale = 1:18.7



				0-1-8 1-0-0							
Plate Off	Plate Offsets (X,Y) [1:Edge,0-1-8], [3:0-1-8,Edge], [4:0-1-8,Edge], [7:0-1-8,Edge]										
LOADIN	G (psf)	SPACING- 2-0	-0 <b>CSI</b> .	DI	<b>EFL.</b> in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL 1.	00 TC (	0.43 Ve	ert(LL) -0.07 '	12-13	>999	480	MT20	244/190	
TCDL	10.0	Lumber DOL 1.	00 BC (	0.58 Ve	ert(CT) -0.09 1	12-13	>999	360			
BCLL	0.0	Rep Stress Incr	O WB	0.25 Ho	orz(CT) 0.01	9	n/a	n/a			
BCDL	5.0	Code IRC2015/TPI201	4 Matrix-	s					Weight: 59 lb	FT = 20%F, 11%E	

BRACING-

TOP CHORD

**BOT CHORD** 

10-2-0

LUMBER-

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

REACTIONS. (size) 14=Mechanical, 9=0-5-8

Max Grav 14=503(LC 3), 9=1208(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-868/0, 3-4=-1073/0, 4-5=-641/96, 5-6=0/480, 6-7=0/479

**BOT CHORD** 13-14=0/608, 12-13=0/1073, 11-12=0/1073, 10-11=0/1073, 9-10=-269/247

WEBS 2-14=-763/0, 2-13=0/338, 3-13=-302/50, 5-9=-872/0, 5-10=0/520, 4-10=-603/0,

7-9=-711/0

### 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) Magnitude of user added load(s) on this truss have been applied uniformly across all gravity load cases with no adjustments.
- 6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 7) CAUTION, Do not erect truss backwards.

### LOAD CASE(S) Standard

Vert: 7=-500

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf) Vert: 8-14=-10, 1-7=-100 Concentrated Loads (lb)



10-3-8 11-3-8

November 28,2023

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 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)

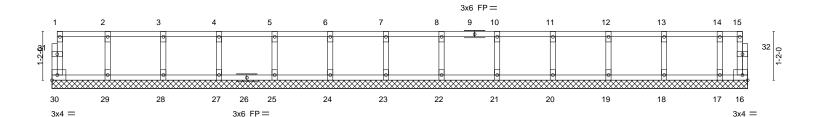


ĺ	Job	Truss	Truss Type	Qty	Ply	Lot 17 Heritage @ NC
						162214243
	J1123-6664	FKW1	Floor Supported Gable	1	1	
						Job Reference (optional)

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Nov 27 16:15:40 2023 Page 1 ID:JQb1igK2ne3CQdqy3dwnCxyStrD-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

0-11-8

0<sub>-1</sub>1<sub>-8</sub> Scale = 1:27.6



16-8-0 16-8-0									
LOADING (psf) TCLL 40.0 TCDL 10.0	SPACING-         2-0-0           Plate Grip DOL         1.00           Lumber DOL         1.00	CSI. TC 0.06 BC 0.01	DEFL. Vert(LL) Vert(CT)	in (loc) n/a - n/a -	l/defl L/d n/a 999 n/a 999	PLATES MT20	<b>GRIP</b> 244/190		
BCLL 0.0 BCDL 5.0	Rep Stress Incr YES Code IRC2015/TPI2014	WB 0.03 Matrix-R	Horz(CT)	0.00 16	n/a n/a	Weight: 70 lb	FT = 20%F, 11%E		

LUMBER-BRACING-

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

**OTHERS** 2x4 SP No.3(flat) 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 16-8-0.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 30, 16, 29, 28, 27, 25, 24, 23, 22, 21, 20, 19, 18, 17

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

### NOTES-

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



November 28,2023



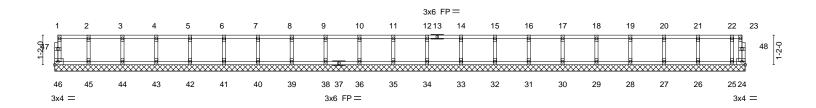
Job		Truss	Truss Type	Qty	Ply	Lot 17 Heritage @ NC
		=10.40				162214244
J1123	-6664	FKW2	Floor Supported Gable	1	1	
						Job Reference (optional)

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Nov 27 16:15:41 2023 Page 1 ID:JQb1igK2ne3CQdqy3dwnCxyStrD-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

0-<u>1</u>-8

0-<u>1</u>1-8

Scale = 1:45.4



	27-2-4 27-2-4									
LOADING (psf) TCLL 40.0 TCDL 10.0 BCLL 0.0 BCDL 5.0	SPACING- 2-0-0 Plate Grip DOL 1.00 Lumber DOL 1.00 Rep Stress Incr YES Code IRC2015/TPI2014	CSI. TC 0.06 BC 0.01 WB 0.03 Matrix-R	DEFL. Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 24	I/defI n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 113 lb	<b>GRIP</b> 244/190 FT = 20%F, 11%E	

LUMBER-BRACING-

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

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 27-2-4.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 46, 24, 45, 44, 43, 42, 41, 40, 39, 38, 36, 35, 34, 33, 32, 31, 30, 29, 28, 27, 26, 25

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.



November 28,2023



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Job Truss Truss Type Qty Lot 17 Heritage @ NC 162214245 J1123-6664 FKW3 Floor Supported Gable Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

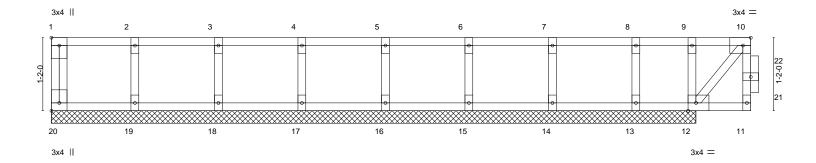
8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Nov 27 16:15:42 2023 Page 1 ID:JQb1igK2ne3CQdqy3dwnCxyStrD-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Structural wood sheathing directly applied or 10-0-0 oc purlins,

except end verticals.

9-11-0 0-9-0

Scale = 1:18.4



					10-2-							0-1-8 1-0-0
Plate Offsets (X,Y) [1:Edge,0-1-8], [10:0-1-8,Edge], [20:Edge,0-1-8]												
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.34	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.29	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	NO	WB	0.07	Horz(CT)	-0.00	12	n/a	n/a		
BCDL	5.0	Code IRC2015/TF	PI2014	Matri	x-S						Weight: 51 lb	FT = 20%F, 11%E

TOP CHORD

10-2-0

LUMBER-BRACING-

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

**WEBS** 2x4 SP No.3(flat) **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. **OTHERS** 2x4 SP No.3(flat)

REACTIONS. All bearings 10-3-8.

Max Uplift All uplift 100 lb or less at joint(s) except 13=-171(LC 4)

Max Grav All reactions 250 lb or less at joint(s) 20, 19, 18, 17, 16, 15, 14 except 12=483(LC 1)

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

WEBS 9-12=-321/0

### 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) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 171 lb uplift at joint 13.
- 7) Non Standard bearing condition. Review required.
- 8) Magnitude of user added load(s) on this truss have been applied uniformly across all gravity load cases with no adjustments.
- 9) 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.
- 10) 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: 11-20=-10, 1-9=-100, 9-10=-250

Concentrated Loads (lb) Vert: 10=-40



November 28,2023





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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TP11 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 17 Heritage @ NC
					I62214246
J1123-6664	FKW4	Floor Supported Gable	1	1	
					Job Reference (optional)

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Nov 27 16:15:43 2023 Page 1 ID:JQb1igK2ne3CQdqy3dwnCxyStrD-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

0<sub>1</sub>1<sub>7</sub>8

Scale = 1:18.2

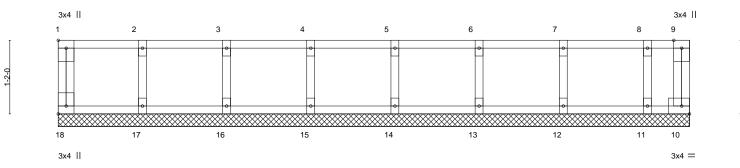


Plate Offsets (X,Y)	[1:Edge,0-1-8], [18:Edge,0-1-8]		10-0-0					·
LOADING (psf) TCLL 40.0 TCDL 10.0 BCLL 0.0 BCDL 5.0	SPACING- 2-0-0 Plate Grip DOL 1.00 Lumber DOL 1.00 Rep Stress Incr YES Code IRC2015/TPI2014	CSI. TC 0.06 BC 0.01 WB 0.03 Matrix-R	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) n/a - n/a - 0.00 10	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 45 lb	<b>GRIP</b> 244/190 FT = 20%F, 11%E

BRACING-

TOP CHORD

**BOT CHORD** 

10-0-0

**WEBS** 2x4 SP No.3(flat) **OTHERS** 2x4 SP No.3(flat)

2x4 SP No.1(flat)

TOP CHORD 2x4 SP No.1(flat)

REACTIONS. All bearings 10-0-0. (lb) - Max Grav All reactions 250 lb or less at joint(s) 18, 10, 17, 16, 15, 14, 13, 12, 11

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

### NOTES-

LUMBER-

**BOT CHORD** 

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





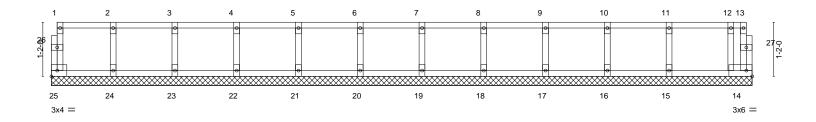
[	Job	Truss	Truss Type	Qty	Ply	Lot 17 Heritage @ NC
		=				l62214247
- 1	J1123-6664	FKW5	Floor Supported Gable	1	1	
						Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Nov 27 16:15:44 2023 Page 1 ID:JQb1igK2ne3CQdqy3dwnCxyStrD-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

0<sub>1</sub>1<sub>8</sub>

Scale = 1:24.9



15-1-8 15-1-8									
LOADING (psf) TCLL 40.0	SPACING- 2-0-0 Plate Grip DOL 1.00	<b>CSI.</b> TC 0.08	DEFL. Vert(LL)	in (loc) n/a -	l/defl L/o	-	<b>GRIP</b> 244/190		
TCDL 10.0 BCLL 0.0 BCDL 5.0	Lumber DOL 1.00 Rep Stress Incr YES Code IRC2015/TPI2014	BC 0.02 WB 0.03 Matrix-R	Vert(CT) Horz(CT)	n/a - 0.00 14	n/a 999 n/a n/a		FT = 20%F, 11%E		

LUMBER-BRACING-

TOP CHORD 2x4 SP No.1(flat) 2x4 SP No.1(flat) BOT CHORD 2x4 SP No.3(flat) **WEBS OTHERS** 2x4 SP No.3(flat) 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 15-1-8.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 25, 14, 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.

- 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.



November 28,2023





### Symbols

## PLATE LOCATION AND ORIENTATION



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



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

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

\* Plate location details available in MiTek software or upon request

### PLATE SIZE

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

## LATERAL BRACING LOCATION



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

### **BEARING**



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

### ANSI/TPI1: Industry Standards: National Design Specification for Metal

DSB-22:

Plate Connected Wood Trusses Installing, Restraining & Bracing of Metal Guide to Good Practice for Handling, Building Component Safety Information, Design Standard for Bracing. Plate Connected Wood Truss Construction.

## 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

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

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

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### MiTek



MiTek Engineering Reference Sheet: MII-7473 rev. 1/2/2023

# General Safety Notes

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

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- 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.

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- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- Cut members to bear tightly against each other

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- joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1. Place plates on each face of truss at each
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.

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- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the camber for dead load deflection responsibility of truss fabricator. General practice is to
- 11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- 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
- Do not cut or alter truss member or plate without prior approval of an engineer.
- Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable project engineer before use. environmental, health or performance risks. Consult with
- 19. Review all portions of this design (front, back, words is not sufficient. and pictures) before use. Reviewing pictures alone
- 21. The design does not take into account any dynamic Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.

or other loads other than those expressly stated.