

RE: J0221-0893

Lot 3 Spartan Ridge

Trenco 818 Soundside Rd Edenton, NC 27932

Site Information:

Customer: Project Name: J0221-0893

Lot/Block: Model:
Address: Subdivision:
City: State:

### General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: IRC2015/TPl2014 Design Program: MiTek 20/20 8.3

Wind Code: N/A Wind Speed: N/A mph Roof Load: N/A psf Floor Load: 55.0 psf

This package includes 13 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date
1	E14568369	ET1	2/23/2021
2	E14568370	ET2	2/23/2021
3	E14568371	F1	2/23/2021
4	E14568372	F2	2/23/2021
5	E14568373	F2A	2/23/2021
6	E14568374	F3	2/23/2021
7	E14568375	F4	2/23/2021
8	E14568376	F4A	2/23/2021
9	E14568377	F5	2/23/2021
10	E14568378	F6	2/23/2021
11	E14568379	F7	2/23/2021
12	E14568380	FG1	2/23/2021
13	E14568381	FG2	2/23/2021

The truss drawing(s) referenced above have been prepared by Truss Engineering Co. under my direct supervision

based on the parameters provided by Comtech, Inc - Fayetteville.

Truss Design Engineer's Name: Lassiter, Frank

My license renewal date for the state of North Carolina is December 31, 2021

North Carolina COA: C-0844

IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to TRENCO. Any project specific information included is for TRENCO customers file reference purpose only, and was not taken into account in the preparation of these designs. TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.



February 23, 2021

Job	Truss	Truss Type	Qty	Ply	Lot 3 Spartan Ridge
J0221-0893	ET1	Elect Supported Coble	1	1	E14568369
30221-0093	[ ]	Floor Supported Gable		'	Job Reference (optional)

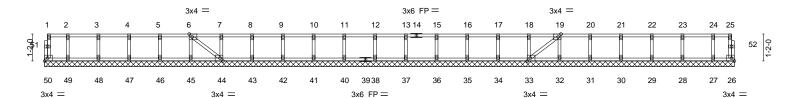
Fayetteville, NC - 28314, Comtech, Inc.

0-11-8

8.330 s May 6 2020 MiTek Industries, Inc. Tue Jun 30 12:06:18 2020 Page 1 ID:J6aSr?qB6etazEy6hKRSkZzPTZ\_-MKJ9328MkJdoSZNfVKM3uN9I?JIIAgpz2MN7wGz15hp

0-11-8

Scale = 1:50.0



	29-11-0										1	
Plate Offsets (X,Y) [6:0-1-8,Edge], [19:0-1-8,Edge], [33:0-1-8,Edge], [44:0-1-8,Edge]												
LOADIN	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	0.06	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	33	n/a	n/a		
BCDL	5.0	Code IRC2015/Ti	PI2014	Matri	x-S						Weight: 128 lb	FT = 20%F, 11%E

29-11-0

LUMBER-BRACING-

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

except end verticals.

**BOT CHORD** Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. All bearings 29-11-0.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 50, 26, 49, 48, 47, 46, 45, 44, 43, 42, 41, 40, 38, 37, 36,  $35,\,34,\,33,\,32,\,31,\,30,\,29,\,28,\,27$ 

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

### NOTES-

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

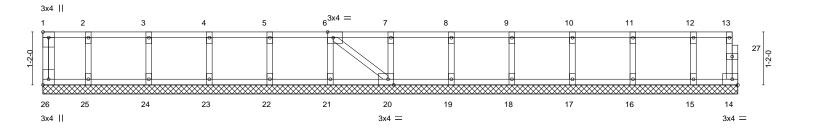


Job	Truss	Truss Type	Qty	Ply	Lot 3 Spartan Ridge
	ET2				E14568370
J0221-0893	E12	Floor Supported Gable	1	1	
					Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc.

8.330 s May 6 2020 MiTek Industries, Inc. Tue Jun 30 12:06:19 2020 Page 1 ID:J6aSr?qB6etazEy6hKRSkZzPTZ\_-qWtYHO9\_Vdlf3jyr31tlRaiTmie\_v737H07gTjz15ho

Scale = 1:25.4



				15-3-12						
Plate Offsets (X,Y) [1:Edge,0-1-8], [6:0-1-8,Edge], [20:0-1-8,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 0.06	Vert(LL)	n/a -	n/a	999	MT20	244/190	
TCDL	10.0	Lumber DOL 1.00	BC 0.01	Vert(CT)	n/a -	n/a	999			
BCLL	0.0	Rep Stress Incr YES	WB 0.03	Horz(CT)	0.00 14	n/a	n/a			
BCDL	5.0	Code IRC2015/TPI2014	Matrix-S					Weight: 68 lb	FT = 20%F, 11%E	

15-3-12

LUMBER-**BRACING-**

TOP CHORD 2x4 SP No.1(flat) TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, 2x4 SP No.1(flat) **BOT CHORD** except end verticals. 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 15-3-12.

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

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

- 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 3 Spartan Ridge
10004 0000	E1			,	E14568371
J0221-0893	F1	Floor	8	1	Job Reference (optional)

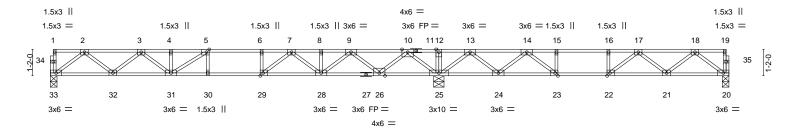
Favetteville, NC - 28314. Comtech, Inc.

8.330 s May 6 2020 MiTek Industries, Inc. Tue Jun 30 12:06:20 2020 Page 1 ID:J6aSr?qB6etazEy6hKRSkZzPTZ\_-JjRwUkAcGwtWhtX2clPX\_oFR26n1eRgGVgsD?9z15hn



2-2-0

0-1-8 Scale = 1:50.8



17·1-8 17·1-8								-11-0 2-9-8	———
Plate Offsets (X,Y)	[5:0-1-8,Edge], [22:0-1-8,Edge], [23:0-	1-8,Edge], [29:0-1-8,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 YES Code IRC2015/TPI2014	CSI. TC 0.86 BC 0.85 WB 0.58 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.20 -0.28 0.05	(loc) 30 30 20	l/defl >999 >735 n/a	L/d 480 360 n/a	PLATES MT20 Weight: 149 lb	<b>GRIP</b> 244/190 FT = 20%F, 11%E

LUMBER-BRACING-

TOP CHORD 2x4 SP No.1(flat) **BOT CHORD** 2x4 SP No.1(flat) **WEBS** 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 6-0-0 oc bracing

REACTIONS. 33=0-3-8, 25=0-5-8, 20=0-3-8 (size)

Max Grav 33=826(LC 3), 25=1934(LC 1), 20=608(LC 4)

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

TOP CHORD 2-3=-1695/0, 3-4=-2732/0, 4-5=-2732/0, 5-6=-2963/0, 6-7=-2963/0, 7-8=-2067/0, 8-9=-2067/0, 9-10=-539/303, 10-12=0/2152, 12-13=0/2152, 13-14=-551/972, 14-15=-1575/269, 15-16=-1575/269, 16-17=-1575/269, 17-18=-1162/0

32-33=0/1030, 31-32=0/2330, 30-31=0/2963, 29-30=0/2963, 28-29=0/2561,

26-28=-37/1417, 25-26=-833/0, 24-25=-1263/0, 23-24=-662/1135, 22-23=-269/1575,

21-22=-24/1515, 20-21=0/747

**WEBS**  $2\text{-}33\text{=-}1290/0,\ 2\text{-}32\text{=-}0/866,\ 3\text{-}32\text{=-}826/0,\ 3\text{-}31\text{=-}0/514,\ 10\text{-}25\text{=-}1655/0,\ 10\text{-}26\text{=-}0/1228,}$ 9-26=-1188/0, 9-28=0/878, 7-28=-685/0, 7-29=0/807, 6-29=-359/0, 5-31=-475/153,

13-25=-1321/0, 13-24=0/882, 14-24=-926/0, 14-23=0/942, 18-20=-935/0, 18-21=0/540,

17-21=-460/99, 17-22=-345/76, 15-23=-417/0

### NOTES-

BOT CHORD

- 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.
- Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.



Job Truss Truss Type Qty Ply Lot 3 Spartan Ridge E14568372 J0221-0893 F2 Floor Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc.

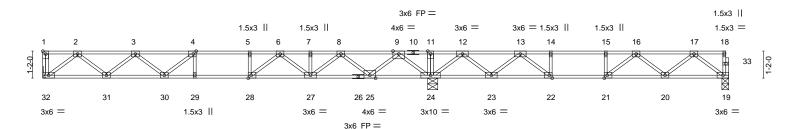
1-3-0

8.330 s May 6 2020 MiTek Industries, Inc. Tue Jun 30 12:06:21 2020 Page 1 ID:J6aSr?qB6etazEy6hKRSkZzPTZ\_-nv?lh4BE1E?NJ16EASwmW?ncbW7ENvAPkKcnXbz15hm

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

2-3-0 0-11-8

Scale = 1:49.8



<u> </u>			16-7-8 16-7-8			16-9-C 0-1-8	)		29-7-8 12-10-		
Plate Offse	ets (X,Y)	[1:Edge,0-1-8], [4:0-1-8,E		-8,Edge], [22:	0-1-8,Edge]				.20		
LOADING TCLL TCDL	(psf) 40.0 10.0	SPACING- Plate Grip DOL Lumber DOL	2-0-0 1.00 1.00	CSI. TC BC	0.87 0.85	DEFL. Vert(LL) Vert(CT)	in (loc) -0.18 28-29 -0.25 28-29	l/defl >999 >810	L/d 480 360	PLATES MT20	<b>GRIP</b> 244/190
BCLL BCDL	0.0 5.0	Rep Stress Incr Code IRC2015/Ti	YES	_	0.57	Horz(CT)	0.05 19	n/a	n/a	Weight: 146 lb	FT = 20%F, 11%E

LUMBER-BRACING-TOP CHORD

2-3-0

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

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

REACTIONS. 32=Mechanical, 19=0-3-8, 24=0-5-4

Max Grav 32=814(LC 3), 19=615(LC 4), 24=1907(LC 1)

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

2-3=-1658/0, 3-4=-2582/0, 4-5=-2848/0, 5-6=-2848/0, 6-7=-2034/0, 7-8=-2034/0, TOP CHORD

8-9=-563/296, 9-11=0/2082, 11-12=0/2082, 12-13=-578/905, 13-14=-1611/221,

14-15=-1611/221, 15-16=-1611/221, 16-17=-1179/0

BOT CHORD 31-32=0/1002, 30-31=0/2282, 29-30=0/2848, 28-29=0/2848, 27-28=0/2500,

25-27=-36/1414, 24-25=-810/0, 23-24=-1188/0, 22-23=-602/1165, 21-22=-221/1611,

20-21=0/1540, 19-20=0/756

**WEBS** 2-32=-1257/0, 2-31=0/854, 3-31=-813/0, 3-30=0/392, 4-30=-431/27, 9-24=-1619/0, 9-25=0/1194, 8-25=-1155/0, 8-27=0/843, 6-27=-652/0, 6-28=0/750, 5-28=-323/0,

17-19=-946/0, 17-20=0/550, 16-20=-470/84, 16-21=-317/90, 12-24=-1316/0,

12-23=0/876, 13-23=-920/0, 13-22=0/936, 14-22=-417/0

### NOTES-

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





Job Truss Type Qty Ply Lot 3 Spartan Ridge Truss E14568373 J0221-0893 F2A Floor Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc.

8.330 s May 6 2020 MiTek Industries, Inc. Tue Jun 30 12:06:23 2020 Page 1 ID:J6aSr?qB6etazEy6hKRSkZzPTZ\_-jI626lCVZrF5YLGcltyEbQt\_GKuVrnniBe5ucUz15hk

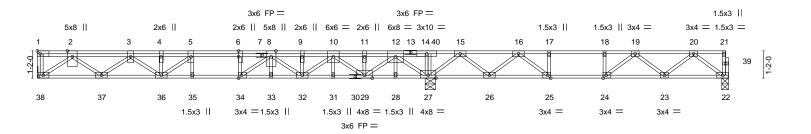
Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 6-0-0 oc bracing

except end verticals.

1-3-0 2-3-0

Scale = 1:49.4



	16-7-8 16-7-8		16 <sub>7</sub> 9-0 0-1-8			29-7-8 12-10-8		<del></del>
Plate Offsets (X,Y)	[6:0-3-0,Edge], [24:0-1-8,Edge], [25:0-1	-8,Edge], [34:0-1-8,Edge]				12 10 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 NO Code IRC2015/TPI2014	CSI. TC 0.66 BC 0.48 WB 0.69 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) -0.15 34 -0.20 34-35 0.04 22	l/defl >999 >993 n/a	L/d 480 360 n/a	PLATES MT20 Weight: 175 lb	<b>GRIP</b> 244/190 FT = 20%F, 11%E

**BOT CHORD** 

LUMBER-**BRACING-**TOP CHORD

TOP CHORD 2x4 SP 2400F 2.0E(flat) 2x4 SP 2400F 2.0E(flat) **BOT CHORD** 

2x4 SP No.3(flat) WEBS

> 38=Mechanical, 27=0-5-4, 22=0-3-8 (size) Max Grav 38=951(LC 3), 27=2436(LC 1), 22=579(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-2097/0, 3-4=-3319/0, 4-5=-3319/0, 5-6=-3521/0, 6-8=-3521/0, 8-9=-2750/0,

9-10=-2750/0, 10-11=-1201/0, 11-12=-1201/0, 12-14=0/2484, 14-15=0/2500,

15-16=-224/1085, 16-17=-1394/330, 17-18=-1394/330, 18-19=-1394/330, 19-20=-1095/0 37-38=0/1249, 36-37=0/2909, 35-36=0/3521, 34-35=0/3521, 33-34=0/3180, 32-33=0/3180,

31-32=0/2041, 29-31=0/2041, 28-29=-501/77, 27-28=-501/77, 26-27=-1403/0,

25-26=-753/865, 24-25=-330/1394, 23-24=-59/1406, 22-23=0/710

 $2 - 38 = -1534/0, \ 2 - 37 = 0/1077, \ 3 - 37 = -1031/0, \ 3 - 36 = 0/512, \ 4 - 36 = -257/13, \ 12 - 27 = -2425/0, \ 2 - 38 = -1534/0, \ 2 - 37 = 0/1077, \ 3 - 37 = -1031/0, \ 3 - 36 = 0/512, \ 4 - 36 = -257/13, \ 12 - 27 = -2425/0, \ 2 - 37 = 0/1077, \ 3 - 37 = -1031/0, \ 3 - 36 = 0/512, \ 4 - 36 = -257/13, \ 12 - 27 = -2425/0, \ 2 - 37 = 0/1077, \ 3 - 37 = -1031/0, \ 3 - 36 = 0/512, \ 4 - 36 = -257/13, \ 12 - 27 = -2425/0, \ 2 - 37 = 0/1077, \ 3 - 37 = -1031/0, \ 3 - 36 = 0/512, \ 4 - 36 = -257/13, \ 12 - 27 = -2425/0, \ 3 - 37 = -1031$ 

12-29=0/1449, 10-29=-1115/0, 10-32=0/936, 8-32=-593/0, 8-34=0/799, 6-34=-397/0, 15-27=-1479/0, 5-36=-372/209, 15-26=0/905, 16-26=-970/0, 16-25=0/989, 17-25=-436/0,

20-22=-888/0, 20-23=-6/501, 19-23=-405/117, 19-24=-370/0

### NOTES-

**WEBS** 

REACTIONS.

BOT CHORD

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x6 MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 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.
- CAUTION, Do not erect truss backwards.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 222 lb down at 4-1-4, and 576 lb down at 15-1-12 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

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

Vert: 22-38=-10, 1-21=-100

Concentrated Loads (lb)

Vert: 3=-142(F) 12=-496(F)



June 30,2020



Job Truss Truss Type Qty Ply Lot 3 Spartan Ridge E14568374 J0221-0893 F3 Floor Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc.

8.330 s May 6 2020 MiTek Industries, Inc. Tue Jun 30 12:06:23 2020 Page 1 ID:J6aSr?qB6etazEy6hKRSkZzPTZ\_-jl626lCVZrF5YLGcltyEbQt?lKoOrsdiBe5ucUz15hk

1-3-0 2-4-0 0118

Scale: 1/2"=1

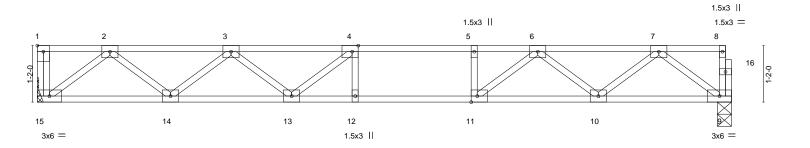


Plate Offsets (X,Y)--[1:Edge,0-1-8], [4:0-1-8,Edge], [11:0-1-8,Edge] LOADING (psf) SPACING-DEFL. **PLATES** GRIP CSI. (loc) I/defI L/d Vert(LL) **TCLL** 40.0 Plate Grip DOL 1.00 TC 0.60 -0.19 12-13 >906 480 MT20 244/190 TCDL Lumber DOL вс 0.87 Vert(CT) -0.25 12-13 10.0 1.00 >687 360 **BCLL** 0.0 Rep Stress Incr YES WB 0.38 Horz(CT) 0.04 9 n/a n/a Code IRC2015/TPI2014 Weight: 71 lb FT = 20%F, 11%E **BCDL** 5.0 Matrix-S

LUMBER-BRACING-

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

REACTIONS. 15=Mechanical, 9=0-3-8 (size) Max Grav 15=775(LC 1), 9=768(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1559/0, 3-4=-2384/0, 4-5=-2550/0, 5-6=-2550/0, 6-7=-1538/0

**BOT CHORD** 14-15=0/947, 13-14=0/2143, 12-13=0/2550, 11-12=0/2550, 10-11=0/2118, 9-10=0/954 **WEBS** 

 $2\text{-}15\text{=-}1188/0,\ 2\text{-}14\text{=-}0/797,\ 3\text{-}14\text{=-}761/0,\ 3\text{-}13\text{=-}0/398,\ 7\text{-}9\text{=-}1194/0,\ 7\text{-}10\text{=-}0/760,}$ 

6-10=-755/0, 6-11=0/740, 5-11=-317/0, 4-13=-437/18

### NOTES-

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





Job Truss Truss Type Qty Ply Lot 3 Spartan Ridge E14568375 J0221-0893 F4 Floor Job Reference (optional)

Favetteville, NC - 28314. Comtech, Inc.

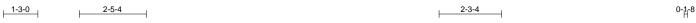
8.330 s May 6 2020 MiTek Industries, Inc. Tue Jun 30 12:06:24 2020 Page 1 ID:J6aSr?qB6etazEy6hKRSkZzPTZ\_-BUgRK5D7K9NyAUrpraTT8eP66j8uaGPsQlqR8wz15hj

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

Rigid ceiling directly applied or 6-0-0 oc bracing

except end verticals.

Scale = 1:41.8



1.5x3 || 1.5x3 || 3x6 FP = 1.5x3 || 3x6 = 4x6 = 1.5x3 || 3x6 =1.5x3 = 2 3 5 6 8 9 10 11 12 13 14 15 16 29 28 27 26 25 24 23 22 21 20 19 18 17 3x6 = 3x6 =3x10 =4x6 = 3x6 FP = 3x6 = 1.5x3 || 3x6 =3x6 =

	8-2-4	8-2-8	24-11-8	
	8-2-4	0-0-4	16-9-0	<u>'</u>
Plate Offsets (X,Y)	[1:Edge,0-1-8], [13:0-1-8,Edge], [21:	0-1-8,Edge], [26:0-1-8,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 NO	CSI. TC 0.85 BC 0.86 WB 0.54	DEFL.         in (loc)         l/defl         L/d           Vert(LL)         -0.21 21-22         >964         480           Vert(CT)         -0.28 21-22         >719         360           Horz(CT)         0.05         17         n/a         n/a	PLATES         GRIP           MT20         244/190
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S	Horz(CT) 0.05 17 n/a n/a	Weight: 125 lb FT = 20%F, 11%E

**BOT CHORD** 

LUMBER-BRACING-TOP CHORD

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

> 28=Mechanical, 25=0-3-8, 17=0-3-8 Max Grav 28=1746(LC 3), 25=1571(LC 1), 17=851(LC 7)

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

1-28=-1403/0, 2-3=-629/297, 3-4=-629/297, 4-5=-629/297, 5-6=0/1219, 6-7=0/1219, TOP CHORD

7-8=-1123/0, 8-10=-2493/0, 10-11=-2493/0, 11-12=-3157/0, 12-13=-3157/0,

13-14=-2793/0, 14-15=-1763/0

BOT CHORD 27-28=-55/424, 26-27=-297/629, 25-26=-730/183, 24-25=-35/277, 22-24=0/1926,

21-22=0/2904, 20-21=0/3157, 19-20=0/3157, 18-19=0/2432, 17-18=0/1059

**WEBS**  $2 - 28 = -532/70, \ 2 - 27 = -303/257, \ 5 - 25 = -823/0, \ 5 - 26 = 0/878, \ 4 - 26 = -429/0, \ 15 - 17 = -1326/0, \ 2 - 28 = -100/200, \ 2 - 28 = -100/2$ 15-18=0/917, 14-18=-871/0, 14-19=0/501, 7-25=-1524/0, 7-24=0/1128, 8-24=-1076/0,

8-22=0/753, 11-22=-559/0, 11-21=0/624, 12-21=-277/0, 13-19=-602/0

### NOTES-

REACTIONS.

- 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.

### LOAD CASE(S) Standard

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

Vert: 17-28=-10. 1-16=-100

Concentrated Loads (lb) Vert: 1=-1350





Job Truss Truss Type Qty Ply Lot 3 Spartan Ridge E14568376 J0221-0893 F4A Floor Girder Job Reference (optional)

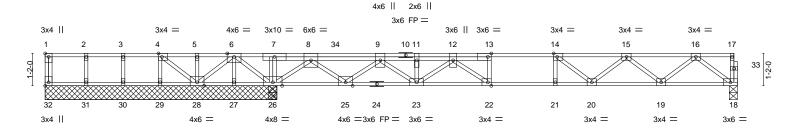
Fayetteville, NC - 28314, Comtech, Inc.

8.330 s May 6 2020 MiTek Industries, Inc. Tue Jun 30 12:06:26 2020 Page 1 ID:J6aSr?qB6etazEy6hKRSkZzPTZ\_-7toBlnENsmdgPo\_Bz?VxD3UTbXr127s9ucJYCpz15hh

> 2-3-0 0-<u>1</u>1-8

1-2-0 | 1-2-8 | 1-2-8 | 1-2-8 | 1-2-8 | 1-3-0 |

Scale = 1:41.5



		8-2-8	8	3- <sub>4-</sub> 4		2	24-11-8			
		8-2-8	0	-1-12			16-7-4			1
Plate Offsets (	(X,Y)	[1:Edge,0-1-8], [4:0-1-8,E	dge], [13:0-1-8	3,Edge], [14:0-1-8,Ed	ge], [22:0-1-8,Edge],	[32:Edge,0-1-8]				
	T									
LOADING (ps	sf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 40	.ó	Plate Grip DOL	1.00	TC 0.79	Vert(LL)	-0.17 20-21	>999	480	MT20	244/190
TCDL 10	.0	Lumber DOL	1.00	BC 0.81	Vert(CT)	-0.23 21	>881	360		
BCLL 0	.0	Rep Stress Incr	NO	WB 0.67	Horz(CT)	0.03 18	n/a	n/a		
BCDL 5	.0	Code IRC2015/TP	PI2014	Matrix-S					Weight: 136 lb	FT = 20%F, 11%E
									_	

LUMBER-**BRACING-**

TOP CHORD 2x4 SP No.1(flat) **BOT CHORD** 2x4 SP No.1(flat) WEBS 2x4 SP No.3(flat) TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

6-0-0 oc bracing: 27-28,26-27,25-26.

REACTIONS. All bearings 8-4-4 except (jt=length) 18=0-3-8.

Max Uplift All uplift 100 lb or less at joint(s) except 27=-448(LC 4), 28=-344(LC 4), 29=-254(LC 4) (lb) -Max Grav All reactions 250 lb or less at joint(s) 32, 28, 29, 30, 31 except 26=2622(LC 1), 26=2622(LC 1),

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

TOP CHORD 4-5=0/391, 5-6=0/391, 6-7=0/2930, 7-8=0/2937, 9-11=-1767/0, 11-12=-1767/0,

12-13=-2619/0, 13-14=-2617/0, 14-15=-2418/0, 15-16=-1576/0

27-28=-1260/0, 26-27=-1260/0, 25-26=-1151/0, 23-25=0/1119, 22-23=0/2282,

21-22=0/2617, 20-21=0/2617, 19-20=0/2166, 18-19=0/956

**WEBS** 6-26=-2091/0, 6-27=0/434, 6-28=0/1122, 4-28=-496/0, 4-29=0/265, 8-26=-2311/0,

8-25=0/1401, 9-25=-1369/0, 9-23=0/808, 16-18=-1196/0, 16-19=0/807, 15-19=-768/0,

15-20=0/383, 14-20=-417/0, 12-23=-643/0, 12-22=0/580

### NOTES-

**BOT CHORD** 

- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 448 lb uplift at joint 27, 344 lb uplift at joint 28 and 254 lb uplift at joint 29.
- 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) 407 lb down at 10-5-12 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

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

Vert: 18-32=-10, 1-17=-100

Concentrated Loads (lb) Vert: 34=-327(B)



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

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

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



Job Truss Truss Type Qty Ply Lot 3 Spartan Ridge E14568377 6 J0221-0893 F5 Floor Job Reference (optional)

Favetteville, NC - 28314. Comtech, Inc.

2-5-4

1-3-0

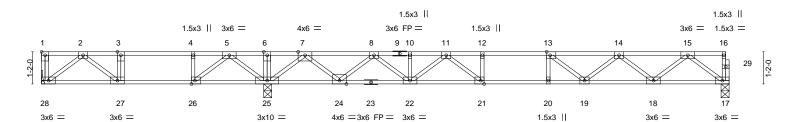
8.330 s May 6 2020 MiTek Industries, Inc. Tue Jun 30 12:06:27 2020 Page 1 ID:J6aSr?qB6etazEy6hKRSkZzPTZ\_-b3MZy7F?d4lX1yZOXj1AmG1f5xBpnc8l6G35lFz15hg

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

Rigid ceiling directly applied or 6-0-0 oc bracing

2-3-4 0-11-8

Scale = 1:41.8



	8-2-4	-4-8	24-11-8	
	8-2-4	-0-4	16-9-0	1
Plate Offsets (X,Y)-	[1:Edge,0-1-8], [13:0-1-8,Edge], [21:0-	1-8,Edge], [26:0-1-8,Edge		
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.74	Vert(LL) -0.21 21-22 >964 480	MT20 244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.78	Vert(CT) -0.28 21-22 >719 360	
BCLL 0.0	Rep Stress Incr YES	WB 0.54	Horz(CT) 0.05 17 n/a n/a	
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S		Weight: 125 lb FT = 20%F, 11%E
				3

**BOT CHORD** 

24 11 0

except end verticals.

LUMBER-BRACING-TOP CHORD

0 2 0

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

REACTIONS. (size) 28=Mechanical, 25=0-3-8, 17=0-3-8

0 2 4

Max Uplift 28=-14(LC 4)

Max Grav 28=396(LC 3), 25=1571(LC 1), 17=851(LC 7)

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

TOP CHORD 2-3=-629/297, 3-4=-629/297, 4-5=-629/297, 5-6=0/1219, 6-7=0/1219, 7-8=-1123/0,

8-10=-2493/0, 10-11=-2493/0, 11-12=-3157/0, 12-13=-3157/0, 13-14=-2793/0,

14-15=-1763/0

**BOT CHORD** 27-28=-56/423, 26-27=-297/629, 25-26=-730/184, 24-25=-34/277, 22-24=0/1927,

 $21-22=0/2904,\ 20-21=0/3157,\ 19-20=0/3157,\ 18-19=0/2432,\ 17-18=0/1059$ 

**WEBS**  $2-28=-531/70,\ 2-27=-302/259,\ 5-25=-823/0,\ 5-26=0/878,\ 4-26=-429/0,\ 15-17=-1326/0,\ 15-1$ 15-18=0/917, 14-18=-871/0, 14-19=0/501, 7-25=-1524/0, 7-24=0/1128, 8-24=-1076/0,

8-22=0/753, 11-22=-559/0, 11-21=0/624, 12-21=-277/0, 13-19=-603/0

### 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 14 lb uplift at joint 28.
- 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 3 Spartan Ridge E14568378 J0221-0893 2 F6 Floor Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc.

8.330 s May 6 2020 MiTek Industries, Inc. Tue Jun 30 12:06:28 2020 Page 1 ID:J6aSr?qB6etazEy6hKRSkZzPTZ\_-4Fwx9TGdOOtNe68a4QYPIUavJLexW8IRLwofHhz15hf

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

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

except end verticals.

2-5-12 1-3-0 0-1-8

Scale = 1:15.4

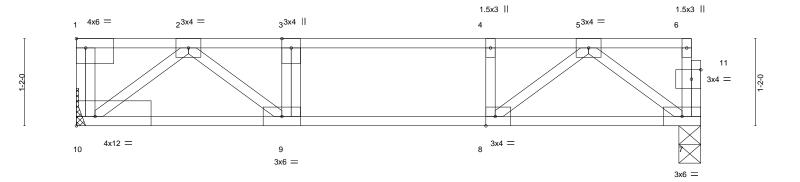


Plate Offsets (X,Y) [1:Edge,0-1-8], [8:0-1-8,Edge], [10:Edge,0-1-8], [11:0-1-8,0-1-8]												
LOADIN	G (psf)	SPACING- 2	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.39	Vert(LL)	-0.04	9-10	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.27	Vert(CT)	-0.05	9-10	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.22	Horz(CT)	0.01	7	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI20	014	Matri	x-S						Weight: 43 lb	FT = 20%F, 11%E

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

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

REACTIONS. (size) 10=Mechanical, 7=0-3-8 Max Grav 10=3846(LC 1), 7=440(LC 1)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 1-10=-3459/0, 2-3=-821/0, 3-4=-821/0, 4-5=-821/0

**BOT CHORD** 9-10=0/493, 8-9=0/821, 7-8=0/489

**WEBS** 2-10=-619/0, 2-9=0/460, 5-7=-609/0, 5-8=0/469

### 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.

### LOAD CASE(S) Standard

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

Vert: 7-10=-10, 1-6=-100 Concentrated Loads (lb) Vert: 1=-3400



June 30,2020

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

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

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



Job Truss Truss Type Qty Ply Lot 3 Spartan Ridge E14568379 J0221-0893 F7 Floor Job Reference (optional) Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Tue Jun 30 12:06:28 2020 Page 1 Comtech, Inc. ID:J6aSr?qB6etazEy6hKRSkZzPTZ\_-4Fwx9TGdOOtNe68a4QYPIUa?PLiGWByRLwofHhz15hf 3x4 = 1-0-0 1-2-8 4 3x4 || 3x4 || 3x4 = Scale = 1:8.5 3x6 =1.5x3 || 1.5x3 II 8 5 3x6 = 3-11-8 Plate Offsets (X,Y)--[1:Edge,0-1-8], [2:0-1-8,Edge], [3:0-1-8,Edge] LOADING (psf) SPACING-CSI. **PLATES** GRIP I/defI L/d (loc) 40.0 TC Vert(LL) TCLL Plate Grip DOL 1.00 0.06 -0.00 >999 480 MT20 244/190 **TCDL** Lumber DOL вс 0.06 Vert(CT) -0.00 10.0 1.00 >999 360 **BCLL** 0.0 Rep Stress Incr YES WB 0.05 Horz(CT) 0.00 5 n/a n/a Code IRC2015/TPI2014 FT = 20%F, 11%E **BCDL** 5.0 Matrix-S Weight: 24 lb LUMBER-**BRACING-**TOP CHORD Structural wood sheathing directly applied or 3-11-8 oc purlins,

**BOT CHORD** 

except end verticals.

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

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

REACTIONS. 8=Mechanical, 5=Mechanical (size) Max Grav 8=204(LC 1), 5=204(LC 1)

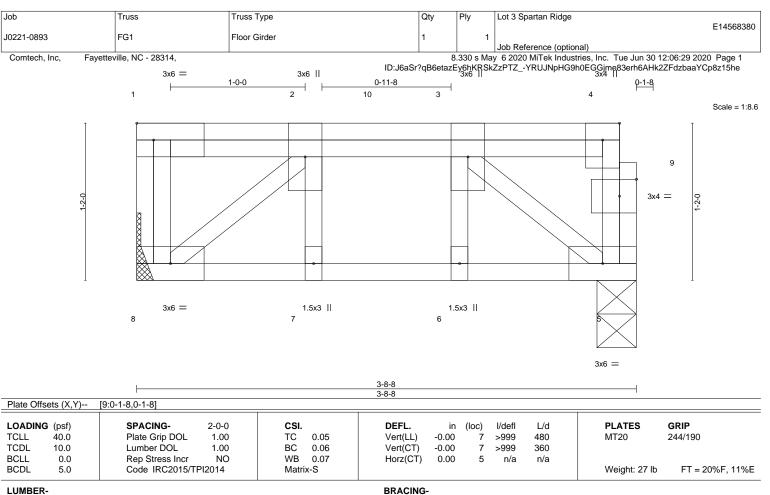
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

### NOTES-

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







TOP CHORD

**BOT CHORD** 

LUMBER-

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

REACTIONS. (size) 8=Mechanical, 5=0-3-8 Max Grav 8=242(LC 1), 5=236(LC 1)

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

2-8=-294/0, 3-5=-291/0 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.
- 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.
- 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 122 lb down at 1-10-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

### LOAD CASE(S) Standard

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

Concentrated Loads (lb) Vert: 10=-104(F)



Structural wood sheathing directly applied or 3-8-8 oc purlins,

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

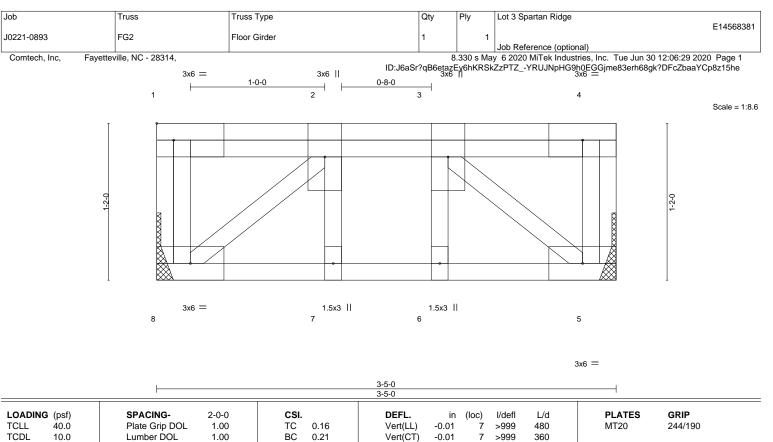
except end verticals.

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

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

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





LOADING (psf) **TCLL TCDL BCLL** WB 0.16 Horz(CT) 0.0 Rep Stress Incr NO 0.00 5 n/a n/a **BCDL** 5.0 Code IRC2015/TPI2014 Matrix-S Weight: 26 lb FT = 20%F, 11%E

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x4 SP No.1(flat)

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

2x4 SP No.3(flat)

REACTIONS. (size) 8=Mechanical, 5=Mechanical

Max Grav 8=596(LC 1), 5=427(LC 1)

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

TOP CHORD 2-3=-528/0 BOT CHORD

7-8=0/528, 6-7=0/528, 5-6=0/528 WFBS

2-8=-684/0, 3-5=-684/0

### 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 705 lb down at 1-6-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 6) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

### LOAD CASE(S) Standard

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

Vert: 5-8=-10, 1-4=-100 Concentrated Loads (lb) Vert: 2=-675(B)



Structural wood sheathing directly applied or 3-5-0 oc purlins,

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

except end verticals.

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

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

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



## Symbols

# PLATE LOCATION AND ORIENTATION



offsets are indicated. Center plate on joint unless x, y and fully embed teeth 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

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

\* Plate location details available in MiTek 20/20 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 where bearings occur. reaction section indicates joint (supports) occur. Icons vary but Indicates location where bearings

## Industry Standards:

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

DSB-89: ANSI/TPI1:

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

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

© 2012 MiTek® All Rights Reserved



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

# **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
- Ņ Truss bracing must be designed by an engineer. For bracing should be considered. may require bracing, or alternative Tor I wide truss spacing, individual lateral braces themselves
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.

ω

designer, erection supervisor, property owner and all other interested parties. Provide copies of this truss design to the building

4

- Cut members to bear tightly against each other
- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.

ტ. Ö

- 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

φ.

- 9 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
- 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
- 13. 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
- Connections not shown are the responsibility of others
- 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 project engineer before use. environmental, health or performance risks. Consult with
- Review all portions of this design (front, back, words is not sufficient. and pictures) before use. Reviewing pictures alone
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- 21. The design does not take into account any dynamic or other loads other than those expressly stated.