

RE: J0720-3213

2631 Darroch Rd. 2-B

Trenco

818 Soundside Rd Edenton, NC 27932

Site Information:

Customer: Project Name: J0720-3213

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

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

Design Code: IRC2015/TPI2014 Design Program: MiTek 20/20 8.3

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	E14305209	ET1	7/13/2020
2	E14305210	ET2	7/13/2020
3	E14305211	F1	7/13/2020
4	E14305212	F2	7/13/2020
5	E14305213	F2A	7/13/2020
6	E14305214	F3	7/13/2020
7	E14305215	F4	7/13/2020
8	E14305216	F4A	7/13/2020
9	E14305217	F5	7/13/2020
10	E14305218	F6	7/13/2020
11	E14305219	F7	7/13/2020
12	E14305220	FG1	7/13/2020
13	E14305221	FG2	7/13/2020

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: Gilbert, Eric

My license renewal date for the state of North Carolina is December 31, 2020

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.



Job	Truss	Truss Type	Qty	Ply	2631 Darroch Rd. 2-B
					E14305209
J0720-3213	ET1	Floor Supported Gable	1	1	
					Inh Reference (ontional)

Comtech. Inc.

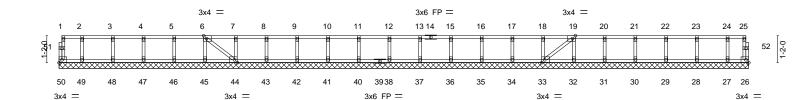
0-1\_8

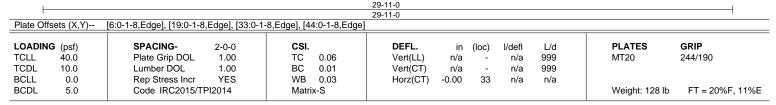
Fayetteville, NC - 28314,

8.330 s Mar 23 2020 MiTek Industries, Inc. Thu Apr 16 14:03:04 2020 Page 1  $ID: J6aSr? qB6etazEy6hKRSkZzPTZ\_-8e9c3eImFH5OOJ7cEOUt?nvVTkX855eZj55VTizQ76L\\$ 

0-1/8

Scale = 1:50.0





LUMBER-

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

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

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

except end verticals.

BOT CHORD Rigid ceiling directly applied or 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.





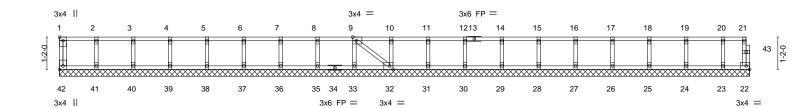
Job	Truss	Truss Type	Qty	Ply	2631 Darroch Rd. 2-B
					E14305210
J0720-3213	ET2	GABLE	1	1	
					Joh Reference (ontional)

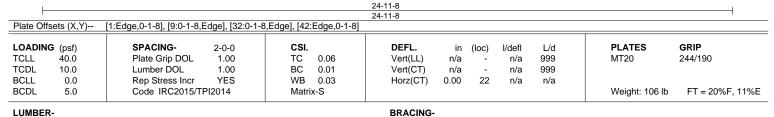
Comtech. Inc. Fayetteville, NC - 28314,

8.330 s Mar 23 2020 MiTek Industries, Inc. Thu Apr 16 14:03:06 2020 Page 1  $ID: J6aSr? qB6etazEy6hKRSkZzPTZ\_-51HNUKK0nuL6dcH\_LpXL4C?rwYDcZ?6sAPabYazQ76J\\$ 

0-1<sub>H</sub>8

Scale = 1:41.7





TOP CHORD

LUMBER-2x4 SP No.1(flat)

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

except end verticals. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

REACTIONS. All bearings 24-11-8.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 42, 22, 41, 40, 39, 38, 37, 36, 35, 33, 32, 31, 30, 29, 28, 27, 26, 25, 24, 23

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





Job 2631 Darroch Rd. 2-B Truss Truss Type Qty E14305211 J0720-3213 F1 Floor Job Reference (optional)

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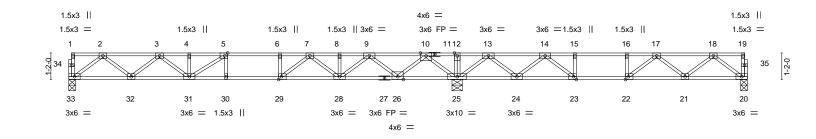
8.330 s Mar 23 2020 MiTek Industries, Inc. Thu Apr 16 14:03:08 2020 Page 1 ID:J6aSr?qB6etazEy6hKRSkZzPTZ\_-1QP7v0LHJVcqtwQNTDZp9d4\_?Liu1l\_9dj3icTzQ76H

0-1-8 HI-3-0

1-6-0 2-3-0

2-2-0

0-1<sub>-</sub>8 Scale = 1:50.8



			17-1-8			29-11-0						
			17-1-8						12	2-9-8	1	
Plate Offse	ate 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)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.86	Vert(LL)	-0.20	30	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.85	Vert(CT)	-0.28	30	>735	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.58	Horz(CT)	0.05	20	n/a	n/a		
BCDL	5.0	Code IRC2015/TF	PI2014	Matrix	:-S						Weight: 149 II	FT = 20%F, 11%E

LUMBER-TOP CHORD

2x4 SP No.1(flat)

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

**BRACING-**

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

except end verticals.

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

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

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

TOP CHORD

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  $2\text{-}3\text{=-}1695/0,\ 3\text{-}4\text{=-}2732/0,\ 4\text{-}5\text{=-}2732/0,\ 5\text{-}6\text{=-}2963/0,\ 6\text{-}7\text{=-}2963/0,\ 7\text{-}8\text{=-}2067/0,}$  $8-9 = -2067/0, \ 9-10 = -539/303, \ 10-12 = 0/2152, \ 12-13 = 0/2152, \ 13-14 = -551/972,$ 

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 2-33=-1290/0, 2-32=0/866, 3-32=-826/0, 3-31=0/514, 10-25=-1655/0, 10-26=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.
- 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.



🗥 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 MTReks connectors. This design is based only upon parameters shown, and is for an individual building ocomponent, 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/PTI Quality Criteria, DSB-89 and BCSI Building Component Sector Members and Possible Sector Truss Plate betties 2570 Crisis Historyca. Suits 232 Wolderf, MD 200610. fabrication, storage, delivery, erection and bracing of trusses and truss systems, see \*\*ANSVTP/1 Qu Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job 2631 Darroch Rd. 2-B Truss Truss Type Qty E14305212 J0720-3213 F2 Floor Job Reference (optional)

Comtech. Inc.

1-3-0

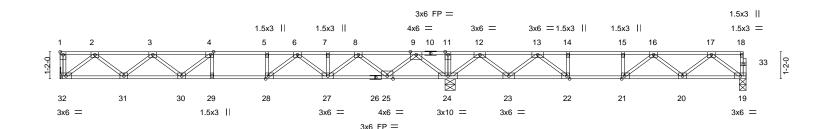
Fayetteville, NC - 28314,

2-3-0

8.330 s Mar 23 2020 MiTek Industries, Inc. Thu Apr 16 14:03:11 2020 Page 1 ID:J6aSr?qB6etazEy6hKRSkZzPTZ\_-R?4GX1O9cQ\_PkO9y8M6WnFiV2ZjZE7\_bKhIMDozQ76E

2-3-0

Scale = 1:49.8



<u> </u>			16-7-8			16-9-0			29-7-8			
Plate Offse	ets (X,Y)	[1:Edge,0-1-8], [4:0-1-8,Edge	16-7-8 ge], [21:0-1-8	8,Edge], [22:	)-1-8,Edge]	0-1 <u>-8</u> , [28:0-1-8,Edge]	¥ · · ·			12-10-8		
LOADING	(psf)		2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.87	Vert(LL)	-0.18 28-29	>999	480	MT20	244/190	
TCDL	10.0	Lumber DOL	1.00	BC	0.85	Vert(CT)	-0.25 28-29	>810	360			
BCLL	0.0	Rep Stress Incr	YES	WB	0.57	Horz(CT)	0.05 19	n/a	n/a			
BCDL	5.0	Code IRC2015/TPI2	2014	Matrix	r-S					Weight: 146 lb	FT = 20%F, 11%E	

LUMBER-TOP CHORD

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

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

**BRACING-**

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

except end verticals.

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

REACTIONS.

(size) 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.

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

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.



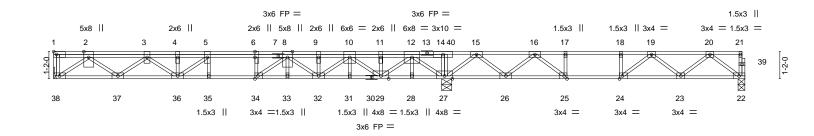


Job Truss Truss Type Qty 2631 Darroch Rd. 2-B E14305213 J0720-3213 F2A Floor Job Reference (optional)

Comtech. Inc. Fayetteville, NC - 28314, 8.330 s Mar 23 2020 MiTek Industries, Inc. Thu Apr 16 14:03:15 2020 Page 1 ID:J6aSr?qB6etazEy6hKRSkZzPTZ\_-KmKmNPRgffUqD?TjNCBSx5tEDABIAv4BEIGaMZzQ76A

1-3-0 1-2-8 1-11-0 1-2-8 1-2-8 1-2-8 1-2-8 1-2-8

Scale = 1:49.4



			16-7-8		16-9-0	l		29-7-8		
			16-7-8		0-1-8			12-10-8		1
Plate Offs	ets (X,Y)	[6:0-3-0,Edge], [24:0-1-8	-8,Edge], [34:0-1-8,Edge	<u>;]</u>						
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 0.66	Vert(LL)	-0.15 34	>999 4	80	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC 0.48	Vert(CT)	-0.20 34-35	>993 3	60		
BCLL	0.0	Rep Stress Incr	NO	WB 0.69	Horz(CT)	0.04 22	n/a r	n/a		
BCDL	5.0	Code IRC2015/TF	PI2014	Matrix-S					Weight: 175 lb	FT = 20%F, 11%E

LUMBER-**BRACING-**

TOP CHORD 2x4 SP 2400F 2.0E(flat) TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins,

2x4 SP 2400F 2.0E(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. (size) 38=Mechanical, 27=0-5-4, 22=0-3-8 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

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

**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.
- 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.
- 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)



April 16,2020

MARNING - 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 MTI-sky 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/PTI Quality Criteria, DSB-89 and BCSI Building Component Safety Information, pushed from Trus Plate persons. fabrication, storage, delivery, erection and bracing of trusses and truss systems, see \*\*ANSVTP/1 Qu Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Type 2631 Darroch Rd. 2-B Truss Qty E14305214 J0720-3213 F3 Floor Job Reference (optional)

Comtech. Inc.

1-3-0

Fayetteville, NC - 28314,

8.330 s Mar 23 2020 MiTek Industries, Inc. Thu Apr 16 14:03:18 2020 Page 1 ID:J6aSr?qB6etazEy6hKRSkZzPTZ\_-kL?v?RTYyasP4SBI2Kk9ZkVIVN6uNLfdxGUEzuzQ767

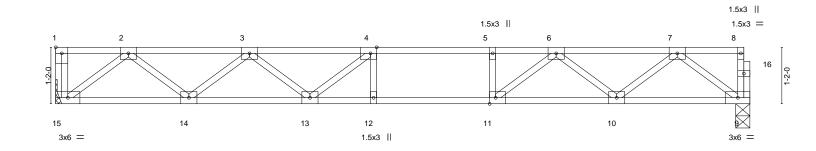
0-1-8

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

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

except end verticals.

Scale: 1/2"=1



-			14-4-0 14-4-0			
Plate Offsets (X,Y)	[1:Edge,0-1-8], [4:0-1-8,Edge], [11:0-1-8	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 0.60 BC 0.87 WB 0.38 Matrix-S	DEFL. in (I Vert(LL) -0.19 12 Vert(CT) -0.25 12 Horz(CT) 0.04	L/d 480 360 n/a	PLATES MT20 Weight: 71 lb	<b>GRIP</b> 244/190 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)

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

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

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

 $2\text{-}3\text{--}1559/0,\ 3\text{-}4\text{--}2384/0,\ 4\text{-}5\text{--}2550/0,\ 5\text{-}6\text{--}2550/0,\ 6\text{-}7\text{--}1538/0}$ 

**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** 

2-15=-1188/0, 2-14=0/797, 3-14=-761/0, 3-13=0/398, 7-9=-1194/0, 7-10=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 2631 Darroch Rd. 2-B Truss Truss Type Qty E14305215 J0720-3213 F4 Floor Job Reference (optional)

Comtech. Inc.

1-3-0

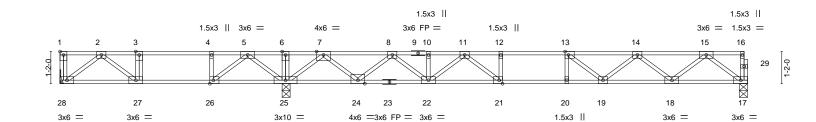
Fayetteville, NC - 28314,

2-5-4

8.330 s Mar 23 2020 MiTek Industries, Inc. Thu Apr 16 14:03:20 2020 Page 1 ID:J6aSr?qB6etazEy6hKRSkZzPTZ\_-gj7fQ6UoUB67JmLgAInde9a12BodrChwOazL1nzQ765

2-3-4 0-118

Scale = 1:41.8



		8-2-4	8-2	<del>-</del> 8	24-11-8	
		8-2-4	0-0	-4	16-9-0	
Plate Offse	ets (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 0.85	Vert(LL) -0.21 21-22 >964 480 MT20 244/190	
TCDL	10.0	Lumber DOL	1.00	BC 0.86	Vert(CT) -0.28 21-22 >719 360	
BCLL	0.0	Rep Stress Incr	NO	WB 0.54	Horz(CT) 0.05 17 n/a n/a	
BCDL	5.0	Code IRC2015/TP	PI2014	Matrix-S	Weight: 125 lb FT = 20%F,	11%E

LUMBER-

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

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

**BRACING-**

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

except end verticals.

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

REACTIONS. (size) 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.

TOP CHORD 1-28=-1403/0, 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=-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 2-28=-532/70, 2-27=-303/257, 5-25=-823/0, 5-26=0/878, 4-26=-429/0, 15-17=-1326/0,

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-

**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.

### 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



April 16,2020

MARNING - 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 MTI-sky 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/PTI Quality Criteria, DSB-89 and BCSI Building Component Safety Information, pushed from Trus Plate persons. fabrication, storage, delivery, erection and bracing of trusses and truss systems, see \*\*ANSVTP/1 Qu Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	2631 Darroch Rd. 2-B
					E14305216
J0720-3213	F4A	Floor Girder	1	1	
					Job Reference (optional)

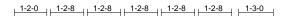
Comtech. Inc.

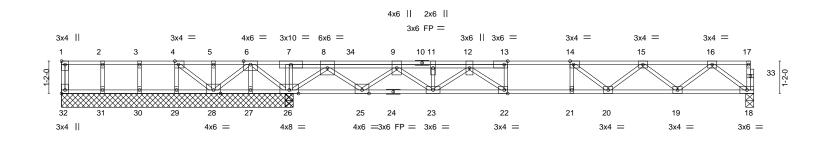
Fayetteville, NC - 28314,

8.330 s Mar 23 2020 MiTek Industries, Inc. Thu Apr 16 14:03:24 2020 Page 1 ID:J6aSr?qB6etazEy6hKRSkZzPTZ\_-ZVNAGUYJYQdYoNfSPbrZp?kk1oAEn\_fWJCyYAYzQ761

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

Scale = 1:41.5





	8-2-8	8	-4-4			24-11-8			
	8-2-8	0-	1-12			16-7-4			ı
Plate Offsets (X	Y) [1:Edge,0-1-8], [4:0-1-8,	Edge], [13:0-1-8	,Edge], [14:0-1-8,E	Edge], [22:0-1-8,Edge]	[32:Edge,0-1	·8]			
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 0.79	Vert(LL)	-0.17 20-2	,	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.81	Vert(CT)	-0.23 2	1 >881	360		
BCLL 0.0	Rep Stress Incr	NO	WB 0.67	Horz(CT	0.03 1	8 n/a	n/a		
BCDL 5.0	Code IRC2015/T	PI2014	Matrix-S					Weight: 136 lb	FT = 20%F, 11%E

LUMBER-**BRACING-**

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

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.

**BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 27-28,26-27,25-26.

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

(lb) - Max Uplift All uplift 100 lb or less at joint(s) except 27=-448(LC 4), 28=-344(LC 4), 29=-254(LC 4) 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), 18=775(LC 4)

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

**BOT CHORD** 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 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-

WEBS

- 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.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION, Do not erect truss backwards.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 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)



April 16,2020



MARNING - 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 MTI-sky 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/PTI Quality Criteria, DSB-89 and BCSI Building Component Safety Information, pushed from Trus Plate persons. Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job 2631 Darroch Rd. 2-B Truss Truss Type Qty E14305217 J0720-3213 F5 Floor Job Reference (optional)

Comtech. Inc.

1-3-0

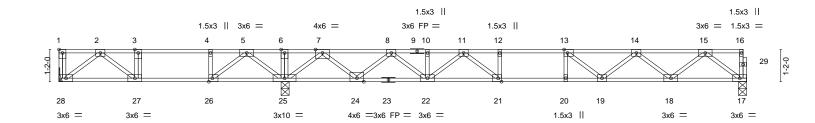
Fayetteville, NC - 28314,

2-5-4

8.330 s Mar 23 2020 MiTek Industries, Inc. Thu Apr 16 14:03:27 2020 Page 1 ID:J6aSr?qB6etazEy6hKRSkZzPTZ\_-z42JuVaBrL?7frN04jPGRdMG0?CU\_MQy?AACntzQ76\_

2-3-4

Scale = 1:41.8



		8-2-4	8-2	-8	24-11-8	
'		8-2-4	0-0	-4	16-9-0	
Plate Offse	ets (X,Y)	[1:Edge,0-1-8], [13:0-1-8,	Edge], [21:0-1-	·8,Edge], [26:0-1-8,Edge]		
LOADING TCLL	(psf) 40.0	SPACING- Plate Grip DOL	2-0-0 1.00	<b>CSI.</b> TC 0.74	DEFL.         in (loc)         l/defl         L/d         PLATES         GRIP           Vert(LL)         -0.21         21-22         >964         480         MT20         244/190	
TCDL BCLL	10.0 0.0	Lumber DOL Rep Stress Incr	1.00 1.00 YES	BC 0.78 WB 0.54	Vert(CT) -0.28 21-22 >>904 400 W120 244/190 Vert(CT) -0.28 21-22 >719 360 Horz(CT) 0.05 17 n/a n/a	
BCDL	5.0	Code IRC2015/TP		Matrix-S	Weight: 125 lb FT = 20%F,	11%E

LUMBER-

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

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

**BRACING-**

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

except end verticals.

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

REACTIONS.

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

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 2-28=-531/70, 2-27=-302/259, 5-25=-823/0, 5-26=0/878, 4-26=-429/0, 15-17=-1326/0,

15-18=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-

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) 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.





Edenton, NC 27932

Job Truss Type 2631 Darroch Rd. 2-B Truss Qty E14305218 J0720-3213 F6 Floor Job Reference (optional)

Comtech. Inc.

Fayetteville, NC - 28314,

8.330 s Mar 23 2020 MiTek Industries, Inc. Thu Apr 16 14:03:30 2020 Page 1 ID:J6aSr?qB6etazEy6hKRSkZzPTZ\_-OfkRWXc47GNiWl6blryz2G\_skDL3Bo4Oh8PtNBzQ75x

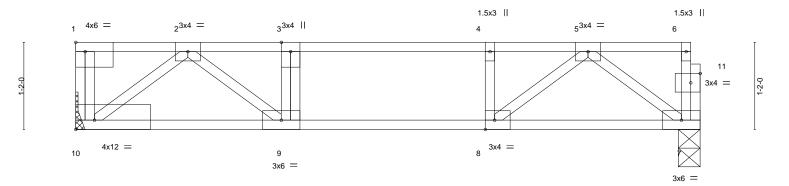
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

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

Scale = 1:15.4



8-4-4 8-4-4

Plate Offs	ate 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]											
LOADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.Ó	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/TF	PI2014	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)

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

REACTIONS. (size) 10=Mechanical, 7=0-3-8

Max Grav 10=3846(LC 1), 7=440(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) 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

- 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



April 16,2020

Job Truss Type 2631 Darroch Rd. 2-B Truss Qty E14305219 J0720-3213 F7 Floor Job Reference (optional) 8.330 s Mar 23 2020 MiTek Industries, Inc. Thu Apr 16 14:03:32 2020 Page 1 ID:J6aSr?qB6etazEy6hKRSkZzPTZ\_-K1sCxDeKftdQlcG\_tG\_R7h4HJ05sflDh9SuzR4zQ75v Comtech, Inc, Fayetteville, NC - 28314, 3x4 = 1-0-0 1-2-8 1 3x4 || 4 3x4 || 3x4 = Scale = 1:8.5 3x6 =1.5x3 || 1.5x3 || 8 5 3x6 =3-11-8 3-11-8 Plate Offsets (X,Y)-- [1:Edge,0-1-8], [2:0-1-8,Edge], [3:0-1-8,Edge]

BCLL 0.0 Rep Stress Incr YES WB 0.05 Horz(CT) 0.00 5 n/a n/a	BCLL 0.0	Rep Stress Incr YES	WB 0.05	. (- )	PLATES GRIP MT20 244/190  Weight: 24 lb FT = 20%F, 11%
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**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

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

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

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.

- 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.



Structural wood sheathing directly applied or 3-11-8 oc purlins,

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

except end verticals.



Job 2631 Darroch Rd. 2-B Truss Truss Type Qty E14305220 J0720-3213 FG1 Floor Girder Job Reference (optional) 8.330 s Mar 23 2020 MiTek Industries, Inc. Thu Apr 16 14:03:35 2020 Page 1 Comtech. Inc. Fayetteville, NC - 28314, ID:J6aSr?qB6etazEy6hKRSkZzPTZ\_-kcXKaFgDyo??c4?ZYOY8lJioiE7ds5k7rQ6e2PzQ75s 3x6 || 3x4 || 3x4 || 3x6 3x6 3x6 II 1-0-0 0-11-8 0-1-8 Scale = 1:8 6 3x4 = 3x6 =1.5x3 II 1.5x3 II 8 3x6 = 3-8-8 3-8-8 Plate Offsets (X,Y)--[9:0-1-8,0-1-8] LOADING (psf) SPACING-CSI. DEFL. **PLATES** GRIP 2-0-0 in (loc) I/defI I/d TCLL 40.0 Plate Grip DOL 1.00 TC 0.05 Vert(LL) -0.00>999 480 244/190 MT20 BC 360 TCDL 10.0 Lumber DOL 1.00 0.06 Vert(CT) -0.00>999 **BCLL** 0.0 Rep Stress Incr NO WB 0.07 Horz(CT) 0.00 5 n/a n/a BCDL 5.0 Code IRC2015/TPI2014 Matrix-S Weight: 27 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) 2x4 SP No.3(flat) **WEBS** 

> (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.

**WEBS** 2-8=-294/0, 3-5=-291/0

### NOTES-

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



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

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ANSI/PTI Quality Criteria, DSB-89 and BCSI Building Component Safety Information, pushed from Trus Plate persons. fabrication, storage, delivery, erection and bracing of trusses and truss systems, see \*\*ANSVTP/1 Qu Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Type 2631 Darroch Rd. 2-B Truss Qty E14305221 J0720-3213 FG2 Floor Girder Job Reference (optional) 8.330 s Mar 23 2020 MiTek Industries, Inc. Thu Apr 16 14:03:38 2020 Page 1 ID:J6aSr?qB6etazEy6hKRSkZzPTZ\_-9BDTCGi5FjNZTXj8DX5rNyKHLR5\_3R3aXOLIfkzQ75p 3x6 Comtech. Inc. Fayetteville, NC - 28314, 3x6 II 3x6 =1-0-0 0-8-0 Scale = 1:8 6 -2-0 3x6 =1.5x3 II 1.5x3 II 8 5 3x6 = 3-5-0 3-5-0

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 0.16	Vert(LL) -0.01 7 >999 480	MT20 244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.21	Vert(CT) -0.01 7 >999 360	
BCLL 0.0	Rep Stress Incr NO	WB 0.16	Horz(CT) 0.00 5 n/a n/a	
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S		Weight: 26 lb 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)

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

(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

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

### NOTES-

REACTIONS.

- 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)

minimi April 16,2020

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 MTReks connectors. This design is based only upon parameters shown, and is for an individual building ocomponent, 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/PTI Quality Criteria, DSB-89 and BCSI Building Component Sector Members and Possible Sector Truss Plate betties 2570 Crisis Historyca. Suits 232 Wolderf, MD 200610. fabrication, storage, delivery, erection and bracing of trusses and truss systems, see \*\*ANSI/TPI1 Qu Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

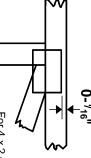


### **Symbols**

## 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



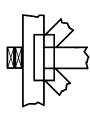
to slots. Second dimension is the length parallel to slots. width measured perpendicular The first dimension is the plate

## LATERAL BRACING LOCATION



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

### **BEARING**



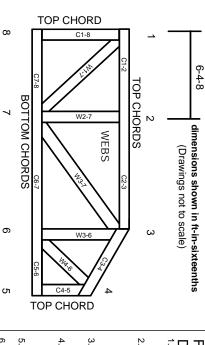
Min size shown is for crushing only number where bearings occur. reaction section indicates joint (supports) occur. Icons vary but Indicates location where bearings

### Industry Standards:

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

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

# **General Safety Notes**

# Failure to Follow Could Cause Property

- Damage or Personal Injury

  1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- Ņ 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.
- ω Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- Provide copies of this truss design to the building all other interested parties. designer, erection supervisor, property owner and
- Cut members to bear tightly against each other
- Place plates on each face of truss at each locations are regulated by ANSI/TPI 1. oint and embed fully. Knots and wane at joint

6 5

- 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

œ

7.

- 9 Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- 10. Camber is a non-structural consideration and is the 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 specified.
- 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.