

RE: 1024906 -

Site Information:

Customer Info: Starr Custom Homes Project Name: 1024906 Model: Tilak Residence Lot/Block: Address: 2939 Front Rd. City: Duval

Name Address and License # of Structural Engineer of Record, If there is one, for the building. Name: Pontigo, Luis Antonio, PE Address: 420 Osceola Ave. City: Jacksonville Beach

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

> MiTek USA, Inc. 6904 Parke East Blvd.

State: Florida

License #: 53311

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

Subdivision:

State: Florida

Design Code: FBC2014/TPI2007 Wind Code: ASCE 7-10 Roof Load: 32.0 psf

Design Program: MiTek 20/20 7.6 Wind Speed: 130 mph Floor Load: 55.0 psf

This package includes 105 individual, Truss Design Drawings and 0 Additional Drawings. With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	T11146680	F01	5/17/17	18	T11146697	HJ01	5/17/17
2	T11146681	F02	5/17/17	19	T11146698	HJ01A	5/17/17
3	T11146682	F03	5/17/17	20	T11146699	HJ02	5/17/17
4	T11146683	F04	5/17/17	21	T11146700	HJ03	5/17/17
5	T11146684	F05	5/17/17	22	T11146701	HJ04	5/17/17
6	T11146685	F06	5/17/17	23	T11146702	HJ05	5/17/17
7	T11146686	F07	5/17/17	24	T11146703	HJ06	5/17/17
8	T11146687	F08	5/17/17	25	T11146704	HJ07	5/17/17
9	T11146688	F10	5/17/17	26	T11146705	HJ08	5/17/17
10	T11146689	F10A	5/17/17	27	T11146706	J01	5/17/17
11	T11146690	F11	5/17/17	28	T11146707	J02	5/17/17
12	T11146691	F12	5/17/17	29	T11146708	J03	5/17/17
13	T11146692	F13	5/17/17	30	T11146709	J04	5/17/17
14	T11146693	FGE01	5/17/17	31	T11146710	J05	5/17/17
15	T11146694	FGE02	5/17/17	32	T11146711	J06	5/17/17
16	T11146695	FGE03	5/17/17	33	T11146712	J07	5/17/17
17	T11146696	FGE05	5/17/17	34	T11146713	J08	5/17/17

The truss drawing(s) referenced above have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Builders FirstSource-Jacksonville.

Truss Design Engineer's Name: Velez, Joaquin

My license renewal date for the state of Florida is February 28, 2019.

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. Any project specific information included is for MiTek's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek 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.



Velez, Joaquin

RE: 1024906 -

Site Information:

Customer Info: Starr Custom Homes Project Name: 1024906 Model: Tilak Residence Subdivision: Address: 2939 Front Rd. City: Duval State: Florida

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
35	T11146714	J09	5/17/17	78	T11146757	T37	5/17/17
36	T11146715	J10	5/17/17	79	T11146758	T39	5/17/17
37	T11146716	J11	5/17/17	80	T11146759	T40	5/17/17
38	T11146717	J12	5/17/17	81	T11146760	T41	5/17/17
39	T11146718	J13	5/17/17	82	T11146761	T42	5/17/17
40	T11146719	J14	5/17/17	83	T11146762	T43	5/17/17
41	T11146720	J15	5/17/17	84	T11146763	T44	5/17/17
42	T11146721	T01	5/17/17	85	T11146764	T45	5/17/17
43	T11146722	T02	5/17/17	86	T11146765	T46	5/17/17
44	T11146723	T03	5/17/17	87	T11146766	T47	5/17/17
45	T11146724	T04	5/17/17	88	T11146767	T48	5/17/17
46	T11146725	T05	5/17/17	89	T11146768	T50	5/17/17
47	T11146726	T06	5/17/17	90	T11146769	T51	5/17/17
48	T11146727	T07	5/17/17	91	T11146770	T52	5/17/17
49	T11146728	T08	5/17/17	92	T11146771	T53	5/17/17
50	T11146729	T09	5/17/17	93	T11146772	T54	5/17/17
51	T11146730	T10	5/17/17	94	T11146773	T55	5/17/17
52	T11146731	T11	5/17/17	95	T11146774	T56	5/17/17
53	T11146732	T12	5/17/17	96	T11146775	T57	5/17/17
54	T11146733	T13	5/17/17	97	T11146776	T58	5/17/17
55	T11146734	T14	5/17/17	98	T11146777	T59	5/17/17
56	T11146735	T15	5/17/17	99	T11146778	T60	5/17/17
57	T11146736	T16	5/17/17	100	T11146779	T61	5/17/17
58	T11146737	T17	5/17/17	101	T11146780	T62	5/17/17
59	T11146738	T18	5/17/17	102	T11146781	T63	5/17/17
60	T11146739	T19	5/17/17	103	T11146782	TFG01	5/17/17
61	T11146740	T20	5/17/17	104	T11146783	TFG02	5/17/17
62	T11146741	T21	5/17/17	105	T11146784	TFG03	5/17/17
63	T11146742	T22	5/17/17				
64	T11146743	T23	5/17/17				
65	T11146744	T24	5/17/17]			
66	T11146745	T25	5/17/17				
67	T11146746	T26	5/17/17	1			
68	T11146747	T27	5/17/17	1			
69	T11146748	T28	5/17/17]			
70	T11146749	T29	5/17/17	1			
71	T11146750	T30	5/17/17				
72	T11146751	T31	5/17/17				
73	T11146752	T32	5/17/17				
74	T11146753	T33	5/17/17				
75	T11146754	T34	5/17/17				
76	T11146755	T35	5/17/17				
77	T11146756	T36	5/17/17				



<u> 1-6-0</u> 1-6-0	<u>4-0-0</u> 2-6-0		<u>10-11-0</u> 6-11-0		13-5-0 2-6-0	<u>14-11-0</u> 1-6-0
Plate Offsets (X,Y)	[1:Edge,0-1-8], [8:0-1-8,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 FBC2014/TPI2007	CSI. TC 0.47 BC 0.63 WB 0.43 (Matrix)	DEFL. in Vert(LL) -0.10 Vert(TL) -0.14 Horz(TL) 0.03	n (loc) l/defl L/d 11-12 >999 360 13-14 >999 240 ; 9 n/a n/a	PLATES MT20 Weight: 84 II	GRIP 244/190 FT = 20%F, 11%E
LUMBER- TOP CHORD 2x4 SP BOT CHORD 2x4 SP WEBS 2x4 SP	/ No.2(flat) / No.2(flat) / No.3(flat)		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing d end verticals. Rigid ceiling directly applied	irectly applied or 6-0 or 10-0-0 oc bracing)-0 oc purlins, except g.
REACTIONS. (lb/size	e) 16=800/0-5-0, 9=800/0-5-0					

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

TOP CHORD 16-17=-796/0, 1-17=-795/0, 9-18=-796/0, 8-18=-795/0, 1-2=-623/0, 2-3=-1475/0, 3-4=-1900/0, 4-5=-1900/0,

5-6=-1900/0, 6-7=-1475/0, 7-8=-623/0

BOT CHORD 14-15=0/1169, 13-14=0/1759, 12-13=0/1900, 11-12=0/1759, 10-11=0/1169

WEBS 8-10=0/911, 1-15=0/911, 7-10=-867/0, 2-15=-867/0, 7-11=0/485, 2-14=0/485, 6-11=-451/0, 3-14=-451/0, 6-12=-28/422, 3-13=-28/422

NOTES-

1) Unbalanced floor live loads have been considered for this design.

2) All plates are 3x3 MT20 unless otherwise indicated.

3) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

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.







L			21-4-8			
			21-4-8			I
Plate Offsets (X,Y)	[1:Edge,0-1-8], [13:0-1-8,Edge], [14:Ed	ge,0-1-8], [21:0-1-8,Edge	e], [25:Edge,0-1-8]			
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 FBC2014/TPI2007	CSI. TC 0.78 BC 0.65 WB 0.66 (Matrix)	DEFL. i Vert(LL) -0.29 Vert(TL) -0.44 Horz(TL) 0.0	n (loc) l/defl L/d 9 19-20 >863 360 6 19-20 >555 240 8 14 n/a n/a	PLATES MT20 MT20HS Weight: 122 lb	GRIP 244/190 187/143 FT = 20%F, 11%E
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x4 SF WEBS 2x4 SF	P No.2(flat) P M 31(flat) P No.3(flat)		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing dir end verticals. Rigid ceiling directly applied c	ectly applied or 4-7-1-	4 oc purlins, except

REACTIONS. (lb/size) 25=1156/0-3-8, 14=1156/0-3-8

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

- 25-26=-1149/0, 1-26=-1148/0, 14-27=-1150/0, 13-27=-1149/0, 1-2=-938/0, 2-3=-2368/0, TOP CHORD 3-4=-2368/0, 4-5=-3368/0, 5-6=-3368/0, 6-7=-3950/0, 7-8=-3950/0, 8-9=-3863/0, 9-10=-3365/0, 10-11=-3365/0, 11-12=-2367/0, 12-13=-938/0
- BOT CHORD 23-24=0/1773, 22-23=0/2936, 21-22=0/3702, 20-21=0/3950, 19-20=0/3950, 18-19=0/3725, 17-18=0/3725, 16-17=0/2940, 15-16=0/1772
- WEBS
- 13-15=0/1376, 1-24=0/1375, 12-15=-1323/0, 2-24=-1325/0, 12-16=0/945, 2-23=0/945, 11-16=-909/0, 4-23=-903/0, 11-17=0/657, 4-22=0/666, 9-17=-555/0, 6-22=-524/0, 9-19=-6/388, 6-21=-49/656, 8-19=-466/209, 7-21=-286/0

NOTES-

1) Unbalanced floor live loads have been considered for this design.

2) All plates are MT20 plates unless otherwise indicated.

- 3) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- 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.





L			16-3-4		
1			16-3-4		I
Plate Offsets (X,Y)	- [1:Edge,0-1-8], [8:0-1-8,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 FBC2014/TPI2007	CSI. TC 0.59 BC 0.48 WB 0.48 (Matrix)	DEFL. i Vert(LL) -0.1 Vert(TL) -0.2 Horz(TL) 0.0	n (loc) l/defl L/d 4 12-13 >999 360 0 12-13 >952 240 3 9 n/a n/a	PLATES GRIP MT20 244/190 Weight: 91 lb FT = 20%F, 11%E
LUMBER- TOP CHORD 2x4 BOT CHORD 2x4 WEBS 2x4	SP No.2(flat) SP M 31(flat) SP No.3(flat)	I I	BRACING- TOP CHORD BOT CHORD	Structural wood sheathing dire end verticals. Rigid ceiling directly applied o	ectly applied or 6-0-0 oc purlins, except r 10-0-0 oc bracing.

REACTIONS. (lb/size) 17=875/0-3-8, 9=875/0-3-8

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

17-18=-872/0, 1-18=-871/0, 9-19=-870/0, 8-19=-870/0, 1-2=-692/0, 2-3=-1653/0, 3-4=-2259/0, 4-5=-2259/0, TOP CHORD 5-6=-2169/0, 6-7=-1666/0, 7-8=-687/0

BOT CHORD

15-16=0/1294, 14-15=0/2012, 13-14=0/2259, 12-13=0/2259, 11-12=0/2026, 10-11=0/1291 8-10=0/1006, 1-16=0/1013, 7-10=-958/0, 2-16=-956/0, 7-11=0/597, 2-15=0/570, 6-11=-570/0, 3-15=-570/0, WEBS 6-12=0/320, 3-14=0/562, 5-12=-363/95, 4-14=-250/0

NOTES-

1) Unbalanced floor live loads have been considered for this design.

2) All plates are 3x3 MT20 unless otherwise indicated.

3) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

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.





<u> </u>	3-10-8 2-6-0	<u>11-11-8</u> 8-1-0		<u>17-1-0</u> 5-1-8	<u>19-7-0 20-11-8</u> 2-6-0 1-4-8
Plate Offsets (X,Y)	[1:Edge,0-1-8], [13:0-1-8,Edge], [14:0-1	1-8,Edge], [21:0-1-8,Edge]		
LOADING (psf) TCLL 40.0 TCDL 10.0 BCLL 0.0 BCDL 5.0	SPACING-2-0-0Plate Grip DOL1.00Lumber DOL1.00Rep Stress IncrYESCode FBC2014/TPI2007	CSI. TC 0.74 BC 0.98 WB 0.65 (Matrix)	DEFL. Vert(LL) -0 Vert(TL) -0 Horz(TL) 0	in (loc) I/defl L/d .28 19-20 >880 360 .44 19-20 >566 240 .08 14 n/a n/a	PLATES GRIP MT20 244/190 MT20HS 187/143 Weight: 117 lb FT = 20%F, 11%E
LUMBER- TOP CHORD 2x4 SI BOT CHORD 2x4 SI 18-25: WEBS 2x4 SI	P No.2(flat) P No.2(flat) *Except* . 2x4 SP M 31(flat) P No.3(flat)		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing di end verticals. Rigid ceiling directly applied o 2-2-0 oc bracing: 17-19.	rectly applied or 4-10-5 oc purlins, except or 10-0-0 oc bracing, Except:

2x4 SP No.3(flat)

REACTIONS. (lb/size) 14=1146/Mechanical, 25=1146/0-5-8

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

TOP CHORD	1-25=-1138/0, 13-14=-1139/0, 1-2=-883/0, 2-3=-2298/0, 3-4=-2298/0, 4-5=-3284/0,
	5-6=-3284/0, 6-7=-3844/0, 7-8=-3844/0, 8-9=-3763/0, 9-10=-3282/0, 10-11=-3282/0,
	11-12=-2298/0, 12-13=-884/0
BOT CHORD	23-24=0/1710, 22-23=0/2860, 21-22=0/3609, 20-21=0/3844, 19-20=0/3844, 18-19=0/3632
	17-18=0/3632, 16-17=0/2863, 15-16=0/1710
WEBS	13-15=0/1363, 1-24=0/1362, 12-15=-1312/0, 2-24=-1314/0, 12-16=0/933, 2-23=0/934,
	11-16=-897/0, 4-23=-891/0, 11-17=0/647, 4-22=0/654, 9-17=-541/0, 6-22=-510/0,
	9-19=-16/373, 6-21=-56/624, 8-19=-441/204, 7-21=-265/0

NOTES-

1) Unbalanced floor live loads have been considered for this design.

2) All plates are MT20 plates unless otherwise indicated.

3) The Fabrication Tolerance at joint 18 = 11%

4) Refer to girder(s) for truss to truss connections.

5) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

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.





ł	1-6-0	4-0-0		8-10-8		11-4-8	12-10-8
Plate Of	<u>1-6-0</u> ffsets (X,Y) [<u>2-6-0</u> 1:Edge,0-1-8], [6:0-1-8,Edge]		4-10-8		2-6-0	1-6-0
LOADIN TCLL TCDL BCLL BCDL	IG (psf) 40.0 10.0 0.0 5.0	SPACING-2-0-0Plate Grip DOL1.00Lumber DOL1.00Rep Stress IncrYESCode FBC2014/TPI2007	CSI. TC 0.44 BC 0.70 WB 0.36 (Matrix)	DEFL. i Vert(LL) -0.09 Vert(TL) -0.11 Horz(TL) 0.03	n (loc) l/defl L/d ∋ 11-12 >999 360 1 11-12 >999 240 2 7 n/a n/a	PLATES MT20 Weight: 73 lb	GRIP 244/190 FT = 20%F, 11%E
LUMBE TOP CH BOT CH WEBS	R- IORD 2x4 SP IORD 2x4 SP 2x4 SP	No.2(flat) No.2(flat) No.3(flat)		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing end verticals. Rigid ceiling directly appli	g directly applied or 6-0 ed or 10-0-0 oc bracing	-0 oc purlins, except

REACTIONS. (lb/size) 14=688/0-4-8, 7=688/0-5-0

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

TOP CHORD 14-15=-684/0, 1-15=-683/0, 7-16=-684/0, 6-16=-683/0, 1-2=-523/0, 2-3=-1193/0, 3-4=-1403/0, 4-5=-1193/0,

5-6=-523/0

BOT CHORD 12-13=0/977, 11-12=0/1403, 10-11=0/1403, 9-10=0/1403, 8-9=0/977

WEBS 6-8=0/764, 1-13=0/764, 5-8=-721/0, 2-13=-721/0, 5-9=0/360, 2-12=0/360, 4-9=-426/0, 3-12=-426/0

NOTES-

1) Unbalanced floor live loads have been considered for this design.

2) All plates are 3x3 MT20 unless otherwise indicated.

3) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

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

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1-4-C	<u> </u>	<u>J-10-07-1-4</u>	9-7-4		14-0-4		17-0-4	10-0-4
1-4-8	4-5-0	0-1-0 1-2-12	2-6-0		4-11-0	I	2-6-0	1-6-0
Plate Offsets (X,	Y) [9:0-1-8,Edge]					1		
LOADING (psf) TCLL 40.0	SPACING- Plate Grip DOL	2-0-0 CSI . 1.00 TC	0.51 D	EFL. ir ert(LL) -0.08	i (loc) l/defl 14-15 >999	L/d 360	PLATES MT20	GRIP 244/190
TCDL 10.0 BCLL 0.0 BCDL 5.0	Lumber DOL Rep Stress Incr Code FBC2014/T	1.00 BC YES WB PI2007 (Mat)	0.62 V 0.37 H trix)	ert(TL) -0.10 orz(TL) 0.02	13 >999 10 n/a	240 n/a	Weight: 102 lb	FT = 20%F, 11%E
LUMBER- TOP CHORD 22 BOT CHORD 22 WEBS 22	 4 SP No.2(flat) 44 SP No.2(flat) 44 SP No.3(flat) 		BI TC BC	RACING- OP CHORD OT CHORD	Structural wood end verticals. Rigid ceiling dir	I sheathing directly ectly applied or 6-0	applied or 6-0-0)-0 oc bracing.	oc purlins, except

44 6 4

47 0 4

10 0 4

074

REACTIONS. (lb/size) 21=319/Mechanical, 10=689/0-5-0, 17=1003/0-3-8 Max Grav 21=379(LC 10), 10=693(LC 7), 17=1015(LC 8)

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FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-21=-376/0, 10-22=-689/0, 9-22=-688/0, 2-3=-421/1, 3-4=-421/1, 4-5=-552/0, 5-6=-1212/0, 6-7=-1423/0, 7-8=-1206/0, 8-9=-527/0

- BOT CHORD 19-20=-1/421, 18-19=-1/421, 15-16=0/994, 14-15=0/1423, 13-14=0/1423, 12-13=0/1423, 11-12=0/985
- WEBS 4-17=-1033/0, 1-20=0/347, 4-18=0/469, 2-20=-301/33, 9-11=0/771, 4-16=0/769, 8-11=-727/0, 5-16=-724/0, 8-12=0/350, 5-15=0/384, 7-12=-388/0, 6-15=-382/0

NOTES-

4 4 0

1) Unbalanced floor live loads have been considered for this design.

2) All plates are 3x3 MT20 unless otherwise indicated.

3) Refer to girder(s) for truss to truss connections.

4) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

F 40 0 7 4 4

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.







NOTES-

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4) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

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4) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

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.





ł				<u>24-1-12</u> 24-1-12			
Plate O	ffsets (X,Y) [1:Edge,0-1-8], [14:0-1-8,Edge], [15:Edg	e,0-1-8], [18:0-2-0,Edge]]			
LOADIN TCLL TCDL BCLL BCDL	IG (psf) 40.0 10.0 0.0 5.0	SPACING-2-0-0Plate Grip DOL1.00Lumber DOL1.00Rep Stress IncrYESCode FBC2014/TPI2007	CSI. TC 0.54 BC 0.95 WB 0.76 (Matrix)	DEFL. i Vert(LL) -0.4 Vert(TL) -0.64 Horz(TL) 0.13	n (loc) l/defl L/d l 20-21 >707 360 4 20-21 >450 240 2 15 n/a n/a	PLATES GRIP MT20 244/190 MT20HS 187/143 Weight: 134 lb FT = 20%	F, 11%E
LUMBE TOP CH BOT CH WEBS	R- IORD 2x4 SP 4-14: 2) IORD 2x4 SP 18-27: 2 2x4 SP	No.2(flat) *Except* <4 SP M 31(flat) No.2(flat) *Except* 2x4 SP M 31(flat) No.3(flat)		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing of end verticals. Rigid ceiling directly applied 2-2-0 oc bracing: 17-19.	lirectly applied or 6-0-0 oc purlins, ex	cept

REACTIONS. (lb/size) 15=1311/0-3-8, 27=1318/Mechanical

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

 TOP CHORD
 1-27=-1310/0, 15-28=-1306/0, 14-28=-1305/0, 1-2=-1029/0, 2-3=-2721/0, 3-4=-3996/0, 4-5=-3996/0, 5-6=-3996/0, 6-7=-4762/0, 7-8=-5077/0, 8-9=-5077/0, 9-10=-4778/0, 10-11=-4018/0, 11-12=-4018/0, 12-13=-2757/0, 13-14=-1077/0

- BOT CHORD
 25-26=0/1994, 24-25=0/3426, 23-24=0/4470, 22-23=0/5077, 21-22=0/5077, 20-21=0/5024, 19-20=0/4499, 18-19=0/3455, 17-18=0/3455, 16-17=0/2037

 WEBS
 14-16=0/1580, 1-26=0/1587, 13-16=-1524/0, 2-26=-1533/0, 13-17=0/1144, 2-25=0/1153,
- 12-17=-1108/0, 3-25=-1120/0, 12-19=0/869, 3-24=0/878, 10-19=-741/0, 6-24=-732/0, 10-20=0/444, 6-23=0/613, 9-20=-463/0, 7-23=-786/34, 9-21=-330/566, 7-22=-156/267, 8-21=-285/94

NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) The Fabrication Tolerance at joint 18 = 11%
- Refer to girder(s) for truss to truss connections.
- 5) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- 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.







			24-6-8			
			24-6-8			
Plate Offsets (X,Y)	[1:Edge,0-1-8], [13:0-4-8,Edge], [14:Ed	ge,0-1-8], [26:Edge,0-1-8	3], [28:0-1-8,0-1-0]			
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 FBC2014/TPI2007	CSI. TC 0.63 BC 0.80 WB 0.82 (Matrix)	DEFL. in Vert(LL) -0.44 Vert(TL) -0.68 Horz(TL) 0.12	n (loc) I/defi L/d 4 19-20 >670 360 3 19-20 >427 240 2 14 n/a n/a	PLATES MT20 MT20HS Weight: 141 lb	GRIP 244/190 187/143 FT = 20%F, 11%E
LUMBER- TOP CHORD 2x4 SF 1-4: 2x BOT CHORD 2x4 SF WEBS 2x4 SF	P M 31(flat) *Except* 4 SP No.2(flat) 9 M 31(flat) 2 No.3(flat)		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing dir end verticals. Rigid ceiling directly applied o	ectly applied or 5-3-8 or 10-0-0 oc bracing.	oc purlins, except

REACTIONS. (lb/size) 26=1330/0-5-0, 14=1330/0-5-0

FORCES. (lb) -	Max. Comp./Max. Ten All forces 250 (lb) or less except when shown.
TOP CHORD	26-27=-1324/0, 1-27=-1323/0, 14-28=-1321/0, 13-28=-1261/0, 1-2=-1092/0,
	2-3=-2806/0, 3-4=-4050/0, 4-5=-4050/0, 5-6=-4858/0, 6-7=-5207/0, 7-8=-5207/0,
	8-9=-4967/0, 9-10=-4219/0, 10-11=-4219/0, 11-12=-2951/0, 12-13=-1278/0
BOT CHORD	24-25=0/2065, 23-24=0/3527, 22-23=0/4548, 21-22=0/5207, 20-21=0/5207, 19-20=0/5189,
	18-19=0/4703, 17-18=0/4703, 16-17=0/3637, 15-16=0/2242
WEBS	1-25=0/1603, 2-25=-1545/0, 2-24=0/1176, 3-24=-1145/0, 3-23=0/831, 5-23=-791/0,
	5-22=0/636, 6-22=-830/7, 6-21=-142/292, 13-15=0/1721, 12-15=-1529/0, 12-16=0/1126,
	11-16=-1089/0, 11-17=0/875, 9-17=-727/0, 9-19=0/421, 8-19=-445/0, 8-20=-377/540,
	7-20=-275/113

NOTES-

1) Unbalanced floor live loads have been considered for this design.

- 2) All plates are MT20 plates unless otherwise indicated.
- 3) The Fabrication Tolerance at joint 18 = 11%
- 4) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- 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.









				3-0-0	
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 0.12	Vert(LL) -0.00 7 >999 360 MT20 244/190	
TCDL	10.0	Lumber DOL 1.00	BC 0.07	Vert(TL) -0.00 7 >999 240	
BCLL	0.0	Rep Stress Incr YES	WB 0.08	Horz(TL) 0.00 5 n/a n/a	
BCDL	5.0	Code FBC2014/TPI2007	(Matrix)	Weight: 27 lb FT = 20%F	, 11%E

LUMBER-

TOP CHORD2x4 SP No.2(flat)BOT CHORD2x4 SP No.2(flat)WEBS2x4 SP No.3(flat)

BRACING-TOP CHORD

Structural wood sheathing directly applied or 3-8-0 oc purlins, except end verticals.

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

REACTIONS. (lb/size) 8=185/0-5-8, 5=191/Mechanical

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) Refer to girder(s) for truss to truss connections.

- 3) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- 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.





		1-0-0	0-0-12	3-7-4	
LOADIN TCLL TCDI	IG (psf) 40.0 10.0	SPACING- 2-0- Plate Grip DOL 1.0	0 CSI. 0 TC 0.14 0 BC 0.12	DEFL. in (loc) I/defl L/d Vert(LL) -0.00 7 >999 360 Vert/TL) -0.01 6-7 >999 240	PLATES GRIP MT20 244/190
BCLL BCDL	0.0 5.0	Rep Stress Incr YES Code FBC2014/TPI200	S WB 0.08 7 (Matrix)	Horz(TL) 0.00 6 n/a n/a	Weight: 31 lb FT = 20%F, 11%E

LUMBER-

TOP CHORD2x4 SP No.2(flat)BOT CHORD2x4 SP No.2(flat)WEBS2x4 SP No.3(flat)

BRACING-TOP CHORD

Structural wood sheathing directly applied or 4-8-0 oc purlins, except end verticals.

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

REACTIONS. (lb/size) 6=183/Mechanical, 9=303/0-10-0 Max Grav 6=192(LC 4), 9=303(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. WEBS 2-9=-265/0

NOTES-

1) Unbalanced floor live loads have been considered for this design.

2) All plates are 1.5x3 MT20 unless otherwise indicated.

3) Refer to girder(s) for truss to truss connections.

4) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

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			т	11146602
1024906	FGE01	GABLE		2	1	Job Reference (optional)		I	11140093
Builders FirstSource, Jacks	sonville, FI 32244		ID:6	uMeWvmq\	7.6 √eEx7fGG	40 s Apr 19 2016 MiTek Industri jqSaDTzVmxC-fGjMHM4TE	es, Inc. Tue May 1 334xarCdTzN	l6 16:30:20 2017 Pa Is?oWiflYebJszH0	ige 1 GH5zFtwX
0-1-18								0-	1 <mark>1</mark> 8
								Scale	e = 1:25.4
1 2	3 4	5	6 7		8	Q 11) 1	1 12	
						•	•		26
									0 8
24 23	22 2	1 20	19 18		17	16 15	5 1	4 13	
3x3 =								3x3	=

H	1-0-12	2-10-12	4-2-12	5-0-12	0-10-12	0-2-12	9-0-12		10-10-12	12-2-12	13-0-12	14-11-0
	1-6-12	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0		1-4-0	1-4-0	1-4-0	1-4-4
LOADI	NG (psf)	SPACING-	2-0-0	с	SI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip I	DOL 1.00	T	C 0.09	Vert(LL) n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DC	DL 1.00	В	C 0.02	Vert(TL) n/a	-	n/a	999		
BCLL	0.0	Rep Stress	Incr YES	N	/B 0.03	Horz(TL	.) 0.00	13	n/a	n/a		
BCDL	5.0	Code FBC	2014/TPI2007	(N	/latrix)						Weight: 73 lb	FT = 20%F, 11%E
LUMBE	R-					BRACIN	IG-					

TOP CHORD 2x4 SP No.2(flat) BOT CHORD 2x4 SP No.2(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 10-0-0 oc bracing.

REACTIONS. All bearings 14-11-0.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 24, 13, 23, 22, 21, 20, 19, 18, 17, 16, 15, 14

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

NOTES-

1) All plates are 1.5x3 MT20 unless otherwise indicated.

- 2) Gable requires continuous bottom chord bearing.
- 3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 4) Gable studs spaced at 1-4-0 oc.
- 5) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- 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.





3x3 =

	<u> </u>	2		<u>2-10-12</u> 1-4-0			<u>4-2-12</u> 1-4-0			<u>5-4-4</u> 1-1-8	4
LOADING (psf) TCLL 40.0 TCDL 10.0 BCLL 0.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.00 1.00 YES	CSI. TC BC WB	0.09 0.02 0.03	DEFL. Vert(LL) Vert(TL) Horz(TL)	in n/a n/a	(loc) - - 6	l/defl n/a n/a	L/d 999 999	PLATES MT20	GRIP 244/190
BCDL 5.0	Code FBC2014/T	PI2007	(Matr	ix)		0.00	0	170	n/d	Weight: 30 lb	FT = 20%F, 11%E

LUMBER-

=

TOP CHORD 2x4 SP No.2(flat) BOT CHORD 2x4 SP No.2(flat) WEBS 2x4 SP No.3(flat) OTHERS 2x4 SP No.3(flat) BRACING-TOP CHORD

Structural wood sheathing directly applied or 5-4-4 oc purlins, except end verticals.

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

REACTIONS. All bearings 5-4-4.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 10, 6, 9, 8, 7

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

NOTES-

1) All plates are 1.5x3 MT20 unless otherwise indicated.

- 2) Gable requires continuous bottom chord bearing.
- 3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 4) Gable studs spaced at 1-4-0 oc.
- 5) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- 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			T11146605
1024906	FGE03	GABLE		1	1	lob Reference (ontional)		111140095
Builders FirstSource, Ja	cksonville, FI 32244		ID:6u	/eWvmaV	7.6 eEx7fGGi	40 s Apr 19 2016 MiTek Industries, In SaDTzVmxC-7SHkVi55vNCoB	c. Tue May 16 16:30:21 2 ?ng1hVDv4XzE6?nH5	017 Page 1 S5d1ggXzFtwW
0- <u>1-</u> 8			12.00		02/11/0003			0-1-18
								Scale = 1:21.9
1	2 3	4	5 6		7	8 9	10	11
								24 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
				$\times \times \times \rangle$	$\langle \times \times \times \rangle$	XXXXXXXXXXXXX	×××××××××	\times
22	21 20	19	18 17		16	15 1.	4 13	12
3x3 =								3x3 =

F	<u>1-6-12</u> 1-6-12	<u>2-10-12</u> 1-4-0	<u>4-2-12</u> 1-4-0	5-6-12		<u>6-10-12</u> 1-4-0	<u>8-2-12</u> 1-4-0		<u>9-6-12</u> 1-4-0		<u>10-10-12</u> 1-4-0	12-2-1	12 12-10-8 0 0-7-12
LOADIN TCLL	IG (psf) 40.0	SPACING- Plate Grip DOL	2-0-0 1.00	CSI. TC	0.09	DEFL. Vert(LL)	in n/a	(loc)	l/defl n/a	L/d 999		PLATES MT20	GRIP 244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.03	Vert(TL)	n/a	-	n/a	999			
BCLL BCDL	0.0 5.0	Rep Stress Incr Code FBC2014/T	YES PI2007	WB (Matr	0.03 ix)	Horz(TL	0.00	12	n/a	n/a		Weight: 65 lb	FT = 20%F, 11%E

LUMBER-

TOP CHORD 2x4 SP No.2(flat) BOT CHORD 2x4 SP No.2(flat) WEBS 2x4 SP No.3(flat) OTHERS 2x4 SP No.3(flat) BRACING-TOP CHORD

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

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

REACTIONS. All bearings 12-10-8.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 22, 12, 21, 20, 19, 18, 17, 16, 15, 14, 13

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

NOTES-

- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
- 2) Gable requires continuous bottom chord bearing.
- 3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 4) Gable studs spaced at 1-4-0 oc.
- 5) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- 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					T44440	2000
1024906	FGE05	GABLE		1	1					111146	690
						Job Reference	e (optional)				
Builders FirstSource, Jacks	onville, FI 32244		ID:6uM	1eWvmqVe	7.64 Ex7fGGjq	10 s Apr 19 2016 SaDTzVmxC-	∂ MiTek Indust 7SHkVi55yN	ries, Inc. Tue M וCoB?nq1hVD	ay 16 16:30:21 2 v4Xzx6?4H5nS	017 Page 1 S5d1qqXzFt	wW
0- <u>1</u> -8										0-1 <mark>1</mark> 8	
										Scale = 1:4	2.0
_{3x3} =	3x6 FP	=									
1 2 3	3 4 5 6 7	8 9	10 11 12	13	14	15	16	17 18	19	20	
			8 8 8	e	e	e	e	<u>e</u> e	e	e 6 42	2 0-8
				E							ť
	~~~~~~~~~~~~	~~~~~~~~~~~	· · · · · · · · · · · · · · · · · · ·		XXXX	~~~~~		<u> </u>			
40 39 3	38 37 36 3	5 34 33	32 31 30	29	28	27 26	25	24 23	22	21	
$_{3x3} = _{3x3} =$					3x6 FP	=				_{3x3} =	

# 

	1-0-12	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-7-12
LOADIN	IG (psf)		SPACI	NG-	2-0-0		CSI.			DEFL.	in	(loc)	l/defl	L/d		PLATES		GRIP
TCLL	40.0		Plate G	rip DOL	1.00		TC	0.11		Vert(LL)	n/a	-	n/a	999		MT20		244/190
TCDL	10.0		Lumber	DOL	1.00		BC	0.01		Vert(TL)	n/a	-	n/a	999				
BCLL	0.0		Rep Str	ess Incr	YES		WB	0.04		Horz(TL)	0.00	21	n/a	n/a				
BCDL	5.0		Code F	BC2014/	TPI2007		(Mati	rix)								Weight: 1	19 lb	FT = 20%F, 11%E
LUMBE TOP CH	<b>R-</b> IORD 2x4	4 SP No	.2(flat)							BRACINO TOP CHO	<b>3-</b> DRD	Structu	ral wood	sheathing	g directl	y applied or	6-0-0	oc purlins, except

IOF CHORD	2x4 SF N0.2(IIal)	I OF CHORD	Structural wood sheathing directly applied of 6-0-
BOT CHORD	2x4 SP No.2(flat)		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 24-6-8.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 21, 40, 39, 38, 37, 36, 35, 34, 33, 32, 31, 30, 29, 27, 26,

25, 24, 23, 22

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) Gable requires continuous bottom chord bearing.

3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).

4) Gable studs spaced at 1-4-0 oc.

5) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

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.





			3-6-0		9-10-13						
	(V) [6	0 2 0 0 2 01		3-6-0	•			6-4	-13		·
Fidle Olisels (A	<u>(, T) [0</u>	.0-2-9,0-2-0]							1		
LOADING (psf) TCLL 20.0 TCDL 7.0 BCLL 0.0	*	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.25 1.25 NO	CSI. TC 0.79 BC 0.67 WB 0.48	<b>DEFL.</b> Vert(LL) Vert(TL) Horz(TL)	in 0.16 -0.20 -0.01	(loc) 6-7 6-7 5	l/defl >694 >560 n/a	L/d 240 180 n/a	PLATES MT20	<b>GRIP</b> 244/190
BCDL 5.0		Code FBC2014/TP	12007	(Matrix)						Weight: 45 lb	FT = 20%
LUMBER- TOP CHORD 2 BOT CHORD 2 WEBS 2	2x4 SP N 2x4 SP N 2x4 SP N	No.2 No.2 No.3		BRACING- TOP CHOR BOT CHOR	RD S RD I	Structu Rigid ce	ral wood eiling dire	sheathing dir ectly applied c	ectly applied or 6-0-( or 6-8-15 oc bracing.	0 oc purlins.	
REACTIONS.	(Ib/size) Max Hor Max Upli Max Gra	4=174/Mechanical, 2=4 z 2=140(LC 4) ift4=-141(LC 4), 2=-308(I w 4=174(LC 1), 2=489(LC	146/0-7-12, 5 _C 4), 5=-172 C 35), 5=194(	=143/Mechanical 2(LC 5) LC 3)							
FORCES. (Ib) TOP CHORD BOT CHORD WEBS	- Max. C 2-8=-7 2-11=-( 3-6=-62	comp./Max. Ten All forc 17/593, 3-8=-632/618 649/618, 7-11=-649/618, 27/658	es 250 (lb) oi 7-12=-649/6	r less except when showr 18, 12-13=-649/618, 6-13	n. 3=-649/618						

# NOTES-

 Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope); porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

- 4) Refer to girder(s) for truss to truss connections.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 141 lb uplift at joint 4, 308 lb uplift at joint 2 and 172 lb uplift at joint 5.

- 6) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- 7) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails. For more details refer to MiTek's ST-TOENAIL Detail.
- 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 + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
  - Uniform Loads (plf)

Vert: 1-4=-54, 2-5=-10

Concentrated Loads (lb)

Vert: 8=92(F=46, B=46) 10=-54(F=-27, B=-27) 13=-20(F=-10, B=-10)





		<u>3-6-0</u> 3-6-0		<u>9-1-9</u> 5-7-9	<u>9-10-13</u> 0-9-3
LOADING (psf) TCLL 20.0 TCDL 7.0 BCLL 0.0 * BCDL 5.0	SPACING-2-0-0Plate Grip DOL1.25Lumber DOL1.25Rep Stress IncrNOCode FBC2014/TPI2007	CSI. TC 0.72 BC 0.42 WB 0.29 (Matrix)	DEFL.         in         (l           Vert(LL)         0.08         Vert(TL)         -0.09           Vert(TL)         -0.01         Horz(TL)         -0.01	loc) l/defl L/d 7-8 >999 240 7-8 >999 180 7 n/a n/a	PLATES         GRIP           MT20         244/190           Weight: 47 lb         FT = 20%

BRACING-

TOP CHORD

BOT CHORD

# LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3

REACTIONS. (lb/size) 2=401/0-4-4, 7=367/0-7-12 Max Horz 2=138(LC 4) Max Uplift 2=-272(LC 4), 7=-318(LC 5) Max Grav 2=455(LC 35), 7=367(LC 1)

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

TOP CHORD 2-9=-612/411. 3-9=-549/433

BOT CHORD 2-12=-460/515, 8-12=-460/515, 8-13=-460/515, 13-14=-460/515, 7-14=-460/515 3-7=-525/469

WEBS

# NOTES-

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope); porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60

2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will

fit between the bottom chord and any other members.

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 272 lb uplift at joint 2 and 318 lb uplift at joint 7.

5) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

6) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails. For more details refer to MiTek's ST-TOENAIL Detail.

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 + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-5=-54, 2-6=-10

Concentrated Loads (lb)

Vert: 9=92(F=46, B=46) 11=-54(F=-27, B=-27) 14=-20(F=-10, B=-10)





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

Rigid ceiling directly applied or 8-1-12 oc bracing.



			<u>3-5-0</u> 3-5-0		6-0-2 2-7-2
Plate Offsets (X,Y)	[4:0-2-8,0-0-10]		1		1
LOADING (psf)	<b>SPACING-</b> 2-0-0	CSI.	DEFL. in (loc)	) l/defl L/d	PLATES GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.74	Vert(LL) -0.09 7	7 >761 240	MT20 244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.16	Vert(TL) -0.11 7	7 >618 180	
BCLL 0.0 *	Rep Stress Incr NO	WB 0.26	Horz(TL) 0.03 6	6 n/a n/a	
BCDL 5.0	Code FBC2014/TPI2007	(Matrix)			Weight: 26 lb FT = 20%
LUMBER-			BRACING-		
TOP CHORD 2x4 SF	P No.2		TOP CHORD Struc	tural wood sheathing di	irectly applied or 5-2-10 oc purlins.
BOT CHORD 2v4 SE	P No 2 *Excent*		BOT CHORD Rigid	ceiling directly applied	or 6-0-0 oc bracing

4-7: 2x4 SP No.3 2x4 SP No.3

WEBS

REACTIONS. (Ib/size) 5=109/Mechanical, 2=337/0-7-12, 6=25/Mechanical Max Horz 2=140(LC 22) Max Uplift 5=-86(LC 8), 2=-247(LC 4), 6=-18(LC 4)

Max Grav 5=130(LC 35), 2=381(LC 35), 6=40(LC 3)

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

TOP CHORD 2-8=-912/619, 3-8=-792/524

BOT CHORD 2-9=-631/834, 7-9=-631/834, 4-7=-272/387

WEBS 3-7=-916/693

#### NOTES-

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18;

MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60

2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

4) Refer to girder(s) for truss to truss connections.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 86 lb uplift at joint 5, 247 lb uplift at joint 2 and 18 lb uplift at joint 6.

6) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

7) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails. For more details refer to MiTek's ST-TOENAIL Detail.

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 + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25 Uniform Loads (plf)

Vert: 1-4=-54, 4-5=-54, 2-7=-10, 4-6=-10 Concentrated Loads (lb)

Vert: 8=92(F=46, B=46) 10=-31(F=-16, B=-16)

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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not besign value to be only with with these contractions. This besign is based only upon 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 Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.





		5-7-14									
	G (psf)	SPACING- 2-0	-0 <b>CSI</b> .		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1.2	25 TC	0.72	Vert(LL)	-0.05	2-6	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL 1.2	25 BC	0.28	Vert(TL)	-0.08	2-6	>810	180		
BCLL	0.0 *	Rep Stress Incr N	O WB	0.08	Horz(TL)	0.00	5	n/a	n/a		
BCDL	5.0	Code FBC2014/TPI200	)7 (Mat	rix)						Weight: 25 lb	FT = 20%

# LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3 BRACING-TOP CHORD BOT CHORD - **-** 44

Structural wood sheathing directly applied or 5-7-14 oc purlins. Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (lb/size) 4=81/Mechanical, 2=371/0-7-12, 5=14/Mechanical Max Horz 2=135(LC 4) Max Uplift4=-70(LC 4), 2=-267(LC 4), 5=-45(LC 19) Max Grav 4=81(LC 1), 2=371(LC 1), 5=120(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-346/208

BOT CHORD 2-7=-210/303, 6-7=-210/303

WEBS 3-6=-322/222

#### NOTES-

 Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60

2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

4) Refer to girder(s) for truss to truss connections.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 70 lb uplift at joint 4, 267 lb uplift at joint 2 and 45 lb uplift at joint 5.

6) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

7) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails. For more details refer to MiTek's ST-TOENAIL Detail.

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 + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf) Vert: 1-4=-54, 2-5=-10 Concentrated Loads (lb)

Vert: 3=44(F=22, B=22)





			2-7-13 2-7-4
LOADING (psf)           TCLL         20.0           TCDL         7.0           BCLL         0.0 *           BCDL         5.0	SPACING- 2-0-0 Plate Grip DOL 1.25 Lumber DOL 1.25 Rep Stress Incr NO Code FBC2014/TPI2007	CSI. TC 0.66 BC 0.04 WB 0.00 (Matrix)	DEFL.         in (loc)         l/defl         L/d           Vert(LL)         -0.00         2-4         >999         240           Vert(TL)         -0.00         2-4         >999         180           Horz(TL)         -0.00         3         n/a         n/a           Weight:         13 lb         FT = 20%

LUMBER-

BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 2-7-13 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (Ib/size) 3=-91/Mechanical, 4=6/Mechanical, 2=299/0-9-14

Max Horz 2=82(LC 6)

Max Uplift 3=-91(LC 1), 2=-309(LC 4)

Max Grav 3=113(LC 4), 4=28(LC 3), 2=299(LC 1)

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

# NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) Gable studs spaced at 1-4-0 oc.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 91 lb uplift at joint 3 and 309 lb uplift at joint 2
- 8) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- 9) 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 + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
  - Uniform Loads (plf)
  - Vert: 1-5=-54

Trapezoidal Loads (plf)

Vert: 5=0(F=27, B=27)-to-3=-38(F=8, B=8), 2=-1(F=5, B=5)-to-4=-7(F=1, B=1)

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						<u>3-10-5</u> 3-10-5					7-0-14 3-2-8
LOADIN TCLL	G (psf) 20.0	SPACING- Plate Grip DOL	2-0-0 1.25	CSI. TC	0.71	DEFL. Vert(LL)	in -0.02	(loc) 2-7	l/defl >999	L/d 240	PLATES         GRIP           MT20         244/190
BCLL BCDL	0.0 * 5.0	Rep Stress Incr Code FBC2014/T	NO PI2007	WB (Matr	0.37 0.06 ix)	Horz(TL)	0.02	2-7 5	>999 n/a	n/a	Weight: 32 lb FT = 20%

# LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3 BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins. Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (lb/size) 4=85/Mechanical, 2=354/0-7-12, 5=72/Mechanical Max Horz 2=155(LC 4) Max Uplift4=-85(LC 22), 2=-291(LC 4), 5=-78(LC 5) Max Grav 4=101(LC 19), 2=387(LC 35), 5=111(LC 35)

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

TOP CHORD 2-8=-367/96, 3-8=-294/118

BOT CHORD 2-10=-145/263, 7-10=-145/263, 7-11=-145/263, 6-11=-145/263

WEBS 3-6=-283/156

# NOTES-

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

4) Refer to girder(s) for truss to truss connections.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 85 lb uplift at joint 4, 291 lb uplift at joint 2 and 78 lb uplift at joint 5.

6) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

7) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails. For more details refer to MiTek's ST-TOENAIL Detail.

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 + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf) Vert: 1-4=-54, 2-5=-10 Concentrated Loads (lb)

Vert: 8=89(F=45, B=45)





			4-3-15								
LOADIN	IG (psf)	SPACING- 2-0	)-0 <b>C</b>	SI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1.	25 T	C 0.79	Vert(LL)	-0.01	2-4	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL 1.	25 B	C 0.15	Vert(TL)	-0.03	2-4	>999	180		
BCLL	0.0 *	Rep Stress Incr N	10 V	/B 0.00	Horz(TL)	-0.00	3	n/a	n/a		
BCDL	5.0	Code FBC2014/TPI20	07 (I	Matrix)						Weight: 17 lb	FT = 20%

LUMBER-

BRACING-TOP CHORD BOT CHORD 1 2 15

Structural wood sheathing directly applied or 4-3-15 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (Ib/size) 3=20/Mechanical, 2=268/0-7-14, 4=20/Mechanical

Max Horz 2=121(LC 4)

Max Uplift 3=-101(LC 19), 2=-150(LC 4)

Max Grav 3=111(LC 22), 2=268(LC 1), 4=59(LC 3)

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

# NOTES-

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18;

- MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will
- fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 101 lb uplift at joint 3 and 150 lb uplift at
- joint 2. 6) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- 7) "NAILED" indicates 2-12d (0.148"x3.25") toe-nails. For more details refer to MiTek's ST-TOENAIL Detail.
- a) 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 + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
- Uniform Loads (plf) Vert: 1-3=-54, 2-4=-10
- Concentrated Loads (lb) Vert: 5=82(F=41, B=41)





		1				3-10-5					3-0-7	
LOADIN	IG (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL TCDL	20.0 7.0	Plate Grip DOL Lumber DOL	1.25 1.25	TC BC	0.36 0.11	Vert(LL) Vert(TL)	-0.01 -0.01	2-7 2-7	>999 >999	240 180	MT20	244/190
BCLL BCDL	0.0 * 5.0	Rep Stress Incr Code FBC2014/TF	NO 912007	WB (Matr	0.06 ix)	Horz(TL)	0.00	6	n/a	n/a	Weight: 31 lb	FT = 20%

# LUMBER-

TOP CHORD 2x4 SP M 31 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3 BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins. Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (lb/size) 4=91/Mechanical, 2=349/0-7-12, 6=61/Mechanical Max Horz 2=152(LC 4) Max Uplift4=-97(LC 22), 2=-256(LC 4), 6=-44(LC 8) Max Grav 4=113(LC 19), 2=382(LC 35), 6=111(LC 35)

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

TOP CHORD 2-8=-374/77, 3-8=-273/84

BOT CHORD 2-10=-116/251, 7-10=-116/251, 7-11=-116/251, 6-11=-116/251

WEBS 3-6=-270/124

#### NOTES-

 Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60

2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

4) Refer to girder(s) for truss to truss connections.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 97 lb uplift at joint 4, 256 lb uplift at joint 2 and 44 lb uplift at joint 6.

6) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

7) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails. For more details refer to MiTek's ST-TOENAIL Detail.

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 + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf) Vert: 1-4=-54, 2-5=-10 Concentrated Loads (lb)

Vert: 8=89(F=45, B=45)





LOADING         (psf)           TCLL         20.0           TCDL         7.0           BCLL         0.0           BCDL         5.0	SPACING-2-0-0Plate Grip DOL1.25Lumber DOL1.25Rep Stress IncrNOCode FBC2014/TPI2007	<b>CSI.</b> TC 0.91 BC 0.40 WB 0.00 (Matrix)	DEFL.         in           Vert(LL)         0.03           Vert(TL)         0.01           Horz(TL)         -0.17	1 (loc) I/defl L/d 5 4-5 >903 240 5 4-5 >783 180 7 3 n/a n/a	PLATES         GRIP           MT20         244/190           Weight: 20 lb         FT = 20%
LUMBER- TOP CHORD 2x4 SP BOT CHORD 2x4 SP	No.2 No.2		BRACING- TOP CHORD	Structural wood sheathing di end verticals.	rectly applied or 4-2-15 oc purlins, except

BOT CHORD

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

REACTIONS. (Ib/size) 5=267/0-7-12, 3=30/Mechanical, 4=-4/Mechanical

Max Horz 5=116(LC 5) Max Uplift 5=-352(LC 4), 3=-75(LC 8), 4=-63(LC 5)

Max Grav 5=303(LC 35), 3=65(LC 35), 4=41(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-5=-274/244

NOTES-

WEBS

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18;

MWFRS (envelope) gable end zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

Refer to girder(s) for truss to truss connections.

2x4 SP No.3

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 352 lb uplift at joint 5, 75 lb uplift at joint 3 and 63 lb uplift at joint 4.

6) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

7) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails. For more details refer to MiTek's ST-TOENAIL Detail.

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 + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-2=-54, 2-3=-54, 4-5=-10 Concentrated Loads (lb)

Vert: 6=99(F=50, B=50) 7=28(F=14, B=14)







				1-0-0
	G (psf)	SPACING- 2-0-0	<b>CSI</b> .	DEFL.         in (loc)         l/defl         L/d         PLATES         GRIP           Vert(L)         -0.00         -2.5999         240         MT20         244/190
TCDL	7.0	Lumber DOL 1.25	BC 0.01	Vert(TL) -0.00 2 >999 180
BCLL BCDL	0.0 * 5.0	Rep Stress Incr YES Code FBC2014/TPI2007	WB 0.00 (Matrix)	Horz(TL) -0.00 3 n/a n/a Weight: 7 lb FT = 20%

LUMBER-

BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 1-0-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

100

**REACTIONS.** (lb/size) 3=-95/Mechanical, 2=265/0-3-0, 4=5/Mechanical

Max Horz 2=58(LC 8)

Max Uplift 3=-95(LC 1), 2=-221(LC 8), 4=-8(LC 8) Max Grav 3=98(LC 8), 2=265(LC 1), 4=14(LC 3)

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

# NOTES-

 Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

4) Refer to girder(s) for truss to truss connections.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 95 lb uplift at joint 3, 221 lb uplift at joint 2

and 8 lb uplift at joint 4.







				3-0-0
LOADIN	<b>G</b> (psf)	SPACING- 2-0-0	<b>CSI.</b>	DEFL.         in         (loc)         I/defl         L/d         PLATES         GRIP           Vert(LL)         0.01         2-4         >999         240         MT20         244/190
TCLL	20.0	Plate Grip DOL 1.25	TC 0.35	
TCDL	7.0	Lumber DOL 1.25	BC 0.11	Vert(TL) -0.01 2-4 >999 180
BCLL	0.0 *	Rep Stress Incr YES	WB 0.00	Horz(TL) -0.00 3 n/a n/a
BCDL	5.0	Code FBC2014/TPI2007	(Matrix)	Weight: 13 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

. . .

Structural wood sheathing directly applied or 3-0-0 oc purlins.

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

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2

REACTIONS. (Ib/size) 3=30/Mechanical, 2=253/0-3-0, 4=14/Mechanical Max Horz 2=95(LC 12) Max Uplift3=-37(LC 12), 2=-187(LC 8), 4=-24(LC 8)

Max Grav 3=30(LC 1), 2=253(LC 1), 4=42(LC 3)

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

# NOTES-

 Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

4) Refer to girder(s) for truss to truss connections.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 37 lb uplift at joint 3, 187 lb uplift at joint 2

- and 24 lb uplift at joint 4.
- 6) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.





LUMBER-



				5-0-0
LOADIN	<b>G</b> (psf)	SPACING- 2-0-0	<b>CSI.</b>	DEFL.         in         (loc)         I/defl         L/d         PLATES         GRIP           Vert(LL)         0.07         2-4         >775         240         MT20         244/190           Vert(TL)         0.06         2-4         >962         180         MT20         244/190
TCLL	20.0	Plate Grip DOL 1.25	TC 0.35	
TCDL	7.0	Lumber DOL 1.25	BC 0.34	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.00	Horz(TL) -0.00 3 n/a n/a
BCDL	5.0	Code FBC2014/TPI2007	(Matrix)	Weight: 19 lb FT = 20%

LUMBER-

BRACING-TOP CHORD BOT CHORD

- - -

Structural wood sheathing directly applied or 5-0-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (Ib/size) 3=103/Mechanical, 2=298/0-3-0, 4=24/Mechanical Max Horz 2=136(LC 12) Max Uplift 3=-100(LC 12), 2=-208(LC 8), 4=-41(LC 8) Max Grav 3=103(LC 1), 2=298(LC 1), 4=72(LC 3)

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

# NOTES-

 Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

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 3, 208 lb uplift at joint 2

and 41 lb uplift at joint 4.



TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2



		7-0-0							
LOADING (psf) TCLL 20.0 TCDL 7.0 BCLL 0.0 * BCDL 5.0	SPACING- 2-0-0 Plate Grip DOL 1.25 Lumber DOL 1.25 Rep Stress Incr YES Code FBC2014/TPI2007	CSI. TC 0.72 BC 0.71 WB 0.00 (Matrix)	DEFL.         in         (loc)         l/defl         L/d           Vert(LL)         0.30         2-4         >277         240           Vert(TL)         0.24         2-4         >344         180           Horz(TL)         -0.00         3         n/a         n/a	PLATES         GRIP           MT20         244/190           Weight: 25 lb         FT = 20%					

LUMBER-

BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (Ib/size) 3=165/Mechanical, 2=355/0-3-0, 4=34/Mechanical Max Horz 2=177(LC 12) Max Uplift3=-154(LC 12), 2=-238(LC 8), 4=-58(LC 8) Max Grav 3=165(LC 1), 2=355(LC 1), 4=102(LC 3)

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

# NOTES-

 Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

4) Refer to girder(s) for truss to truss connections.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 154 lb uplift at joint 3, 238 lb uplift at joint 2

and 58 lb uplift at joint 4.





				2-0-0	
LOADIN TCLL	IG (psf) 20.0 7.0	SPACING- 2-0-0 Plate Grip DOL 1.25	CSI. TC 0.33 BC 0.03	DEFL.         in (loc)         l/defl         L/d         PLATES         G           Vert(LL)         -0.00         2         >999         240         MT20         2           Vert(TL)         -0.00         2.4         >999         180         MT20         2	<b>RIP</b> 44/190
BCLL BCDL	0.0 * 5.0	Rep Stress Incr YES Code FBC2014/TPI2007	WB 0.00 (Matrix)	Horz(TL) -0.00 3 n/a n/a Weight: 10 lb	FT = 20%

LUMBER-

BRACING-TOP CHORD BOT CHORD ~ .

Structural wood sheathing directly applied or 2-0-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 3=-9/Mechanical, 2=237/0-5-8, 4=10/Mechanical Max Horz 2=76(LC 12)

Max Hold 2=76(LC 12) Max Uplift 3=-9(LC 1), 2=-161(LC 8)

Max Grav 3=25(LC 8), 2=237(LC 1), 4=29(LC 3)

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

# NOTES-

 Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

4) Refer to girder(s) for truss to truss connections.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 9 lb uplift at joint 3 and 161 lb uplift at joint 2.





			4-0-0					
LOADIN TCLL	<b>G</b> (psf) 20.0	SPACING- 2-0-0 Plate Grip DOL 1.25	<b>CSI.</b> TC 0.38	DEFL.         in (loc)         l/defl         L/d         PLATES         GRIP           Vert(LL)         -0.01         2-4         >999         240         MT20         244/190				
TCDL BCLL	7.0 0.0 *	Lumber DOL 1.25 Rep Stress Incr YES	BC 0.12 WB 0.00	Vert(TL) -0.02 2-4 >999 180 Horz(TL) -0.00 3 n/a n/a				
BCDL	5.0	Code FBC2014/TPI2007	(Matrix)	Weight: 16 lb FT = 20%				

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LUMBER-
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BRACING-TOP CHORD BOT CHORD 4 0 0

Structural wood sheathing directly applied or 4-0-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (Ib/size) 3=62/Mechanical, 2=280/0-5-8, 4=19/Mechanical Max Horz 2=116(LC 12)

Max Uplift 3=-66(LC 12), 2=-158(LC 8)

Max Grav 3=62(LC 1), 2=280(LC 1), 4=56(LC 3)

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

# NOTES-

 Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

4) Refer to girder(s) for truss to truss connections.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 66 lb uplift at joint 3 and 158 lb uplift at joint 2.

6) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.





<u>2-5-8</u> <u>4-0-0</u> 2-5-8 <u>1-6-8</u>										
Plate Offsets (X,Y) [2:0-6-6,0-0-8], [3:0-6-9,0-0-8]										
DEFL. in (loc) I/defl L/d PLATES GRIP										
Vert(LL) -0.01 6 >999 240 MT20 244/190										
Vert(TL) -0.02 6 >999 180										
Horz(TL) 0.01 5 n/a n/a Weight: 17 lb ET = 20%										

LUMBER-

 TOP CHORD
 2x4 SP No.2

 BOT CHORD
 2x4 SP No.2 *Except*

 3-6: 2x4 SP No.3

BRACING-TOP CHORD

 TOP CHORD
 Structural wood sheathing directly applied or 4-0-0 oc purlins.

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

REACTIONS. (lb/size) 4=53/Mechanical, 2=280/0-5-8, 5=28/Mechanical Max Horz 2=116(LC 12) Max Uplift4=-43(LC 12), 2=-158(LC 8), 5=-11(LC 12)

Max Grav 4=53(LC 1), 2=280(LC 1), 5=42(LC 3)

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

# NOTES-

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18;

MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber

- DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 43 lb uplift at joint 4, 158 lb uplift at joint 2 and 11 lb uplift at joint 5.
- 6) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.







	ł	<u>2-5-8</u> 2-5-8		<u>6-0-0</u> 3-6-8	
Plate Offsets (X,Y)	[3:0-0-9,0-0-0]			1	
LOADING (psf)TCLL20.0TCDL7.0BCLL0.0 *BCDL5.0	SPACING-2-0-0Plate Grip DOL1.25Lumber DOL1.25Rep Stress IncrYESCode FBC2014/TPI2007	CSI. TC 0.38 BC 0.29 WB 0.00 (Matrix)	DEFL. Vert(LL) 0. Vert(TL) -0. Horz(TL) 0.	in (loc) l/defl L/d 08 3-5 >867 240 11 3-5 >636 180 05 5 n/a n/a	PLATES         GRIP           MT20         244/190           Weight: 23 lb         FT = 20%
LUMBER- TOP CHORD 2x4 S BOT CHORD 2x4 S 3-6: 2	P No.2 P No.2 *Except* x4 SP No.3		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing dire Rigid ceiling directly applied o	ectly applied or 6-0-0 oc purlins. r 6-0-0 oc bracing.

REACTIONS. (lb/size) 4=107/Mechanical, 2=331/0-5-8, 5=50/Mechanical Max Horz 2=156(LC 12) Max Uplift4=-90(LC 12), 2=-165(LC 12), 5=-17(LC 12) Max Grav 4=107(LC 1), 2=331(LC 1), 5=72(LC 3)

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

# NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18;
- MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber
- DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 90 lb uplift at joint 4, 165 lb uplift at joint 2 and 17 lb uplift at joint 5.
- 6) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.






		F		6-0-0	
LOADIN TCLL TCDL	<b>G</b> (psf) 20.0 7.0	SPACING- 2-0-0 Plate Grip DOL 1.25 Lumber DOL 1.25	CSI. TC 0.46 BC 0.31	DEFL.         in         (loc)         l/defl         L/d           Vert(LL)         -0.06         2-4         >999         240           Vert(TL)         -0.11         2-4         >615         180	PLATES         GRIP           MT20         244/190
BCLL BCDL	0.0 * 5.0	Rep Stress Incr YES Code FBC2014/TPI2007	WB 0.00 (Matrix)	Horz(TL) -0.00 3 n/a n/a	Weight: 22 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2

BOT CHORD 2x4 SP No.2

BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (Ib/size) 3=129/Mechanical, 2=331/0-5-8, 4=29/Mechanical Max Horz 2=156(LC 12) Max Uplift3=-124(LC 12), 2=-165(LC 12) Max Grav 3=129(LC 1), 2=331(LC 1), 4=86(LC 3)

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

#### NOTES-

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

4) Refer to girder(s) for truss to truss connections.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 124 lb uplift at joint 3 and 165 lb uplift at joint 2.

6) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.





				2-	1-13			
LOADING (psf)           TCLL         20.0           TCDL         7.0           BCLL         0.0         *           BCDL         5.0	SPACING- 2-0-0 Plate Grip DOL 1.25 Lumber DOL 1.25 Rep Stress Incr YES Code FBC2014/TPI2007	CSI. TC 0.41 BC 0.03 WB 0.00 (Matrix)	<b>DEFL.</b> Vert(LL) Vert(TL) Horz(TL)	in (loc) -0.00 2 -0.00 2-4 -0.00 3	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 10 lb	<b>GRIP</b> 244/190 FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 BRACING-TOP CHORD BOT CHORD . . ..

Structural wood sheathing directly applied or 2-1-13 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 3=-36/Mechanical, 2=269/0-7-4, 4=9/Mechanical Max Horz 2=78(LC 12)

Max Uplift 3=-36(LC 1), 2=-187(LC 8)

Max Grav 3=45(LC 8), 2=269(LC 1), 4=27(LC 3)

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

#### NOTES-

 Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

4) Refer to girder(s) for truss to truss connections.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 3 and 187 lb uplift at joint 2.

6) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.





				4-0-0	
LOADIN TCLL TCDL BCLL	<b>G</b> (psf) 20.0 7.0 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.25 Lumber DOL 1.25 Rep Stress Incr YES	<b>CSI.</b> TC 0.41 BC 0.12 WB 0.00	DEFL.         in         (loc)         I/defl         L/d         PLATES         GRIP           Vert(LL)         -0.01         2-4         >999         240         MT20         244/190           Vert(TL)         -0.02         2-4         >999         180         MT20         244/190           Horz(TL)         -0.00         3         n/a         n/a         N/a         N/a	
BCDL	5.0	Code FBC2014/TPI2007	(Matrix)	Weight: 16 lb FT = 20%	%

LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 4-0-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 3=57/Mechanical, 2=285/0-7-4, 4=18/Mechanical Max Horz 2=116(LC 12)

Max Uplift 3=-63(LC 12), 2=-162(LC 8)

Max Grav 3=57(LC 1), 2=285(LC 1), 4=55(LC 3)

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

#### NOTES-

2

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 63 lb uplift at joint 3 and 162 lb uplift at joint







				2-8-6
LOADIN	<b>G</b> (psf)	SPACING- 2-0-0	<b>CSI.</b>	DEFL.         in (loc)         l/defl         L/d         PLATES         GRIP           Vert(LL)         -0.00         2-4         >999         240         MT20         244/190
TCLL	20.0	Plate Grip DOL 1.25	TC 0.41	
TCDL	7.0	Lumber DOL 1.25	BC 0.04	Vert(TL) -0.00 2-4 >999 180
BCLL	0.0 *	Rep Stress Incr YES	WB 0.00	Horz(TL) -0.00 3 n/a n/a
BCDL	5.0	Code FBC2014/TPI2007	(Matrix)	Weight: 12 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 BRACING-TOP CHORD BOT CHORD . . .

Structural wood sheathing directly applied or 2-8-6 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 3=-1/Mechanical, 2=266/0-7-4, 4=12/Mechanical

Max Horz 2=89(LC 12) Max Uplift 3=-15(LC 12), 2=-174(LC 8)

Max Grav 3=18(LC 8), 2=266(LC 1), 4=35(LC 3)

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

#### NOTES-

 Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

4) Refer to girder(s) for truss to truss connections.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 15 lb uplift at joint 3 and 174 lb uplift at joint 2.

6) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.





		I		5-0-0	
LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP	
TCLL	20.0	Plate Grip DOL 1.25	TC 0.41	Vert(LL) -0.03 1-3 >999 240 MT20 244/190	
TCDL	7.0	Lumber DOL 1.25	BC 0.21	Vert(TL) -0.05 1-3 >999 180	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.00	Horz(TL) -0.00 2 n/a n/a	
BCDL	5.0	Code FBC2014/TPI2007	(Matrix)	Weight: 16 lb FT = 20%	

LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 5-0-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (Ib/size) 1=151/0-5-8, 2=127/Mechanical, 3=24/Mechanical Max Horz 1=102(LC 12)

Max Uplift 1=-58(LC 12), 2=-117(LC 12)

Max Grav 1=151(LC 1), 2=127(LC 1), 3=71(LC 3)

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

#### NOTES-

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

4) Refer to girder(s) for truss to truss connections.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 58 lb uplift at joint 1 and 117 lb uplift at joint 2.

6) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.







<u>| 1-0-0</u> 1-0-0

LOADIN	G (psf)	<b>SPACING-</b> 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP
TCLL	20.0	Plate Grip DOL 1.25	TC 0.53	Vert(LL) 0.00 5 >999 240 MT20 244/190
TCDL	7.0	Lumber DOL 1.25	BC 0.24	Vert(TL) 0.00 5 >999 180
BCLL	0.0 *	Rep Stress Incr YES	WB 0.00	Horz(TL) -0.03 3 n/a n/a
BCDL	5.0	Code FBC2014/TPI2007	(Matrix)	Weight: 9 lb FT = 20%

BRACING-

## LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3 TOP CHORD Structural wood sheathing directly applied or 1-0-0 oc purlins, except end verticals.

Scale = 1:17.7

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

REACTIONS. (lb/size) 5=302/0-5-8, 3=-115/Mechanical, 4=-14/Mechanical Max Horz 5=90(LC 9) Max Uplift 5=-152(LC 8), 3=-115(LC 1), 4=-82(LC 9) Max Grav 5=302(LC 1), 3=63(LC 8), 4=28(LC 10)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-5=-279/327

#### NOTES-

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 152 lb uplift at joint 5, 115 lb uplift at joint 3 and 82 lb uplift at joint 4.
- 6) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.









			000		
Plate Offsets (X,Y)	[2:0-3-0,0-1-12]				
LOADING (psf)           TCLL         20.0           TCDL         7.0           BCLL         0.0 *           BCDL         5.0	SPACING- 2-0-0 Plate Grip DOL 1.25 Lumber DOL 1.25 Rep Stress Incr YES Code FBC2014/TPI2007	CSI. TC 0.76 BC 0.37 WB 0.00 (Matrix)	DEFL. Vert(LL) 0.0 Vert(TL) 0.0 Horz(TL) -0.0	in (loc) I/defl L/d 12 4-5 >999 240 12 4-5 >999 180 9 3 n/a n/a	PLATES         GRIP           MT20         244/190           Weight: 16 lb         FT = 20%
LUMBER- TOP CHORD 2x4 SP BOT CHORD 2x4 SP WEBS 2x4 SP	No.2 No.2 No.3	1	BRACING- TOP CHORD BOT CHORD	Structural wood sheathing dir end verticals. Rigid ceiling directly applied c	ectly applied or 3-0-0 oc purlins, except

REACTIONS. (lb/size) 5=255/0-5-8, 3=36/Mechanical, 4=6/Mechanical Max Horz 5=117(LC 9)

Max Uplift 5=-108(LC 8), 3=-67(LC 12), 4=-27(LC 9) Max Grav 5=255(LC 1), 3=36(LC 1), 4=38(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-5=-234/259

TOP CHORD

NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

4) Refer to girder(s) for truss to truss connections.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 108 lb uplift at joint 5, 67 lb uplift at joint 3 and 27 lb uplift at joint 4.





Job	Truss	Truss Type	Qty	Ply	T11146721	
1024906	T01	Roof Special Girder	1	1	Job Reference (optional)	
Builders FirstSource, Jacks	sonville, FI 32244		ID:6uMeWvm	7.6 aVeEx7fG	340 s Apr 19 2016 MiTek Industries, Inc. Tue May 16 16:30:35 2017 Page 1 GGigSaDTzVmxC-i971RUGtfgzpt8rWrdIWT16GDIYTYFxWJpQZJizFtwI	
-2-0-0 - 4-	0-0 8-1-4	12-2-8 16-3-12	20-5-0	24-6-	29-7-8	
2-0-0 4-	0-0 4-1-4	4-1-4 4-1-4	4-1-4	4-1-	-4 3-11-12 0-1-8 3-10-8 2-0-0	
					Scale: 3/16"=1'	
	Special		NAILED		Special	
5 00 12	6x10 = NAI	LED NAILED NAILED NA	ILED NAILED	NAILED	NAILED NAILED NAILED $4x6 =$	
0.00   12	NAILED 3	NAILED 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 -	7 25 26 8		28 9 29 30 10 11	
IJ				- 00		
2-0-1						
3x8 =	²¹ 31 ²	²⁰ 32 ¹⁹ 33	¹⁸ 34 35 ¹⁷	⁷ 16	36 ¹⁵ 37 38 14 3x8 ≈ √	
	2x4 II NAILED 4x8	3 = 7x8 = NAILED	3x8 = 3x	6 =	NAILED $4x8 =$ NAILED $3x6 =$	
	Special NAI	LED NAILED NA	NAILED NAILED	6x8 =	NAILED Special	
			NAILED	NAILED		
4-	0-0 8-1-4	12-2-8 16-3-12	20-5-0	24-6	5-4 28-7-8 29-7-8 33-6-0	
Plate Offsets (X,Y) [2:0	<u>0-0                                   </u>	<u>4-1-4</u> <u>4-1-4</u> [12:0-3-1.0-1-8]. [15:0-3-8.0-2-0].	<u>4-1-4</u> [19:0-4-0.0-5-4]. [20:0	4-1- -3-8.0-2-0	-4 ' 4-1-4 1-0-0' 3-10-8 ' 01	
				(100)		
TCLL 20.0	Plate Grip DOL 1.25	5 TC 0.50	Vert(LL) 0.78	(100)	>508 240 MT20 244/190	
TCDL 7.0	Lumber DOL 1.25	5 BC 0.97	Vert(TL) -1.23	18	>323 180	
BCDL 5.0	Code FBC2014/TPI2007	(Matrix)	Horz(TL) 0.14	12	n/a n/a Weight: 206 lb FT = 20%	
			BRACING-			
TOP CHORD 2x4 SP No	.2 *Except*		TOP CHORD	Structura	al wood sheathing directly applied or 2-8-12 oc purlins.	
6-10,3-6: 2	x6 SP No.2 2 *Except*		BOT CHORD	Rigid cei	iling directly applied or 4-8-2 oc bracing.	
16-19: 2x6	SP M 26					
WEBS 2x4 SP No.	.3					
REACTIONS. (Ib/size)	2=1308/0-5-8, 12=1309/0-5-	8				
Max Horz 2 Max Uplift2	2=31(LC 34) 2=-655(LC 4). 12=-657(LC 5	5)				
	·····	/				
TOP CHORD 2-3=-268	9/1413, 3-22=-4460/2360, 4	-22=-4461/2361, 4-23=-5734/3017	, 5-23=-5734/3017,			
5-24=-6	119/3219, 6-24=-6119/3219	, 6-7=-6119/3219, 7-25=-6119/3219	9,			
9-28=-58	87/3099, 9-29=-4810/2537,	29-30=-4810/2537, 10-30=-4810/2	1537,			
10-11=-2	444/1308, 11-12=-2611/136	3 20 21- 1227/2442, 20 22- 2285/	4461			
19-32=-2	285/4461, 19-33=-2949/573	34, 18-33=-2949/5734, 18-34=-304	4/5887,			
34-35=-3 15-36=-2	044/5887, 17-35=-3044/588	37, 16-17=-2482/4810, 16-36=-2482	2/4810, 2/2053			
12-14=-1	208/2353	0, 07 00- 1002/2000, 14 00- 1007	2/2000,			
WEBS 3-20=-11 8-18=-13	46/2168, 4-20=-739/453, 4- 8/250 8-17=-345/247 9-17	19=-711/1361, 5-19=-398/272, 5-18 =-612/1153_9-15=-629/399_10-15;	8=-228/411, =-1031/1988			
10-14=-1	076/601, 11-14=-468/1000	- 012/1100, 0 10- 025/000, 10 10	- 100 // 1000,			
NOTES-						
1) Unbalanced roof live loa	ads have been considered for	or this design.				
<ol> <li>Wind: ASCE 7-10; Vult= MWFRS (envelope): Lu</li> </ol>	=130mph (3-second gust) Va mber DOL=1.60 plate grip D	asd=101mph; TCDL=4.2psf; BCDL= )OL=1.60	=3.0psf; h=18ft; Cat. I	I; Exp C;	Encl., GCpi=0.18;	
3) Provide adequate drain	age to prevent water pondin	g.				
<ul> <li>4) This truss has been des</li> <li>5) * This truss has been des</li> </ul>	esigned for a 10.0 pst bottom	Opsf on the bottom chord in all area	any other live loads.	3-6-0 tall	by 2-0-0 wide will	
fit between the bottom of	chord and any other membe	rs.		- i t 0		
<li>b) Provide mechanical cor joint 12.</li>	inection (by others) of truss	to bearing plate capable of withstai	nding 655 ib uplift at j	bint 2 and	d 657 id uplitt at	
7) "Semi-rigid pitchbreaks	including heels" Member en	d fixity model was used in the anal	ysis and design of this	s truss.		
9) Hanger(s) or other conr	nection device(s) shall be pro-	ovided sufficient to support concent	trated load(s) 60 lb dc	wn and 1	140 lb up at 4-0-0,	
and 56 lb down and 140 lb up at 29-7-8 on top chord, and 134 lb down and 43 lb up at 4-0-0, and 134 lb down and 43 lb up at 29-5-4						
40) In the LOAD CASE(S)	section loads applied to the	a face of the truss are noted as from	of (E) or back (B)			
WARNING - Verify design	parameters and READ NOTES ON	THIS AND INCLUDED MITEK REFERENCE	PAGE MII-7473 rev. 10/03/2	2015 BEFOR	RE USE.	
Design valid for use only with a truss system. Before use, the	MiTek® connectors. This design is e building designer must verify the a	based only upon parameters shown, and is f applicability of design parameters and proper	or an individual building cor rly incorporate this design ir	nponent, no nto the overa	ot all and a second sec	
building design. Bracing indic is always required for stability	ated is to prevent buckling of individ and to prevent collapse with possib	lual truss web and/or chord members only. / le personal injury and property damage. For	Additional temporary and per general guidance regarding	ermanent bra g the	racing MiTek [®]	
fabrication, storage, delivery, e Safety Information available	erection and bracing of trusses and from Truss Plate Institute, 218 N. L	truss systems, see ANSI/TPI1 Qua ee Street, Suite 312, Alexandria, VA 22314.	lity Criteria, DSB-89 and E	SCSI Buildir	ng Component 6904 Parke East Blvd.	

Job	Truss	Truss Type	Qty	Ply	
1024906	T01	Roof Special Girder	1	1	T11146721
					Job Reference (optional)

Builders FirstSource, Jacksonville, Fl 32244

7.640 s Apr 19 2016 MiTek Industries, Inc. Tue May 16 16:30:35 2017 Page 2 ID:6uMeWvmqVeEx7fGGjqSaDTzVmxC-j971RUGtfgzpt8rWrdIWT16GDIYTYFxWJpQZJjzFtwl

# LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-3=-54, 3-11=-54, 11-13=-54, 2-12=-10

Concentrated Loads (lb)

Vert: 3=-13(F) 21=-15(F) 20=-9(F) 4=-8(F) 19=-9(F) 5=-8(F) 18=-9(F) 7=-8(F) 14=-15(F) 16=-9(F) 22=-8(F) 23=-8(F) 24=-8(F) 25=-8(F) 26=-8(F) 27=-8(F) 28=-8(F) 29=-8(F) 30=-8(F) 31=-9(F) 32=-9(F) 33=-9(F) 35=-9(F) 35=-9(F) 36=-9(F) 37=-9(F) 38=-9(F) 36=-9(F) 36=-9(F





	6-0-0 12-1	0-9	19-7-7	26-6-0		30-7-8 31-7-8 3	33-6-0
	6-0-0 6-10	)-9	6-8-13	6-10-9		<u>4-1-8 1-0-0 1</u>	1-10-8 '
Plate Offsets (X	Y) [3:0-5-12,0-2-0], [10:0-3-0,0-1-8]						
LOADING (psf) TCLL 20.0 TCDL 7.0 BCLL 0.0 BCDL 5.0	SPACING-         2-0-0           Plate Grip DOL         1.25           Lumber DOL         1.25           *         Rep Stress Incr         NO           Code FBC2014/TPI2007         Code FBC2014/TPI2007	CSI. TC 0.87 BC 0.88 WB 0.55 (Matrix)	DEFL. Vert(LL) -( Vert(TL) -( Horz(TL) (	in (loc) l/defl 0.38 15-16 >999 0.73 15-16 >540 0.17 10 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 160 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER-       TOP CHORD 2x4 SP No.2 *Except*       TOP CHORD Structural wood sheathing directly applied.         3-5: 2x4 SP M 31       BOT CHORD Xx4 SP No.2       BOT CHORD Rigid ceiling directly applied or 6-2-13 oc bracing.         BOT CHORD 2x4 SP No.2       WEBS       1 Row at midpt       6-13         REACTIONS.       (lb/size)       2=1179/0-5-8, 10=1140/0-5-8       1							
FORCES. (lb) -	Max Uplift2=-344(LC 4), 10=-361(LC 5) Max. Comp./Max. Ten All forces 250 (Ib)	or less except when show	n.				
TOP CHORD	2-3=-2217/597, 3-4=-3265/964, 4-5=-3265/ 7-8=-2419/668, 8-9=-1791/496, 9-10=-1881	964, 5-6=-3265/964, 6-7=- /511	-2247/644,				
BOT CHORD	2-18=-473/1969, 17-18=-471/1973, 16-17= 13-14=-901/3336, 12-13=-727/2761, 10-12	-471/1973, 15-16=-901/33 :=-424/1638	36, 14-15=-901/333	6,			
WEBS	3-16=-441/1446, 4-16=-389/183, 6-13=-125 8-12=-1350/401 9-12=-230/889	5/398, 7-13=-130/607, 8-1	13=-573/202,				

#### NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18;

MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.

4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 344 lb uplift at joint 2 and 361 lb uplift at joint 10.

"Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

- 8) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails. For more details refer to MiTek's ST-TOENAIL Detail.
- 9) 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 + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf) Vert: 1-3=-54, 3-7=-54, 7-8=-54, 8-9=-54, 9-11=-54, 2-10=-10 Concentrated Loads (lb)

Vert: 9=43(B)





F	8-0-0		16-3-0		24-6-0			32-6-0	
Plate Offsets (X,	<u>8-0-0</u> Y) [2:0-3-0,Edge], [10:0-3-0,E	Edge]	8-3-0		8-3-0			8-0-0	
LOADING (psf)           TCLL         20.0           TCDL         7.0           BCLL         0.0           BCDL         5.0	SPACING- Plate Grip DOL Lumber DOL * Rep Stress Incr Code FBC2014/TF	2-0-0 CS 1.25 TC 1.25 BC YES W Pl2007 (M	il. 0.51 0.69 3 0.57 atrix)	DEFL. Vert(LL) Vert(TL) Horz(TL)	in (loc) 0.22 13 0.44 13-15 0.13 10	l/defl >999 >871 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 154 lb	<b>GRIP</b> 244/190 FT = 20%
UMBER- TOP CHORD 2x4 SP No.2       BRACING- TOP CHORD 3x4 SP No.2         30T CHORD 2x4 SP No.2       TOP CHORD Structural wood sheathing directly applied or 3-7-9 oc purlins.         BOT CHORD 2x4 SP No.2       BOT CHORD Rigid ceiling directly applied or 5-2-14 oc bracing.         WEBS 2x4 SP No.3       BOT CHORD Rigid ceiling directly applied or 5-2-14 oc bracing.         REACTIONS. (lb/size) 10=1021/0-5-8, 2=1153/0-5-8 Max Horz 2=64(LC 12)       Max Horz 2=64(LC 12)									
N	/lax Uplift 10=-241(LC 8), 2=-31	9(LC 8)							
FORCES. (Ib) - TOP CHORD	Max. Comp./Max. Ten All for 2-3=-2158/1259, 3-4=-1972/11	ces 250 (lb) or less exc 39, 4-5=-1807/1100, 5	ept when shown. 6=-2402/1428, 6-7=-	-2402/1428,					
BOT CHORD WEBS	7-8=-1830/1118, 8-9=-1998/1160, 9-10=-2211/1311 BOT CHORD 2-15=-1087/1920, 14-15=-1263/2366, 13-14=-1263/2366, 12-13=-1269/2374, 11-12=-1269/2374, 10-11=-1145/1989 WEBS 4-15=-241/494, 5-15=-730/414, 7-11=-720/393, 8-11=-256/512								
NOTES-									
1) Unbalanced ro 2) Wind: ASCE 7 MWFRS (envo grip DOL=1.60	oof live loads have been conside 7-10; Vult=130mph (3-second gu elope) and C-C Exterior(2) zone 0	ered for this design. ust) Vasd=101mph; TC ;;C-C for members and	DL=4.2psf; BCDL=3 forces & MWFRS fo	.0psf; h=18ft; ( r reactions sho	Cat. II; Exp C; own; Lumber I	Encl., GC DOL=1.60	Cpi=0.18; ) plate		
<ol> <li>Provide adequi</li> </ol>	late drainage to prevent water p	onaing.							

4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 241 lb uplift at joint 10 and 319 lb uplift at joint 2.







⊢	10-0-0	16-3-0	22-6-0		32-6-0		
1	10-0-0	6-3-0	6-3-0	1	10-0-0		
Plate Offsets (X,	Y) [2:0-0-6,Edge], [8:0-0-6,Edge]						
LOADING (psf) TCLL 20.0 TCDL 7.0 BCLL 0.0 BCDL 5.0	SPACING- 2-0-0 Plate Grip DOL 1.25 Lumber DOL 1.25 Rep Stress Incr YES Code FBC2014/TPI2007	<b>CSI.</b> TC 0.54 BC 0.82 WB 0.49 (Matrix)	DEFL. in (loc) Vert(LL) -0.29 8-10 Vert(TL) -0.56 8-10 Horz(TL) 0.12 8	) l/defl L/d ) >999 240 ) >692 180 3 n/a n/a	PLATES         GRIP           MT20         244/190           Weight: 160 lb         FT = 20%		
JUMBER-       Image: Bracing-         FOP CHORD 2x4 SP No.2       TOP CHORD 2x4 SP No.2         30T CHORD 2x4 SP No.3       BOT CHORD Structural wood sheathing directly applied or 3-10-6 oc purlins.         BOT CHORD 2x4 SP No.3       BOT CHORD Rigid ceiling directly applied or 5-8-5 oc bracing.         REACTIONS. (lb/size) 2=1149/0-5-8, 8=1149/0-5-8       Max Horz 2=-63(LC 13)         Max Uplift2=-300(LC 8), 8=-300(LC 9)       Max Uplift2=-300(LC 8), 8=-300(LC 9)							
FORCES. (Ib) - TOP CHORD BOT CHORD WEBS	Max. Comp./Max. Ten All forces 250 (lb) o 2-3=-2136/1267, 3-4=-1841/1075, 4-5=-166 7-8=-2136/1267 2-14=-1018/1903, 13-14=-968/1967, 12-13= 10-11=-968/1967, 8-10=-1050/1903 3-14=-280/303, 4-14=-191/425, 5-14=-472/2 7-10=-280/303	r less except when show 5/1044, 5-6=-1665/1044, -968/1967, 11-12=-968/1 44, 5-10=-472/244, 6-10:	n. 6-7=-1841/1075, 967, =-191/425,				
NOTES- 1) Unbalanced ro 2) Wind: ASCE 7 MWFRS (enve grip DOL=1.60 3) Provide adequ 4) This truss has	of live loads have been considered for this d -10; Vult=130mph (3-second gust) Vasd=10 lope) and C-C Exterior(2) zone;C-C for men ate drainage to prevent water ponding. been designed for a 10.0 psf bottom chord li	esign. Imph; TCDL=4.2psf; BCI bers and forces & MWFf ve load nonconcurrent w	DL=3.0psf; h=18ft; Cat. II; Exp S for reactions shown; Lumbe th any other live loads.	C; Encl., GCpi=0.18; er DOL=1.60 plate			

5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 300 lb uplift at joint 2 and 300 lb uplift at joint 8.







	8-5-6	16-3-0	24-0-10	32-6-0	
	8-5-6	7-9-10	7-9-10	8-5-6	
Plate Offsets ()	(,Y) [2:0-3-0,Edge], [4:0-3-0,0-2-4], [6:0-3-0	0,0-2-4], [8:0-3-0,Edge]		1	
LOADING         (psf)           TCLL         20.0           TCDL         7.0           BCLL         0.0           BCDL         5.0	SPACING-         2-0-0           Plate Grip DOL         1.25           Lumber DOL         1.25           *         Rep Stress Incr         YES           Code         FBC2014/TPI2007	CSI. TC 0.53 BC 0.66 WB 0.17 (Matrix)	DEFL.         in         (loc)         I/defl           Vert(LL)         -0.15         12         >999           Vert(TL)         -0.31         10-12         >999           Horz(TL)         0.11         8         n/a	L/d PLATES 240 MT20 180 n/a Weight: 159 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD 2 BOT CHORD 2 WEBS 2	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3		BRACING- TOP CHORD Structural wood BOT CHORD Rigid ceiling dire	sheathing directly applied or 3-8-12 ctly applied or 5-9-8 oc bracing.	2 oc purlins.
REACTIONS.	(lb/size) 2=1149/0-5-8, 8=1149/0-5-8 Max Horz 2=73(LC 12) Max Uplift2=-282(LC 8), 8=-282(LC 9)				
FORCES. (Ib) TOP CHORD BOT CHORD WEBS	- Max. Comp./Max. Ten All forces 250 (lb) ( 2-3=-2136/1257, 3-4=-1920/1184, 4-5=-162 7-8=-2136/1257 2-14=-1003/1900, 13-14=-695/1495, 12-13: 10-11=-701/1495, 8-10=-1035/1900 3-14=-297/314, 4-14=-227/385, 4-12=-89/32 7-10=-297/314	or less except when shown. 5/1062, 5-6=-1625/1062, 6- =-695/1495, 11-12=-701/149 24, 6-12=-89/324, 6-10=-22	7=-1920/1184, 95, 7/385,		
NOTES- 1) Unbalanced i 2) Wind: ASCE MWFRS (env grip DOL=1.6 3) Provide adec 4) This truss ha	roof live loads have been considered for this of 7-10; Vult=130mph (3-second gust) Vasd=10 velope) and C-C Exterior(2) zone;C-C for mer 30 juate drainage to prevent water ponding. s been designed for a 10.0 psf bottom chord i	design. 1mph; TCDL=4.2psf; BCDL nbers and forces & MWFRS ive load nonconcurrent with	=3.0psf; h=18ft; Cat. II; Exp C; Encl., C for reactions shown; Lumber DOL=1.6 any other live loads.	GCpi=0.18; 50 plate	

5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 282 lb uplift at joint 2 and 282 lb uplift at joint 8.







1		7-3-14	14	-0-0		18-6-0	25	-2-2		32-6-0	
		7-3-14	6	-8-2		4-6-0	6-	-8-2		7-3-14	
Plate C	Diffsets (X,Y)	[3:0-5-4,0-2-0]				1					
LOADI TCLL TCDL BCLL BCDL	NG (psf) 20.0 7.0 0.0 * 5.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code FBC2014/	2-0-0 1.25 1.25 YES TPI2007	CSI. TC BC WB (Matri	0.75 0.59 0.66 ix)	DEFL. Vert(LL) Vert(TL) Horz(TL)	in (loc) -0.15 10 -0.30 10-12 0.12 6	l/defl >999 >999 n/a	L/d 240 180 n/a	<b>PLATES</b> MT20 Weight: 157 lb	<b>GRIP</b> 244/190 FT = 20%
LUMB TOP C BOT C WEBS	ER- HORD 2x4 SP HORD 2x4 SP 2x4 SP	No.2 No.2 No.3				BRACING- TOP CHOF BOT CHOF	RD Structu RD Rigid c	ıral wood eiling dire	sheathing dire	ectly applied or 2-2-0 5-6-3 oc bracing.	oc purlins.
REAC	TIONS. (Ib/size Max Ho Max Uj	e) 1=1025/0-5-8, 6=10 orz 1=73(LC 12) plift 1=-240(LC 12), 6=-2	25/0-5-8 240(LC 13)								
FORCI TOP C BOT C WEBS	ES. (Ib) - Max. HORD 1-2=- HORD 1-12= 8-9=- 2-10=	Comp./Max. Ten All 1 2160/1296, 2-3=-1577/ 1106/1936, 11-12=-1 1106/1936, 7-8=-1106/ 616/479, 3-10=-166/3	forces 250 (lb) 1008, 3-4=-138 106/1936, 10-1 1936, 6-7=-110 26, 4-9=-166/3	or less excep 89/989, 4-5=-´ 1=-1106/1936 06/1936 826, 5-9=-616/	t when shov 1577/1009, 5 5, 9-10=-673 479	vn. 5-6=-2160/1296 3/1389,					
NOTES 1) Unb 2) Wind MW grip 3) Prov	S- alanced roof live d: ASCE 7-10; V FRS (envelope) DOL=1.60 ide adequate di	e loads have been cons /ult=130mph (3-second and C-C Exterior(2) zo rainage to prevent wate	idered for this gust) Vasd=10 ne;C-C for me r ponding.	design. 01mph; TCDL mbers and for	=4.2psf; BC ces & MWF	DL=3.0psf; h=18fi RS for reactions s	; Cat. II; Exp ( hown; Lumber	C; Encl., G r DOL=1.6	6Cpi=0.18; 60 plate		

 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 240 lb uplift at joint 1 and 240 lb uplift at joint 6. 7) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.









	8-3-14	<u>16-3-0</u>	<u>23-11-2</u>	<u>32-6-0</u>
	8-3-14	7-11-2	7-8-2	8-6-14
LOADING (psf)           TCLL         20.0           TCDL         7.0           BCLL         0.0 *           BCDL         5.0	SPACING- 2-0-0 Plate Grip DOL 1.25 Lumber DOL 1.25 Rep Stress Incr YES Code FBC2014/TPI2007	CSI. TC 0.52 BC 0.71 WB 0.53 (Matrix)	DEFL.         in         (loc)         l/defl         L/d           Vert(LL)         -0.18         9-10         >999         240           Vert(TL)         -0.37         9-10         >999         180           Horz(TL)         0.11         9         n/a         n/a	PLATES         GRIP           MT20         244/190           Weight: 156 lb         FT = 20%

BRACING-

TOP CHORD

BOT CHORD

## LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3

REACTIONS. (Ib/size) 1=1028/0-7-4, 9=1028/Mechanical Max Horz 1=85(LC 12) Max Uplift 1=-253(LC 12), 9=-255(LC 13)

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

 TOP CHORD
 1-2=-2181/1356, 2-3=-1968/1240, 3-4=-1870/1255, 4-5=-1394/961, 5-6=-1394/961, 6-7=-1891/1266, 7-8=-1989/1251, 8-9=-2241/1398

 BOT CHORD
 1-14=-1172/1956, 13-14=-889/1622, 12-13=-889/1622, 11-12=-899/1641, 10-11=-899/1641, 9-10=-1219/2025

WEBS 2-14=-264/278, 4-14=-154/341, 4-12=-527/418, 6-12=-549/431, 6-10=-166/358, 8-10=-312/316, 5-12=-508/756

#### NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

5) Refer to girder(s) for truss to truss connections.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 253 lb uplift at joint 1 and 255 lb uplift at joint 9.

7) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.





Structural wood sheathing directly applied or 3-2-12 oc purlins.

Rigid ceiling directly applied or 5-3-15 oc bracing.



2-2-4	3-6-0	8-6-4	16-3-0	22-6-4	27-2-4	32-6-0	
2-2-4	1-3-12	5-0-4	7-8-12	6-3-4	4-8-0	5-3-12	
Plate Offsets (X,Y)	[7:0-3-8,0-1-8],	[9:0-6-4,0-4-4]					
		• • •					

LOADING (psf TCLL 20. TCDL 7.	f) 0 0	SPACING- Plate Grip DOL Lumber DOL Pep Stress Incr	2-0-0 1.25 1.25 VES	CSI. TC BC WB	0.45 0.78 0.77	DEFL. Vert(LL) Vert(TL) Horz(TL)	in (loc) -0.42 11-12 -0.78 11-12 0.42 6	l/defl >915 >494	L/d 240 180 p/a	PLATES MT20	<b>GRIP</b> 244/190	
BCDL 5.	0	Code FBC2014/T	PI2007	(Matr	ix)		0.42 0	11/a	11/a	Weight: 172 I	b FT = 20%	
L <b>UMBER-</b> TOP CHORD BOT CHORD WEBS	2x4 SP   2-12: 2x 2x4 SP   3-8: 2x4 2x4 SP   14-16: 2	No.2 *Except* (4 SP M 31 No.2 *Except* I SP No.3, 11-14: 2x8 SI No.3 *Except* 2v4 SP No.2	P 2400F 2.0E			BRACING- TOP CHOF BOT CHOF WEBS	RD Structu end ve RD Rigid c 1 Row	iral wood rticals. eiling dire at midpt	sheathing di ectly applied 1-	irectly applied or 3-4 or 4-11-0 oc bracing 10, 3-10	0 oc purlins, exce	ept
REACTIONS.	(lb/size) Max Ho Max Up	) 16=1298/0-7-4, 6=10 orz 16=-110(LC 17) olift16=-193(LC 12), 6=-2	41/Mechanical 254(LC 13)									
FORCES. (Ib TOP CHORD BOT CHORD	) - Max. ( 14-16= 4-5=-2 11-12=	Comp./Max. Ten All fo =-1154/480, 1-12=-3038 2661/1592, 5-6=-2307/1 =-1461/2751, 10-11=-14	rces 250 (lb) o 3/1731, 1-2=-17 379 153/2725, 9-10	r less excep '00/1049, 2- =-1341/246	ot when show -3=-1683/10 2, 3-9=-284/	wn. )57, 3-4=-2576/160 /558, 6-7=-1204/20	15, 185					

 BOT CHORD
 11-12=-1461/2751, 10-11=-1453/2725, 9-10=-1341/2462, 3-9=-284/558, 6-7=-1204/2085

 WEBS
 1-11=-213/591, 1-10=-1306/828, 2-10=-504/885, 3-10=-1080/744, 7-9=-1162/2030, 5-9=-103/337, 5-7=-467/331

# NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

5) Refer to girder(s) for truss to truss connections.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 193 lb uplift at joint 16 and 254 lb uplift at joint 6.







2-2-4	5-6-0	16-3-0	22-6-4	·	27-2-4	32-6-0	———————————————————————————————————————
Plate Offsets (X,Y)	[10:0-3-8,0-1-8], [12:0-6-4,0-4-4], [16:0-	-5-12,0-4-4]	0-3-4		4-0-0	J-J-12	
LOADING (psf) TCLL 20.0 TCDL 7.0 BCLL 0.0 * BCDL 5.0	SPACING- 2-0-0 Plate Grip DOL 1.25 Lumber DOL 1.25 Rep Stress Incr YES Code FBC2014/TPI2007	CSI. TC 0.66 BC 0.92 WB 0.76 (Matrix)	DEFL.         i           Vert(LL)         -0.4           Vert(TL)         -0.9           Horz(TL)         0.2	n (loc) l/defl 4 13-15 >884 4 13-15 >413 8 9 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 177 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD 2x4 SP BOT CHORD 2x4 SP 2-17,6- WEBS 2x4 SP	No.2 No.2 *Except* 11: 2x4 SP No.3 No.3		BRACING- TOP CHORD BOT CHORD WEBS	Structural wood end verticals. Rigid ceiling diru 1 Row at midpt	sheathing directl ectly applied or 2- 6-13	y applied or 2-4-4 -2-0 oc bracing.	oc purlins, except
REACTIONS. (Ib/size Max He Max Uj	e) 18=1033/0-7-4, 9=1033/Mechanica orz 18=-135(LC 13) plift18=-258(LC 12), 9=-254(LC 13)	I					
FORCES. (lb) - Max. TOP CHORD 1-18=	Comp./Max. Ten All forces 250 (lb) c 978/527, 1-2=-1584/839, 2-3=-3373/1	or less except when shown 897, 3-4=-3878/2234, 4-5	=-1658/1060,				

 5-6=-1667/1050, 6-7=-2545/1606, 7-8=-2629/1592, 8-9=-2297/1377

 BOT CHORD
 2-16=-808/504, 15-16=-815/1745, 14-15=-1150/2122, 13-14=-1150/2122, 12-13=-1345/2435, 6-12=-285/538, 9-10=-1202/2065

 WEBS
 1-16=-963/1819, 2-15=-1038/1761, 3-15=-1666/1016, 4-15=-875/1710, 4-13=-769/578, 5-13=-557/931, 6-13=-1069/759, 10-12=-1160/1999, 8-12=-106/328, 8-10=-459/330

NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.

4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

6) Refer to girder(s) for truss to truss connections.

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 258 lb uplift at joint 18 and 254 lb uplift at joint 9.







Scale = 1:78.2



<b> </b>	<u>7-0-0</u> <u>10-3-10</u> <u>12-2-</u> 7-0-0 <u>3-3-10</u> 1-10-1	17-9-1 ) 5-6-13	<u>25-2-9</u> 7-5-7	32-6-4		<u>37-6-2</u> <u>42-6</u> 4-11-14 4-11	5-0  -14
Plate Offsets (X,Y)	[3:0-5-12,0-2-8], [15:0-7-4,0-4-12],	[19:0-6-12,0-2-8], [21:0-3-8,0	0-3-0]				
LOADING (psf)           TCLL         20.0           TCDL         7.0           BCLL         0.0 *           BCDL         5.0	SPACING-2-0-0Plate Grip DOL1.25Lumber DOL1.25Rep Stress IncrNOCode FBC2014/TPI2007	CSI. TC 1.00 BC 0.99 WB 0.94 (Matrix)	DEFL. Vert(LL) Vert(TL) Horz(TL)	in (loc) l/defl -0.53 15-16 >724 -1.04 15-16 >368 0.13 12 n/a	L/d 240 180 n/a	PLATES MT20 MT20HS Weight: 220 lb	<b>GRIP</b> 244/190 187/143 FT = 20%
LUMBER- TOP CHORD 2x4 SI BOT CHORD 2x4 SI 20-23, WEBS 2x4 SI 3-22,4	P No.2 P No.2 *Except* 9-14: 2x4 SP No.3 P No.3 *Except* -21,10-13: 2x4 SP M 31		BRACING- TOP CHORI BOT CHORI WEBS	D Structural wood D Rigid ceiling dir 2 Rows at 1/3 p	sheathing d ectly applied ts 5	directly applied, excep d or 5-7-13 oc bracing. 5-19	t end verticals.
REACTIONS. (Ib/siz Max H Max U	e) 12=946/Mechanical, 2=333/0-3 lorz 2=122(LC 23) Jplift 12=-289(LC 19), 2=-317(LC 4)	-0, 21=2046/0-7-4 21=-1057(LC 5)					
FORCES.         (lb) - Max           TOP CHORD         2-3=           6-7=         6-7=           BOT CHORD         2-22           16-1         WEBS           3-22         5-16	. Comp./Max. Ten All forces 250 253/649, 3-24=-246/754, 4-24=-24 3598/1100, 7-8=-3598/1100, 8-9= 2=-565/188, 22-25=-571/190, 21-25 7=-652/2116, 15-16=-1093/3550, § 2=-335/440, 3-21=-1017/831, 19-21 3=-485/1532, 7-16=-410/194, 13-15	lb) or less except when show 7/754, 4-5=-372/1138, 5-6=- 3598/1100, 9-10=-3381/103 e-571/190, 18-19=-652/2116, -15=-330/155, 12-13=-407/1, e-1331/494, 4-19=-441/256, e-352/1184, 10-15=-673/217	vn. 3598/1100, 8 , 17-18=-652/2116, 338 5-19=-3365/1012, 7, 10-12=-1545/469	)			
NOTES- 1) Wind: ASCE 7-10; MWFRS (envelope 2) Provide adequate ( 3) All plates are MT2C 4) All plates are MT2C 5) This truss has been 6) * This truss has been 7) Refer to girder(s) ff 8) Provide mechanica and 1057 lb uplift a 9) "Semi-rigid pitchbro 10) "NAILED" indicated 11) Hanger(s) or other 7-0-0 on top chorn responsibility of o	Vult=130mph (3-second gust) Vasc b); porch left exposed; Lumber DOL drainage to prevent water ponding. D plates unless otherwise indicated. AT20 unless otherwise indicated. In designed for a 10.0 psf bottom ch en designed for a live load of 20.0p tom chord and any other members. or truss to truss connections. al connection (by others) of truss to t joint 21. eaks including heels" Member end as 3-10d (0.148"x3") or 3-12d (0.14 er connection device(s) shall be pro d, and 222 lb down and 256 lb up a thers.	=101mph; TCDL=4.2psf; BC =1.60 plate grip DOL=1.60 ord live load nonconcurrent w sf on the bottom chord in all a pearing plate capable of with ixity model was used in the a "x3.25") toe-nails. For more ided sufficient to support cor . 7-0-0 on bottom chord. The	DL=3.0psf; h=18ft; with any other live lo areas where a recta standing 289 lb upl analysis and design details refer to MiT ncentrated load(s) 2 e design/selection of	Cat. II; Exp C; Encl., o pads. angle 3-6-0 tall by 2-0- ift at joint 12, 317 lb up of this truss. ek's ST-TOENAIL Det 204 lb down and 308 lb of such connection dev	GCpi=0.18; 0 wide will 0 lift at joint 2 ail. 0 up at vice(s) is the		

12) 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



Job	Truss	Truss Type	Qty	Ply	
1024006	<b>T10</b>	Half Hin Cirder	1		T11146730
1024906	110		1		Job Reference (optional)
Builders FirstSource, Jac	sonville, FI 32244			7.6	40 s Apr 19 2016 MiTek Industries, Inc. Tue May 16 16:30:43 2017 Page 2

ID:6uMeWvmqVeEx7fGGjqSaDTzVmxC-Uhc36DMum7_gqNS2JluOoiSWU_GvQq6h92M_bFzFtwA

# LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25 Uniform Loads (plf)

Vert: 1-3=-54, 3-11=-54, 2-20=-10, 15-19=-10, 12-14=-10 Concentrated Loads (lb)

Vert: 3=-204(F) 22=-152(F) 24=-106(F) 25=-24(F)







	I	<u>9-0-0</u> 9-0-0	10-3-10 12-2-4	<u>21-5-13</u> 9-3-9		<u>32-6-4</u> 11-0-7	,		+	<u>42-6-0</u> 9-11-12	
Plate Offse	ts (X,Y) [/	4:0-5-12,0-2-8], [15	5:0-2-4,Edge], [16:0	-6-0,0-3-0], [19:0-3-8,0-3-	0]						
LOADING TCLL TCDL BCLL BCDL	(psf) 20.0 7.0 0.0 * 5.0	SPACING- Plate Grip D Lumber DOL Rep Stress I Code FBC20	2-0-0 OL 1.25 - 1.25 ncr YES 014/TPI2007	<b>CSI.</b> TC 0.62 BC 0.64 WB 0.85 (Matrix)	DEFL. Vert(LL) Vert(TL) Horz(TL)	in 0.24 -0.72 0.06	(loc) 2-20 16-17 13	l/defl >517 >535 n/a	L/d 240 180 n/a	PLATES MT20 MT20HS Weight: 234 lb	<b>GRIP</b> 244/190 187/143 FT = 20%
LUMBER- TOP CHOR BOT CHOR WEBS	2x4 SP 2x4 SP 18-21,1 2x4 SP 4-20,5-1	No.2 No.2 *Except* 0-14: 2x4 SP No.3, No.3 *Except* 19: 2x4 SP No.2	, 15-16,16-17: 2x4 \$	SP M 31	BRACING- TOP CHOR BOT CHOR WEBS	D D	Structur end ver Rigid ce 1 Row a	ral wood s ticals. eiling dire at midpt	sheathing dir ctly applied c 6-1	ectly applied or 3-2-5 or 6-0-0 oc bracing. 7, 13-15, 11-13	oc purlins, except
REACTION	I <b>S.</b> (Ib/size) Max Ho Max Up	) 13=982/Mechar orz 2=151(LC 12) olift13=-297(LC 8),	nical, 2=316/0-3-0, 1 2=-188(LC 8), 19=-	9=1541/0-7-4 560(LC 9)							
FORCES. TOP CHOR BOT CHOR WEBS	(lb) - Max. ( 2D 3-4=-( 8-9=-2 2-20= 3-20= 6-17= 11-15	Comp./Max. Ten 64/274, 4-5=-176/2 2410/1322, 9-10=-2 -342/88, 16-17=-9 -330/373, 4-20=-6( -2331/1317, 6-16= =-653/1270, 11-13	All forces 250 (lb) c 97, 5-6=-238/402, 6 2410/1322, 10-11=- 39/1783, 15-16=-15 01/363, 4-19=-369/6 -263/741, 8-16=-48 =-1523/897	r less except when show -7=-2341/1207, 7-8=-234 2326/1277 23/2726, 10-15=-326/251 :11, 17-19=-1305/768, 5- ⁻ 3/397, 8-15=-338/214, 13	n. :1/1207, 17=-447/333, -15=-633/1052,						
NOTES- 1) Wind: AS MWFRS DOL=1.6 2) Provide a 3) All plates 4) This trus 5) * This trus fit between	SCE 7-10; V (envelope) 30 plate grip adequate dri 3 are MT20 p s has been iss has been en the botto	ult=130mph (3-sec and C-C Exterior(2 DOL=1.60 ainage to prevent v plates unless other designed for a 10.0 n designed for a liv m chord and any o	ond gust) Vasd=10 ) zone; porch left ex vater ponding. wise indicated. ) psf bottom chord li e load of 20.0psf on ther members.	1mph; TCDL=4.2psf; BCI cposed;C-C for members ve load nonconcurrent wi the bottom chord in all a	DL=3.0psf; h=18ft; and forces & MW th any other live k reas where a recta	Cat. II FRS fo bads. angle 3	I; Exp C or reactio 3-6-0 tal	; Encl., G ons show I by 2-0-0	Cpi=0.18; n; Lumber wide will		

6) Refer to girder(s) for truss to truss connections.

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 297 lb uplift at joint 13, 188 lb uplift at joint 2 and 560 lb uplift at joint 19.







- 6)* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 222 lb uplift at joint 2, 527 lb uplift at joint 22 and 235 lb uplift at joint 11.
- 9) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.







	5-5-11	10-3-10 12-2-4	19-6-0	26-0-0	32-6-4	42-6-0	
	5-5-11	4-9-15 1-10-10 [']	7-3-12	6-6-0	6-6-4	9-11-12	
Plate Offsets (X	(,Y) [6:0-3-0,0-2-4], [	10:0-3-0,0-2-4], [22:0-	3-8,0-3-0]				
LOADING (psf) TCLL 20.0 TCDL 7.0 BCLL 0.0 BCDL 5.0	* Rep Stre Code FB	G- 2-0-0 p DOL 1.25 DOL 1.25 ss Incr YES C2014/TPI2007	CSI. TC 0.48 BC 0.71 WB 0.80 (Matrix)	DEFL. Vert(LL) -0.2 Vert(TL) -0.5 Horz(TL) 0.0	in (loc) l/defl 9 14-15 >999 3 14-15 >721 5 14 n/a	L/d PL 240 M1 180 M1 n/a We	ATES GRIP 120 244/190 120HS 187/143 eight: 246 lb FT = 20%
LUMBER- TOP CHORD 2 BOT CHORD 2 WEBS 2 REACTIONS.	2x4 SP No.2 2x4 SP No.2 *Except* 21-24,11-15: 2x4 SP N 2x4 SP No.3 (lb/size) 2=381/0-3-0 Max Horz 2=119(LC 12 Max Uplift2=-234(LC 8 Max Grav 2=389(LC 2)	o.3 , 22=1456/0-7-4, 14=1 2) ), 22=-457(LC 9), 14= 3), 22=1456(LC 1), 14:	002/Mechanical -233(LC 8) =1002(LC 1)	BRACING- TOP CHORD BOT CHORD WEBS	Structural wood sh end verticals. Rigid ceiling direct 1 Row at midpt	heathing directly app tly applied or 6-1-2 o 14-16, 12-1	lied or 3-10-8 oc purlins, except c bracing. 4
FORCES. (Ib) TOP CHORD BOT CHORD WEBS	- Max. Comp./Max. Te 2-3=-313/491, 6-7=-1 10-11=-1523/995, 11 2-23=-455/234, 22-23 16-17=-764/1498 3-22=-407/637, 20-22 9-19=-431/260, 10-17	n All forces 250 (lb) 451/934, 7-8=-1451/9 -12=-1658/1009 3=-455/234, 19-20=-16 2=-1238/707, 6-20=-1 ⁻¹ 7=-198/479, 14-16=-77	or less except when shown 34, 8-9=-1451/934, 9-10=- 5/416, 18-19=-927/1806, 79/617, 6-19=-664/1256, '2/1221, 12-14=-1589/983	n. -1806/1148, 17-18=-927/1806, 7-19=-373/287,			

## NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.

4) All plates are MT20 plates unless otherwise indicated.

5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

7) Refer to girder(s) for truss to truss connections.

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 234 lb uplift at joint 2, 457 lb uplift at joint 22 and 233 lb uplift at joint 14.







<u> </u>	5-5-11 10-3-10 12-2-4	22-9-0		32-6-4	3	37-4-6 42-6	-0
Diata Offacta (X X)	<u>5-5-11</u> <u>4-9-15</u> <u>1-10-10</u>			9-9-4	4	1-10-2 5-1-1	0
Plate Olisets (A, I)	1	<u>- 12,0-2-12], [10.0-4-12,0-</u>	<u>3-0], [17.0-3-0,0-1-6], [1</u>	9.Euge,0-3-0], [/	20.0-3-6,0-3-0	1	
LOADING (psf)	<b>SPACING-</b> 2-0-0	CSI.	DEFL. ii	n (loc) l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.69	Vert(LL) -0.24	16-17 >999	240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.87	Vert(TL) -0.46	6 15-16 >843	180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.85	Horz(TL) 0.0	5 12 n/a	n/a		
BCDL 5.0	Code FBC2014/TPI2007	(Matrix)				Weight: 241 lb	FT = 20%
LUMBER- TOP CHORD 2x4 SF	P No.2		BRACING- TOP CHORD	Structural woo	d sheathing di	rectly applied or 3-10-	-0 oc purlins, except
BUICHURD 2X4 SH				end verticals.			
WEBS 2x4 SF	9-14. 284 SP NO.3 P No.3		WEBS	1 Row at midpl	ectly applied	18. 8-16	
				·		,	
REACTIONS. (lb/siz	e) 2=330/0-3-0, 12=985/Mechanical	20=1505/0-7-4					
Max I	$\ln \frac{1}{2} = -250(1 - 8) + 12 = -238(1 - 13) + 21$	= 415(1 - 9)					
Max G	Grav 2=341(LC 23), 12=985(LC 1), 20=	1505(LC 1)					
FORCES. (lb) - Max	. Comp./Max. Ten All forces 250 (lb)	or less except when show	n.				
TOP CHORD 2-3=	-190/531, 3-4=0/425, 4-5=0/484, 5-6=	0/499, 6-7=-1408/997, 7-8	=-1408/997,				
	-1644/1137, 9-10=-1683/1072, 10-11:	-1391/852, 11-12=-956/60	19				
BUICHURD 2-21	=-491/121, 20-21=-491/121, 19-20=-4	01/0, 17-16=-293/803, 17-	24=-310/307,				
24-2 WEBS 3-20	5=-318/587, 16-25=-318/587, 16-22= =-397/627_18-20=-1240/718_5-18=-2	719/1370,22-23=-719/137 54/263 6-18=-1310/632 6	0, 15-23=-719/1370 3-16=-500/1013				

7-16=-482/367, 8-15=-244/367, 13-15=-702/1235, 10-15=-95/306, 10-13=-535/374, 11-13=-707/1219

# NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 5.0psf.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 259 lb uplift at joint 2, 238 lb uplift at joint 12 and 415 lb uplift at joint 20.
- 8) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.









	<u>5-5-11 10-3-10 13-4-</u> 5-5-11 4-9-15 3-0-7	<u>1   17-0-0  </u> 3-7-15	<u>32-5-12</u> 15-5-12		42-6-0
Plate Offsets (X,Y)	[6:0-5-12,0-2-8], [8:0-3-0,0-2-4], [17:0-3	-8,0-3-0]			
LOADING (psf)           TCLL         20.0           TCDL         7.0           BCLL         0.0           BCDL         5.0	SPACING- 2-0-0 Plate Grip DOL 1.25 Lumber DOL 1.25 Rep Stress Incr YES Code FBC2014/TPI2007	<b>CSI.</b> TC 0.55 BC 0.77 WB 0.81 (Matrix)	DEFL.         in           Vert(LL)         -0.31           Vert(TL)         -0.47           Horz(TL)         0.04	(loc) I/defl L/d 12-14 >999 240 12-14 >819 180 11 n/a n/a	PLATES         GRIP           MT20         244/190           Weight: 240 lb         FT = 20%
LUMBER- TOP CHORD 2x4 SP BOT CHORD 2x4 SP WEBS 2x4 SP	No.2 No.2 No.3		BRACING- TOP CHORD BOT CHORD WEBS	Structural wood sheathing di end verticals. Rigid ceiling directly applied 1 Row at midpt 8-	rectly applied or 4-4-1 oc purlins, except or 6-0-0 oc bracing. 14, 9-11
REACTIONS. (Ib/size Max Ho Max U Max G	<ul> <li>2=263/0-3-0, 17=1593/0-7-4, 11=96</li> <li>orz 2=140(LC 12)</li> <li>plift2=-181(LC 8), 17=-498(LC 9), 11=-</li> <li>rav 2=302(LC 23), 17=1593(LC 1), 11=</li> </ul>	64/Mechanical 232(LC 13) 964(LC 1)			

TOP CHORD 3-4=-351/399, 4-5=-337/489, 5-6=-698/426, 6-7=-968/687, 7-8=-968/687,

8-9=-1343/860

BOT CHORD 16-17=-398/416, 15-16=-398/416, 15-19=-134/563, 14-19=-134/563, 14-20=-446/1021,

 13-20=-446/1021, 13-21=-446/1021, 12-21=-446/1021, 11-12=-707/1272

 WEBS
 3-17=-369/597, 5-17=-1366/930, 6-14=-383/659, 7-14=-346/247, 8-12=-195/340,

9-12=-191/290, 9-11=-1352/756, 6-15=-559/394, 5-15=-653/1150

#### NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.

4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 5.0psf.

6) Refer to girder(s) for truss to truss connections.

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 181 lb uplift at joint 2, 498 lb uplift at joint 17 and 232 lb uplift at joint 11.

8) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.





<b>—</b>	8-8-4	16-8-12 8-0-8	<u>26-6-0</u> 9-9-4		<u>34-9-0</u> 8-3-0	2-11-9	
Plate Offsets (X,Y)	[6:0-3-0,0-2-4], [7:0-3-0,0-2-4], [13:0-5-	-4,0-3-0]					
LOADING (psf) TCLL 20.0 TCDL 7.0 BCLL 0.0 * BCDL 5.0	SPACING- 2-0-0 Plate Grip DOL 1.25 Lumber DOL 1.25 Rep Stress Incr YES Code FBC2014/TPI2007	CSI. TC 0.71 BC 0.58 WB 0.96 (Matrix)	DEFL.         i           Vert(LL)         0.2           Vert(TL)         -0.34           Horz(TL)         0.0	n (loc) l/defl 2 2-16 >893 4 12-14 >630 1 10 n/a	L/d PL 240 MT 180 n/a We	ATES         GRIP           '20         244/190           sight: 210 lb         FT = 20%	
LUMBER- TOP CHORD 2x4 SP BOT CHORD 2x4 SP WEBS 2x4 SP	No.2 No.2 No.3		BRACING-         TOP CHORD       Structural wood sheathing directly applied or 6-0-0 oc purlins, exception of the end verticals.         BOT CHORD       Rigid ceiling directly applied or 6-0-0 oc bracing.         WEBS       1 Row at midot         6-14				
REACTIONS. All be (Ib) - Max Ho Max Up Max Gr	earings 0-3-0 except (jt=length) 14=0-5 orz 2=193(LC 12) olift All uplift 100 lb or less at joint(s) e rav All reactions 250 lb or less at joint	-8, 10=3-3-1, 11=0-3-8. xcept 2=-265(LC 8), 14=-6 (s) 11 except 2=515(LC 23	603(LC 9), 10=-181(LC 3), 14=1454(LC 1), 10=	2 13) =551(LC 24)			

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

TOP CHORD 2-3=-559/538, 3-4=-346/463, 4-5=-230/481, 5-6=-405/454, 6-7=-361/209, 7-8=-455/177

- BOT CHORD 2-16=-597/453, 14-18=-115/333, 18-19=-115/333, 13-19=-115/333, 12-13=-115/333,
  - 12-20=-148/420, 20-21=-148/420, 11-21=-148/420, 10-11=-148/420
- WEBS 3-16=-333/353, 5-16=-829/457, 5-14=-548/742, 6-14=-955/782, 6-12=-426/550,
  - 8-12=-116/259, 8-10=-579/191

## NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 5.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 265 lb uplift at joint 2, 603 lb uplift at joint 14 and 181 lb uplift at joint 10.







	8-8-4	16-8-12	21-0-0	24-6-0	30-11-9	37-8-9	
I	8-8-4	8-0-8	4-3-4	3-6-0	6-5-9	6-9-1	
Plate Offsets (X,Y)	[6:0-3-0,0-2-4], [7:0-3-0,0-2-4]						
LOADING (psf) TCLL 20.0 TCDL 7.0 BCLL 0.0 * BCDL 5.0	SPACING- 2-0-0 Plate Grip DOL 1.25 Lumber DOL 1.25 Rep Stress Incr YES Code FBC2014/TPI2007	<b>CSI.</b> TC 0.54 BC 0.50 WB 0.55 (Matrix)	DEFL. Vert(LL) Vert(TL) Horz(TL)	in (loc) 0.24 2-16 -0.26 2-16 0.01 10	l/defl L/d >832 240 >765 180 n/a n/a	PLATES MT20 Weight: 222 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x4 SF WEBS 2x4 SF	P No.2 P No.2 P No.2 P No.3		BRACING- TOP CHORE BOT CHORE WEBS	D Structu end ver D Rigid c 1 Row	ral wood sheathing dir rticals. eiling directly applied c at midpt 5-1	ectly applied or 6-0-0 c r 6-0-0 oc bracing. 6, 6-14, 7-13, 8-13	oc purlins, except
REACTIONS. (lb/size	e) 2=506/0-3-0, 14=1466/0-5-8, 10=54	42/Mechanical					

REACTIONS. (lb/size) 2=506/0-3-0, 14=1466/0-5-8, 10=542/Mechanical Max Horz 2=203(LC 12) Max Uplift2=-263(LC 8), 14=-581(LC 9), 10=-152(LC 13) Max Grav 2=517(LC 23), 14=1466(LC 1), 10=592(LC 24)

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

 TOP CHORD
 2-3=-537/494, 3-4=-382/496, 4-5=-255/516, 5-6=-383/466, 6-7=-266/165, 7-8=-368/145, 8-9=-557/210, 9-10=-561/252

 BOT CHORD
 2-16=-548/427, 16=17=-128/255, 15=17=-128/255, 15=18=-128/255, 14=18=-128/255, 12=13=-120/460, 11=21=-120/460

WEBS 3-16=-355/374, 5-16=-970/576, 5-14=-601/767, 6-14=-929/736, 6-13=-327/461, 8-13=-291/336, 9-11=-114/485

#### NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.

4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 5.0psf.

6) Refer to girder(s) for truss to truss connections.

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 263 lb uplift at joint 2, 581 lb uplift at joint 14 and 152 lb uplift at joint 10.

8) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.





	8-9-10	16-8-12 16-	-11-8 19-11-8	26-8-8	29-8-8	37-8-9	
Plate Offsets (X,Y)	<u>8-9-10</u> [4:0-3-0,0-3-0], [11:0-6-4,0-2-4], [14:0	-4-0,0-1-9]	-2-12 3-0-0	6-9-0	3-0-0	8-0-1	
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (loc) l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.65	Vert(LL) 0.	22 2-16 >927	240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.53	Vert(TL) -0.	25 10-11 >986	180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.89	Horz(TL) 0.	.02 10 n/a	n/a		
BCDL 5.0	Code FBC2014/TPI2007	(Matrix)			-	Weight: 222 lb	FT = 20%
LUMBER-			BRACING-		<b>i</b>		
TOP CHORD 2x4 SF	P No.2		TOP CHORD	Structural wood	sheathing directly	v applied or 6-0-0	oc purlins, except
BOT CHORD 2x4 SF	P No.2			end verticals.		,	
WEBS 2x4 SF	P No.3		BOT CHORD	Rigid ceiling dire	ctly applied or 6-	0-0 oc bracing.	
REACTIONS. (lb/siz	e) 2=467/0-3-0, 10=498/Mechanical.	14=1549/0-5-8					

REACTIONS. (lb/size) 2=467/0-3-0, 10=498/Mechanical, 14=1549/0-5-8 Max Horz 2=212(LC 12) Max Uplift2=-267(LC 8), 10=-148(LC 13), 14=-559(LC 9) Max Grav 2=503(LC 23), 10=537(LC 24), 14=1549(LC 1)

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

 TOP CHORD
 2-3=-552/f539, 3-4=-300/416, 4-5=-462/538, 5-6=-224/286, 6-7=-361/198, 7-8=-449/178, 8-9=-501/196, 9-10=-496/248

 BOT CHORD
 2-16=-606/451, 13-14=-554/689, 13-17=-57/258, 17-18=-57/258, 12-18=-57/258, 11-12=-115/476

WEBS 3-16=-297/323, 4-16=-640/389, 4-14=-558/804, 5-14=-863/523, 5-13=-163/490, 6-13=-714/606, 6-12=-340/445, 8-12=-144/327, 8-11=-356/125, 9-11=-80/389

#### NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 5.0psf.

5) Refer to girder(s) for truss to truss connections.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 267 lb uplift at joint 2, 148 lb uplift at joint 10 and 559 lb uplift at joint 14.







<b> </b>	8-9-10 16-8-1	2 16-11-8 0-2-12 3-0.0	26-8-8	29-8-8 35-6-2	40-6-1 45-6-0					
Plate Offsets (X,Y)	[15:0-2-0,0-3-12], [18:0-6-4,0-2-4]	0-2-12 0-0-0	0-5-0	0-0-0	÷11-10 ÷11-10					
LOADING (psf)           TCLL         20.0           TCDL         7.0           BCLL         0.0 *           BCDL         5.0	SPACING- 2-0-0 Plate Grip DOL 1.25 Lumber DOL 1.25 Rep Stress Incr NO Code FBC2014/TPI2007	CSI. TC 0.34 BC 0.47 WB 0.78 (Matrix)	DEFL. i Vert(LL) -0.1 Vert(TL) -0.2 Horz(TL) 0.0	n (loc) l/defl L/d 1 13-14 >999 240 1 13-14 >999 180 3 12 n/a n/a	PLATES         GRIP           MT20         244/190           Weight: 586 lb         FT = 20%	%				
LUMBER- TOP CHORD 2x4 SP 9-11: 2 BOT CHORD 2x4 SP 12-15: WEBS 2x4 SP	No.2 *Except* x6 SP No.2 No.2 *Except* 2x6 SP M 26 No.3		BRACING- TOP CHORD BOT CHORD	Structural wood sheath end verticals. Rigid ceiling directly ap	ing directly applied or 6-0-0 oc purlins, e	except				
REACTIONS. (Ib/size Max H Max U Max G	12=3317/0-7-4, 2=122/0-3-0, 18=3 orz 2=229(LC 8) plift12=-911(LC 9), 2=-334(LC 23), 18 rav 12=3344(LC 20), 2=300(LC 18), 18	005/0-5-8 =-930(LC 5) 3=3005(LC 1)								
*ORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown.         FOP CHORD       2-3=-282/831, 3-4=-249/879, 4-5=-233/906, 5-6=-408/1419, 6-7=-214/689, 7-8=-1387/443, 8-9=-1851/534, 9-21=-4099/1129, 10-21=-4103/1129, 11-12=-523/154         3OT CHORD       2-20=-746/296, 19-20=-919/287, 18-19=-919/287, 17-18=-1563/517, 15-16=-545/2031, 14-15=-1122/4070, 14-26=-969/3527, 13-26=-969/3527, 12-13=-969/3527         NEBS       3-20=-339/192, 5-20=-303/421, 5-18=-540/315, 6-18=-1736/442, 6-17=-288/1338, 7-17=-2079/561, 7-16=-611/2105, 8-16=-884/335, 8-15=-206/663, 9-15=-2934/823, 9-14=-318/1033, 10-14=-207/743, 10-13=-262/1085, 10-12=-4549/1250										
NOTES- 1) 2-ply truss to be cor Top chords connect Bottom chords conne Webs connected as 2) All loads are consid connections have bu 3) Unbalanced roof live 4) Wind: ASCE 7-10; \ MWFRS (envelope) 5) Provide adequate d 6) This truss has been fit between the botto 8) Provide mechanical and 930 lb uplift at j 9) "Semi-rigid pitchbre 10) Use Simpson Stroo or at 20-11.4 from the	nnected together with 10d (0.131"x3") i ted as follows: 2x4 - 1 row at 0-9-0 oc, hected as follows: 2x4 - 1 row at 0-9-0 oc. follows: 2x4 - 1 row at 0-9-0 oc. ered equally applied to all plies, excep een provided to distribute only loads nu e loads have been considered for this i /ult=130mph (3-second gust) Vasd=10 ; porch left exposed; Lumber DOL=1.6 rainage to prevent water ponding. designed for a 10.0 psf bottom chord en designed for a live load of 20.0psf or m chord and any other members, with connection (by others) of truss to beal oint 18. aks including heels" Member end fixity ng-Tie HHUS26-2 (14-10d Girder, 4-10 n chord. ng-Tie HTU26 (20-10d Girder, 11-10db a left end to 43-11-4 to connect truss(0	hails as follows: 2x6 - 2 rows staggered at ( bc, 2x6 - 2 rows staggered t if noted as front (F) or bac obted as (F) or (B), unless of design. 1 mph; TCDL=4.2psf; BCD 0 plate grip DOL=1.60 ive load nonconcurrent wit n the bottom chord in all arr BCDL = 5.0psf. ring plate capable of withst model was used in the ani- 0d Truss) or equivalent at 3 (1 1/2 Truss, Single Ply Gir s) to front face of top chore	D-9-0 oc. at 0-5-0 oc. k (B) face in the LOA therwise indicated. L=3.0psf; h=18ft; Cat. h any other live loads eas where a rectangle anding 911 lb uplift at alysis and design of th i7-10-8 from the left en der) or equivalent spa	D CASE(S) section. Ply to II; Exp C; Encl., GCpi=0. 9 3-6-0 tall by 2-0-0 wide to joint 12, 334 lb uplift at jo nis truss. Ind to connect truss(es) to aced at 2-0-0 oc max. star	o ply .18; will .int 2					
WARNING - Verify des Design valid for use only a truss system. Before us building design. Bracing	sign parameters and READ NOTES ON THIS AN with MiTek® connectors. This design is based or se, the building designer must verify the applicabi indicated is to nerver th uckling of individual trust	D INCLUDED MITEK REFERENC Ily upon parameters shown, and is ility of design parameters and prop web and/or chord members only	E PAGE MII-7473 rev. 10/03 s for an individual building c erly incorporate this design Additional temporary and	V2015 BEFORE USE.						

building design. Bracing indicate is to prevent bucking of individual russ web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Job	Truss	Truss Type	Qty	Ply				
1024906	T10	Roof Special Girder	1		T11146739			
1024300	113		'	2	Job Reference (optional)			
Builders FirstSource, Jack	sonville, FI 32244			7	640 s Apr 19 2016 MiTek Industries, Inc. Tue May 16 16:30:52 2017 Page 2			
ID:6uMeWvmqVeEx7fGGjqSaDTzVmxC-jQfS?ITYfu6PPmenLhYVfcJCQcTB1xo0Dy1yQEzFt								

NOTES-

12) Fill all nail holes where hanger is in contact with lumber.

# LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25 Uniform Loads (plf)

Vert: 1-7=-54, 7-9=-54, 9-11=-54, 2-18=-10, 17-18=-10, 16-17=-10, 15-16=-10, 12-15=-10

Concentrated Loads (lb)

Vert: 21=-470(F) 22=-470(F) 23=-470(F) 26=-2022(F)





Scale = 1:85.0



			19-11-8						
	8-9-10	16-8-12	16-11-8	22-9-0	26-8-8	29-8-8	37-3-5	45-6-0	
	8-9-10	7-11-2	0-2-12 3-0-0	2-9-8	3-11-8	3-0-0	7-6-14	8-2-11	
Plate Offsets (X,Y) [7:0-3-0,0-2-4], [8:0-3-0,0-2-4], [14:0-6-4,0-2-4], [18:0-3-0,0-2-3]									
-									

LOADING (psf)         SPACING-         2-0-0           TCLL         20.0         Plate Grip DOL         1.25           TCDL         7.0         Lumber DOL         1.25           BCLL         0.0 *         Rep Stress Incr         YES           BCDL         5.0         Code FBC2014/TPI2007	CSI. TC 0.78 BC 0.58 WB 0.99 (Matrix)	DEFL. ir Vert(LL) 0.21 Vert(TL) -0.24 Horz(TL) 0.04	l (loc) l/defl L/d 2-20 >972 240 12-13 >999 180 12 n/a n/a	PLATES         GRIP           MT20         244/190           Weight: 262 lb         FT = 20%
LUMBER-TOP CHORD2x4 SP No.2BOT CHORD2x4 SP No.2WEBS2x4 SP No.3		BRACING- TOP CHORD BOT CHORD WEBS	Structural wood sheathing dir Rigid ceiling directly applied o 1 Row at midpt 11-	ectly applied or 2-2-0 oc purlins. r 6-0-0 oc bracing. -14
REACTIONS. (lb/size) 12=707/0-7-4, 2=333/0-3-0, 18=196 Max Horz 2=132(LC 12) Max Uplift 12=-220(LC 13), 2=-267(LC 8), 18= Max Grav 12=741(LC 24), 2=449(LC 23), 18=	52/0-5-8 607(LC 9) 1962(LC 1)			

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

 TOP CHORD
 2-3=-423/475, 3-4=-161/366, 4-5=-57/393, 5-6=-526/888, 6-7=-293/470, 8-9=-563/252, 9-10=-663/384, 10-11=-747/362, 11-12=-141.6/697

 BOT CHORD
 2-20=-369/333, 19-20=-440/222, 18-19=-440/222, 17-18=-906/966, 16-17=-239/592,

 WEBS
 15-16=0/340, 14-15=-92/737, 13-14=-544/1231, 12-13=-544/1231

 WEBS
 3-20=-324/344, 5-20=-678/413, 5-18=-556/771, 6-18=-1045/482, 6-17=-181/706, 7-17=-1102/730, 7-16=-494/774, 8-16=-737/517, 8-15=-438/687, 9-15=-318/474, 11-14=-683/524, 11-13=0/273

#### NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

Provide adequate drainage to prevent water ponding.

All plates are 3x6 MT20 unless otherwise indicated.

5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 220 lb uplift at joint 12, 267 lb uplift at joint 2 and 607 lb uplift at joint 18.







Scale = 1:85.0



			19-11-8							
	8-9-10	16-8-12	16-11-8	26-8-8	29-8-8	37-3-5	45-6-0			
	<u>8-9-10</u>	/-11-2 4 0 0 41 [47:0 (	0-2-12 3-0-0	6-9-0	3-0-0	7-6-14	8-2-11	,		
Plate Olisets (7	<u> </u>	4,0-2-4], [17:0-3	5-0,0-2-3]				1			
LOADING (psf)           TCLL         20.0           TCDL         7.0           BCLL         0.0           BCDL         5.0	SPACING-     Plate Grip DOL     Lumber DOL     * Rep Stress Incr     Code FBC2014/T	2-0-0 1.25 1.25 YES PI2007	<b>CSI.</b> TC 0.75 BC 0.58 WB 0.99 (Matrix)	DEFL. Vert(LL) Vert(TL) Horz(TL)	in (loc) 0.21 2-19 -0.24 12-13 0.04 12	l/defl L/d >973 240 >999 180 n/a n/a	PLATES MT20 Weight: 252 lb	<b>GRIP</b> 244/190 FT = 20%		
LUMBER-       BRACING-         TOP CHORD 2x4 SP No.2       TOP CHORD       Structural wood sheathing directly applied or 2-2-0 oc purlins.         BOT CHORD 2x4 SP No.2       BOT CHORD       Rigid ceiling directly applied or 6-0-0 oc bracing.         WEBS       2x4 SP No.3       WEBS       1 Row at midpt										
REACTIONS. (Ib/size) 2=319/0-3-0, 12=698/0-7-4, 17=1986/0-5-8 Max Horz 2=121(LC 12) Max Uplift2=-261(LC 8), 12=-214(LC 13), 17=-644(LC 9) Max Grav 2=430(LC 23), 12=738(LC 24), 17=1986(LC 1)										
FORCES. (Ib) TOP CHORD	- Max. Comp./Max. Ten All fo 2-3=-375/458, 3-4=-114/415, 8-9=-561/225, 9-10=-716/361	orces 250 (lb) or 4-5=-15/442, 5- , 10-11=-734/34	less except when show 6=-544/928, 6-7=-314/4 0, 11-12=-1412/682	n. 58, 7-8=-316/469,						
BOT CHORD	2-19=-352/289, 18-19=-485/2 15-20=0/453, 14-15=-67/725,	36, 17-18=-485 13-14=-531/12	/237, 16-17=-950/991, 1 28, 12-13=-531/1228	6-20=0/453,						
WEBS	NEBS 3-19=-322/343, 5-19=-677/415, 5-17=-563/777, 6-17=-1044/460, 6-16=-240/805, 7-16=-444/321, 8-16=-1081/717, 11-14=-696/535, 11-13=0/274, 9-15=-260/428, 8-15=-353/611									
NOTES- 1) Unbalanced	roof live loads have been consid	dered for this de	esign.							

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber

DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.4) All plates are 3x6 MT20 unless otherwise indicated.

5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 5.0psf.

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 261 lb uplift at joint 2, 214 lb uplift at joint 12 and 644 lb uplift at joint 17.







	<u>8-9-14</u> 8-9-14	<u>    16-6-0                              </u>	7 <u>+0+0 22-9-0</u> -6-0 5-9-0	28-6-0 5-9-0		<u>36-8-2</u> 8-2-2	45-6-0 8-9-14			
Plate Offsets (X,Y)	[6:0-5-12,0-2-8], [8:0-5-12,0	<u>)-2-8], [10:0-0-0,0-0-0],</u>	[15:0-3-8,0-3-0], [1	7:0-3-8,0-3-0]						
LOADING (psf)           TCLL         20.0           TCDL         7.0           BCLL         0.0 *           BCDL         5.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code FBC2014/TPI	2-0-0 <b>CSI</b> 1.25 TC 1.25 BC YES WB 2007 (Ma	0.43 0.63 0.59 trix)	DEFL.         i           Vert(LL)         0.2           Vert(TL)         -0.2           Horz(TL)         0.0	n (loc) 2 2-19 9 12-13 3 12	l/defl L/d >943 240 >999 180 n/a n/a	<b>PLATES</b> MT20 Weight: 247 lb	<b>GRIP</b> 244/190 FT = 20%		
LUMBER-       BRACING-         TOP CHORD 2x4 SP No.2       TOP CHORD       Structural wood sheathing directly applied or 4-2-4 oc purlins.         BOT CHORD 2x4 SP No.2       BOT CHORD       Rigid ceiling directly applied or 6-0-0 oc bracing.         WEBS       2x4 SP No.3       WEBS       1 Row at midpt										
REACTIONS. (Ib/siz Max H Max U Max 0	REACTIONS. (lb/size) 2=369/0-3-0, 17=1919/0-5-8, 12=715/0-7-4 Max Horz 2=111(LC 12) Max Uplift2=-261(LC 8), 17=-682(LC 9), 12=-206(LC 13) Max Grav 2=454(LC 23), 17=1919(LC 1), 12=761(LC 24)									
FORCES. (Ib) - Max TOP CHORD 2-3= 9-10	Comp./Max. Ten All force 433/480, 3-4=-171/335, 4-{ )=-1173/618, 10-11=-1277/6	es 250 (lb) or less exce 5=-66/351, 5-6=-527/80 02, 11-12=-1517/737	pt when shown. 02, 8-9=-646/291,							
BOT CHORD 2-19 16-2	9=-373/342, 18-19=-370/213 21=0/548, 15-21=0/548, 14-1	, 17-18=-370/213, 17-2 I5=-273/957, 13-14=-2	0=-723/825, 16-20= 73/957, 12-13=-604	=-723/825, /1350						
WEBS 3-19 9-15 8-16	VEBS 3-19=-321/342, 5-19=-671/401, 5-17=-562/783, 6-17=-1476/985, 8-15=-261/436, 9-15=-554/450, 9-13=-184/384, 11-13=-304/321, 6-16=-727/1176, 7-16=-355/261, 8-16=-675/480									
NOTES-	ve loads have been consider	red for this design								

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber

- DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are 3x6 MT20 unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 5.0psf.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 261 lb uplift at joint 2, 682 lb uplift at joint 17 and 206 lb uplift at joint 12.
- 8) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.







Plate Offsets (X,Y)	<u>8-8-4</u> 8-0-8 [2:0-2-13,0-0-15], [6:0-3-0,0-2-4], [7:0-3	6-10 8-8,0-2-8], [9:0-5-12,0-2-8	<u>6-10-10</u> 6-10-10], [18:0-2-8,0-3-12], [19:0-4]	-0,0-4-4], [20	4-9-6 0-2-2,0-2-8]	4-9-6 5-5-3			
LOADING (psf)           TCLL         20.0           TCDL         7.0           BCLL         0.0 *           BCDL         5.0	SPACING- 2-0-0 Plate Grip DOL 1.25 Lumber DOL 1.25 Rep Stress Incr NO Code FBC2014/TPI2007	<b>CSI.</b> TC 0.53 BC 0.93 WB 0.84 (Matrix)	DEFL. in (I Vert(LL) -0.17 14- Vert(TL) -0.32 14- Horz(TL) 0.04	oc) l/defl -15 >999 -15 >999 -13 n/a	L/d 240 180 n/a	PLATES         GRIP           MT20         244/190           Weight: 580 lb         FT = 20%			
LUMBER- TOP CHORD 2x4 SI BOT CHORD 2x6 SI WEBS 2x4 SI 7-18: 2	P No.2 P No.2 P No.3 *Except* 2x4 SP No.2		BRACING- TOP CHORD Str BOT CHORD Rig	uctural wood gid ceiling dire	sheathing direc ectly applied or (	tly applied or 4-1-9 oc purlins. 6-0-0 oc bracing.			
REACTIONS. (Ib/siz Max H Max U Max C	e) 2=-413/0-3-0, 19=6196/0-5-8, 13=3 Horz 2=102(LC 8) Jplift2=-761(LC 20), 19=-2343(LC 5), 13 Grav 2=392(LC 18), 19=6196(LC 1), 13=	527/0-7-4 =-1089(LC 9) 3567(LC 20)							
FORCES. (lb) - Max TOP CHORD 2-3= 7-8= 12-1	. Comp./Max. Ten All forces 250 (lb) c 764/2261, 3-4=-754/2323, 4-5=-740/23 1785/727, 8-9=-1785/727, 9-10=-3848, I3=-7394/2310	r less except when show 47, 5-6=-874/2660, 6-7= '1359, 10-11=-5598/1859	/n. 863/2682, 9, 11-12=-5646/1849,						
BOT CHORD 2-21 23- 18-2 16-1 15-3 34-3	OT CHORD 2-21=-2069/780, 20-21=-2176/820, 19-20=-2176/820, 19-22=-2540/965, 22-23=-2540/965, 23-24=-2540/965, 24-25=-2540/965, 25-26=-2540/965, 18-26=-2540/965, 18-27=-1091/3570, 27-28=-1091/3570, 17-29=-1091/3570, 17-29=-1091/3570, 16-37=-1001/5167, 15-31=-1601/5167, 15-31=-2078/6755, 32-33=-2078/6755, 14-33=-2078/6755, 14-34=-2078/6755, 34-35=-2078/6755, 13-35=-2078/6755								
WEBS 3-21 7-18 10-1	=-324/181, 5-21=-273/285, 5-19=-454/3  =-2006/5639, 8-18=-408/196, 9-18=-24  5=-517/1846, 12-15=-1753/526, 12-14=	66, 6-19=-1128/367, 7-1 63/772, 9-16=-941/2780, -290/1222	9=-4076/1484, 10-16=-2187/700,						
<ul> <li>NOTES-</li> <li>1) 2-ply truss to be consistent of the construction of the construction of the construction of the constructions have the constructions have the constructions have the construction of the construction</li></ul>	<ul> <li>10-15=-517/1846, 12-15=-1753/526, 12-14=-290/1222</li> <li>NOTES- <ol> <li>2-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc. Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc. Webs connected as follows: 2x4 - 1 row at 0-9-0 oc. </li> <li>2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated. 3) Unbalanced roof live loads have been considered for this design. 4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope); porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60 5) Provide adequate drainage to prevent water ponding. 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 5.0psf. 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 761 lb uplift at joint 2, 2343 lb uplift at joint 13. 9) "Somi dial disbehaves is including healer." Member and fixity model was used in the analysis and design of this truss.</li></ol></li></ul>								
WARNING - Verify di Design valid for use only a truss system. Before u building design. Bracing is always required for st fabrication, storage, deli Safety Information ava	esign parameters and READ NOTES ON THIS AN y with MiTek® connectors. This design is based on use, the building designer must verify the applicabili g indicated is to prevent buckling of individual truss ability and to prevent collapse with possible person very, erection and bracing of trusses and truss sys ailable from Truss Plate Institute, 218 N. Lee Street	D INCLUDED MITEK REFEREN y upon parameters shown, and ty of design parameters and pr web and/or chord members on al injury and property damage. terms, see <b>ANSI/TPI1 (</b> , Suite 312, Alexandria, VA 223	ICE PAGE MII-7473 rev. 10/03/2015 i is for an individual building compor operly incorporate this design into th y. Additional temporary and perma For general guidance regarding the Quality Criteria, DSB-89 and BCSI 314.	BEFORE USE. nent, not ne overall nent bracing Building Comp	onent	6904 Parke East Blvd. Tampa, FL 36610			

Job	Truss	Truss Type	Qty	Ply	
					T11146743
1024906	123	Hip Girder	1	2	lob Reference (ontional)
Buildere FirstCourse	laakaanvilla. El 22244			7.0	1000 Reference (optional)
Builders FirstSource,	Jacksonville, FI 32244			7.6	40 s Apr 19 2016 MiTek Industries, Inc. Tue May 16 16:30:57 2017 Page 2

NOTES-

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10) Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 18-0-12 from the left end to 44-0-12 to connect truss(es) to back face of bottom chord.

11) Fill all nail holes where hanger is in contact with lumber.

#### LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-6=-54, 6-9=-54, 9-13=-54, 2-13=-10 Concentrated Loads (lb)

Vert: 16=-448(B) 14=-451(B) 23=-448(B) 25=-448(B) 26=-448(B) 27=-448(B) 28=-448(B) 29=-448(B) 30=-448(B) 31=-448(B) 32=-448(B) 33=-448(B) 33=-448(B) 34=-463(B) 35=-463(B)





2	-9-6 6-0-0		12-6-8				15-0-0		
Plate Offsets (X Y)	-9-6 3-2-10 [2:2-2-4 0-4-5] [2:0-8-3 0-0-4] [3:0-5-1]	2 0-2-81 [8:0-2-8 Edge]		6-6-8			2-5-8		
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (lo	oc) l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL 1.25	TC 0.73	Vert(LL)	0.25 2	2-9 >713	240	MT20	244/190	
TCDL 7.0	Lumber DOL 1.25	BC 0.82	Vert(TL) -	0.38 2	2-9 >466	180			
BCLL 0.0 *	Rep Stress Incr NO	WB 0.62	Horz(TL)	0.22	6 n/a	n/a			
BCDL 5.0	Code FBC2014/TPI2007	(Matrix)					Weight: 72 lb	FT = 20%	
LUMBER-			BRACING-						
TOP CHORD 2x6 SP	M 26 *Except*		TOP CHORD	Stru	uctural wood	sheathing dir	ectly applied or 4-4-	12 oc purlins, except	
3-5: 2x4	4 SP No.2			end	d verticals.	<b>J</b>		· · · · · · · · · · · · · · · ·	
BOT CHORD 2x4 SP	No.2 *Except*		BOT CHORD	Rig	id ceiling dire	ctly applied o	or 5-7-9 oc bracing.		
4-7: 2x4	4 SP No.3				, U		· ·		
WEBS 2x4 SP	No.3								
REACTIONS. (Ib/size) 1=651/0-5-8, 6=808/0-5-8 Max Horz 1=85(LC 8) Max Uplift 1=-310(LC 8), 6=-466(LC 5)									
FORCES. (lb) - Max. TOP CHORD 2-3=-	Comp./Max. Ten All forces 250 (lb) o 1924/1084, 3-10=-1191/701, 10-11=-11	r less except when show 191/701, 11-12=-1191/7(	vn. 01, 4-12=-1191/701,						
80T CHORD 2-9=-	1025/601, 5-13=-1025/601, 5-6=-761/ .1086/1877_9-14=-1092/1897_14-15=-^	400 1092/1897 15_16=_1092	/1897						
8-16=	-1092/1897 4-8=-470/345	1002/1001, 10-10-1002	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
WEBS 3-9=-	71/325, 3-8=-725/443, 5-8=-737/1255								
NOTES- 1) Unbalanced roof live 2) Wind: ASCE 7-10; V MWFRS (envelope) 3) Provide adequate di 4) This truss has been	e loads have been considered for this d /ult=130mph (3-second gust) Vasd=10' ; Lumber DOL=1.60 plate grip DOL=1.6 rainage to prevent water ponding. designed for a 10.0 psf bottom chord li	esign. Imph; TCDL=4.2psf; BC 80 ve load nonconcurrent w	DL=3.0psf; h=18ft; ( vith any other live loa	Cat. II; Ex	xp C; Encl., G	Cpi=0.18;			

5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

6) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 310 lb uplift at joint 1 and 466 lb uplift at joint 6.

8) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

9) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails. For more details refer to MiTek's ST-TOENAIL Detail. 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 148 lb down and 181 lb up at

10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 148 lb down and 181 lb up at 6-0-0 on top chord, and 52 lb down and 53 lb up at 6-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

11) 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 + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25



Job	Truss	Truss Type	Qty	Ply	
4004000	<b>T</b> 04	Helf His Cistor			T11146744
1024906	124	Hair Hip Girder	1	1	Job Reference (optional)
Builders FirstSource, Jacksonville, Fl 32244 7.640 s Apr 19 2016 MiTek Industries, Inc. Tue May 16 16:30:58 2017 Page 2					

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### LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-2=-65, 2-3=-54, 3-5=-54, 2-8=-10, 6-7=-10

Concentrated Loads (lb)

Vert: 3=-86(F) 9=-52(F) 10=-53(F) 11=-53(F) 12=-53(F) 13=-81(F) 14=-40(F) 15=-40(F) 16=-40(F) 17=-20(F)




2	-9-6 -9-6	<u>8-0-0</u> 5-2-10		<u>12-6-8</u> 4-6-8	<u>15-0-0</u>   2-5-8
Plate Offsets (X,Y)	[2:0-1-3,0-0-4], [2:2-2-3,0-4-4],	[3:0-5-12,0-2-8]			1
LOADING (psf)           TCLL         20.0           TCDL         7.0           BCLL         0.0         *           BCDL         5.0	SPACING- 2-0- Plate Grip DOL 1.2 Lumber DOL 1.2 Rep Stress Incr YE Code FBC2014/TPI200	0 <b>CSI.</b> 5 TC 0.88 5 BC 0.58 6 WB 0.78 7 (Matrix)	DEFL. Vert(LL) 0.2 Vert(TL) -0.4 Horz(TL) 0.2	n (loc) l/defl L/d 8 2-9 >626 240 6 2-9 >382 180 2 5 n/a n/a	PLATES         GRIP           MT20         244/190           Weight: 71 lb         FT = 20%
LUMBER- TOP CHORD 2x6 SI 3-4: 2) BOT CHORD 2x4 SI 6-8: 2)	P No.2 *Except* 44 SP No.2 P No.2 *Except* 44 SP No.3		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing di end verticals. Rigid ceiling directly applied 6-11-0 oc bracino: 2-9	rectly applied or 2-2-0 oc purlins, except or 6-0-0 oc bracing. Except:

# REACTIONS. (lb/size) 1=470/0-5-8, 5=468/0-5-8 Max Horz 1=112(LC 12) Max Uplift 1=-109(LC 12), 5=-134(LC 9)

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

TOP CHORD 2-3=-882/567, 5-7=-451/353

2x4 SP No.3

BOT CHORD

2-9=-641/826, 8-9=-640/832, 7-8=-646/843 WEBS 3-7=-813/634

#### NOTES-

WEBS

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) Provide adequate drainage to prevent water ponding.

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

5) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 109 lb uplift at joint 1 and 134 lb uplift at joint 5.







LOADING TCLL TCDL BCLL BCDL	(psf) 20.0 7.0 0.0 * 5.0	SPACING- 2-0-0 Plate Grip DOL 1.25 Lumber DOL 1.25 Rep Stress Incr YES Code FBC2014/TPI2007	CSI. TC 0.94 BC 0.90 WB 0.41 (Matrix)	<b>DEFL.</b> Vert(LL) Vert(TL) Horz(TL)	in 0.39 -0.65 0.27	(loc) 2-9 2-9 5	l/defl >445 >271 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 74 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER				BRACING-					I	
TOP CHC	RD 2x6 SP	No.2 *Except*		TOP CHOR	RD .	Structu	ral wood	sheathing di	rectly applied or 2-2-	0 oc purlins, except
	3-4: 2x4	4 SP No.2		end verticals.						
BOT CHC	RD 2x4 SP	No.2 *Except*		BOT CHORD Rigid ceiling directly applied or 8-8-14 oc bracing. Ex					Except:	
	6-8: 2x4	4 SP No.3				7-10-0	oc bracir	ng: 2-9	Ŭ	
WEBS	2x4 SP	No.3						•		
REACTIO	NS. (Ib/size	e) 1=470/0-5-8, 5=468/0-5-8								
	Max Ho	orz 1=141(LC 12)								
	Max Up	olift 1=-111(LC 12), 5=-129(LC 9)								

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

- TOP CHORD 2-3=-622/352, 5-7=-458/368
- BOT CHORD 2-9=-449/563, 8-9=-449/569, 7-8=-453/565
- WEBS 3-7=-671/529

# NOTES-

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) Provide adequate drainage to prevent water ponding.

- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 111 lb uplift at joint 1 and 129 lb uplift at joint 5.

7) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.





WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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 besign value to be only with with these contractions. This besign is based only upon 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 Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Plate Offsets (X V)	$\frac{2-9-6}{2-9-6}$	<u>12-0-0</u> 9-2-10		<u>12-6-8</u> 0-6-8	<u>5-0-0</u> 2-5-8
	[ <u>2:0-2-3,0-0-4], [2:2-1-11,0-4-3], [4:0-3-</u>				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (loc) l/defl L/d	PLATES GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.93	Vert(LL) -0.2	5 2-10 >691 240	MT20 244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.72	Vert(TL) -0.5	5 2-10 >318 180	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.44	Horz(TL) 0.2	0 6 n/a n/a	
BCDL 5.0	Code FBC2014/TPI2007	(Matrix)			Weight: 85 lb FT = 20%
LUMBER-	· · · · - · ·		BRACING-		
TOP CHORD 2x6 SF	No.2 *Except*		TOP CHORD	Structural wood sheathing di	rectly applied or 2-2-0 oc purlins, except
4-5: 2x	4 SP No.2		DOT OUODD	end verticals.	
BOT CHORD 2X4 SF	/ NO.2 ^Except^		BOT CHORD	Rigid ceiling directly applied	or 6-0-0 oc bracing. Except:
WEBS 2x4 SF	4 SP N0.3 ? No.3			5-11-0 oc bracing. 2-10	
REACTIONS. (lb/size	e) 1=470/0-5-8 6=468/0-5-8				
Max H	orz 1=169(LC 12)				

Max Uplift 1=-109(LC 12), 6=-139(LC 12)

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

TOP CHORD 2-3=-1053/730, 3-4=-386/190, 6-8=-461/382

BOT CHORD 2-10=-936/1031, 9-10=-226/301, 8-9=-224/323

WEBS 3-10=-787/761, 4-10=-210/417, 4-8=-509/380

#### NOTES-

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) Provide adequate drainage to prevent water ponding.

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

5) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 109 lb uplift at joint 1 and 139 lb uplift at joint 6.







	200	4012	
Plate Offsets (X,Y)	[2.2-2-1 0-4-2] [2.0-1-3 0-0-4]		41

COADING (psf)         SPACING-         2-0-0           'CCLL         20.0         Plate Grip DOL         1.25           'CDL         7.0         Lumber DOL         1.25           3CLL         0.0 *         Rep Stress Incr         YES           3CDL         5.0         Code FBC2014/TPl2007	CSI.         DEFL.           TC         0.88         Vert(LL)         0.2           BC         0.58         Vert(TL)         -0.4           WB         0.41         Horz(TL)         0.2           (Matrix)         Kertick         Kertick         Kertick	in (loc) l/defl L/d 26 2-10 >685 240 11 2-10 >427 180 21 6 n/a n/a	PLATES         GRIP           MT20         244/190           Weight: 83 lb         FT = 20%
.UMBER- OP CHORD 2x4 SP No.2 *Except*	BRACING- TOP CHORD	Structural wood sheathing di	rectly applied or 2-2-0 oc purlins, except
1-3: 2x6 SP No.2		end verticals.	or 6-0-0 oc bracing Except
7-9: 2x4 SP No.3	BOTCHORD	6-0-0 oc bracing: 2-10	or 0-0-0 oc bracing. Except.
VEBS 2x4 SP No.3	WEBS	1 Row at midpt 4-	10

REACTIONS. (lb/size) 1=470/0-5-8, 6=468/0-5-8 Max Horz 1=198(LC 12) Max Uplift 1=-102(LC 12), 6=-171(LC 12)

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

TOP CHORD 2-3=-1044/623, 3-4=-1127/837, 6-8=-451/407

BOT CHORD 2-10=-877/1001

WEBS 4-10=-929/1077, 3-10=-541/573, 4-8=-503/521

#### NOTES-

 Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) Provide adequate drainage to prevent water ponding.

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

5) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 102 lb uplift at joint 1 and 171 lb uplift at joint 6.

7) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.



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 Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not
 a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall
 building designer. 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
 **NSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



BCLL 0 BCDL 5	.0 * .0	Rep Stress Incr YES Code FBC2014/TPI2007	WB 0.36 (Matrix)	Horz(TL) 0.2	21 5 n/a n/a	Weight: 76 lb FT = 20%
LUMBER- TOP CHORD	2x6 SP No	0.2 *Except*		BRACING- TOP CHORD	Structural wood sheathing	directly applied or 2-2-0 oc purlins, except
BOT CHORD	3-4: 2x4 S 2x4 SP No 6-8: 2x4 S	SP No.2 o.2 *Except* SP No.3		BOT CHORD	end verticals. Rigid ceiling directly applie 5-10-0 oc bracing: 2-9	d or 6-0-0 oc bracing. Except:
WEBS	2x4 SP No	0.3		WEBS	1 Row at midpt	3-7

REACTIONS. (lb/size) 1=470/0-5-8, 5=468/0-5-8 Max Horz 1=209(I C 12) Max Uplift 1=-97(LC 12), 5=-187(LC 12)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-255/37, 2-3=-1077/638, 5-7=-450/415

BOT CHORD

2-9=-919/1038, 8-9=-917/1045, 7-8=-928/1054 WEBS 3-7=-1056/929

#### NOTES-

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

4) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 97 lb uplift at joint 1 and 187 lb uplift at joint 5.







Plate Offsets (X Y)	[2:0-2-0 Edge] [3:0-4-0 0-3-0]
	12.0-2-0.Luuci. 13.0-4-0.0-3-01

LOADING TCLL TCDL	(psf) 20.0 7.0	SPACING- Plate Grip DOL Lumber DOL	2-0-0 1.25 1.25	<b>CSI.</b> TC 0.62 BC 0.46	<b>DEFL.</b> Vert(LL) -0 Vert(TL) -0	in (loc) .09 5-6 .16 5-6	l/defl >999 >999	L/d 240 180	PLATES MT20	<b>GRIP</b> 244/190
BCLL	0.0 *	Rep Stress Incr	YES	WB 0.25	Horz(TL) C	0.02 5	n/a	n/a		
BCDL	5.0	Code FBC2014/T	PI2007	(Matrix)					Weight: 75 lb	FT = 20%
LUMBER-	RD 2x4 SP	? No.2			BRACING- TOP CHORD	Structu	ural wood :	sheathing di	rectly applied or 5-10	)-10 oc purlins,
BOT CHO	RD 2x4 SP	9 No.2				except	end vertion	als.		
WEBS	2x4 SP	9 No.3			BOT CHORD WEBS	Rigid o 1 Row	eiling dire at midpt	ctly applied 3-	or 8-0-6 oc bracing. 5	
REACTIO	NS. (Ib/size Max H	e) 5=458/Mechanical, 2=	=601/0-5-8							

Max Uplift 5=-183(LC 12), 2=-144(LC 12)

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

TOP CHORD 2-3=-780/297

BOT CHORD 2-6=-535/655, 5-6=-534/656

WEBS 3-6=0/257, 3-5=-686/558

#### NOTES-

 Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

4) Refer to girder(s) for truss to truss connections.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 183 lb uplift at joint 5 and 144 lb uplift at joint 2.







BRACING-TOP CHORD

BOT CHORD

end verticals

# WEBS

TOP CHORD

BOT CHORD

LUMBER-

WEBS

BOT CHORD

TOP CHORD 2x4 SP No.2

2x4 SP No.2

2x4 SP No.3

2-7=-508/632

REACTIONS. (lb/size) 6=458/Mechanical, 2=601/0-5-8 Max Horz 2=212(LC 12)

2-3=-760/310, 3-4=-752/484

Max Uplift 6=-157(LC 12), 2=-151(LC 12)

3-7=-376/410, 4-7=-541/688, 4-6=-444/403

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

NOTES-

 Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) Provide adequate drainage to prevent water ponding.

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 5.0psf.

5) Refer to girder(s) for truss to truss connections.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 157 lb uplift at joint 6 and 151 lb uplift at joint 2.

7) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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 designer. This design in to the overall
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 building designer. Strategies and the applicability of design parameters and properly incorporate this design into the overall
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 building designer. 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
 **NoIVIT11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



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

Rigid ceiling directly applied or 8-2-9 oc bracing.



LOADING TCLL TCDL BCLL BCDL	(psf) 20.0 7.0 0.0 * 5.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code FBC2014/T	2-0-0 1.25 1.25 YES PI2007	<b>CSI.</b> TC BC WB (Matr	0.42 0.83 0.30 ix)	DEFL. Vert(LL) Vert(TL) Horz(TL)	in -0.41 -0.73 0.01	(loc) 2-7 2-7 6	l/defl >426 >241 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 80 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHO	- DRD 2x4 SP	No.2				BRACING- TOP CHOF	RD S	Structu	ral wood	sheathing d	irectly applied or 6-0-0	) oc purlins, except
WEBS	2x4 SP	No.3				BOT CHOF	RD I	Rigid ce	eiling dire	ectly applied	or 6-0-0 oc bracing.	

# REACTIONS. (Ib/size) 6=458/Mechanical, 2=601/0-5-8 Max Horz 2=184(LC 12) Max Uplift6=-127(LC 12), 2=-157(LC 12)

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

TOP CHORD 2-3=-769/423, 3-4=-368/148, 4-5=-276/182, 5-6=-473/319

BOT CHORD 2-7=-579/653

WEBS 3-7=-406/426, 5-7=-312/479

NOTES-

 Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) Provide adequate drainage to prevent water ponding.

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

5) Refer to girder(s) for truss to truss connections.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 127 lb uplift at joint 6 and 157 lb uplift at joint 2.

7) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.





LOADING (psf) TCLL 20.0 TCDL 7.0 BCLL 0.0 * BCDL 5.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code FBC2014/T	2-0-0 1.25 1.25 YES PI2007	<b>CSI.</b> TC BC WB (Matri	0.40 0.57 0.28 x)	DEFL. Vert(LL) Vert(TL) Horz(TL)	in -0.20 -0.35 0.01	(loc) 2-7 2-7 6	l/defl >886 >499 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 77 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD 2x4 BOT CHORD 2x4 WEBS 2x4	SP No.2 SP No.2 SP No.3				BRACING- TOP CHOR BOT CHOR	RD S RD I	Structur end ver Rigid ce	al wood : ticals. eiling dire	sheathing di ctly applied	rectly applied or 6-0-0 or 7-8-4 oc bracing.	) oc purlins, except

#### REACTIONS. (Ib/size) 6=458/Mechanical, 2=601/0-5-8 Max Horz 2=156(LC 12) Max Uplift6=-129(LC 9), 2=-158(LC 12)

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

TOP CHORD 2-3=-804/466, 3-4=-505/265, 4-5=-418/285, 5-6=-441/319

BOT CHORD 2-7=-579/688

WEBS 3-7=-290/316, 5-7=-338/499

#### NOTES-

 Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) Provide adequate drainage to prevent water ponding.

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

5) Refer to girder(s) for truss to truss connections.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 129 lb uplift at joint 6 and 158 lb uplift at joint 2.

7) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.





LOVEN							1 241 20	U.U.
TCLL	20.0	Plate Grip DOL 1.25	TC 0.61	Vert(LL) -0.0	7 2-6 >	999 240	MT20	244/190
TCDL	7.0	Lumber DOL 1.25	BC 0.44	Vert(TL) -0.1	4 2-6 >	999 180		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.72	Horz(TL) 0.0	2 5	n/a n/a		
BCDL	5.0	Code FBC2014/TPI2007	(Matrix)				Weight: 69 lb	FT = 20%
LUMBER TOP CH	<b>8-</b> ORD 2x4 SP	No.2		BRACING- TOP CHORD	Structural	wood sheathing d	lirectly applied or 5-4-	14 oc purlins, except
BOT CHO WEBS	ORD 2x4 SP 2x4 SP	No.2 No.3		BOT CHORD	end vertica Rigid ceilir	als. ng directly applied	l or 8-11-14 oc bracino	1.

# REACTIONS. (lb/size) 5=458/Mechanical, 2=601/0-5-8 Max Horz 2=128(LC 12)

Max Uplift 5=-133(LC 9), 2=-166(LC 8)

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

TOP CHORD 2-3=-726/367

BOT CHORD 2-6=-411/594, 5-6=-409/598

WEBS 3-6=0/256, 3-5=-596/410

NOTES-

 Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) Provide adequate drainage to prevent water ponding.

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

5) Refer to girder(s) for truss to truss connections.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 133 lb uplift at joint 5 and 166 lb uplift at joint 2.

7) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.





BRACING-

TOP CHORD

BOT CHORD

## LUMBER-TOP CHORD 2x4 SP No.2

BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3

#### REACTIONS. (lb/size) 4=461/Mechanical, 2=604/0-5-8 Max Horz 2=61(LC 12) Max Uplift4=-115(LC 13), 2=-162(LC 12)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-740/443, 3-4=-733/437

BOT CHORD 2-5=-306/606, 4-5=-306/606

WEBS 3-5=0/267

#### NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

5) Refer to girder(s) for truss to truss connections.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 115 lb uplift at joint 4 and 162 lb uplift at joint 2.

7) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.





Structural wood sheathing directly applied or 3-9-3 oc purlins.

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



⊢ <u>2</u>	<u>-9-6</u>		7-6-0 4-8-10	12-2	15-0-0	
Plate Offsets (X,Y)	2-9-6 4-8-10 Plate Offsets (X,Y) [2:0-1-3,0-0-4], [2:2-1-15,0-4-4], [2:2-4-13,1-5-14]					200
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL. in (loc)	l/defl L/d	PLATES GRIP
TCU 00.0	Diata Orin DO	1 1 0 5	TC 0.04	V/ort/UL) 0.00 4.6	SEAE 040	MT00 044/400

TCDL BCLL	7.0 0.0 *	Lumber DOL 1.25 Rep Stress Incr YES	BC 0.64 WB 0.08	Vert(TL) -0.5 Vert(TL) -0.5 Horz(TL) 0.3	52 4-6 >545 56 4-6 >313 39 5 n/a	180 n/a	Weight: 55 lb	ET - 20%	
BCDL	5.0	Code FBC2014/1F12007	(Matrix)				Weight. 55 lb	11 = 20 %	
LUMBER	<b>!-</b>			BRACING-					
TOP CHO	ORD 2x6 SP	No.2		TOP CHORD	Structural wood	I sheathing d	lirectly applied or 2-2-0 o	oc purlins.	
BOT CHO	ORD 2x4 SP	No.2		BOT CHORD	Rigid ceiling di	ectly applied	or 10-0-0 oc bracing.		
WEBS	2x4 SP	No.3		JOINTS	1 Brace at Jt(s)	:6	c c		

REACTIONS. (lb/size) 1=472/0-5-8, 5=473/Mechanical Max Horz 1=-40(LC 13)

Max Uplift 1=-115(LC 12), 5=-116(LC 13)

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

 TOP CHORD
 2-3=-1070/780, 3-4=-1067/778

 BOT CHORD
 2-6=-643/1023, 4-6=-643/1023

NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will

fit between the bottom chord and any other members.

5) Refer to girder(s) for truss to truss connections.

6) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 115 lb uplift at joint 1 and 116 lb uplift at joint 5.







2	-9-6 6-0-0		9-0-0	12-2-10	15-0-0
Plate Offsets (X,Y)	<u>-9-6</u> <u>3-2-10</u> [2:2-4-13,1-5-14], [2:2-1-15,0-4-3], [2:	0-2-3,0-0-12], [3:0-5-0,0-2-		3-2-10	2-9-0
LOADING (psf)           TCLL         20.0           TCDL         7.0           BCLL         0.0 *           BCDL         5.0	SPACING- 2-0-0 Plate Grip DOL 1.25 Lumber DOL 1.25 Rep Stress Incr NO Code FBC2014/TPI2007	CSI. TC 0.53 BC 0.79 WB 0.07 (Matrix)	DEFL. Vert(LL) 0.3 Vert(TL) -0.4 Horz(TL) 0.3	in (loc) l/defl L/d 31 8 >565 240 8 2-8 >362 180 35 6 n/a n/a	PLATES         GRIP           MT20         244/190           Weight: 57 lb         FT = 20%
LUMBER- TOP CHORD 2x6 SF 3-4: 2x BOT CHORD 2x4 SF WEBS 2x4 SF	P M 26 *Except* 4 SP No.2 P No.2 P No.3		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing d Rigid ceiling directly applied	irectly applied or 4-3-0 oc purlins. or 5-8-2 oc bracing.

REACTIONS. (lb/size) 1=652/0-5-8, 6=652/0-5-8 Max Horz 1=-31(LC 9) Max Uplift 1=-336(LC 8), 6=-336(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1901/1140, 3-9=-1870/1131, 4-9=-1870/1131, 4-5=-1902/1130

BOT CHORD 2-8=-1094/1854, 8-10=-1100/1869, 7-10=-1100/1869, 5-7=-1067/1855

### NOTES-

1) Unbalanced roof live loads have been considered for this design.

 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.

4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

6) Bearing at joint(s) 1, 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 336 lb uplift at joint 1 and 336 lb uplift at joint 6.

8) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

9) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails. For more details refer to MiTek's ST-TOENAIL Detail.

10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 148 lb down and 181 lb up at 6-0-0, and 53 lb down and 96 lb up at 7-6-0 on top chord, and 52 lb down and 53 lb up at 6-0-0, and 42 lb down and 27 lb up at 7-6-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

11) 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 + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-2=-65, 2-3=-54, 3-4=-54, 4-5=-54, 5-6=-65, 2-5=-10

Concentrated Loads (lb)

Vert: 3=-86(B) 4=-86(B) 8=-52(B) 7=-52(B) 9=-53(B) 10=-40(B)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.







	5-5-6		7-5-10		12-11-8				
<u> </u>	5-5-6		2-0-4		5-5-14				
Plate Offsets (X,Y)	[2:0-3-8,0-1-8], [4:0-5-4,0-2-0]		1						
LOADING (psf)           TCLL         20.0           TCDL         7.0           BCLL         0.0         *           BCDL         5.0	SPACING-2-0-0Plate Grip DOL1.25Lumber DOL1.25Rep Stress IncrNOCode FBC2014/TPI2007	<b>CSI.</b> TC 0.51 BC 0.26 WB 0.05 (Matrix)	<b>DEFL.</b> Vert(LL) -0.0 Vert(TL) -0.0 Horz(TL) -0.0	in (loc) l/defl 04 5-7 >999 05 5-7 >999 01 2 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 55 lb	<b>GRIP</b> 244/190 FT = 20%		
LUMBER- TOP CHORD 2x4 SP BOT CHORD 2x4 SP WEBS 2x4 SP WEDGE Right: 2x4 SP No.3	No.2 No.2 No.3		BRACING- TOP CHORD BOT CHORD	Structural woo Rigid ceiling c	od sheathing dire lirectly applied o	ectly applied or 6-0- r 6-0-0 oc bracing.	0 oc purlins.		
REACTIONS. (Ib/size) 2=475/0-3-8, 5=475/0-7-9 Max Horz 5=-32(LC 9) Max Uplift2=-210(LC 4), 5=-210(LC 5)									
FORCES. (Ib) - Max. Comp./Max. Ten All forces 250 (Ib) or less except when shown.         TOP CHORD       2-9=-674/180, 3-9=-641/181, 3-10=-610/187, 4-11=-646/181, 5-11=-680/180         BOT CHORD       2-12=-132/653, 8-12=-133/652, 8-13=-138/651, 7-13=-138/651, 7-14=-143/653, 5-14=-142/655									
<ul> <li>5-14=-142/655</li> <li>NOTES- <ol> <li>Unbalanced roof live loads have been considered for this design.</li> <li>Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60</li> <li>Provide adequate drainage to prevent water ponding.</li> <li>This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.</li> <li>* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.</li> <li>Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 210 lb uplift at joint 2 and 210 lb uplift at joint 5.</li> <li>"Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.</li> <li>"NALLED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails. For more details refer to MiTek's ST-TOENAIL Detail.</li> </ol></li></ul>									
LOAD CASE(S) Stand 1) Dead + Roof Live (b Uniform Loads (plf) Vert: 1-2=-5 Concentrated Loads Vert: 3=39(l	dard yalanced): Lumber Increase=1.25, Plate 54, 2-3=-54, 3-4=-54, 4-5=-54, 5-6=-54, 5 (lb) F) 4=39(F) 8=-9(F) 7=-9(F) 9=20(F) 10=	Increase=1.25 2-5=-10 :-3(F) 11=20(F) 13=-8(F	)						

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		6-8-2		
	5-4-0	i 6-3-5 6-5-12 i 7-7-8 i	12-11-8	
	5-4-0	0-11-6 0-2-6 0-11-6	5-4-0	
		0-2-6		
Plate Offsets (X,Y) [2:0-2-0,Edg	e], [5:0-0-0,0-0-0], [6:0-2-0,Edge]			

LOADING (psf) TCLL 20.0 TCDL 7.0 BCLL 0.0 * BCDL 5.0	SPACING- 2-0-0 Plate Grip DOL 1.25 Lumber DOL 1.25 Rep Stress Incr YES Code FBC2014/TPI2007	CSI. TC 0.41 BC 0.32 WB 0.10 (Matrix)	DEFL. Vert(LL) -C Vert(TL) -C Horz(TL) -C	in (loc) 0.04 2-8 0.07 2-8 0.01 2	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 57 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER-       BRACING-         TOP CHORD       2x4 SP No.2         BOT CHORD       2x4 SP No.2         WEBS       2x4 SP No.3								0 oc purlins.
REACTIONS. (Ib/size Max H Max U	e) 2=520/0-5-8, 6=526/0-7-4 lorz 6=43(LC 12) plift2=-149(LC 8), 6=-152(LC 9)							
FORCES.         (lb) - Max.           TOP CHORD         2-3=           BOT CHORD         2-8=           WEBS         4-8=	. Comp./Max. Ten All forces 250 (lb) c -594/351, 3-4=-472/338, 4-5=-471/339, -198/486, 6-8=-181/482 -210/271	or less except when shown. 5-6=-592/351						
NOTES- 1) Unbalanced roof liv	e loads have been considered for this c	lesign.						

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 149 lb uplift at joint 2 and 152 lb uplift at joint 6.

6) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

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			6-5	5-12					12-11	-8		
Plate Offsets	s (X,Y) [2:	0-2-0,Edge], [4:0-2-0,E	dge]	p-12					6-5-	2		
LOADING (p	osf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 2	20.0	Plate Grip DOL	1.25	TC	0.42	Vert(LL)	-0.04	4-6	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.34	Vert(TL)	-0.08	4-6	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(TL)	-0.01	2	n/a	n/a		
BCDL	5.0	Code FBC2014/T	PI2007	(Matr	ix)						Weight: 51 lb	FT = 20%
LUMBER-					L. L	BRACING-						
TOP CHORE	D 2x4 SP N	lo.2				TOP CHOP	RD S	Structu	ral wood	sheathing dir	ectly applied or 6-0-0	) oc purlins.
BOT CHORE	D 2x4 SP N	lo.2				BOT CHOP	RD I	Rigid ce	eiling dire	ctly applied o	or 10-0-0 oc bracing.	

BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3

REACTIONS. (lb/size) 2=525/0-3-8, 4=524/0-3-1 Max Horz 4=-44(LC 17)

Max Uplift 2=-143(LC 12), 4=-143(LC 13)

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

2-3=-596/345, 3-4=-596/345 BOT CHORD 2-6=-178/482, 4-6=-178/482

NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. 4)* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will

fit between the bottom chord and any other members.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 143 lb uplift at joint 2 and 143 lb uplift at joint 4.







Vert: 7=-582(B) 8=-527(B) 9=-527(B) 10=-527(B) 11=-527(B) 12=-527(B)

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 a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall
 building designer. 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
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Plate Offsets (X,Y)-         30-54-02-20, [5-0-1-6,Edge]         14-0           LOADING (ps)         SPACING-         2-0-0         CSI.         In (loc)         l/def         L/d           Plate Offsets (X,Y)-         30-54-02-20, [5-0-1-6,Edge]         CSI.         DEFL.         in (loc)         l/def         L/d           Plate Sing DOL         1.25         TC         0.40         Vert(LI)         -0.04         6-7         >999         240           DCL         0.0         Rep Stress Incr         NO         WB         0.08         Horz(TL)         0.02         5         n/a         M20           BCLL         0.0         Rep Stress Incr         NO         WB         0.08         Horz(TL)         0.02         5         n/a         M20           LUMBER.         Code FBC2014/TP12007         Watrix)         BRACING-         TOP CHORD         Structural wood sheathing directly applied or 5-11-9 oc purlins.           BOT CHORD 2x4 SP No.2         Structural wood sheathing directly applied or 9-2-11 oc bracing.         Watrix)         Watrix // 24-30(C 12)         Max Horz 24-30(C 4)         FOC CHORD         Structural wood sheathing directly applied or 9-2-11		4-0-0		9-0-0		13-0-0				
LODDING (pst)       SPACING.       2-0-0       CSI.       DEFL.       in (loc)       l/deft       L/d         TCL       20.0       TCL       25       TC       0.40       Vert(IL)       -0.46       6-7       >999       240         TCDL       7.0       Lumber DOL       1.25       BC       0.33       Vert(IL)       -0.08       6-7       >999       180         BCDL       5.0       Code FBC2014/TPI2007       (Matrix)       BRACING-       TOP CHORD       24 SP No.2       Weight: 54 lb       FT = 20%         LUMBER-       TOP CHORD 2x4 SP No.2       BOT CHORD       Structural wood sheathing directly applied or 5-11-9 oc purlins.         BOT CHORD 2x4 SP No.3       BOT CHORD       Structural wood sheathing directly applied or 9-2-11 oc bracing.         REACTIONS.       (b):/size)       5-440/Mechanical, 2=580/0-5-8       Max Hour 2=43(LC 12)       Max Uplift5=-219(LC 9), 2=-289(LC 4)         FORCES.       (b) - Max. Comp.Max. Ten Al forces 250 (b) or less except when shown.       TOP CHORD       2.7=-394/740, 7.10=-391/753, 10-11=-391/753, 5-6=-411/774         NOTES       1) Unbalanced roof live loads have been considered for this design.       1)       1)       1)         1) Unvike ASCE 7-10; Vult=130mp d: second gust) Vad=10 mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (	Plate Offsets (X,Y) [	3:0-5-4.0-2-0]. [5:0-1-6.Edae]		5-0-0		4-0-0				
LUMBER- TOP CHORD       2x4 SP No.2       BRACING- TOP CHORD         BOT CHORD       2x4 SP No.2       BOT CHORD       Structural wood sheathing directly applied or 5-11-9 oc purlins.         BOT CHORD       2x4 SP No.3       BOT CHORD       Rigid ceiling directly applied or 9-2-11 oc bracing.         REACTIONS.       (b/size)       5=440/Mechanical, 2=586/0-5-8 Max Horz 2=43(LC 12) Max Uplitfs=-219(LC 9), 2=-289(LC 4)       Rigid ceiling directly applied or 9-2-11 oc bracing.         FORCES.       (b) - Max. Comp./Max. Ten All forces 250 (b) or less except when shown.       TOP CHORD       2-3=330/460, 3-8=-777/459, 4-9=-777/459, 4-9=-777/459, 4-5=-78/476         BOT CHORD       2-7=-394/740, 7-10=-391/753, 10-11=-391/753, 5-6=-411/774       NOTES-         1) Uhbalanced roof live loads have been considered for this design.       2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60       3) Provide adequate drainage to prevent water ponding.         4) This truss has been designed for a 10.0 psf bottom chord in e load nonconcurrent with any other live loads.       5) * This truss has been designed for a 10.0 psf bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.         6) Refer to girder(s) for truss to truss connections.       7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 219 lb uplift at joint 2.         9) "NalLED" ind	LOADING (psf) TCLL 20.0 TCDL 7.0 BCLL 0.0 * BCDL 5.0	SPACING- 2-0-0 Plate Grip DOL 1.25 Lumber DOL 1.25 Rep Stress Incr NO Code FBC2014/TPI2007	CSI. TC 0.40 BC 0.33 WB 0.08 (Matrix)	DEFL.         in         (loc           Vert(LL)         -0.04         6-           Vert(TL)         -0.08         6-           Horz(TL)         0.02	i) l/defl L/d 7 >999 240 7 >999 180 5 n/a n/a	PLATES         GRIP           MT20         244/190           Weight: 54 lb         FT = 20%				
<ul> <li>REACTIONS. (Ib/size) 5=440/Mechanical, 2=586/0-5-8 Max Horz 2=43(LC 12) Max Uplift5=-219(LC 9), 2=-289(LC 4)</li> <li>FORCES. (Ib) - Max. Comp./Max. Ten All forces 250 (Ib) or less except when shown.</li> <li>TOP CHORD 2-3=-830/460, 3-8=-777/459, 4-9=-777/459, 4-5=-878/476</li> <li>BOT CHORD 2-7=-394/740, 7-10=-391/753, 10-11=-391/753, 6-11=-391/753, 5-6=-411/774</li> <li>NOTES- <ol> <li>Unbalanced roof live loads have been considered for this design.</li> <li>Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60</li> <li>Provide adequate drainage to prevent water ponding.</li> <li>This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.</li> <li>This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.</li> <li>This truss has been designed for a 10.0 psf bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.</li> <li>Refer to girder(s) for truss to truss connections.</li> <li>Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 219 lb uplift at joint 5 and 289 lb uplift at joint 5.</li> <li>"Smi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.</li> <li>"NAILED" indicates 3-100 (0.148"x3) or 3-12d (0.148"x3.25") toe-nails. For more details refer to MiTek's ST-TOENAIL Detail.</li> <li>Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 60 lb down and 43 lb up at 4-0-0, and 60 lb down and 140 lb up at 4-0-0, and 134 lb down and 434 lb down and 43 lb up at 4-1-0, and 50 lb down and 43 lb up at 4-1-0, and 60 lb down and 43 lb up at 4-0-0, and 134 lb down and 434 lb down and 43 lb up at 4-1-0, and 60 lb down and 430 lb up at 4-0-0, and 134 lb down and 434 lb down an</li></ol></li></ul>	LUMBER- TOP CHORD 2x4 SP BOT CHORD 2x4 SP WEBS 2x4 SP	JUMBER-       BRACING-         FOP CHORD 2x4 SP No.2       TOP CHORD         30T CHORD 2x4 SP No.2       BOT CHORD         WEBS 2x4 SP No.3       BOT CHORD         Rigid ceiling directly applied or 9-2-11 oc bracing.								
<ul> <li>FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown.</li> <li>TOP CHORD 2-3=-830/460, 3-8=-777/459, 8-9=-777/459, 4-9=-777/459, 4-5=-878/476</li> <li>BOT CHORD 2-7=-394/740, 7-10=-391/753, 10-11=-391/753, 5-6=-411/774</li> <li>NOTES- <ol> <li>Unbalanced roof live loads have been considered for this design.</li> <li>Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60</li> <li>Provide adequate drainage to prevent water ponding.</li> <li>This truss has been designed for a 1ive load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.</li> <li>Refer to girder(s) for truss to truss connections.</li> <li>Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 219 lb uplift at joint 5 and 289 lb uplift at joint 2.</li> <li>Smi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.</li> <li>"NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails. For more details refer to MITek's ST-TOENAIL Detail.</li> <li>Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 60 lb down and 140 lb up at 4-0-0, and 134 lb down and 43 lb up at 4-0-0, and 134 lb down and 43 lb up at 8-11-4</li> </ol></li></ul>	REACTIONS. (lb/size) 5=440/Mechanical, 2=586/0-5-8 Max Horz 2=43(LC 12) Max Uplift5=-219(LC 9), 2=-289(LC 4)									
<ul> <li>NOTES- <ol> <li>Unbalanced roof live loads have been considered for this design.</li> <li>Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60</li> <li>Provide adequate drainage to prevent water ponding.</li> <li>This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.</li> <li>* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.</li> <li>Refer to girder(s) for truss to truss connections.</li> <li>Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 219 lb uplift at joint 5 and 289 lb uplift at joint 2.</li> <li>"Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.</li> <li>"NALLED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails. For more details refer to MITek's ST-TOENAIL Detail.</li> <li>Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 60 lb down and 140 lb up at 4-0-0, and 134 lb down and 43 lb up at 4-1-4.</li> </ol></li></ul>	FORCES.       (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown.         TOP CHORD       2-3=-830/460, 3-8=-777/459, 8-9=-777/459, 4-9=-777/459, 4-5=-878/476         BOT CHORD       2-7=-394/740, 7-10=-391/753, 10-11=-391/753, 5-6=-411/774									
<ul> <li>on bottom chord. The design/selection of such connection device(s) is the responsibility of others.</li> <li>11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).</li> </ul>	NOTES- 1) Unbalanced roof live 2) Wind: ASCE 7-10; V MWFRS (envelope); 3) Provide adequate dr 4) This truss has been 5) * This truss has been fit between the botto 6) Refer to girder(s) for 7) Provide mechanical joint 2. 8) "Semi-rigid pitchbrea 9) "NAILED" indicates 10) Hanger(s) or other and 60 lb down and on bottom chord. 11) In the LOAD CASE	loads have been considered for this d ult=130mph (3-second gust) Vasd=10 ⁻ Lumber DOL=1.60 plate grip DOL=1.6 ainage to prevent water ponding. designed for a 10.0 psf bottom chord lin n designed for a live load of 20.0psf on m chord and any other members. truss to truss connections. connection (by others) of truss to bear aks including heels" Member end fixity 3-10d (0.148"x3") or 3-12d (0.148"x3.2 connection device(s) shall be provided d 140 lb up at 9-0-0 on top chord, and The design/selection of such connection 5(S) section, loads applied to the face of arct	lesign. 1mph; TCDL=4.2psf; BCI 30 ve load nonconcurrent w the bottom chord in all a ing plate capable of withs model was used in the al 5") toe-nails. For more d l sufficient to support con 134 lb down and 43 lb uj n device(s) is the respon of the truss are noted as f	DL=3.0psf; h=18ft; Cat. II; Exp ith any other live loads. areas where a rectangle 3-6-0 standing 219 lb uplift at joint 5 nalysis and design of this trus etails refer to MiTek's ST-TOE iccentrated load(s) 60 lb down a p at 4-0-0, and 134 lb down a sibility of others. front (F) or back (B).	<ul> <li>b C; Encl., GCpi=0.18;</li> <li>tall by 2-0-0 wide will</li> <li>and 289 lb uplift at</li> <li>s.</li> <li>NAIL Detail.</li> <li>and 140 lb up at 4-0-0,</li> <li>nd 43 lb up at 8-11-4</li> </ul>					

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25 Uniform Loads (plf) Vert: 1-3=-54, 3-4=-54, 4-5=-54, 2-5=-10 Concentrated Loads (lb)

Vert: 3=-13(B) 4=-13(B) 7=-15(B) 6=-15(B) 8=-8(B) 9=-8(B) 10=-9(B) 11=-9(B)

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Plate Offsets (X,Y)	[1:0-1-6,Edge], [4:0-1-6,Edge]			
LOADING (psf) TCLL 20.0 TCDL 7.0 BCLL 0.0 * BCDL 5.0	SPACING- 2-0-0 Plate Grip DOL 1.25 Lumber DOL 1.25 Rep Stress Incr YES Code FBC2014/TPI2007	<b>CSI.</b> TC 0.45 BC 0.31 WB 0.06 (Matrix)	DEFL.         in         (loc)         l/defl         L/d           Vert(LL)         -0.05         4-5         >999         240           Vert(TL)         -0.09         4-5         >999         180           Horz(TL)         0.01         4         n/a         n/a           Weight:         47 lb         FT = 20%	
LUMBER- TOP CHORD 2x4 S BOT CHORD 2x4 S	6P No.2 6P No.2		BRACING-         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.	

BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3

REACTIONS. (lb/size) 1=407/0-5-8, 4=407/Mechanical Max Horz 1=32(LC 12) Max Uplift 1=-97(LC 12), 4=-98(LC 13)

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

TOP CHORD 1-2=-671/432, 2-3=-563/463, 3-4=-669/431

BOT CHORD 1-6=-314/559, 5-6=-314/563, 4-5=-315/560

NOTES-

4

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.

4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

6) Refer to girder(s) for truss to truss connections.

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 97 lb uplift at joint 1 and 98 lb uplift at joint

8) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.
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	<u>5-0-0</u> 5-0-0	9-6-0		<u>14-0-0</u> 4-6-0		<u>19-0-0</u> 5-0-0			
Plate Offsets (X,Y)	2:0-3-1,0-1-8], [3:0-5-4,0-2-0], [5:0-5-4.	0-2-0], [6:0-3-1,0-1-8], [8:	:0-4-0,0-4-8]						
LOADING (psf)           TCLL         20.0           TCDL         7.0           BCLL         0.0 *           BCDL         5.0	SPACING-2-0-0Plate Grip DOL1.25Lumber DOL1.25Rep Stress IncrNOCode FBC2014/TPI2007	<b>CSI.</b> TC 0.35 BC 0.65 WB 0.33 (Matrix)	DEFL. Vert(LL) 0 Vert(TL) -0 Horz(TL) 0	in (loc) l/defl 13 8-9 >999 21 8-9 >999 .04 6 n/a	L/d 240 180 n/a	<b>PLATES</b> MT20 Weight: 98 lb	<b>GRIP</b> 244/190 FT = 20%		
LUMBER- TOP CHORD     2x4 SP No.2     BRACING- TOP CHORD       BOT CHORD     2x6 SP No.2     TOP CHORD     Structural wood sheathing directly applied or 3-8-7 oc purlins.       BOT CHORD     2x6 SP No.2     BOT CHORD     Rigid ceiling directly applied or 6-5-0 oc bracing.       WEBS     2x4 SP No.3     BOT CHORD     Rigid ceiling directly applied or 6-5-0 oc bracing.									
REACTIONS. (lb/size) 6=773/0-5-8, 2=1172/0-5-8 Max Horz 2=50(LC 8) Max Uplift6=-300(LC 5), 2=-620(LC 4)									
FORCES.       (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown.         TOP CHORD       2-3=-2305/1329, 3-4=-2197/1143, 4-5=-2197/1143, 5-6=-1650/707         BOT CHORD       2-9=-1187/2065, 9-10=-1211/2102, 8-10=-1211/2102, 7-8=-615/1475, 6-7=-618/1471         WEBS       3-9=-332/522, 3-8=-297/448, 4-8=-263/128, 5-8=-524/874									
NOTES- 1) Unbalanced roof live 2) Wind: ASCE 7-10; \ MWFRS (envelope) 3) Provide adequate d 4) This truss has been fit between the botte 6) Provide mechanical joint 2. 7) "Semi-rigid pitchbre 8) Use Simpson Strom connect truss(es) to 9) Fill all nail holes whe 10) Hanger(s) or other 5-0-0 on top chord responsibility of ott 11) In the LOAD CASE	e loads have been considered for this d /ult=130mph (3-second gust) Vasd=10' ; Lumber DOL=1.60 plate grip DOL=1.6 rainage to prevent water ponding. designed for a 10.0 psf bottom chord li n designed for a live load of 20.0psf on om chord and any other members. connection (by others) of truss to beari aks including heels" Member end fixity g-Tie HTU26 (20-10d Girder, 11-10dx1 front face of bottom chord. ere hanger is in contact with lumber. connection device(s) shall be provided , and 117 lb down and 60 lb up at 5-0-0 ers. E(S) section, loads applied to the face o	esign. Imph; TCDL=4.2psf; BCD i0 ve load nonconcurrent wi the bottom chord in all ar ng plate capable of withst model was used in the an 1/2 Truss, Single Ply Girc sufficient to support cond 0 on bottom chord. The d	DL=3.0psf; h=18ft; C th any other live load reas where a rectang tanding 300 lb uplift alysis and design of der) or equivalent at centrated load(s) 14t lesign/selection of su ont (F) or back (B).	at. II; Exp C; Encl., G ds. gle 3-6-0 tall by 2-0-0 at joint 6 and 620 lb this truss. 5-11-4 from the left o 5 lb down and 219 lb uch connection device	GCpi=0.18; 0 wide will uplift at end to p up at ce(s) is the				

# LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25 Uniform Loads (plf) Vert: 1-3=-54, 3-5=-54, 5-6=-54, 2-6=-10 Concentrated Loads (lb) Vert: 3=-98(F) 9=-71(F) 10=-466(F)

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	7-0-0		<u>12-0-0</u> 5-0-0		<u>19-0-0</u> 7-0-0
Plate Offsets (X,Y)	[2:0-2-0,Edge], [3:0-5-4,0-2-0]				
LOADING (psf) TCLL 20.0 TCDL 7.0 BCLL 0.0 * BCDL 5.0	SPACING- 2-0-0 Plate Grip DOL 1.25 Lumber DOL 1.25 Rep Stress Incr YES Code FBC2014/TPI2007	<b>CSI.</b> TC 0.69 BC 0.45 WB 0.07 (Matrix)	DEFL.         in         (loc)           Vert(LL)         -0.08         5-6           Vert(TL)         -0.18         5-6           Horz(TL)         0.03         5	l/defl L/d >999 240 >999 180 n/a n/a	PLATES         GRIP           MT20         244/190           Weight: 77 lb         FT = 20%
LUMBER-           TOP CHORD         2x4 SP No.2           BOT CHORD         2x4 SP No.2           WEBS         2x4 SP No.3		BRACING- TOP CHORD Struct BOT CHORD Rigid of	ural wood sheathing direc ceiling directly applied or	ctly applied or 3-8-15 oc purlins. 8-6-13 oc bracing.	
REACTIONS. (Ib/size Max H Max U	e) 5=586/0-5-8, 2=724/0-5-8 orz 2=59(LC 12) plift5=-130(LC 13), 2=-199(LC 8)				
FORCES. (Ib) - Max	Comp /Max Ten - All forces 250 (lb) o	r less excent when shown			

TOP CHORD 2-3=-1032/574, 3-4=-902/607, 4-5=-1050/587

BOT CHORD 2-8=-431/875, 7-8=-430/878, 6-7=-430/878, 5-6=-449/898

#### NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.

4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 130 lb uplift at joint 5 and 199 lb uplift at joint 2.

7) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

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	9-0-0		10-0-0			19-0-0				
Plate Offsets (X,Y)	<u>9-0-0</u> [2:0-3-0,0-1-8], [7:0-3-0,0-1-8], [8:0-3-0	,0-3-4]	1-0-0			9-0-0				
LOADING (psf)           TCLL         20.0           TCDL         7.0           BCLL         0.0         *           BCDL         5.0	SPACING- 2-0-0 Plate Grip DOL 1.25 Lumber DOL 1.25 Rep Stress Incr YES Code FBC2014/TPI2007	CSI. TC 0.43 BC 0.62 WB 0.16 (Matrix)	DEFL. Vert(LL) -C Vert(TL) -C Horz(TL) C	in (loc) .16 7-8 .31 7-8 .04 7	l/defl >999 >719 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 87 lb	<b>GRIP</b> 244/190 FT = 20%		
DOBL       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0										
FORCES.         (lb) - Max.           TOP CHORD         2-3=-           BOT CHORD         2-9=-           WEBS         3-9=-	FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown.         TOP CHORD       2-3=-1117/700, 3-4=-837/521, 4-5=-733/523, 5-6=-839/523, 6-7=-1145/732         BOT CHORD       2-9=-575/973, 8-9=-320/733, 7-8=-615/1019         WEBS       3-9=-288/282, 6-8=-337/329									
NOTES- 1) Unbalanced roof live 2) Wind: ASCE 7-10; V MWFRS (envelope) arin DOI =1 60	e loads have been considered for this d /ult=130mph (3-second gust) Vasd=10 and C-C Exterior(2) zone;C-C for men	esign. 1mph; TCDL=4.2psf; BCI ibers and forces & MWFF	DL=3.0psf; h=18ft; C RS for reactions show	at. II; Exp ( vn; Lumber	C; Encl., G DOL=1.6	6Cpi=0.18; 60 plate				

3) Provide adequate drainage to prevent water ponding.

4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 142 lb uplift at joint 7 and 189 lb uplift at joint 2. 7) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

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	Job	Truss	Truss Type	Qty	Ply	
						T11146767
	1024906	T48	Common Girder	1	2	
					-	Job Reference (optional)
ľ	Builders FirstSource, Jacks	onville, FI 32244			7.6	40 s Apr 19 2016 MiTek Industries, Inc. Tue May 16 16:31:15 2017 Page 2

ID:6uMeWvmqVeEx7fGGjqSaDTzVmxC-YrY9qAkzEy08gIvCB1Tu5Sm1ktlvwHPPW16gjPzFtvg

# LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-3=-54, 3-5=-54, 1-5=-10

Concentrated Loads (lb)

Vert: 9=-1018(B) 10=-1031(B) 11=-1023(B) 12=-936(B) 13=-972(B) 14=-940(B) 15=-992(B) 16=-975(B) 17=-954(B)

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Max Horz 6=-28(LC 13)

Max Uplift 6=-79(LC 12), 4=-79(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-308/229, 2-3=-308/229, 1-6=-318/262, 3-4=-318/262

# NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

5) Refer to girder(s) for truss to truss connections.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 79 lb uplift at joint 6 and 79 lb uplift at joint

7) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

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TOP CHORD

BOT CHORD

end verticals.

#### LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x6 SP No.2 WEBS 2x4 SP No.3

REACTIONS. (lb/size) 1=520/0-5-8, 3=534/Mechanical Max Horz 1=67(LC 8) Max Uplift 1=-350(LC 8), 3=-307(LC 8)

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

#### NOTES.

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60

2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

Refer to girder(s) for truss to truss connections.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 350 lb uplift at joint 1 and 307 lb uplift at ioint 3.

6) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

7) Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss, Single Ply Girder) or equivalent at 3-0-11 from the left end to connect truss(es) to back face of bottom chord.

8) Fill all nail holes where hanger is in contact with lumber.

9) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails. For more details refer to MiTek's ST-TOENAIL Detail.

10) 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 + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-2=-54, 1-3=-10

Concentrated Loads (lb)

Vert: 2=-75(F) 3=-54(F) 4=-297(B) 5=-333(B)

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

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



Plate Of	⊢ fsets (X,Y)	<u>4-11-4</u> <u>4-11-4</u> [9:0-4-0,0-4-8]		<u>10-6-0</u> 5-6-12	<u> </u>	2	<u>21-0-0</u> 4-11-4	I	
LOADIN TCLL	G (psf) 20.0	SPACING- Plate Grip DOL	2-0-0 1.25	<b>CSI.</b> TC 0.45	<b>DEFL.</b> in (lo Vert(LL) -0.11 9-	c) l/defl L/d 10 >999 240	PLATES MT20	<b>GRIP</b> 244/190	
TCDL	7.0	Lumber DOL Rep Stress Incr	1.25 NO	BC 0.55 WB 0.69	Vert(TL) -0.19 9- Horz(TL) 0.06	10 >999 180 6 n/a n/a			

BRACING-

TOP CHORD

BOT CHORD

## LUMBER-

BCDL

TOP CHORD 2x4 SP No.2 BOT CHORD 2x6 SP No.2 WEBS 2x4 SP No.3

5.0

REACTIONS. (lb/size) 2=1304/0-5-8, 6=1304/0-5-8 Max Horz 2=65(LC 8)

Max Uplift 2=-520(LC 8), 6=-520(LC 9)

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

TOP CHORD 2-3=-2572/1061, 3-4=-1535/595, 4-5=-1535/595, 5-6=-2572/1062

Code FBC2014/TPI2007

BOT CHORD 2-10=-977/2321, 9-10=-977/2321, 8-9=-913/2321, 6-8=-913/2321

WEBS 4-9=-341/839, 5-9=-1044/551, 5-8=-247/511, 3-9=-1044/549, 3-10=-248/511

#### NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18;

(Matrix)

MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 520 lb uplift at joint 2 and 520 lb uplift at joint 6.

6) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

7) Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss, Single Ply Girder) or equivalent spaced at 11-1-8 oc max. starting

at 4-11-4 from the left end to 16-0-12 to connect truss(es) to front face of bottom chord.

8) Fill all nail holes where hanger is in contact with lumber.

9) 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 + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-4=-54, 4-7=-54, 2-6=-10 Concentrated Loads (lb)

Vert: 8=-524(F) 10=-524(F)

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Weight: 117 lb

Structural wood sheathing directly applied or 3-6-12 oc purlins.

Rigid ceiling directly applied or 7-4-14 oc bracing.

FT = 20%



F	<u>7-2-10</u> 7-2-10	<u> </u>	<u>13-9-6</u> 3-3-6			<u>21-0-0</u> 7-2-10		
Plate Offsets (X,Y)	[2:0-3-0,0-1-8], [6:0-3-0,0-1-8]							
LOADING (psf) TCLL 20.0 TCDL 7.0 BCLL 0.0 * BCDL 5.0	SPACING-2-0-0Plate Grip DOL1.25Lumber DOL1.25Rep Stress IncrYESCode FBC2014/TPI2007	<b>CSI.</b> TC 0.42 BC 0.42 WB 0.13 (Matrix)	DEFL.         ii           Vert(LL)         -0.08           Vert(TL)         -0.18           Horz(TL)         0.04	n (loc) 3 2-10 5 2-10 4 6	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 95 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x4 SF WEBS 2x4 SF	No.2 No.2 No.3	BRACING- TOP CHORD BOT CHORD	Structu Rigid c	ıral wood s eiling direc	heathing directly tly applied or 7-	applied or 5-1-: 9-13 oc bracing.	2 oc purlins.	
REACTIONS. (Ib/size Max H Max U	e) 6=781/0-5-8, 2=781/0-5-8 orz 2=65(LC 12) plift6=-206(LC 13), 2=-206(LC 12)							
FORCES.         (lb) - Max.           TOP CHORD         2-3=-           BOT CHORD         2-10:           WEBS         4-8=-	Comp./Max. Ten All forces 250 (lb) o .1250/745, 3-4=-1077/699, 4-5=-1077/6 =-540/1091, 9-10=-289/743, 8-9=-289/7 .211/345, 5-8=-261/262, 4-10=-211/345	r less except when shown. 99, 5-6=-1250/745 43, 6-8=-572/1091 , 3-10=-261/262						

NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 206 lb uplift at joint 6 and 206 lb uplift at joint 2.







	7-2-10		<u>10-6-0</u> 3-3-6	<u>13-9-6</u> 3-3-6		<u>20-11-8</u> 7-2-2	<u>21-</u> 0-0 0-0-8
Plate Offsets (X,Y)	[2:0-3-0,0-1-8], [6:0-3-0,0-1-8]						
LOADING (psf) TCLL 20.0 TCDL 7.0 BCLL 0.0 * BCDL 5.0	SPACING- 2-0-0 Plate Grip DOL 1.25 Lumber DOL 1.25 Rep Stress Incr YES Code FBC2014/TPI2007	<b>CSI.</b> TC 0.43 BC 0.45 WB 0.15 (Matrix)	DEFL. Vert(LL) Vert(TL) Horz(TL	in (loc) -0.08 6-7 -0.16 6-7 ) 0.04 6	l/defl L/d >999 240 >999 180 n/a n/a	PLATES GRIP MT20 244/190 Weight: 92 lb FT	) = 20%
		1	BRACIN	G_			

TOP CHORD

BOT CHORD

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3

# REACTIONS. (lb/size) 6=650/0-5-8, 2=788/0-5-8 Max Horz 2=77(LC 12)

Max Uplift 6=-161(LC 13), 2=-207(LC 12)

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

- 2-3=-1267/772, 3-4=-1094/726, 4-5=-1122/749, 5-6=-1290/800 TOP CHORD
- 2-9=-635/1106, 8-9=-353/759, 7-8=-353/759, 6-7=-669/1147 BOT CHORD

4-7=-242/384, 5-7=-288/288, 4-9=-207/345, 3-9=-261/264 WEBS

#### NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 161 lb uplift at joint 6 and 207 lb uplift at joint 2.

6) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.





Structural wood sheathing directly applied or 4-9-8 oc purlins.

Rigid ceiling directly applied or 7-2-7 oc bracing.



	0040000			5-51			DI 4750			
Plate Offsets (X,Y) [	Plate Offsets (X,Y) [2:0-3-0,0-1-8]									
			10-6-0			1	3-11-0			
			10-6-0				14-5-0			

LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.33	Vert(LL)	-0.31	2-7	>409	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.66	Vert(TL)	-0.54	2-7	>233	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.24	Horz(TL)	0.00	6	n/a	n/a		
BCDL	5.0	Code FBC2014/T	PI2007	(Matr	ix)						Weight: 73 lb	FT = 20%
LUMBER	-					BRACING					1	
TOP CHC	RD 2x4 SP	No.2				TOP CHOR	RD S	Structu	ral wood	sheathing di	rectly applied or 6-0-	-0 oc purlins, except
BOT CHC	RD 2x4 SP	No.2						end ver	ticals.			
WEBS	2x4 SP	No.3				BOT CHOR	RD I	Rigid ce	eiling dire	ectly applied	or 6-0-0 oc bracing.	

REACTIONS. (Ib/size) 2=390/14-5-0, 6=-68/14-5-0, 6=-68/14-5-0, 7=702/14-5-0 Max Horz 2=138(LC 12) Max Uplift2=-109(LC 8), 6=-145(LC 23), 6=-68(LC 1), 7=-212(LC 12) Max Grav 2=390(LC 1), 6=50(LC 24), 7=702(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-307/169

WEBS 3-7=-404/411, 4-7=-337/287

### NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 109 lb uplift at joint 2, 145 lb uplift at joint 6 and 212 lb uplift at joint 7.







Plate OI	sets (X, Y)	[2.0-3-0,0-1-8]		1		1					1	
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.39	Vert(LL)	-0.27	2-8	>548	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.69	Vert(TL)	-0.48	2-8	>311	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.22	Horz(TL)	0.01	7	n/a	n/a		
BCDL	5.0	Code FBC2014/1	PI2007	(Matr	ix)						Weight: 77 lb	FT = 20%
LUMBER	र-	·				BRACING-						
TOPCH	0PD 2v/ SI	2 No 2					חס	Structu	hoow ler	chaothing d	irectly applied or 6-0-	0 oc purline except

TOP CHORD2x4 SP No.2TOP CHORDStructural wood sheathing directly applied or 6-0-0 oc purlins, except<br/>end verticals.BOT CHORD2x4 SP No.2end verticals.WEBS2x4 SP No.3BOT CHORDRigid ceiling directly applied or 8-10-10 oc bracing.

REACTIONS. (lb/size) 2=521/0-5-8, 7=501/0-3-8 Max Horz 2=138(LC 12) Max Uplift2=-147(LC 12), 7=-122(LC 12)

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

 TOP CHORD
 2-3=-592/373

 BOT CHORD
 2-8=-429/493

WEBS 3-8=-368/385, 4-8=-75/415, 4-7=-489/262

#### NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 147 lb uplift at joint 2 and 122 lb uplift at joint 7.







F	7-0-0		12-9-4	12-9-10	19-0-0				
Plate Offsets (X,Y)	[2:0-2-0,Edge], [5:0-3-0,0-2-4]		5-9-4	0-0-0	0-2-0				
LOADING (psf) TCLL 20.0 TCDL 7.0 BCLL 0.0 * BCDL 5.0	SPACING- 2-0-0 Plate Grip DOL 1.25 Lumber DOL 1.25 Rep Stress Incr NO Code FBC2014/TPI2007	<b>CSI.</b> TC 0.86 BC 0.58 WB 0.59 (Matrix)	<b>DEFL.</b> Vert(LL) Vert(TL) - Horz(TL)	in (loc) l/defl 0.19 9-11 >810 0.16 9-11 >970 0.01 9 n/a	L/d 240 180 n/a	PLATES         GRIP           MT20         244/190           Weight: 91 lb         FT = 20%			
LUMBER- TOP CHORD 2x4 SP BOT CHORD 2x4 SP WEBS 2x4 SP	No.2 No.2 No.3		BRACING- TOP CHORD BOT CHORD	Structural wood Rigid ceiling dir	l sheathing directly ectly applied or 6-0	/ applied or 3-9-8 oc purlins. 0-0 oc bracing.			
REACTIONS. (Ib/size Max Ho Max Up Max Go	<ul> <li>2=718/0-5-8, 9=1670/0-5-8, 7=152// prz 2=-47(LC 9)</li> <li>plift2=-452(LC 4), 9=-1431(LC 4), 7=-2</li> <li>rav 2=727(LC 19), 9=1670(LC 1), 7=25</li> </ul>	0-3-0 18(LC 24) 1(LC 17)							
FORCES.         (lb) - Max.           TOP CHORD         2-3=-           5-6=-         5-6=-           BOT CHORD         2-11=           WEBS         5-11=	Comp./Max. Ten All forces 250 (lb) o 1139/913, 3-4=-991/911, 4-12=-891/86 248/411, 6-7=-269/309 814/988, 7-9=-282/264 942/1043, 5-9=-1204/980	r less except when show 4, 12-13=-891/864, 5-13:	n. =-891/864,						
<ul> <li>NOTES- <ol> <li>Unbalanced roof live loads have been considered for this design.</li> <li>Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope); porch right exposed; Lumber DOL=1.60 plate grip DOL=1.60</li> <li>Provide adequate drainage to prevent water ponding.</li> <li>This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.</li> <li>* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.</li> <li>Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 452 lb uplift at joint 2, 1431 lb uplift at joint 9 and 218 lb uplift at joint 7.</li> <li>"Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.</li> <li>"NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails. For more details refer to MiTek's ST-TOENAIL Detail.</li> <li>Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 256 lb down and 311 lb up at 7-0-0 on top chord, and 223 lb down and 257 lb up at 7-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.</li> <li>In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).</li> </ol> </li> </ul>									
1) Dead + Roof Live (b Uniform Loads (plf) Vert: 1-4=-5 Concentrated Loads Vert: 4=-209	ualau alanced): Lumber Increase=1.25, Plate 64, 4-5=-54, 5-8=-54, 2-7=-10 6 (lb) 9(B) 5=-111(B) 10=-24(B) 11=-153(B) 1	Increase=1.25 2=-111(B) 13=-111(B) 14	4=-24(B) 15=-363(B	3=-24)					

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ł	9-0-0		12-9-4		19-0-0		
Plate Offsets (X Y)	<u>9-0-0</u> [2:0-3-0 0-1-8] [5:0-3-0 0-2-4]		3-9-4		6-2-12		
LOADING (psf)           TCLL 20.0           TCDL 7.0           BCLL 0.0 *           BCDL 5.0	SPACING- 2-0-0 Plate Grip DOL 1.25 Lumber DOL 1.25 Rep Stress Incr YES Code FBC2014/TPI2007	CSI. TC 0.38 BC 0.50 WB 0.18 (Matrix)	<b>DEFL.</b> in Vert(LL) 0.10 Vert(TL) -0.30 Horz(TL) 0.01	(loc) l/defl 7-9 >768 2-11 >496 9 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 93 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD 2x4 SI BOT CHORD 2x4 SI WEBS 2x4 SI REACTIONS. (Ib/siz Max H Max L Max C	P No.2 P No.2 P No.3 e) 2=496/0-5-8, 9=686/0-5-8, 7=252/0 forz 2=57(LC 12) Jplift2=-144(LC 12), 9=-199(LC 8), 7=-1 Grav 2=496(LC 1), 9=686(LC 1), 7=284(L	3-0 58(LC 9) C 24)	BRACING- TOP CHORD BOT CHORD	Structural wooc Rigid ceiling dir	d sheathing directl ectly applied or 6-	ly applied or 6-0- -0-0 oc bracing.	0 oc purlins.
FORCES.(lb) - MaxTOP CHORD2-3=BOT CHORD2-11WEBS3-11	. Comp./Max. Ten All forces 250 (lb) c 559/342, 3-4=-259/150 =-179/465 =-297/300, 5-11=-123/292, 5-9=-417/93	r less except when shown. , 6-9=-299/327					
NOTES- 1) Unbalanced roof liv 2) Wind: ASCE 7-10;	/e loads have been considered for this d Vult=130mph (3-second gust) Vasd=10	esign. Imph; TCDL=4.2psf; BCDI	_=3.0psf; h=18ft; Cat. I	I; Exp C; Encl.,	GCpi=0.18;		

MWFRS (envelope) and C-C Exterior(2) zone; porch right exposed;C-C for members and forces & MWFRS for reactions shown;

Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.

4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 144 lb uplift at joint 2, 199 lb uplift at joint 9 and 168 lb uplift at joint 7.









	<b> </b>	6-2-12				<u>12-9-4</u> 6-6-8				<u>19-0-0</u> 6-2-12	)	
Plate Offsets (X	,Y) [2:0-3-0,0-	1-8], [6:0-3-0,0-	-1-8]									
LOADING (psf) TCLL 20.0 TCDL 7.0 BCLL 0.0 BCDL 5.0	* Rep Coo	ACING- te Grip DOL nber DOL o Stress Incr de FBC2014/TF	2-0-0 1.25 1.25 YES Pl2007	<b>CSI.</b> TC BC WB (Matri	0.38 0.33 0.28 (x)	<b>DEFL.</b> Vert(LL) Vert(TL) Horz(TL)	in 0.09 0.08 0.01	(loc) 6-8 6-8 8	l/defl >779 >895 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 87 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3						BRACING- TOP CHOR BOT CHOR		Structu Rigid ce	ral wood eiling dire	sheathing direct ectly applied or 6	ly applied or 6-0- -0-0 oc bracing.	0 oc purlins.
REACTIONS. ( M	lb/size) 2=495/ Max Horz 2=-60(I Max Uplift2=-147 Max Grav 2=495(	′0-5-8, 8=690/0 LC 13) ′(LC 12), 8=-18 ′(LC 1), 8=690(L	-5-8, 6=249/0- 3(LC 8), 6=-17 .C 1), 6=282(L	3-0 74(LC 9) .C 24)								
FORCES. (lb) - TOP CHORD BOT CHORD WEBS	- Max. Comp./Ma 2-3=-567/320, 3 2-10=-157/469 4-10=-175/337,	ax. Ten All for 3-4=-435/305 4-8=-522/261,	rces 250 (lb) or 5-8=-254/277	r less excep	t when shown							

### NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 147 lb uplift at joint 2, 183 lb uplift at joint 8 and 174 lb uplift at joint 6.

6) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

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 a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall
 building designer. 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.





5 3 6 [4 T ø 7 Ŕ Ŕ 10 9 3x4 ≈ 3x4 ⋍ _ 8 3x4 = 3x6 _{3x4} =

	F	<u>8-2-12</u> 8-2-12		2-6-8				<u>19-0-0</u> 8-2-12		
Plate Offsets (X	(,Y) [2	2:0-3-0,0-1-8], [6:0-3-0,0-1-8]								
LOADING (psf) TCLL 20.0 TCDL 7.0 BCLL 0.0 BCDL 5.0	*	SPACING-2-0-0Plate Grip DOL1.25Lumber DOL1.25Rep Stress IncrYESCode FBC2014/TPI2007	<b>CSI.</b> TC 0.38 BC 0.55 WB 0.20 (Matrix)	DEFL. Vert(LL) Vert(TL) Horz(TL)	in 0.23 0.18 0.00	(loc) 6-8 6-8 8	l/defl >418 >536 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 88 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD 2 BOT CHORD 2 WEBS 2	2x4 SP 2x4 SP 2x4 SP 2x4 SP	No.2 No.2 No.3		BRACING- TOP CHOR BOT CHOR	.DS DR	tructu ligid ce	ral wood eiling dire	sheathing di ectly applied	rectly applied or 6-0- or 6-0-0 oc bracing.	0 oc purlins.
REACTIONS. ( I I	) 2=403/0-5-8, 8=731/0-5-8, 6=300/0 rz 2=-60(LC 17) lift2=-124(LC 12), 8=-228(LC 8), 6=-1 av 2=420(LC 23), 8=731(LC 1), 6=333									
FORCES. (Ib) TOP CHORD BOT CHORD WEBS	- Max. ( 2-3=-3 2-10= 3-10=	Comp./Max. Ten All forces 250 (lb) ( 373/164, 4-5=-63/276 -96/294 -292/294, 4-8=-534/183, 5-8=-308/349	'n.							

# NOTES-

1-3-9

0-4-1

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; porch right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 124 lb uplift at joint 2, 228 lb uplift at joint 8 and 194 lb uplift at joint 6.

6) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

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 a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall
 building designer. 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.




Max Uplift 2=-151(LC 12), 6=-69(LC 13), 7=-58(LC 3)

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

TOP CHORD 2-3=-734/452, 3-4=-428/247, 4-5=-427/241, 5-6=-404/258

BOT CHORD 2-8=-456/624

WEBS 3-8=-317/326, 5-8=-144/352

#### NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 151 lb uplift at joint 2, 69 lb uplift at joint 6 and 58 lb uplift at joint 7.

6) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.





fit between the bottom chord and any other members. 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 199 lb uplift at joint 7 and 348 lb uplift at joint 2.

7) Load case(s) 27 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.

8) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

9) 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 Except:

- 1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
- Uniform Loads (plf) Vert: 1-4=-54, 4-5=-54, 5-6=-54, 2-8=-85, 7-8=-10

27) User defined: Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-4=-54(F), 4-5=-54(F), 5-6=-54(F), 2-8=-85(F=-10), 7-8=-10(F)





	5-1-5		7-6-3			<u>12-7</u> 5-1-	/- <u>8</u>			
Plate Offsets (X,Y) [8:0-3-8,0-1-8] [9:0-3-8,0-1-8]										
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 FBC2014/TPI2007	<b>CSI.</b> TC 0.61 BC 0.70 WB 0.60 (Matrix)	DEFL. Vert(LL) -0 Vert(TL) -0 Horz(TL) 0	in ( ).14 9 ).23 9 ).04	(loc) l/defl 9-10 >999 9-10 >657 7 n/a	L/d 240 180 n/a	<b>PLATES</b> MT20 Weight: 119 lb	<b>GRIP</b> 244/190 FT = 20%		
LUMBER- TOP CHORD 2x4 SP BOT CHORD 2x4 SP WEBS 2x4 SP 2-10,2- REACTIONS. (lb/size	BRACING- TOP CHORD BOT CHORD	St er Ri	Structural wood sheathing directly applied or 5-0-6 oc purlins, except end verticals. Rigid ceiling directly applied or 9-11-12 oc bracing.							
Max Uplift 10=-558(LC 8), 7=-383(LC 8)         FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown.         TOP CHORD       2-12=-7332/2851, 3-13=-7332/2851, 4-13=-7332/2851, 4-13=-7332/2851, 4-14=-7332/2851, 5-14=-7332/2851         BOT CHORD       9-10=-2041/5191, 8-9=-2851/7332, 7-8=-1434/3632         WEBS       2-10=-5772/2277, 2-9=-926/2448, 3-9=-1537/624, 4-8=-1691/684, 5-8=-1621/4229, 5-7-4109(4626)										
<ul> <li>NOTES-</li> <li>1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc. Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.</li> <li>Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.</li> <li>2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.</li> <li>3) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces &amp; MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60</li> <li>4) Provide adequate drainage to prevent water ponding.</li> <li>5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.</li> </ul>										
<ul> <li>6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.</li> <li>7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 558 lb uplift at joint 10 and 383 lb uplift at joint 7.</li> <li>8) Load case(s) 23, 24 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.</li> </ul>										
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 237 lb down and 92 lb up at 2-0-0, 1309 lb down and 511 lb up at 4-0-0, and 1140 lb down and 445 lb up at 6-0-0, and 299 lb down and 117 lb up at 8-0-0 on top chord.										

# 1309 lb down and 511 lb up at 4-0-0, and 1140 lb down and 445 lb up at 6-0-0, and 299 lb down and 117 lb up at 8-0-0 on to The design/selection of such connection device(s) is the responsibility of others.

# LOAD CASE(S) Standard Except:



Job	Truss	Truss Type	Qty	Ply	
1024906	TFG01	Flat Girder	1	2	T11146782
				<b></b>	Job Reference (optional)
Builders FirstSource, Jac	ksonville, FI 32244			7.6	640 s Apr 19 2016 MiTek Industries, Inc. Tue May 16 16:31:26 2017 Page 2
		ID:	6uMeWvm	nqVeEx7f0	GjqSaDTzVmxC-jziJ8wtteLOaU_FJKq9T2nkydJ1d?M801FHmcGzFtvV

LOAD CASE(S) Standard Except:

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

Vert: 1-14=-224, 6-14=-100, 7-10=-10

Concentrated Loads (lb)

Vert: 11=-237 12=-1309 13=-1140 14=-299 23) User defined: Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 1-14=-224(F=-100), 6-14=-100(F), 7-10=-10(F) Concentrated Loads (lb)

Vert: 11=-237 12=-1309 13=-1140 14=-299

24) User defined: Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf) Vert: 1-14=-224(F=-100), 6-14=-100(F), 7-10=-10(F) Concentrated Loads (lb)

Vert: 11=-237 12=-1309 13=-1140 14=-299







				<u>2-2-0</u> 2-2-0		-			
LOADIN TCLL TCDL BCLL	<b>G</b> (psf) 40.0 10.0 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.00 Lumber DOL 1.00 Rep Stress Incr NO	CSI. TC 0.52 BC 0.02 WB 0.00	<b>DEFL.</b> Vert(LL) -0.0 Vert(TL) -0.0 Horz(TL) -0.0	in (loc) 0 4 0 4 0 3	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20	<b>GRIP</b> 244/190
BCDL	5.0	Code FBC2014/TPI2007	(Matrix)					Weight: 25 lb	FT = 20%

# LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3 BRACING-TOP CHORD

Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.

Scale = 1:11.4

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

**REACTIONS.** (lb/size) 4=413/0-3-8, 3=1051/Mechanical Max Uplift4=-73(LC 4), 3=-186(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-4=-403/79, 2-3=-1042/192

#### NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.

Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.

Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.

2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply

connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.

 Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60

4) Provide adequate drainage to prevent water ponding.

5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

7) Refer to girder(s) for truss to truss connections.

Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 73 lb uplift at joint 4 and 186 lb uplift at joint 3.

9) Load case(s) 19, 20 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.

10) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1025 lb down and 181 lb up at 1-8-0 on top chord. The design/selection of such connection device(s) is the responsibility of others.

# LOAD CASE(S) Standard Except:

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

Uniform Loads (plf) Vert: 1-2=-224, 3-4=-10 Concentrated Loads (lb) Vert: 5=-1025

19) User defined: Lumber Increase=1.00, Plate Increase=1.00



Job	Truss	Truss Type	Qty	Ply	
					T11146783
1024906	TFG02	Flat Girder	1	2	Inh Deference (antional)
					JOD Reference (optional)
Builders FirstSource, Jacks	onville, FI 32244	•		7.6	40 s Apr 19 2016 MiTek Industries, Inc. Tue May 16 16:31:26 2017 Page 2

ID:6uMeWvmqVeEx7fGGjqSaDTzVmxC-jziJ8wtteLOaU_FJKq9T2nkz8JBF?VS01FHmcGzFtvV

LOAD CASE(S)

Uniform Loads (plf) Vert: 1-2=-224(F=-100), 3-4=-10(F) Concentrated Loads (lb) Vert: 5=-1025 20) User defined: Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf) Vert: 1-2=-224(F=-100), 3-4=-10(F) Concentrated Loads (lb) Vert: 5=-1025





		5-10-8 5-10-8		1	<u>11-1-12</u> 5-3-4	2		<u>13-1-12</u> 2-0-0	2		<u>18-6-12</u> <u>5-5-0</u>	
LOADIN TCLL TCDL	I <b>G</b> (psf) 40.0 10.0	<b>SPACING-</b> Plate Grip DOL Lumber DOL	2-0-0 1.00 1.00	CSI. TC BC	0.41 0.31	DEFL. Vert(LL) Vert(TL)	in -0.06 -0.11	(loc) 9 9	l/defl >999 >999	L/d 240 180	PLATES MT20	<b>GRIP</b> 244/190
BCLL BCDL	0.0 * 5.0	Rep Stress Incr Code FBC2014/TPI	NO 2007	WB (Matr	0.62 ix)	Horz(TL)	-0.00	11	n/a	n/a	Weight: 202 lb	FT = 20%

# LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x6 SP No.2

WEBS 2x6 SP No.2 WEBS 2x4 SP No.3 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. (lb/size) 13=176/Mechanical, 8=730/0-5-8, 11=1520/0-3-8 Max Uplift 13=-23(LC 4), 8=-107(LC 4), 11=-225(LC 4) Max Grav 13=252(LC 2), 8=937(LC 2), 11=1924(LC 2)

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

 TOP CHORD
 2-3=-101/753, 3-4=-1788/213, 4-5=-1788/213, 5-6=-1788/213, 6-7=-1788/213,

- 7-8=-616/110
- BOT CHORD 11-17=-753/101, 17-18=-753/101, 18-19=-753/101, 10-19=-753/101, 10-20=-213/1788, 9-20=-213/1788
- WEBS 2-13=0/296, 2-11=-633/124, 3-11=-1043/201, 3-10=-324/2621, 5-10=-362/90, 6-9=-353/96, 7-9=-186/1614

#### NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc. Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc. Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.

2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.

 Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60

4) Provide adequate drainage to prevent water ponding.

5) na

- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 23 lb uplift at joint 13, 107 lb uplift at joint 8 and 225 lb uplift at joint 11.
- 10) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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 designer. This design in to the overall
 building designer must verify the applicability of design parameters and properly incorporate this design into the overall
 building designer. Strategies and property damage. For general guidance regarding the
 fabrication, storage, delivery, erection and bracing of trusses and truss systems, see
 MSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component
 Safety Information
 available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Job	Truss	Truss Type	Qty	Ply	
1024906	TFG03	Flat Girder	1	<b>_</b>	T11146784
				<b></b>	Job Reference (optional)
Builders FirstSource, Ja	cksonville, FI 32244			7.6	640 s Apr 19 2016 MiTek Industries, Inc. Tue May 16 16:31:27 2017 Page 2
		ID:6u	MeWvmg	/eEx7fGG	jgSaDTzVmxC-B9GhLGuVPeWR68pVuYhia GAYjSvkpzAGv0J8izFtvU

# NOTES-

11) Use Simpson Strong-Tie LUS46 (4-10d Girder, 4-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 0-6-8 from the left end to 17-10-8 to connect truss(es) to back face of bottom chord.

12) Fill all nail holes where hanger is in contact with lumber.

### LOAD CASE(S) Standard

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

Uniform Loads (plf) Vert: 1-7=-100, 8-13=-10

Concentrated Loads (lb)

Vert: 14=-45(B) 15=-42(B) 16=-42(B) 17=-42(B) 18=-40(B) 19=-40(B) 20=-40(B) 21=-40(B) 22=-40(B) 23=-44(B)



