

RE: 0519-2534 Kent A&B Trenco 818 Soundside Rd Edenton, NC 27932

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

Design Code: IRC2015/TPI2014 Wind Code: ASCE 7-10 Roof Load: 40.0 psf Design Program: MiTek 20/20 8.1 Wind Speed: 130 mph Floor Load: N/A psf

This package includes 15 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date
1	E12697036	a01	2/13/2019
2	E12697037	a02	2/13/2019
3	E12697038	a03	2/13/2019
4	E12697039	a04	2/13/2019
5	E12697040	a05	2/13/2019
6	E12697041	b01	2/13/2019
7	E12697042	b02	2/13/2019
8	E12697043	b03	2/13/2019
9	E12697044	c01	2/13/2019
10	E12697045	m01	2/13/2019
11	E12697046	m02	2/13/2019
12	E12697047	m03	2/13/2019
13	E12697048	m04	2/13/2019
14	E12697049	p01	2/13/2019
15	E12697050	p02	2/13/2019

The truss drawing(s) referenced above have been prepared by

Truss Engineering Co. under my direct supervision

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

Truss Design Engineer's Name: Gilbert, Eric

My license renewal date for the state of North Carolina is December 31, 2019

North Carolina COA: C-0844

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





Plate Offsets (X,Y)	[8:0-2-0,Edge]					
LOADING         (psf)           TCLL         20.0           TCDL         10.0           BCLL         0.0 *           BCDL         10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2015/TPI2014	CSI. TC 0.12 BC 0.04 WB 0.14 Matrix-S	DEFL.         ir           Vert(LL)         0.00           Vert(CT)         0.00           Horz(CT)         0.00	n (loc) l/defl L/d 1 n/r 120 1 n/r 120 14 n/a n/a	PLATES GRIP MT20 244/1 Weight: 127 lb FT =	90 = 20%
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x4 SF WEBS 2x4 SF	No.1 No.1 No.3		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing dir except end verticals. Rigid ceiling directly applied o	ectly applied or 6-0-0 oc purlir or 10-0-0 oc bracing.	ns,

### REACTIONS. All bearings 20-8-0.

(lb) - Max Horz 2=223(LC 7)

2x4 SP No.3

Max Uplift All uplift 100 lb or less at joint(s) 2, 20, 22, 23, 16 except 21=-112(LC 10), 24=-106(LC 10), 17=-134(LC 11), 15=-141(LC 11)

Max Grav All reactions 250 lb or less at joint(s) 14, 2, 21, 22, 23, 24, 18, 17, 16, 15 except 20=286(LC 17)

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

## NOTES-

OTHERS

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

 Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 3-6-5, Exterior(2) 3-6-5 to 7-2-10, Corner(3) 7-2-10 to 11-7-6 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 3) 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.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 20, 22, 23, 16 except (jt=lb) 21=112, 24=106, 17=134, 15=141.



818 Soundside Road Edenton, NC 27932

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 property 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 buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSUTPTI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



	6-11-5 6-11-5		<u>13-7-3</u> 6-7-14			20-8-0		
LOADING         (psf)           TCLL         20.0           TCDL         10.0           BCLL         0.0           BCDL         10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2015/TPI2014	<b>CSI.</b> TC 0.70 BC 0.39 WB 0.26 Matrix-S	DEFL. i Vert(LL) -0.1: Vert(CT) -0.1: Horz(CT) 0.0: Wind(LL) 0.0:	n (loc 2 8-1) 5 8-1) 2 3 2-1)	) l/defl ) >999 ) >999 7 n/a ) >999	L/d 360 240 n/a 240	PLATES MT20 Weight: 119 lb	<b>GRIP</b> 244/190 FT = 20%

#### LUMBER-

TOP CHORD	2x4 SP No.1 *Except* 4-5: 2x6 SP No.1
BOT CHORD	2x4 SP No.1
WEBS	2x4 SP No.3

#### BRACING-TOP CHORD

TOP CHORD Structural wood sheathing directly applied or 5-3-9 oc purlins, except end verticals. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=875/0-5-8, 7=810/0-5-8 Max Horz 2=180(LC 7) Max Uplift 2=-83(LC 10), 7=-52(LC 11)

Max Grav 2=923(LC 17), 7=840(LC 18)

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

- TOP CHORD 2-3=-1284/304, 3-4=-1228/410, 4-5=-906/229, 5-7=-781/244
- BOT CHORD 2-10=-219/1114, 8-10=-66/660

WEBS 3-10=-365/224, 4-10=-181/691, 5-8=0/614

#### NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 7-2-10, Exterior(2) 7-2-10 to 11-7-6 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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 7.

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Job		Truss	Truss Type	Qty	Ply	Kent A&B
						E1269703
0519-2	2534	A03	Common Girder	1	2	
					<b>–</b>	Job Reference (optional)
Com	tech, Inc., Faye	tteville, NC 28309		8	.130 s Ma	11 2018 MiTek Industries, Inc. Tue Feb 12 15:58:47 2019 Page 2
			I	D:LZVQAW1	Ef0Va58b	vNJXqTOyYrsN-jY2f4cuoYS9tzLSbzz1LzywYiboNvAq0C?dZgtzlqjc

LOAD CASE(S) Standard

Concentrated Loads (lb) Vert: 8=-7289(F=-7189, B=-100)

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Plate Offsets (X,Y)	[2:0-1-14,0-1-8]				
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2015/TPI2014	CSI. TC 0.63 BC 0.63 WB 0.28 Matrix-S	DEFL. in Vert(LL) -0.30 Vert(CT) -0.39 Horz(CT) 0.02 Wind(LL) -0.03	(loc) l/defl L/d 7-9 >700 360 7-9 >538 240 7 n/a n/a 2-9 >999 240	PLATES         GRIP           MT20         244/190           Weight: 97 lb         FT = 20%
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x4 SF WEBS 2x4 SF 5-7: 2x	P No.1 P No.1 P No.3 *Except* 4 SP No.2		BRACING- TOP CHORD BOT CHORD WEBS	Structural wood sheathing dir except end verticals. Rigid ceiling directly applied of 1 Row at midpt 4	rectly applied or 5-10-13 oc purlins, or 10-0-0 oc bracing. I-7
REACTIONS. (Ib/siz Max H	e) 7=710/Mechanical, 2=775/0-5-8 lorz 2=180(LC 7)				

Max Uplift 7=-53(LC 10), 2=-71(LC 10)

Max Grav 7=838(LC 17), 2=799(LC 17)

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

- TOP CHORD 2-3=-1038/250, 3-4=-834/255, 5-7=-269/160
- BOT CHORD 2-9=-248/902, 7-9=-77/475

WEBS 3-9=-382/225, 4-9=-76/642, 4-7=-600/97

#### NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 7-2-10, Exterior(2) 7-2-10 to 11-7-6 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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.

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

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 2.



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LOADING(psTCLL20.TCDL10.BCLL0.BCDL10.	sf) .0 .0 * .0 *	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2015/TP	2-0-0 1.15 1.15 YES Pl2014	<b>CSI.</b> TC BC WB Matrix	0.04 0.03 0.17 <-S	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.00 -0.00 0.01	(loc) 1 1 12	l/defl n/r n/r n/a	L/d 120 120 n/a	PLATES MT20 Weight: 117 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD	2x4 SP No.	1			·	BRACING- TOP CHOR	D	Structur	al wood s	sheathing dir	ectly applied or 6-0-0	oc purlins,
WEBS	2x4 SP No.3	3				BOT CHOR	D	Rigid ce	eilina dire	ais. ctlv applied o	or 10-0-0 oc bracing.	

TOP CHORD	2x4 SP No.1
BOT CHORD	2x4 SP No.1
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3

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

REACTIONS. All bearings 18-2-0.

(lb) - Max Horz 2=253(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 12, 14, 13, 18, 19, 20, 21, 22, 23, 16, 15, 2

Max Grav All reactions 250 lb or less at joint(s) 12, 14, 13, 19, 20, 21, 22, 23, 16, 15, 2 except 18=273(LC 20)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 2-3=-255/208

#### NOTES-

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

- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 3-7-6, Exterior(2) 3-7-6 to 7-2-10, Corner(3) 7-2-10 to 11-7-6, Exterior(2) 16-0-3 to 18-2-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 14, 13, 18, 19, 20, 21, 22, 23, 16, 15, 2.



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Job	Truss	Truss Type	Qty	Ply	Kent A&B		E12697042
0519-2534	B02	COMMON	2	1			E 12007 042
Comtech, Inc., Faye	LURINC 28309	4-1-0         5-2-4         10-1-0           4-1-0         1-1-4         4-10-12	8.3 ID:LZVQAWTEf0V4584 14-11-12 4-10-12	130 s Mar bvNJXqTC <u>16-1-0</u> 1-1-4	Job Reference (optional) 11 2018 MiTek Industries, I )yYrsN-3Vs7KywN_n936L <u>20-2-0 21-0-8</u> 4-1-0 0-10-8	Inc. Tue Feb 12 15 ZmWdWg?dMBcX`	58:52 2019 Page 1 YaV5IMGKKL4zlqjX
	1138 1138 1138	$2x4 =$ $12.00 \overline{12} \qquad 3$ $2x4    \qquad 13$ $2x4    \qquad 12$ $2 \qquad 14$ $12$ $2 \qquad 14$ $12$ $2 \qquad 14$	4 2x4 5 12-0-0	$=$ $\frac{14}{9}$ $=$ $\frac{9}{2x6}$	$2x4    6 \\ 6 \\ 8x8 = \\   $		
Plate Offsets (X,Y) [1	:Edge,0-3-8], [1:0-4-3,0-0-8], [1	4-1-0         6-9-13           4-1-0         2-8-13           :0-0-4,0-0-4], [4:0-3-0,Edge], [7:0]	13-4-3 16 6-6-5 2-1 0-0-4,0-0-4], [7:0-4-3,0-0-	6-1-0 8-13 -8], [7:Edç	20-2-0 4-1-0 ge,0-3-8]		
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2015/TPI2014	CSI. TC 0.48 BC 0.42 WB 0.44 Matrix-S	DEFL.         in           Vert(LL)         -0.23           Vert(CT)         -0.38           Horz(CT)         0.01           Wind(LL)         0.10	(loc) 9-11 9-11 7 9-11	l/defi L/d >999 360 >631 240 n/a n/a >999 240	PLATES MT20 Weight: 155 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD 2x6 SP M BOT CHORD 2x8 SP M WEBS 2x4 SP M WEDGE Left: 2x6 SP No.1, Right:	No.1 No.1 No.3 2x6 SP No.1		BRACING- TOP CHORD BOT CHORD	Structura Rigid cei	al wood sheathing directly ling directly applied or 10	applied or 6-0-0 c -0-0 oc bracing.	oc purlins.
REACTIONS. (Ib/size) Max Hot Max Up Max Gra	1=790/0-5-8, 7=847/0-3-8 rz 1=-259(LC 6) lift 1=-50(LC 11), 7=-54(LC 11) av 1=904(LC 18), 7=941(LC 18						
FORCES.         (lb) - Max. C           TOP CHORD         1-2=-1:           BOT CHORD         1-11=-:           WEBS         2-11=-:	omp./Max. Ten All forces 250 236/167, 2-3=-673/284, 5-6=-67 23/660, 9-11=-22/662, 7-9=-22/ 32/578, 6-9=-29/591, 3-5=-818/	(lb) or less except when shown. 0/284, 6-7=-1245/185 660 413					
NOTES- 1) Unbalanced roof live I 2) Wind: ASCE 7-10; Vu MWFRS (envelope) a 16-2-15 zone;C-C for 3) This truss has been d 4) * This truss has been between the bottom c 5) Provide mechanical co	oads have been considered for It=130mph (3-second gust) Vas nd C-C Exterior(2) 0-2-12 to 4-7 members and forces & MWFRS esigned for a 10.0 psf bottom cl designed for a live load of 20.0 hord and any other members, w ponnection (by others) of truss to	this design. d=103mph; TCDL=6.0psf; BCDL -9, Interior(1) 4-7-9 to 5-8-3, Ext for reactions shown; Lumber Do ord live load nonconcurrent with sf on the bottom chord in all are ith BCDL = 10.0psf. bearing plate capable of withsta	.=5.0psf; h=15ft; Cat. II; E erior(2) 5-8-3 to 10-1-0, I OL=1.60 plate grip DOL= n any other live loads. as with a clearance great Inding 100 lb uplift at joint	Exp C; en nterior(1) 1.60 ter than 6 t(s) 1, 7.	closed; 14-5-13 to -0-0	PUPPINI PUPPINI	CARO













L		7-0-0		13-0-0			20-0-0			
Г		7-0-0	I	6-0-0		1		7-0-0		
Plate Offse	ets (X,Y)	[7:Edge,0-4-12], [8:0-8-0,0-1-8], [10:	-8-0,0-1-8], [11:Edge,0-4-1	2]						
LOADING	(psf)	<b>SPACING-</b> 2-0-0	CSI.	DEFL.	in (le	oc) l/defl	L/d	PLATES	GRIP	
TCLL	20.0	Plate Grip DOL 1.15	TC 0.46	Vert(LL) -0.	13 8-	-10 >999	360	MT20	244/190	
TCDL	10.0	Lumber DOL 1.15	BC 0.48	Vert(CT) -0.	25 8-	-10 >944	240	M18SHS	244/190	
BCLL	0.0 *	Rep Stress Incr NO	WB 0.74	Horz(CT) 0.	05	7 n/a	n/a			
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.	11	10 >999	240	Weight: 334 lb	FT = 20%	
LUMBER-				BRACING-				·		
TOP CHO BOT CHO	RD 2x6 SF RD 2x10 S	P 2400F 2.0E SP 2400F 2.0E		TOP CHORD	Str	ructural wood	sheathing d	irectly applied or 5-11-6	oc purlins,	
WEBS	2x4 SF	P No.2 *Except*		BOT CHORD	Ric	aid ceiling dir	ectly applied	or 10-0-0 oc bracing.		
	1-11.6	-7: 2x6 SP No.1. 4-10.4-8: 2x4 SP No.	.3	WEBS	T-È	Brace:	2 11 22	2x6 SPF No.2 - 2-11. 5-	-7	
	, -	,,			Fa	sten (2X) Ta	and I braces	to narrow edge of web	with 10d	
					(0.	.131"x3") nail	s. 6in o.cwit	th 3in minimum end dist	ance.	

Brace must cover 90% of web length.

REACTIONS. (lb/size) 11=7209/Mechanical, 7=6604/0-3-8 Max Uplift 11=-1520(LC 4), 7=-1322(LC 4)

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

- TOP CHORD 1-11=-316/81, 1-2=-664/143, 2-4=-13118/2555, 4-5=-12986/2505, 5-6=-623/130, 6-7=-311/80
- BOT CHORD
   10-11=-1925/9700, 8-10=-2611/13303, 7-8=-1887/9597

   WEBS
   2-11=-10078/1986, 2-10=-1035/5616, 4-10=-263/71, 4-8=-455/135, 5-8=-1016/5567, 5-7=-10004/1957

#### NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc. Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-6-0 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=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60

- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are MT20 plates unless otherwise indicated.
- 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 with a clearance greater than 6-0-0 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 100 lb uplift at joint(s) except (jt=lb) 11=1520, 7=1322.
- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 587 lb down and 213 lb up at 0-10-12, 789 lb down and 73 lb up at 1-11-4, 583 lb down and 216 lb up at 2-3-12, 789 lb down and 73 lb up at 3-11-4, 583 lb down and 216 lb up at 4-3-12, 1560 lb down and 543 lb up at 5-9-12, 789 lb down and 73 lb up at 5-11-4, 789 lb down and 73 lb up at 7-11-4, 789 lb down and 73 lb up at 1-11-4, 789 lb down and 73 lb up at 1-11-4, 789 lb down and 73 lb up at 13-11-4, 789 lb down and 73 lb up at 13-11-4, 789 lb down and 73 lb up at 13-11-4, 789 lb down and 73 lb up at 13-11-4, 789 lb down and 73 lb up at 13-11-4, 789 lb down and 73 lb up at 13-11-4, 789 lb down and 73 lb up at 13-11-4, 789 lb down and 73 lb up at 13-11-4, 789 lb down and 73 lb up at 13-11-4, and 583 lb down and 216 lb up at 17-11-4, and 789 lb down and 73 lb up at 17-11-4, and 583 lb down and 73 lb up at 17-11-4, and 583 lb down and 73 lb up at 17-11-4, and 583 lb down and 73 lb up at 17-11-4, and 583 lb down and 73 lb up at 17-11-4, and 583 lb down and 73 lb up at 17-11-4, and 583 lb down and 73 lb up at 17-11-4, and 583 lb down and 73 lb up at 17-11-4, and 583 lb down and 73 lb up at 17-11-4, and 583 lb down and 73 lb up at 17-11-4, and 583 lb down and 216 lb up at 17-11-4, and 583 lb down and 73 lb up at 17-11-4, and 583 lb down and 583 lb down and 583 lb up at 17-11-4, and 583 lb down and 583 lb down and 583 lb up at 17-11-4, and 583 lb down and 583 lb up at 17-11-4, and 583 lb down and 583 lb up at 17-11-4, and 583 lb down and 583 lb up at 17-11-4, and 583 lb up at 17-
- Control Wedrow Date: 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 **ANS/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	Kent A&B	
						E12697044
0519-2534	C01	Flat Girder	1	ົ		
				<b>_</b>	Job Reference (optional)	
Comtech. Inc., Favettev	rille. NC 28309		8.1	130 s Mar	11 2018 MiTek Industries, Inc. Tue Feb 12 15:58:55 2019	Page 2

NOTES-

ID:LZVQAWTEf0Va58bvNJXqTOyYrsN-U4XgmM\_pgvAkwa47ReBDIeFtgqXBnnAC2EZ\_yPzIqjU

11) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

#### ri) Waining. /

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-6=-60, 7-11=-20 Concentrated Loads (lb)

Vert: 12=-587(B) 13=-690(F) 14=-583(B) 15=-690(F) 16=-583(B) 17=-2250(F=-690, B=-1560) 18=-690(F) 19=-690(F) 20=-690(F) 21=-2250(F=-690, B=-1560) 22=-1273(F=-690, B=-583) 23=-1273(F=-690, B=-583)

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 safe 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.







Edenton, NC 27932



		1	
LOADING (psf)	<b>SPACING-</b> 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.61	Vert(LL) -0.12 11-12 >999 360 MT20 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.47	Vert(CT) -0.27 11-12 >762 240
BCLL 0.0 *	Rep Stress Incr YES	WB 0.96	Horz(CT) 0.06 10 n/a n/a
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.13 11-12 >999 240 Weight: 119 lb FT = 20%
LUMBER-			BRACING-

BOT CHORD

WEBS

except end verticals.

1 Row at midpt

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

5-11

#### TOP CHORD 2x4 SP No.1 BOT CHORD 2x4 SP No.1

WEBS 2x4 SP No.3

(lb/size) 10=603/Mechanical, 2=100/0-3-0, 14=1222/0-5-8 REACTIONS. Max Horz 14=405(LC 10) Max Uplift 10=-196(LC 10), 2=-130(LC 6), 14=-127(LC 10) Max Grav 10=651(LC 17), 2=100(LC 1), 14=1222(LC 1)

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

TOP CHORD 2-3=-480/994, 3-5=-1820/427, 5-6=-1023/276

BOT CHORD 2-14=-950/500, 12-14=-769/25, 11-12=-812/2103, 10-11=-338/823 WEBS

3-14=-673/249, 3-12=-718/2426, 5-12=-372/245, 5-11=-921/334, 6-11=-249/871, 6-10=-1147/472

# NOTES-

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 19-2-3, Exterior(2) 19-2-3 to 23-7-0 zone; cantilever 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 with a clearance greater than 6-0-0 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 196 lb uplift at joint 10, 130 lb uplift at joint 2 and 127 lb uplift at joint 14.

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🔺 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 **ANS/TPTI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.





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

#### Continued on page

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GI

minum February 13,2019

Job	Truss	Truss Type	Qty	Ply	Kent A&B	
						E12697047
0519-2534	M03	COMMON	2	1		
					Job Reference (optional)	
Comtech, Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Tue Feb 12 15:58:58 2019 Page 2						

8.130 s Mar 11 2018 MiTek Industries, Inc. Tue Feb 12 15:58:58 2019 Page 2 ID:LZVQAWTEf0Va58bvNJXqTOyYrsN-ufDpON1hyqYJn1oi7nkwwGtHJ1To\_6\_ekCneZkzlqjR

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)

Vert: 1-3=-150, 3-8=-150, 8-9=-50, 2-16=-50, 12-16=-50, 10-12=-50

Concentrated Loads (lb) Vert: 15=-1500(F)

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	IVI P	<u></u>	R-

TOP CHORD	2x4 SP No.1
BOT CHORD	2x4 SP No.1
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) 6=87/Mechanical, 2=292/0-3-0, 7=455/0-5-8 Max Horz 2=129(LC 10) Max Uplift 6=-38(LC 10), 2=-122(LC 6), 7=-116(LC 6)

Max Grav 6=128(LC 17), 2=292(LC 1), 7=455(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. WEBS 3-7=-331/207

NOTES-

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 6-6-10, Exterior(2) 6-6-10 to 10-0-0 zone; porch 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 with a clearance greater than 6-0-0 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 38 lb uplift at joint 6, 122 lb uplift at joint 2 and 116 lb uplift at joint 7.



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			12-0-0						
Plate Offsets (X,Y)	[2:0-3-0,Edge], [6:0-3-0,Edge]		12-0-0						
LOADING (psf)	<b>SPACING-</b> 2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.37	Vert(LL)	-0.05	6-8	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.41	Vert(CT)	-0.09	6-8	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.12	Horz(CT)	-0.02	6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL)	0.10	6-8	>999	240	Weight: 44 lb	FT = 20%
LUMBER-	-		BRACING-						

TOP CHORD

BOT CHORD

9

2x4 ||

8

2x4 ||

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

Rigid ceiling directly applied or 5-5-1 oc bracing.

#### LUMBER-

0-4-1-

2x4 SP No.1 TOP CHORD 2x4 SP No.1 BOT CHORD 2x4 SP No.3 OTHERS

3x6

#### REACTIONS. (lb/size) 2=500/0-3-8, 6=500/0-3-8 Max Horz 2=43(LC 14) Max Uplift 2=-278(LC 6), 6=-278(LC 7)

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

TOP CHORD 2-3=-889/1280, 3-4=-841/1325, 4-5=-841/1325, 5-6=-889/1280

BOT CHORD 2-10=-1123/797, 9-10=-1123/797, 8-9=-1123/797, 6-8=-1123/797

WEBS 4-9=-498/295

#### NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 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

10

2x4 ||

3) 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.

4) Gable studs spaced at 2-0-0 oc.

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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 278 lb uplift at joint 2 and 278 lb uplift at ioint 6.



0-4-1

3x6

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<u> </u>			+ 12-0-0 6-0-0				
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2015/TPI2014	CSI. TC 0.38 BC 0.30 WB 0.11 Matrix-S	DEFL.         in           Vert(LL)         -0.03           Vert(CT)         -0.07           Horz(CT)         0.01           Wind(LL)         0.03	(loc) l/defl 2-6 >999 2-6 >999 4 n/a 2-6 >999	L/d 360 240 n/a 240	PLATES MT20 Weight: 41 lb	<b>GRIP</b> 244/190 FT = 20%

BRACING-

TOP CHORD

BOT CHORD

```
LUMBER-
```

TOP CHORD2x4 SP No.1BOT CHORD2x4 SP No.1WEBS2x4 SP No.3

REACTIONS. (Ib/size) 2=500/0-3-8, 4=500/0-3-8 Max Horz 2=25(LC 10) Max Uplift 2=-68(LC 6), 4=-68(LC 7)

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

 TOP CHORD
 2-3=-874/369, 3-4=-874/369

 BOT CHORD
 2-6=-273/774, 4-6=-273/774

 WEBS
 3-6=0/282

#### NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 68 lb uplift at joint 2 and 68 lb uplift at joint 4.

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Structural wood sheathing directly applied or 5-10-12 oc purlins.

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

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