

RE: J0721-4250 Cates\Lot 692 Lexington Plantation Trenco 818 Soundside Rd Edenton, NC 27932

Truss Name

VA3

VA4

Date

7/6/2021

7/6/2021

Site Information:

Customer: Lot/Block:	Project Name:	J0721-4250
Address:		
City:		

Model: Subdivision: State:

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 8.4 Wind Speed: 130 mph Floor Load: N/A psf

This package includes 22 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#
1	E15906388	A1	7/6/2021	21	E15906408
2	E15906389	A2	7/6/2021	22	E15906409
3	E15906390	A2A	7/6/2021		
4	E15906391	A3	7/6/2021		
5	E15906392	A4GDR	7/6/2021		
6	E15906393	B1	7/6/2021		
7	E15906394	B1GE	7/6/2021		
8	E15906395	B2	7/6/2021		
9	E15906396	J03	7/6/2021		
10	E15906397	J03A	7/6/2021		
11	E15906398	J07	7/6/2021		
12	E15906399	J07A	7/6/2021		
13	E15906400	J07B	7/6/2021		
14	E15906401	J07C	7/6/2021		
15	E15906402	M1	7/6/2021		
16	E15906403	M1GE	7/6/2021		
17	E15906404	P1	7/6/2021		
18	E15906405	P1GE	7/6/2021		
19	E15906406	VA1	7/6/2021		
20	E15906407	VA2	7/6/2021		

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

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

Truss Design Engineer's Name: Gilbert, Eric

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

North Carolina COA: C-0844

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



Gilbert, Eric



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see MSIVTP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Edenton, NC 27932



	<u> </u>	<u>21-2-7</u> 10-4-14	<u>32-0-0</u> 10-9-9	1
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING-2-0-0C:Plate Grip DOL1.15TGLumber DOL1.15BGRep Stress IncrYESWCode IRC2015/TPI2014M	I. DEFL. in (loc 0.39 Vert(LL) -0.23 9-11 0.68 Vert(CT) -0.31 9-11 3 0.30 Horz(CT) 0.04 9 trix-S Wind(LL) 0.23 2-15) I/defl L/d PLATES 1 >999 360 MT20 1 >999 240 9 n/a n/a 5 >999 240 Weight: 230 lb	GRIP 244/190 FT = 20%

BRACING-TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD	2x6 SP No.1 *Except*
	5-6: 2x4 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x4 SP No.2 *Except*
	12-14: 2x6 SP No.1

WEDGE

RE

Left: 2x4 SP No.2 , Right: 2x4 SP No.2

ACTIONS.	(size)	2=0-3-8, 9=0-3-8
	Max Horz	2=-253(LC 10)
	Max Uplift	2=-120(LC 12), 9=-120(LC 13)
	Max Grav	2=1482(LC 19), 9=1482(LC 20)

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

- TOP CHORD 2-3=-1975/543, 3-5=-1780/568, 5-6=-1212/509, 6-8=-1780/568, 8-9=-1975/543
- BOT CHORD 2-15=-328/1700, 11-15=-101/1260, 9-11=-317/1536
- WEBS 3-15=-443/318, 5-15=-106/749, 6-11=-106/750, 8-11=-443/318

NOTES-

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

- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-15 to 3-7-14, Interior(1) 3-7-14 to 13-6-0, Exterior(2) 13-6-0 to 24-8-11, Interior(1) 24-8-11 to 32-8-15 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 30.0psf 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 = 10.0psf.

- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=120, 9=120.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied or 5-4-6 oc purlins, except

2-0-0 oc purlins (5-5-7 max.): 5-6.

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

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

A MiTek Affil 818 Soundside Road Edenton, NC 27932



	10-9-9 10-9-9	21-2-7 10-4-14	32-0-0 10-9-9	
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. DEFL. TC 0.40 Vert(LL) -0.2 BC 0.68 Vert(CT) -0.3 WB 0.30 Horz(CT) 0.0 Matrix-S Wind(LL) 0.2	n (loc) l/defl L/d PLATES 4 9-10 >999 360 MT20 2 9-10 >999 240 4 9 n/a n/a 3 2-14 >999 240 Weight: 228 lb	GRIP 244/190 FT = 20%

LUMBER	-
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TOP CHORD	2x6 SP No.1 *Except*
	5-6: 2x4 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x4 SP No.2 *Except*
	11-13 2x6 SP No 1

BRACING-TOP CHORD

BOT CHORD

Structural wood sheathing directly applied or 5-4-2 oc purlins, except 2-0-0 oc purlins (5-5-6 max.): 5-6. Rigid ceiling directly applied or 10-0-0 oc bracing.

WEDGE Left: 2x4 SP No.2 , Right: 2x4 SP No.2

CTIONS.	(size)	2=0-3-8, 9=0-3-8
	Max Horz	2=253(LC 9)
	Max Uplift	2=-120(LC 12), 9=-105(LC 13)
	Max Grav	2=1483(LC 19), 9=1431(LC 20)

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

- TOP CHORD 2-3=-1977/543, 3-5=-1781/568, 5-6=-1214/512, 6-8=-1783/577, 8-9=-1978/552
- BOT CHORD 2-14=-328/1700, 10-14=-102/1260, 9-10=-321/1539
- WEBS 3-14=-443/317, 5-14=-107/749, 6-10=-114/753, 8-10=-443/322

NOTES-

REA

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

- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-15 to 3-7-14, Interior(1) 3-7-14 to 13-6-0, Exterior(2) 13-6-0 to 24-8-11, Interior(1) 24-8-11 to 31-10-4 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 30.0psf 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 = 10.0psf.

- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=120, 9=105.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.







Plate Offsets (X,Y)	[4:0-3-0,0-3-5], [5:0-2-4,0-4-0]					
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 0.54 BC 0.39 WB 0.26 Matrix-S	DEFL. ir Vert(LL) -0.10 Vert(CT) -0.21 Horz(CT) 0.04 Wind(LL) 0.05	n (loc) l/defl) 7-9 >999 7-9 >999 4 7 n/a 3 11 >999	L/d PLATES 360 MT20 240 n/a 240 Weight: 226 II	GRIP 244/190 p FT = 20%
LUMBER- TOP CHORD 2x6 SF BOT CHORD 2x6 SF WEBS 2x4 SF WEDGE Left: 2x4 SP No.2 , Rig	P No.1 P No.1 P No.2 pht: 2x4 SP No.2		BRACING- TOP CHORD BOT CHORD WEBS	Structural wood sh 2-0-0 oc purlins (5 Rigid ceiling direct T-Brace: Fasten (2X) T and (0.131"x3") nails, 6	neathing directly applied or 5-8- -7-10 max.): 4-5. tly applied or 10-0 oc bracing. 2x4 SPF No.2 - 5-11 d I braces to narrow edge of wel 6in o.c.,with 3in minimum end d	5 oc purlins, except o with 10d stance.

Brace must cover 90% of web length.

REACTIONS.	(size)	2=0-3-8, 7=0-3-8
	Max Horz	2=-207(LC 10)
	Max Uplift	2=-106(LC 12), 7=-106(LC 13)
	Max Grav	2=1322(LC 1), 7=1322(LC 1)

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

- TOP CHORD 2-3=-1767/570, 3-4=-1541/537, 4-5=-1228/525, 5-6=-1540/537, 6-7=-1767/571
- BOT CHORD 2-11=-365/1362, 9-11=-173/1227, 7-9=-354/1352
- WEBS 3-11=-320/224, 4-11=0/455, 5-9=-5/481, 6-9=-320/224

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-15 to 3-7-14, Interior(1) 3-7-14 to 11-0-0, Exterior(2) 11-0-0 to 17-2-11, Interior(1) 17-2-11 to 21-0-0, Exterior(2) 21-0-0 to 27-2-11, Interior(1) 27-2-11 to 32-8-15 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, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=106, 7=106.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 9) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.







Scale = 1:55.0



1		8-6-0		16-0-0		23-6-	-0			32-0-0	
		8-6-0	I	7-6-0		7-6-0	0		I	8-6-0	
Plate Offs	ets (X,Y)	[11:0-4-0,0-6-0]									
LOADING TCLL TCDL BCLL	i (psf) 20.0 10.0 0.0 *	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.15 1.15 NO	CSI. TC 0.36 BC 0.34 WB 0.39	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (-0.05 -0.10 0.04	(loc) 11 11 8	l/defl >999 >999 n/a	L/d 360 240 n/a	PLATES MT20	GRIP 244/190
BCDL	10.0	Code IRC2015/T	PI2014	Matrix-S	Wind(LL)	0.07	11	>999	240	Weight: 506 lb	FT = 20%
LUMBER TOP CHC BOT CHC WEBS	RD 2x6 SP RD 2x8 SP 2x4 SP	2 No.1 2 No.1 2 No.2			BRACING- TOP CHOF BOT CHOF	RD S 2 [.] RD R	Structura 2-0-0 oc Rigid ce	al wood purlins eiling dire	sheathing dir (6-0-0 max.): ectly applied c	rectly applied or 6-0-0 4-6. or 10-0-0 oc bracing.	oc purlins, except
REACTIO	REACTIONS. (size) 2=0-3-8, 8=0-3-8 Max Horz 2=-165(LC 25) Max Uplift 2=-877(LC 9), 8=-877(LC 9) Max Grav 2=2678(LC 1), 8=2678(LC 1)										
FORCES. TOP CHC	(lb) - Max. RD 2-3=- 7-8=-	Comp./Max. Ten All fo 3745/1364, 3-4=-3541/1 3745/1364	orces 250 (lb) or 344, 4-5=-2962	less except when shown /1173, 5-6=-2961/1173,	n. 6-7=-3541/1344,				U	iq SEA	
BOT CHC WEBS	BOT CHORD 2-12=-1159/2970, 11-12=-1545/3890, 10-11=-1545/3890, 8-10=-999/2902 SEAL WEBS 3-12=-149/269, 4-12=-293/1322, 5-12=-1197/608, 5-11=0/560, 5-10=-1197/607, 6-10=-293/1323, 7-10=-149/269 036322							22			
NOTES-										· A. ENO	-cRik S
1) 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: 2x8 - 2 rows staggered at 0-9-0 oc. Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.											
2) All load ply con	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.										
 Unbala Wind: A 	NCED FOOT LIVE ASCE 7-10; V r DOL =1 60 p	ult=130mph Vasd=103m ult=arin DOI =1.60	hph; TCDL=6.0	osign. osf; BCDL=6.0psf; h=25f	t; Cat. II; Exp C; Er	nclosed; N	/WFRS	6 (envelo	ope);		
5) Provide	adequate dr	ainage 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 = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=877, 8=877.
- 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

July 6,2021



Job	Truss	Truss Type	Qty	Ply	Cates\Lot 692 Lexington Plantation	
						E15906392
J0721-4250	A4GDR	HIP GIRDER	2	2		
				_	Job Reference (optional)	
Comtech, Inc, Fayettev	ville, NC - 28314,			8.430 s J	un 2 2021 MiTek Industries, Inc. Tue Jul 6 08:38:19 202	1 Page 2

NOTES-

ID:aDWe9B_?OPf4LyIDd8dOtsyuGQ3-NskIGWweHOue73JO0ZEYSeoftVX0UqVR2Hdhlyz_r4o

11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 116 lb down and 120 lb up at 2-6-12, 74 lb down and 73 lb up at 4-6-12, 31 lb down and 44 lb up at 6-6-12, 183 lb down and 196 lb up at 8-6-0, 188 lb down and 192 lb up at 10-6-12, 188 lb down and 192 lb up at 12-6-12, 188 lb down and 192 lb up at 12-6-12, 188 lb down and 192 lb up at 12-6-4, 188 lb down and 192 lb up at 12-6-12, 188 lb down and 192 lb up at 12-6-4, 188 lb down and 192 lb up at 12-6-4, 188 lb down and 192 lb up at 12-6-4, 188 lb down and 192 lb up at 22-5-4, and 74 lb down and 73 lb up at 22-5-4, and 146 lb down and 192 lb up at 22-5-4 on top chord, and 123 lb down at 2-6-12, 91 lb down at 12-6-12, 91 lb down at 16-6-12, 91 lb down at 16-6-12, 91 lb down at 16-6-12, 91 lb down at 16-0-0, 91 lb down at 17-5-4, 91 lb down at 21-5-4, 91 lb down at 23-5-4, 193 lb down and 42 lb up at 25-5-4, and 145 lb down at 23-5-4, and 123 lb down at 29-5-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-4=-60, 4-6=-60, 6-9=-60, 2-8=-20

Concentrated Loads (lb)

Vert: 4=-133(F) 6=-133(F) 12=-45(F) 3=-34(F) 11=-45(F) 5=-133(F) 10=-45(F) 7=-34(F) 13=-76(F) 15=-133(F) 16=-133(F) 17=-133(F) 18=-133(F) 19=-133(F) 20=-133(F) 22=-76(F) 23=-104(F) 24=-145(F) 25=-193(F) 26=-45(F) 27=-45(F) 29=-45(F) 30=-45(F) 32=-45(F) 33=-45(F) 34=-193(F) 35=-104(F) 3



Job	Truss	Truss Type	Qty	Ply	Cates\Lot 692 Lexing	ton Plantation	E45000000
J0721-4250	B1	COMMON	7	1			E15906393
Comtech, Inc, Fayette	ville, NC - 28314,			8.430 s J	Job Reference (option Jun 2 2021 MiTek Indu	nal) stries, Inc. Tue Jul 608:38	:20 2021 Page 1
· · · ·	-0-10-8	-6-0 , 11-0-0	ID:aDWe9B_?OF	Pf4LyIDd8	dOtsyuGQ3-r3I7UsxG 22-0-0	2i0UIDuaaHIn_sLnMvrFDHe 22-10-8	bHxMEHOz_r4n
	0-10-8 6	i-6-0 4-6-0	4-6-0		6-6-0	0-10-8	
			4x6 =				Scale = 1:58.7
	T		5				
		2x4 =	2x4 =	=			
		4	6				
	10.0	0 12 2x4 II			2~4		
		3		7	274		
	.			R			
	10-0		4				
		13	7-2-		14		
		2-2-					
			9-0-0				
	2 511					8	
	171 171 171 171	lei		ы			
	d 4x6 =	12	11 4x6 =	10		4x6 =	
		2x4	45.0.0	2x4	00.0.0		
	6	-6-0	9-0-0		6-6-0		
Plate Offsets (X,Y) [2:0	0-0-0,0-0-3], [5:0-3-0,Edge], [3:Edge,0-0-3]					
LOADING (psf)	SPACING- 2-0-0 Plate Grip DOI 1.15	CSI.	DEFL. in	(loc)	l/defl L/d	PLATES G	RIP
TCDL 10.0	Lumber DOL 1.15	BC 0.47	Vert(CT) -0.33	10-12	>787 240	10120 2	14/130
BCLL 0.0 * BCDL 10.0	Rep Stress Incr YES Code IRC2015/TPI2014	WB 0.39 Matrix-S	Horz(CT) 0.02 Wind(LL) 0.16	8 2-12	n/a n/a >999 240	Weight: 148 lb	FT = 20%
			BRACING-				
TOP CHORD 2x6 SP No	b.1		TOP CHORD	Structur	al wood sheathing di	rectly applied or 6-0-0 oc p	ourlins.
BOT CHORD 2x6 SP No WEBS 2x4 SP No).1).2		BOT CHORD	Rigid ce	eiling directly applied	or 10-0-0 oc bracing.	
WEDGE							
Len. 2x4 SP No.3 , Right.	2X4 SF N0.3						
REACTIONS. (size) Max Horz	2=0-3-8, 8=0-3-8 2=-262(LC 10)						
Max Uplif	t 2=-85(LC 12), 8=-85(LC 13)	00)					
Max Grav	2=1057(LC 19), 8=1057(LC	20)					
FORCES. (lb) - Max. Co	mp./Max. Ten All forces 25) (lb) or less except when shown.	2				
7-8=-136	64/255	10/040	-,				
WEBS 3-12=-10	0/916, 10-12=-10/916, 8-10=- 522, 7-10=0/522, 4-6=-1305/5	10/916 39					
NOTES-							
1) Unbalanced roof live loa	ads have been considered for	this design.					
 Wind: ASCE 7-10; Vult= and C-C Exterior(2) -0- 	=130mph Vasd=103mph; TCI 9-1 to 3-7-12, Interior(1) 3-7-1	DL=6.0pst; BCDL=6.0pst; h=25tt; Ca 2 to 11-0-0, Exterior(2) 11-0-0 to 15	at. II; Exp C; Enclosed 5-7-12, Interior(1) 15-7	; MWFRS -12 to 22	5 (envelope) -9-1 zone;C-C		
for members and forces	& MWFRS for reactions sho	wn; Lumber DOL=1.60 plate grip DC	DL=1.60			MILLION AND AND AND AND AND AND AND AND AND AN	11.
 4) * This truss has been de 	esigned for a live load of 30.0	psf on the bottom chord in all areas	where a rectangle 3-6	6-0 tall by	2-0-0 wide	TH CAR	Olin
5) Provide mechanical cor	om chord and any other mem nection (by others) of truss to	bers, with BCDL = 10.0psf. b bearing plate capable of withstand	ling 100 lb uplift at join	nt(s) 2, 8.		O FESSIO	2 Vin
6) This truss is designed in	n accordance with the 2015 In	ternational Residential Code section	ns R502.11.1 and R80	02.10.2 a	nd	and I	a contraction of the second se
Telefenced standard Al	0//1111.				Ξ	SEAL	E S
					Ξ	03632	, <u> </u>
					1	030322	- <i>1 3</i> -
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							N 0021

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July 6,2021



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A MiTek 818 Soundside Road

Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates\Lot 692 Lexin	gton Plantation	F4500005
J0721-4250	B2	COMMON	4	1			E15906395
Comtech Inc Eavette	eville: NC - 28314			8 430 s.	Job Reference (optional lun 2 2021 MiTek Ind	onal) lustries Inc. Tue Jul 6.08 [.]	38:23 2021 Page 1
	-0.10.8	ID:a	DWe9B_?C	Pf4LyIDd8	3dOtsyuGQ3-Ge_G6u	z8LdO3cgd9FPIUcUzHT6	stQdL1zvbuujz_r4k
	0-10-8	6-6-0 11-0-0 4-6-0 4-6-0	4-6-0		6-6-0		
		4x6 =	=				Scale = 1:58.7
		5					
		2x4 =	<hr/>	×4 —			
		4	\backslash	6 6			
	1	0.00 12 2x4		$\langle \rangle$	2x4 7		
		3			, 		
	0-0-0				13		
		12	7-2-4				
		5-6	1				
	2	9-0-0				8	
	1 197			÷ 6			
		11		10 9		2×6 -	
	4x0 —	2x4	4	x6 = 2x4	1	5x0 —	
	<u> </u>	6-6-0 15-6-0 15-0-0			22-0-0		
Plate Offsets (X,Y) [2:	0-0-0,0-0-3], [5:0-3-0,Edge], [8	3:0-6-0,0-0-5]			0-0-0		
LOADING (psf)	SPACING- 2-0-0	CSI. DEFL	. iı	n (loc)	l/defl L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.58 Vert(L	L) -0.22	2 9-11	>999 360	MT20	244/190
BCLL 0.0 *	Rep Stress Incr YES	WB 0.40 Horz(0	CT) -0.33 CT) 0.02	2 8	>//9 240 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S Wind(LL) 0.16	5 2-11	>999 240	Weight: 145 lb	FT = 20%
	- 1	BRAC	ING-	Christen		line other opplied on 5 40 40	
BOT CHORD 2x6 SP No	5.1	BOT C	HORD	Rigid ce	eiling directly applied	l or 10-0-0 oc bracing.	coc punins.
WEBS 2x4 SP No WEDGE	b.2						
Left: 2x4 SP No.3 , Right:	2x4 SP No.3						
REACTIONS. (size)	8=0-3-8, 2=0-3-8						
Max Horz	2=259(LC 11)						
Max Opin Max Grav	v 8=1005(LC 20), 2=1058(LC	19)					
FORCES. (lb) - Max. Co	mp./Max. Ten All forces 250) (lb) or less except when shown.					
TOP CHORD 2-3=-130	68/257, 3-4=-829/332, 4-5=-1	15/370, 5-6=-108/370, 6-7=-830/337,					
BOT CHORD 2-11=-2	58/253 5/913, 9-11=-25/913, 8-9=-25/	913					
WEBS 3-11=0/5	525, 7-9=0/512, 4-6=-1313/55	7					
NOTES-							
 Unbalanced roof live load Wind: ASCE 7-10; Vulta 	ads have been considered for =130mph Vasd=103mph; TCI	this design. DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp (C; Enclose	d; MWFR:	S (envelope)		
and C-C Exterior(2) -0-	9-1 to 3-7-12, Interior(1) 3-7-1	2 to 11-0-0, Exterior(2) 11-0-0 to 15-7-12, Inte	erior(1) 15-	7-12 to 21	-10-4		
 This truss has been des 	signed for a 10.0 psf bottom c	hord live load nonconcurrent with any other liv	ve loads.				11111
 4) * This truss has been do will fit between the botto 	esigned for a live load of 30.0 om chord and anv other mem	psf on the bottom chord in all areas where a r pers, with BCDL = 10.0psf.	ectangle 3-	6-0 tall by	/ 2-0-0 wide	RTHOA	SUM
5) Provide mechanical cor	nnection (by others) of truss to	b bearing plate capable of withstanding 100 lb	uplift at joi	nt(s) 8, 2.	and a second	A DEES	This .
referenced standard AN	NSI/TPI 1.			02.10.2 8		ung 1	
						SEA	L 1 E
					Ξ	0363	22 =
							1 E
						E. A. SNOW	ERIX
						AND GIN	BELIN
						11, A. G	IL UNIT
							I Design

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				2-6-0				
LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in	(loc)	l/defl	L/d	PLATES GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.04	Vert(LL) -0.00	2	>999	360	MT20 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.02	Vert(CT) -0.00	2	>999	240	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.00	3	n/a	n/a	
BCDL	10.0	Code IRC2015/TPI2014	Matrix-P	Wind(LL) 0.00	2	****	240	Weight: 16 lb FT = 20%

BRACING-TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x6 SP No.1 BOT CHORD 2x6 SP No.1 WEDGE Left: 2x4 SP No.2

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical Max Horz 2=77(LC 12) Max Uplift 3=-59(LC 12)

Max Grav 3=73(LC 19), 2=155(LC 1), 4=46(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 Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; 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
- 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(s) 3.
- 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 2-6-0 oc purlins.

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





				1	1-0-	0		1-6-0				
LOADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL	. in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.03	Vert(L	L) -0.00	2	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(C	T) -0.00	2	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT) 0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2	2014	Matrix	<-P	Wind(LL) -0.00	2	>999	240	Weight: 16 lb	FT = 20%

LUM	BER-
-----	------

TOP CHORD 2x6 SP No.1 BOT CHORD 2x6 SP No.1 WEDGE BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 2-6-0 oc purlins, except 2-0-0 oc purlins: 3-4. Rigid ceiling directly applied or 10-0-0 oc bracing.

Left: 2x4 SP No.2

REACTIONS. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical Max Horz 2=38(LC 12)

Max Uplift 4=-25(LC 9), 2=-18(LC 12) Max Grav 4=58(LC 1), 2=155(LC 1), 5=42(LC 3)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; 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) 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 100 lb uplift at joint(s) 4, 2.
- 8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.







									1	
SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
Plate Grip DOL	1.15	TC	0.38	Vert(LL)	-0.02	2-5	>999	360	MT20	244/190
Lumber DOL	1.15	BC	0.17	Vert(CT)	-0.05	2-5	>999	240		
Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.02	4	n/a	n/a		
Code IRC2015/T	PI2014	Matri	x-P	Wind(LL)	0.00	2	****	240	Weight: 45 lb	FT = 20%
*	SPACING- Plate Grip DOL Lumber DOL * Rep Stress Incr Code IRC2015/T	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 * Rep Stress Incr YES Code IRC2015/TPI2014	SPACING- 2-0-0 CSI. Plate Grip DOL 1.15 TC Lumber DOL 1.15 BC * Rep Stress Incr YES WB Code IRC2015/TPI2014 Matri	SPACING- 2-0-0 CSI. Plate Grip DOL 1.15 TC 0.38 Lumber DOL 1.15 BC 0.17 * Rep Stress Incr YES WB 0.00 Code IRC2015/TPI2014 Matrix-P	SPACING- 2-0-0 CSI. DEFL. Plate Grip DOL 1.15 TC 0.38 Vert(LL) Lumber DOL 1.15 BC 0.17 Vert(CT) * Rep Stress Incr YES WB 0.00 Horz(CT) Code IRC2015/TPI2014 Matrix-P Wind(LL)	SPACING- 2-0-0 CSI. DEFL. in Plate Grip DOL 1.15 TC 0.38 Vert(LL) -0.02 Lumber DOL 1.15 BC 0.17 Vert(CT) -0.05 * Rep Stress Incr YES WB 0.00 Horz(CT) 0.02 Code IRC2015/TPI2014 Matrix-P Wind(LL) 0.00	SPACING- 2-0-0 CSI. DEFL. in (loc) Plate Grip DOL 1.15 TC 0.38 Vert(LL) -0.02 2-5 Lumber DOL 1.15 BC 0.17 Vert(CT) -0.05 2-5 * Rep Stress Incr YES WB 0.00 Horz(CT) 0.02 4 Code IRC2015/TPI2014 Matrix-P Wind(LL) 0.00 2	SPACING- 2-0-0 CSI. DEFL. in (loc) l/defl Plate Grip DOL 1.15 TC 0.38 Vert(LL) -0.02 2-5 >999 Lumber DOL 1.15 BC 0.17 Vert(CT) -0.05 2-5 >999 * Rep Stress Incr YES WB 0.00 Horz(CT) 0.02 4 n/a Code IRC2015/TPI2014 Matrix-P Wind(LL) 0.00 2 *****	SPACING- 2-0-0 CSI. DEFL. in (loc) //defl L/d Plate Grip DOL 1.15 TC 0.38 Vert(LL) -0.02 2-5 >999 360 Lumber DOL 1.15 BC 0.17 Vert(CT) -0.05 2-5 >999 240 * Rep Stress Incr YES WB 0.00 Horz(CT) 0.02 4 n/a n/a Code IRC2015/TPI2014 Matrix-P Wind(LL) 0.00 2 **** 240	SPACING- 2-0-0 CSI. DEFL. in (loc) I/defl L/d PLATES Plate Grip DOL 1.15 TC 0.38 Vert(LL) -0.02 2-5 >999 360 MT20 * Rep Stress Incr YES WB 0.00 Horz(CT) 0.02 4 n/a n/a Code IRC2015/TPI2014 Matrix-P Wind(LL) 0.00 2 **** 240 Weight: 45 lb

LUMBER-

TOP CHORD2x6 SP No.1BOT CHORD2x6 SP No.1SLIDERLeft 2x4 SP No

2x6 SP No.1 Left 2x4 SP No.2 4-4-1 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. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical

Max Horz 2=220(LC 12)

Max Uplift 4=-180(LC 12)

Max Grav 4=235(LC 19), 2=309(LC 1), 5=131(LC 3)

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

NOTES-

- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-1 to 3-7-12, Interior(1) 3-7-12 to 6-6-7 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.

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=180.
- 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.







		5. 5.	-0-0 -0-0	6-7-3	
Plate Offsets (X,Y)	[2:Edge,0-0-0], [4:0-2-8,0-3-3]				
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 0.22 BC 0.23 WB 0.10 Matrix-P	DEFL. in Vert(LL) -0.02 Vert(CT) -0.06 Horz(CT) 0.05 Wind(LL) 0.04	l (loc) l/defl L/d 2-7 >999 360 2-7 >999 240 5 n/a n/a 2-7 >999 240	PLATES GRIP MT20 244/190 Weight: 49 lb FT = 20%
LUMBER- TOP CHORD 2x6 SF BOT CHORD 2x6 SF WEBS 2x4 SF SLIDER Left 2x	P No.1 P No.1 P No.2 P No.2 3-3-9		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing di 2-0-0 oc purlins: 4-5. Rigid ceiling directly applied	rectly applied or 6-0-0 oc purlins, except or 10-0-0 oc bracing.

REACTIONS. (size) 5=Mechanical, 2=0-3-8, 6=Mechanical Max Horz 2=171(LC 12) Max Uplift 5=-19(LC 8), 6=-74(LC 12) Max Grav 5=46(LC 1), 2=309(LC 1), 6=223(LC 19)

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

WEBS 4-7=-282/274

NOTES-

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

- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-1 to 3-7-12, Interior(1) 3-7-12 to 5-0-0, Exterior(2) 5-0-0 to 6-6-7 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 100 lb uplift at joint(s) 5, 6.
- 8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and
- referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.







- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2, 6.
- 8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and
- referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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REACTIONS. (size) 5=Mechanical, 7=Mechanical, 2=0-3-8 Max Horz 2=79(LC 8) Max Uplift 5=-84(LC 4), 2=-55(LC 8) Max Grav 5=136(LC 1), 7=163(LC 3), 2=312(LC 1)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 2-4=-299/51

NOTES-

- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); 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 100 lb uplift at joint(s) 5, 2.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and
- referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 9) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 24 lb down and 52 lb up at 0-7-15, and 80 lb down and 63 lb up at 2-7-15, and 81 lb down and 63 lb up at 4-7-15 on top chord, and 14 lb down at 0-7-15, and 11 lb down at 2-7-15, and 11 lb down at 4-7-15 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=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-4=-60, 4-5=-60, 2-6=-20 Concentrated Loads (lb) Vert: 3=-1(F) 11=-8(F) 12=-3(F) 13=-3(F)







0-4-8

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 0.44 BC 0.45 WB 0.00 Matrix-P	DEFL. Vert(LL) -0.0 Vert(CT) -0.0 Horz(CT) 0.0 Wind(LL) 0.0	n (loc) 1 2-4 3 2-4 0 3 2-4	l/defl >999 >999 n/a >999	L/d 360 240 n/a 240	PLATES GRIP MT20 244/190 Weight: 28 lb FT = 20%
LUMBER-			BRACING-				

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP No.1 BOT CHORD 2x6 SP No.1 2x6 SP No.1 WEBS

REACTIONS. (size) 4=0-1-8, 2=0-3-0

Max Horz 2=86(LC 8) Max Uplift 4=-112(LC 8), 2=-139(LC 8)

Max Grav 4=221(LC 1), 2=291(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; 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 5-9-4 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 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) 4 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 at joint(s) 4.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=112, 2=139.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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

except end verticals.





LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	*	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2015/TP	2-0-0 1.15 1.15 YES 12014	CSI. TC BC WB Matrix	0.15 0.04 0.07 ĸ-P	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.00 0.00 0.00	(loc) 1 1	l/defl n/r n/r n/a	L/d 120 120 n/a	PLATES MT20 Weight: 29 lb	GRIP 244/190 FT = 20%
LUMBER- TOP CHORD 2 BOT CHORD 2 WEBS 2 OTHERS 2	2x4 SP N 2x6 SP N 2x6 SP N 2x6 SP N 2x4 SP N	lo.1 lo.1 lo.2				BRACING- TOP CHOR BOT CHOR	D D	Structur except Rigid ce	ral wood end verti eiling dire	sheathing di cals. ectly applied	rectly applied or 6-0-0 or 10-0-0 oc bracing.	oc purlins,

REACTIONS. (size) 5=6-0-0, 2=6-0-0, 6=6-0-0 Max Horz 2=121(LC 8)

Max Uplift 5=-16(LC 8), 2=-79(LC 8), 6=-123(LC 12) Max Grav 5=31(LC 1), 2=183(LC 1), 6=300(LC 1)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. WEBS 3-6=-222/411

NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 3-9-4, Exterior(2) 3-9-4 to 5-9-4 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 requires continuous bottom chord bearing.

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 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 100 lb uplift at joint(s) 5, 2 except (jt=lb) 6=123.

8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.







F	6-0-0		12-0-0
Plate Offsets (X,Y) [2:0-2-15,Edge], [4:0-2-15,Edge]		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 0.37 BC 0.30 WB 0.06 Matrix-S	DEFL. in (loc) l/defl L/d Vert(LL) 0.10 4-6 >999 240 Vert(CT) -0.07 2-6 >999 240 Horz(CT) -0.01 4 n/a n/a Weight: 42 lb FT = 20%
LUMBER- TOP CHORD 22 BOT CHORD 22 WEBS 22	44 SP No.1 44 SP No.1 44 SP No.2		BRACING-TOP CHORDStructural wood sheathing directly applied or 6-0-0 oc purlins.BOT CHORDRigid ceiling directly applied or 6-2-6 oc bracing.
REACTIONS. M M M			
FORCES. (Ib) - TOP CHORD BOT CHORD WEBS	Max. Comp./Max. Ten All forces 250 (lb) or 2-3=-866/1072, 3-4=-866/1072 2-6=-927/765, 4-6=-927/765 3-6=-409/282	less except when shown.	
NOTES-			

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

2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; 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 6-0-0, Exterior(2) 6-0-0 to 10-4-13, Interior(1) 10-4-13 to 12-10-8 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

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 100 lb uplift at joint(s) except (jt=lb) 2=246, 4=246.

6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.









F	6-0-0		12-0-0				
I	6-0-0		1		6-0-0		I
Plate Offsets (X,Y)	[2:0-2-15,Edge], [4:0-2-15,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 0.37 BC 0.30 WB 0.06 Matrix-S	DEFL. in Vert(LL) 0.10 Vert(CT) -0.07 Horz(CT) -0.01	(loc) l/defl 4-6 >999 2-6 >999 4 n/a	L/d 240 240 n/a	PLATES MT20 Weight: 46 lb	GRIP 244/190 FT = 20%
LUMBER- TOP CHORD 2x BOT CHORD 2x WEBS 2x OTHERS 2x	4 SP No.1 4 SP No.1 4 SP No.2 4 SP No.2		BRACING- TOP CHORD BOT CHORD	Structural wood Rigid ceiling dire	l sheathing dir ectly applied c	ectly applied or 6-0-0 or 6-2-6 oc bracing.	oc purlins.
REACTIONS. M M M	(size) 2=0-3-0, 4=0-3-0 ax Horz 2=52(LC 12) ax Uplift 2=-343(LC 8), 4=-343(LC 9) ax Grav 2=530(LC 1), 4=530(LC 1)				6	TH CARE	AROLIN
FORCES. (lb) - M TOP CHORD 2 BOT CHORD 2 WEBS 3	Max. Comp./Max. Ten All forces 250 (lb) or 2-3=-866/1072, 3-4=-866/1072 2-6=-927/765, 4-6=-927/765 3-6=-409/282	less except when shown.			10000	SE/ 0363	AL 322
NOTES- 1) Unbalanced roc 2) Wind: ASCE 7- ²	of live loads have been considered for this de 10; Vult=130mph Vasd=103mph; TCDL=6.0	sign. osf; BCDL=6.0psf; h=25ft; Cat	. II; Exp C; Enclosed	; MWFRS (envel	ope)	Co ENGIN	EEP. A.

gable end zone and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 6-0-0, Exterior(2) 6-0-0 to 10-4-13, Interior(1) 10-4-13 to 12-10-8 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

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 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 100 lb uplift at joint(s) except (jt=lb) 2=343, 4=343.

8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



July 6,2021



(lb) - Max Horz 1=-155(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 11=-136(LC 12), 12=-127(LC 12), 9=-135(LC 13), 8=-128(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 7, 10, 11, 12, 9, 8

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

NOTES-

2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-13 to 4-9-10, Interior(1) 4-9-10 to 5-11-12, Exterior(2) 5-11-12 to 10-4-9, Interior(1) 10-4-9 to 11-6-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) All plates are 2x4 MT20 unless otherwise indicated.

4) Gable requires continuous bottom chord bearing.

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 100 lb uplift at joint(s) 1, 7 except (jt=lb) 11=136, 12=127, 9=135, 8=128.

8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





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



Max Horz 1=-88(LC 8) Max Uplift 1=-36(LC 13), 3=-45(LC 13)

Max Grav 1=184(LC 1), 3=184(LC 1), 4=268(LC 1)

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

NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; 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) Gable requires continuous bottom chord bearing.
- 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 100 lb uplift at joint(s) 1, 3.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.







TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS. (size) 1=5-5-13, 3=5-5-13, 4=5-5-13 Max Horz 1=53(LC 9)

Max Uplift 1=-22(LC 13), 3=-27(LC 13)

Max Grav 1=110(LC 1), 3=110(LC 1), 4=160(LC 1)

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

NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; 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 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 100 lb uplift at joint(s) 1, 3.

6) Non Standard bearing condition. Review required.

7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 5-6-12 oc purlins.

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





2x4 🥢

2x4 📎

2-4r
0-0-

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

	[2.0-2-0,Edge]	1	1	
OADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
CLL 20.0	Plate Grip DOL 1.15	TC 0.01	Vert(LL) n/a - n/a 999	MT20 244/190
CDL 10.0	Lumber DOL 1.15	BC 0.02	Vert(CT) n/a - n/a 999	
3CLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00 3 n/a n/a	
3CDL 10.0	Code IRC2015/TPI2014	Matrix-P		Weight: 6 lb FT = 20%

BOT CHORD

<u>2-3-14</u> 2-3-14

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

REACTIONS. (size) 1=2-3-7, 3=2-3-7

Max Horz 1=-17(LC 8) Max Uplift 1=-5(LC 12), 3=-5(LC 13)

Max Grav 1=62(LC 1), 3=62(LC 1)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; 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) Gable requires continuous bottom chord bearing.
- 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 100 lb uplift at joint(s) 1, 3.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses sand truss system, see **ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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