

Trenco 818 Soundside Rd Edenton, NC 27932

Re: J0124-0300 Weaver Homes/38 West Preserve/Harnett

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville.

Pages or sheets covered by this seal: I63472302 thru I63472338

My license renewal date for the state of North Carolina is December 31, 2024.

North Carolina COA: C-0844



February 7,2024

# Gilbert, Eric

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



<b> </b>	<u>12-6-12</u> 12-6-12		24-3-4			36	6-10-0 2-6-12	
Plate Offsets (X,Y)	[3:0-4-0,0-4-8], [13:0-1-10,0-2-8], [14:0-	1-9,0-1-0], [15:0-2-0,0-0-	12], [15:0-2-0,0-0-1	2], [16:0-1-9,0	)-1-0]	12	. 0 12	
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 0.43 BC 0.69 WB 0.55 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in (loc) -0.32 10-11 -0.42 10-11 0.07 7 0.10 7-10	l/defl >999 >999 n/a >999	L/d 360 240 n/a 240	PLATES MT20 Weight: 291 lb	<b>GRIP</b> 244/190 FT = 25%
LUMBER- TOP CHORD 2x6 SF BOT CHORD 2x6 SF WEBS 2x6 SF 2-11,4 OTHERS 2x4 SF REACTIONS. (siz	P No.1 P No.1 P No.1 *Except* -11,4-10,6-10: 2x4 SP No.2 P No.2 re) 1=0-3-8, 7=0-3-8		BRACING- TOP CHOR BOT CHOR	D Structu D Rigid c	ural wood ceiling dire	sheathing dir ectly applied c	rectly applied or 4-3-0 or 10-0-0 oc bracing.	oc purlins.
Max H Max U Max C FORCES. (Ib) - Max. TOP CHORD 1-2= BOT CHORD 1-11 WEBS 2-11	Horz 1=-199(LC 17) Jplift 1=-301(LC 12), 7=-325(LC 13) Grav 1=1461(LC 1), 7=1547(LC 2) . Comp./Max. Ten All forces 250 (lb) or -2642/577, 2-4=-2407/593, 4-6=-2479/58 =-538/2290, 10-11=-164/1549, 7-10=-37 =-562/436, 4-11=-262/956, 4-10=-262/10	less except when shown 30, 6-7=-2714/562 6/2354 975, 6-10=-559/430	ı.					
<ul> <li>NOTES-</li> <li>1) Unbalanced roof liv.</li> <li>2) Wind: ASCE 7-10; Y gable end zone and 37-6-6 zone;C-C for</li> <li>3) Truss designed for ' Gable End Details a</li> <li>4) All plates are 2x4 M</li> <li>5) Gable studs spaced</li> <li>6) This truss has been</li> <li>7) * This truss has been</li> <li>7) * This truss has been</li> <li>7) * This truss has been</li> <li>8) Provide mechanical joint 7.</li> </ul>	e loads have been considered for this de Vult=130mph Vasd=103mph; TCDL=6.0 I C-C Exterior(2) 0-1-12 to 4-6-9, Interior r members and forces & MWFRS for rea wind loads in the plane of the truss only. as applicable, or consult qualified building T20 unless otherwise indicated. I at 2-0-0 oc. I designed for a 10.0 psf bottom chord liv en designed for a live load of 30.0psf on for bottom chord and any other members, w I connection (by others) of truss to bearing	sign. sf; BCDL=6.0psf; h=15ft (1) 4-6-9 to 18-5-0, Exteri ctions shown; Lumber DC For studs exposed to wi g designer as per ANSI/T e load nonconcurrent with he bottom chord in all are ith BCDL = 10.0psf. g plate capable of withsta	; Cat. II; Exp C; Enc ior(2) 18-5-0 to 22- DL=1.60 plate grip I nd (normal to the fa Pl 1. h any other live loa eas where a rectan- anding 301 lb uplift	closed; MWFR 9-13, Interior(1 DOL=1.60 ace), see Stan ds. gle 3-6-0 tall b at joint 1 and	RS (envela 1) 22-9-13 Idard Indu by 2-0-0 w 325 lb up	ppe) to stry ide ift at	ORTH C.	AROUNING



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 **ANSUTP11 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcaccomponents.com)



		<u>12-6-12</u> 12-6-12				24-3-4 11-8-8				36-10-0 12-6-12	
LOADING (	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 2	20.0	Plate Grip DOL	1.15	TC	0.43	Vert(LL)	-0.28 10-11	>999	360	MT20	244/190
TCDL 1	10.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.38 10-11	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.07 7	n/a	n/a		
BCDL 1	10.0	Code IRC2015/T	PI2014	Matrix	x-S	Wind(LL)	0.10 7-10	>999	240	Weight: 233 lb	FT = 25%
LUMBER-						BRACING				•	

TOP CHORD

BOT CHORD

# LUMBER-

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

REACTIONS. 1=0-3-8, 7=0-3-8 (size) Max Horz 1=-199(LC 17) Max Uplift 1=-301(LC 12), 7=-325(LC 13) Max Grav 1=1528(LC 2), 7=1571(LC 2)

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

1-2=-2763/577, 2-4=-2528/593, 4-6=-2526/580, 6-7=-2761/562 TOP CHORD

1-11=-538/2400, 10-11=-164/1600, 7-10=-376/2397 BOT CHORD

WEBS 2-11=-562/436, 4-11=-262/1063, 4-10=-262/1059, 6-10=-559/430

#### 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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 18-5-0, Exterior(2) 18-5-0 to 22-9-13, Interior(1) 22-9-13 to 37-6-6 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 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.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 301 lb uplift at joint 1 and 325 lb uplift at ioint 7.



Structural wood sheathing directly applied or 4-2-0 oc purlins.

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

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818 Soundside Road



1		8-10-0	l	17-4-8		29	10-0			36-10-0	1
1		8-10-0		8-6-8		12	-5-8			7-0-0	
Plate Off	sets (X,Y)	[1:0-3-10,0-0-15], [11:0-5	-8,0-4-0], [12:0	)-5-4,0-2-8]							
LOADIN TCLL TCDL BCLL BCDL	G (psf) 20.0 10.0 0.0 * 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2015/TF	2-0-0 1.15 1.15 YES Pl2014	<b>CSI.</b> TC 0.47 BC 0.54 WB 0.84 Matrix-S	<b>DEFL.</b> Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in -0.18 -0.36 0.18 0.15	(loc) 12 11-12 9 12	l/defl >999 >999 n/a >999	L/d 360 240 n/a 240	PLATES MT20 Weight: 240 lb	<b>GRIP</b> 244/190 FT = 25%
LUMBER TOP CHO BOT CHO WEBS REACTIO	R- DRD 2x6 SP DRD 2x6 SP 2x4 SP DNS. (size Max H Max U Max G	P No.1 P No.1 No.2 a) 1=0-3-8, 9=0-3-8 orz 1=-126(LC 10) plift 1=-86(LC 12), 9=-12: rav 1=1110(LC 1), 9=186	2(LC 13) 67(LC 1)		BRACING- TOP CHOF BOT CHOF WEBS	2D 2D	Structu Rigid c 6-0-0 c 2 Rows	iral wood eiling dire oc bracing s at 1/3 p	sheathing d ectly applied g: 7-9. ts	irectly applied or 3-8-2 c or 10-0-0 oc bracing, I 2-11	oc purlins. Except:
FORCES TOP CHO BOT CHO WEBS	6. (lb) - Max. ORD 1-2=- ORD 1-12= 2-12= 2-12=	Comp./Max. Ten All for 3461/540, 2-4=-1077/267 =-378/3114, 11-12=-377/3 =-84/1663, 2-11=-2437/49	rces 250 (lb) or 7, 4-6=-1038/25 3106, 9-11=-7/3 95, 4-11=0/458	less except when shown. 51, 6-7=-662/777 321, 7-9=-566/691 , 6-11=-209/650, 6-9=-1769/8	33						
<b>NOTES-</b> 1) Unbal	anced roof live	e loads have been conside	ered for this de	sign.							

Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 18-5-0, Exterior(2) 18-5-0 to 22-9-13, Interior(1) 22-9-13 to 37-6-6 zone; cantilever right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 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 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.

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 86 lb uplift at joint 1 and 122 lb uplift at joint 9.



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	10-11-0		22-1-0	33-0-0		
Plate Offsets (X,Y)	[2:0-2-2,Edge]		11-2-0	10-11-0	) ·	
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 0.31 BC 0.53 WB 0.26 Matrix-S	DEFL.         in           Vert(LL)         -0.25           Vert(CT)         -0.35           Horz(CT)         0.05           Wind(L)         0.05	(loc) l/defl L/d 10-13 >999 360 10-13 >999 240 8 n/a n/a 2-13 >999 240	PLATES GRI MT20 244	I <b>P</b> /190 T = 25%
LUMBER- TOP CHORD 2x6 SF BOT CHORD 2x6 SF WEBS 2x4 SF	P No.1 P No.1 P No.2		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing dir Rigid ceiling directly applied c	ectly applied or 4-9-6 oc pui r 10-0-0 oc bracing.	lins.
REACTIONS. (siz Max H Max U	e) 2=0-3-8, 8=0-3-8 łorz 2=112(LC 11) Jplift 2=-91(LC 12), 8=-91(LC 13) zerz 2, 4250(LC 1), 8, 1250(LC 1)					

Max Grav 2=1359(LC 1), 8=1359(LC 1)

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

TOP CHORD 2-3=-2297/505, 3-5=-2094/540, 5-7=-2094/540, 7-8=-2297/505

BOT CHORD 2-13=-322/2010, 10-13=-106/1315, 8-10=-332/1968

WFBS 3-13=-490/297, 5-13=-151/893, 5-10=-151/893, 7-10=-490/297

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-6 to 3-8-7, Interior(1) 3-8-7 to 16-6-0, Exterior(2) 16-6-0 to 20-10-13, Interior(1) 20-10-13 to 33-8-6 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 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.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 91 lb uplift at joint 2 and 91 lb uplift at joint 8.



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	F	10-10-12		20-11-4	24-10-0	31-10-0	
Plate Offs	sets (X,Y)	[2:0-0-6,Edge]	1		5-10-12	1-0-0	
LOADING	G (psf)	SPACING- 2-0-0	CSI.	DEFL. i	n (loc) l/defl L/d	PLATES GRIP	
TCLL	20.0	Plate Grip DOL 1.15	TC 0.38	Vert(LL) -0.14	4 12-13 >999 360	MT20 244/190	
TCDL	10.0	Lumber DOL 1.15	BC 0.40	Vert(CT) -0.20	0 12-13 >999 240		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.49	Horz(CT) 0.02	2 10 n/a n/a		
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.0	3 2-13 >999 240	Weight: 209 lb FT = 25%	

#### LUMBER-

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

WEBS 2x4 SP No.2

BRACING-TOP CHORD BOT CHORD WEBS

Structural wood sheathing directly applied or 6-0-0 oc purlins. Rigid ceiling directly applied or 6-0-0 oc bracing. T-Brace: 2x4 SPF No.2 - 5-12 Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c.,with 3in minimum end distance. Brace must cover 90% of web length.

# **REACTIONS.** (size) 2=0-3-8, 10=0-3-8

Max Horz 2=-108(LC 10) Max Uplift 2=-86(LC 12), 10=-112(LC 13) Max Grav 2=942(LC 1), 10=1685(LC 1)

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

TOP CHORD 2-3=-1419/242, 3-5=-1214/258, 5-7=-528/127, 7-8=-597/758

BOT CHORD 2-13=-146/1286, 12-13=0/618, 10-12=-190/457, 8-10=-561/626

WEBS 3-13=-484/295, 5-13=-142/843, 5-12=-549/344, 7-12=-160/772, 7-10=-1594/621

# NOTES-

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

Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-6 to 3-8-7, Interior(1) 3-8-7 to 15-11-0, Exterior(2) 15-11-0 to 20-3-13, Interior(1) 20-3-13 to 32-6-6 zone; cantilever right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 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 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.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 10=112.

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



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	10-10-12 10-10-12		20-11-4 10-0-8	24-8-4	31-10-0 7-1-12	
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 0.29 BC 0.46 WB 0.23 Matrix-S	DEFL.         in         (l)           Vert(LL)         -0.16         12           Vert(CT)         -0.26         12           Horz(CT)         0.05         Wind(LL)         0.05	loc) I/defi L/d -13 >999 360 -13 >999 240 8 n/a n/a -13 >999 240	PLATES         GRIP           MT20         244/190           Weight: 209 lb         FT = 25%	

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD2x6 SP No.1BOT CHORD2x6 SP No.1WEBS2x4 SP No.2

REACTIONS. (size) 2=0-3-8, 8=0-3-8 Max Horz 2=-108(LC 10) Max Uplift 2=-88(LC 12), 8=-88(LC 13) Max Grav 2=1312(LC 1), 8=1312(LC 1)

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

TOP CHORD 2-3=-2195/493, 3-5=-1981/509, 5-7=-1974/520, 7-8=-2273/475

BOT CHORD 2-13=-316/1926, 12-13=-103/1275, 10-12=-319/1901, 8-10=-306/1933

WEBS 3-13=-474/288, 5-13=-130/825, 5-12=-150/814, 7-12=-552/256

#### 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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-6 to 3-8-7, Interior(1) 3-8-7 to 15-11-0, Exterior(2) 15-11-0 to 20-3-13, Interior(1) 20-3-13 to 32-6-6 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 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.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.

Structural wood sheathing directly applied or 4-10-12 oc purlins.

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

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SEAL 036322 February 7,2024



				18-0-0						
	H	8-0-6	15-11-0	15-11-12		23-10-0		29-8	-0 31-10-0	4
Plate Offsets (	X Y)	[8:0-8-4 0-3-0]	7-10-10	0-0-12 2-0-4		5-10-0		5-10	-0 2-2-0	
	,,,,,,									
LOADING (ps	;f)	SPACING- 2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.	Ó	Plate Grip DOL 1.15	TC 0.33	Vert(LL)	-0.06	11	>999	360	MT20	244/190
TCDL 10.	.0	Lumber DOL 1.15	BC 0.21	Vert(CT)	-0.13	11	>999	240		
BCLL 0.	.0 *	Rep Stress Incr YES	WB 0.36	Horz(CT)	0.03	9	n/a	n/a		
BCDL 10.	.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL)	0.05	11	>999	240	Weight: 215 lb	FT = 25%
LUMBER-	00	N- 4		BRACING-		0		l a la a statu in an altan		a a colla a
	200 5P	No.1				Structu	irai wood	sneathing dire	ectly applied or 6-0-0 c	oc puriins.
BUICHURD	200 5P			BUICHUP	KD			ectly applied of	6-0-0 oc bracing, E	xcept:
WERC	9-11. Z	No 2		WEDO		10-0-0 1 Pow	ot midnt	ig. 9-11.	16	
WEDS	284 36	100.2		WEDS		T-Brac		-0- 2v	10 1/ SPE No 2 - 3-16 7-	.1.4
						Factor	с. (2X) Те	nd I braces to	narrow edge of web v	with 10d
						(0 131)	(27) 1 0 'v3") naile	s 6in o c with	3in minimum end dist	ance
						Brace	must cov	er 90% of web	length	
REACTIONS.	(size	e) 2=0-3-8, 9=0-3-8, 16=0-3-8				Biaco		01 00 /0 01 100	longun	
	Max H	$r_{z} = 109(LC 11)$								
	Max U	plift 2=-81(LC 12), 9=-69(LC 13), 16=-2	1(LC 13)							
	Max G	rav 2=491(LC 23), 9=402(LC 24), 16=1	893(LC 1)							
			· · /							
FORCES. (Ib	) - Max.	Comp./Max. Ten All forces 250 (lb) or	less except when shown.							
TOP CHORD	2-3=-	504/264, 3-5=0/758, 5-7=0/764								
	0 40	407/000 40 40 407/000 45 40 554	000 40 44 000/700							

BOT CHORD 2-18=-197/368, 16-18=-197/368, 15-16=-551/209, 13-14=-203/709

- WEBS 3-18=0/353, 3-16=-814/266, 14-16=-1333/287, 5-14=-1013/193, 7-14=-816/248,
- NOTES-
- 1) Unbalanced roof live loads have been considered for this design.

7-12=0/271

2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-6 to 3-8-7, Interior(1) 3-8-7 to 15-11-0, Exterior(2) 15-11-0 to 20-3-13, Interior(1) 20-3-13 to 32-6-6 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 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.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 9, 16.

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



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **PCB Building Component Scitut Information**. Building from the Structure Building Component Advancement description (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)





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 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 and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

Job	Truss	Truss Type	Qty	Ply	Weaver Homes/38 West Preserve/Harnett	
						l63472310
J0124-0300	C4GR	ROOF SPECIAL GIRDER	1	ົ		
				2	Job Reference (optional)	
Comtech, Inc, Fa	etteville, NC - 28314,		8	8.430 s Ja	n 6 2022 MiTek Industries, Inc. Tue Feb 6 12:36:26 2024	1 Page 2
		ID:sE6vl	KHaz7jp0i0	cmNOmW	m0zovJ2-RfC?PsB70Hq3NSqPqnL8w3uITXbGKWrCDoi7	J4zJC?f

LOAD CASE(S) Standard

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

Uniform Loads (plf) Vert: 1-3=-60, 3-8=-60, 13-19=-20, 7-12=-20, 8-9=-20

Concentrated Loads (lb)

Vert: 20=-843(F) 21=-836(F) 22=-836(F) 23=-836(F) 24=-836(F) 27=-803(F) 28=-803(F) 29=-803(F) 30=-803(F) 31=-803(F) 32=-803(F) 33=-839(F) 33=-8

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	<u> </u>						
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 0.29 BC 0.43 WB 0.23 Matrix-S	<b>DEFL.</b> i Vert(LL) -0.0 Vert(CT) -0.1 Horz(CT) 0.0 Wind(LL) 0.0	in (loc) 8 2-9 8 2-9 2 6 3 2-9	l/defl L/d >999 360 >999 240 n/a n/a >999 240	PLATES         GRIP           MT20         244/19           Weight: 117 lb         FT =	0 25%

BRACING-

TOP CHORD

BOT CHORD

# LUMBER-

TOP CHORD2x4 SP No.1BOT CHORD2x6 SP No.1WEBS2x4 SP No.2

REACTIONS. (size) 6=0-3-8, 2=0-3-8 Max Horz 2=77(LC 11) Max Uplift 6=-66(LC 13), 2=-66(LC 12) Max Grav 6=930(LC 1), 2=930(LC 1)

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

TOP CHORD 2-3=-1425/377, 3-4=-1076/286, 4-5=-1076/286, 5-6=-1425/377

BOT CHORD 2-9=-249/1194, 6-9=-258/1194

WEBS 3-9=-365/248, 4-9=-76/632, 5-9=-365/248

#### 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=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 11-0-0, Exterior(2) 11-0-0 to 15-4-13, Interior(1) 15-4-13 to 22-10-8 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 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.

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



Structural wood sheathing directly applied or 5-0-0 oc purlins.

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

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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 0.08 BC 0.03 WB 0.06 Matrix-S	DEFL.         in         (loc)         l/defl         L/d         PLATE           Vert(LL)         0.00         12         n/r         120         MT20           Vert(CT)         0.00         12         n/r         120         MT20           Horz(CT)         0.00         12         n/a         n/a         Weight:	S GRIP 244/190 133 lb FT = 25%
LUMBER-			BRACING-	

TOP CHORD 2x4 SP No.1 BOT CHORD 2x6 SP No.1 OTHERS 2x4 SP No.2 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. All bearings 22-0-0.

(lb) -Max Horz 2=120(LC 16)

Max Uplift All uplift 100 lb or less at joint(s) 12, 2, 19, 20, 21, 17, 16, 15 except 22=-108(LC 12),

14=-106(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 12, 2, 18, 19, 20, 21, 22, 17, 16, 15, 14

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=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 11-0-0, Corner(3) 11-0-0 to 15-4-13, Exterior(2) 15-4-13 to 22-10-8 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 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. 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 2, 19, 20, 21,

17, 16, 15 except (jt=lb) 22=108, 14=106.



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## Continued on page 2

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Job	Truss	Truss Type	Qty	Ply	Weaver Homes/38 West Preserve/Harnett	
						163472313
J0124-0300	D1GR	QUEENPOST	1	2		
				<b>_</b>	Job Reference (optional)	
Comtech, Inc,	ayetteville, NC - 28314,			8.430 s Ja	n 6 2022 MiTek Industries, Inc. Tue Feb 6 12:36:31 2024	4 Page 2
		ID:sE6vl	(Haz7jp0i0	cmNOmW	m0zovJ2-RfC?PsB70Hq3NSqPqnL8w3uITXbGKWrCDoi7	J4zJC?f

LOAD CASE(S) Standard

Concentrated Loads (lb) Vert: 8=-841(B) 9=-836(B) 10=-836(B) 11=-836(B) 12=-836(B) 13=-836(B) 14=-838(B) 15=-838(B) 16=-838(B) 17=-838(B)

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2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-12 to 3-8-1, Interior(1) 3-8-1 to 10-10-0, Exterior(2) 10-10-0 to 15-5-12, Interior(1) 15-5-12 to 21-6-12 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) 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) 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) 8, 2.



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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 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.

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 12, 20, 22, 18, 15 except (jt=lb) 21=110, 23=162, 16=112, 14=159.



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- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-4 to 4-6-1, Interior(1) 4-6-1 to 10-10-0, Exterior(2) 10-10-0 to 15-5-12, Interior(1) 15-5-12 to 21-6-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 2x4 MT20 unless otherwise indicated.
- 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) 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) 1, 7.



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2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-4 to 4-6-1, Interior(1) 4-6-1 to 10-10-0, Exterior(2) 10-10-0 to 15-5-12, Interior(1) 15-5-12 to 21-6-4 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) 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) 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) 1, 7.



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- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelor and C-C Exterior(2) 0-1-4 to 4-6-1, Interior(1) 4-6-1 to 10-10-0, Exterior(2) 10-10-0 to 15-5-12, Interior(1) 15-5-12 to 22-4-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 2x4 MT20 unless otherwise indicated.
- 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) 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) 1, 7.



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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 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.

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 11, 19, 21, 17, 14 except (jt=lb) 20=110, 22=168, 15=112, 13=159.



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	7-0-0	<u> </u>	<u></u>	<u>21-8-0</u> 5-6-12	
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 0.29 BC 0.43 WB 0.36 Matrix-S	DEFL.         in         (loc)           Vert(LL)         -0.11         1-11           Vert(CT)         -0.27         1-11           Horz(CT)         0.05         5           Wind(LL)         0.05         1-11	l/defl L/d >999 360 >967 240 n/a n/a >999 240	PLATES         GRIP           MT20         244/190           Weight: 161 lb         FT = 25%

LUMBER-

TOP CHORD2x6 SP No.1BOT CHORD2x6 SP No.1WEBS2x4 SP No.2

REACTIONS. (size) 12=Mechanical, 5=0-3-8 Max Horz 12=-205(LC 8) Max Uplift 12=-32(LC 12), 5=-57(LC 13) Max Grav 12=823(LC 1), 5=910(LC 1)

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

TOP CHORD 1-2=-1147/322, 2-3=-863/277, 3-4=-852/275, 4-5=-1136/248

BOT CHORD 1-11=-140/956, 10-11=-188/474, 8-9=0/503, 7-8=-87/809, 5-7=-87/809

WEBS 8-10=-43/477, 3-10=-167/723, 4-8=-403/196, 2-10=-468/243

#### 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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-7-14 to 5-4-4, Interior(1) 5-4-4 to 10-10-0, Exterior(2) 10-10-0 to 15-2-13, Interior(1) 15-2-13 to 22-4-12 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 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.

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) 12, 5.



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BRACING-

BOT CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 9-11.



5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 6=116.



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818 Soundside Road

February 7,2024



TOP CHORD

BOT CHORD

## LUMBER-

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

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

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

Max Horz 2=-104(LC 10) Max Uplift 2=-80(LC 12), 4=-80(LC 13)

Max Grav 2=350(LC 1), 4=350(LC 1), 4=350(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-289/273, 3-4=-289/273

#### 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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone 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) 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.

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 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.

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.



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

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

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February 7,2024



REACTIONS. (size) 1=9-4-13, 3=9-4-13, 4=9-4-13 Max Horz 1=-27(LC 10) Max Uplift 1=-20(LC 12), 3=-25(LC 13) Max Grav 1=152(LC 23), 3=152(LC 24), 4=356(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=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) 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 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.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



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3x4 💋

3x4 📚

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

Plate Offsets (X Y) [	2.0-2-0 Edge]		3-5-9 3-5-9	3-6-5 0-0-12
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.02 BC 0.04 WB 0.00	DEFL.         in         (loc)         l/defl         L/d           Vert(LL)         n/a         -         n/a         999           Vert(CT)         n/a         -         n/a         999           Horz(CT)         0.00         3         n/a         n/a	<b>PLATES GRIP</b> MT20 244/190
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P	BRACING-	Weight: 9 lb FT = 25%
TOP CHORD 2x4 SP	No.1		TOP CHORD Structural wood sheathing of	directly applied or 3-6-5 oc purlins.

BOT CHORD

TOP CHORD2x4 SP No.1BOT CHORD2x4 SP No.1

REACTIONS. (size) 1=3-4-13, 3=3-4-13 Max Horz 1=-7(LC 8) Max Uplift 1=-5(LC 12), 3=-5(LC 13) Max Grav 1=89(LC 1), 3=89(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=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) 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 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.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



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BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

TOP CHORD

OTHERS 2x4 SP No.2

REACTIONS. 1=9-5-5, 3=9-5-5, 4=9-5-5 (size) Max Horz 1=27(LC 9) Max Uplift 1=-20(LC 12), 3=-25(LC 13) Max Grav 1=153(LC 23), 3=153(LC 24), 4=358(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=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) 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 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.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



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

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

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3x4 ⋍

3x4 📚

	0-0-12				3-6-13						
Plate Offsets (X,Y)	0-0-12 [2:0-2-0,Edge]				3-6-1						
<b>_OADING</b> (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	тс	0.02	Vert(LL)	n/a	-	n/a	999	MT20	244/190
CDL 10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
CLL 0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
SCDL 10.0	Code IRC2015/T	PI2014	Matrix	κ-P						Weight: 9 lb	FT = 25%
UMBER-					BRACING-						

TOP CHORD

BOT CHORD

#### LUMBER-

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

REACTIONS. 1=3-5-5, 3=3-5-5 (size) Max Horz 1=-8(LC 10) Max Uplift 1=-5(LC 12), 3=-5(LC 13) Max Grav 1=90(LC 1), 3=90(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=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) 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 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.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



Structural wood sheathing directly applied or 3-6-13 oc purlins.

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

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#### LUMBER-

TOP CHORD2x4 SP No.1BOT CHORD2x4 SP No.1OTHERS2x4 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.** All bearings 19-1-11.

(lb) - Max Horz 1=-165(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 13, 8 except 12=-122(LC 12), 9=-122(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 11=437(LC 22), 12=468(LC 19), 13=266(LC 19), 9=468(LC 20), 8=266(LC 20)

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

WEBS 3-12=-336/230, 2-13=-259/200, 5-9=-337/230, 6-8=-259/200

#### NOTES-

2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-5 to 4-10-1, Interior(1) 4-10-1 to 9-7-6, Exterior(2) 9-7-6 to 14-0-2, Interior(1) 14-0-2 to 18-9-6 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 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.

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 13, 8 except (jt=lb) 12=122, 9=122.



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<sup>1)</sup> Unbalanced roof live loads have been considered for this design.



NOTES-

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

 Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-5 to 4-10-1, Interior(1) 4-10-1 to 8-3-6, Exterior(2) 8-3-6 to 12-8-2, Interior(1) 12-8-2 to 16-1-6 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 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) 1 except (jt=lb) 9=130, 6=130.



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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 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.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=111, 6=111.



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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.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=112, 6=112.



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			8-6-3	0-0-8	
LOADING (pst)         SPACING-         2-0-0         CSI.         DEFL.         in         (ioc)         i/deft         L/d         PLATES         GRIP           TCLL         20.0         Plate Grip DOL         1.15         TC         0.21         Vert(LL)         n/a         -         n/a         999         MT20         244/190           TCDL         10.0         Lumber DOL         1.15         BC         0.11         Vert(CT)         n/a         -         n/a         999         MT20         244/190           BCLL         0.0 *         Rep Stress Incr         YES         WB         0.03         Horz(CT)         0.00         3         n/a         n/a           BCDL         10.0         Code IRC2015/TPI2014         Matrix-P         Weight: 31 lb         FT = 25 <sup>6</sup>	LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING-         2-0-0         CSI.           Plate Grip DOL         1.15         TC         0           Lumber DOL         1.15         BC         0           Rep Stress Incr         YES         WB         0           Code IRC2015/TPI2014         Matrix-F	DEFL. in (loc 0.21 Vert(LL) n/a - 0.11 Vert(CT) n/a - 0.03 Horz(CT) 0.00 C	t) l/defl L/d - n/a 999 - n/a 999 3 n/a n/a Weight: 31 lb FT = 2	25%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

OTHERS 2x4 SP No.2

REACTIONS. 1=8-5-11, 3=8-5-11, 4=8-5-11 (size) Max Horz 1=-69(LC 10) Max Uplift 1=-27(LC 12), 3=-33(LC 13) Max Grav 1=172(LC 1), 3=172(LC 1), 4=269(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=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) 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 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.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



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

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

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BOT CHORD

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

BOT CHORD 2x4 SP No.1

OTHERS 2x4 SP No.2

REACTIONS. 1=5-9-11, 3=5-9-11, 4=5-9-11 (size) Max Horz 1=-45(LC 10) Max Uplift 1=-17(LC 12), 3=-22(LC 13) Max Grav 1=112(LC 1), 3=112(LC 1), 4=176(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=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) 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 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.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



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<u>3-2-</u>11 0-0-8 3-2-3 3-2-3 Plate Offsets (X,Y)--[2:0-2-0,Edge] SPACING-PLATES GRIP LOADING (psf) 2-0-0 CSI. DEFL in (loc) l/defl L/d Plate Grip DOL 244/190 TCLL 20.0 1.15 тс 0.02 Vert(LL) 999 MT20 n/a n/a TCDL 10.0 Lumber DOL 1.15 BC 0.05 Vert(CT) n/a n/a 999 BCLL 0.0 Rep Stress Incr YES WB 0.00 Horz(CT) 0.00 3 n/a n/a Code IRC2015/TPI2014 FT = 25% BCDL 10.0 Matrix-P Weight: 9 lb

BRACING-

TOP CHORD

BOT CHORD

#### LUMBER-

TOP CHORD2x4 SP No.1BOT CHORD2x4 SP No.1

REACTIONS. (size) 1=3-1-11, 3=3-1-11 Max Horz 1=21(LC 9) Max Uplift 1=-5(LC 12), 3=-5(LC 13) Max Grav 1=94(LC 1), 3=94(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=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) 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 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.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



Structural wood sheathing directly applied or 3-2-11 oc purlins.

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

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A MiTek Affi 818 Soundside Road

