

Trenco 818 Soundside Rd Edenton, NC 27932

Re: J0722-3677 Wellco/Lot 109 Hidden Lakes/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: I53146737 thru I53146752

My license renewal date for the state of North Carolina is December 31, 2022.

North Carolina COA: C-0844



July 18,2022

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.



	L	6-3-0	1	12-3-0		20-3-0		26-3-0		32-4-4	38-6-0		
	1	6-3-0	I	6-0-0		8-0-0	1	6-0-0	1	6-1-4	6-1-12		
Plate Offsets (X,	,Y) [2:0-5-	8,Edge], [5:0-5-4,0	0-2-12]										
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/T	2-0-0 1.15 1.15 YES Pl2014	CSI. TC BC WB Matri	0.52 0.43 0.15 x-S		DEFL. Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in (lo -0.06 16- -0.11 16- 0.03 0.03 14-	bc) l/defl 18 >999 18 >999 13 n/a 16 >999	L/d 360 240 n/a 240	PLATES MT20 Weight: 294 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER- TOP CHORD BOT CHORD WEBS WEDGE Left: 2v4 SP No.	2x6 SP No.1 9-12: 2x4 SP 2x6 SP No.1 2x4 SP No.2 2 Right: 2x4	*Except* No.1					BRACING- TOP CHOP BOT CHOP	RD Str exc 2-0 RD Rig 6-0 1 F	uctural woo ept -0 oc purlir id ceiling d -0 oc braci	od sheathing d ns (6-0-0 max.) irectly applied ng: 11-13.	irectly applied or 5-11- ): 5-6, 9-13. or 10-0-0 oc bracing, 3-18, 5-16, 8-16, 1111	9 oc purlins, Except:	
WEDGE         6-0-0 oc bracing: 11-13.           Left: 2x4 SP No.2, Right: 2x4 SP No.3         WEBS           REACTIONS.         (size) 2=0-3-8, 13=0-3-8           Max Horz 2=-266(LC 10)         Max Uplift 2=-56(LC 12), 13=-157(LC 9)           Max Grav 2=1302(LC 1), 13=1872(LC 1)         6-0-0 oc bracing: 11-13.													
FORCES. (lb) TOP CHORD	- Max. Comp 2-3=-1651/3 9-13=-2043	./Max. Ten All fo 338, 3-5=-1303/39 /695, 9-10=-602/7	orces 250 (lb) 8, 5-6=-951/3 08, 10-11=-6	or less except 363, 6-8=-1206 81/750	when sho 3/345, 8-9=	wn. -1369/22	29,				SE/ 0363	AL 322	VIIIIII
BOT CHORD	2-19=-107/1	274, 18-19=-107/	1274, 16-18=	=0/1001, 14-16	=0/1021, 1	3-14=0/	1021,					1	-
WEBS	11-13=-656 3-19=0/253 10-13=-326	/704 , 3-18=-499/229, 5 /181	5-18=-62/567	7, 6-16=-15/399	, 8-16=-33	2/152,					THE RENGIN	EEREALIN	
NOTES- 1) Unbalanced r	oof live loads	have been consid	lered for this	design.							A. (	GILD	

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) -0-9-1 to 3-7-12, Interior(1) 3-7-12 to 12-3-0, Exterior(2) 12-3-0 to 16-7-13, Interior(1) 16-7-13 to 20-3-0, Exterior(2) 20-3-0 to 24-7-13, Interior(1) 24-7-13 to 39-4-8 zone; cantilever right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.

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

5) \* This truss has been designed for a live load of 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 56 lb uplift at joint 2 and 157 lb uplift at joint 13.

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.

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	6-3-0	12-3-0	20-3-0	26-3-0	32-6-0
	6-3-0	6-0-0	8-0-0	6-0-0 '	6-3-0
Plate Offsets (X,Y)	[2:0-5-8,Edge], [5:0-5-4,0-2-12], [9:0-5-	8,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 0.32 BC 0.29 WB 0.15 Matrix-S	DEFL. ir Vert(LL) -0.07 Vert(CT) -0.11 Horz(CT) 0.03 Wind(LL) 0.02	n (loc) l/defl L/d 7 12-15 >999 360 1 12-15 >999 240 3 9 n/a n/a 2 15 >999 240	PLATES         GRIP           MT20         244/190           Weight: 265 lb         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 Iht: 2x4 SP No.2		BRACING- TOP CHORD BOT CHORD WEBS	Structural wood sheathing d except 2-0-0 oc purlins (6-0-0 max. Rigid ceiling directly applied 1 Row at midpt	irectly applied or 5-10-6 oc purlins, ): 5-6. or 10-0-0 oc bracing. 3-15, 5-12, 8-12
REACTIONS. (siz Max H Max U Max U Max G	e) 2=0-3-8, 9=0-3-8 lorz 2=-261(LC 10) lplift 2=-55(LC 12), 9=-55(LC 13) Grav 2=1342(LC 1), 9=1342(LC 1)				

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

- TOP CHORD 2-3=-1709/396, 3-5=-1354/458, 5-6=-992/431, 6-8=-1337/458, 8-9=-1708/396
- BOT CHORD 2-16=-175/1300, 15-16=-175/1300, 12-15=-51/1030, 11-12=-170/1178, 9-11=-170/1178
- WEBS 3-16=0/252, 3-15=-495/236, 5-15=-72/569, 6-12=-75/477, 8-12=-492/236
- 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) -0-9-1 to 3-7-12, Interior(1) 3-7-12 to 12-3-0, Exterior(2) 12-3-0 to 18-5-11, Interior(1) 18-5-11 to 20-3-0, Exterior(2) 20-3-0 to 26-3-0, Interior(1) 26-3-0 to 33-3-1 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 55 lb uplift at joint 2 and 55 lb uplift at joint 9.
- 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.







BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

TOP CHORD 2x6 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.** All bearings 14-9-8 except (jt=length) 16=12-7-8, 16=12-7-8, 13=12-7-8, 9=12-7-8, 15=12-7-8, 14=12-7-8, 11=12-7-8, 11=12-7-8, 18=0-3-8.

(lb) - Max Horz 2=-261(LC 10)

- Max Uplift All uplift 100 lb or less at joint(s) 2, 21, 16, 13, 9, 26, 15, 11 except 24=-108(LC 12), 19=-265(LC 18)
- Max Grav All reactions 250 lb or less at joint(s) 22, 23, 25, 26, 15, 14, 12, 11
  - except 2=307(LC 23), 24=359(LC 19), 21=376(LC 19), 16=612(LC 1), 16=612(LC 1), 13=317(LC 24), 9=278(LC 24), 18=551(LC 18)
- FORCES. (Ib) Max. Comp./Max. Ten. All forces 250 (Ib) or less except when shown.
- TOP CHORD 2-3=-331/151, 3-5=-256/234, 8-9=-278/60
- WEBS 3-24=-310/187, 6-16=-375/119, 8-13=-271/172

# 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 Corner(3) -0-9-1 to 3-7-12, Exterior(2) 3-7-12 to 12-3-0, Corner(3) 12-3-0 to 16-7-13, Exterior(2) 16-7-13 to 20-3-0, Corner(3) 20-3-0 to 24-7-13, Exterior(2) 24-7-13 to 33-3-1 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) Provide adequate drainage to prevent water ponding.

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

- 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, with BCDL = 10.0psf.

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 21, 16, 13, 9, 26, 15, 11 except (jt=lb) 24=108, 19=265.

- 10) 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.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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 system. See MSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601 July 18,2022



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

3-21, 5-21, 5-16, 6-16, 8-16

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

1 Row at midpt

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

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Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 109 Hidder	h Lakes/Harnett	1504 407 40
J0722-3677	C1	ROOF TRUSS	4	1			153146740
Comtech, Inc, Fayett				3.430 s Au	Job Reference (optiona g 16 2021 MiTek Industri	al) ies, Inc. Mon Jul 18 06:57:02	2 2022 Page 1
	-0-10-8 6-3-0	12-3-0 1	ID:oiJeAM7jL 6-3-0	nIAQMeF_ 20-3-0	yajkeyxrR0-g2XZRUk_Z	472V5K6XJavTlkvfCoL7b4rF 8-0	RwUDdBywvRI
	0-10-8 6-3-0	6-0-0	4-0-0	4-0-0	8-5	-0	
		eve —	2x4		6x6 =		Scale = 1:63.2
		10.00 12 5	19 6	<mark>, 2</mark> 0	7 224 11		
Ī					8 8	Ī	
		4x6 15 2x6	= 17 = 4x6 II	3x		21	
	3х	6 // 4	4,00 []				
		3				22	
-1-8				4	M	4x8 \\ 9	 
				8-2-			~
	18						
						5	
	2		8-3-8		-	4	
1							
-0 4-0	4x12	14 13			12	⊠ 10 11 <sup>10</sup>	
		2x4    8x12 =			5x8 =	3x6	
	6-3-0 6-3-0	12-3-0 6-0-0	20-3-0		28-	<u>B-0</u>	
Plate Offsets (X,Y) [2	:0-5-8,Edge], [13:0-4-12,0-3-8						
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. i	n (loc)	l/defl L/d	PLATES GR	IP
TCLL 20.0 TCDL 10.0	Plate Grip DOL 1.15 Lumber DOL 1.15	TC 0.30 BC 0.40	Vert(LL) -0.09 Vert(CT) -0.16	9 13-14 5 13-14	>999 360 >999 240	MT20 244	/190
BCLL 0.0 *	Rep Stress Incr YES Code IRC2015/TPI2014	WB 0.36 Matrix-S	Horz(CT) 0.02 Wind(LL) 0.02	2 11 9 13-14	n/a n/a ⊳999 240	Weight <sup>,</sup> 289 lb F	T = 20%
					2.0		. 20,0
TOP CHORD 2x6 SP N	lo.1	<u>!</u>	TOP CHORD	Structu	ral wood sheathing dire	ctly applied or 5-7-3 oc pu	rlins,
BOT CHORD 2x6 SP N 10-13: 2x	No.1 *Except* <10 SP No.1	I	BOT CHORD	except Rigid ce	end verticals, and 2-0-0 eiling directly applied or	) oc purlins (6-0-0 max.): 5 · 10-0-0 oc bracing.	-7.
WEBS 2x4 SP N 5-13 8-12	lo.2 *Except* 2 9-11 15-16: 2x6 SP No 1		VEBS IOINTS	1 Row a 1 Brace	at midpt 3- at .lt(s): 17	13, 12-16	
WEDGE		· · · · · · · · · · · · · · · · · · ·		1 Didde			
Left: 2x4 SP No.2							
REACTIONS. (size) Max Hor	2=0-3-8, 11=0-3-8 z 2=254(LC 9)						
Max Gra	v 2=1467(LC 20), 11=1608(LC	2 2)					
FORCES. (lb) - Max. Co	omp./Max. Ten All forces 25	) (lb) or less except when shown.					
10P CHORD 2-3=-19 8-9=-15	905/105, 3-5=-1571/162, 5-6=- 526/76, 9-11=-1633/72	1270/191, 6-7=-1270/191, 7-8=-820/155	,				
BOT CHORD 2-14=-1 WEBS 3-13=-5	121/1472, 13-14=-122/1473, 12 524/257_13-15=-32/713_5-15=	2-13=0/1150 :0/726_12-16=-116/388_8-16=0/412_9-;	12=0/1224				
16-17=	-479/114, 3-14=0/289, 7-17=-1	12/706	12-0/1221,				
NOTES-							
<ol> <li>Unbalanced roof live lo</li> <li>Wind: ASCE 7-10: Vul</li> </ol>	pads have been considered for t=130mph Vasd=103mph; TCI	this design. DL=6.0psf: BCDL=6.0psf: h=15ft: 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 12-3-0, Exterior(2) 12-3-0 to 18-5-1	1, Interior(1) 18-	5-11 to 20	)-3-0,	WHY CAP	1111
Lumber DOL=1.60 pla	te grip DOL=1.60			reactions	Shown,	R	LIN'S
<ol> <li>Provide adequate drait</li> <li>This truss has been de</li> </ol>	nage to prevent water ponding esigned for a 10.0 psf bottom o	hord live load nonconcurrent with any o	her live loads.		4	TAP	K M
5) * This truss has been of will fit between the bot	designed for a live load of 30.0	psf on the bottom chord in all areas whe	ere a rectangle 3-	-6-0 tall by	/ 2-0-0 wide		
<ul><li>6) Ceiling dead load (10.0)</li></ul>	0 psf) on member(s). 15-17, 16	S-17; Wall dead load (5.0psf) on member	er(s).13-15, 12-10	6	Ξ	SEAL	: E
<ul><li>7) Bottom chord live load</li><li>8) This truss is designed</li></ul>	in accordance with the 2015 Ir	m cnord dead load (10.0 pst) applied or Iternational Residential Code sections F	ity to room. 12-13 502.11.1 and R8	ა 302.10.2 a	ind E	036322	- <u> </u> - <u>-</u>
referenced standard A	NSI/TPI 1.	ze or the orientation of the purlin along	the ton and/or bo	ttom chor	d I	No.	1. 3
10) Attic room checked for	or L/360 deflection.		ייים יסף מוימ/טו שנ		u	A SAGINEE	A.M.
						A GIL	34.111
						"IIIIIIIII	<i>((</i> ,

July 18,2022

CO





Job		Truss	Truss Type	Qty	Ply	Wellco/Lot 109 Hidden Lakes/Harnett	
							153146741
J0722-3677		C1GE	GABLE	1	1		
						Job Reference (optional)	
Comtech, Inc,	Fayettev	ille, NC - 28314,		. 8	.430 s Aug	16 2021 MiTek Industries, Inc. Mon Jul 18 06:57:04 2022	Page 2
	-		ID:oiJ	leAM7jLnl/	QMeF_ya	ijkeyxrR0-cQfKs9mF5hNmkPTUekdNYjpF90TpbVa8uEzKh	13ywvRj

## NOTES-

14) Attic room checked for L/360 deflection.



Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 109 Hidden L	_akes/Harnett	153146742
J0722-3677	C2	ROOF TRUSS	1	2			100140742
Comtech, Inc, Fayet	tteville, NC - 28314,		8.	430 s Aug	16 2021 MiTek Industries	s, Inc. Mon Jul 18 06:57:05	5 2022 Page 1
	-Q-10-8 6-3-0	12-3-0	ID:oiJeAM7jLnl	IAQMeF_y 20-3-0	/ajkeyxrR0-4dDi3Vnts?Vd 28-8-0	MZ2hCR8c5wMPwPpQKy	XI7ujtDVywvRi
	0-10-8 6-3-0	6-0-0	4-0-0	4-0-0	8-5-0		
		eve —	2x4		5x5 =		Scale: 3/16"=1'
		10.00 12	5 19 6	<u>_2</u> 0	7 0.4 11		
Ī		1			8	I	
		\$ /					
		4x6 // 15	$2x_6 = \frac{17}{17}$	2)			
		4	4x6				
	3X						
-1-8						22 5x8 \	φ -
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	184			-			
	$\langle \rangle$						
	2 4		8-3-8				
	.9 <sup>1</sup>						
	36				ð	l l l	
	4x12	14	13		12	11 <sup>10</sup> 5x8	
	6-3-0	2x4    12-3-0	8x12 — 20-3-0		8x8 — 28-8-(	J	
Plate Offects (X X)	6-3-0 6-3-0	6-0-0 12:0 4 0 0 5 81 [12:0 4 12 0 2 8	8-0-0		8-5-0		
	2.0-3-6,∟ugej, [1.0-3-4,0-3-0], [	12.0-4-0,0-3-0], [13.0-4-12,0-3-0					
LOADING (psf) TCLL 20.0	SPACING- 4-0-0 Plate Grip DOL 1.15	CSI. TC 0.37	DEFL. in Vert(LL) -0.08	(loc) 12	l/defl L/d >999 360	PLATES GRI MT20 244	<b>IP</b> /190
TCDL 10.0	Lumber DOL 1.15	BC 0.44	Vert(CT) -0.11	13-14	>999 240		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.08	13-14	>999 240	Weight: 578 lb F	T = 20%
LUMBER-			BRACING-				
TOP CHORD 2x6 SP	No.1		TOP CHORD	2-0-0 oc	purlins (6-0-0 max.), ex	cept end verticals	
10-13: 2:	x10 SP No.1		BOT CHORD	Rigid cei	iling directly applied or 1	0-0-0 oc bracing.	
WEBS 2x4 SP 1 5-13.8-1	No.2 *Except* 2.9-11.15-16: 2x6 SP No.1		JOINTS	1 Brace	at Jt(s): 5, 7, 9, 15, 16, 7	17	
WEDGE	,. ,						111.
Len: 274 SF 110.2						TH CAR	20 March
REACTIONS. (size) Max Hol	2=0-3-8, 11=0-3-8 rz 2=509(LC 9)					FESSIO	1 sin
Max Gra	av 2=3122(LC 20), 11=4444(L0	C 21)			4	the share	
FORCES. (Ib) - Max. C	comp./Max. Ten All forces 25	0 (Ib) or less except when shown	۱.		E	SEAL	È E
TOP CHORD 2-3=-4 8-9=-3	039/252, 3-5=-3448/380, 5-6=- 502/231, 9-11=-3684/218	2679/406, 6-7=-2681/406, 7-8=-	1950/365,			036322	÷ E
BOT CHORD 2-14=-	272/3123, 13-14=-273/3125, 1	2-13=0/2599 	/1194 0 12-0/2677		1	N	1 3
15-17	=-51/282, 16-17=-762/193, 6-1	7=-259/208, 3-14=0/535, 7-17=-	156/1079			TA NGINEEP	
NOTES-						CACINE	3Et III
1) 2-ply truss to be connected	ected together with 10d (0.131	'x3") nails as follows:				A. GIL	in in the second s
Bottom chords connected	cted as follows: 2x6 - 2 rows stage	aggered at 0-9-0 oc, 2x10 - 2 rov	ws staggered at 0-9-0 oc.				
2) All loads are consider	ollows: 2x4 - 1 row at 0-9-0 oc, ed equally applied to all plies, e	2x6 - 2 rows staggered at 0-9-0 except if noted as front (F) or bac	oc. ck (B) face in the LOAD C	ASE(S) s	ection. Ply to		
ply connections have	been provided to distribute only	/ loads noted as (F) or (B), unles	s otherwise indicated.		-		
4) Wind: ASCE 7-10; Vu	lt=130mph Vasd=103mph; TCl	DL=6.0psf; BCDL=6.0psf; h=15ft	; Cat. II; Exp C; Enclosed	; MWFRS	(envelope)		
and C-C Exterior(2) -0 Exterior(2) 20-3-0 to 2	0-9-1 to 3-7-12, Interior(1) 3-7-1 26-5-11, Interior(1) 26-5-11 to 2	2 to 12-3-0, Exterior(2) 12-3-0 to 8-3-12 zone:C-C for members a	o 18-5-11, Interior(1) 18-5 nd forces & MWFRS for re	-11 to 20- eactions s	·3-0, shown;		
Lumber DOL=1.60 pla	ate grip DOL=1.60						
6) This truss has been d	esigned for a 10.0 psf bottom of	hord live load nonconcurrent wit	h any other live loads.				
<li>7) * This truss has been will fit between the bo</li>	designed for a live load of 30.0 ttom chord and any other mem	psf on the bottom chord in all are bers.	eas where a rectangle 3-6	5-0 tall by	2-0-0 wide		
<ol> <li>8) Ceiling dead load (10.</li> <li>9) Bottom chord live load</li> </ol>	.0 psf) on member(s). 15-17, 10	6-17; Wall dead load (5.0psf) on	member(s).13-15, 12-16				
10) This truss is designe	ed in accordance with the 2015	International Residential Code s	ections R502.11.1 and R8	802.10.2 a	and		
reterenced standard 11) Graphical purlin repr	ANSI/TPT1. resentation does not depict the	size or the orientation of the purl	lin along the top and/or bo	ottom cho	rd.	July 18	,2022
12) Attic room checked f Continued on page 2	for L/360 deflection.	·			_		
WARNING - Verify design valid for use only v	gn parameters and READ NOTES ON TH with MiTek® connectors. This design is	HIS AND INCLUDED MITEK REFERENCE based only upon parameters shown, and	PAGE MII-7473 rev. 5/19/2020 B is for an individual building com	SEFORE USE	Ε.		'nn
a truss system. Before use building design. Bracing in is always required for state	e, the building designer must verify the ndicated is to prevent buckling of individ	applicability of design parameters and pro- lual truss web and/or chord members only	y. Additional temporary and per	o the overall manent brac	sing		ek Affiliate
fabrication, storage, delive	ery, erection and bracing of trusses and	truss systems, see ANSI/TPI1 (	Quality Criteria, DSB-89 and B	CSI Building	g Component	818 Soundside Road	

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 109 Hidden Lakes/Harnett	
						153146742
J0722-3677	C2	ROOF TRUSS	1	2		
					Job Reference (optional)	
Comtech, Inc, Fayette	/ille, NC - 28314,		8	.430 s Aug	16 2021 MiTek Industries, Inc. Mon Jul 18 06:57:05 2022	Page 2

ID:oiJeAM7jLnIAQMeF\_yajkeyxrR0-4dDi3Vnts?VdMZ2hCR8c5wMPwPpQKyXI7ujtDVywvRi

## LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-5=-120, 5-7=-120, 7-9=-120, 2-13=-40, 12-13=-80, 11-12=-160(F=-120), 10-11=-40, 15-16=-40 Drag: 13-15=-20, 12-16=-20









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 system. See MSI/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 Affili 818 Soundside Road

Edenton, NC 27932



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 **MSI/TPI1 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



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G mm July 18,2022

> 818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qtv	Plv	Wellco/Lot 109 Hidde	en Lakes/Harnett	
10722-3677	03	ATTIC	3	1			153146748
30722-3077					Job Reference (option	nal)	
Comtech, Inc, Faye	etteville, NC - 28314,		ID:oiJeAM7jLnIAC	3.430 s Au QMeF_yajk	g 16 2021 Millek Indus eyxrR0-vnazKZreSrGm	n4UWqZiF0KBcNkqmF	6:57:11 2022 Page 1 kh7AWpABR9ywvRc
		<u>4-0-4</u> 8-6-13 4-0-4 4-6-9	<u>10-11-8   13-4-3  </u> 2-4-11   2-4-11	<u>17-10-12</u> 4-6-9	<u>21-11-0</u> 4-0-4		
			6x8 =				Scale = 1:82.9
	т		5				
		12.00 $12$ $2x6 =$		2x6 —			
		12.00   12		6			
		18		19			
		2x6		//			
	3-7-0	6x8 1/ 3			20 2x6    7 6x8 \\		
	÷		+2-4		8 5x8 %		
	5		0,		9		
	I	5	13-5-0			Ī	
	2-8-8			-		2-8-8	
		ă	<u>L</u>	3			
		$16 \begin{array}{c} 15 \\ 10 \times 10 \end{array} =$	6x12	2 =	12   11   11   10   10   3x6   11	-	
		3x6    4-0-4	17-10-12		21-11-0		
Plate Offsets (X,Y)	[2:0-4-0,Edge], [8:0-4-0,Edge], [12	<u>4-0-4</u> 2:0-5-0,0-7-8], [14:0-5-0,0-7-8]	13-10-8		4-0-4		
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. ir	n (loc)	l/defl L/d	PLATES	GRIP
TCLL 20.0 TCDL 10.0	Plate Grip DOL 1.15 Lumber DOL 1.15	TC 0.60 BC 0.79	Vert(LL) -0.23 Vert(CT) -0.36	3 12-14 5 12-14	>999 360 >700 240	MT20	244/190
BCLL 0.0 *	Rep Stress Incr YES	WB 0.25 Matrix-S	Horz(CT) 0.01 Wind(LL) 0.05	1 11 5 12-14	n/a n/a	Weight: 254 lb	FT - 20%
		Matrix C		7 12 14	2333 240	Weight. 204 lb	11 - 2070
TOP CHORD 2x10 SI	P No.1 *Except*		TOP CHORD	Structur	al wood sheathing dir	ectly applied or 4-10-	12 oc purlins,
1-2,8-9 BOT CHORD 2x10 SI	: 2x6 SP No.1 P No.1		BOT CHORD	except e Rigid ce	end verticals. eiling directly applied o	or 10-0-0 oc bracing,	Except:
WEBS 2x6 SP 1-14,9-	No.1 *Except* 12: 2x4 SP No.2			8-8-5 00	c bracing: 12-14.		
REACTIONS (size	) 15=0-3-8 11=0-3-8						
Max Ho	$ \frac{1}{1000} = $	2 20)					
	av 15=1544(EC 21), 11=1544(EC 21)	(1)					
TOP CHORD 1-3=-	Comp./Max. Ten All forces 250 1604/0, 3-4=-1039/164, 4-5=-21/3	(lb) or less except when shown 359, 5-6=-21/359, 6-7=-1039/16	4, 7-9=-1603/0,				
1-15= BOT CHORD 14-15	-1885/0, 9-11=-1886/0 =-317/359, 12-14=0/991						
WEBS 4-6=-	1312/202, 3-14=0/827, 7-12=0/82	7, 1-14=0/1096, 9-12=0/1097					
NOTES- 1) Unbalanced roof live	loads have been considered for t	his design					
2) Wind: ASCE 7-10; V	ult=130mph Vasd=103mph; TCD 4.13 to $4.0.0$ Interior(1) $4.0.0$ to	L=6.0psf; BCDL=6.0psf; h=15ft;	Cat. II; Exp C; Enclosed	d; MWFR	S (envelope)		
vertical left and right	exposed;C-C for members and fo	prces & MWFRS for reactions sh	nown; Lumber DOL=1.60	0 plate gri	p DOL=1.60		
<ul> <li>4) * This truss has been</li> </ul>	designed for a 10.0 pst bottom ch a designed for a live load of 30.0p	ord live load nonconcurrent with sf on the bottom chord in all are	any other live loads. as where a rectangle 3-	6-0 tall by	2-0-0 wide	and the second s	
will fit between the b 5) Ceiling dead load (10	ottom chord and any other memb 0.0 psf) on member(s). 3-4, 6-7, 4	ers. -6; Wall dead load (5.0psf) on ı	nember(s).3-14, 7-12			IN RTH U	C L L
<ul><li>6) Bottom chord live loa</li><li>7) This truss is designed</li></ul>	d (40.0 psf) and additional botton d in accordance with the 2015 Int	n chord dead load (10.0 psf) ap ernational Residential Code sec	blied only to room. 12-14 tions R502.11.1 and R8	4 302.10.2 a	ind	FES	Risi
referenced standard	ANSI/TPI 1.						
					Ξ	: SE/	AL 🗄 🚊







		L		6-3-8				1		10-2-0		
		I		6-3-8				1		3-10-8		
Plate Offse	ets (X,Y)	[4:0-1-11,0-1-8]										
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.01	4-5	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	-0.02	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TF	912014	Matri	x-S	Wind(LL)	0.00	2-7	>999	240	Weight: 42 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	2x4 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
WEBS	2x4 SP No.2		6-0-0 oc bracing: 4-5.
OTHERS	2x4 SP No.2		

**REACTIONS.** All bearings 6-3-8 except (jt=length) 4=Mechanical.

(lb) - Max Horz 2=177(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 4, 2, 7 except 5=-174(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 4, 2, 6, 7 except 5=440(LC 1), 5=440(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. WEBS 3-5=-353/236

#### NOTES-

- 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) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 10-3-12 zone; 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 studs spaced at 2-0-0 oc.

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

5) \* This truss has been designed for a live load of 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) 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, 7 except (jt=lb) 5=174.

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.



818 Soundside Road Edenton, NC 27932



Plate Offsets (X,Y)	[2:0-2-1,0-1-8], [4:0-2-1,0-1-8]			
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 0.17 BC 0.08 WB 0.02 Matrix-P	DEFL.         in         (loc)         l/defl         L/d         PLATES         GRIP           Vert(LL)         0.00         5         n/r         120         MT20         244/190           Vert(CT)         0.01         5         n/r         120         MT20         244/190           Horz(CT)         0.00         4         n/a         n/a         Na         Weight: 29 lb         FT = 20	%
LUMBER- TOP CHORD 2x4 SI BOT CHORD 2x4 SI	P No.1 P No.1		BRACING-           TOP CHORD         Structural wood sheathing directly applied or 6-0-0 oc purlins.           BOT CHORD         Rigid ceiling directly applied or 10-0-0 oc bracing.	

OTHERS 2x4 SP No.2 **REACTIONS.** (size) 2=6-8-9, 4=

(size) 2=6-8-9, 4=6-8-9, 6=6-8-9 Max Horz 2=-75(LC 10)

Max Uplift 2=-30(LC 12), 4=-37(LC 13)

Max Grav 2=182(LC 1), 4=182(LC 1), 6=223(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.
- 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
   Oct the provide provide structure of the provide structure
- 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) 2, 4.
- 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) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.







Plate Olisets (X, Y)	[2:0-2-1,0-1-8], [6:0-2-1,0-1-8]			
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 0.04 BC 0.02 WB 0.03	DEFL.         in         (loc)         l/defl         L/d           Vert(LL)         -0.00         6         n/r         120           Vert(CT)         0.00         6         n/r         120           Horz(CT)         0.00         6         n/a         n/a	PLATES         GRIP           MT20         244/190
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P		Weight: 32 lb FT = 20%
LUMBER- TOP CHORD 2x4 S BOT CHORD 2x4 S	P No.1	1	BRACING- TOP CHORD Structural wood sheathing dire BOT CHORD Rigid coiling directly applied o	ectly applied or 6-0-0 oc purlins.

BOT CHORD

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

REACTIONS. All bearings 6-8-9.

(lb) -Max Horz 2=94(LC 11)

2x4 SP No.2

Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 10=-121(LC 12), 8=-120(LC 13) Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9, 10, 8

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

### NOTES-

OTHERS

- 1) Unbalanced roof live loads have been considered for this design
- 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;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 requires continuous bottom chord bearing.

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

- 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 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.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6 except (jt=lb) 10=121, 8=120.
- 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) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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Plate Offsets (X,Y)	[2:0-2-1,0-1-8], [4:0-2-1,0-1-8]						
LOADING         (psf)           TCLL         20.0           TCDL         10.0           BCLL         0.0           BCDL         10.0	SPACING- 4-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO Code IRC2015/TPI2014	CSI. TC 0.07 BC 0.08 WB 0.01 Matrix-P	DEFL.         in           Vert(LL)         0.00           Vert(CT)         0.00           Horz(CT)         0.00	(loc) l/defl 5 n/r 5 n/r 4 n/a	L/d 120 120 n/a	<b>PLATES</b> MT20 Weight: 74 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD 2x6 SP BOT CHORD 2x4 SP OTHERS 2x4 SP	9 No.1 9 No.1 9 No.2		BRACING- TOP CHORD BOT CHORD	2-0-0 oc purlir (Switched fror Rigid ceiling d	ns (6-0-0 max.) m sheeted: Spac lirectly applied c	cing > 2-8-0). or 10-0-0 oc bracing.	

REACTIONS. (size) 2=6-2-5, 4=6-2-5, 6=6-2-5 Max Horz 2=-146(LC 10)

Max Uplift 2=-66(LC 12), 4=-81(LC 13) Max Grav 2=373(LC 1), 4=373(LC 1), 6=384(LC 3)

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

## NOTES-

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: 2x4 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) 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
- 5) Gable requires continuous bottom chord bearing.
- 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 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.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 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) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



omponent 818 Soundside Road Edenton, NC 27932

