

Trenco 818 Soundside Rd Edenton, NC 27932

Re: J0421-2290 Stout/Lot 17 Forest Ridge/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: E15666779 thru E15666799

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

North Carolina COA: C-0844



April 28,2021

# 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.



	<u>12-1-14</u> 12-1-14		<u>18-9-2</u> 6-7-3		30-11-0 12-1-14	
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 Ippr YES	CSI. TC 0.19 BC 0.65 WB 0.15	DEFL. Vert(LL) Vert(CT)	in (loc) l/defl -0.29 2-16 >999 -0.44 2-16 >850 0.03 11 p/a	L/d 360 240	PLATES         GRIP           MT20         244/190
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL)	0.19 2-16 >999	240	Weight: 251 lb FT = 20%

LUMBER-		BRACING-		
TOP CHORD	2x6 SP No.1	TOP CHORD	Structural wood sheathing directly a	applied or 6-0-0 oc purlins, except
BOT CHORD	2x6 SP No.1		2-0-0 oc purlins (6-0-0 max.): 6-7.	
WEBS	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0	0-0 oc bracing.
SLIDER	Left 2x8 SP No.1 - 4-3-7, Right 2x8 SP No.1 -x 4-3-7	WEBS	1 Row at midpt 5-16, 8	-13

REACTIONS. (size) 2=0-3-8, 11=0-3-8 Max Horz 2=-267(LC 8) Max Uplift 2=-52(LC 12), 11=-52(LC 13) Max Grav 2=1486(LC 19), 11=1486(LC 20)

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

TOP CHORD 2-5=-1649/413, 5-6=-1429/436, 6-7=-1033/408, 7-8=-1429/436, 8-11=-1649/413

BOT CHORD 2-16=-183/1268, 13-16=-14/1079, 11-13=-162/1122

WEBS 5-16=-347/270, 6-16=-69/560, 7-13=-69/560, 8-13=-347/270

#### NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-11 to 3-7-2, Interior(1) 3-7-2 to 12-1-14, Exterior(2) 12-1-14 to 18-4-9, Interior(1) 18-4-9 to 18-9-2, Exterior(2) 18-9-2 to 24-10-5, Interior(1) 24-10-5 to 31-8-11 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 52 lb uplift at joint 2 and 52 lb uplift at joint 11.

7) 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 sand truss systems, 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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Job	Truss	Truss Type	Qty	Ply	Stout/Lot 17 Forest Ridge/Harnett	
10421 2200	A01CE		1	1	E1560	6780
30421-2290	AUIGE	GABLE	1		Job Reference (optional)	
Comtech, Inc, Fayet	eville, NC - 28314,			3.330 s Oc	t 7 2020 MiTek Industries, Inc. Tue Apr 27 15:17:01 2021 Page	2
		ID:ikQvRsN	Xi14PrYc	3UMF2QW	/zXTAO-LceOQYIVo V8eHpeEiOhPbtMBK15WxiD8MVStPzMU	?0

### NOTES-

10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 32, 34, 35, 30 except (jt=lb) 22=116, 36=120, 37=115, 38=107, 39=123, 40=299, 28=121, 27=116, 26=108, 25=121, 2=234, 24=266.

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

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

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- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10.
- 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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Job	Truss	Truss Type	Qty	Ply	Stout/Lot 17 Forest R	idge/Harnett	
J0421-2290	A03GE	GABLE	1	1		E156667	'83
Comtech, Inc, Faye	etteville, NC - 28314,			8.330 s O	Job Reference (option oct 7 2020 MiTek Industr	ial) ries, Inc. Tue Apr 27 15:17:09 2021 Page 1	
	-q <u>-11-0 6-2-11</u>	12-1-14	ID:ikQyRsNXi14PrYc3U 18-9-2	MF2QWz>	24-8-5	bWQAiOYZkHCg3ZjnORWO_cRu8xzMU_u 28-8-0	
	0-11-0 6-2-11	5-11-3	6-7-3		5-11-3	3-11-11 '	
		6x6 =	9 10 11	6x6 =	=	Scale = 1:	ô8.2
		10.00 12 8 6x6 % 8				53x4 ≫	
2 2 2	$4x6 \neq 2x6 \parallel 5x5 \neq 45$ $5x5 \neq 3$ $G_{H}^{T} = 2^{1}$	6 36 35 35 3x10    3x10    3x10		38	39 39 3x10    3x10    3x10	0	
	3x10    33	3) 32 31 30 29	44 = 25 28   27   26 4x6 =	24 3x4 =	23 42 22 43 21	<sup>44</sup> 20 19 6x6 =	
		12-1-14 12-1-14	18-9-2 6-7-3		28-8-0 9-10-14		
Plate Offsets (X,Y)	[2:0-7-8,0-0-3], [6:0-3-0,0-2-4],	[36:0-0-4,0-2-6]					
LOADING(psf)TCLL20.0TCDL10.0BCLL0.0BCDL10.0	SPACING- 2-0 Plate Grip DOL 1.1 Lumber DOL 1.1 Rep Stress Incr N Code IRC2015/TPI2014	0 <b>CSI.</b> 5 TC 0.19 5 BC 0.24 O WB 0.67 Matrix-S	DEFL.         ir           Vert(LL)         0.07           Vert(CT)         -0.08           Horz(CT)         0.01	(loc) 22-23 22-23 19	l/defl L/d >999 240 >999 240 n/a n/a	PLATES         GRIP           MT20         244/190           Weight: 354 lb         FT = 20%	
LUMBER- TOP CHORD 2x6 SP BOT CHORD 2x6 SP WEBS 2x4 SP 18-19: 2 OTHERS 2x4 SP SLIDER Left 2x6	No.1 No.2 *Except* 2x6 SP No.1 No.2 3 SP No.1 -x 4-3-7		BRACING- TOP CHORD BOT CHORD WEBS	Structur except e Rigid ce T-Brace Fasten (0.131"> Brace m	ral wood sheathing dir end verticals, and 2-0- eiling directly applied o e: 21 (2X) T and I braces (2X) T and I braces (3X) nails, 6in o.c.,with nust cover 90% of web	ectly applied or 6-0-0 oc purlins, 0 oc purlins (6-0-0 max.): 9-12. or 10-0-0 oc bracing. x4 SPF No.2 - 10-26, 11-25 o narrow edge of web with 10d 3 in minimum end distance. o length.	
REACTIONS. All be (lb) - Max Ho Max Up Max Gi	arings 14-9-8 except (jt=length brz 2=377(LC 5) blift All uplift 100 lb or less at j 28=-617(LC 20), 19=-481( rav All reactions 250 lb or les 28=414(LC 9), 19=1148(LC	) 19=1-6-8. oint(s) 29, 31, 33 except 2=-311(L _C 9), 26=-163(LC 4), 30=-121(LC s at joint(s) 29, 30, 33 except 2=75 C 1), 26=478(LC 20), 31=267(LC 1	JOINTS C 4), : 8), 32=-247(LC 27) 93(LC 34), !), 32=266(LC 15)	1 Brace	at Jt(s): 34, 35, 38, 39	9, 41	
FORCES. (Ib) - Max. ( TOP CHORD 2-4=-5 9-10= 14-15	Comp./Max. Ten All forces 2: 959/474, 4-6=-783/425, 6-7=-8 -618/496, 10-11=-617/496, 11- =-860/444, 15-16=-1056/536	50 (lb) or less except when shown 62/495, 7-8=-887/581, 8-9=-807/5 12=-618/496, 12-13=-733/544, 13	96, -14=-820/523,				
BOT CHORD 2-33= 28-29 22-23 WEBS 9-28=	-171/517, 32-33=-171/517, 31- =-171/517, 26-28=-165/602, 2! =-296/638, 21-22=-296/638, 2! -307/405, 12-24=-213/262, 16-	32=-171/517, 30-31=-171/517, 29 5-26=-165/602, 24-25=-165/602, 2 3-21=-296/638, 19-20=-296/638 41=-1242/532, 19-41=-1095/468,	I-30=-171/517, I3-24=-296/638, 4-32=-237/285,			Wed CAP	
15-40 NOTES- 1) Unbalanced roof live 2) Wind: ASCE 7-10; V MWFRS (envelope) ) 3) Truss designed for w Gable End Details as 4) Provide adequate dr 5) All plates are 2x4 MT 6) Gable studs spaced 7) This truss has been will fit between the bo 9) Provide mechanical ( (jt=lb) 2=311, 28=61 10) Graphical purlin rep Continued on page 2	=-106/285, 21-40=-151/267 loads have been considered fu ult=130mph (3-second gust) Vi gable end zone; end vertical rig ind loads in the plane of the tri sapplicable, or consult qualifier ainage to prevent water pondin '20 unless otherwise indicated at 2-0-0 oc. designed for a 10.0 psf bottom o designed for a live load of 30. bottom chord and any other mer connection (by others) of truss 7, 19=481, 26=163, 30=121, 33 presentation does not depict the	or this design. asd=103mph; TCDL=6.0psf; BCDL ht exposed; Lumber DOL=1.60 pl uss only. For studs exposed to wir d building designer as per ANSI/Tf g. chord live load nonconcurrent with 0psf on the bottom chord in all are nbers. to bearing plate capable of withsta 2=247. a size or the orientation of the purli	L=6.0psf; h=15ft; Cat. II; ate grip DOL=1.60 nd (normal to the face), s PI 1. n any other live loads. as where a rectangle 3- anding 100 lb uplift at join in along the top and/or b	Exp C; Er see Stand 6-0 tall by nt(s) 29, 3 ottom chc	nclosed; lard Industry / 2-0-0 wide 31, 33 except ord.	SEAL 036322 A. GILPHININ April 28,2021	
WARNING - Verify des Design valid for use only a truss system. Before us building design. Bracing is always required for sta fabrication, storage, delin Safety Information ava	sign parameters and READ NOTES ON with MITek® connectors. This design i se, the building designer must verify the indicated is to prevent buckling of indi- bility and to prevent collapse with poss very, erection and bracing of trusses an ilable from Truss Plate Institute, 2670 C	THIS AND INCLUDED MITEK REFERENCE s based only upon parameters shown, and i applicability of design parameters and pro idual truss web and/or chord members only ble personal injury and property damage. I d truss systems, see <b>ANS/TPI (2</b> znia Highway, Suite 200 Waldorf, MD 2060	PAGE MII-7473 rev. 5/19/2020 is for an individual building com perly incorporate this design iniv. Additional temporary and per For general guidance regarding <i>Quality Criteria, DSB-89 and E</i> 01	BEFORE US ponent, not to the overal manent bra- the BCSI Buildin	SE. II Incing ng Component	ENGINEERING BY <b>TRENCO</b> A MITEK Affiliate 818 Soundside Road Edenton, NC 27932	

Job	Ti	russ	Truss Type	Qty	Ply	Stout/Lot 17 Forest Ridge/Harnett	
							E15666783
J0421-2290	A	03GE	GABLE	1	1		
						Job Reference (optional)	
Comtech, Inc, Fa	ayetteville	e, NC - 28314,			3.330 s Oc	t 7 2020 MiTek Industries, Inc. Tue Apr 27 15:17:09 2021	Page 2
	-		ID:ikQvRsNXi	4PrYc3U	MF2QWzX	TAO-687Q5HrWvRV0bWQAiOYZkHCa3ZinORWO cRu8	kzMŪ u

#### NOTES-

11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 45 lb down and 55 lb up at 16-6-12, 45 lb down and 55 lb up at 18-6-12, 45 lb down and 55 lb up at 20-2-12, 45 lb down and 55 lb up at 21-8-4, and 45 lb down and 55 lb up at 23-4-4, and 45 lb down and 55 lb up at 25-4-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

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

13) 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: 1-9=-60, 9-12=-60, 12-18=-60, 2-19=-20 Concentrated Loads (lb)

Vert: 24=-45(B) 25=-45(B) 23=-45(B) 42=-45(B) 43=-45(B) 44=-45(B)

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Comtech, Inc, Fayetteville, NC - 28314,



Scale = 1:86.1



		5-8-12 5-8-12	<u>18-2-4</u> 12-5-8	$10x_{10} = 23-11$ 5-8-1	-0		
Plate Offsets (X,Y)	[1:0-0-0,0-0-8], [5:0-4-0,Ed	lge], [9:0-0-0,0-0-4], [11:0	0-5-0,0-2-12], [13:0-4-0,0-2-8]				
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/TPI:	2-0-0         CSI.           1.15         TC           1.15         BC           YES         WB           2014         Matr	DEFL.           0.91         Vert(LL)           0.82         Vert(CT)           0.14         Horz(CT)           ix-S         Wind(LL)	in (loc) // -0.29 11-13 > -0.51 11-13 > 0.01 9 0.11 11-13 >	defl L/d 968 360 552 240 n/a n/a 999 240	PLATES MT20 Weight: 279 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD 2x8 SF BOT CHORD 2x10 S 11-13: WEBS 2x6 SF WEDGE	P No.1 P No.1 *Except* 2x8 SP No.1 P No.1		BRACING TOP CHO BOT CHO	- RD Structural RD Rigid ceilir	wood sheathing dire	ectly applied or 2-2-0 o 8-4-10 oc bracing.	oc purlins.

REACTIONS.	(size)	1=0-3-8, 9=0-3-8
	Max Horz	1=-302(LC 8)
	Max Grav	1=1541(LC 21), 9=1577(LC 21)

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

- TOP CHORD 1-3=-2031/0, 3-4=-1103/167, 4-5=-43/677, 5-6=-48/681, 6-7=-1098/163, 7-9=-2059/0
- BOT CHORD 1-13=0/1150, 11-13=0/1150, 9-11=0/1150
- WEBS 4-6=-1960/287, 3-13=0/984, 7-11=0/1026

#### NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=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 11-11-8, Exterior(2) 11-11-8 to 16-4-5, Interior(1) 16-4-5 to 24-7-6 zone; end vertical 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 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) Ceiling dead load (10.0 psf) on member(s). 3-4, 6-7, 4-6; Wall dead load (5.0psf) on member(s).3-13, 7-11

6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 11-13

7) Attic room checked for L/360 deflection.



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Comtech, Inc, Fayetteville, NC - 28314,



Scale = 1:84.5



		-8-12 -8-12	18-2-4 12-5-8	0x10 = 23-	11-0 B-12		
Plate Offsets (X,Y)	[4:0-4-0,0-6-0], [5:0-8-6,Edge], [7:0-4-	0,Edgej, [9:0-8-6,Edgej, [10	):0-4-0,0-6-0], [16:0-5-0,	0-2-4], [18:0	-5-0,0-3-4]		
LOADING         (psf)           TCLL         20.0           TCDL         10.0           BCLL         0.0         *           BCDL         10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCodeIRC2015/TPI2014	<b>CSI.</b> TC 0.94 BC 0.74 WB 0.25 Matrix-S	DEFL.         ir           Vert(LL)         -0.25           Vert(CT)         -0.44           Horz(CT)         0.01           Wind(LL)         0.13	n (loc) 1/0 5 16-18 >9 4 16-18 >6 1 12 3 16-18 >9	defl L/d 999 360 647 240 n/a n/a 999 240	PLATES MT20 Weight: 297 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD 2x8 SI BOT CHORD 2x10 S 16-18: WEBS 2x6 SI OTHERS 2x4 SI	P No.1 SP No.1 *Except* 2x8 SP No.1 P No.1 P No.2		BRACING- TOP CHORD BOT CHORD	Structural Rigid ceilir	wood sheathing dired	ctly applied or 2-2-0 c 10-0-0 oc bracing.	oc purlins.

REACTIONS. (size) 2=0-3-8, 12=0-3-8 Max Horz 2=-379(LC 10) Max Grav 2=1570(LC 20), 12=1570(LC 21)

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

- TOP CHORD
   2-3=-1976/0, 3-4=-1733/0, 4-5=-2220/29, 5-6=-1109/203, 6-7=-64/622, 7-8=-65/622, 8-9=-1109/203, 9-10=-2219/28, 10-11=-1733/0, 11-12=-1975/0

   BOT CHORD
   2-20=0/1231, 19-20=0/1236, 18-19=0/1178, 16-18=0/1178, 15-16=0/1178, 14-15=0/1232, 12-14=0/1225
- WEBS 6-8=-1854/382, 5-18=0/1471, 9-16=0/1471, 4-19=-901/146, 10-15=-901/146

## NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=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) All plates are 2x6 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.

- 6) Ceiling dead load (10.0 psf) on member(s). 5-6, 8-9, 6-8; Wall dead load (5.0psf) on member(s).5-18, 9-16
- 7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 16-18

8) Attic room checked for L/360 deflection.



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818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Stout/Lot 17 Forest Ridge/Harnett
.10421-2290	B02	ATTIC	5	1	E15666786
00421 2200	502				Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Tue Apr 27 15:17:18 2021 Page 1 ID:ikQyRsNXi14PrYc3UMF2QWzXTAO-Mt9p\_My9oCekBvcvknCgbB42jBfm?eej2V6szwzMU\_I

Scale = 1:88.8



	5.	8-12	<u>18-2-4</u> 1 12-5-8	$0x_{10} = 23-11-0$ 5-8-12					
Plate Offsets (X,Y)	[2:0-0-0,0-0-4], [6:0-4-0,Edge], [11:0-5	-4,Edge], [11:0-1-15,0-1-1	5], [12:0-2-8,0-7-0], [14	:0-4-0,0-2-8]					
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	<b>CSI.</b> TC 0.90 BC 0.82 WB 0.16 Matrix-S	DEFL. Vert(LL) -0.2 Vert(CT) -0.5 Horz(CT) 0.0 Wind(LL) 0.1	in (loc) I/defl 29 12-14 >971 50 12-14 >557 01 11 n/a 11 12-14 >999	L/d 360 240 n/a 240	<b>PLATES</b> MT20 Weight: 285 lb	<b>GRIP</b> 244/190 FT = 20%		
LUMBER- TOP CHORD 2x8 SF BOT CHORD 2x10 S 12-14: WEBS 2x6 SF WEDGE Left: 2x6 SP No.2	P No.1 P No.1 *Except* 2x8 SP No.1 P No.1 *Except* 2x4 SP No.2		BRACING- TOP CHORD BOT CHORD	Structural wood except end vert Rigid ceiling dir	l sheathing dir icals. ectly applied c	rectly applied or 2-2-0 o	oc purlins,		
REACTIONS. (size) 2=0-3-8, 11=0-3-8 Max Horz 2=316(LC 9) Max Grav 2=1550(LC 20), 11=1542(LC 20)									
FORCES.         (lb) - Max.           TOP CHORD         2-4=-           10-17           BOT CHORD         2-14=           WEBS         5-7=-	Comp./Max. Ten All forces 250 (lb) d 1994/0, 4-5=-1065/173, 5-6=-50/656, 6 I=-1667/0 =0/1107, 12-14=0/1107, 11-12=-93/431 1875/296, 4-14=0/992, 8-12=0/846, 10	r less except when shown 5-7=-49/635, 7-8=-1082/17 -12=-3/777	ı. '3, 8-10=-1844/0,						
NOTES- 1) Unbalanced roof live 2) Wind: ASCE 7-10; V MWFRS (envelope) to 23-4-4 zone; end plate grip DOL=1.60 3) This truss has been 4) * This truss has bee will fit between the b 5) Ceiling dead load (1 6) Bottom chord live lo. 7) Attic room checked to	e loads have been considered for this d /ult=130mph (3-second gust) Vasd=10: and C-C Exterior(2) -0-8-6 to 3-8-7, In vertical left and right exposed;C-C for n designed for a 10.0 psf bottom chord li n designed for a live load of 30.0psf on oottom chord and any other members. 0.0 psf) on member(s). 4-5, 7-8, 5-7; V ad (40.0 psf) and additional bottom chord for L/360 deflection.	esign. 3mph; TCDL=6.0psf; BCDJ erior(1) 3-8-7 to 11-11-8, I nembers and forces & MW ve load nonconcurrent with the bottom chord in all are Vall dead load (5.0psf) on rd dead load (10.0 psf) ap	L=6.0psf; h=15ft; Cat. I Exterior(2) 11-11-8 to 1. /FRS for reactions show h any other live loads. eas where a rectangle 3 member(s).4-14, 8-12 plied only to room. 12-7	l; Exp C; Enclosed 8-2-4, Interior(1) 18 wn; Lumber DOL= 3-6-0 tall by 2-0-0 v 14	3-2-4 1.60 vide	SEA 0363	L EEER-R H B H H B H H I I I I I I I I I I I I I		

G 400000 April 28,2021

818 Soundside Road Edenton, NC 27932

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2x4 SP No.2 \*Except\* WEBS 1-7,3-4: 2x6 SP No.1

REACTIONS. (size) 4=0-3-8, 7=0-3-8 Max Horz 7=238(LC 9) Max Uplift 4=-27(LC 12), 7=-27(LC 13) Max Grav 4=633(LC 1), 7=633(LC 1)

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

- TOP CHORD 1-2=-597/185, 2-3=-597/185, 1-7=-562/196, 3-4=-562/196
- BOT CHORD 6-7=-280/369. 4-6=-152/262

WEBS 2-6=0/315, 1-6=-106/254, 3-6=-112/260

NOTES-

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

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



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818 Soundside Road Edenton, NC 27932



 
 LUMBER-TOP CHORD
 2x6 SP No.1
 BRACING-TOP CHORD

 BOT CHORD
 2x6 SP No.1
 TOP CHORD
 Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.

 WEBS
 2x4 SP No.2 \*Except\* 1-8,3-4: 2x6 SP No.1
 BOT CHORD
 Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 8=0-3-8, 4=0-3-8 Max Horz 8=-238(LC 25) Max Uplift 8=-168(LC 9), 4=-170(LC 8) Max Grav 8=5109(LC 2), 4=5167(LC 2)

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

- TOP CHORD 1-2=-4747/232, 2-3=-4726/232, 1-8=-4159/167, 3-4=-4136/167
- BOT CHORD 7-8=-310/751. 5-7=-105/2367. 4-5=-135/623
- WEBS 2-5=-98/3167, 2-7=-99/3221, 1-7=-169/2772, 3-5=-172/2739

#### 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: 2x6 - 2 rows staggered at 0-7-0 oc.
- Webs connected as follows: 2x4 1 row at 0-9-0 oc.

2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.

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

4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

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) except (jt=lb) 8=168 4=170

8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1301 lb down and 48 lb up at 2-2-12, 1301 lb down and 48 lb up at 4-2-12, 1289 lb down and 48 lb up at 6-2-12, 1256 lb down and 48 lb up at 8-2-12, 1293 lb down and 48 lb up at 10-2-12, and 1301 lb down and 48 lb up at 12-2-12, and 1301 lb down and 48 lb up at 14-2-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

## LOAD CASE(S) Standard

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

Vert: 1-2=-60, 2-3=-60, 4-8=-20

#### Continued on page 2

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Job		Truss	Truss Type	Qty	Ply	Stout/Lot 17 Forest Ridge/Harnett	
							E15666788
J0421-2290		C01GR	COMMON GIRDER	1	2		
					<b>–</b>	Job Reference (optional)	
Comtech, Inc, F	ayettev	ille, NC - 28314,			8.330 s O	t 7 2020 MiTek Industries, Inc. Tue Apr 27 15:17:20 202	1 Page 2
			ID:ikQyRsN	Xi14PrYc3	UMF2QW	zXTAO-IGHaP2zQKpuSQCmHsCE8hc9Yq_JqTTU0Wpbz	1ozMU_j

#### LOAD CASE(S) Standard Concentrated Loads (Ib)

Vert: 6=-1117(B) 9=-1117(B) 10=-1117(B) 11=-1117(B) 13=-1117(B) 15=-1117(B) 16=-1117(B)

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П

 $4x6 = \frac{14}{14}$ 

31010

2x6

13

16-3-8

 $\otimes$ 

3x4 Ш

12

				3-3-4	3-4-4	1-6-4		8-1-12				
Plate Offsets (	(X,Y)	[15:0-5-4,0-2-0]										
LOADING (ps	sf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20	.Ó	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	-0.01	13-15	>999	360	MT20	244/190
TCDL 10	.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.01	13-15	>999	240		
BCLL 0	.0 *	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.00	12	n/a	n/a		
BCDL 10	.0	Code IRC2015/TF	PI2014	Matr	ix-S	Wind(LL)	0.00	17	>999	240	Weight: 182 lb	FT = 20%
LUMBER-				1		BRACING	-					
TOP CHORD	2x6 SF	9 No.1				TOP CHO	RD	Structu	Iral wood	sheathing d	irectly applied or 6-0-0	oc purlins,
BOT CHORD	2x6 SF	9 No.1						except	end vert	icals.		
WEBS	2x4 SP	No.2 *Except*				BOT CHO	RD	Rigid ceiling directly applied or 6-0-0 oc bracing.				
	2-18,10	0-12: 2x6 SP No.1, 3-15: 2	2x8 SP No.1			WEBS		T-Brac	e:		2x4 SPF No.2 - 6-15	
OTHERS	2x4 SP	9 No.2						Fasten	(2X) Ta	and I braces	to narrow edge of web	with 10d
								(0.131	"x3") nail	s, 6in o.c.,wi	h 3in minimum end dis	tance.
								Brace	must cov	er 90% of we	eb length.	
						JOINTS		1 Brac	e at .lt(s)	19 21 22		

× X

15

8-1-12

4x12 = 16

3x10 ||

6-7-8

17

REACTIONS. All bearings 9-8-0 except (jt=length) 18=0-3-8, 16=0-3-8, 16=0-3-8. Max Horz 18=-328(LC 10) (lb) -Max Uplift All uplift 100 lb or less at joint(s) 18, 16 except 12=-166(LC 11),

15=-109(LC 12), 13=-373(LC 13) Max Grav All reactions 250 lb or less at joint(s) 12, 16, 16 except 15=584(LC 1), 18=312(LC 1), 13=523(LC 20)

X

18

3x4 ||

3-3-4

- FORCES. (Ib) Max. Comp./Max. Ten. All forces 250 (Ib) or less except when shown.
- TOP CHORD 9-10=-280/243, 2-18=-256/152
- BOT CHORD 17-18=-225/293, 16-17=-225/292, 15-16=-225/292
- WEBS 6-15=-302/0, 3-20=-269/225, 19-20=-288/224, 15-19=-350/288, 9-23=-434/363, 13-23=-522/443

#### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical 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) All plates are 2x4 MT20 unless otherwise indicated.
- 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) 18, 16 except (jt=lb) 12=166, 15=109, 13=373.
- 9) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



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### REACTIONS. All bearings 6-6-8.

(lb) - Max Horz 12=-185(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) except 12=-141(LC 8), 8=-127(LC 9), 11=-160(LC 9), 9=-151(LC 8) Max Grav All reactions 250 lb or less at joint(s) 12, 8, 10, 11, 9

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 (3-second gust) 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; end vertical 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 requires continuous bottom chord bearing.
- 5) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 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 141 lb uplift at joint 12, 127 lb uplift at joint 8, 160 lb uplift at joint 11 and 151 lb uplift at joint 9.



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BOT CHORD

19

18 17 16

4x6 =

15

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

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

14

3x4 =

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

REACTIONS. All bearings 22-3-0.

3x4 =

23

22

21

20

Max Horz 2=-79(LC 13) (lb) -

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

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

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 (3-second gust) 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) 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, 20, 21, 22, 23, 18, 16, 15, 14.



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<b>—</b> ——	<u> </u>				22-3-0 11-1-8		
Plate Offsets (X,Y)	[2:0-0-7,0-0-10], [6:0-0-7,0-0-10]						
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	<b>CSI.</b> TC 0.17 BC 0.45 WB 0.26 Matrix-S	DEFL. Vert(LL) -0.0 Vert(CT) -0.0 Horz(CT) 0.0 Wind(LL) 0.0	in (loc) l/defl 08 6-9 >999 18 6-9 >999 03 6 n/a 04 9 >999	L/d F 360 M 240 n/a 240 N	PLATES VT20 Weight: 133 lb	<b>GRIP</b> 244/190 FT = 20%
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 Rigid ceiling dire	sheathing directly ap ectly applied or 10-0-	oplied or 5-6-1 oc 0 oc bracing.	c purlins.
REACTIONS. (size Max H Max U Max G	e) 6=0-3-8, 2=0-3-8 orz 2=-47(LC 13) plift 6=-98(LC 9), 2=-98(LC 8) rav 6=926(LC 1), 2=926(LC 1)						
FORCES. (lb) - Max. TOP CHORD 2-3=-	Comp./Max. Ten All forces 250 (lb) or 1887/501, 3-4=-1449/332, 4-5=-1449/3	less except when shown. 32, 5-6=-1887/501					

BOT CHORD 2-9=-419/1733, 6-9=-420/1733

WEBS 4-9=-33/612, 5-9=-474/266, 3-9=-474/266

#### NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-7-5 to 3-9-8, Interior(1) 3-9-8 to 11-2-0, Exterior(2) 11-2-0 to 15-6-13, Interior(1) 15-6-13 to 22-11-5 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.



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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 0.30	Vert(LL) -0.00 2	2 >999 360	MT20 244/190
FCDL 10.0	Lumber DOL 1.15	BC 0.10	Vert(CT) -0.00 2-4	4 >999 240	
3CLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00	n/a n/a	
3CDL 10.0	Code IRC2015/TPI2014	Matrix-P			Weight: 11 lb FT = 20%
UMBER-		L	BRACING-		
TOP CHORD 2x4	SP No.1		TOP CHORD Struc	ctural wood sheathing dire	ectly applied or 2-0-0 oc purlins.

BOT CHORD

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

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

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

Max Horz 2=93(LC 9) Max Uplift 2=-18(LC 9), 4=-35(LC 9)

Max Grav 2=149(LC 1), 4=66(LC 19)

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

#### NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=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
- 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 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.
- 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) 2, 4.



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Job	Truss	Truss Type	Qty	Ply	Stout/Lot 17 Forest Ridge/Harnett
					E15666794
J0421-2290	M01	MONOPITCH	15	1	
					Job Reference (optional)
Comtech, Inc, Fayettev	rille, NC - 28314,			3.330 s Oc	t 7 2020 MiTek Industries, Inc. Tue Apr 27 15:17:29 2021 Page 1
		ID:ikQ	/RsNXi14Pi	Yc3UMF2	QWzXTAO-X_K_I743Ca1A?by0tbvFYV10wdV14TyLajHxsnzMU_a
-0-11-0		8-2-8		1	13-11-8
0-11-0		8-2-8		1	5-9-0

## Scale = 1:24.3



<b>⊢</b>		8-2-8			I			13-11-8		14-3-0
Plate Offsets (X,Y)	8-2-8           8-27-8           Bodd Stress         SPACING-         2-0-0         CSI.         DE           L         20.0         Plate Grip DOL         1.15         TC         0.52         Ve           L         20.0         Plate Grip DOL         1.15         BC         0.39         Ve           L         0.0         *         Rep Stress Incr         YES         WB         0.76         Hd           L         0.0         *         Rep Stress Incr         YES         WB         0.76         Hd           L         0.0         *         Rep Stress Incr         YES         WB         0.76         Hd           L         0.0         *         Rep Stress Incr         YES         WB         0.76         Hd           L         0.0         Code IRC2015/TPI2014         Matrix-S         Wi         Wi           IBER-         *         ChORD         2x4 SP No.1         TC         TC           CHORD         2x4 SP No.2         *Except*         BC         4-5: 2x6 SP No.1         Max Horz 2=81(LC 8)         Max Horz 2=81(LC 8)         Max Horz 2=81(LC 8)         Max Grav 5=541(LC 1), 2=610(LC 1)         RCES.         (b) - Max. Com						5-9-0		0-3-8	
LOADING         (psf)           TCLL         20.0           TCDL         10.0           BCLL         0.0 *           BCDL         10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2015/TPI2014	CSI. TC 0.52 BC 0.39 WB 0.76 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in -0.07 -0.15 0.02 0.15	(loc) 2-6 2-6 5 2-6	l/defl >999 >999 n/a >999	L/d 360 240 n/a 240	PLATES MT20 Weight: 70 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER- TOP CHORD 2x4 S BOT CHORD 2x6 S WEBS 2x4 S 4-5: 2	P No.1 P No.1 P No.2 *Except* x6 SP No.1		BRACING- TOP CHOR BOT CHOR	D D	Structu except Rigid c	iral wood end verti eiling dire	sheathing di icals. ectly applied	rectly applied or 4-2-9 or 6-1-3 oc bracing.	oc purlins,	
REACTIONS. (siz Max H Max I Max (	te) 5=0-3-8, 2=0-3-8 Horz 2=81(LC 8) Jplift 5=-215(LC 8), 2=-243(LC 8) Grav 5=541(LC 1), 2=610(LC 1)									
FORCES. (lb) - Max TOP CHORD 2-3= BOT CHORD 2-6=	. Comp./Max. Ten All forces 250 (lb) oi -1485/1380 -1426/1420, 5-6=-1426/1420	less except when shown.								

- WEBS 3-6=-383/311, 3-5=-1420/1417

### NOTES-

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-11-0 to 3-5-13, Interior(1) 3-5-13 to 13-8-12 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

3) \* This truss has been designed for a live load of 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.

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=215, 2=243.



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Job	Truss	Truss Type	Qty	Ply	Stout/Lot 17 Forest Ridge/Harnett
					E15666795
J0421-2290	M01GE	GABLE	1	1	
					Job Reference (optional)
Comtech, Inc, Fayettev	/ille, NC - 28314,		8	3.330 s Oc	t 7 2020 MiTek Industries, Inc. Tue Apr 27 15:17:30 2021 Page 1
-		ID:ikQyRsN	Xi14PrYc3	UMF2QW	zXTAO-?BuMVS5hzu91dIXCRJQU4jaFk0wop5TUpN0VODzMU_Z
-0-11-0		13-11-8			
0-11-0		13-11-8			

#### Scale = 1:24.8



1					
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 0.26 BC 0.10 WB 0.04 Matrix-S	<b>DEFL.</b> in Vert(LL) -0.00 Vert(CT) 0.01 Horz(CT) -0.00	i (loc) l/defl L/d 1 n/r 120 1 n/r 120 8 n/a n/a	PLATES         GRIP           MT20         244/190           Weight: 67 lb         FT = 20%
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x6 SF WEBS 2x6 SF	P No.1 P No.1 P No.1		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing dir except end verticals. Rigid ceiling directly applied c	ectly applied or 6-0-0 oc purlins, or 10-0-0 oc bracing.

OTHERS 2x4 SP No.2

**REACTIONS.** All bearings 13-11-8.

(lb) - Max Horz 2=117(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 8, 9, 2, 10, 11, 12 except 13=-154(LC 12) Max Grav All reactions 250 lb or less at joint(s) 8, 9, 10, 11, 12 except 2=253(LC 1), 13=513(LC 1)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. WEBS 3-13=-330/242

## NOTES-

- Wind: ASCE 7-10; Vult=130mph (3-second gust) 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 and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) All plates are 2x4 MT20 unless otherwise indicated.

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.

 Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 9, 2, 10, 11, 12 except (jt=lb) 13=154.



## April 28,2021

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Scale = 1:24.3



<b>├</b> ───		8-2-8			13-11-8	14-3-0
Plate Offsets (X,Y)	[2:0-3-6,0-1-4], [7:0-1-8,0-1-12]	0-2-0			5-9-0	0-3-8
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2015/TPI2014	CSI. TC 0.39 BC 0.44 WB 0.93 Matrix-S	DEFL. in Vert(LL) 0.19 Vert(CT) -0.18 Horz(CT) -0.02	(loc) l/defl L/d 2-10 >862 240 2-10 >919 240 7 n/a n/a	PLATES         GRIP           MT20         244/190           Weight: 74 lb         FT = 20%	
LUMBER-           TOP CHORD         2x4 S           BOT CHORD         2x6 S           WEBS         2x4 S           6-7: 2         2           OTHERS         2x4 S	P No.1 P No.1 P No.2 *Except* x6 SP No.1 P No.2		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing dir except end verticals. Rigid ceiling directly applied o	rectly applied or 4-7-5 oc purlins, or 5-7-11 oc bracing.	
REACTIONS. (si. Max Max Max	ze) 7=0-3-8, 2=0-3-8 Horz 2=115(LC 8) Uplift 7=-314(LC 8), 2=-352(LC 8) Grav 7=541(LC 1), 2=610(LC 1)					
FORCES.(lb) - MaxTOP CHORD2-3=BOT CHORD2-10WEBS4-9=	Comp./Max. Ten All forces 250 (lb) or 1439/1554, 3-4=-1409/1579 )=-1621/1381, 9-10=-1621/1381, 8-9=-16 472/357, 4-12=-1401/1639, 11-12=-139	r less except when shown. 321/1381, 7-8=-1621/1381 12/1639, 7-11=-1450/1692				

NOTES-

 Wind: ASCE 7-10; Vult=130mph (3-second gust) 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 and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

3) Gable studs spaced at 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=314, 2=352.



ENGINEERING BY EREENCO A MITCH Attiliate 818 Soundside Road Edenton, NC 27932

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	<u>  0-6-8</u>	<u> </u>								
LOADING (psf)	<b>SPACING-</b> 2-0-0	CSI.	DEFL. i	n (loc)	l/defl	L/d	PLATES	GRIP		
TCLL 20.0	Plate Grip DOL 1.15	TC 0.30	Vert(LL) -0.0	2-4	>999	360	MT20	244/190		
TCDL 10.0	Lumber DOL 1.15	BC 0.40	Vert(CT) -0.03	3 2-4	>999	240				
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.0	)	n/a	n/a				
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P	Wind(LL) 0.03	3 2-4	>999	240	Weight: 34 lb	FT = 20%		
LUMBER-			BRACING-							

TOP CHORD

BOT CHORD

## LUMBER-

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

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

Max Horz 2=73(LC 8) Max Uplift 2=-110(LC 8), 4=-97(LC 8)

Max Grav 2=284(LC 1), 4=222(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 (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-5 to 3-7-8, Interior(1) 3-7-8 to 5-9-4 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 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.
- 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) 4 except (jt=lb) 2 = 110.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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

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

except end verticals.

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		0-6-8					6-4-0 5-9-8					———————————————————————————————————————
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	0.34	Vert(LL)	-0.05	2-6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.11	2-6	>674	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code IRC2015/TF	PI2014	Matri	x-P	Wind(LL)	0.17	2-6	>427	240	Weight: 32 lb	FT = 20%
LUMBER-						BRACING					·	

TOP CHORD

BOT CHORD

## LUMBER-

TOP CHORD 2x6 SP No.1 BOT CHORD 2x6 SP No.1 2x6 SP No.1 WFBS

REACTIONS. (size) 5=0-3-8, 2=0-3-0

Max Horz 2=62(LC 8) Max Uplift 5=-193(LC 8), 2=-152(LC 8)

Max Grav 5=478(LC 1), 2=383(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 (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-5 to 3-7-8, Interior(1) 3-7-8 to 4-10-8 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
- 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 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.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=193, 2=152.
- 5) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s). 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: 1-3=-60, 3-4=-60, 2-5=-20

Concentrated Loads (lb) Vert: 8=-400



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

Rigid ceiling directly applied or 9-2-10 oc bracing.

except end verticals.

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LOADING         (psf)           TCLL         20.0           TCDL         10.0           BCLL         0.0         *           BCDL         10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCodeIRC2015/TPI2014	<b>CSI.</b> TC 0.10 BC 0.05 WB 0.02 Matrix-P	DEFL.         in           Vert(LL)         0.00           Vert(CT)         0.00           Horz(CT)         0.00	n (loc) l/def ) 5 n/ ) 5 n/ ) 4 n/a	l L/d r 120 r 120 a n/a	PLATES MT20 Weight: 24 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD 2x4 S BOT CHORD 2x4 S OTHERS 2x4 S	P No.1 P No.1 P No.2		BRACING- TOP CHORD BOT CHORD	Structural wo	od sheathing di directly applied	rectly applied or 6-0-0 or 10-0-0 oc bracing.	oc purlins.

REACTIONS. (size) 2=5-3-12, 4=5-3-12, 6=5-3-12 Max Horz 2=-77(LC 10) Max Uplift 2=-51(LC 12), 4=-61(LC 13)

Max Grav 2=150(LC 1), 4=150(LC 1), 6=175(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 (3-second gust) 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; end vertical left and right exposed;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) 2, 4.

7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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 systems, 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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