

RE: J0523-2758  
 Lot 9 Williams Farms

Trenco  
 818 Soundside Rd  
 Edenton, NC 27932

**Site Information:**

Customer: Project Name: J0523-2758  
 Lot/Block: Model:  
 Address: Subdivision:  
 City: State:

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

Design Code: IRC2015/TPI2014 Design Program: MiTek 20/20 8.4  
 Wind Code: ASCE 7-10 Wind Speed: 130 mph  
 Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 25 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I57987749	A1-GE	4/27/2023	21	I57987769	PB4	4/27/2023
2	I57987750	A2	4/27/2023	22	I57987770	PB5	4/27/2023
3	I57987751	A3	4/27/2023	23	I57987771	PB6	4/27/2023
4	I57987752	B1-GE	4/27/2023	24	I57987772	PB7	4/27/2023
5	I57987753	B2	4/27/2023	25	I57987773	PB8	4/27/2023
6	I57987754	C1-GE	4/27/2023				
7	I57987755	C2	4/27/2023				
8	I57987756	C3	4/27/2023				
9	I57987757	C4	4/27/2023				
10	I57987758	C5	4/27/2023				
11	I57987759	C6	4/27/2023				
12	I57987760	D1-GE	4/27/2023				
13	I57987761	D2	4/27/2023				
14	I57987762	E1-GE	4/27/2023				
15	I57987763	E2	4/27/2023				
16	I57987764	E3	4/27/2023				
17	I57987765	E4	4/27/2023				
18	I57987766	PB1	4/27/2023				
19	I57987767	PB2	4/27/2023				
20	I57987768	PB3	4/27/2023				

The truss drawing(s) referenced above have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville.  
 Truss Design Engineer's Name: Gilbert, Eric  
 My license renewal date for the state of North Carolina is December 31, 2023.  
 North Carolina COA: C-0844

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



Job	Truss	Truss Type	Qty	Ply	Lot 9 Williams Farms	157987749
J0523-2758	A1-GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

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ID:2GNsYO62Bl49KgBFP3SImayOXVO-RIC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?F

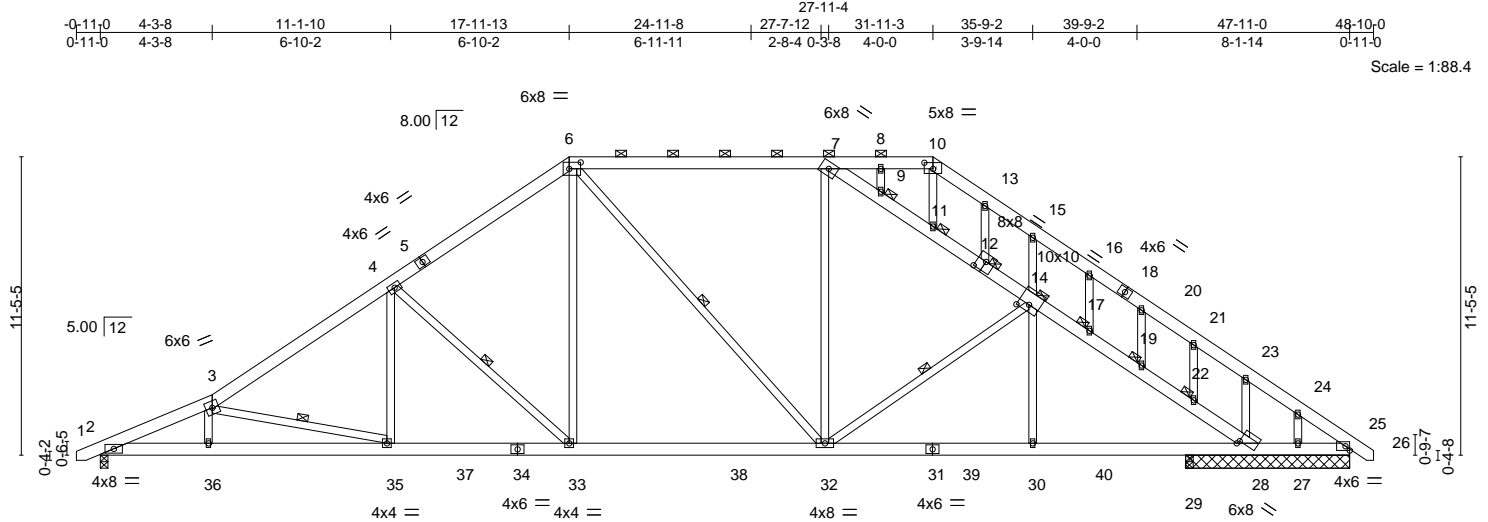


Plate Offsets (X,Y)--	[6:0-5-4,0-3-0],	[10:0-4-0,0-2-13],	[12:0-4-0,0-4-8],	[14:0-5-0,0-3-0],	[28:0-0-9,0-1-10]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.43	Vert(LL) -0.20 32-33 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.56	Vert(CT) -0.33 32-33 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.37	Horz(CT) 0.10 25 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.12 35-36 >999 240		
				Weight: 427 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 3-9-10 oc purlins, except
BOT CHORD 2x6 SP No.1	2-0-0 oc purlins (5-1-1 max.): 6-10, 7-28.
WEBS 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
OTHERS 2x4 SP No.2	8-5-0 oc bracing: 2-36
	8-4-14 oc bracing: 35-36.
	WEBS 1 Row at midpt 3-35, 4-33, 6-32, 14-32
	JOINTS 1 Brace at Jt(s): 9, 11, 12, 17, 19, 22, 14

**REACTIONS.** All bearings 6-3-8 except (jt=length) 2=0-3-8, 29=0-3-8.  
 (lb) - Max Horz 2=345(LC 11)  
 Max Uplift All uplift 100 lb or less at joint(s) except 2=330(LC 12), 27=-120(LC 2), 28=-665(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 27 except 2=1854(LC 2), 25=379(LC 22), 28=1675(LC 2), 29=352(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-4065/1008, 3-4=-3064/793, 4-6=-2391/725, 6-7=-1885/665, 7-8=-313/147, 8-10=-302/141, 10-13=-368/137, 13-15=-364/85, 15-16=-335/0, 16-20=-369/0, 20-21=-409/0, 21-23=-475/0, 23-24=-441/236, 24-25=-528/195, 7-9=-1908/626, 9-11=-1918/629, 11-12=-1876/616, 12-14=-1919/654, 14-17=-2236/762, 17-19=-2268/797, 19-22=-2304/828, 22-28=-2301/839  
 BOT CHORD 2-36=-866/3708, 35-36=-874/3705, 33-35=-462/2557, 32-33=-296/1918, 30-32=-317/2146, 29-30=-317/2146, 28-29=-317/2146, 27-28=-192/433, 25-27=-192/433  
 WEBS 3-35=-1244/431, 4-35=-41/554, 4-33=-944/393, 6-33=-159/1047, 7-32=-35/670, 23-28=-574/361, 14-30=0/309, 14-32=-490/234

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - Provide adequate drainage to prevent water ponding.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* 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.
  - Provide mechanical connection (by others) of withstanding 330 lb uplift at joint 2, 120 lb uplift at joint 28 and 20 lb uplift at joint 28.



April 27, 2023

**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 ANSITPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 9 Williams Farms	157987749
J0523-2758	A1-GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Apr 26 09:13:47 2023 Page 2  
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**NOTES-**

10) 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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 Edenton, NC 27932

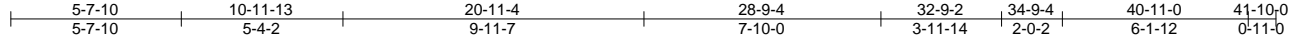


Job	Truss	Truss Type	Qty	Ply	Lot 9 Williams Farms	157987751
J0523-2758	A3	Piggyback Base	3	1		

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ID:2GNsYO62Bl49KgBFP3SmayOXVO-RIC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?F



5x8 =

2x4 ||

4x8 =

Scale = 1:76.2

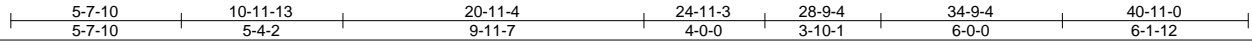
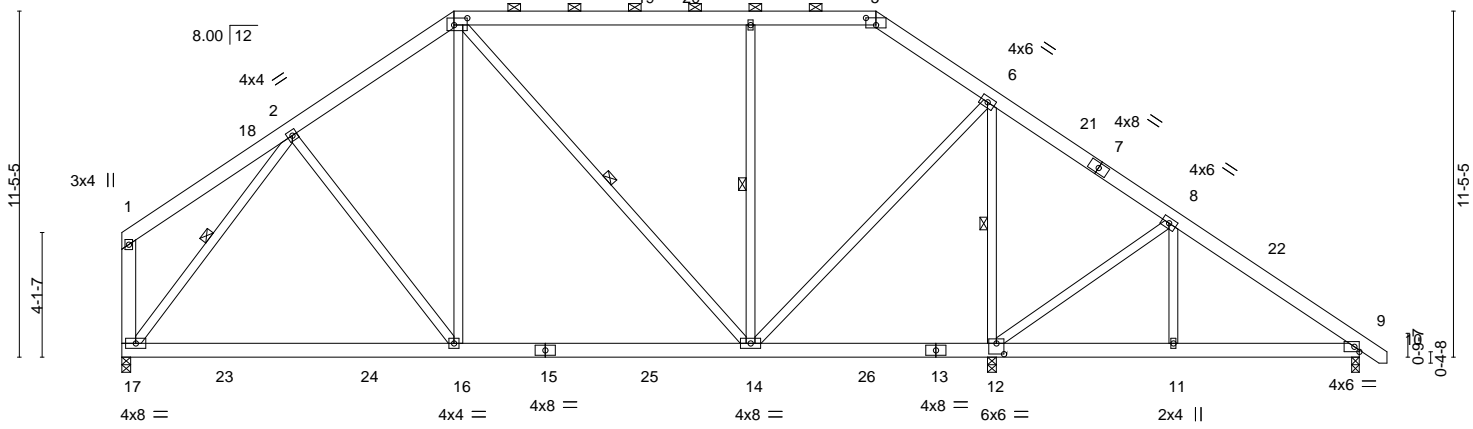


Plate Offsets (X,Y)-- [3:0-5-4,0-2-12], [5:0-4-0,0-2-13], [12:0-3-0,0-4-4]

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 0.45	Vert(LL)	-0.16 16-17	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.51	Vert(CT)	-0.25 16-17	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.68	Horz(CT)	0.01 12	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.04 14-16	>999	240		
								Weight: 338 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 1-17: 2x6 SP No.1

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-5.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
 WEBS 1 Row at midpt 3-14, 4-14, 6-12, 2-17

**REACTIONS.**

(size) 12=0-3-8, 17=0-3-8, 9=0-3-0  
 Max Horz 17=-262(LC 8)  
 Max Uplift 12=-178(LC 8), 17=-21(LC 12), 9=-118(LC 25)  
 Max Grav 12=2275(LC 2), 17=1187(LC 19), 9=274(LC 24)

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

TOP CHORD 2-3=-967/282, 3-4=-440/222, 4-5=-439/223, 5-6=-531/216, 6-8=-216/641, 8-9=-132/439  
 BOT CHORD 16-17=-148/809, 14-16=-84/843, 12-14=-588/419, 11-12=-313/113, 9-11=-313/113  
 WEBS 3-16=-7/544, 3-14=-541/110, 4-14=-464/250, 6-14=-294/1359, 6-12=-1704/542,  
 2-17=-1001/179, 8-12=-549/464

**NOTES-**

- 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) 0-2-12 to 4-7-9, Interior(1) 4-7-9 to 10-11-13, Exterior(2) 10-11-13 to 17-2-7, Interior(1) 17-2-7 to 24-11-3, Exterior(2) 24-11-3 to 31-1-14, Interior(1) 31-1-14 to 41-8-7 zone; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 178 lb uplift at joint 12, 21 lb uplift at joint 17 and 118 lb uplift at joint 9.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 27, 2023

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

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



818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 9 Williams Farms	157987752
J0523-2758	B1-GE	PIGGYBACK BASE SUPPO	1	1		

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-0-11-0 4-3-8 17-11-13 27-11-4 43-11-0 44-10-0  
 0-11-0 4-3-8 13-8-4 9-11-7 15-11-13 0-11-0

Scale = 1:81.3

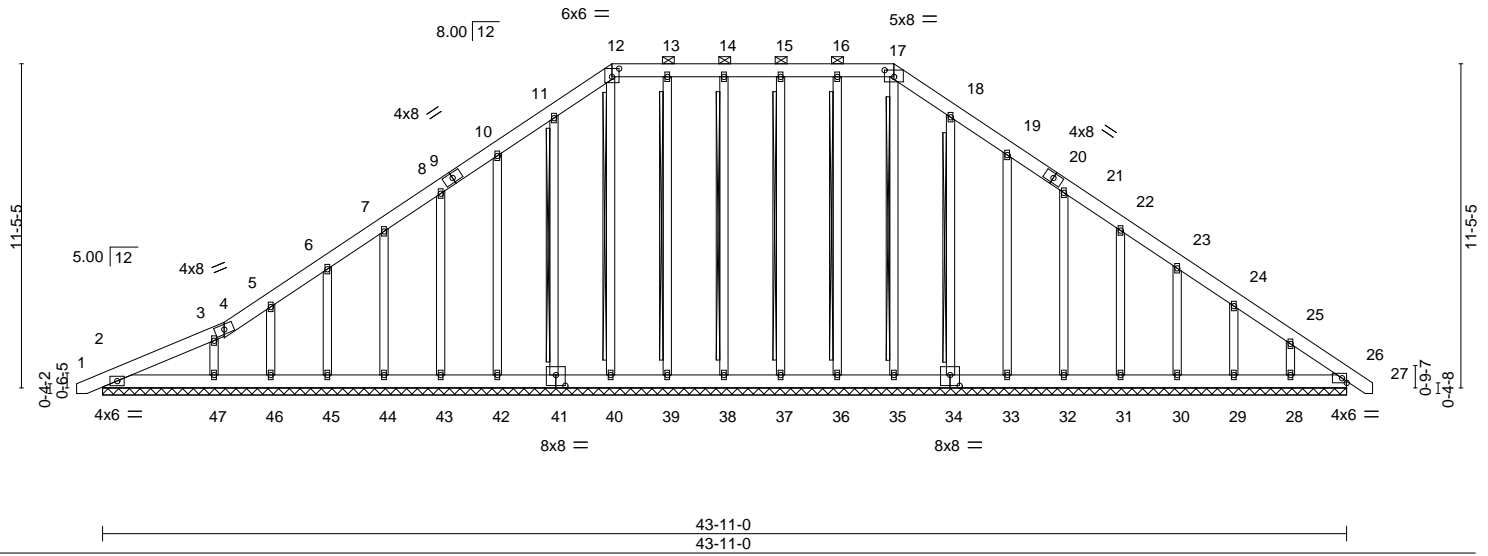


Plate Offsets (X,Y)-- [12:0-3-0,0-3-8], [17:0-4-0,0-2-13], [34:0-4-0,0-4-8], [41:0-4-0,0-4-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.05	Vert(LL) 0.00	26	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.04	Vert(CT) 0.00	26	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.18	Horz(CT) 0.01	26	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S						
							Weight: 428 lb	FT = 20%

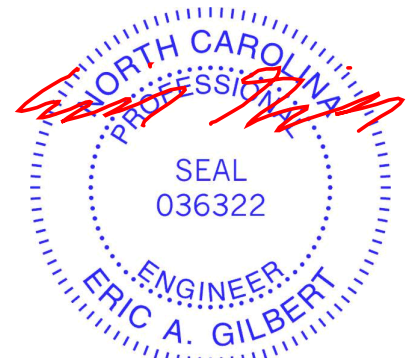
**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 OTHERS 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 12-17.  
 Rigid ceiling directly applied or 10-0-0 oc bracing.  
 BOT CHORD T-Brace: 2x4 SPF No.2 - 17-35, 16-36, 15-37, 14-38, 13-39, 12-40, 11-41, 18-34  
 WEBS 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.** All bearings 43-11-0.  
 (lb) - Max Horz 2=345(LC 11)  
 Max Uplift All uplift 100 lb or less at joint(s) 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 34, 33, 32, 31, 30, 29, 26 except 2=-106(LC 8), 28=-122(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 34, 33, 32, 31, 30, 29, 28, 26 except 47=307(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-296/209, 10-11=-235/290, 11-12=-285/330, 12-13=-258/307, 13-14=-258/307, 14-15=-258/307, 15-16=-258/307, 16-17=-258/307, 17-18=-285/330, 18-19=-236/271

- NOTES-**
- 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) 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
  - 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.
  - Provide adequate drainage to prevent water ponding.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* 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) 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 34, 33, 32, 31, 30, 29, 26 except (jt=lb) 2=106, 28=122.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



April 27, 2023

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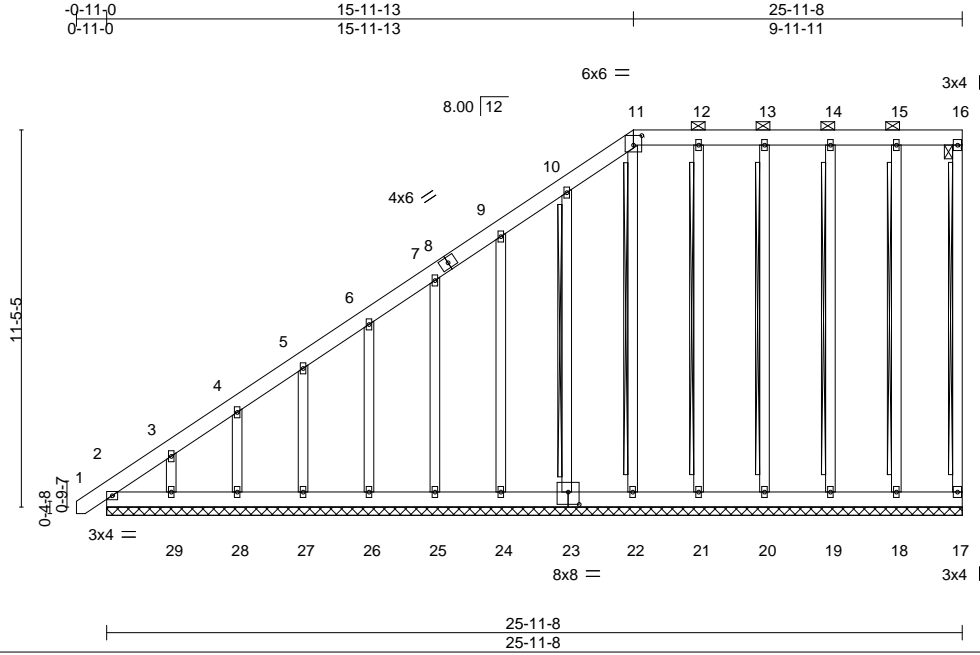


Job	Truss	Truss Type	Qty	Ply	Lot 9 Williams Farms	157987754
J0523-2758	C1-GE	Piggyback Base Supported Gable	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

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Scale = 1:69.9

Plate Offsets (X,Y)-- [1:0-3-0,0-3-8], [2:3-0-4-0,0-4-8]

LOADING (psf)	SPACING-	CSL	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.05	Vert(LL) -0.00	1	n/r	120		MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.01	Vert(CT) -0.00	1	n/r	120			
BCLL 0.0 *	Rep Stress Incr YES	WB 0.17	Horz(CT) -0.00	17	n/a	n/a			
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S							
								Weight: 280 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 11-16.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 22-23.  
 WEBS T-Brace: 2x4 SPF No.2 - 16-17, 15-18, 14-19, 13-20, 12-21, 11-22, 10-23  
 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.**

All bearings 25-11-8.  
 (lb) - Max Horz 2=523(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 17, 2, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28 except 29=-161(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29 except 2=344(LC 12)

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

TOP CHORD 2-3=-618/496, 3-4=-498/396, 4-5=-421/336, 5-6=-347/277, 6-7=-272/218

**NOTES-**

- 1) 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
- 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) Provide adequate drainage to prevent water ponding.
- 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) 17, 2, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28 except (it=lb) 29=161.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 49 lb down and 33 lb up at 24-0-12 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.

**LOAD CASE(S)** Standard

Continued on page 2



April 27, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

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818 Soundside Road  
 Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	Lot 9 Williams Farms	I57987754
J0523-2758	C1-GE	Piggyback Base Supported Gable	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Apr 26 09:13:56 2023 Page 2  
 ID:2GNsYO62Bl49KgBFP3SImayOXVO-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?f

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
  - Vert: 1-11=-60, 11-16=-60, 2-17=-20
- Concentrated Loads (lb)
  - Vert: 18=-49

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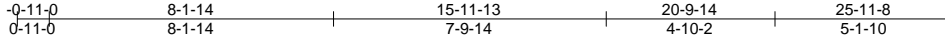
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 9 Williams Farms	157987755
J0523-2758	C2	Piggyback Base	4	1		

Comtech, Inc., Fayetteville, NC - 28314,

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ID:2GNsYO62BI49KgBFP3SImayOXVO-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:66.1

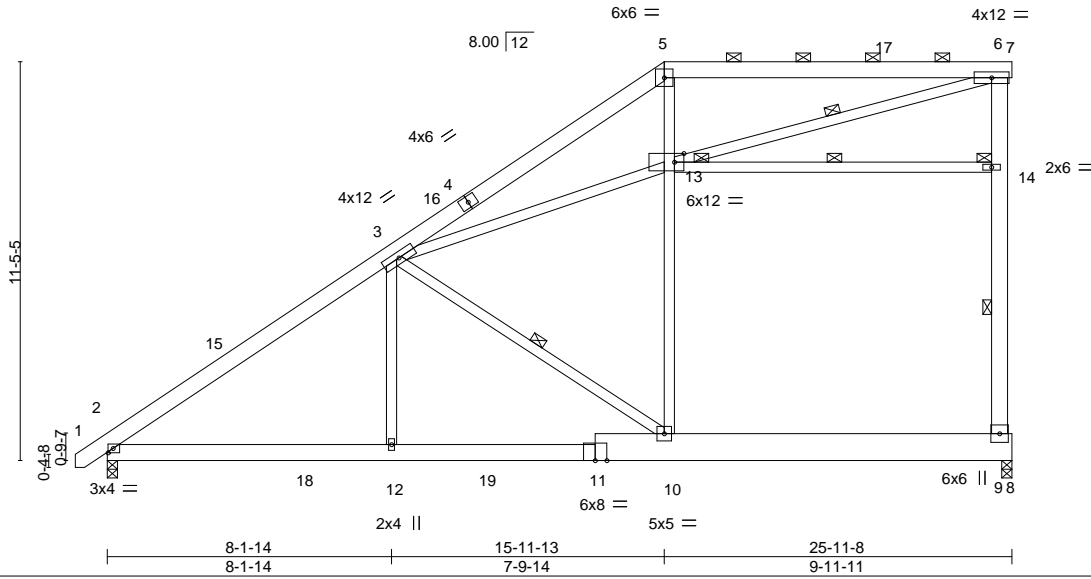


Plate Offsets (X,Y)-- [2:0-1-12,0-1-8], [13:0-3-4,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.45	Vert(LL) -0.18	10	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.37	Vert(CT) -0.32	10-12	>958	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.81	Horz(CT) 0.02	9	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.12	10-12	>999	240		
							Weight: 251 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1 \*Except\*  
 8-11: 2x10 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 6-9: 2x6 SP No.1

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-5-14 oc purlins, except end verticals, and 2-0-0 oc purlins (4-6-15 max.): 5-7.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 9-14, 3-10, 13-14, 6-13  
 JOINTS 1 Brace at Jt(s): 13, 14

**REACTIONS.**

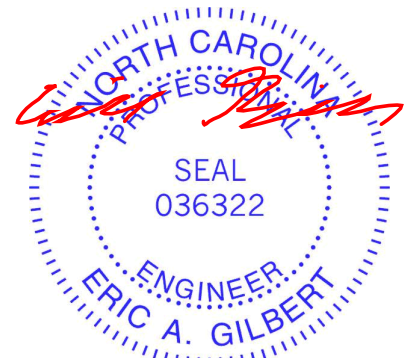
(size) 9=0-3-8, 2=0-3-8  
 Max Horz 2=364(LC 12)  
 Max Uplift 9=-124(LC 9), 2=-24(LC 12)  
 Max Grav 9=1337(LC 2), 2=1252(LC 19)

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

TOP CHORD 2-3=-1708/145, 3-5=-2883/706, 5-6=-2391/678, 9-14=-952/344, 6-14=-952/344  
 BOT CHORD 2-12=-431/1400, 10-12=-433/1386  
 WEBS 3-12=0/475, 3-10=-1600/514, 10-13=-134/1227, 5-13=-143/1189, 6-13=-659/2509,  
 3-13=-679/2320

**NOTES-**

- 1) 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) -0-9-7 to 3-7-6, Interior(1) 3-7-6 to 15-11-13, Exterior(2) 15-11-13 to 22-2-7, Interior(1) 22-2-7 to 25-11-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 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) 9=124.
- 6) 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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**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



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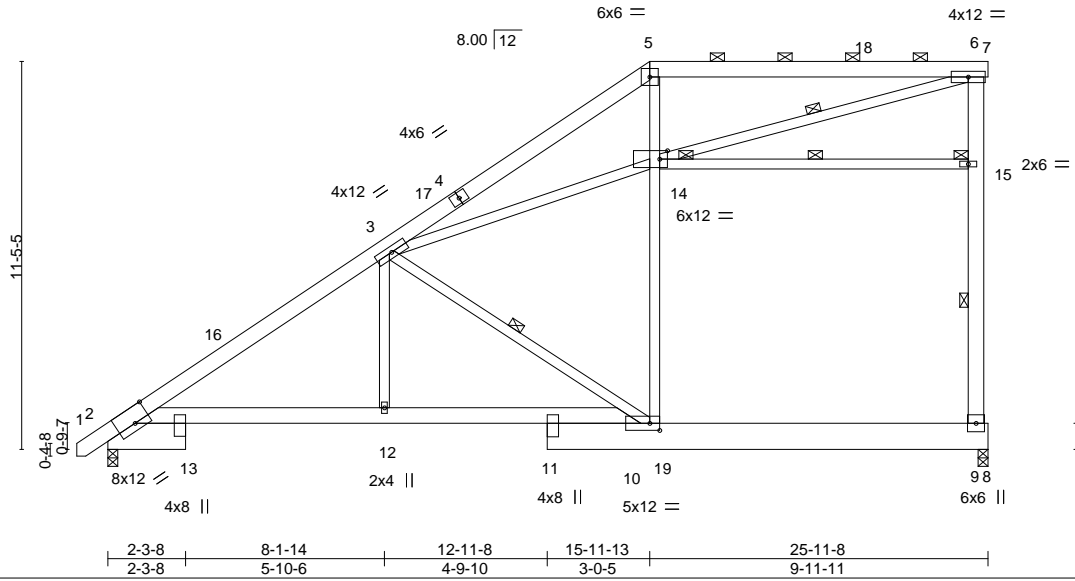
Job	Truss	Truss Type	Qty	Ply	Lot 9 Williams Farms	157987756
J0523-2758	C3	Piggyback Base	4	1		

Comtech, Inc. Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Apr 26 09:13:58 2023 Page 1

ID:2GNsYO62Bl49KgBFP3SImayOXVO-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:68.0



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.45	Vert(LL) -0.15 9-10 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.70	Vert(CT) -0.31 10-12 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.84	Horz(CT) 0.07 9 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.14 10-12 >999 240	Weight: 265 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-8-2 oc purlins, except end verticals, and 2-0-0 oc purlins (4-9-10 max.): 5-7.
BOT CHORD 2x10 SP No.1 *Except*	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except*	WEBS 1 Row at midpt 9-15, 3-10, 14-15, 6-14
6-9: 2x6 SP No.1	JOINTS 1 Brace at Jt(s): 14, 15

**REACTIONS.** (size) 9=0-3-8, 2=0-3-8  
Max Horz 2=363(LC 12)  
Max Uplift 9=-123(LC 9), 2=-26(LC 12)  
Max Grav 9=1258(LC 2), 2=1089(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1663/239, 3-5=-2667/746, 5-6=-2204/714, 9-15=-891/354, 6-15=-891/354  
BOT CHORD 2-12=-515/1397, 10-12=-517/1382  
WEBS 3-12=-46/502, 3-10=-1536/599, 10-14=-159/1134, 5-14=-164/1066, 6-14=-695/2298, 3-14=-700/2031

- NOTES-**
- 1) 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) -0-9-7 to 3-7-6, Interior(1) 3-7-6 to 15-11-13, Exterior(2) 15-11-13 to 22-2-7, Interior(1) 22-2-7 to 25-11-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Provide adequate drainage to prevent water ponding.
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 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) 9=123.
  - 6) 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	Lot 9 Williams Farms	157987757
J0523-2758	C4	Piggyback Base	2	1		

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8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Apr 26 09:13:59 2023 Page 1

ID:2GNsYO62Bl49KgBFP3SImayOXVO-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?

0-11-0	2-3-8	8-1-14	12-11-8	15-11-13	20-9-14	25-11-8
0-11-0	2-3-8	5-10-6	4-9-10	3-0-5	4-10-2	5-1-10

Scale = 1:68.0

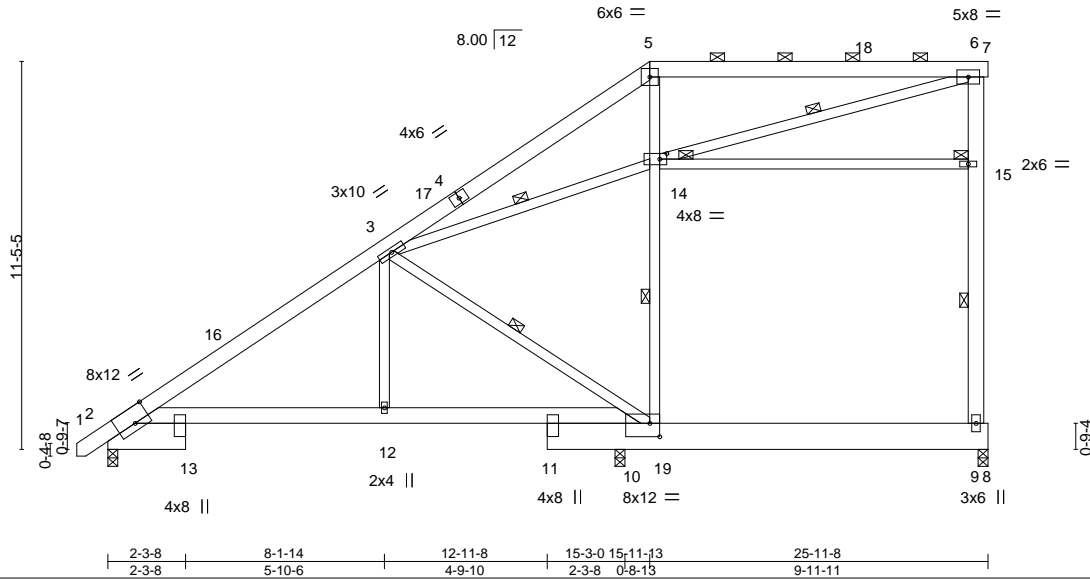


Plate Offsets (X,Y)-- [2:0-5-8,Edge], [10:0-3-8,0-4-12], [14:0-2-8,0-2-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.37	Vert(LL) -0.06 9-10 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.38	Vert(CT) -0.09 2-12 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.32	Horz(CT) 0.03 10 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.04 2-12 >999 240		
				Weight: 265 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x10 SP No.1 \*Except\*  
 2-10: 2x6 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 6-9: 2x6 SP No.1

**REACTIONS.**

(size) 9=0-3-8, 2=0-3-8, 10=0-3-8  
 Max Horz 2=363(LC 12)  
 Max Uplift 9=69(LC 8), 10=185(LC 12)  
 Max Grav 9=510(LC 2), 2=598(LC 1), 10=1333(LC 19)

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

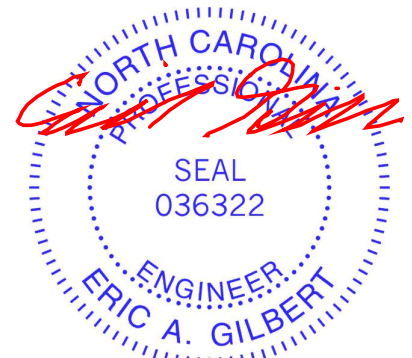
TOP CHORD 2-3=676/0, 3-5=117/262, 9-15=254/150, 6-15=254/150  
 BOT CHORD 2-12=249/570, 10-12=243/561  
 WEBS 3-12=0/330, 3-10=778/345, 10-14=602/323, 5-14=528/286, 6-14=257/62

**NOTES-**

- 1) 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) -0-9-7 to 3-7-6, Interior(1) 3-7-6 to 15-11-13, Exterior(2) 15-11-13 to 22-2-7, Interior(1) 22-2-7 to 25-11-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 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) 9 except (jt=lb) 10=185.
- 6) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 5-7.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 9-10.  
 WEBS 1 Row at midpt 9-15, 3-10, 10-14, 3-14, 6-14  
 JOINTS 1 Brace at Jt(s): 14, 15



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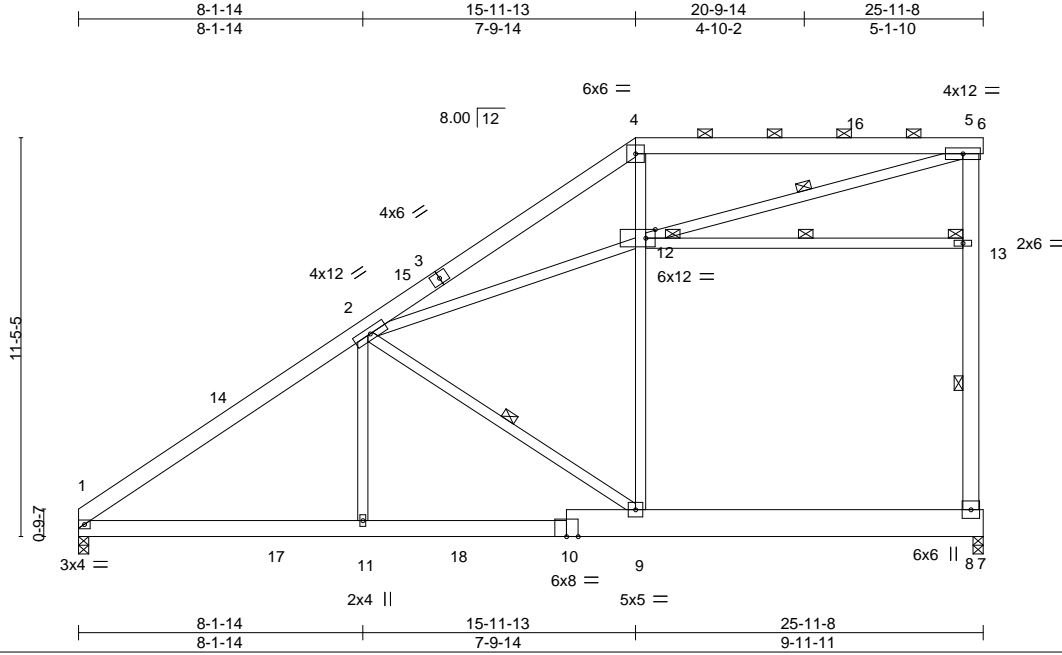
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 9 Williams Farms	157987758
J0523-2758	C5	Piggyback Base	1	1		

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ID:2GNsYO62BI49KgBFP3SImayOXVO-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:66.1

Plate Offsets (X,Y)-- [12:0-3-4,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.45	Vert(LL) -0.18	9	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.37	Vert(CT) -0.32	9-11	>956	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.82	Horz(CT) 0.02	8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.12	9-11	>999	240		
							Weight: 249 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1 \*Except\*  
 7-10: 2x10 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 5-8: 2x6 SP No.1

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-5-11 oc purlins, except end verticals, and 2-0-0 oc purlins (4-6-12 max.): 4-6.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 8-13, 2-9, 12-13, 5-12  
 JOINTS 1 Brace at Jt(s): 12, 13

**REACTIONS.**

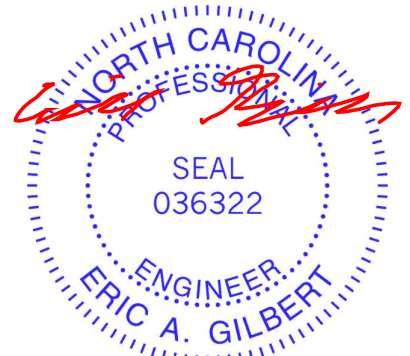
(size) 8=0-3-8, 1=0-3-8  
 Max Horz 1=358(LC 12)  
 Max Uplift 8=124(LC 9), 1=10(LC 12)  
 Max Grav 8=1338(LC 2), 1=1199(LC 19)

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

TOP CHORD 1-2=-1685/149, 2-4=-2888/709, 4-5=-2394/680, 8-13=-953/345, 5-13=-953/345  
 BOT CHORD 1-11=-432/1404, 9-11=-434/1390  
 WEBS 2-11=0/476, 2-9=-1605/516, 9-12=-137/1231, 4-12=-146/1193, 5-12=-661/2512,  
 2-12=-680/2323

**NOTES-**

- 1) 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 15-11-12, Exterior(2) 15-11-12 to 22-2-7, Interior(1) 22-2-7 to 25-11-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 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) 1 except (jt=lb) 8=124.
- 6) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 27, 2023

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Job	Truss	Truss Type	Qty	Ply	Lot 9 Williams Farms
J0523-2758	C6	Monopitch	1	1	157987759

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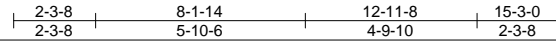
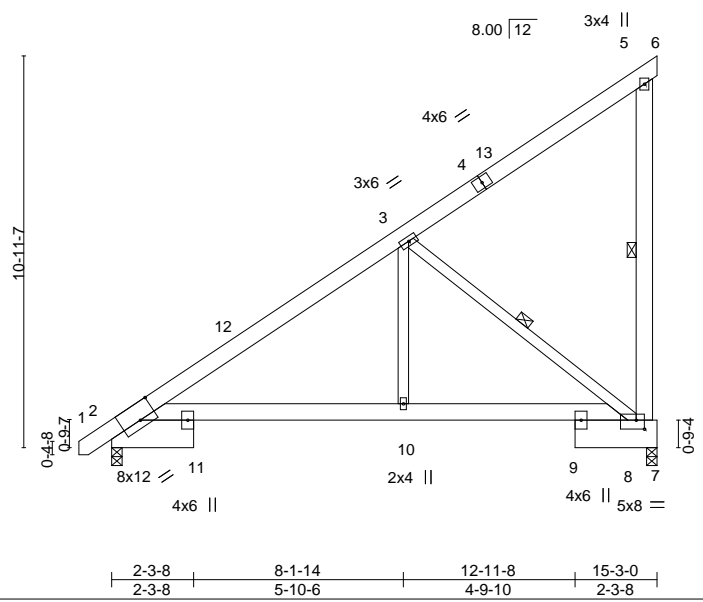


Plate Offsets (X,Y)-- [2:0-5-8,Edge], [8:0-2-12,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.24	Vert(LL) -0.04	2-10	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.40	Vert(CT) -0.08	2-10	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.26	Horz(CT) 0.03	8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.04	2-10	>999	240		
							Weight: 137 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x10 SP No.1 \*Except\*  
 2-8: 2x6 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 5-8: 2x6 SP No.1

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 5-8, 3-8

**REACTIONS.**

(size) 8=0-3-8, 2=0-3-8  
 Max Horz 2=344(LC 12)  
 Max Uplift 8=185(LC 12)  
 Max Grav 8=680(LC 19), 2=630(LC 1)

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

TOP CHORD 2-3=-753/0  
 BOT CHORD 2-10=-234/624, 8-10=-225/624  
 WEBS 3-10=0/404, 3-8=-809/287

**NOTES-**

- 1) 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) -0-9-7 to 3-7-6, Interior(1) 3-7-6 to 15-3-0 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=185.



April 27, 2023

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

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



818 Soundside Road  
 Edenton, NC 27932

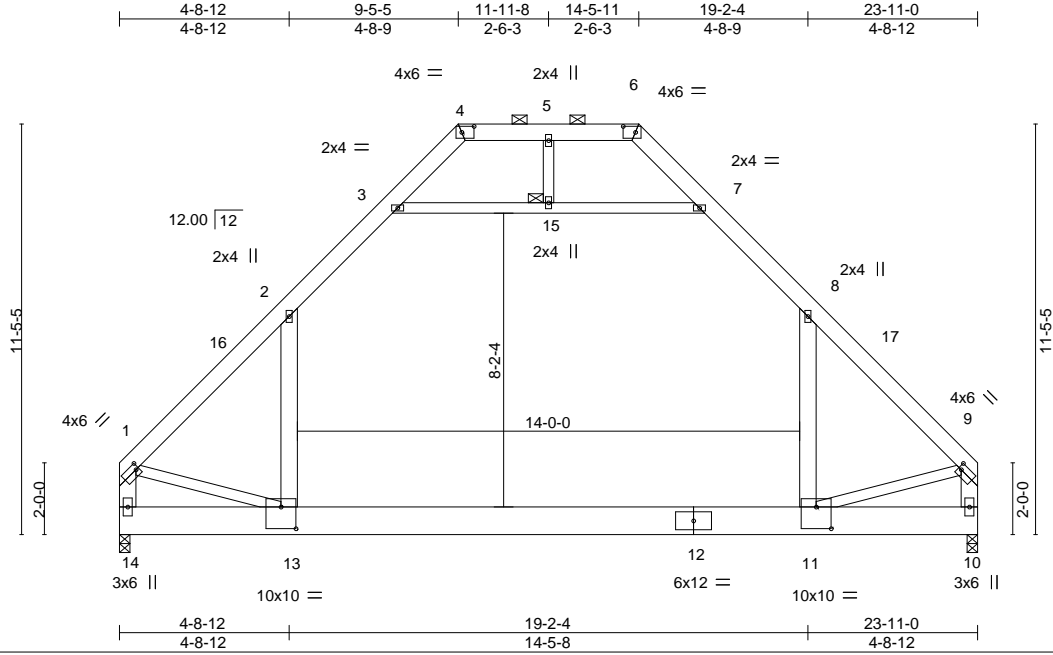


Job	Truss	Truss Type	Qty	Ply	Lot 9 Williams Farms	157987761
J0523-2758	D2	Piggyback Base	10	1		

Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Apr 26 09:14:05 2023 Page 1

ID:2GNsYO62BI49KgBFP3SImayOXVO-RIC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale: 3/16"=1'

Plate Offsets (X,Y)-- [1:0-1-0-0-2-0], [4:0-4-2-0-2-0], [6:0-4-2-0-2-0], [9:0-1-0-0-2-0], [11:0-5-0-0-7-4], [13:0-5-0-0-7-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.97	Vert(LL) -0.35	11-13	>815	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.45	Vert(CT) -0.56	11-13	>502	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.33	Horz(CT) 0.01	10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.08	11-13	>999	240		
							Weight: 229 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x10 SP 2400F 2.0E  
 WEBS 2x6 SP No.1 \*Except\*  
 3-7: 2x4 SP No.1, 5-15,1-13,9-11: 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-6.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 JOINTS 1 Brace at Jt(s): 15

**REACTIONS.**

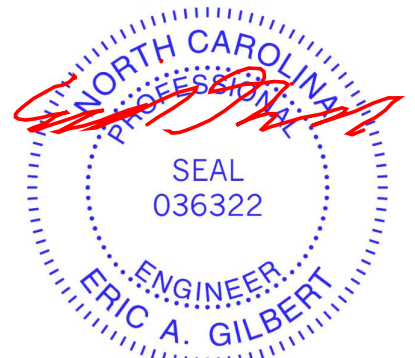
(size) 14=0-3-8, 10=0-3-8  
 Max Horz 14=-223(LC 8)  
 Max Grav 14=1604(LC 2), 10=1604(LC 2)

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

TOP CHORD 1-2=-1856/0, 2-3=-1123/174, 3-4=-264/196, 6-7=-264/196, 7-8=-1123/174, 8-9=-1856/0,  
 4-5=-54/389, 5-6=-54/389, 1-14=-1804/0, 9-10=-1805/0  
 BOT CHORD 13-14=-221/411, 11-13=0/1142  
 WEBS 2-13=0/882, 8-11=0/882, 3-15=-1382/107, 7-15=-1382/107, 1-13=0/1001, 9-11=0/1003

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-12 to 4-8-12, Interior(1) 4-8-12 to 9-6-7, Exterior(2) 9-6-7 to 20-7-4, Interior(1) 20-7-4 to 23-8-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* 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.
- Ceiling dead load (10.0 psf) on member(s). 2-3, 7-8, 3-15, 7-15; Wall dead load (5.0psf) on member(s). 2-13, 8-11
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 11-13
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Attic room checked for L/360 deflection.



April 27, 2023

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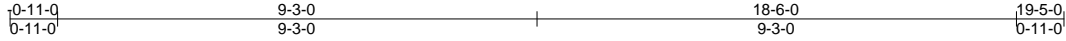
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 9 Williams Farms	157987762
J0523-2758	E1-GE	Common Supported Gable	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

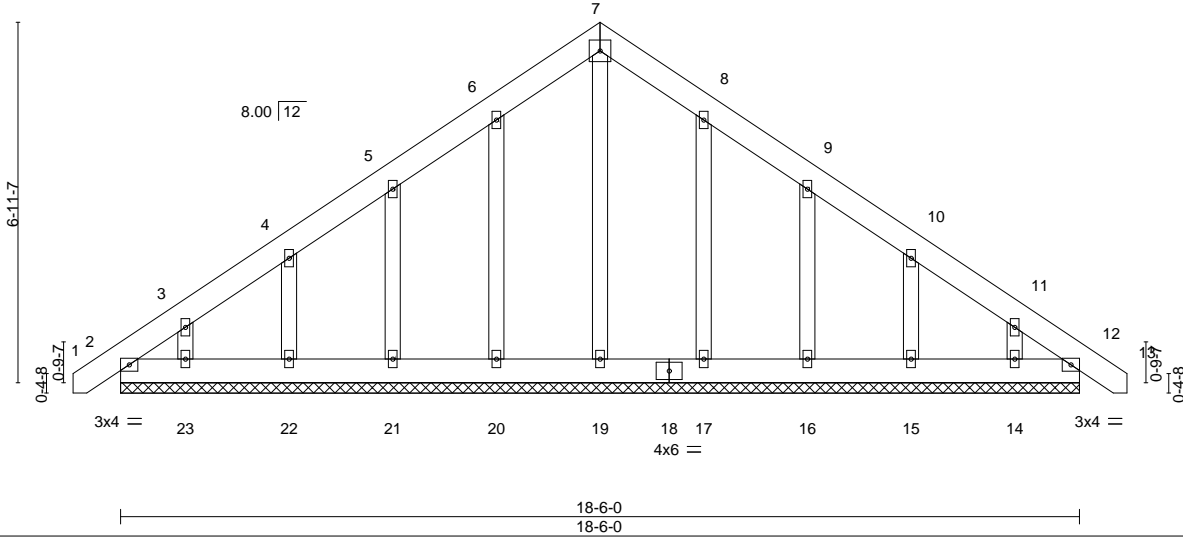
8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Apr 26 09:14:06 2023 Page 1

ID:2GNsYO62Bl49KgBFP3SImayOXVO-RIC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



5x5 =

Scale = 1:44.5



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.03	Vert(LL)	-0.00	12	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.01	Vert(CT)	-0.00	12	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.08	Horz(CT)	0.00	12	n/a	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S						Weight: 142 lb	FT = 20%

**LUMBER-**

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

**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.

**REACTIONS.**

All bearings 18-6-0.  
 (lb) - Max Horz 2=-200(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 20, 21, 22, 17, 16, 15, 14, 12 except 23=-106(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 19, 20, 21, 22, 23, 17, 16, 15, 14, 12

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

**NOTES-**

- 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) 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
- 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.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* 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) 2, 20, 21, 22, 17, 16, 15, 14, 12 except (jt=lb) 23=106.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.



April 27, 2023

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



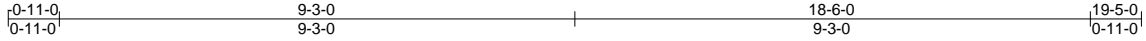
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 9 Williams Farms	157987763
J0523-2758	E2	Common	2	1		

Comtech, Inc., Fayetteville, NC - 28314,

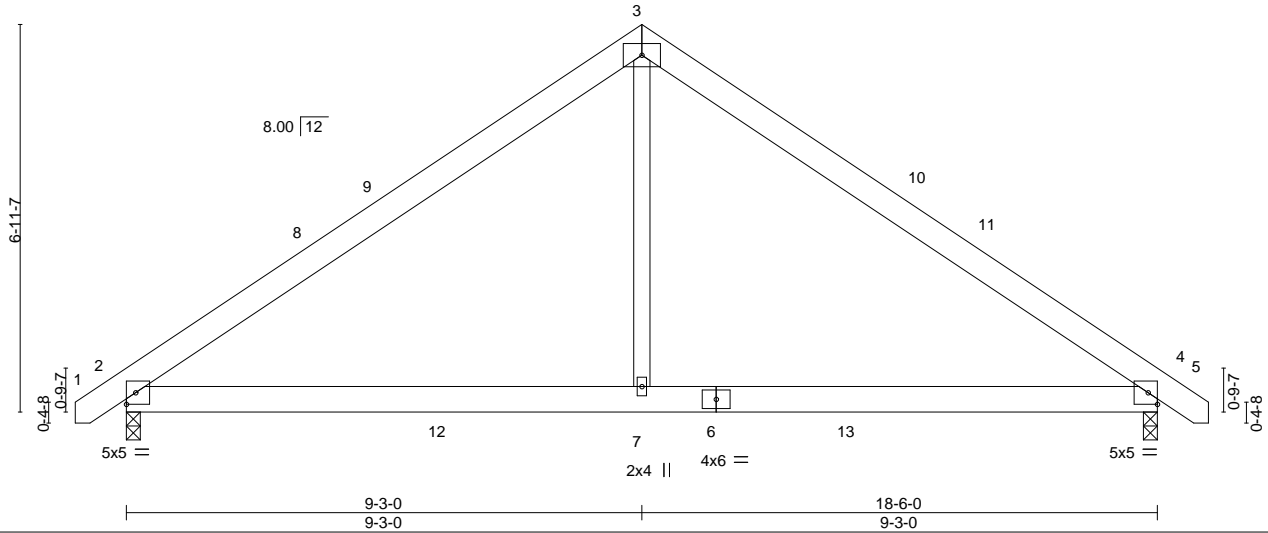
8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Apr 26 09:14:07 2023 Page 1

ID:2GNsYO62BI49KgBFP3SImayOXVO-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



5x8 =

Scale = 1:41.3



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.41	Vert(LL) -0.05	2-7	>999	360		MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.39	Vert(CT) -0.10	2-7	>999	240			
BCLL 0.0 *	Rep Stress Incr YES	WB 0.37	Horz(CT) 0.01	4	n/a	n/a			
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.10	4-7	>999	240		Weight: 110 lb	FT = 20%

**LUMBER-**

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

**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.

**REACTIONS.**

(size) 4=0-3-0, 2=0-3-0  
 Max Horz 2=160(LC 11)  
 Max Uplift 4=-115(LC 8), 2=-115(LC 9)  
 Max Grav 4=849(LC 2), 2=849(LC 2)

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

TOP CHORD 2-3=-1032/758, 3-4=-1032/758  
 BOT CHORD 2-7=-457/742, 4-7=-457/742  
 WEBS 3-7=-547/632

**NOTES-**

- 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) -0-9-7 to 3-7-6, Interior(1) 3-7-6 to 9-3-0, Exterior(2) 9-3-0 to 13-7-13, Interior(1) 13-7-13 to 19-3-7 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
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=115, 2=115.



April 27, 2023

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818 Soundside Road  
 Edenton, NC 27932

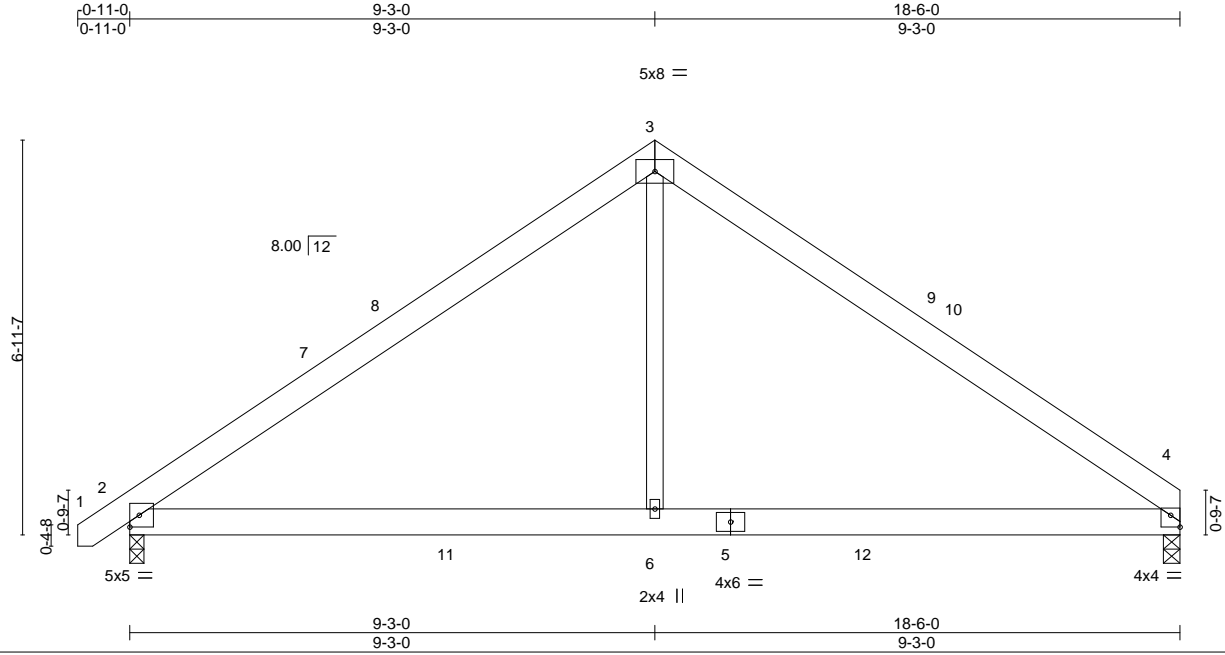


Job	Truss	Truss Type	Qty	Ply	Lot 9 Williams Farms	157987764
J0523-2758	E3	Common	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Apr 26 09:14:08 2023 Page 1

ID:2GNsYO62BI49KgBFP3SImayOXVO-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:40.6

Plate Offsets (X,Y)-- [4:Edge,0-2-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.43	Vert(LL)	-0.05	2-6	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.39	Vert(CT)	-0.10	2-6	>999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.37	Horz(CT)	0.01	4	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.10	2-6	>999		
	Code IRC2015/TPI2014						Weight: 108 lb	FT = 20%

**LUMBER-**

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

**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.

**REACTIONS.**

(size) 4=0-3-8, 2=0-3-0  
 Max Horz 2=159(LC 9)  
 Max Uplift 4=110(LC 8), 2=115(LC 9)  
 Max Grav 4=802(LC 2), 2=850(LC 2)

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

TOP CHORD 2-3=-1032/757, 3-4=-1030/760  
 BOT CHORD 2-6=-469/742, 4-6=-469/742  
 WEBS 3-6=-546/632

**NOTES-**

- 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) -0-9-7 to 3-7-6, Interior(1) 3-7-6 to 9-3-0, Exterior(2) 9-3-0 to 13-7-13, Interior(1) 13-7-13 to 18-4-4 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
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=110, 2=115.



April 27, 2023

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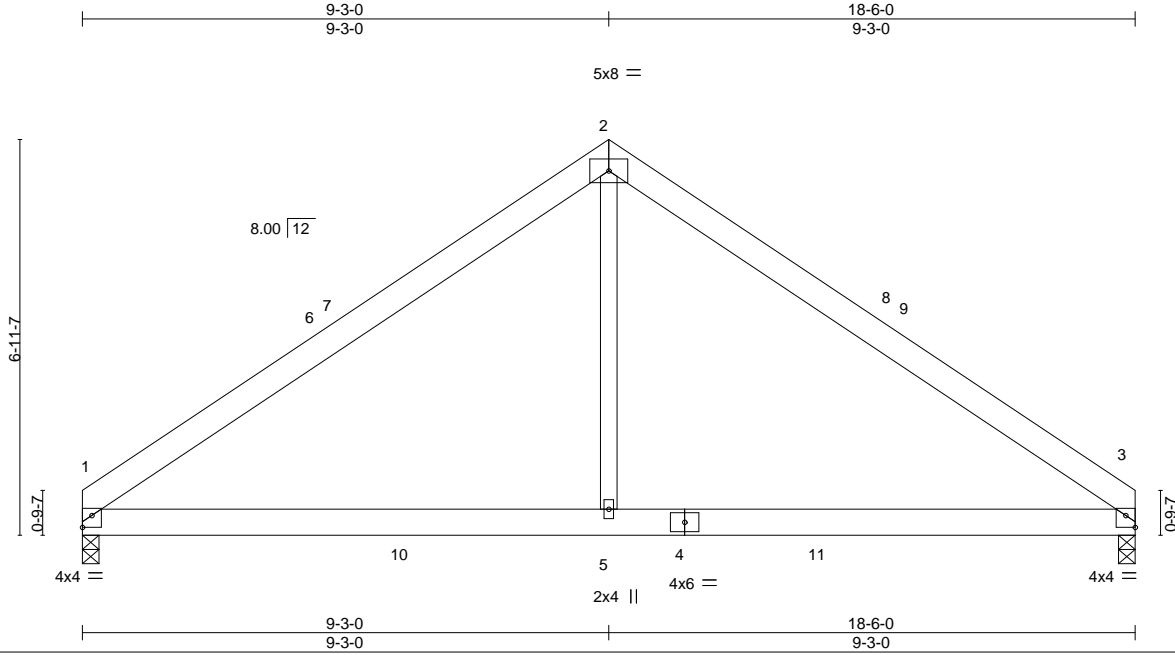
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 9 Williams Farms	157987765
J0523-2758	E4	Common	2	1		

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8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Apr 26 09:14:09 2023 Page 1

ID:2GNsYO62Bl49KgBFP3SImayOXVO-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:40.5

Plate Offsets (X,Y)-- [1:Edge,0-2-8], [3:Edge,0-2-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.43	Vert(LL) -0.05	1-5	>999	360		MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.38	Vert(CT) -0.10	1-5	>999	240			
BCLL 0.0 *	Rep Stress Incr YES	WB 0.37	Horz(CT) 0.01	3	n/a	n/a			
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.10	1-5	>999	240		Weight: 105 lb	FT = 20%

**LUMBER-**

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

**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.

**REACTIONS.**

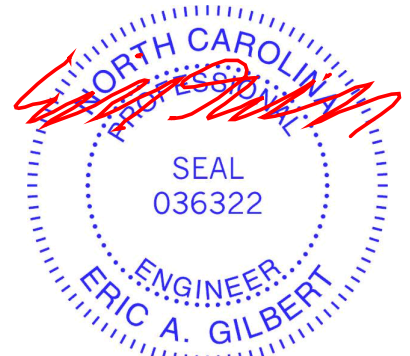
(size) 1=0-3-8, 3=0-3-8  
 Max Horz 1=-155(LC 8)  
 Max Uplift 1=-111(LC 9), 3=-111(LC 8)  
 Max Grav 1=802(LC 2), 3=802(LC 2)

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

TOP CHORD 1-2=-1030/758, 2-3=-1030/758  
 BOT CHORD 1-5=-468/742, 3-5=-468/742  
 WEBS 2-5=-543/632

**NOTES-**

- 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) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 9-3-0, Exterior(2) 9-3-0 to 13-7-13, Interior(1) 13-7-13 to 18-4-4 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
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=111, 3=111.



April 27, 2023

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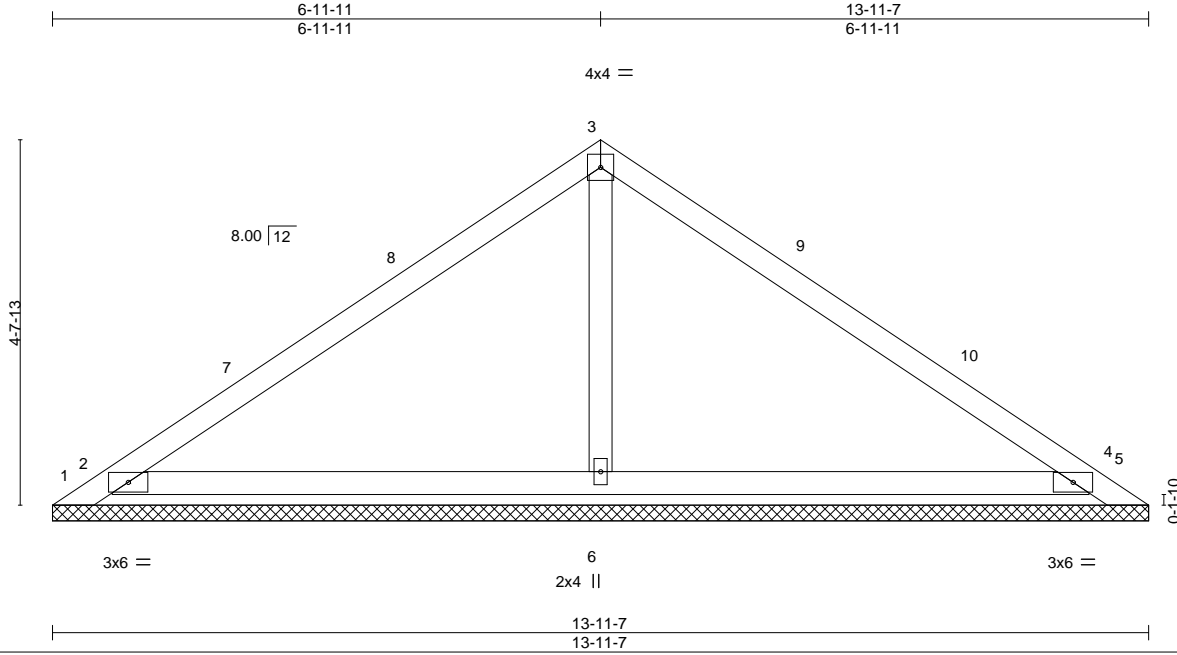


Job	Truss	Truss Type	Qty	Ply	Lot 9 Williams Farms	157987767
J0523-2758	PB2	Piggyback	9	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Apr 26 09:14:12 2023 Page 1

ID:2GNsYO62Bl49KgBFP3SImayOXVO-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:29.3

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.42	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.24	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.09	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						Weight: 49 lb	FT = 20%

**LUMBER-**

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

**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.

**REACTIONS.**

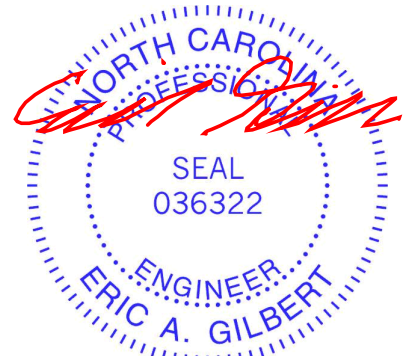
All bearings 13-11-7.  
 (lb) - Max Horz 1=107(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) except 1=565(LC 19), 5=519(LC 20), 2=308(LC 12), 4=288(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 5 except 1=255(LC 12), 2=880(LC 19), 4=850(LC 20), 6=420(LC 1)

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

TOP CHORD 1-2=-192/366, 4-5=-162/287  
 WEBS 3-6=-273/94

**NOTES-**

- 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) 0-3-2 to 4-7-15, Interior(1) 4-7-15 to 6-11-11, Exterior(2) 6-11-11 to 11-4-8, Interior(1) 11-4-8 to 13-8-5 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* 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 565 lb uplift at joint 1, 519 lb uplift at joint 5, 308 lb uplift at joint 2 and 288 lb uplift at joint 4.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



April 27, 2023

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

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



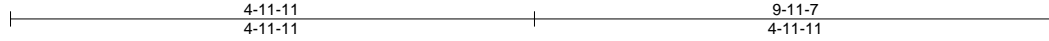
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 9 Williams Farms	157987768
J0523-2758	PB3	GABLE	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

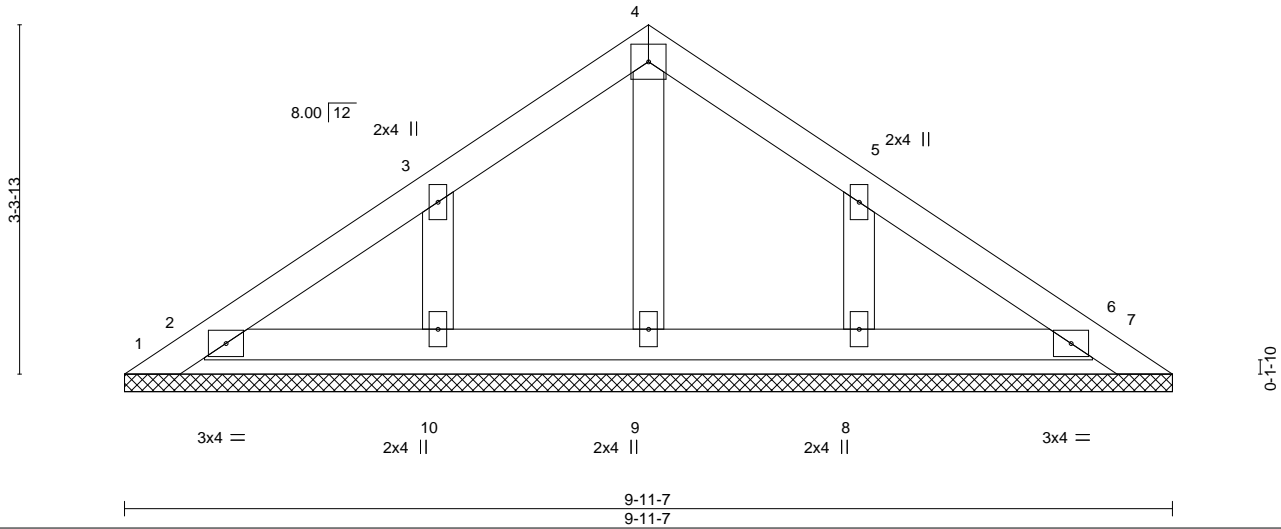
8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Apr 26 09:14:14 2023 Page 1

ID:2GNsYO62Bl49KgBFP3SImayOXVO-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



4x4 =

Scale = 1:21.9



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.04	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.03	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.02	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 6 n/a n/a	Weight: 38 lb	FT = 20%
	Code IRC2015/TPI2014				

**LUMBER-**

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

**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.

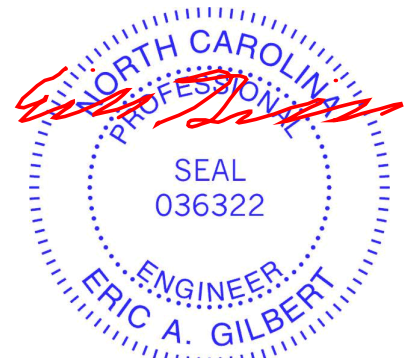
**REACTIONS.**

All bearings 9-11-7.  
 (lb) - Max Horz 1=94(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 2, 6 except 10=105(LC 12), 8=104(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 7, 2, 6, 9, 10, 8

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

**NOTES-**

- 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) 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
- 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 requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* 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) 1, 7, 2, 6 except (jt=lb) 10=105, 8=104.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



April 27, 2023

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

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



818 Soundside Road  
 Edenton, NC 27932

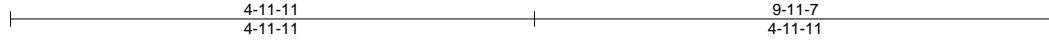


Job	Truss	Truss Type	Qty	Ply	Lot 9 Williams Farms	157987769
J0523-2758	PB4	Piggyback	6	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

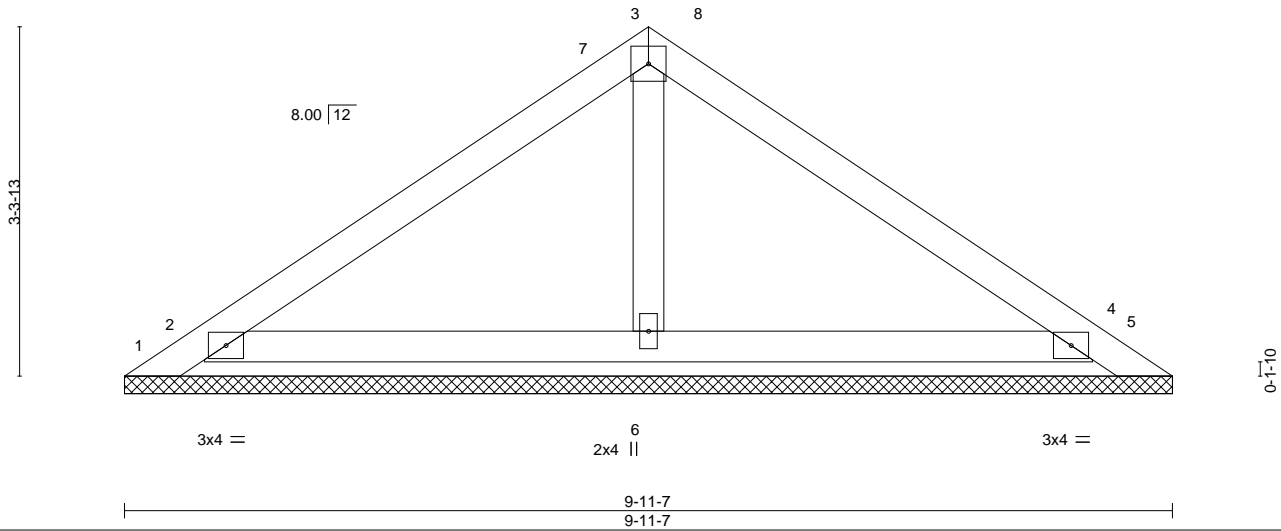
8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Apr 26 09:14:15 2023 Page 1

ID:2GNsYO62Bl49KgBFP3SImayOXVO-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



4x4 =

Scale = 1:21.9



LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.13	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.03	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P						Weight: 34 lb	FT = 20%

**LUMBER-**

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

**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.

**REACTIONS.**

All bearings 9-11-7.

(lb) - Max Horz 1=-75(LC 8)

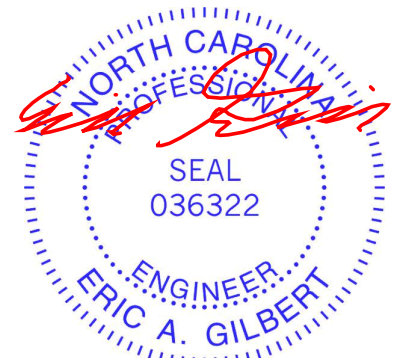
Max Uplift All uplift 100 lb or less at joint(s) except 1=-276(LC 19), 5=-244(LC 20), 2=-206(LC 12), 4=-192(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 2=509(LC 19), 4=488(LC 20), 6=270(LC 1)

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

**NOTES-**

- 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) 0-3-2 to 4-7-15, Interior(1) 4-7-15 to 4-11-11, Exterior(2) 4-11-11 to 9-2-5, Interior(1) 9-2-5 to 9-8-5 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* 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 276 lb uplift at joint 1, 244 lb uplift at joint 5, 206 lb uplift at joint 2 and 192 lb uplift at joint 4.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



April 27, 2023

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



818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 9 Williams Farms	157987770
J0523-2758	PB5	GABLE	1	1	Job Reference (optional)	

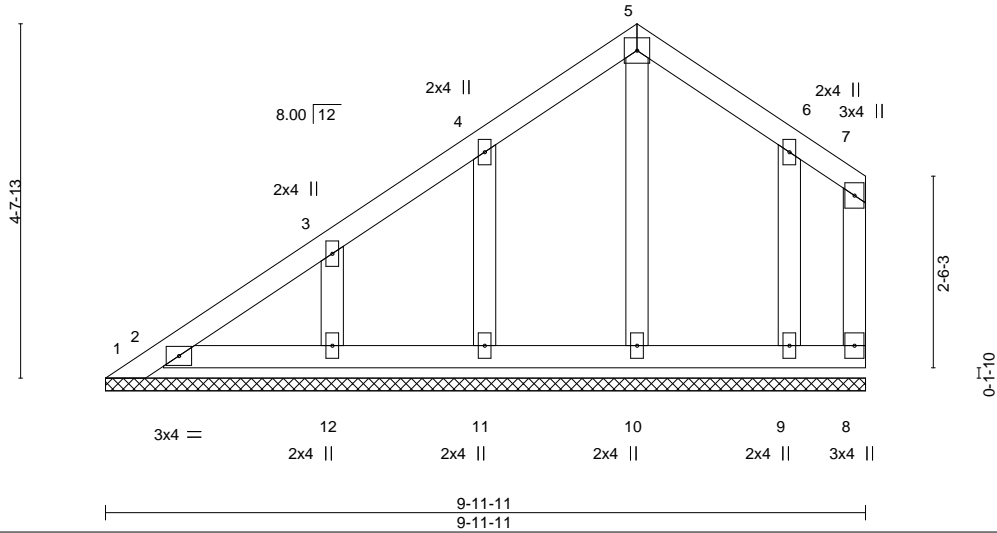
Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Apr 26 09:14:16 2023 Page 1  
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4x4 =

Scale = 1:30.2



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	-0.00	8	n/a	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S						Weight: 50 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

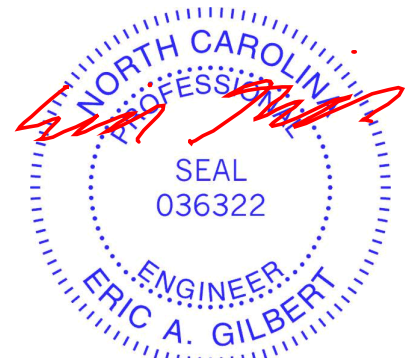
**REACTIONS.**

All bearings 9-11-11.  
(lb) - Max Horz 1=159(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 8, 2, 11, 12, 9  
Max Grav All reactions 250 lb or less at joint(s) 1, 8, 2, 10, 11, 12, 9

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

**NOTES-**

- 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) 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
- 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 requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* 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.
- Bearing at joint(s) 1, 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 8, 2, 11, 12, 9.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



April 27, 2023

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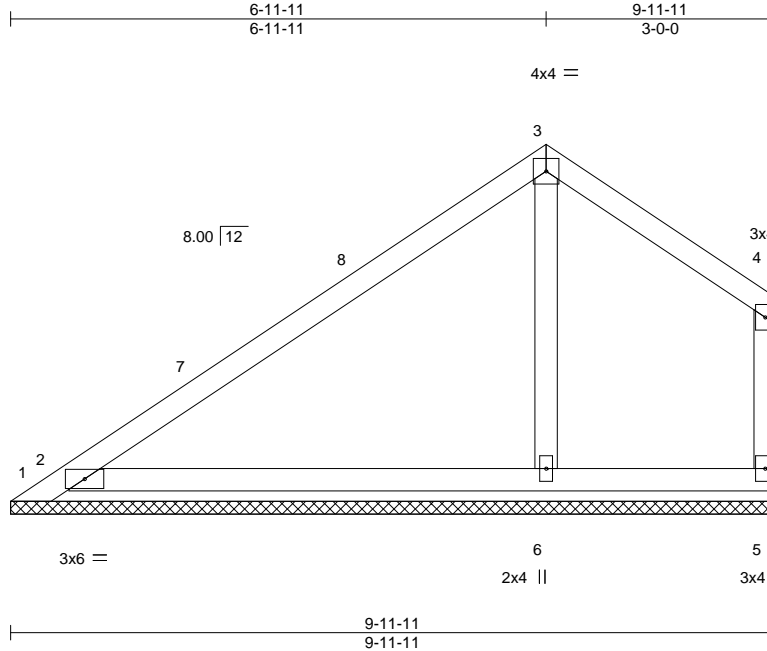
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 9 Williams Farms	157987771
J0523-2758	PB6	Piggyback	9	1	Job Reference (optional)	

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ID:2GNsYO62B149KgBFP3SImayOXVO-RIC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:30.0

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 2-0-0	TC 0.43	Vert(LL) n/a	-	n/a	999		MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.19	Vert(CT) n/a	-	n/a	999			
BCLL 0.0 *	Rep Stress Incr YES	WB 0.08	Horz(CT) 0.00	5	n/a	n/a			
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S						Weight: 41 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS.**

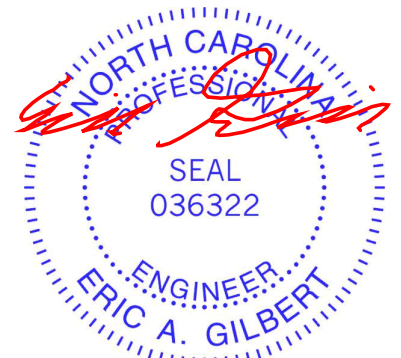
All bearings 9-11-11.  
 (lb) - Max Horz 1=107(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 5, 6 except 1=574(LC 19), 2=308(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 5 except 1=281(LC 12), 2=865(LC 19), 6=399(LC 19)

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

TOP CHORD 1-2=-307/425  
 WEBS 3-6=-278/131

**NOTES-**

- 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) 0-3-2 to 4-7-15, Interior(1) 4-7-15 to 6-11-11, Exterior(2) 6-11-11 to 9-9-15 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* 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.
- Bearing at joint(s) 1, 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6 except (jt=lb) 1=574, 2=308.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



April 27, 2023

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818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 9 Williams Farms	157987772
J0523-2758	PB7	PIGGYBACK	2	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

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ID:2GNsYO62Bl49KgBFP3SImayOXVO-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



4x4 =

Scale = 1:30.0

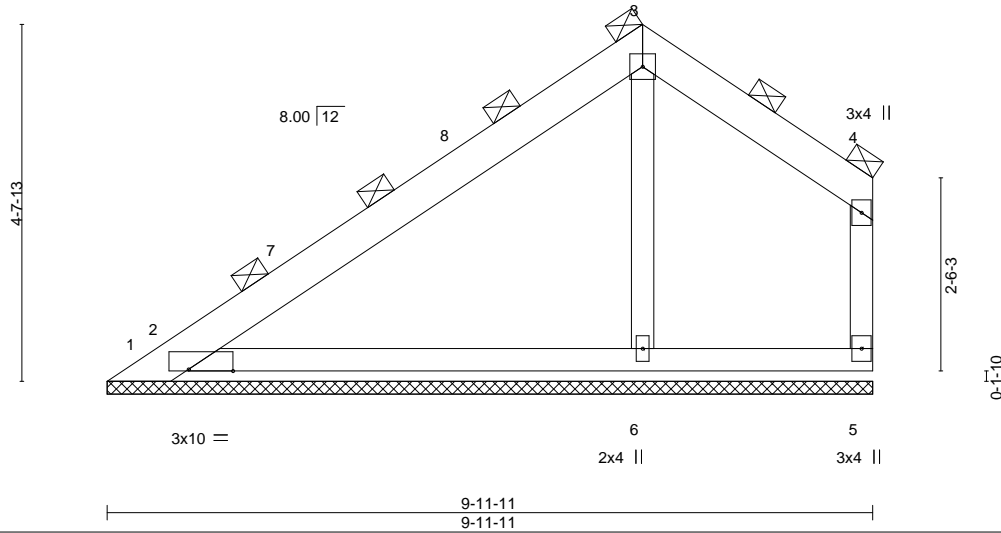


Plate Offsets (X,Y)-- [2:0-6-15,Edge]

LOADING (psf)	SPACING-	3-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.31	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.36	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.09	Horz(CT)	-0.00	5	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-P					Weight: 50 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals (Switched from sheeted: Spacing > 2-8-0).  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

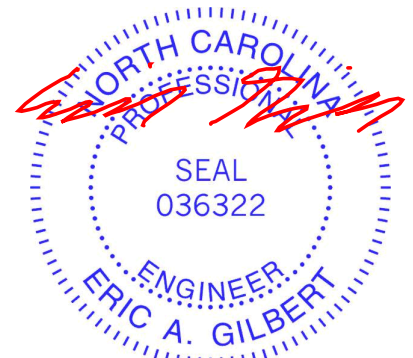
All bearings 9-11-11.  
 (lb) - Max Horz 1=155(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 5 except 1=614(LC 19), 2=458(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 5 except 1=395(LC 12), 2=1067(LC 19), 6=522(LC 19)

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

TOP CHORD 1-2=386/442  
 WEBS 3-6=339/140

**NOTES-**

- 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) 0-4-15 to 4-9-12, Interior(1) 4-9-12 to 6-11-11, Exterior(2) 6-11-11 to 9-9-15 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* 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.
- Bearing at joint(s) 1, 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 1=614, 2=458.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 27, 2023

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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, DSB-89 and BCSI Building Component**

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



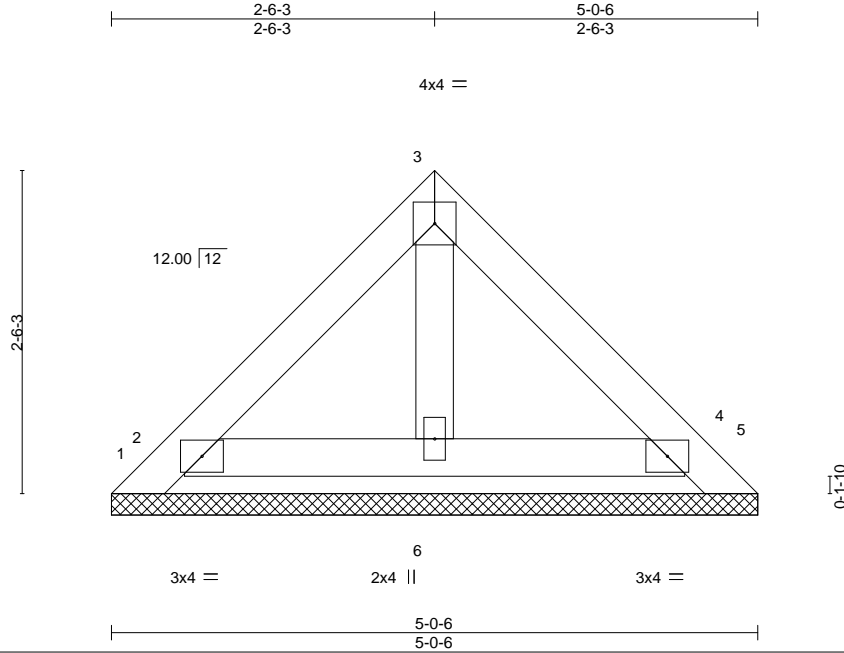
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 9 Williams Farms	157987773
J0523-2758	PB8	Piggyback	11	1		

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Apr 26 09:14:19 2023 Page 1

ID:2GNsYO62Bl49KgBFP3SImayOXVO-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCD0i7J4zJC?f



Scale = 1:17.9

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.05	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.03	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.01	Horz(CT)	0.00	4	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 19 lb	FT = 20%
	Code IRC2015/TPI2014							

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-0-6 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

All bearings 5-0-6.  
 (lb) - Max Horz 1=69(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 5 except 1=109(LC 19), 2=167(LC 12), 4=138(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 2, 4, 6

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

**NOTES-**

- 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) 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
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* 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.
- Bearing at joint(s) 1, 5, 2, 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 1=109, 2=167, 4=138.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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# Symbols

## PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.



This symbol indicates the required direction of slots in connector plates.

\* Plate location details available in **MITek 20/20 software** or upon request.

## PLATE SIZE

**4 X 4**

The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

## BEARING



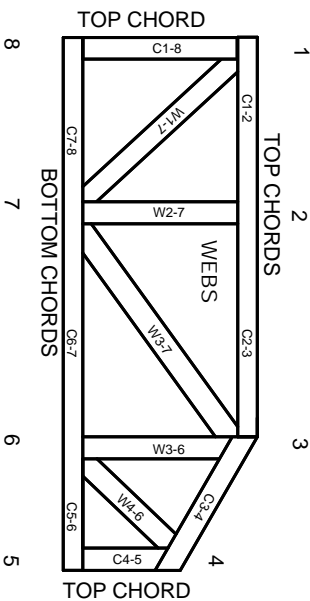
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

### Industry Standards:

ANSI/TFP 1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-89: Design Standard for Bracing.  
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System

6-4-8  
dimensions shown in ft-in-sixteenths  
(Drawings not to scale)



**JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.**

**CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.**

## PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988  
ER-3907, ESR-2362, ESR-1397, ESR-3282

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TFP 1 section 6.3 These truss designs rely on lumber values established by others.

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MITek Engineering Reference Sheet: Mill-7473 rev. 5/19/2020



# General Safety Notes

## Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TFP 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TFP 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Rewriting pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TFP 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.