

RE: J0521-2959  
 Weaver/Lot 4B Williams Farm/Harnett

Trenco  
 818 Soundside Rd  
 Edenton, NC 27932

**Site Information:**

Customer: Project Name: J0521-2959  
 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 8.3  
 Wind Code: ASCE 7-10 Wind Speed: 130 mph  
 Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 18 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date
1	E15492391	A1	6/7/2021
2	E15492392	A1SE	6/7/2021
3	E15492393	A2	6/7/2021
4	E15492394	A3	6/7/2021
5	E15492395	A4	6/7/2021
6	E15492396	A5	6/7/2021
7	E15492397	A6	6/7/2021
8	E15492398	A7	6/7/2021
9	E15492399	A8	6/7/2021
10	E15492400	A9	6/7/2021
11	E15492401	A9GE	6/7/2021
12	E15492402	B1	6/7/2021
13	E15492403	B1GE	6/7/2021
14	E15492404	C1	6/7/2021
15	E15492405	C2	6/7/2021
16	E15492406	C3	6/7/2021
17	E15492407	PB	6/7/2021
18	E15492408	PBGE	6/7/2021

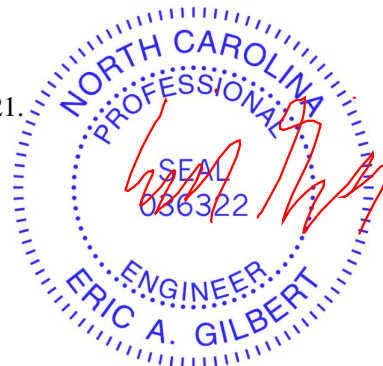
The truss drawing(s) referenced above have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville.

Truss Design Engineer's Name: Gilbert, Eric

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

North Carolina COA: C-0844

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



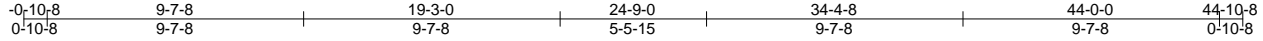
June 07, 2021

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 4B Williams Farm/Harnett	E15492391
J0521-2959	A1	PIGGYBACK BASE	1	1	Job Reference (optional)	

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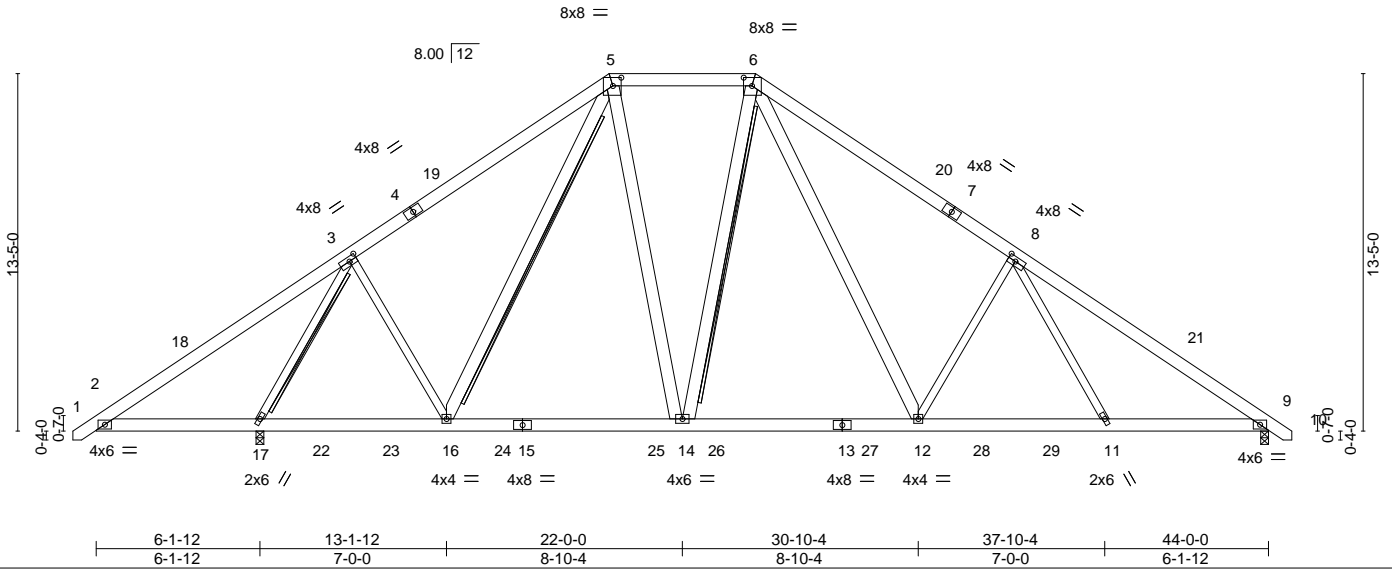


Plate Offsets (X,Y)-- [3:0-3-6,0-2-1], [5:0-3-12,0-3-12], [6:0-3-12,0-3-12], [8:0-3-6,0-2-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.48	Vert(LL) -0.10	12-14	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.45	Vert(CT) -0.17	12-14	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.68	Horz(CT) 0.05	9	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.04	12	>999	240		
							Weight: 395 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x6 SP No.1 \*Except\*  
 3-17,3-16,8-12,8-11: 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-7-3 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-6.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 2-17.  
 WEBS T-Brace: 2x4 SPF No.2 - 3-17  
 2x6 SPF No.2 - 5-16, 6-14  
 Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.  
 Brace must cover 90% of web length.

**REACTIONS.**

(size) 17=0-3-8, 9=0-3-8  
 Max Horz 17=-320(LC 10)  
 Max Uplift 17=-108(LC 12), 9=-94(LC 13)  
 Max Grav 17=2255(LC 2), 9=1725(LC 20)

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

TOP CHORD 2-3=-405/688, 3-5=-1444/385, 5-6=-1256/435, 6-8=-2202/565, 8-9=-2628/426  
 BOT CHORD 2-17=-458/455, 16-17=-181/968, 14-16=-6/1238, 12-14=0/1314, 11-12=-218/1927,  
 9-11=-190/2042  
 WEBS 3-17=-2295/704, 3-16=-19/655, 8-12=-744/366, 8-11=0/310, 5-16=-278/131,  
 6-14=-283/186, 5-14=-75/684, 6-12=-236/1034

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-9 to 3-8-4, Interior(1) 3-8-4 to 19-3-14, Exterior(2) 19-3-14 to 30-10-13, Interior(1) 30-10-13 to 44-8-9 zone; cantilever left 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 100 lb uplift at joint(s) 9 except (jt=lb) 17=108.
- 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.



March 12, 2021

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 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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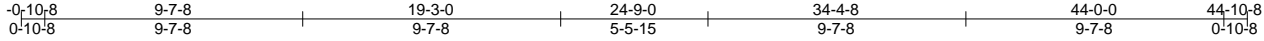


Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 4B Williams Farm/Harnett	E15492393
J0521-2959	A2	PIGGYBACK BASE	5	1	Job Reference (optional)	

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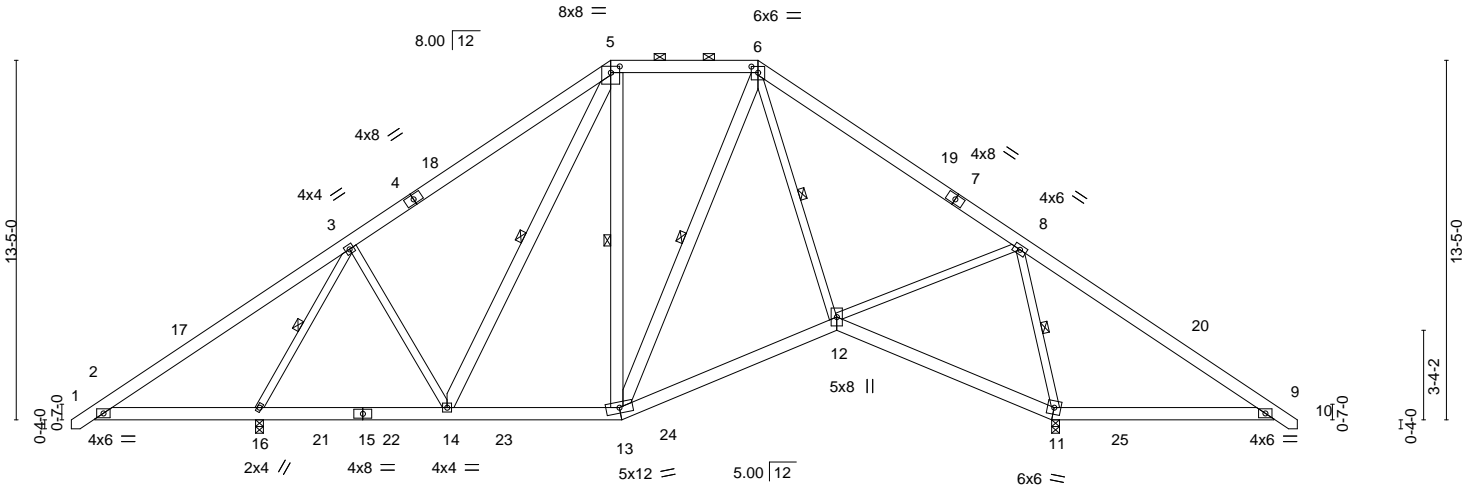


Plate Offsets (X,Y)--	[5:0-4-0,0-2-13], [6:0-3-0,0-2-12]
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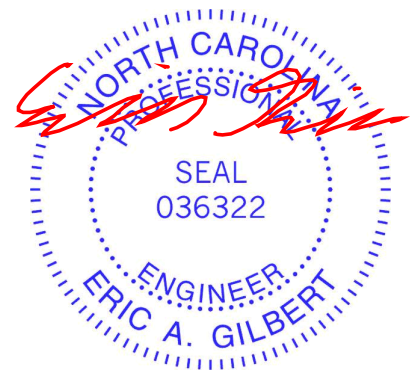
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.51	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.21	Vert(LL) -0.04 13-14 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.41	Vert(CT) -0.09 12-13 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.03 11 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.02 13-14 >999 240	Weight: 381 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 5-13,5-14,6-13: 2x6 SP No.1	WEBS 1 Row at midpt 3-16, 5-13, 6-12, 8-11, 5-14, 6-13

**REACTIONS.** (size) 11=0-3-8, 16=0-3-8  
 Max Horz 16=-320(LC 10)  
 Max Uplift 11=-118(LC 13), 16=-112(LC 12)  
 Max Grav 11=1938(LC 1), 16=1673(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-408/688, 3-5=-889/255, 5-6=-703/289, 6-8=-853/102, 8-9=-484/769  
 BOT CHORD 2-16=-459/457, 14-16=-211/657, 13-14=-60/673, 12-13=-29/726, 11-12=-306/483,  
 9-11=-511/519  
 WEBS 3-16=-1650/574, 8-12=-6/825, 6-12=-53/432, 3-14=-37/358, 8-11=-1687/540

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-9 to 3-8-4, Interior(1) 3-8-4 to 19-3-0, Exterior(2) 19-3-0 to 30-11-10, Interior(1) 30-11-10 to 44-8-9 zone; cantilever left and 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 100 lb uplift at joint(s) except (jt=lb) 11=118, 16=112.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

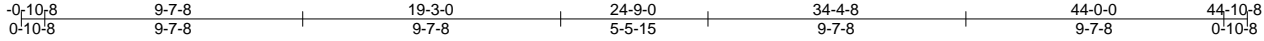


March 12, 2021

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 4B Williams Farm/Harnett	E15492394
J0521-2959	A3	PIGGYBACK BASE	2	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

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 ID:FKRF2G2VvSGFSXRUG\_ubJqzaK1d-cAoVf9nj2CrhYcy3Grml4YhqzpLX7j4\_9BjHyFzbijQ



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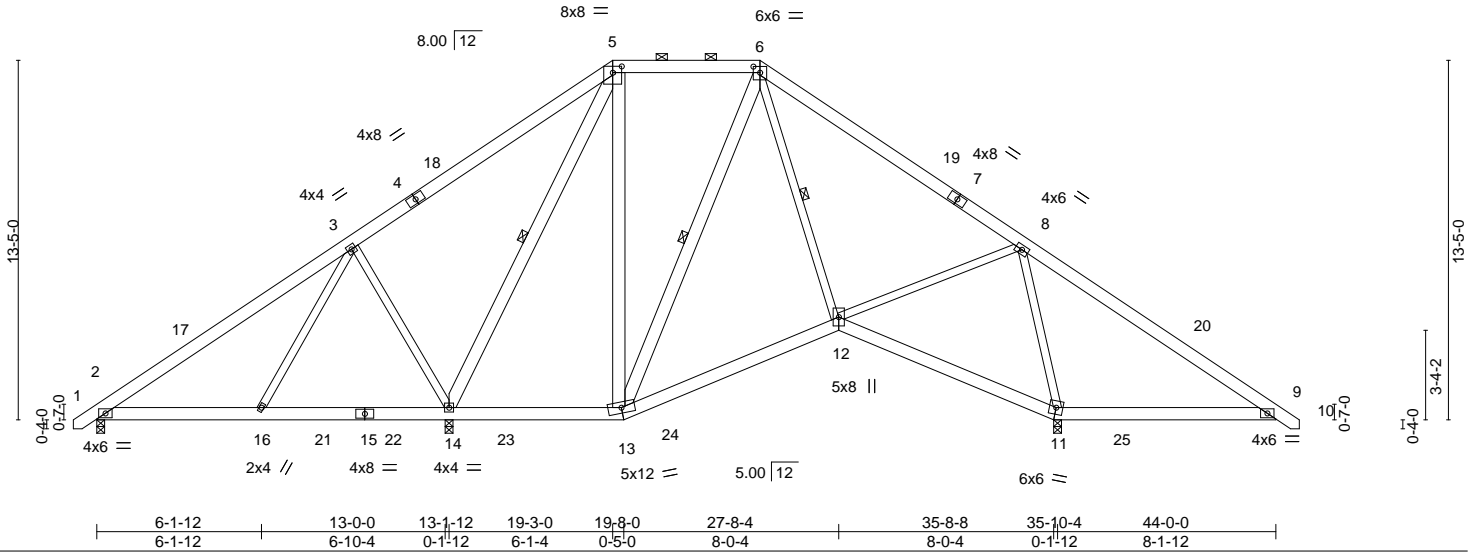


Plate Offsets (X,Y)--	[5:0-4-0,0-2-13], [6:0-3-0,0-2-12]
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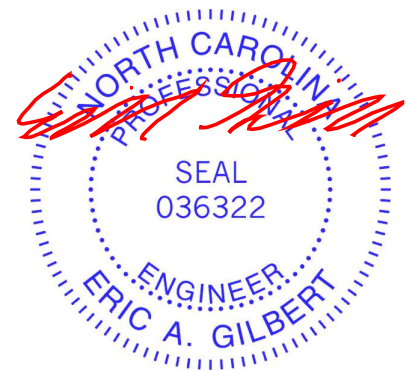
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.51	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.20	Vert(LL) -0.04 12-13 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.99	Vert(CT) -0.08 12-13 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 11 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.02 2-16 >999 240	Weight: 381 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 5-13,5-14,6-13: 2x6 SP No.1	WEBS 1 Row at midpt 6-12, 5-14, 6-13

**REACTIONS.** (size) 2=0-3-8, 11=0-3-8, 14=0-3-8  
 Max Horz 14=-320(LC 10)  
 Max Uplift 2=-56(LC 9), 11=-121(LC 13), 14=-141(LC 9)  
 Max Grav 2=483(LC 23), 11=1674(LC 1), 14=1546(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-455/240, 3-5=-59/369, 5-6=-384/210, 6-8=-493/69, 8-9=-484/769  
 BOT CHORD 2-16=-71/274, 13-14=-121/314, 12-13=-125/434, 11-12=-361/496, 9-11=-511/519  
 WEBS 3-16=-292/330, 8-12=0/547, 5-13=-30/367, 6-12=-87/438, 3-14=-745/533,  
 8-11=-1400/466, 5-14=-859/143, 6-13=-255/25

- NOTES-**
- Unbalanced roof live loads HAVING been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-9 to 3-8-4, Interior(1) 3-8-4 to 19-3-0, Exterior(2) 19-3-0 to 30-11-10, Interior(1) 30-11-10 to 44-8-9 zone; cantilever right exposed; porch left 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 100 lb uplift at joint(s) 2 except (jt=lb) 11=121, 14=141.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 4B Williams Farm/Harnett	E15492395
J0521-2959	A4	ROOF SPECIAL	2	1	Job Reference (optional)	

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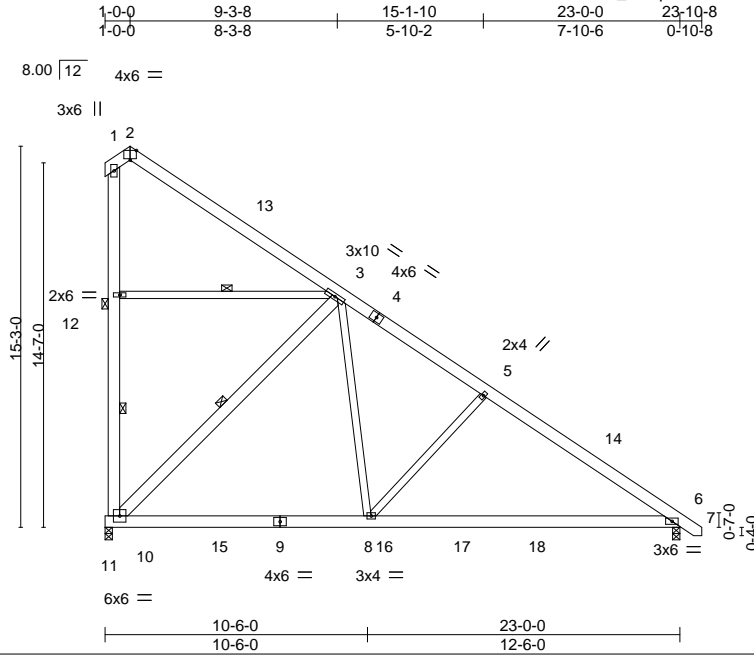


Plate Offsets (X,Y)-- [2:0-3:0,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.29	Vert(LL) -0.13	6-8	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.56	Vert(CT) -0.28	6-8	>970	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.45	Horz(CT) 0.02	6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.03	6-8	>999	240		
							Weight: 219 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 1-10,3-10: 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 10-12, 3-10, 3-12  
 JOINTS 1 Brace at Jt(s): 12

**REACTIONS.**

(size) 10=0-3-8, 6=0-3-8  
 Max Horz 10=-482(LC 13)  
 Max Uplift 10=-236(LC 13)  
 Max Grav 10=1177(LC 20), 6=1071(LC 20)

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

TOP CHORD 3-5=-1052/0, 5-6=-1298/0, 10-12=-259/166, 1-12=-259/166  
 BOT CHORD 8-10=0/743, 6-8=0/987  
 WEBS 5-8=-424/234, 3-10=-1116/335, 3-8=-26/850

**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) 0-4-4 to 5-4-13, Interior(1) 5-4-13 to 23-8-9 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=236.



March 12, 2021

**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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**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



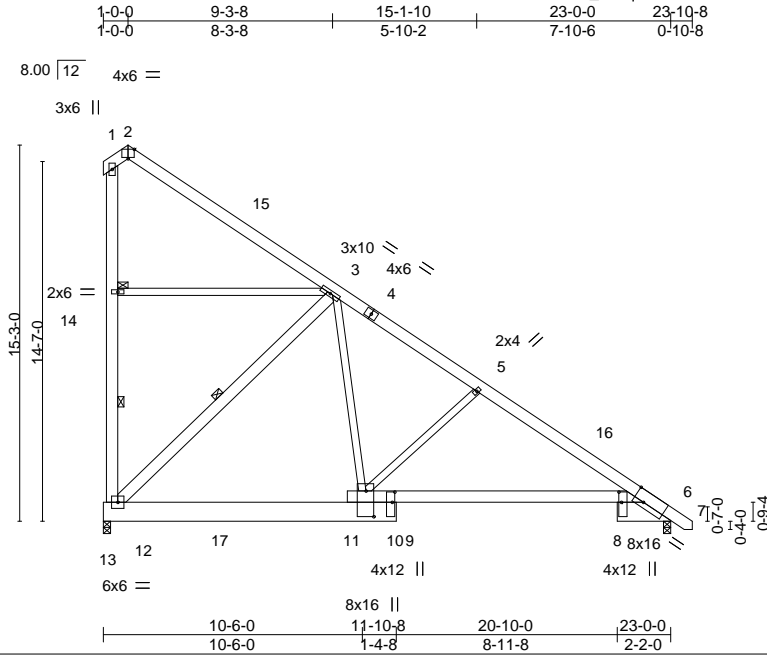
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 4B Williams Farm/Harnett	E15492396
J0521-2959	A5	ROOF SPECIAL	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

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Plate Offsets (X,Y)-- [2:0-3-0,Edge], [6:0-5-0,Edge], [8:0-5-0,0-1-4], [9:0-5-0,0-1-4], [10:1-0-8,0-3-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.37	Vert(LL) -0.12	6-10	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.49	Vert(CT) -0.30	6-10	>887	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.45	Horz(CT) 0.08	6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.05	6-10	>999	240	Weight: 245 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x10 SP No.1 \*Except\*  
 6-11: 2x6 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 1-12,3-12: 2x6 SP No.1

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-11-14 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 12-14, 3-12  
 JOINTS 1 Brace at Jt(s): 14

**REACTIONS.**

(size) 6=0-3-8, 12=0-3-8  
 Max Horz 12=-481(LC 13)  
 Max Uplift 12=-233(LC 13)  
 Max Grav 6=979(LC 20), 12=1127(LC 20)

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

TOP CHORD 3-5=-1079/0, 5-6=-1350/0, 12-14=-256/166, 1-14=-257/166  
 BOT CHORD 10-12=0/827, 6-10=0/1044  
 WEBS 5-10=-432/206, 3-12=-1146/302, 3-10=0/874

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 5-4-13, Interior(1) 5-4-13 to 23-8-9 zone;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) 12=233.



March 12, 2021

**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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**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	Weaver/Lot 4B Williams Farm/Harnett	E15492397
J0521-2959	A6	ROOF SPECIAL	1	2	Job Reference (optional)	

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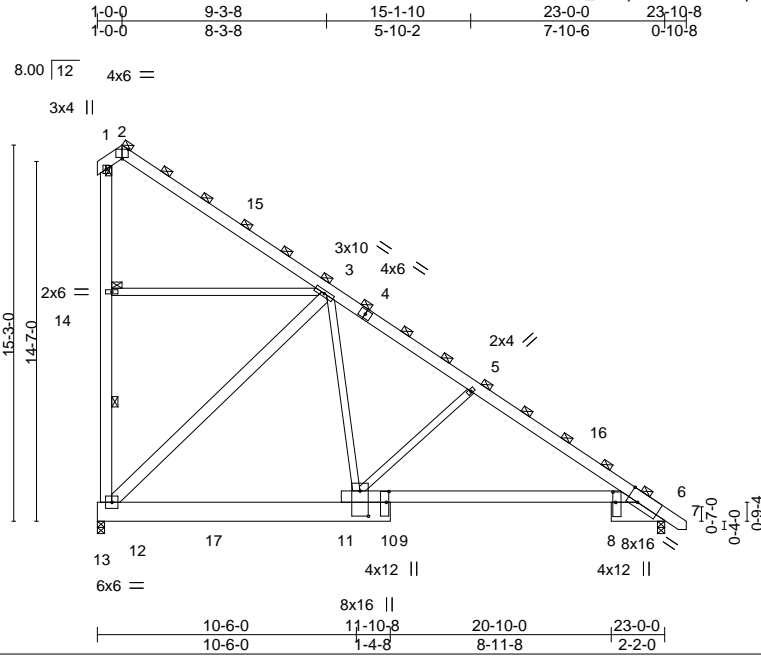


Plate Offsets (X,Y)-- [2:0-3-0,Edge], [6:0-5-0,Edge], [8:0-5-0,0-1-4], [9:0-5-4,0-1-4], [10:1-0-4,0-4-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.37	Vert(LL) -0.11	6-10	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.47	Vert(CT) -0.27	6-10	>999	240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.65	Horz(CT) 0.07	6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.05	6-10	>999	240	Weight: 490 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x10 SP No.1 \*Except\*  
 6-11: 2x6 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 1-12,3-12: 2x6 SP No.1

**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.  
 WEBS 1 Row at midpt 12-14  
 JOINTS 1 Brace at Jt(s): 2, 1, 14

**REACTIONS.**

(size) 6=0-3-8, 12=0-3-8  
 Max Horz 12=-842(LC 13)  
 Max Uplift 12=-407(LC 13)  
 Max Grav 6=1713(LC 20), 12=1971(LC 20)

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

TOP CHORD 1-2=-333/223, 2-3=-379/107, 3-5=-1889/0, 5-6=-2362/0, 12-14=-448/290,  
 1-14=-449/291  
 BOT CHORD 10-12=0/1448, 6-10=0/1827  
 WEBS 5-10=-757/361, 3-12=-2006/528, 3-10=0/1529

**NOTES-**

- 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: 2x10 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
- 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.
- Unbalanced roof live loads have been considered for this design.
- 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) 0-4-4 to 5-4-13, Interior(1) 5-4-13 to 23-8-9 zone; 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) 12=407.
- 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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818 Soundside Road  
 Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 4B Williams Farm/Harnett	E15492398
J0521-2959	A7	ROOF SPECIAL	1	2	Job Reference (optional)	

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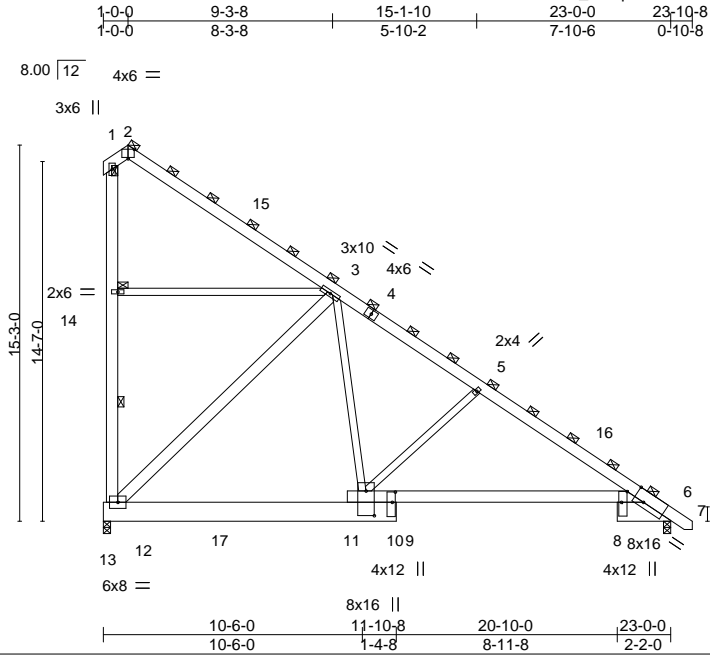


Plate Offsets (X,Y)-- [2:0-3-0,Edge], [6:0-5-0,Edge], [8:0-5-4,Edge], [9:0-5-0,0-1-8], [10:1-0-0,0-4-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	4-3-0	TC 0.46	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.58	Vert(LL) -0.13 6-10 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.79	Vert(CT) -0.32 6-10 >835 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.09 6 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.06 6-10 >999 240	Weight: 490 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x10 SP No.1 \*Except\*  
 6-11: 2x6 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 1-12,3-12: 2x6 SP No.1

**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.  
 WEBS 1 Row at midpt 12-14  
 JOINTS 1 Brace at Jt(s): 2, 1, 14

**REACTIONS.**

(size) 6=0-3-8, 12=0-3-8  
 Max Horz 12=-1022(LC 13)  
 Max Uplift 12=-495(LC 13)  
 Max Grav 6=2081(LC 20), 12=2394(LC 20)

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

TOP CHORD 1-2=-404/270, 2-3=-460/130, 3-5=-2294/0, 5-6=-2868/0, 12-14=-544/352,  
 1-14=-545/353  
 BOT CHORD 10-12=0/1758, 6-10=0/2219  
 WEBS 5-10=-919/438, 3-12=-2436/641, 3-10=0/1857

**NOTES-**

- 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: 2x10 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
- 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.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 5-4-13, Interior(1) 5-4-13 to 23-8-9 zone; 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) 12=495.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 12, 2021

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818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 4B Williams Farm/Harnett	E15492399
J0521-2959	A8	ROOF TRUSS	1	2	Job Reference (optional)	

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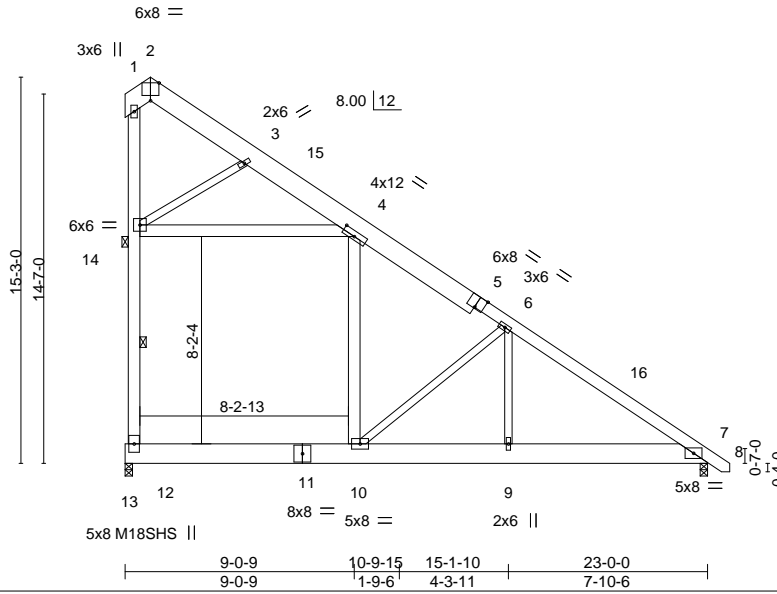


Plate Offsets (X,Y)-- [2:0-4-0,Edge], [4:0-6-0,0-2-8], [5:0-4-0,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.73	Vert(LL) -0.21	10	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.33	Vert(CT) -0.46	10	>587	240	M18SHS	244/190
BCLL 0.0 *	Rep Stress Incr NO	WB 0.48	Horz(CT) 0.01	7	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.17	10	>999	240		
							Weight: 563 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x10 SP No.1 \*Except\*  
 5-8: 2x6 SP No.1  
 BOT CHORD 2x10 SP 2400F 2.0E  
 WEBS 2x6 SP No.1 \*Except\*  
 6-9,6-10,3-14: 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.  
 WEBS 1 Row at midpt 12-14  
 JOINTS 1 Brace at Jt(s): 14

**REACTIONS.**

(size) 12=0-3-8, 7=0-3-8  
 Max Horz 12=-633(LC 13)  
 Max Uplift 12=-7(LC 13)  
 Max Grav 12=2288(LC 21), 7=1482(LC 21)

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

TOP CHORD 3-4=-808/104, 4-6=-829/128, 6-7=-2233/92, 12-14=-1091/133  
 BOT CHORD 10-12=-119/629, 9-10=0/1720, 7-9=0/1720  
 WEBS 4-14=-184/957, 6-9=0/1086, 4-10=0/833, 6-10=-2198/295, 3-14=-1790/225

**NOTES-**

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
- 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.
- Unbalanced roof live loads have been considered for this design.
- 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) 0-4-4 to 5-4-13, Interior(1) 5-4-13 to 23-8-9 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- 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). 4-14; Wall dead load (5.0psf) on member(s). 4-10
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 10-12
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12.
- Attic room checked for L/360 deflection.



March 12, 2021

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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	Weaver/Lot 4B Williams Farm/Harnett	E15492400
J0521-2959	A9	ROOF TRUSS	3	1	Job Reference (optional)	

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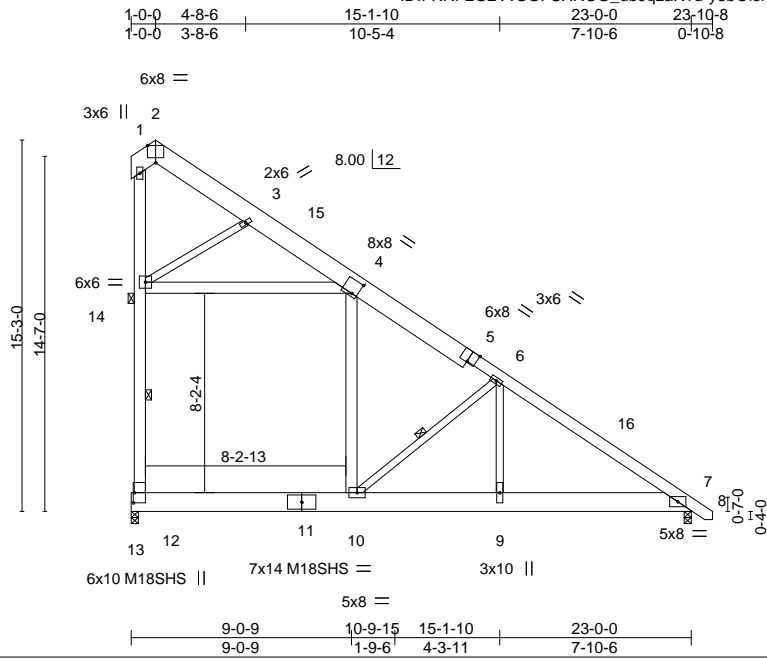


Plate Offsets (X,Y)-- [2:0-4-0,Edge], [4:0-2-12,0-6-8], [5:0-4-0,Edge], [12:0-5-0,0-0-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.96	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.45	Vert(LL) -0.32 10 >844 360	M18SHS	244/190
BCLL 0.0 *	Lumber DOL 1.15	WB 0.60	Vert(CT) -0.69 10 >392 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 7 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.26 10 >999 240		
				Weight: 282 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x10 SP No.1 *Except* 5-8: 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 2x10 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 8-6-0 oc bracing.
WEBS 2x6 SP No.1 *Except* 6-9,6-10,3-14: 2x4 SP No.2	WEBS 1 Row at midpt 12-14, 6-10
	JOINTS 1 Brace at Jt(s): 14

**REACTIONS.** (size) 12=0-3-8, 7=0-3-8  
 Max Horz 12=-475(LC 13)  
 Max Uplift 12=-5(LC 13)  
 Max Grav 12=1716(LC 21), 7=1111(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 3-4=-606/78, 4-6=-622/96, 6-7=-1675/69, 12-14=-818/100  
 BOT CHORD 10-12=-89/471, 9-10=0/1290, 7-9=0/1290  
 WEBS 4-14=-138/718, 6-9=0/815, 4-10=0/624, 6-10=-1648/221, 3-14=-1342/169

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 5-4-13, Interior(1) 5-4-13 to 23-8-9 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) All plates are MT20 plates 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). 4-14; Wall dead load (5.0psf) on member(s).4-10
  - 7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 10-12
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12.
  - 9) Attic room checked for L/360 deflection.

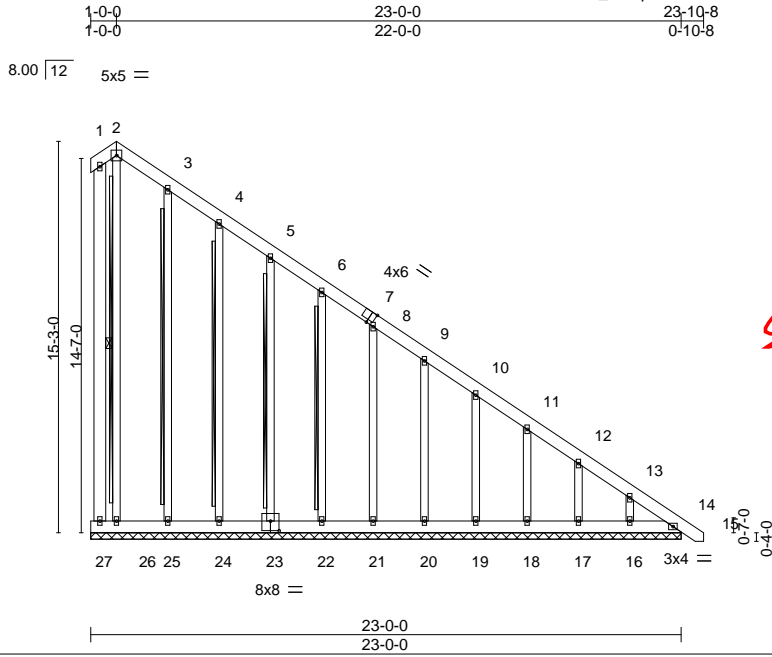


Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 4B Williams Farm/Harnett	E15492401
J0521-2959	A9GE	COMMON SUPPORTED GAB	1	1	Job Reference (optional)	

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Scale = 1:89.8



Plate Offsets (X,Y)-- [7:0-2-9,Edge], [23:0-4-0,0-4-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.06	Vert(LL) 0.00	14	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.06	Vert(CT) 0.00	14	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.16	Horz(CT) 0.01	14	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 2x6 SP No.1  
 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.  
 WEBS 1 Row at midpt 1-27  
 T-Brace: 2x4 SPF No.2 - 3-25, 4-24, 5-23, 6-22  
 2x6 SPF No.2 - 2-26  
 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 23-0-0.  
 (lb) - Max Horz 27=-695(LC 13)  
 Max Uplift All uplift 100 lb or less at joint(s) 27, 26, 25, 24, 23, 22, 21, 20, 19, 18, 17 except 16=-116(LC 13), 14=-100(LC 11)  
 Max Grav All reactions 250 lb or less at joint(s) 27, 26, 25, 24, 23, 22, 21, 20, 19, 18, 17, 16 except 14=414(LC 13)

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

TOP CHORD 5-6=-254/197, 6-8=-329/256, 8-9=-404/314, 9-10=-479/373, 10-11=-554/432, 11-12=-629/491, 12-13=-705/550, 13-14=-794/626  
 BOT CHORD 26-27=-536/694, 25-26=-536/694, 24-25=-536/694, 23-24=-536/694, 22-23=-536/694, 21-22=-536/694, 20-21=-536/694, 19-20=-536/694, 18-19=-536/694, 17-18=-536/694, 16-17=-536/694, 14-16=-536/694

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- 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 Corner(3) 0-4-4 to 5-4-13, Exterior(2) 5-4-13 to 23-8-9 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.
- 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) 27, 26, 25, 24, 23, 22, 21, 20, 19, 18, 17 except (jt=lb) 16=116, 14=100.
- Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

March 12, 2021

**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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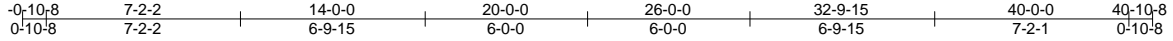
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 4B Williams Farm/Harnett	E15492402
J0521-2959	B1	COMMON SUPPORTED GAB	5	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Mar 12 09:15:55 2021 Page 1

ID:FKRF2G2VvSGFSXRUG\_ubJqzaK1d-NjHXKuuk9fsZVrZckWvdPE0G11wB?Px9?RfiEnzbijl



Scale = 1:85.1

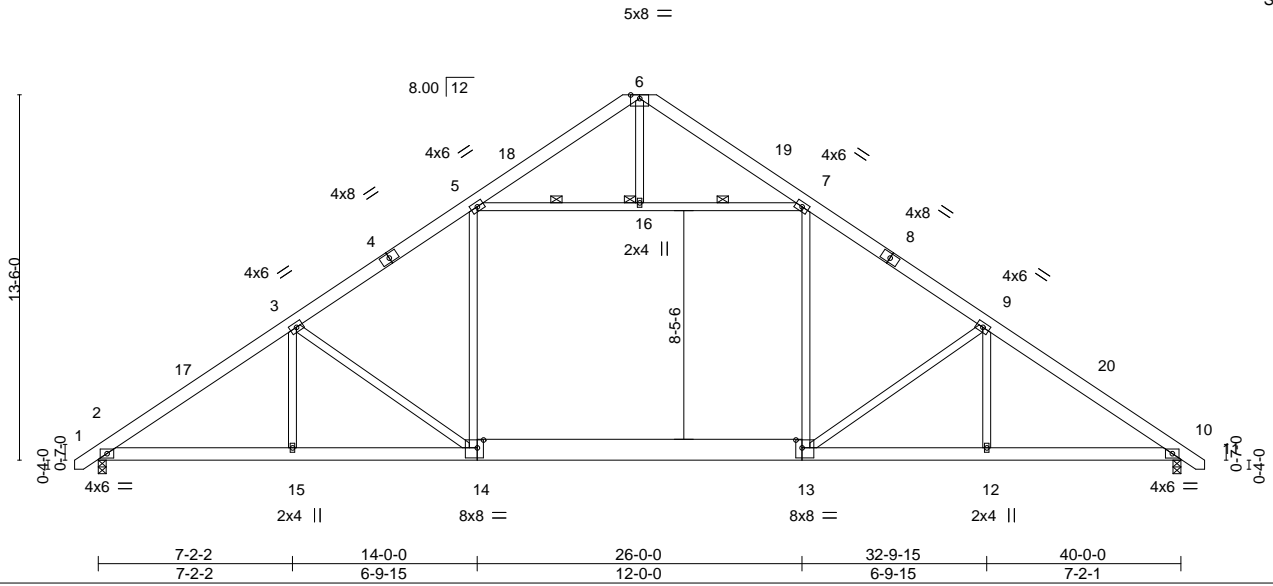


Plate Offsets (X,Y)-- [13:0-2-12,0-3-8], [14:0-2-12,0-3-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.25	Vert(LL) -0.38	12-13	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.86	Vert(CT) -0.44	12-13	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.74	Horz(CT) 0.06	10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.33	14-15	>999	240		
							Weight: 316 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1 \*Except\*  
 13-14: 2x10 SP No.1  
 WEBS 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-7-8 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 5-16, 7-16  
 JOINTS 1 Brace at Jt(s): 16

**REACTIONS.**

(size) 2=0-3-8, 10=0-3-8  
 Max Horz 2=-331(LC 10)  
 Max Uplift 2=-96(LC 12), 10=-96(LC 13)  
 Max Grav 2=1796(LC 19), 10=1796(LC 20)

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

TOP CHORD 2-3=-2750/460, 3-5=-2355/477, 5-6=-484/192, 6-7=-484/192, 7-9=-2357/477,  
 9-10=-2751/460  
 BOT CHORD 2-15=-245/2414, 14-15=-245/2414, 13-14=-82/1966, 12-13=-247/2167, 10-12=-247/2167  
 WEBS 5-14=-6/763, 7-13=-6/764, 5-16=-1571/395, 7-16=-1571/395, 3-15=-43/260,  
 3-14=-642/238, 9-12=-48/260, 9-13=-642/240

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-9 to 3-8-4, Interior(1) 3-8-4 to 20-0-0, Exterior(2) 20-0-0 to 24-4-13, Interior(1) 24-4-13 to 40-8-9 zone; 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) 2, 10.



March 12, 2021

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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	Weaver/Lot 4B Williams Farm/Harnett	E15492403
J0521-2959	B1GE	COMMON SUPPORTED GAB	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

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ID:FKRF2G2VvSGFSXRUG\_ubJqzaK1d-J5OHlav\_hH6H9j\_rxy5Uf5fSroZTR2SSi8plgzbiJG

0-10-8 20-0-0 40-0-0 40-10-8  
 0-10-8 20-0-0 20-0-0 0-10-8

Scale = 1:85.1

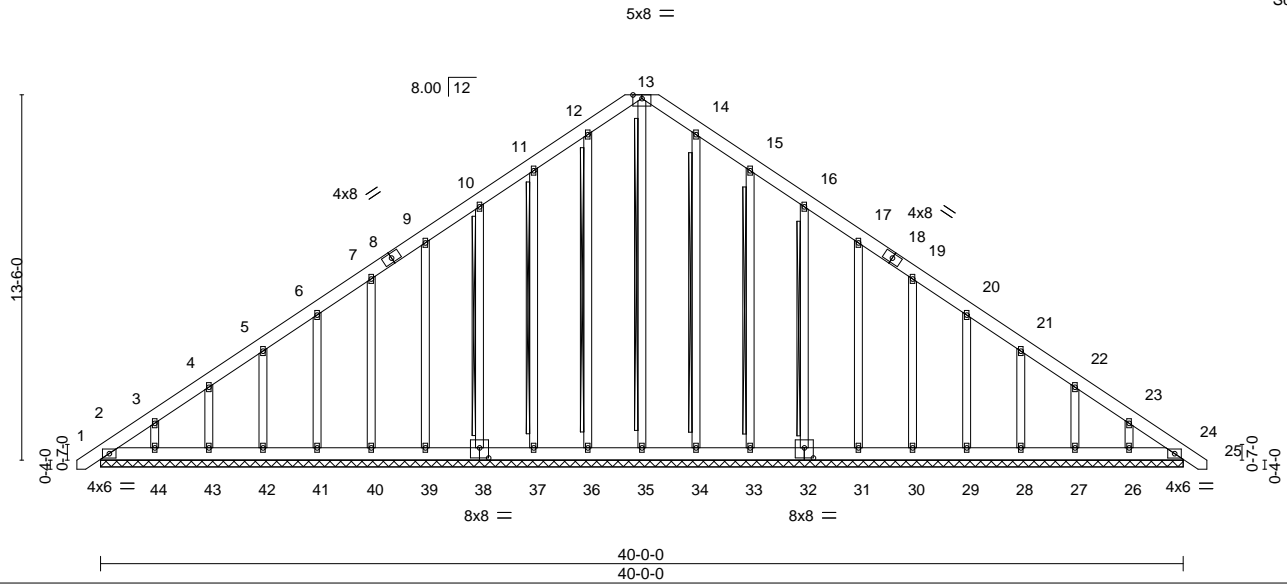


Plate Offsets (X,Y)-- [32:0-4-0,0-4-8], [38:0-4-0,0-4-8]

LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.06	Vert(LL) 0.00	24	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.03	Vert(CT) 0.00	24	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.25	Horz(CT) 0.01	24	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 399 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.  
 WEBS T-Brace: 2x4 SPF No.2 - 13-35, 12-36, 11-37, 10-38, 14-34, 15-33, 16-32  
 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.**

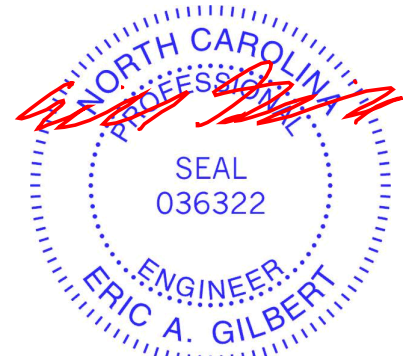
All bearings 40-0-0.  
 (lb) - Max Horz 2=414(LC 11)  
 Max Uplift All uplift 100 lb or less at joint(s) 35, 36, 38, 39, 40, 41, 42, 43, 34, 32, 31, 30, 29, 28, 27, 24 except 2=-110(LC 8), 37=-102(LC 12), 44=-105(LC 12), 33=-106(LC 13), 26=-102(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 36, 37, 38, 39, 40, 41, 42, 43, 44, 34, 33, 32, 31, 30, 29, 28, 27, 26, 24 except 35=277(LC 13)

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

TOP CHORD 2-3=-441/318, 3-4=-357/284, 4-5=-292/257, 10-11=-216/283, 11-12=-284/333, 12-13=-310/354, 13-14=-310/354, 14-15=-284/319, 22-23=-263/167, 23-24=-346/238  
 BOT CHORD 2-44=-212/326, 43-44=-212/326, 42-43=-212/326, 41-42=-212/326, 40-41=-212/326, 39-40=-212/326, 38-39=-212/326, 37-38=-212/326, 36-37=-212/326, 35-36=-212/326, 34-35=-212/326, 33-34=-212/326, 32-33=-212/326, 31-32=-212/326, 30-31=-212/326, 29-30=-212/326, 28-29=-212/326, 27-28=-212/326, 26-27=-212/326, 24-26=-212/326  
 WEBS 13-35=-256/167

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-8-9 to 3-8-4, Exterior(2) 3-8-4 to 20-0-0, Corner(3) 20-0-0 to 24-4-13, Exterior(2) 24-4-13 to 40-8-9 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.
- 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) 35, 36, 38, 39, 40, 41, 42, 43, 34, 32, 31, 30, 29, 28, 27, 24 except (jt=lb) 2=110, 37=102, 44=105, 33=106, 26=102.
- Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



March 12, 2021

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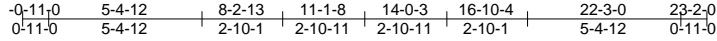
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 4B Williams Farm/Harnett	E15492404
J0521-2959	C1	ATTIC	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Mar 12 09:15:58 2021 Page 1

ID:FKRF2G2VvSGFSXRUG\_ubJqzaK1d-nlyfzwwcSaE7MIIBPTK1sel?E0HCtPbhPurMr6zbjF



Scale = 1:81.1

Plate Offsets (X,Y)-- [2:0-1-8,0-2-0], [3:0-4-0,Edge], [6:0-4-0,Edge], [9:0-4-0,Edge], [10:0-1-8,0-2-0], [13:0-5-0,0-7-0], [15:0-5-0,0-7-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.33	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.58	Vert(LL) -0.12 13-15 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.31	Vert(CT) -0.19 13-15 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 12 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.05 15 >999 240	Weight: 268 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x10 SP No.1 \*Except\*  
1-3,9-11: 2x6 SP No.1  
BOT CHORD 2x10 SP No.1  
WEBS 2x6 SP No.1 \*Except\*  
2-15,10-13: 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-9-8 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 16=0-3-8, 12=0-3-8  
Max Horz 16=-419(LC 10)  
Max Grav 16=1469(LC 21), 12=1469(LC 20)

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

TOP CHORD 2-4=-1675/22, 4-5=-1045/187, 7-8=-1045/187, 8-10=-1675/21, 2-16=-1615/65,  
10-12=-1616/65  
BOT CHORD 15-16=-425/555, 13-15=0/1123  
WEBS 5-7=-1194/265, 4-15=0/744, 8-13=0/744, 2-15=-1/1037, 10-13=-10/1044

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- 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 Corner(3) 0-9-0 to 3-7-13, Exterior(2) 3-7-13 to 11-2-0, Corner(3) 11-2-0 to 15-6-13, Exterior(2) 15-6-13 to 23-1-0 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
- 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). 4-5, 7-8, 5-7; Wall dead load (5.0psf) on member(s).4-15, 8-13
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 13-15
- Attic room checked for L/360 deflection.



March 12, 2021

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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



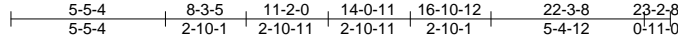
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 4B Williams Farm/Harnett	E15492405
J0521-2959	C2	ATTIC	8	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Mar 12 09:16:01 2021 Page 1

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6x8 =

Scale = 1:81.1

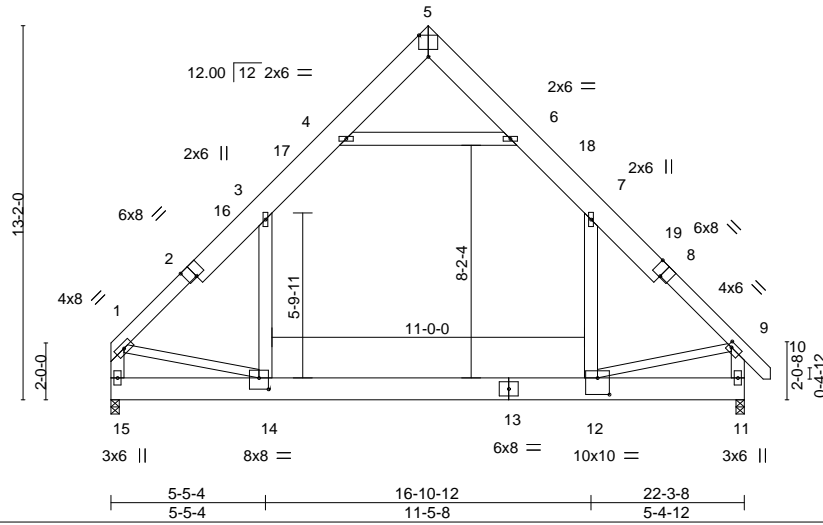


Plate Offsets (X,Y)-- [2:0-4-0,Edge], [5:0-4-0,Edge], [8:0-4-0,Edge], [9:0-1-8,0-2-0], [12:0-5-0,0-7-0], [14:0-4-0,0-4-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.34	Vert(LL) -0.12	12-14	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.58	Vert(CT) -0.20	12-14	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.31	Horz(CT) 0.01	11	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.04	14	>999	240	Weight: 265 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x10 SP No.1 \*Except\*  
1-2,8-10: 2x6 SP No.1  
BOT CHORD 2x10 SP No.1  
WEBS 2x6 SP No.1 \*Except\*  
1-14,9-12: 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-8-4 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

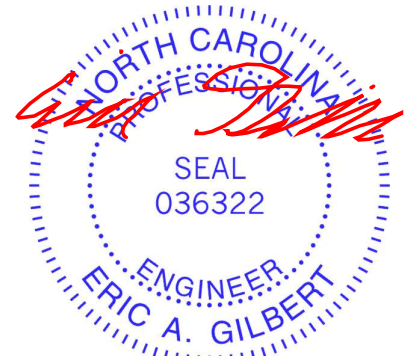
(size) 15=0-3-8, 11=0-3-8  
Max Horz 15=308(LC 11)  
Max Grav 15=1434(LC 21), 11=1478(LC 20)

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

TOP CHORD 1-3=-1661/0, 3-4=-1046/155, 6-7=-1041/146, 7-9=-1669/0, 1-15=-1558/0, 9-11=-1617/31  
BOT CHORD 14-15=-292/402, 12-14=0/1100  
WEBS 4-6=-1220/199, 3-14=0/727, 7-12=0/751, 1-14=0/1026, 9-12=0/1011

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=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 11-2-0, Exterior(2) 11-2-0 to 15-6-13, Interior(1) 15-6-13 to 23-1-0 zone; end vertical 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.
- Ceiling dead load (10.0 psf) on member(s). 3-4, 6-7, 4-6; Wall dead load (5.0psf) on member(s).3-14, 7-12
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-14
- Attic room checked for L/360 deflection.



March 12, 2021

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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

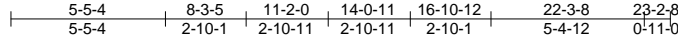


Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 4B Williams Farm/Harnett	E15492406
J0521-2959	C3	ATTIC	1	2	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Mar 12 09:16:02 2021 Page 1

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6x8 =

Scale = 1:81.1

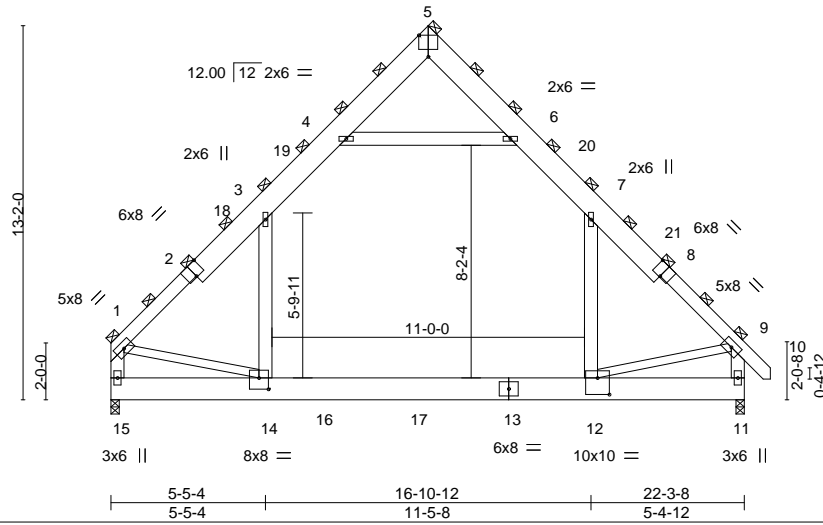


Plate Offsets (X,Y)-- [2:0-4-0,Edge], [5:0-4-0,Edge], [8:0-4-0,Edge], [12:0-5-0,0-7-0], [14:0-4-0,0-4-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.44	Vert(LL) -0.14	12-14	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.76	Vert(CT) -0.22	12-14	>999	240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.23	Horz(CT) 0.01	11	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.04	12-14	>999	240		
							Weight: 531 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x10 SP No.1 \*Except\*  
1-2,8-10: 2x6 SP No.1  
BOT CHORD 2x10 SP No.1  
WEBS 2x6 SP No.1 \*Except\*  
1-14,9-12: 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.**

(size) 15=0-3-8, 11=0-3-8  
Max Horz 15=461(LC 11)  
Max Grav 15=2782(LC 21), 11=2657(LC 20)

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

TOP CHORD 1-3=-3258/53, 3-4=-1866/275, 4-5=-67/483, 5-6=-65/413, 6-7=-1937/271, 7-9=-3213/57,  
1-15=-3076/74, 9-11=-3100/140  
BOT CHORD 14-15=-440/631, 12-14=0/2132, 11-12=-90/352  
WEBS 4-6=-2527/395, 3-14=0/1661, 7-12=0/1519, 1-14=0/1953, 9-12=0/2038

**NOTES-**

- 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, 2x10 - 2 rows staggered at 0-9-0 oc.  
Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc.  
Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
- 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.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=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 11-2-0, Exterior(2) 11-2-0 to 15-6-13, Interior(1) 15-6-13 to 23-1-0 zone; end vertical 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.
- Ceiling dead load (10.0 psf) on member(s). 3-4, 6-7, 4-6; Wall dead load (5.0psf) on member(s).3-14, 7-12
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-14
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 545 lb down and 76 lb up at 7-4-8, and 545 lb down and 76 lb up at 10-8-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- Attic room checked for L/360 deflection.

**LOAD CASE(S)** Standard

March 12,2021

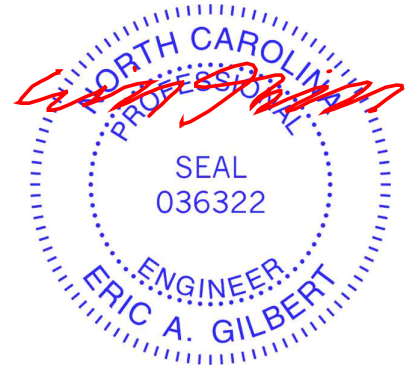
Continued on page 2

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

**ANSI/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	Weaver/Lot 4B Williams Farm/Harnett	E15492406
J0521-2959	C3	ATTIC	1	<b>2</b>	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Mar 12 09:16:02 2021 Page 2  
ID:FKRF2G2VvSGFSXRUG\_ubJqzaK1d-g3CAoHz7VpkZrwbyeUXGBioPEsLJ8igBc0sa\_tzbjB

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 14-15=-30, 12-14=-60, 11-12=-30, 1-3=-90, 3-4=-120, 4-5=-90, 5-6=-90, 6-7=-120, 7-9=-90, 9-10=-90, 4-6=-30

Drag: 3-14=-15, 7-12=-15

Concentrated Loads (lb)

Vert: 16=-300(B) 17=-300(B)

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 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

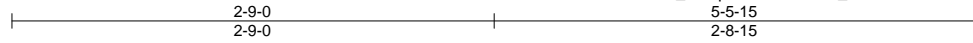
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 4B Williams Farm/Harnett	E15492407
J0521-2959	PB	PIGGYBACK	8	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Mar 12 09:16:03 2021 Page 1

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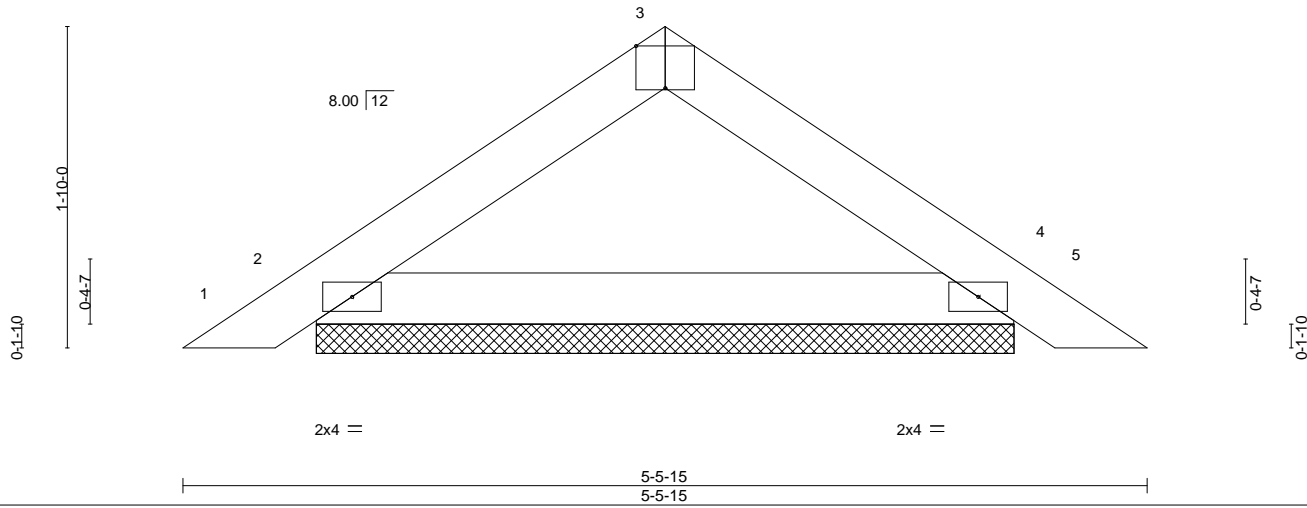


Plate Offsets (X,Y)--	[3:0-2-0,Edge]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.05	Vert(LL)	0.00	4	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	0.00	5	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-P						Weight: 16 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-5-15 oc purlins.
BOT CHORD 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=3-11-11, 4=3-11-11  
 Max Horz 2=-40(LC 10)  
 Max Uplift 2=-16(LC 12), 4=-16(LC 13)  
 Max Grav 2=189(LC 1), 4=189(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 (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
  - 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 100 lb uplift at joint(s) 2, 4.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

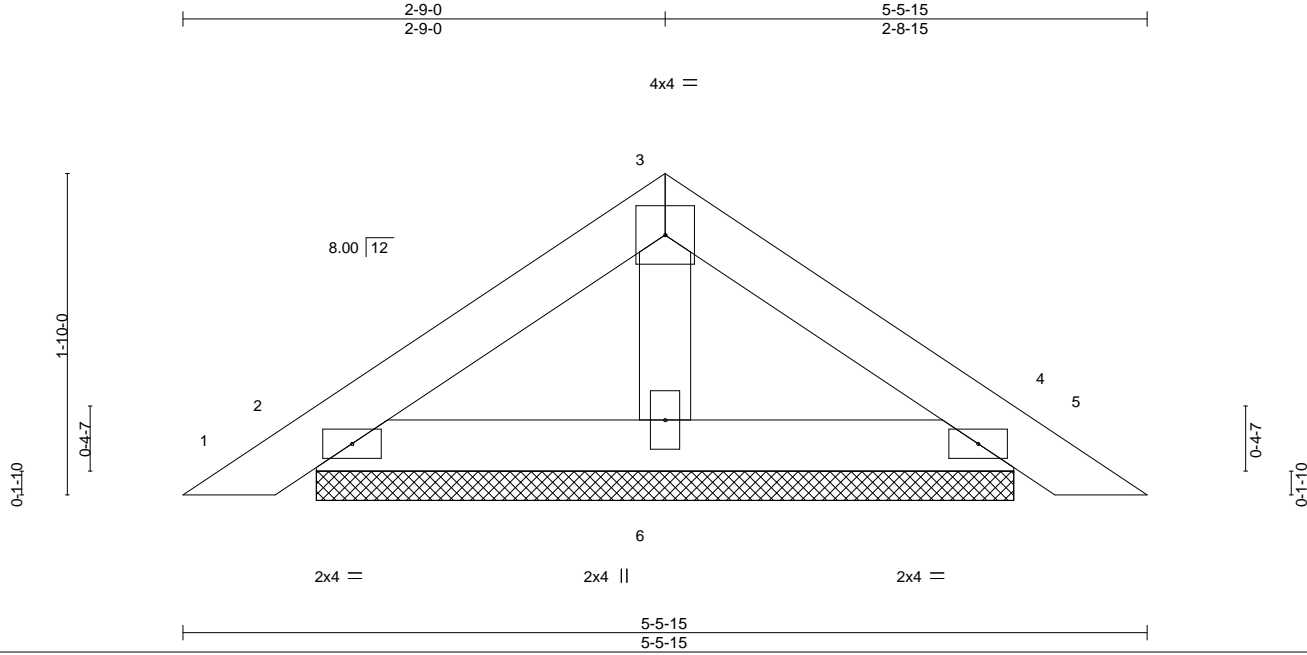


March 12, 2021

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 4B Williams Farm/Harnett	E15492408
J0521-2959	PBGE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Mar 12 09:16:04 2021 Page 1  
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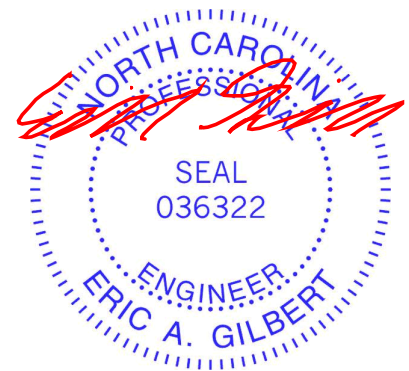
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.05	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.03	Vert(LL) 0.00 4 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.01	Vert(CT) 0.00 5 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 4 n/a n/a	Weight: 17 lb	FT = 20%
	Code IRC2015/TPI2014				

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-5-15 oc purlins.
BOT CHORD 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.2	

**REACTIONS.** (size) 2=3-11-11, 4=3-11-11, 6=3-11-11  
 Max Horz 2=50(LC 11)  
 Max Uplift 2=45(LC 12), 4=52(LC 13)  
 Max Grav 2=119(LC 1), 4=119(LC 1), 6=139(LC 1)

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

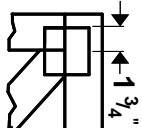
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) zone; C-C for members and forces & MWFRS for reactions 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) 2, 4.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



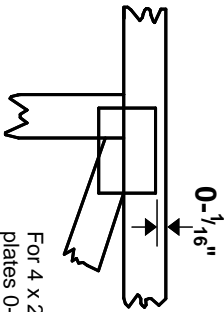
March 12, 2021

# 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**

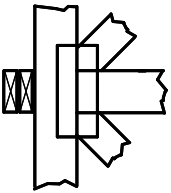
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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



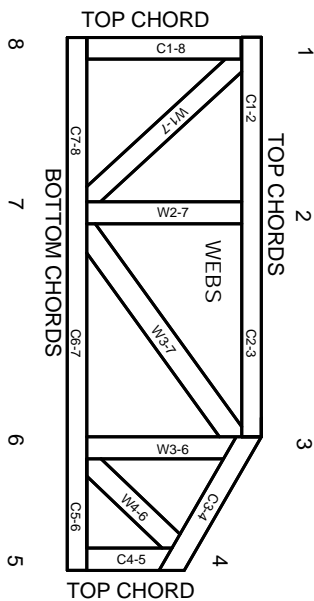
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

### Industry Standards:

ANSI/TFP 1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-89: Design Standard for Bracing, 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.