

Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: J0221-0761  
Weaver/Lot 5 Atkins Farm/Harnett

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

Pages or sheets covered by this seal: E15448541 thru E15448566

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

North Carolina COA: C-0844



February 26, 2021

Gilbert, Eric

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 5 Atkins Farm/Harnett	E15448541
J0221-0761	A1GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Feb 26 08:11:31 2021 Page 1

ID:Sdzs0uuhUIT3B?9OD0R?ZKyk2HC-SLAnRzhIbbiQXyeNHmLTJ9jNfDvHLD4vQzVp\_dzhKfg

0-10-8 39-4-7 49-4-0 55-10-8 62-4-8 63-3-0  
 0-10-8 38-5-15 9-11-9 6-6-8 6-6-0 0-10-8

Scale = 1:116.8

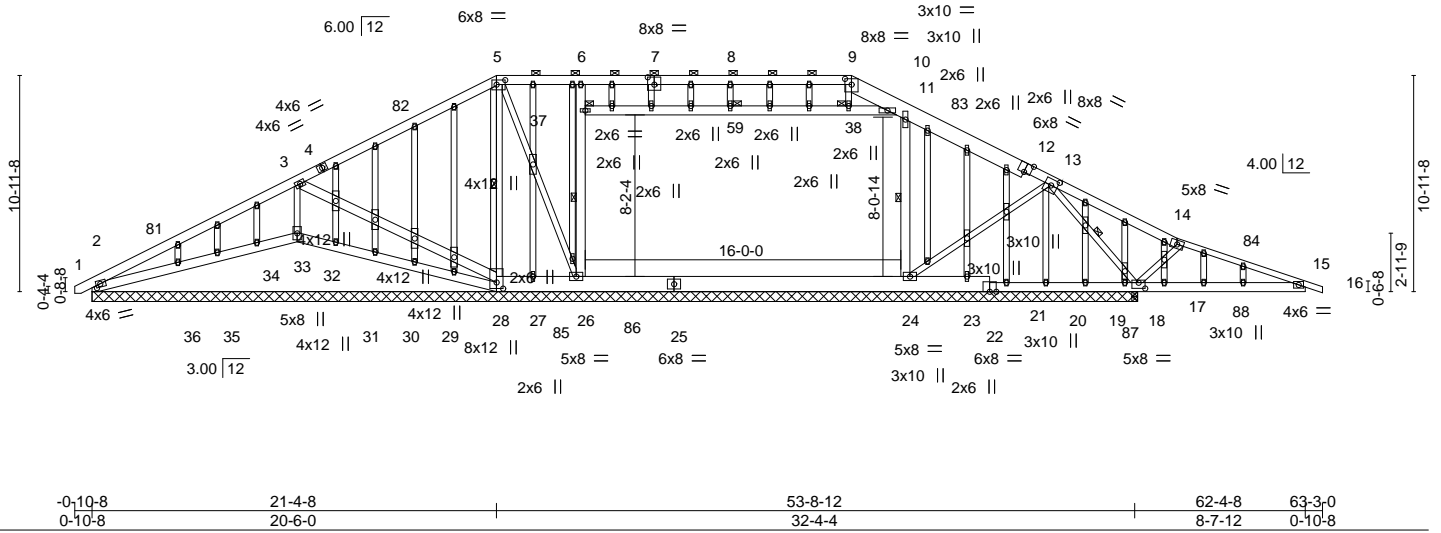


Plate Offsets (X,Y)--	[2:0-2-9,0-2-0], [5:0-5-4,0-2-12], [7:0-4-0,0-4-8], [9:0-4-0,0-3-8], [12:0-4-0,Edge], [13:0-4-0,0-3-12], [17:0-4-0,0-3-8], [28:0-3-12,0-4-0]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.53	Vert(LL) -0.14 24-26 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.48	Vert(CT) -0.19 24-26 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.52	Horz(CT) 0.01 17 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.01 2-36 >999 240	Weight: 667 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1 *Except* 9-12: 2x10 SP No.1, 14-16: 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-9-10 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-9.
BOT CHORD 2x6 SP No.1 *Except* 25-28: 2x10 SP No.1, 22-25: 2x10 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 3-28,6-26,11-24,10-37: 2x6 SP No.1	WEBS 1 Row at midpt 26-37, 11-24, 5-28, 13-17
OTHERS 2x4 SP No.2	JOINTS 1 Brace at Jt(s): 37, 38, 59

**REACTIONS.** All bearings 53-0-0.  
 (lb) - Max Horz 2=215(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 28, 26, 36, 35 except 2=-126(LC 13),  
 33=-451(LC 12), 24=-139(LC 13), 17=-994(LC 9), 27=-908(LC 18), 23=-903(LC 18),  
 18=-613(LC 3)  
 Max Grav All reactions 250 lb or less at joint(s) 36, 35, 34, 32, 31, 30, 29, 20, 19  
 except 2=338(LC 24), 33=1127(LC 24), 28=312(LC 18), 26=1678(LC 18),  
 24=1532(LC 21), 17=2155(LC 25), 17=2148(LC 1), 21=412(LC 18), 18=332(LC 9)

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

TOP CHORD	BOT CHORD	WEBS
2-3=-413/233, 3-5=-740/454, 9-10=-851/629, 10-11=-718/545, 11-13=-609/378, 13-14=-1002/1157, 14-15=-963/911, 5-6=-586/519, 6-8=-684/563, 8-9=-688/562	2-36=-88/309, 35-36=-67/274, 34-35=-72/292, 33-34=-71/287, 32-33=-72/287, 31-32=-72/289, 30-31=-72/289, 29-30=-72/290, 28-29=-72/287, 27-28=-120/518, 26-27=-117/520, 24-26=-148/568, 23-24=-98/369, 21-23=-111/369, 20-21=-98/369, 19-20=-98/369, 18-19=-98/369, 17-18=-98/369, 15-17=-800/997	3-28=-105/302, 26-37=-683/392, 6-37=-621/357, 13-24=-388/506, 3-33=-974/545, 11-24=-679/564, 13-17=-1676/1210, 14-17=-253/217

- 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) gable end zone and C-C Corner(3) 0-8-10 to 3-8-3, Exterior(2) 3-8-3 to 20-6-0, Corner(3) 20-6-0 to 24-9-4, Exterior(2) 24-9-4 to 38-5-15, Corner(3) 38-5-15 to 42-10-12, Exterior(2) 42-10-12 to 62-4-8 zone; cantilever right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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.
  - WARNING:** This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.



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

**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate

818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 5 Atkins Farm/Harnett	E15448541
J0221-0761	A1GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Feb 26 08:11:31 2021 Page 2  
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**NOTES-**

- 5) Provide adequate drainage to prevent water ponding.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) \* 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.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 28, 26, 36, 35 except (jt=lb) 2=126, 33=451, 24=139, 17=994, 27=908, 23=903, 18=613.
- 11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) Attic room checked for L/360 deflection.

**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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Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 5 Atkins Farm/Harnett	E15448542
J0221-0761	A2	ROOF TRUSS	5	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Feb 26 08:11:33 2021 Page 2  
 ID:Sdzs0uuhUIT3B?9OD0R?ZKyk2HC-PklXsfjZ7Cz8mGnlPBNxOapfT1WkpQ5CuH\_v3WzhKFe

**NOTES-**

- 11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) Attic room checked for L/360 deflection.

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 Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 5 Atkins Farm/Harnett	E15448543
J0221-0761	A2A	ROOF TRUSS	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Feb 26 08:11:34 2021 Page 2  
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**NOTES-**

- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) Attic room checked for L/360 deflection.

**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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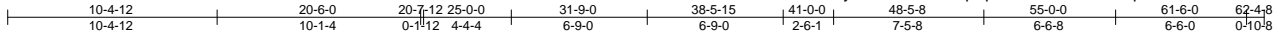
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 5 Atkins Farm/Harnett	E15448544
J0221-0761	A3	ROOF TRUSS	3	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

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Scale = 1:114.4

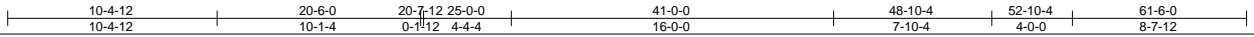
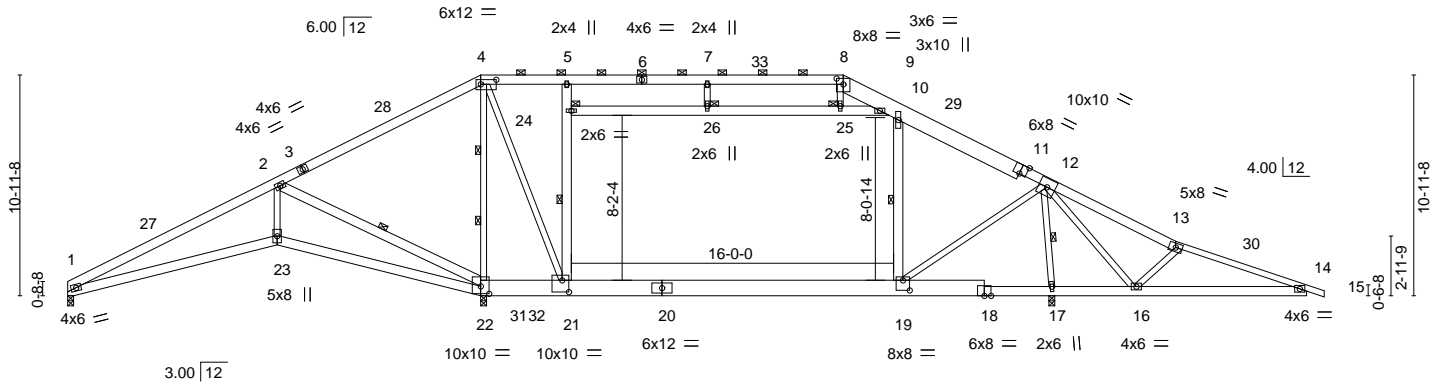


Plate Offsets (X,Y)-- [4:0-9-4,0-2-12], [8:0-4-0,0-3-8], [11:0-4-0,Edge], [19:0-4-0,0-6-0], [21:0-4-0,0-7-0], [22:0-5-0,0-4-7]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.71	Vert(LL) -0.32 19-21 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.49	Vert(CT) -0.50 19-21 >688 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.83	Horz(CT) 0.13 17 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.06 1-23 >999 240		
				Weight: 528 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1 \*Except\*  
8-11: 2x10 SP No.1, 13-15: 2x4 SP No.1  
BOT CHORD 2x6 SP No.1 \*Except\*  
20-22,18-20: 2x10 SP 2400F 2.0E, 14-18: 2x6 SP 2400F 2.0E  
WEBS 2x4 SP No.2 \*Except\*  
2-22,5-21,10-19,9-24: 2x6 SP No.1

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-5-0 oc purlins, except 2-0-0 oc purlins (5-9-15 max.): 4-8.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
WEBS 1 Row at midpt 2-22, 21-24, 10-19, 12-17  
2 Rows at 1/3 pts 4-22  
JOINTS 1 Brace at Jt(s): 24, 25, 26

**REACTIONS.**

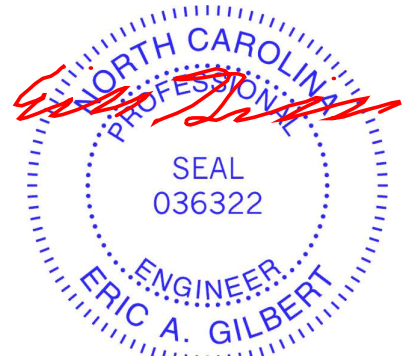
(size) 1=0-3-8, 22=0-3-8, 17=0-3-8  
Max Horz 1=142(LC 10)  
Max Grav 1=875(LC 24), 22=2493(LC 2), 17=3015(LC 27)

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

TOP CHORD 1-2=-2249/0, 2-4=-506/93, 8-9=-1370/11, 9-10=-1336/0, 10-12=-1416/0,  
12-13=-840/1215, 13-14=-832/976, 4-5=-1201/0, 5-7=-1222/0, 7-8=-1226/0  
BOT CHORD 1-23=-20/1994, 22-23=-19/1986, 21-22=-26/642, 19-21=0/1221, 17-19=-1226/1170,  
16-17=-1293/1186, 14-16=-861/840  
WEBS 2-22=-1992/248, 21-24=-944/229, 5-24=-715/241, 12-19=-462/2641, 2-23=0/1165,  
10-19=-907/518, 8-25=0/350, 12-16=-441/446, 4-22=-2340/44, 4-21=0/2425,  
12-17=-3102/791

**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) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 20-6-0, Exterior(2) 20-6-0 to 24-9-4, Interior(1) 24-9-4 to 38-5-15, Exterior(2) 38-5-15 to 42-10-12, Interior(1) 42-10-12 to 62-4-8 zone; cantilever right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
- 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.
- Ceiling dead load (10.0 psf) on member(s). 9-10, 24-26, 25-26, 9-25; Wall dead load (5.0psf) on member(s).21-24, 10-19
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 19-21
- Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 26, 2021

Continued on page 2 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



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Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 5 Atkins Farm/Harnett	E15448544
J0221-0761	A3	ROOF TRUSS	3	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Feb 26 08:11:35 2021 Page 2  
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**NOTES-**

11) Attic room checked for L/360 deflection.

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 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 5 Atkins Farm/Harnett	E15448545
J0221-0761	A4	ROOF TRUSS	3	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Feb 26 08:11:36 2021 Page 1  
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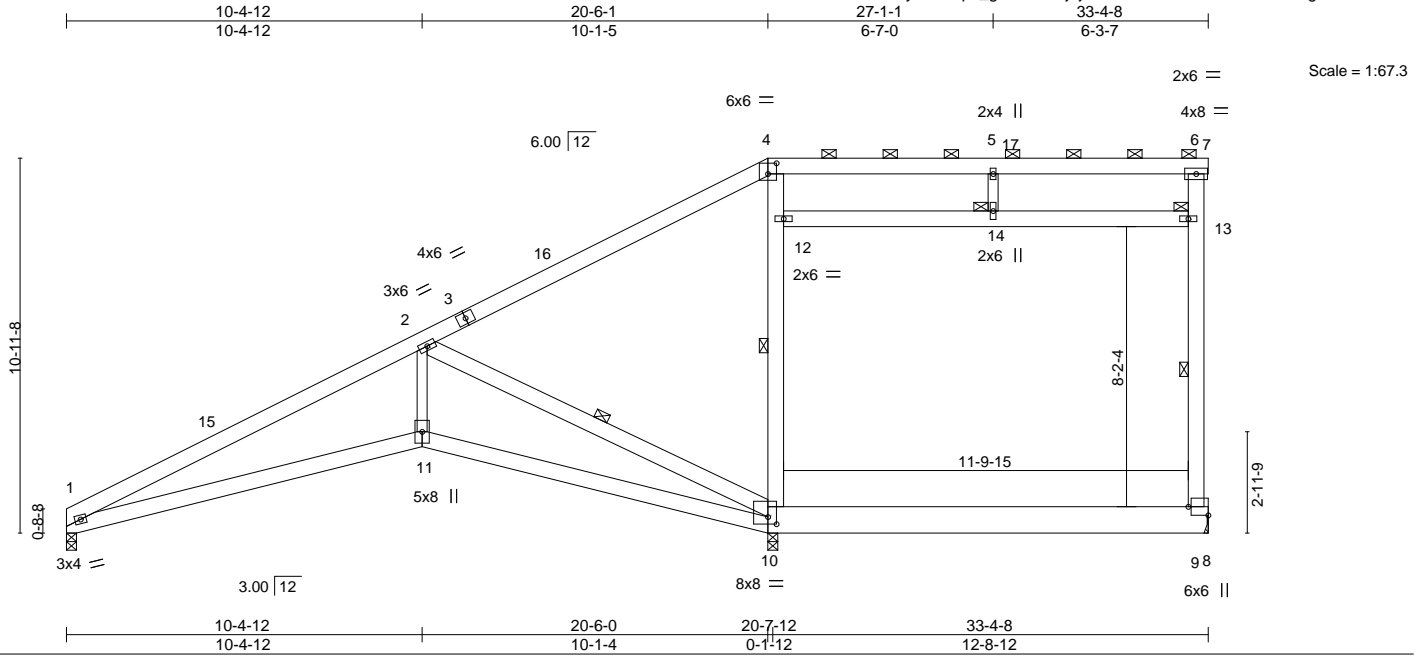


Plate Offsets (X,Y)-- [4:0-3-0,0-3-12], [9:Edge,0-7-0], [10:0-3-0,0-2-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.50	Vert(LL)	-0.24	9-10	>629	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.93	Vert(CT)	-0.35	9-10	>436	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.60	Horz(CT)	0.11	9	n/a	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S	Wind(LL)	0.08	1-11	>999	240		
									Weight: 289 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1 \*Except\*  
 8-10: 2x10 SP No.1  
 WEBS 2x6 SP No.1 \*Except\*  
 2-11,5-14: 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-7-12 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-7.  
 Rigid ceiling directly applied or 2-2-0 oc bracing.  
 BOT CHORD  
 WEBS 1 Row at midpt 9-13, 2-10, 10-12  
 JOINTS 1 Brace at Jt(s): 6, 13, 14

**REACTIONS.**

(size) 9=Mechanical, 1=0-3-8, 10=0-3-8  
 Max Horz 1=343(LC 12)  
 Max Grav 9=1093(LC 2), 1=809(LC 1), 10=1861(LC 2)

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

TOP CHORD 1-2=-1961/301, 2-4=-333/203, 9-13=-523/107, 6-13=-371/100  
 BOT CHORD 1-11=-935/1730, 10-11=-933/1720  
 WEBS 2-11=-328/1031, 2-10=-1810/826, 10-12=-836/436, 4-12=-589/425

**NOTES-**

- 1) 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) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 20-6-1, Exterior(2) 20-6-1 to 26-8-11, Interior(1) 26-8-11 to 33-4-8 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.
- 5) Ceiling dead load (10.0 psf) on member(s). 12-14, 13-14; Wall dead load (5.0psf) on member(s). 10-12
- 6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 9-10
- 7) Refer to girder(s) for truss to truss connections.
- 8) Bearing at joint(s) 1, 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 10) Attic room checked for L/360 deflection.



February 26, 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 5 Atkins Farm/Harnett	E15448546
J0221-0761	A4A	ROOF TRUSS	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Feb 26 08:11:37 2021 Page 1

ID:Sdzs0uuhUIT3B?9OD0R?ZKyk2HC-HVY2i0m3BRTaFt5We1StYQzPLeqwlKGnpy7CHzhKFa

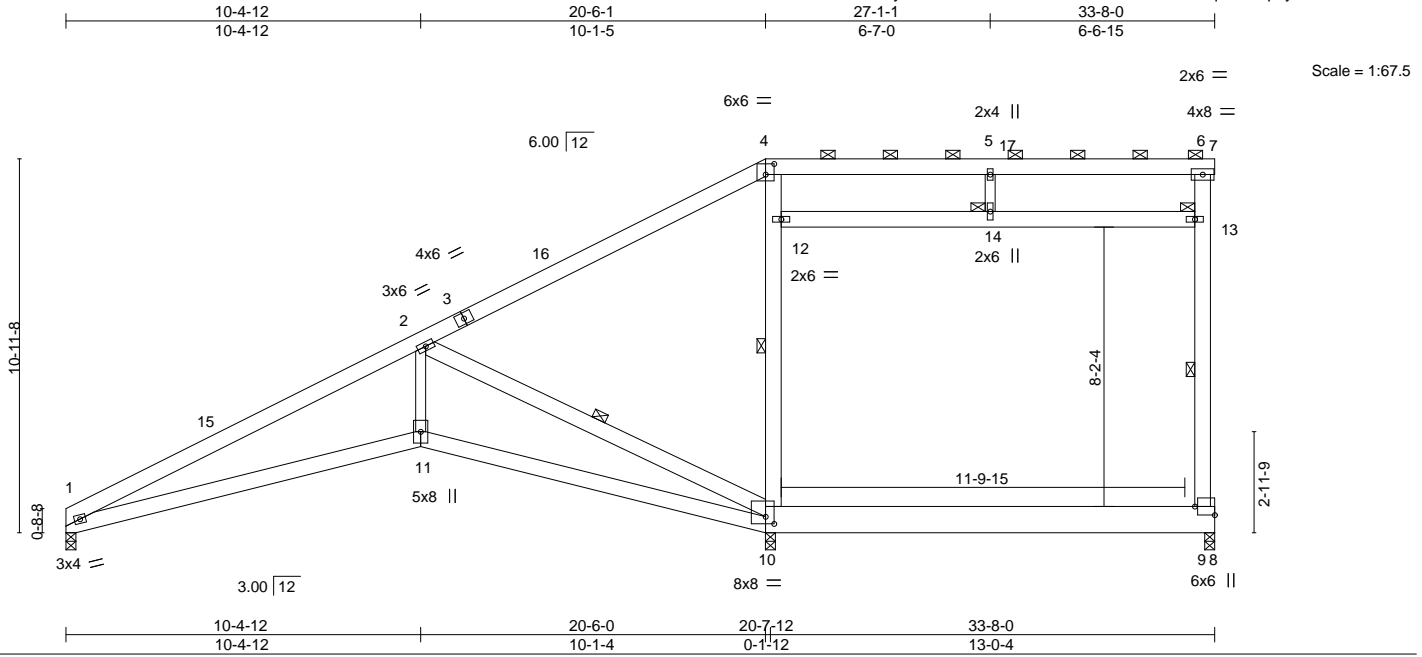


Plate Offsets (X,Y)-- [4:0-3-0,0-3-12], [9:Edge,0-7-0], [10:0-3-0,0-2-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.52	Vert(LL) -0.26	9-10	>589	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.98	Vert(CT) -0.38	9-10	>407	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.60	Horz(CT) 0.11	9	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL) 0.08	1-11	>999	240	Weight: 292 lb	FT = 20%
	Code IRC2015/TPI2014							

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1 \*Except\*  
 8-10: 2x10 SP No.1  
 WEBS 2x6 SP No.1 \*Except\*  
 2-11,5-14: 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-7-7 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-7.  
 Rigid ceiling directly applied or 2-2-0 oc bracing.  
 BOT CHORD 1 Row at midpt 9-13, 2-10, 10-12  
 WEBS 1 Brace at Jt(s): 6, 13, 14

**REACTIONS.**

(size) 9=0-3-8, 1=0-3-8, 10=0-3-8  
 Max Horz 1=343(LC 12)  
 Max Grav 9=1120(LC 2), 1=811(LC 1), 10=1883(LC 2)

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

TOP CHORD 1-2=-1965/303, 2-4=-332/200, 9-13=-536/110, 6-13=-382/106  
 BOT CHORD 1-11=-936/1733, 10-11=-935/1723  
 WEBS 2-11=-329/1032, 2-10=-1808/827, 10-12=-846/437, 4-12=-594/425

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 20-6-1, Exterior(2) 20-6-1 to 26-8-11, Interior(1) 26-8-11 to 33-8-0 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.
- 5) Ceiling dead load (10.0 psf) on member(s). 12-14, 13-14; Wall dead load (5.0psf) on member(s). 10-12
- 6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 9-10
- 7) Bearing at joint(s) 1, 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 9) Attic room checked for L/360 deflection.



February 26, 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



818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 5 Atkins Farm/Harnett	E15448547
J0221-0761	A5	ROOF TRUSS	4	1	Job Reference (optional)	

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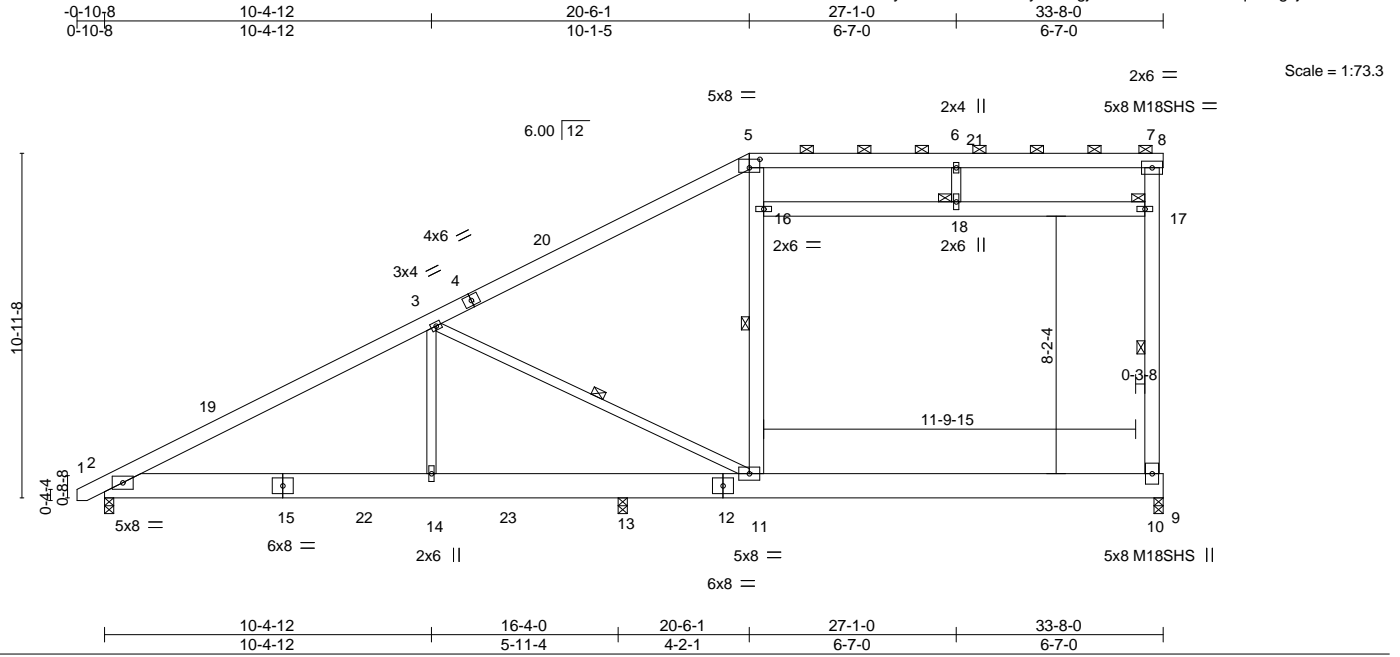


Plate Offsets (X,Y)-- [5:0-4-0,0-3-4]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.63	Vert(LL) -0.28	10-11	>716	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.56	Vert(CT) -0.51	10-11	>392	240	M18SHS	244/190
BCLL 0.0 *	Rep Stress Incr YES	WB 0.52	Horz(CT) -0.00	10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.10	10-11	>999	240		
							Weight: 318 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x10 SP 2400F 2.0E \*Except\*  
 2-15: 2x10 SP No.1  
 WEBS 2x6 SP No.1 \*Except\*  
 3-14,3-11,6-18: 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.): 5-8.  
 Rigid ceiling directly applied or 6-0-0 oc bracing.  
 BOT CHORD  
 WEBS 1 Row at midpt 10-17, 3-11, 11-16  
 JOINTS 1 Brace at Jt(s): 7, 17, 18

**REACTIONS.**

(size) 10=0-3-8, 2=0-3-8, 13=0-3-8  
 Max Horz 2=345(LC 12)  
 Max Uplift 2=-37(LC 12)  
 Max Grav 10=1272(LC 2), 2=621(LC 1), 13=2136(LC 2)

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

TOP CHORD 2-3=-417/184, 3-5=-308/138, 10-17=-559/113, 7-17=-413/111  
 BOT CHORD 2-14=-422/308, 13-14=-422/308, 11-13=-422/308  
 WEBS 3-14=-585/188, 3-11=-157/312, 11-16=-779/421, 5-16=-534/411

**NOTES-**

- 1) 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) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 20-6-1, Exterior(2) 20-6-1 to 26-8-11, Interior(1) 26-8-11 to 33-8-0 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) 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, with BCDL = 10.0psf.
- 6) Ceiling dead load (10.0 psf) on member(s). 16-18, 17-18; Wall dead load (5.0psf) on member(s).11-16
- 7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 10-11
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2.
- 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 11) Attic room checked for L/360 deflection.



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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 5 Atkins Farm/Harnett	E15448549
J0221-0761	A5GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

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**NOTES-**

14) Attic room checked for L/360 deflection.

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818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 5 Atkins Farm/Harnett	E15448550
J0221-0761	B1	PIGGYBACK ATTIC	1	1	Job Reference (optional)	

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8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Feb 26 08:11:41 2021 Page 1

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0-11-0 5-0-12 17-6-4 22-7-0 23-6-0  
 0-11-0 5-0-12 12-5-8 5-0-12 0-11-0

6x8 =

Scale = 1:81.6

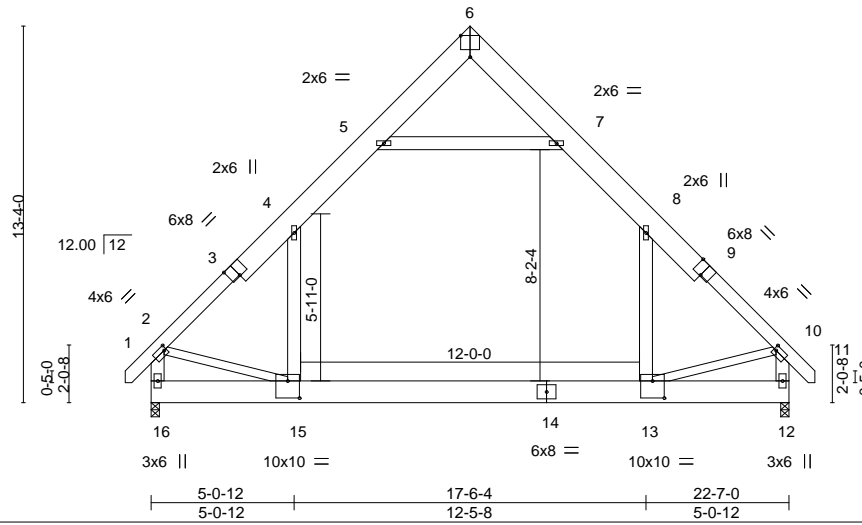


Plate Offsets (X,Y)-- [2:0-1-0,0-2-0], [3:0-4-0,Edge], [6:0-4-0,Edge], [9:0-4-0,Edge], [10:0-1-0,0-2-0], [13:0-5-0,0-7-4], [15:0-5-0,0-7-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.40	Vert(LL) -0.16	13-15	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.67	Vert(CT) -0.26	13-15	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.40	Horz(CT) 0.01	12	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.05	13-15	>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 5-5-3 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

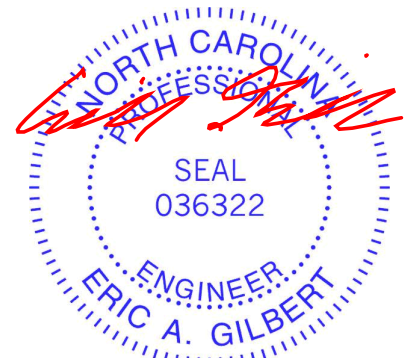
(size) 16=0-3-8, 12=0-3-8  
 Max Horz 16=-339(LC 10)  
 Max Grav 16=1534(LC 21), 12=1534(LC 20)

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

TOP CHORD 2-4=-1750/0, 4-5=-1096/188, 7-8=-1096/188, 8-10=-1749/0, 2-16=-1719/46,  
 10-12=-1720/46  
 BOT CHORD 15-16=-328/473, 13-15=0/1137  
 WEBS 4-15=0/828, 8-13=0/828, 5-7=-1268/253, 2-15=0/1031, 10-13=0/1036

**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 Corner(3) -0-9-2 to 3-7-11, Exterior(2) 3-7-11 to 11-4-0, Corner(3) 11-4-0 to 15-8-13, Exterior(2) 15-8-13 to 23-5-2 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.



February 26, 2021

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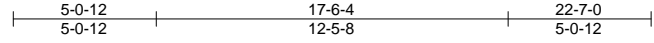


Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 5 Atkins Farm/Harnett	E15448551
J0221-0761	B2	PIGGYBACK ATTIC	8	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

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6x8 =

Scale = 1:81.6

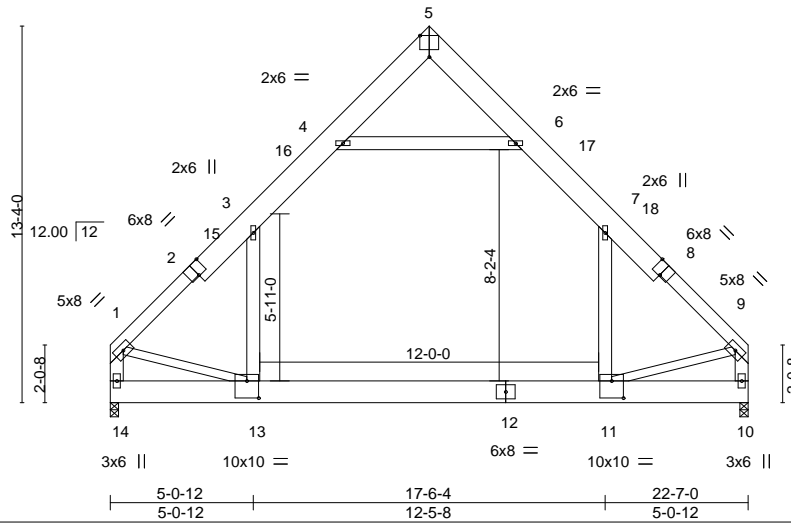


Plate Offsets (X,Y)-- [2:0-4-0,Edge], [5:0-4-0,Edge], [8:0-4-0,Edge], [11:0-5-0,0-7-4], [13:0-5-0,0-7-4]

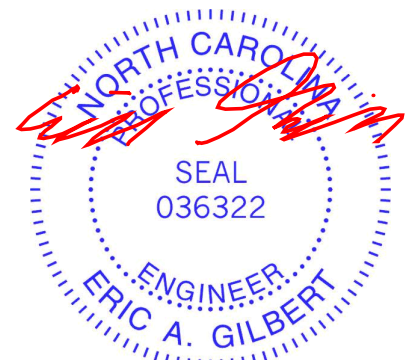
LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.43	Vert(LL) -0.16	11-13	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.67	Vert(CT) -0.26	11-13	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.41	Horz(CT) 0.01	10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.05	11-13	>999	240	Weight: 263 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x10 SP No.1 *Except* 1-2,8-9: 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-4-4 oc purlins, except end verticals.
BOT CHORD 2x10 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x6 SP No.1 *Except* 1-13,9-11: 2x4 SP No.2	

**REACTIONS.** (size) 14=0-3-8, 10=0-3-8  
 Max Horz 14=260(LC 9)  
 Max Grav 14=1493(LC 21), 10=1493(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-3=-1744/0, 3-4=-1099/150, 6-7=-1099/150, 7-9=-1743/0, 1-14=-1678/0, 9-10=-1679/0  
 BOT CHORD 13-14=-286/376, 11-13=0/1123  
 WEBS 3-13=0/807, 7-11=0/807, 4-6=-1292/180, 1-13=0/1078, 9-11=0/1081

- 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) 0-3-4 to 4-8-1, Interior(1) 4-8-1 to 11-4-0, Exterior(2) 11-4-0 to 15-8-13, Interior(1) 15-8-13 to 22-4-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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). 3-13, 7-11
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 11-13
  - Attic room checked for L/360 deflection.



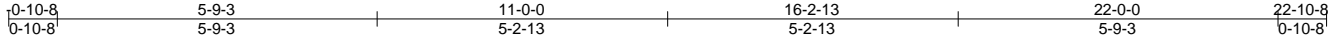
February 26, 2021



Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 5 Atkins Farm/Harnett	E15448553
J0221-0761	G1	COMMON	6	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Feb 26 08:11:45 2021 Page 1  
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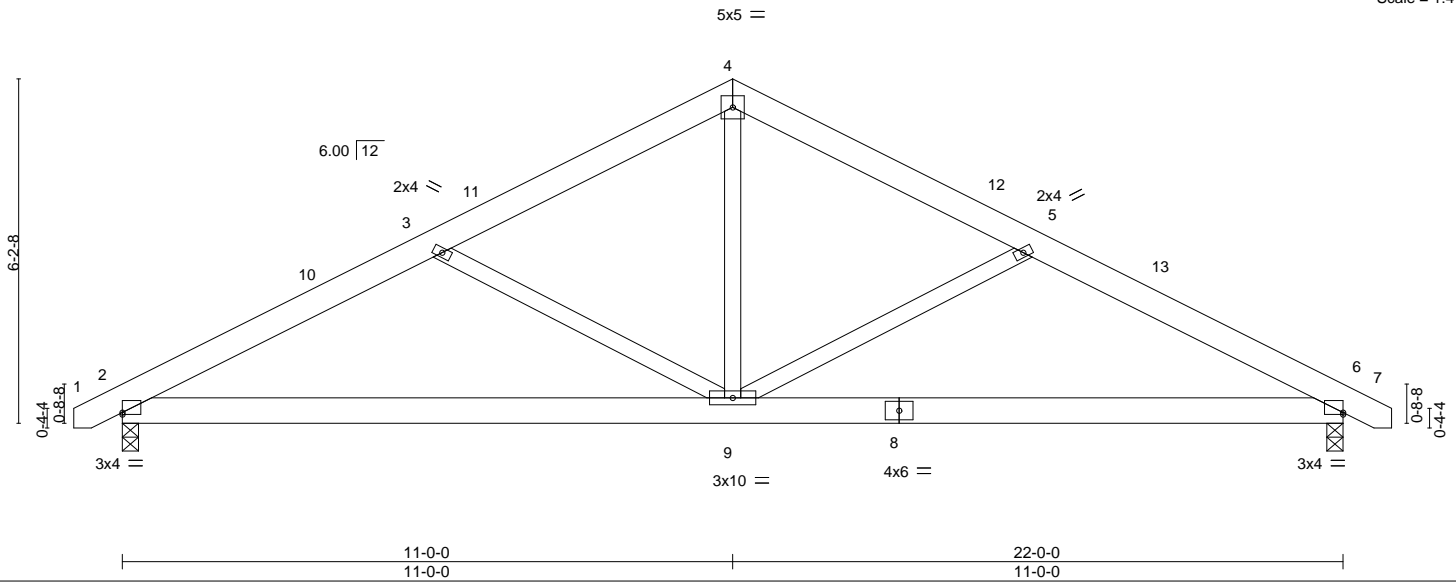


Plate Offsets (X,Y)-- [2:Edge,0-0-7], [6:0-0-0,0-0-7]

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 0.13	Vert(LL)	-0.07	6-9	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.41	Vert(CT)	-0.15	6-9	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.23	Horz(CT)	0.02	6	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S	Wind(LL)	0.02	9	>999		
								Weight: 139 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) 6=0-3-8, 2=0-3-8  
 Max Horz 2=-76(LC 10)  
 Max Uplift 6=-64(LC 13), 2=-64(LC 12)  
 Max Grav 6=920(LC 1), 2=920(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1389/378, 3-4=-1062/288, 4-5=-1062/288, 5-6=-1389/378  
 BOT CHORD 2-9=-252/1174, 6-9=-256/1174  
 WEBS 3-9=-359/240, 4-9=-73/616, 5-9=-359/240

- 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) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 11-0-0, Exterior(2) 11-0-0 to 15-4-13, Interior(1) 15-4-13 to 22-8-10 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



February 26, 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



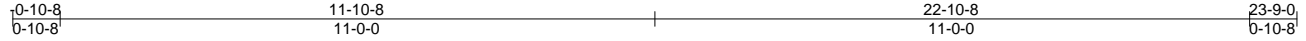
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 5 Atkins Farm/Harnett	E15448554
J0221-0761	G1GE	GABLE	1	1	Job Reference (optional)	

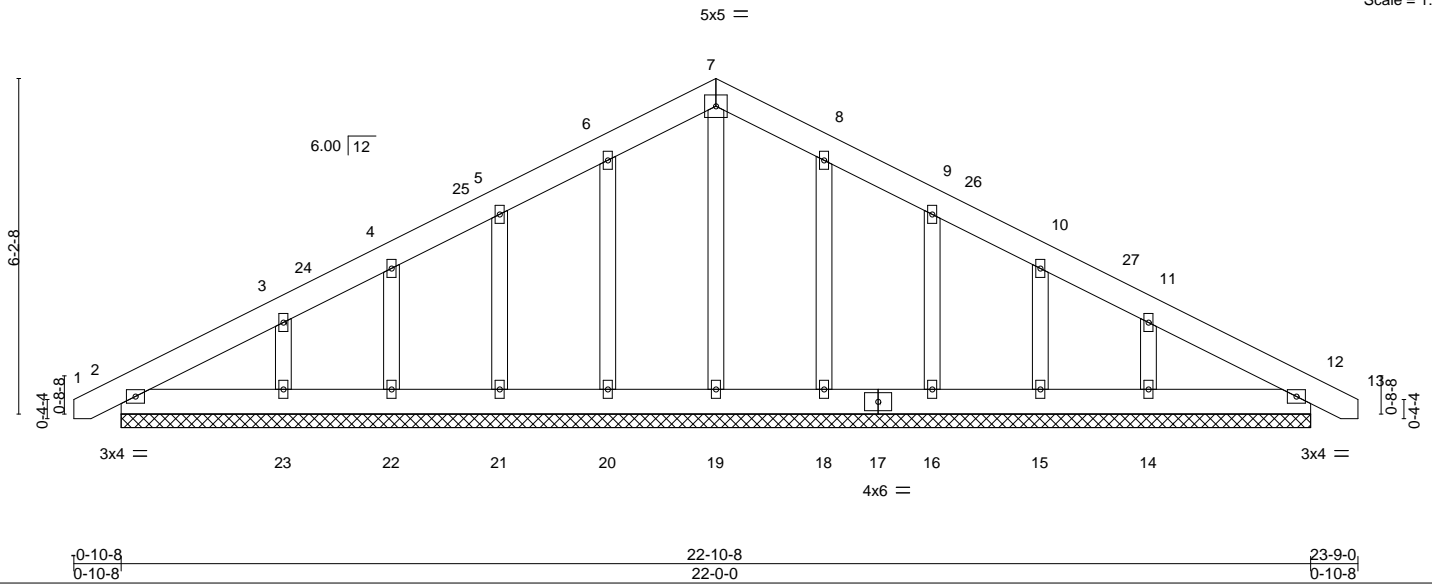
Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Feb 26 08:11:46 2021 Page 1

ID:Sdzs0uuhUIT3B?9OD0R?ZKyk2HC-WEaSB5ti3CblqFHFgQ6\_QKr3eG7wMX?6tpe50FzhKFR



Scale = 1:42.6



<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 0.03	Vert(CT)	0.00	12	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.00	12	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						Weight: 155 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 22-0-0.  
 (lb) - Max Horz 2=-119(LC 17)  
 Max Uplift All uplift 100 lb or less at joint(s) 12, 2, 20, 21, 22, 18, 16, 15 except 23=-113(LC 12),  
 14=-110(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 12, 2, 19, 20, 21, 22, 23, 18, 16, 15, 14

**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) -0-8-10 to 3-8-3, Exterior(2) 3-8-3 to 11-0-0, Corner(3) 11-0-0 to 15-4-13, Exterior(2) 15-4-13 to 22-8-10 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) 12, 2, 20, 21, 22, 18, 16, 15 except (jt=lb) 23=113, 14=110.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



February 26, 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



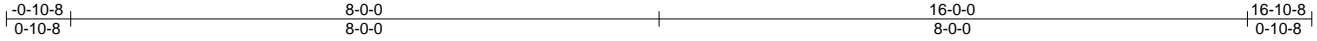
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 5 Atkins Farm/Harnett	E15448555
J0221-0761	P1	COMMON	4	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

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Scale = 1:31.3

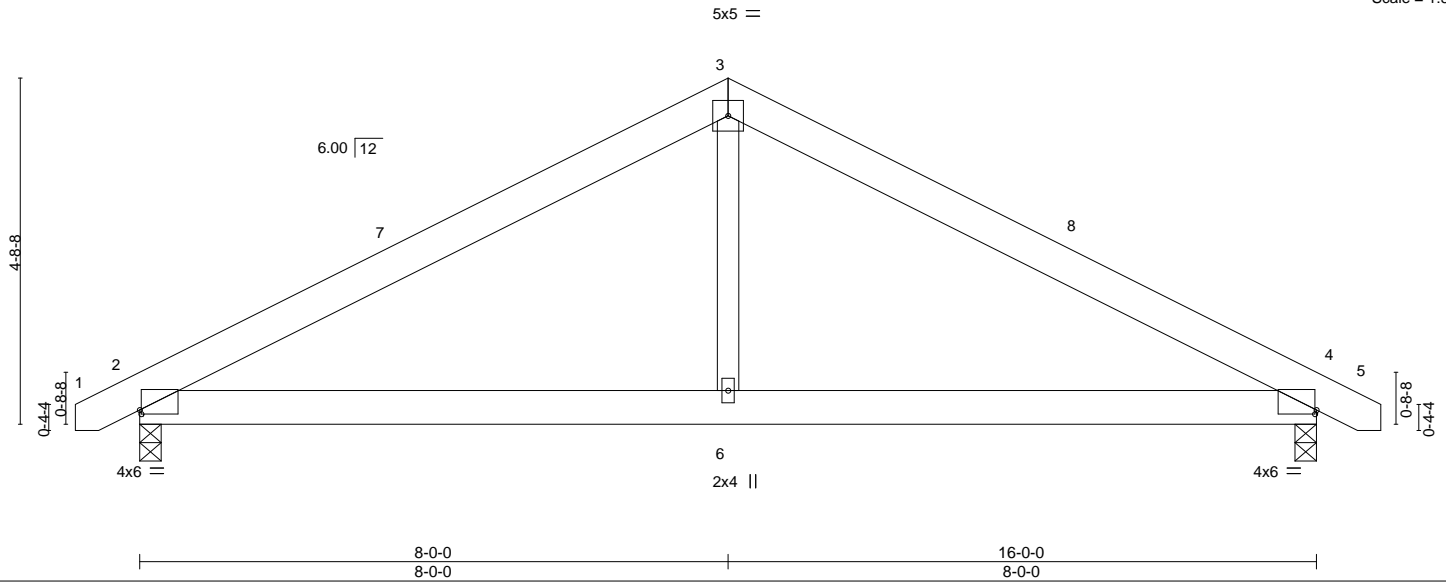


Plate Offsets (X,Y)-- [2:0-0-4,0-0-11], [4:0-0-4,0-0-11]

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) 0.06	4-6	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.24	Vert(CT) -0.05	2-6	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.13	Horz(CT) 0.01	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 90 lb	FT = 20%

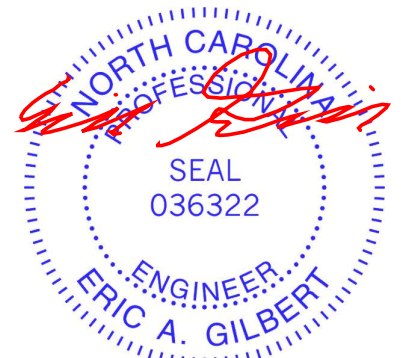
**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 9-6-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 4=0-3-8  
 Max Horz 2=-57(LC 10)  
 Max Uplift 2=-142(LC 9), 4=-142(LC 8)  
 Max Grav 2=680(LC 1), 4=680(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-873/842, 3-4=-873/840  
 BOT CHORD 2-6=-615/675, 4-6=-615/675  
 WEBS 3-6=-478/381

- 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) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 8-0-0, Exterior(2) 8-0-0 to 12-4-13, Interior(1) 12-4-13 to 16-8-10 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=142, 4=142.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



February 26, 2021

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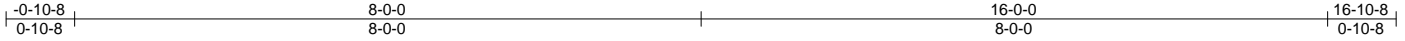
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 5 Atkins Farm/Harnett	E15448556
J0221-0761	P1GE	GABLE	1	1	Job Reference (optional)	

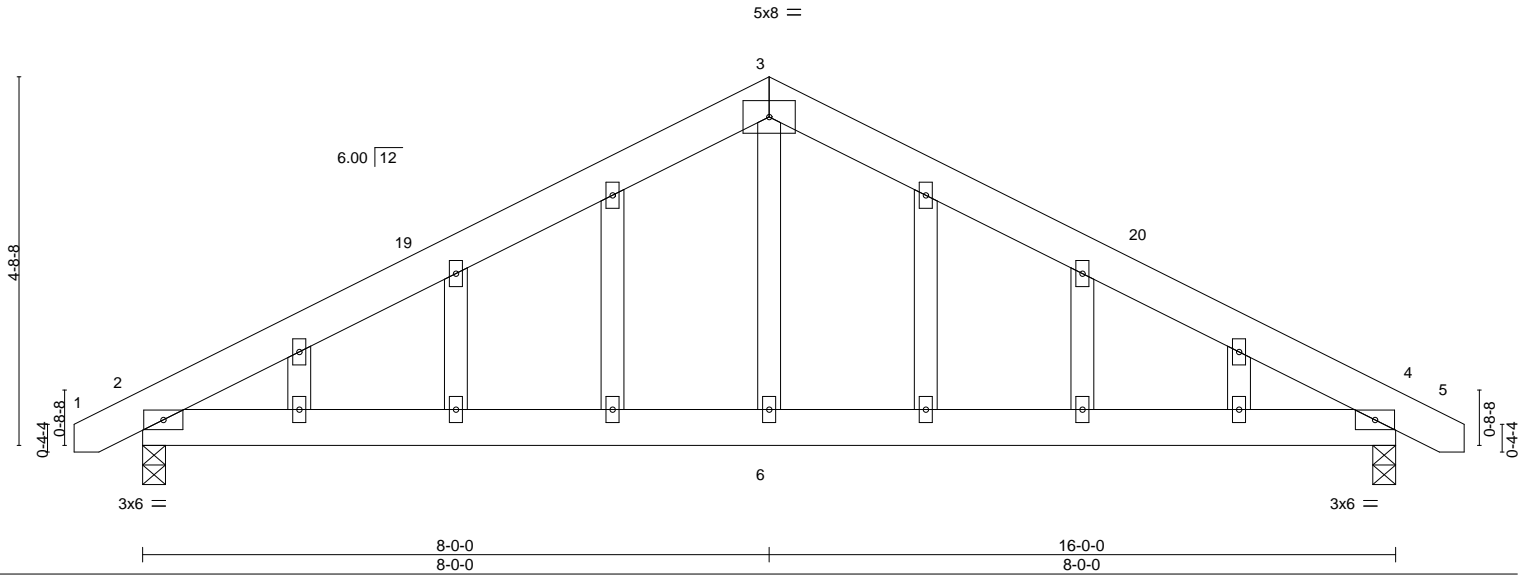
Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Feb 26 08:11:47 2021 Page 1

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Scale = 1:29.4



<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 0.29	Vert(LL)	-0.02	2-6	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.24	Vert(CT)	-0.05	2-6	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.09	Horz(CT)	0.01	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.03	2-6	>999	240		
									Weight: 106 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.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 2=0-3-8, 4=0-3-8  
 Max Horz 2=-88(LC 17)  
 Max Uplift 2=-153(LC 12), 4=-153(LC 13)  
 Max Grav 2=680(LC 1), 4=680(LC 1)

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

TOP CHORD 2-3=-873/474, 3-4=-873/471  
 BOT CHORD 2-6=-228/675, 4-6=-228/675  
 WEBS 3-6=0/381

**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) 0-8-10 to 3-8-3, Exterior(2) 3-8-3 to 8-0-0, Corner(3) 8-0-0 to 12-4-13, Exterior(2) 12-4-13 to 16-8-10 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 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) except (jt=lb) 2=153, 4=153.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



February 26, 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

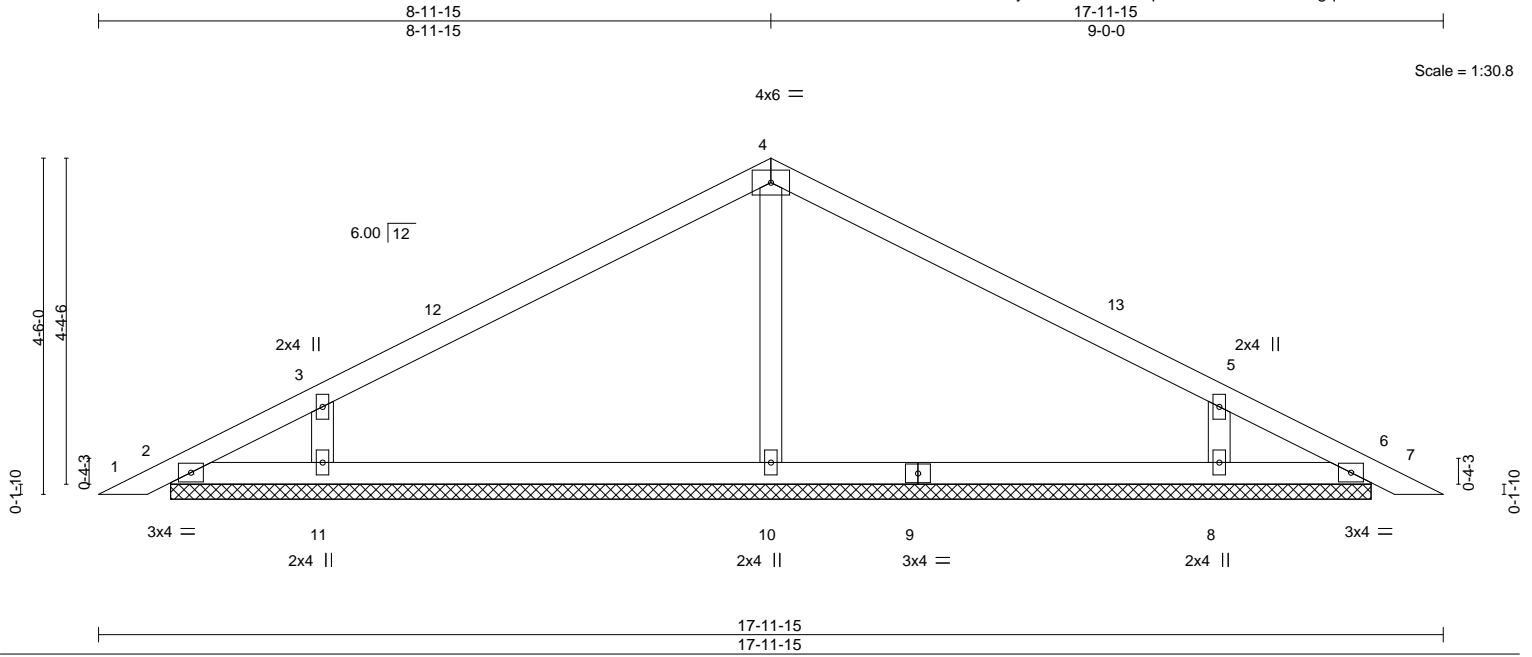


818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 5 Atkins Farm/Harnett	E15448557
J0221-0761	PB1	PIGGYBACK	9	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Feb 26 08:11:48 2021 Page 1  
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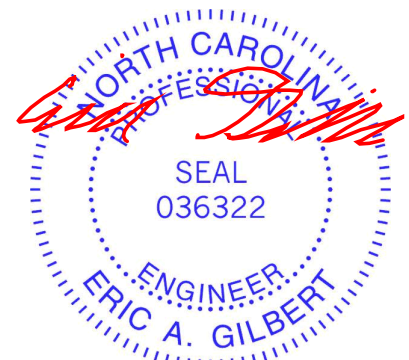
LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.31	Vert(LL) -0.00	7	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.20	Vert(CT) -0.00	7	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.09	Horz(CT) 0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 62 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6'-0-0 oc purlins.
BOT CHORD 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10'-0-0 oc bracing.
OTHERS 2x4 SP No.2	

**REACTIONS.** All bearings 16-0-12.  
(lb) - Max Horz 2=56(LC 11)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 11=-105(LC 12), 8=-105(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 2, 6 except 10=428(LC 1), 11=440(LC 23), 8=440(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 4-10=298/101, 3-11=356/260, 5-8=356/263

- 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) 0-3-15 to 4-8-11, Interior(1) 4-8-11 to 8-11-15, Exterior(2) 8-11-15 to 13-4-12, Interior(1) 13-4-12 to 17-8-0 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6 except (jt=lb) 11=105, 8=105.
  - Non Standard bearing condition. Review required.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



February 26, 2021

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 5 Atkins Farm/Harnett	E15448558
J0221-0761	PB1GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Feb 26 08:11:51 2021 Page 1  
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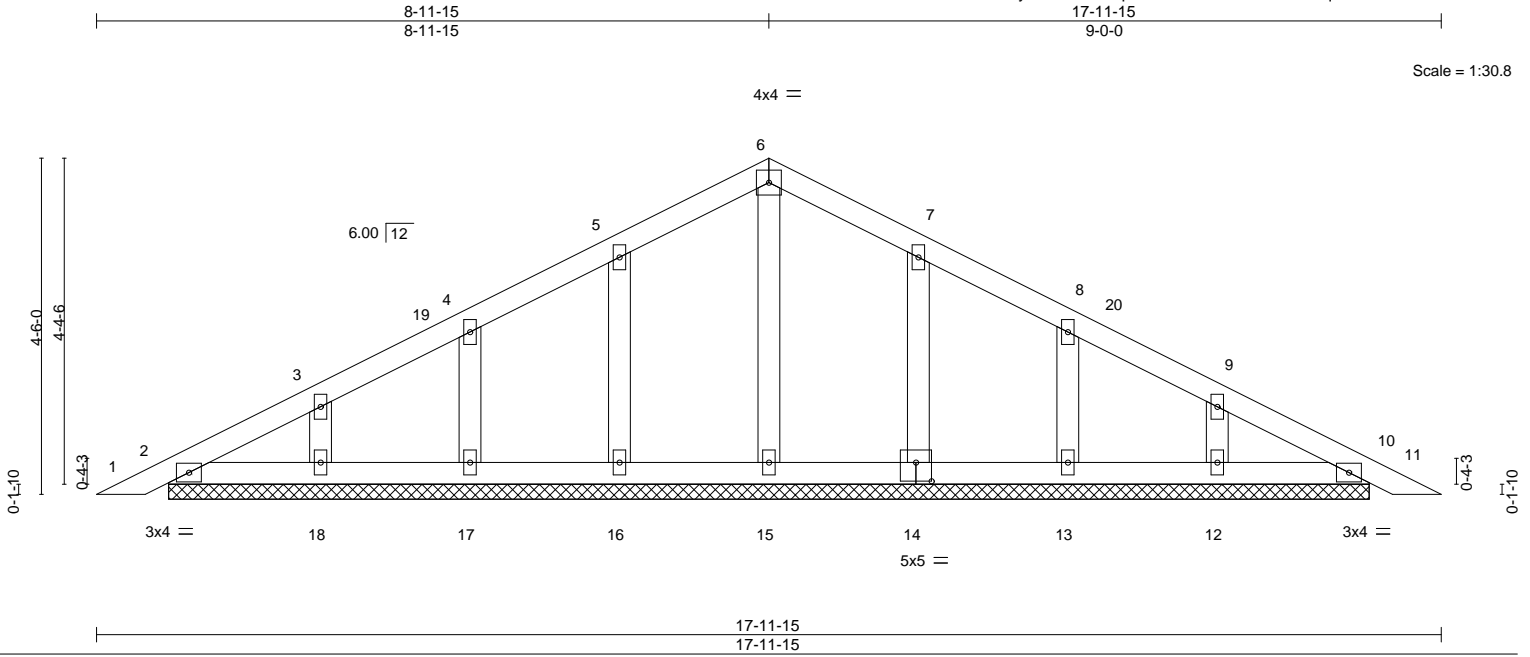


Plate Offsets (X,Y)-- [14:0-2-8,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.03	Vert(LL) 0.00	10	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.02	Vert(CT) 0.00	10	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.03	Horz(CT) 0.00	10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 76 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 16-0-13.  
 (lb) - Max Horz 2=88(LC 16)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 16, 17, 10, 18, 14, 13, 12  
 Max Grav All reactions 250 lb or less at joint(s) 2, 15, 16, 17, 10, 18, 14, 13, 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 (3-second gust) 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) 0-3-15 to 4-11-15, Interior(1) 4-11-15 to 8-11-15, Exterior(2) 8-11-15 to 13-4-12, Interior(1) 13-4-12 to 17-8-0 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) 2, 16, 17, 10, 18, 14, 13, 12.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



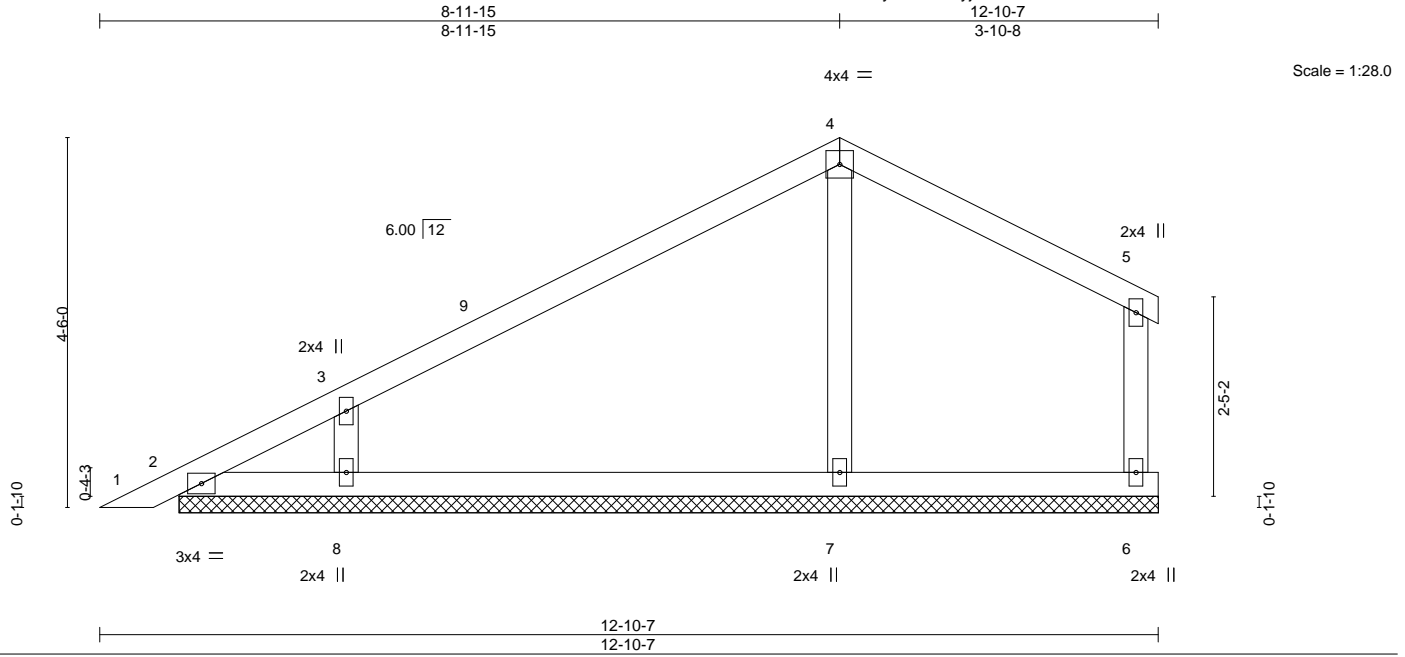
February 26, 2021



Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 5 Atkins Farm/Harnett	E15448559
J0221-0761	PB2	PIGGYBACK	3	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Feb 26 08:11:52 2021 Page 1  
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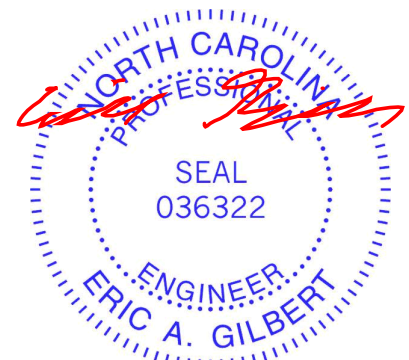
LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.32	Vert(LL) 0.00	0.00	1	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.16	Vert(CT) -0.00	-0.00	1	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.08	Horz(CT) 0.00	0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S						Weight: 49 lb	FT = 20%

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

**REACTIONS.** All bearings 11-10-14.  
 (lb) - Max Horz 2=102(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 6, 2, 7 except 8=103(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 6, 2 except 7=387(LC 1), 8=447(LC 23)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 4-7=-277/173, 3-8=-356/285

- 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) 0-3-15 to 4-8-11, Interior(1) 4-8-11 to 8-11-15, Exterior(2) 8-11-15 to 12-7-3 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) 6, 2, 7 except (jt=lb) 8=103.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

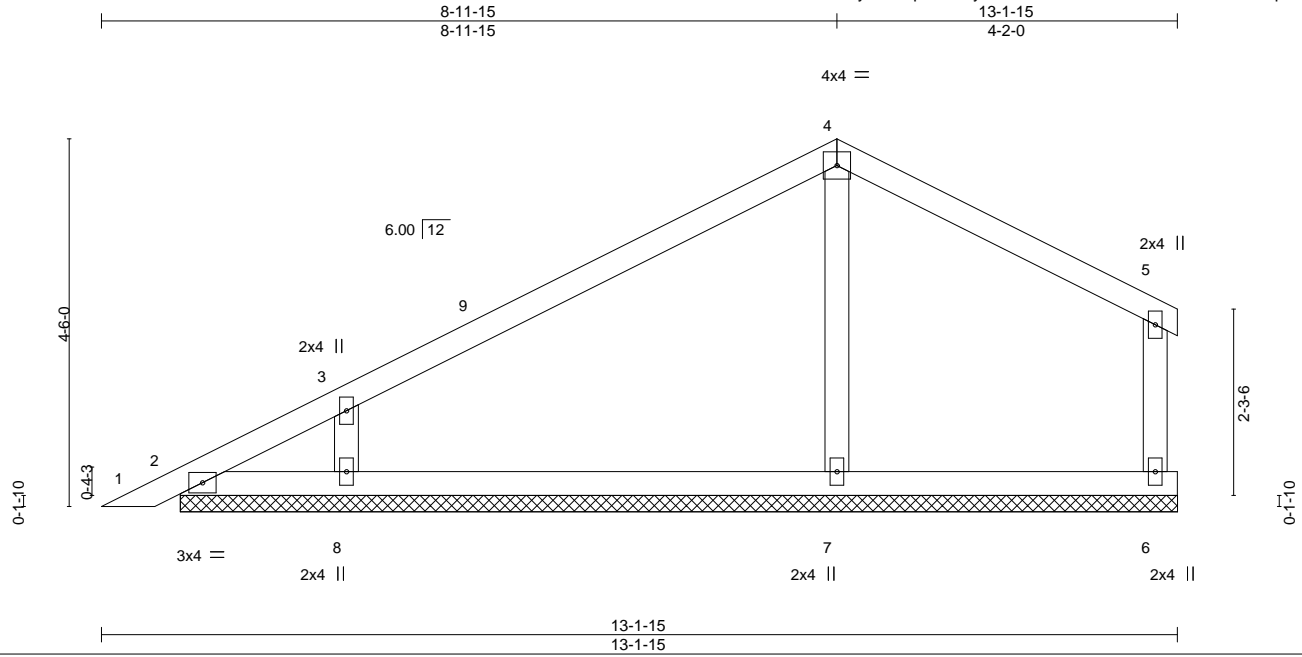


February 26, 2021

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 5 Atkins Farm/Harnett	E15448560
J0221-0761	PB3	PIGGYBACK	5	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Feb 26 08:11:53 2021 Page 1  
 ID:Sdzs0uuhUIT3B?9OD0R?ZKyk2HC-paV53Vy5QMUIAKJbaOkdCoeCS5URVhN8UOqzmMzhKFK



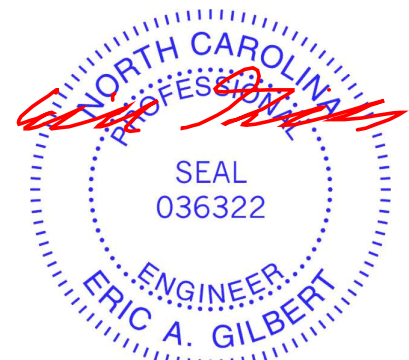
LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.32	Vert(LL) 0.00	0.00	1	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.16	Vert(CT) -0.00	-0.00	1	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.08	Horz(CT) 0.00	0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S						Weight: 50 lb	FT = 20%

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

**REACTIONS.** All bearings 12-2-6.  
 (lb) - Max Horz 2=99(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 6, 2, 7 except 8=104(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 6, 2 except 7=390(LC 1), 8=447(LC 23)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 4-7=-279/166, 3-8=-356/282

- 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) 0-3-15 to 4-8-11, Interior(1) 4-8-11 to 8-11-15, Exterior(2) 8-11-15 to 12-10-11 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) 6, 2, 7 except (jt=lb) 8=104.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

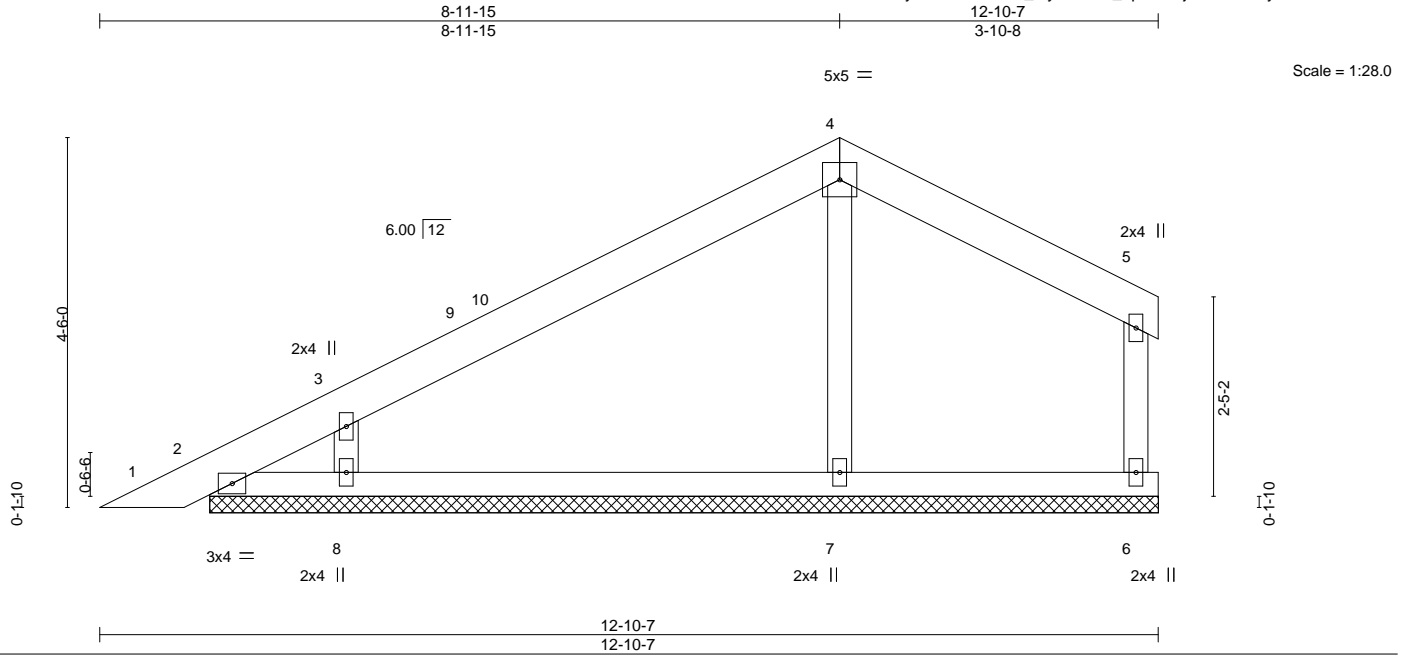


February 26, 2021

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 5 Atkins Farm/Harnett	E15448561
J0221-0761	PB4	PIGGYBACK	2	2	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Feb 26 08:11:55 2021 Page 1  
ID:Sdzs0uuhUIT3B?9OD0R?ZKyk2HC-mzdsUA\_Myzk0PeT\_hpn5HDjbtvB9zckRyJ4rEzhKFI



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.07	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.08	Vert(LL) 0.00 1 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.03	Vert(CT) -0.00 1 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 6 n/a n/a		
	Code IRC2015/TPI2014			Weight: 121 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 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 11-6-7.  
(lb) - Max Horz 2=99(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 6, 2, 7 except 8=111(LC 12)  
Max Grav All reactions 250 lb or less at joint(s) 6, 2 except 7=391(LC 1), 8=455(LC 23)

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

WEBS 4-7=-282/182, 3-8=-349/301

**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, 2x4 - 1 row at 0-9-0 oc.  
Bottom chords connected as follows: 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) 0-6-2 to 4-10-15, Interior(1) 4-10-15 to 8-11-15, Exterior(2) 8-11-15 to 12-7-3 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) 6, 2, 7 except (jt=lb) 8=111.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



February 26, 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

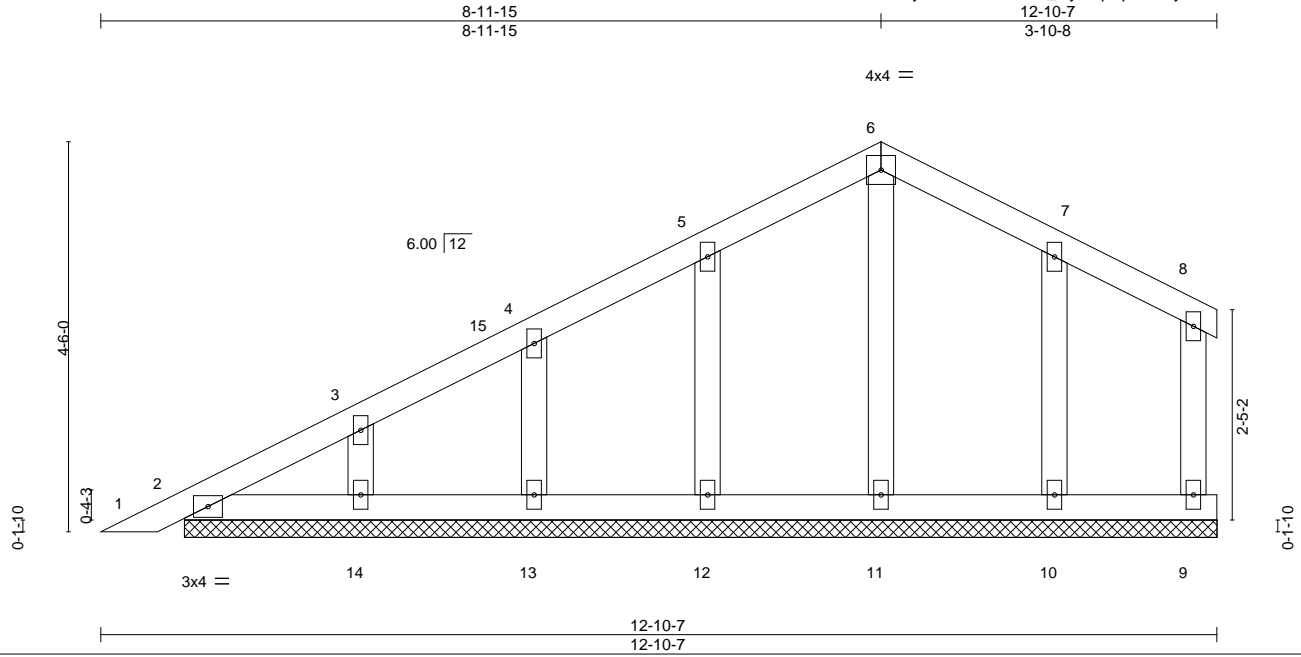


818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 5 Atkins Farm/Harnett	E15448562
J0221-0761	PB4GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Feb 26 08:11:57 2021 Page 1  
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Scale = 1:26.6

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
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 0.02	Vert(LL) 0.00 1 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.03	Vert(CT) 0.00 1 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 9 n/a n/a		
	Code IRC2015/TPI2014			Weight: 60 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.

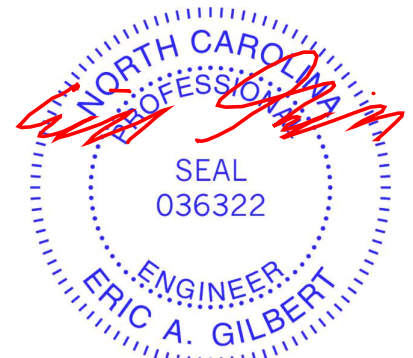
**REACTIONS.**

All bearings 11-10-14.  
(lb) - Max Horz 2=153(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 9, 2, 12, 13, 14, 10  
Max Grav All reactions 250 lb or less at joint(s) 9, 2, 11, 12, 13, 14, 10

**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 Exterior(2) 0-3-15 to 4-11-15, Interior(1) 4-11-15 to 8-11-15, Exterior(2) 8-11-15 to 12-7-3 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.
- 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) 9, 2, 12, 13, 14, 10.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



February 26, 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

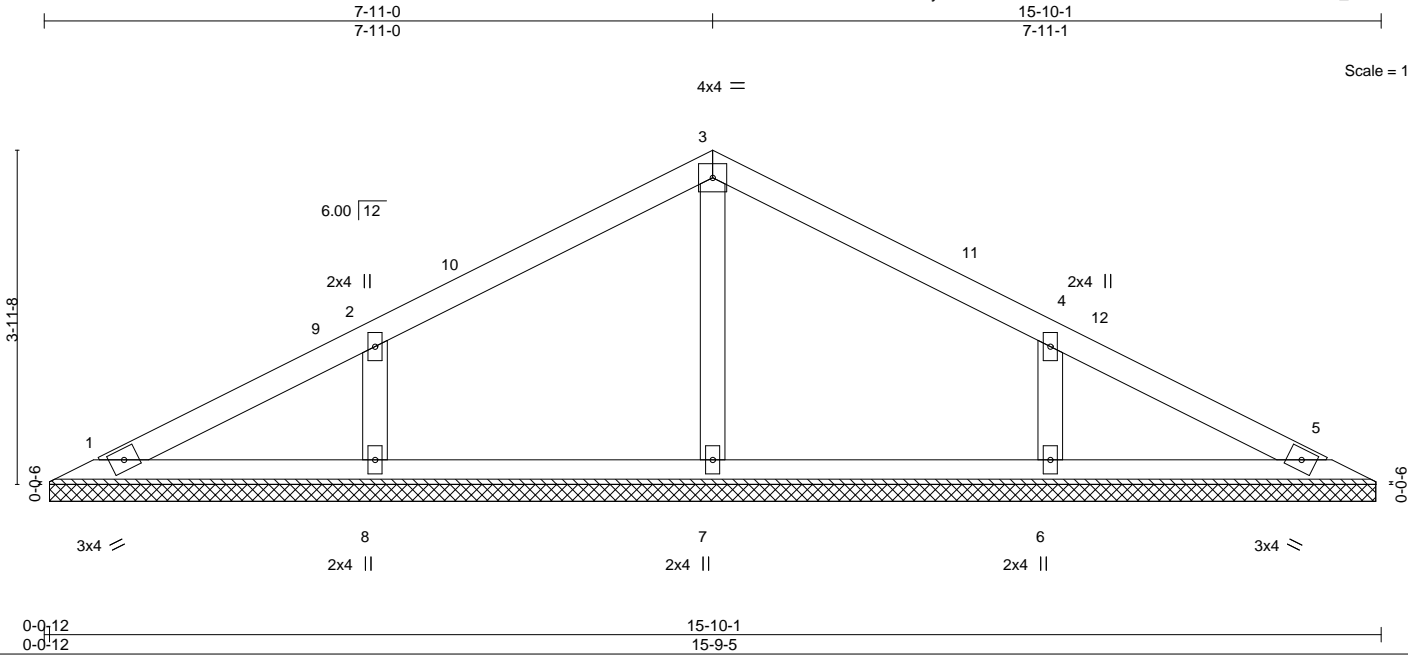


818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 5 Atkins Farm/Harnett	E15448563
J0221-0761	VP1	VALLEY	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Feb 26 08:11:59 2021 Page 1  
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Scale = 1:27.3

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.15	Vert(LL) n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.08	Vert(CT) n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.05	Horz(CT) 0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 57 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 15-8-9.  
 (lb) - Max Horz 1=48(LC 11)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 8, 6  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=272(LC 1), 8=344(LC 23), 6=344(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 2-8=-260/202, 4-6=-260/202

- 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) 0-7-13 to 5-0-10, Interior(1) 5-0-10 to 7-11-0, Exterior(2) 7-11-0 to 12-3-13, Interior(1) 12-3-13 to 15-2-4 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 8, 6.
  - Non Standard bearing condition. Review required.



February 26, 2021

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818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 5 Atkins Farm/Harnett	E15448564
J0221-0761	VP2	VALLEY	1	1	Job Reference (optional)	

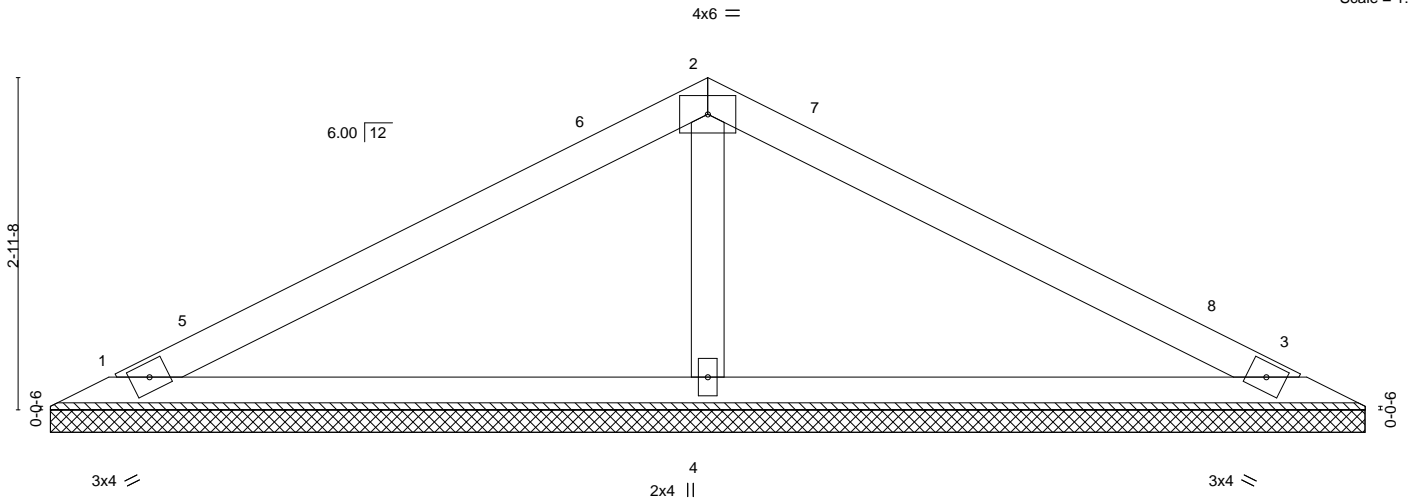
Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Feb 26 08:12:00 2021 Page 1

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Scale = 1:20.5



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) n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.20	Vert(CT) n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.05	Horz(CT) 0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 38 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.

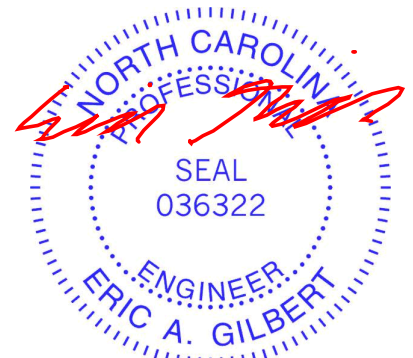
**REACTIONS.**

(size) 1=11-8-9, 3=11-8-9, 4=11-8-9  
 Max Horz 1=-35(LC 8)  
 Max Uplift 1=-26(LC 12), 3=-32(LC 13)  
 Max Grav 1=195(LC 23), 3=195(LC 24), 4=456(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 2-4=-302/187

**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) 0-7-13 to 5-0-10, Interior(1) 5-0-10 to 5-11-0, Exterior(2) 5-11-0 to 10-3-13, Interior(1) 10-3-13 to 11-2-4 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- Non Standard bearing condition. Review required.



February 26, 2021

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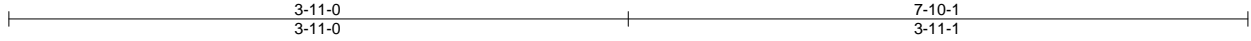
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 5 Atkins Farm/Harnett	E15448565
J0221-0761	VP3	VALLEY	1	1	Job Reference (optional)	

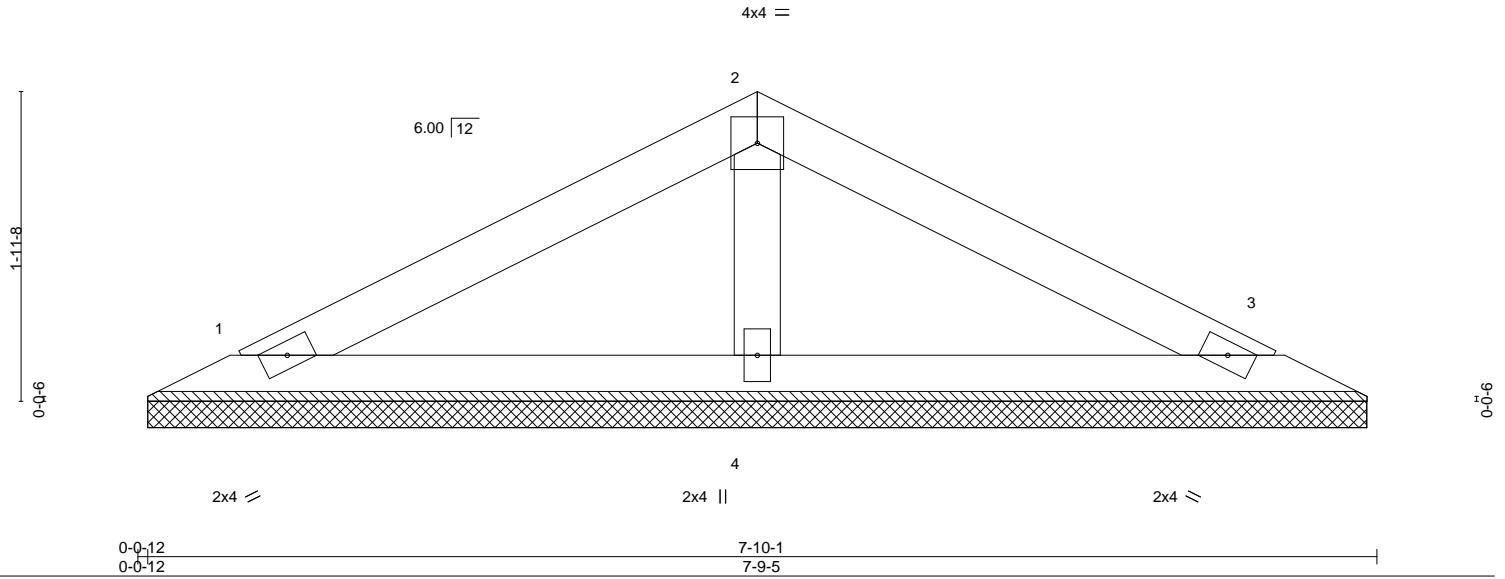
Comtech, Inc., Fayetteville, NC - 28314,

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Scale = 1:14.6



<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 0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-P						Weight: 24 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.

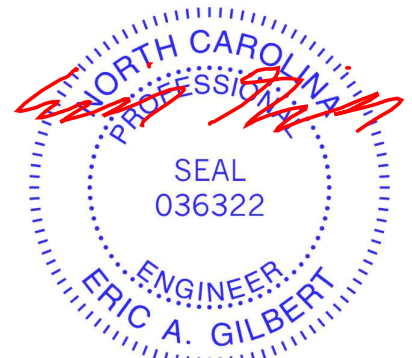
**REACTIONS.**

(size) 1=7-8-9, 3=7-8-9, 4=7-8-9  
 Max Horz 1=-21(LC 10)  
 Max Uplift 1=-21(LC 12), 3=-25(LC 13)  
 Max Grav 1=133(LC 1), 3=133(LC 1), 4=256(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
- 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, 3.
- Non Standard bearing condition. Review required.



February 26, 2021

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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

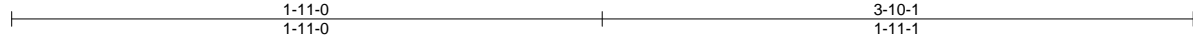


818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 5 Atkins Farm/Harnett	E15448566
J0221-0761	VP4	VALLEY	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Feb 26 08:12:03 2021 Page 1  
 ID:Sdzs0uuhUIT3B?9OD0R?ZKyk2HC-XV6t9v4N3QktNt4W9Uwzcv2zV7xQrD6cnyFV7mzhKFA



Scale = 1:7.5

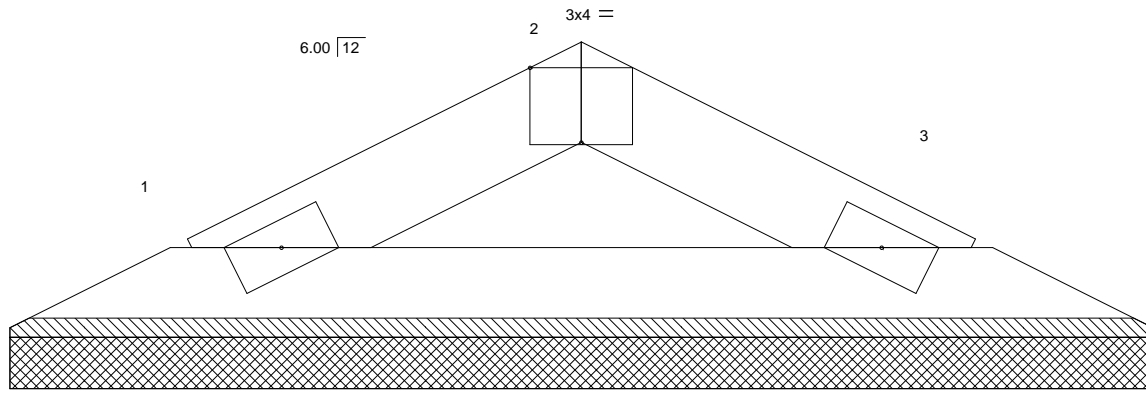


Plate Offsets (X,Y)--	[2:0-2:0,Edge]
-----------------------	----------------

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.03	Vert(LL) n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.06	Vert(CT) n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P					Weight: 10 lb	FT = 20%

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

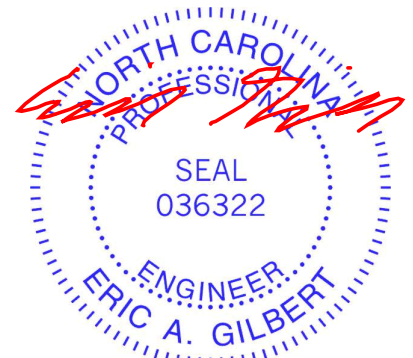
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 3-10-1 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=3-8-9, 3=3-8-9  
 Max Horz 1=8(LC 9)  
 Max Uplift 1=6(LC 12), 3=6(LC 13)  
 Max Grav 1=101(LC 1), 3=101(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
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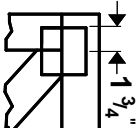


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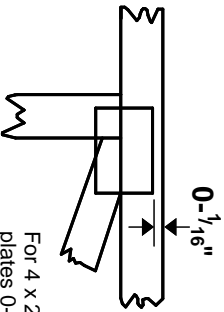


# Symbols

## 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

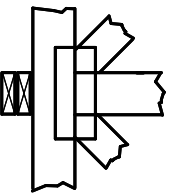
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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



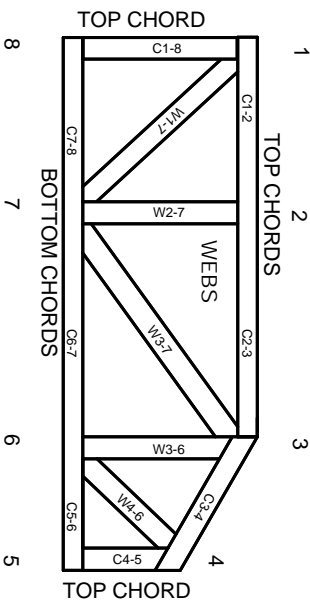
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

### Industry Standards:

ANSI/TP1: 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/TP1 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/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 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/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.