

Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: J1222-6117  
Wellco/Geszler-Hamlet Job/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: I55697719 thru I55697738

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

North Carolina COA: C-0844



December 13, 2022

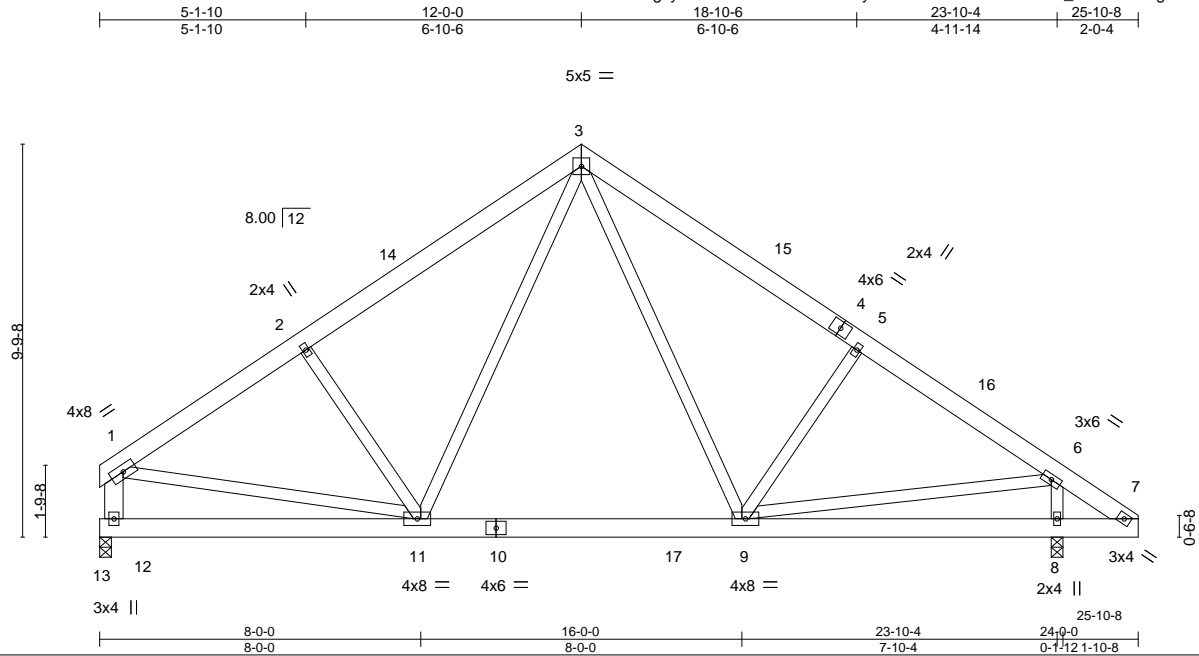
Sevier, Scott

**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 J1222-6117	Truss A1	Truss Type COMMON	Qty 7	Ply 1	Wellco/Geszler-Hamlet Job/Harnett Job Reference (optional)	I55697719
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Dec 12 14:23:22 2022 Page 1  
ID:7gvyW?ROTCXeMFVfsYvMisy9hrv-fQ33FEuV7whNoz?i\_vPj3XLDxg0Prso4YNoAwy9h33



<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 0.19	Vert(LL)	-0.08 9-11	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.30	Vert(CT)	-0.12 9-11	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.21	Horz(CT)	0.01 8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.02 9-11	>999	240	Weight: 204 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 end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 1-12: 2x6 SP No.1	

**REACTIONS.** (size) 12=0-3-8, 8=0-3-8  
 Max Horz 12=221(LC 8)  
 Max Uplift 12=41(LC 12), 8=61(LC 13)  
 Max Grav 12=965(LC 19), 8=1109(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-1173/278, 2-3=-1055/332, 3-5=-1061/312, 5-6=-1185/258, 1-12=-902/234  
 BOT CHORD 11-12=-153/276, 9-11=0/702  
 WEBS 2-11=-392/247, 3-11=-85/446, 3-9=-73/457, 5-9=-385/241, 6-8=-984/347,  
 1-11=-163/848, 6-9=-195/876

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 5-0-1, Interior(1) 5-0-1 to 12-0-0, Exterior(2) 12-0-0 to 16-4-13, Interior(1) 16-4-13 to 25-10-8 zone; cantilever right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) 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 41 lb uplift at joint 12 and 61 lb uplift at joint 8.



December 13, 2022

**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

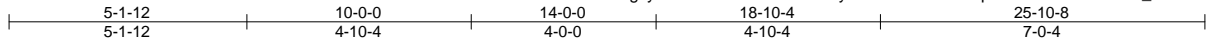
818 Soundside Road  
 Edenton, NC 27932

Job J1222-6117	Truss A2	Truss Type HIP	Qty 2	Ply 1	Wellco/Geszler-Hamlet Job/Harnett Job Reference (optional)	155697720
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Comtech, Inc. Fayetteville, NC - 28314,

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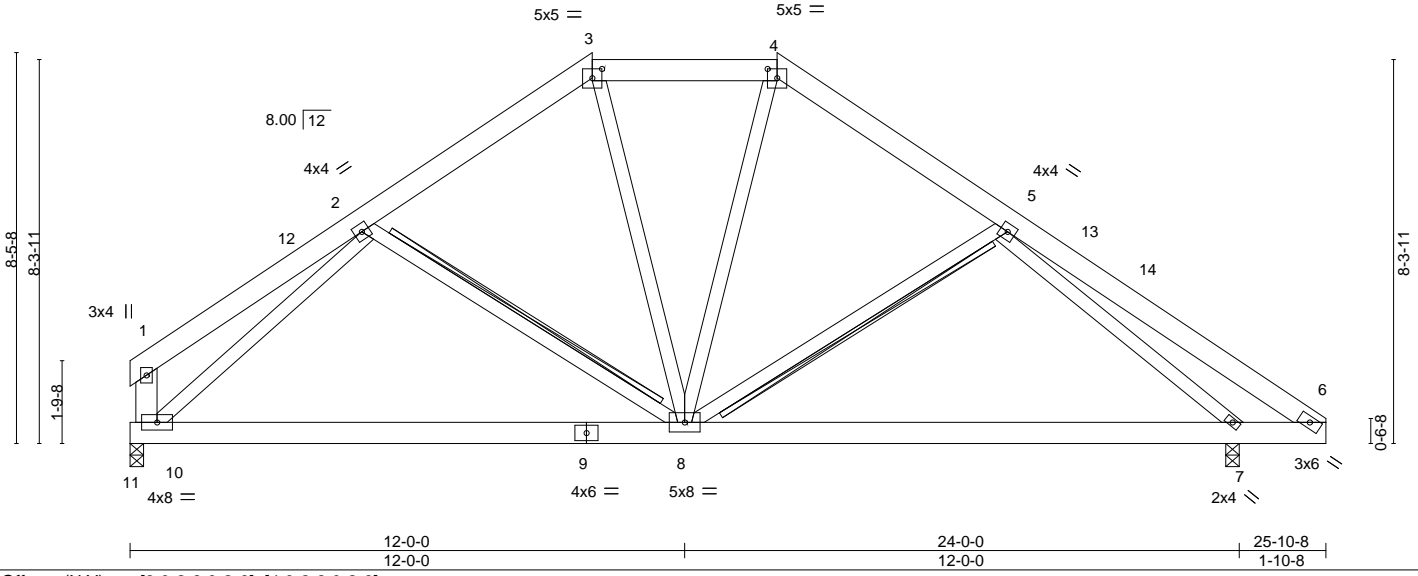


Plate Offsets (X, Y)--	[3:0-2-8,0-2-6], [4:0-2-8,0-2-6]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.23	Vert(LL)	-0.07	7-8	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.39	Vert(CT)	-0.15	7-8	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.84	Horz(CT)	0.02	7	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.01	8	>999		
								Weight: 200 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 end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 1-10: 2x6 SP No.1	WEBS T-Brace: 2x4 SPF No.2 - 5-8, 2-8 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) 10=0-3-8, 7=0-3-8  
 Max Horz 10=188(LC 8)  
 Max Uplift 10=34(LC 12), 7=54(LC 13)  
 Max Grav 10=951(LC 1), 7=1098(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-345/56, 2-3=-901/295, 3-4=-783/295, 4-5=-905/291, 5-6=-346/81, 1-10=-279/88  
 BOT CHORD 8-10=-124/776, 7-8=-143/822, 6-7=-3/267  
 WEBS 3-8=-28/261, 4-8=-44/275, 5-8=-290/205, 5-7=-1059/523, 2-10=-801/291

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-11-3, Interior(1) 4-11-3 to 10-0-0, Exterior(2) 10-0-0 to 20-2-11, Interior(1) 20-2-11 to 25-10-8 zone; cantilever right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 34 lb uplift at joint 10 and 54 lb uplift at joint 7.
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 8) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



December 13, 2022

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Job J1222-6117	Truss A3	Truss Type HIP	Qty 2	Ply 1	Wellco/Geszler-Hamlet Job/Harnett Job Reference (optional)	I55697721
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Dec 12 14:23:24 2022 Page 1  
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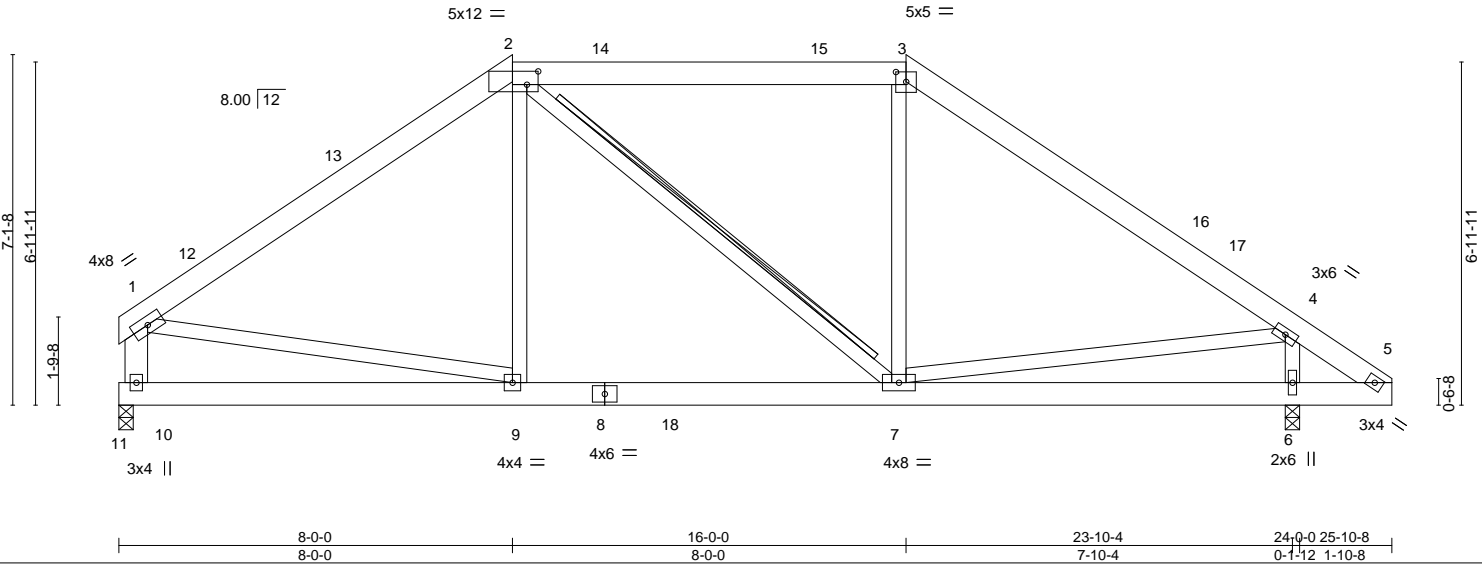


Plate Offsets (X, Y)--	[2:0-2-12,0-3-4], [3:0-2-8,0-2-6]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.30	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.20	Vert(LL) -0.04 7-9 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.15	Vert(CT) -0.06 7-9 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 6 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.01 7-9 >999 240	Weight: 189 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 end verticals, and 2-0-0 oc purlins (6-0-0 max.): 2-3.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 1-10: 2x6 SP No.1	WEBS T-Brace: 2x4 SPF No.2 - 2-7 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) 10=0-3-8, 6=0-3-8  
 Max Horz 10=-156(LC 8)  
 Max Uplift 10=-23(LC 12), 6=-45(LC 13)  
 Max Grav 10=940(LC 1), 6=1109(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-1053/288, 2-3=-776/320, 3-4=-1067/285, 1-10=-851/271  
 BOT CHORD 9-10=-124/295, 7-9=-56/805  
 WEBS 4-7=-69/609, 1-9=-44/631, 4-6=-953/411

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-9-1, Interior(1) 4-9-1 to 8-0-0, Exterior(2) 8-0-0 to 14-2-11, Interior(1) 14-2-11 to 16-0-0, Exterior(2) 16-0-0 to 22-2-11, Interior(1) 22-2-11 to 25-10-8 zone; cantilever 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 23 lb uplift at joint 10 and 45 lb uplift at joint 6.
  - 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.



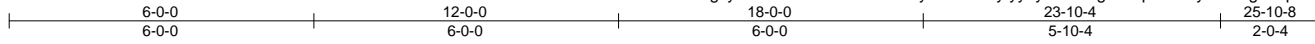
December 13, 2022

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p>ENGINEERING BY <b>TRENCO</b> A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job J1222-6117	Truss A4GDR	Truss Type HIP GIRDER	Qty 2	Ply 2	Wellco/Geszler-Hamlet Job/Harnett Job Reference (optional)	155697722
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Dec 12 14:23:27 2022 Page 1  
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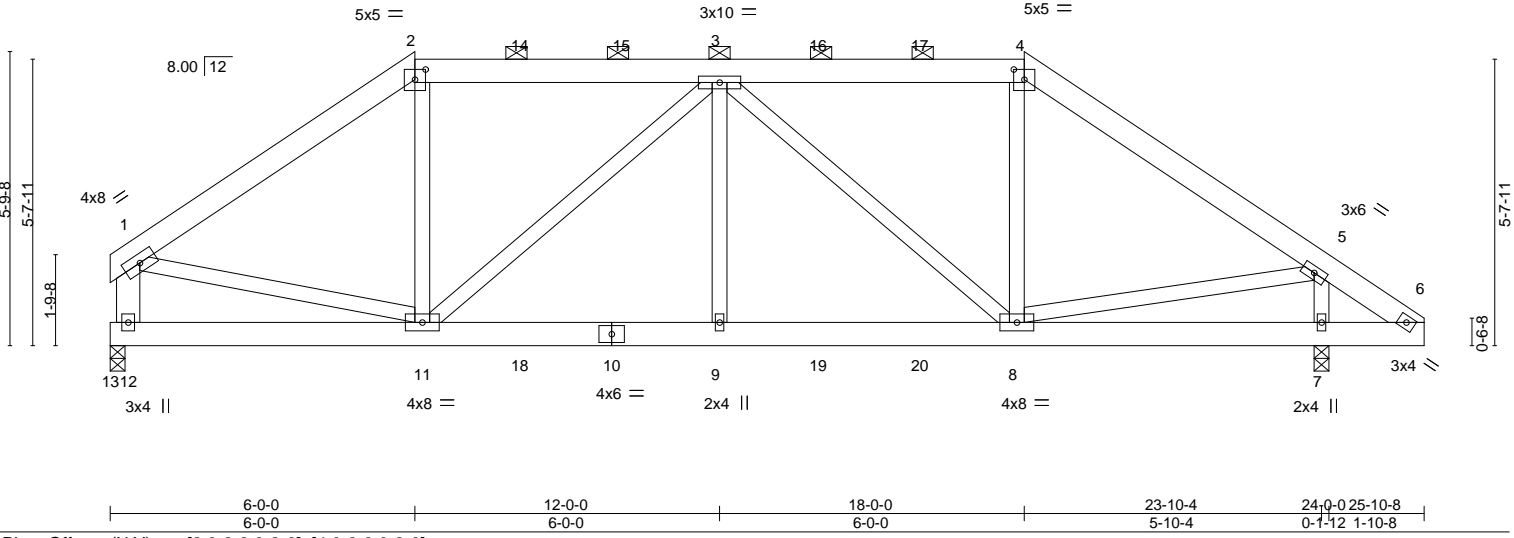


Plate Offsets (X, Y)--	[2:0-2-8,0-2-6], [4:0-2-8,0-2-6]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.14	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.17	Vert(LL) -0.02 9 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.17	Vert(CT) -0.05 8-9 >999 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.01 7 n/a n/a		
	Code IRC2015/TP12014		Wind(LL) 0.03 9 >999 240	Weight: 384 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 end verticals, and 2-0-0 oc purlins (6-0-0 max.): 2-4.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 1-12: 2x6 SP No.1	

**REACTIONS.** (size) 12=0-3-8, 7=0-3-8  
 Max Horz 12=-124(LC 4)  
 Max Uplift 12=501(LC 8), 7=-514(LC 9)  
 Max Grav 12=1591(LC 33), 7=1744(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-1890/666, 2-3=-1547/605, 3-4=-1565/616, 4-5=-1916/681, 1-12=-1516/526  
 BOT CHORD 9-11=-734/2118, 8-9=-734/2118  
 WEBS 2-11=-164/573, 3-11=-779/292, 3-9=0/429, 3-8=-759/278, 4-8=-167/590, 5-8=-539/1470,  
 1-11=-532/1442, 5-7=-1573/548

- 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: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Webs 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 Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever right exposed ; 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 501 lb uplift at joint 12 and 514 lb uplift at joint 7.
  - 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) 130 lb down and 119 lb up at 6-0-0, 134 lb down and 116 lb up at 8-0-12, 134 lb down and 116 lb up at 10-0-12, 134 lb down and 116 lb up at 12-0-0, 134 lb down and 116 lb up at 13-11-4, and 134 lb down and 116 lb up at 15-11-4, and 130 lb down and 119 lb up at 18-0-0 on top chord, and 292 lb down and 228 lb up at 6-0-0, 60 lb down at 8-0-12, 60 lb down at 10-0-12, 60 lb down at 12-0-0, 60 lb down at 13-11-4, and 60 lb down at 15-11-4, and 292 lb down and 228 lb up at 17-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



December 13, 2022

**LOAD CASE(S)** Standard

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

Job J1222-6117	Truss A4GDR	Truss Type HIP GIRDER	Qty 2	Ply <b>2</b>	Wellco/Geszler-Hamlet Job/Harnett I55697722 Job Reference (optional)
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Dec 12 14:23:27 2022 Page 2  
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**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-2=-60, 2-4=-60, 4-6=-60, 6-13=-20

Concentrated Loads (lb)

Vert: 2=-88(F) 4=-88(F) 10=-35(F) 11=-245(F) 3=-88(F) 9=-35(F) 8=-245(F) 14=-88(F) 15=-88(F) 16=-88(F) 17=-88(F) 18=-35(F) 19=-35(F) 20=-35(F)

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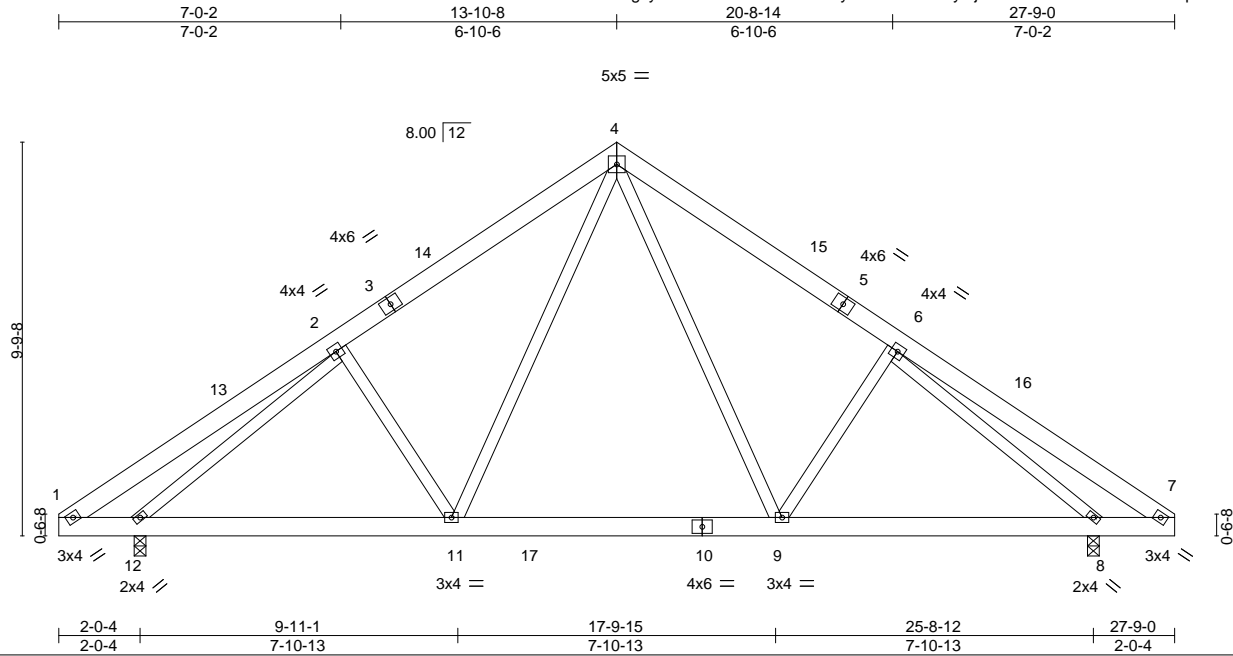


Job J1222-6117	Truss B1	Truss Type COMMON	Qty 1	Ply 2	Wellco/Geszler-Hamlet Job/Harnett Job Reference (optional)	I55697723
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Dec 12 14:23:28 2022 Page 1

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Scale = 1:57.3

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.11	Vert(LL) -0.04	9-11	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.15	Vert(CT) -0.06	9-11	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.21	Horz(CT) 0.01	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL) 0.01	9-11	>999		
							Weight: 413 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 6-0-0 oc bracing.

**REACTIONS.** (size) 12=0-3-8, 8=0-3-8  
 Max Horz 12=223(LC 8)  
 Max Uplift 12=62(LC 12), 8=62(LC 13)  
 Max Grav 12=1110(LC 1), 8=1110(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-1121/333, 4-6=-1120/333  
 BOT CHORD 11-12=-106/1055, 9-11=0/730, 8-9=-99/900  
 WEBS 4-9=-95/500, 6-9=-299/228, 6-8=-1267/394, 4-11=-95/502, 2-11=-299/228,  
 2-12=-1268/394

- 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: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Webs 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 Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 13-10-8, Exterior(2) 13-10-8 to 18-3-5, Interior(1) 18-3-5 to 27-9-0 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
  - 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 62 lb uplift at joint 12 and 62 lb uplift at joint 8.



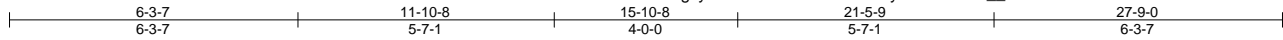
December 13, 2022

Job J1222-6117	Truss B2	Truss Type HIP	Qty 1	Ply 2	Wellco/Geszler-Hamlet Job/Harnett 155697724
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Dec 12 14:23:30 2022 Page 1

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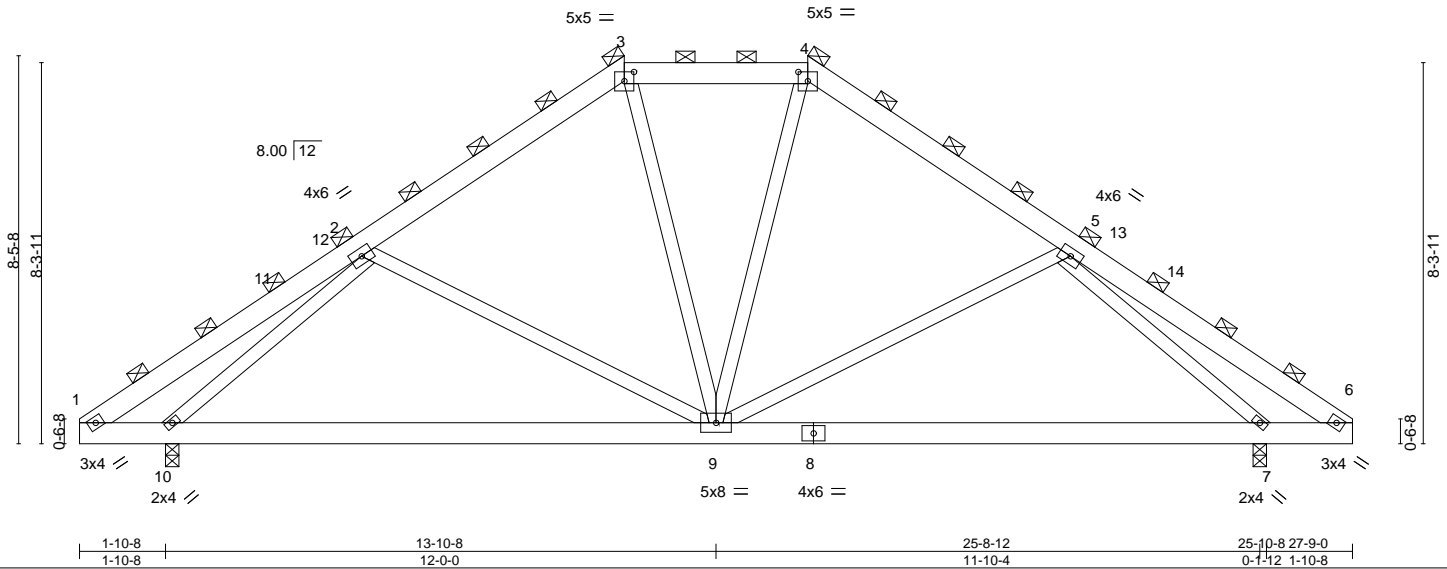


Plate Offsets (X, Y)-- [3:0-2-8,0-2-6], [4:0-2-8,0-2-6]									
<b>LOADING</b> (psf)	<b>SPACING-</b>	3-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.13	Vert(LL)	-0.05	7-9	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.32	Vert(CT)	-0.11	7-9	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.22	Horz(CT)	0.01	7	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.01	9	>999		
								Weight: 412 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD 2-0-0 oc purlins (6-0-0 max.)
BOT CHORD 2x6 SP No.1	(Switched from sheeted: Spacing > 2-8-0).
WEBS 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 10=0-3-8, 7=0-3-8  
 Max Horz 10=284(LC 8)  
 Max Uplift 10=83(LC 12), 7=83(LC 13)  
 Max Grav 10=1665(LC 1), 7=1665(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=507/102, 2-3=1414/431, 3-4=1208/436, 4-5=1414/431, 5-6=507/102  
 BOT CHORD 1-10=0/387, 9-10=233/1280, 7-9=221/1244, 6-7=0/387  
 WEBS 3-9=35/404, 4-9=35/404, 5-9=398/294, 5-7=1633/799, 2-9=398/294, 2-10=1633/799

- 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: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Webs 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 Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 11-10-8, Exterior(2) 11-10-8 to 22-1-3, Interior(1) 22-1-3 to 27-9-0 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 83 lb uplift at joint 10 and 83 lb uplift at joint 7.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 13, 2022

**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

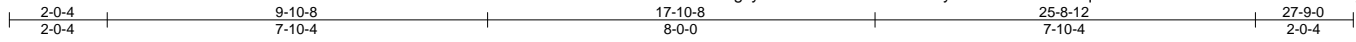


Job J1222-6117	Truss B3	Truss Type HIP	Qty 1	Ply 1	Wellco/Geszler-Hamlet Job/Harnett 155697725
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Dec 12 14:23:31 2022 Page 1

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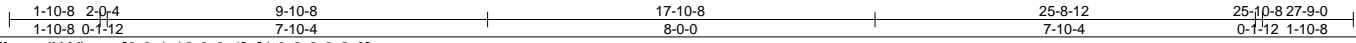
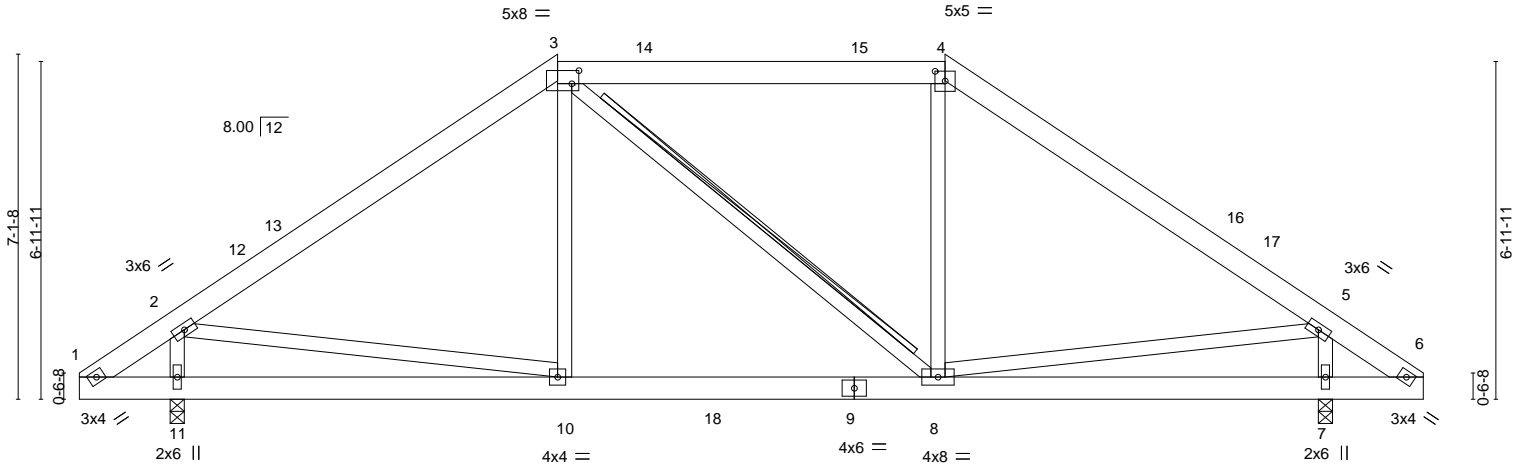


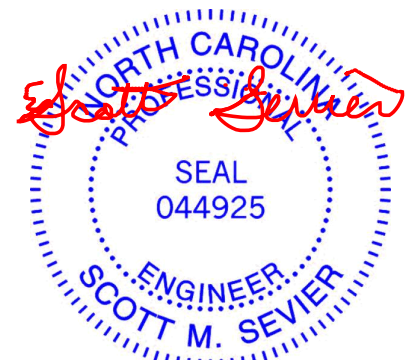
Plate Offsets (X, Y)--	[3:0-1-12,0-3-4], [4:0-2-8,0-2-6]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.30	Vert(LL) -0.04 8-10 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.20	Vert(CT) -0.06 8-10 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.15	Horz(CT) 0.01 7 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.01 8-10 >999 240	Weight: 197 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.): 3-4.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	WEBS T-Brace: 2x4 SPF No.2 - 3-8 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) 11=0-3-8, 7=0-3-8  
 Max Horz 11=157(LC 9)  
 Max Uplift 11=-46(LC 12), 7=-46(LC 13)  
 Max Grav 11=1110(LC 1), 7=1110(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1069/279, 3-4=-777/313, 4-5=-1069/278  
 BOT CHORD 10-11=-162/336, 8-10=-57/810  
 WEBS 2-10=-65/647, 5-8=-70/611, 2-11=-953/409, 5-7=-954/408

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 9-10-8, Exterior(2) 9-10-8 to 16-1-3, Interior(1) 16-1-3 to 17-10-8, Exterior(2) 17-10-8 to 24-1-3, Interior(1) 24-1-3 to 27-9-0 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
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 46 lb uplift at joint 11 and 46 lb uplift at joint 7.
  - 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 8) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



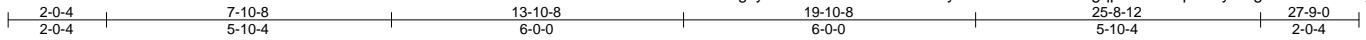
December 13, 2022

Job J1222-6117	Truss B4GDR	Truss Type HIP GIRDER	Qty 1	Ply 2	Wellco/Geszler-Hamlet Job/Harnett Job Reference (optional)	155697726
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Dec 12 14:23:34 2022 Page 1

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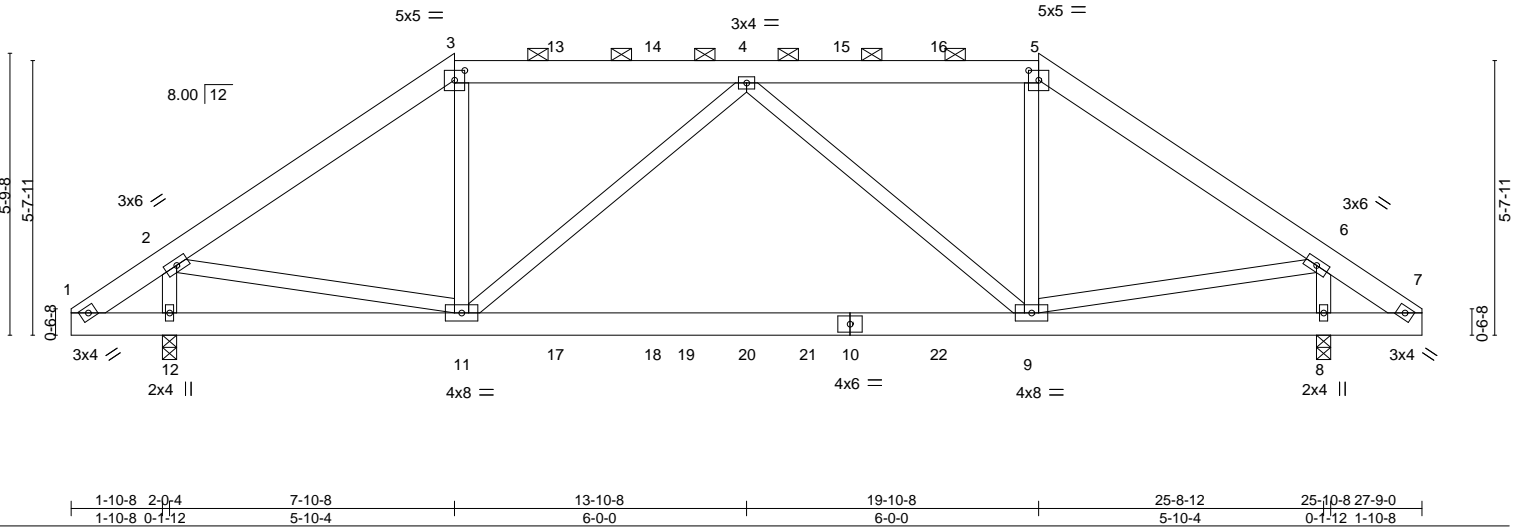


Plate Offsets (X, Y)--	[3:0-2-8,0-2-6], [5:0-2-8,0-2-6]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.14	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.37	Vert(LL) -0.09 9-11 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.19	Vert(CT) -0.19 9-11 >999 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.01 8 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) -0.03 9-11 >999 240	Weight: 387 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.): 3-5.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 9-11.
WEBS 2x4 SP No.2	

**REACTIONS.** (size) 12=0-3-8, 8=0-3-8  
 Max Horz 12=-126(LC 23)  
 Max Uplift 12=-520(LC 8), 8=-520(LC 9)  
 Max Grav 12=1777(LC 33), 8=1778(LC 34)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2101/657, 3-4=-1720/596, 4-5=-1721/595, 5-6=-2102/656  
 BOT CHORD 9-11=-789/2133  
 WEBS 2-11=-481/1717, 3-11=-152/699, 4-11=-596/379, 4-9=-595/380, 5-9=-151/699, 6-9=-485/1720, 2-12=-1809/495, 6-8=-1809/494

- 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: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Webs 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 Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; 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 520 lb uplift at joint 12 and 520 lb uplift at joint 8.
  - 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) 130 lb down and 119 lb up at 7-10-8, 134 lb down and 116 lb up at 9-11-4, 134 lb down and 116 lb up at 11-11-4, 134 lb down and 116 lb up at 13-10-8, 134 lb down and 116 lb up at 15-9-12, and 134 lb down and 116 lb up at 17-9-12, and 130 lb down and 119 lb up at 19-10-8 on top chord, and 292 lb down and 228 lb up at 7-10-8, 60 lb down at 9-11-4, 60 lb down at 11-11-4, 60 lb down at 13-10-8, 60 lb down at 15-9-12, and 60 lb down at 17-9-12, and 292 lb down and 228 lb up at 19-9-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



December 13, 2022

**LOAD CASE(S)** Standard  
 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 J1222-6117	Truss B4GDR	Truss Type HIP GIRDER	Qty 1	Ply <b>2</b>	Wellco/Geszler-Hamlet Job/Harnett I55697726 Job Reference (optional)
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Dec 12 14:23:34 2022 Page 2  
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**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-3=-60, 3-5=-60, 5-7=-60, 1-7=-20

Concentrated Loads (lb)

Vert: 3=-88(B) 5=-88(B) 10=-35(B) 11=-245(B) 4=-88(B) 9=-245(B) 13=-88(B) 14=-88(B) 15=-88(B) 16=-88(B) 17=-35(B) 18=-35(B) 20=-35(B) 22=-35(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

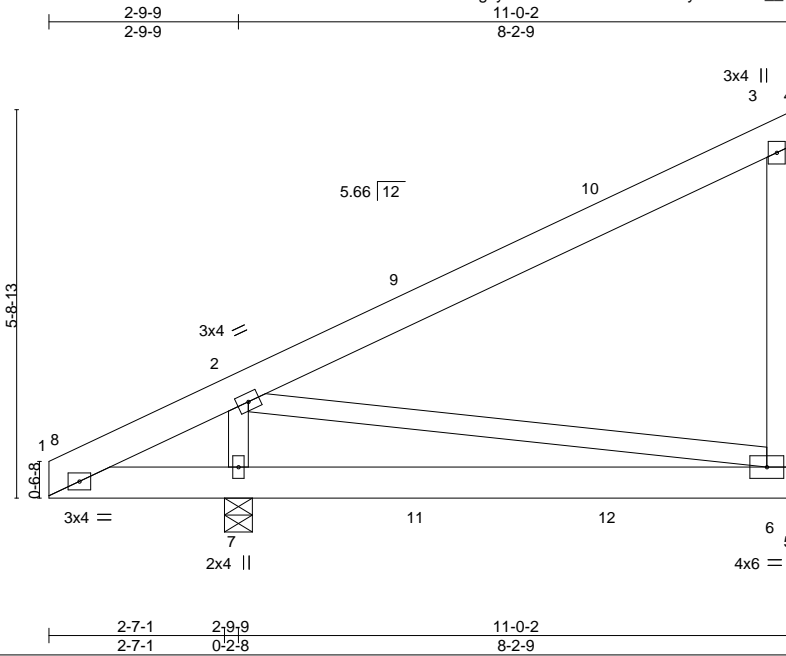


818 Soundside Road  
Edenton, NC 27932

Job J1222-6117	Truss CJ11	Truss Type DIAGONAL HIP GIRDER	Qty 6	Ply 1	Wellco/Geszler-Hamlet Job/Harnett Job Reference (optional)	I55697727
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Dec 12 14:23:35 2022 Page 1  
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Scale = 1:34.0

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 0.24	Vert(LL)	-0.03 6-7	>999	360	MT20	244/190
BCDL 10.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	-0.03 6-7	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.09	Horz(CT)	-0.00 6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	-0.02 6-7	>999	240		
								Weight: 75 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, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS.** (size) 6=Mechanical, 7=0-4-15  
 Max Horz 7=170(LC 26)  
 Max Uplift 6=221(LC 8), 7=206(LC 4)  
 Max Grav 6=250(LC 32), 7=510(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-167/338  
 BOT CHORD 1-7=-280/173, 6-7=-341/91  
 WEBS 2-6=-80/339, 2-7=-471/162

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 4) Refer to girder(s) for truss connections.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 221 lb uplift at joint 6 and 206 lb uplift at joint 7.
  - 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 40 lb down and 4 lb up at 0-5-8, 67 lb down and 43 lb up at 2-7-6, 67 lb down and 43 lb up at 2-7-6, 47 lb down and 111 lb up at 5-5-5, 47 lb down and 111 lb up at 5-5-5, and 100 lb down and 86 lb up at 8-3-4, and 100 lb down and 86 lb up at 8-3-4 on top chord, and 1 lb down at 2-7-6, 1 lb down at 2-7-6, 81 lb up at 5-5-5, 81 lb up at 5-5-5, and 25 lb down and 20 lb up at 8-3-4, and 25 lb down and 20 lb up at 8-3-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard  
 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-3=-60, 3-4=-20, 1-5=-20  
 Concentrated Loads (lb)  
 Vert: 8=-40 9=84(F=42, B=42) 10=-1(F=0, B=0) 11=97(F=48, B=48) 12=7(F=4, B=4)



December 13, 2022

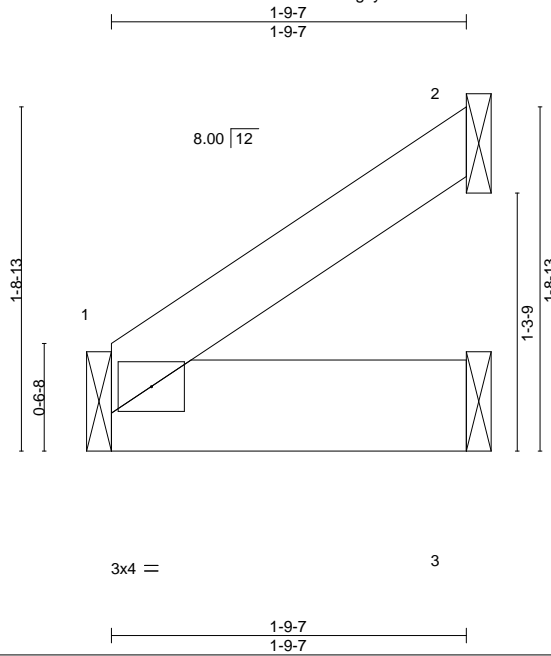
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before 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 J1222-6117	Truss J02	Truss Type JACK-OPEN	Qty 12	Ply 1	Wellco/Geszler-Hamlet Job/Harnett 155697728 Job Reference (optional)
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Dec 12 14:23:36 2022 Page 1  
ID:7gvyW?ROtcXeMFVfsYvMisy9hrv-F6vMB13HqDSN464Pprfxu06n1aWohDcslkmYf6y9h2r



Scale = 1:11.6

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 0.04	Vert(LL)	-0.00	1	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.01	Vert(CT)	-0.00	1	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-P	Wind(LL)	0.00	1	****	240		
									Weight: 8 lb	FT = 20%

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

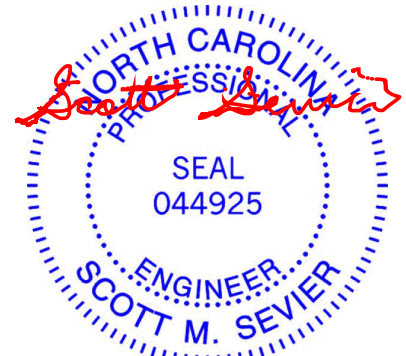
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 1-9-7 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=Mechanical, 2=Mechanical, 3=Mechanical  
Max Horz 3=43(LC 12)  
Max Uplift 2=34(LC 12)  
Max Grav 1=70(LC 1), 2=59(LC 19), 3=35(LC 3)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 34 lb uplift at joint 2.



December 13, 2022

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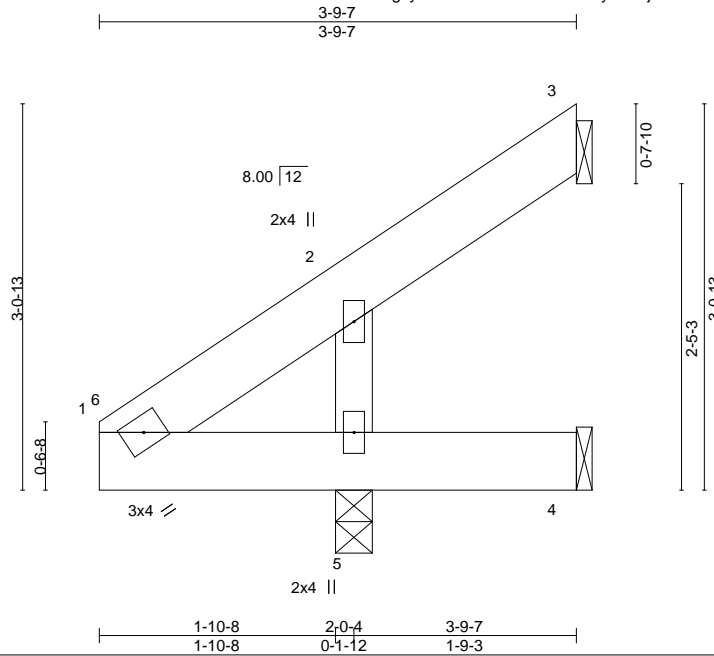
818 Soundside Road  
Edenton, NC 27932

Job J1222-6117	Truss J04	Truss Type JACK-OPEN	Qty 12	Ply 1	Wellco/Geszler-Hamlet Job/Harnett Job Reference (optional)	155697729
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Dec 12 14:23:37 2022 Page 1

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Scale = 1:18.3

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 0.10	Vert(LL)	0.00	5	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	0.00	4-5	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.03	Horz(CT)	-0.01	3	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P	Wind(LL)	-0.00	5	>999		
								Weight: 21 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 3-9-7 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 3=Mechanical, 4=Mechanical, 5=0-3-8  
 Max Horz 5=82(LC 12)  
 Max Uplift 3=-39(LC 12), 4=-52(LC 1)  
 Max Grav 3=10(LC 10), 4=7(LC 8), 5=405(LC 1)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 39 lb uplift at joint 3 and 52 lb uplift at joint 4.
- 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 40 lb down and 14 lb up at 0-4-0 on top chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-3=-60, 1-4=-20  
 Concentrated Loads (lb)  
 Vert: 6=-40



December 13, 2022

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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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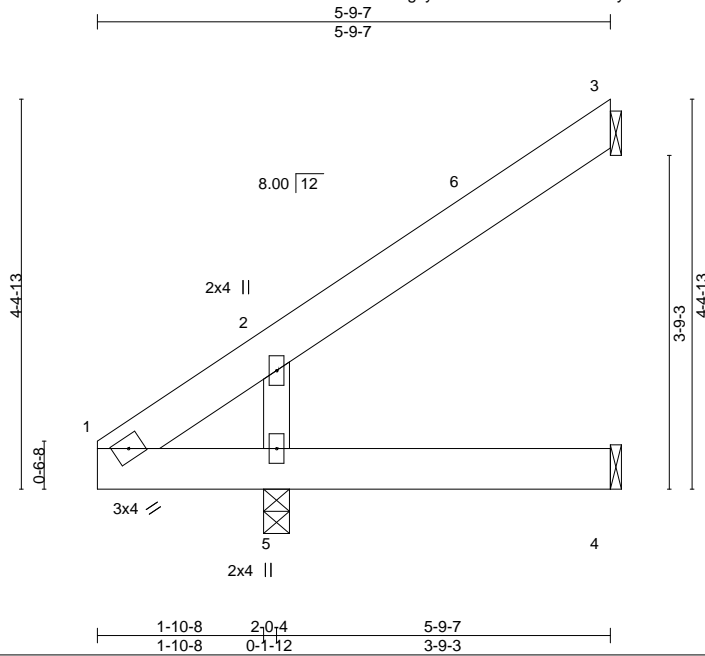


Job J1222-6117	Truss J06	Truss Type JACK-OPEN	Qty 12	Ply 1	Wellco/Geszler-Hamlet Job/Harnett I55697730
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8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Dec 12 14:23:38 2022 Page 1

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Scale = 1:26.0

<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 0.08	Vert(LL)	-0.00 4-5	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	-0.00 4-5	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	-0.01 3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P					Weight: 31 lb	FT = 20%

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

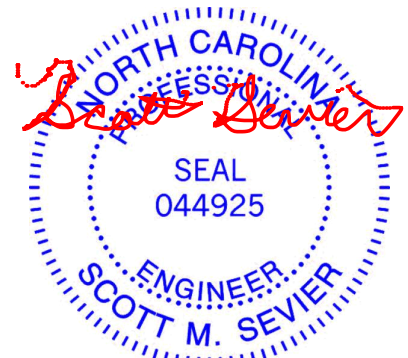
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-9-7 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 3=Mechanical, 4=Mechanical, 5=0-3-8  
 Max Horz 5=126(LC 12)  
 Max Uplift 3=-72(LC 12), 4=-5(LC 12)  
 Max Grav 3=103(LC 19), 4=53(LC 3), 5=354(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 2-5=-250/201

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 5-8-11 zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 72 lb uplift at joint 3 and 5 lb uplift at joint 4.



December 13, 2022

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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

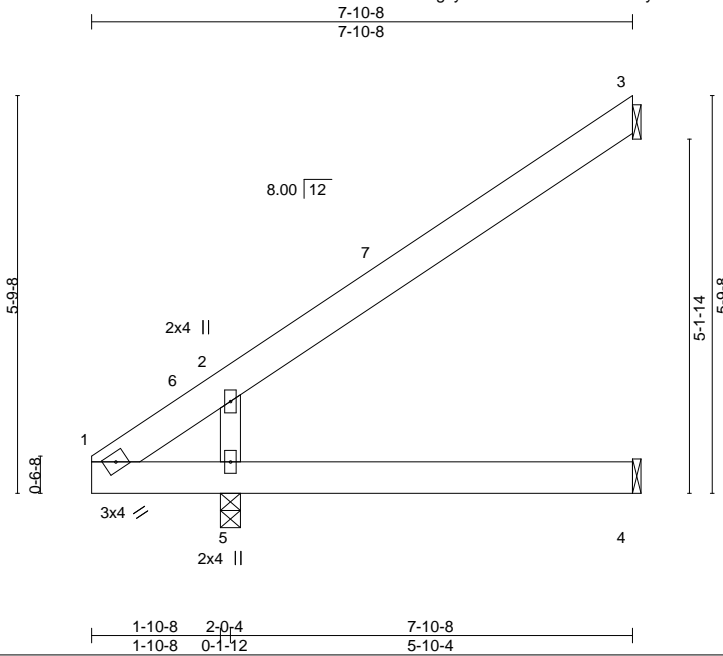


818 Soundside Road  
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Job J1222-6117	Truss J08	Truss Type JACK-OPEN	Qty 21	Ply 1	Wellco/Geszler-Hamlet Job/Harnett 155697731
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Dec 12 14:23:39 2022 Page 1  
ID:7gvyW?ROTcXeMFVfsYvMisy9hrv-fhaVq25978qyxaozU\_DeWfkG4oXouad\_l?CFRy9h2o



Scale = 1:33.5

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 0.18	Vert(LL)	-0.01 4-5	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	-0.02 4-5	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.03 3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P	Wind(LL)	0.02 4-5	>999	240		
								Weight: 42 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) 3=Mechanical, 4=Mechanical, 5=0-3-8  
 Max Horz 5=171(LC 12)  
 Max Uplift 3=-103(LC 12)  
 Max Grav 3=171(LC 19), 4=100(LC 3), 5=422(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-288/244  
 BOT CHORD 1-5=-206/251  
 WEBS 2-5=-341/264

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 7-9-12 zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 103 lb uplift at joint 3.



December 13, 2022

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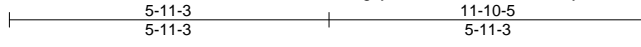
ENGINEERING BY  
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 Edenton, NC 27932

Job J1222-6117	Truss LG1	Truss Type GABLE	Qty 3	Ply 1	Wellco/Geszler-Hamlet Job/Harnett I55697732
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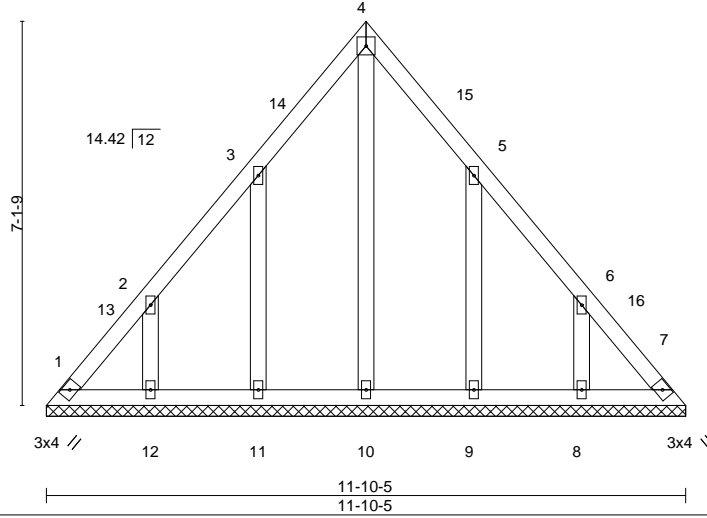
8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Dec 12 14:23:41 2022 Page 1

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4x4 =

Scale = 1:42.7



<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 0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.12	Horz(CT)	0.00	7	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						Weight: 71 lb	FT = 20%

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

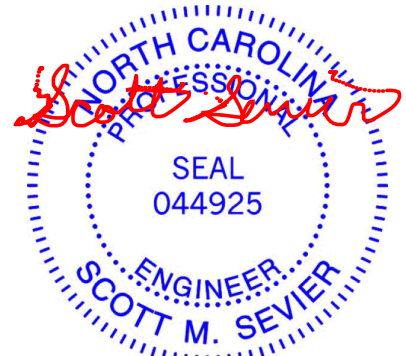
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 11-10-5.  
 (lb) - Max Horz 1=-170(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 11=-115(LC 12), 12=-112(LC 12), 9=-114(LC 13), 8=-113(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 7, 10, 11, 12, 9, 8

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-3-12 to 4-8-9, Interior(1) 4-8-9 to 5-11-3, Exterior(2) 5-11-3 to 10-3-15, Interior(1) 10-3-15 to 11-6-10 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7 except (jt=lb) 11=115, 12=112, 9=114, 8=113.



December 13, 2022

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

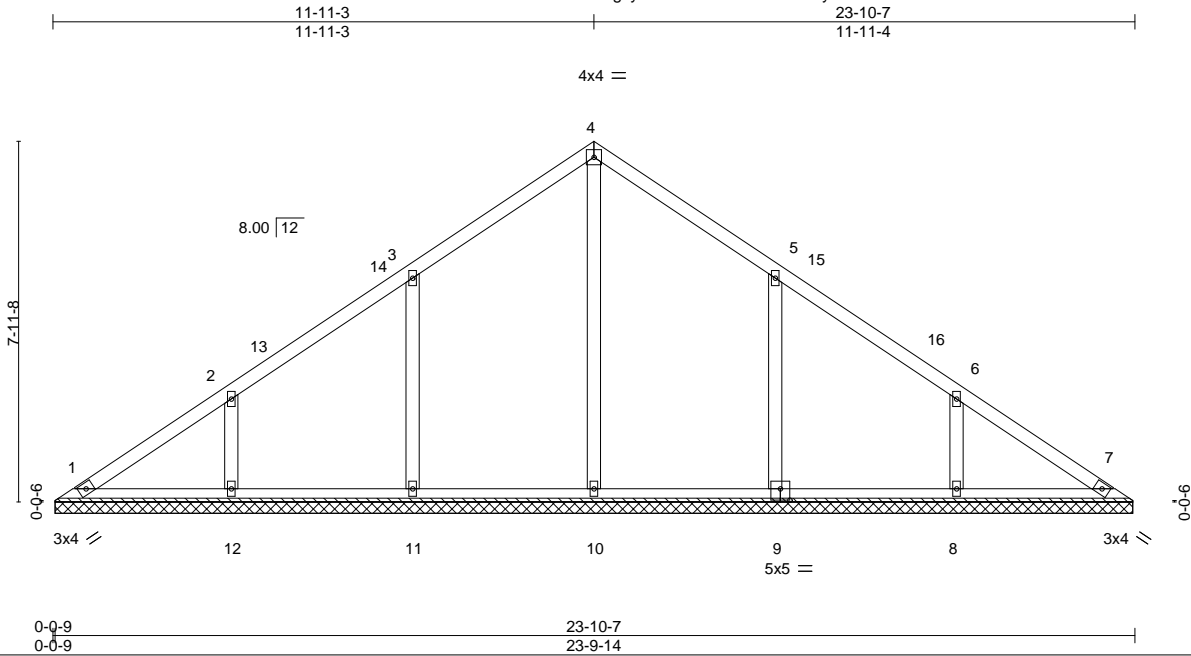


818 Soundside Road  
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Job J1222-6117	Truss VB1	Truss Type VALLEY	Qty 1	Ply 1	Wellco/Geszler-Hamlet Job/Harnett Job Reference (optional)	155697733
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8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Dec 12 14:23:42 2022 Page 1  
ID:7gvyW?ROTcXeMFVfsYvMisy9hrv-3GGdS472Q3CXo1XY96mL7HMnt?WK5vNkhfDssmy9h2l



Scale = 1:50.8

Plate Offsets (X, Y)--	[5:0-0-0,0-0-0], [6:0-0-0,0-0-0], [9:0-2-8,0-3-0]
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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 0.15	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.19	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.17	Horz(CT)	0.00	7	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 107 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 23-9-5.  
 (lb) - Max Horz 1=183(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 12, 8 except 11=102(LC 12), 9=104(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=459(LC 22), 11=446(LC 19), 12=341(LC 19), 9=455(LC 20), 8=338(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 3-11=-308/203, 2-12=-293/195, 5-9=-313/206, 6-8=-293/195

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-15 to 4-10-12, Interior(1) 4-10-12 to 11-11-3, Exterior(2) 11-11-3 to 16-4-0, Interior(1) 16-4-0 to 23-4-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) All plates are 2x4 MT20 unless otherwise indicated.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 12, 8 except (jt=lb) 11=102, 9=104.
  - 7) Non Standard bearing condition. Review required.



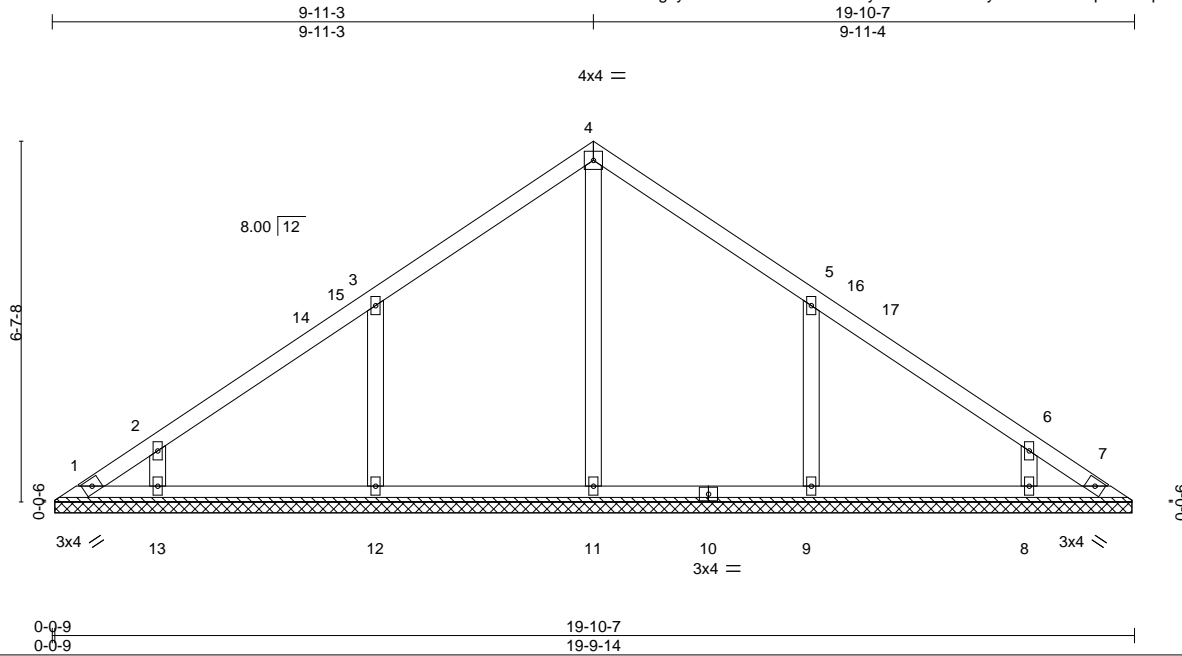
December 13, 2022

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b>          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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p>ENGINEERING BY  <b>TRENCO</b>          A MiTek Affiliate</p> <p>818 Soundside Road          Edenton, NC 27932</p>
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Job J1222-6117	Truss VB2	Truss Type VALLEY	Qty 1	Ply 1	Wellco/Geszler-Hamlet Job/Harnett Job Reference (optional)	I55697734
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Dec 12 14:23:44 2022 Page 1  
ID:7gvyW?ROTCXeMFVfsYvMisy9hrv-OfOOtm9lyhTF1LhxHXOpCiR7EpDwZql18zizzey9h2j



Scale = 1:42.3

Plate Offsets (X,Y)--	[5:0-0-0,0-0-0], [6:0-0-0,0-0-0]				
<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 0.16	Vert(LL) n/a - n/a 999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.19	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.12	Horz(CT) 0.00 7 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S		Weight: 84 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
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 19-9-5.  
 (lb) - Max Horz 1=-151(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 13, 8 except 12=-106(LC 12), 9=-105(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 11=444(LC 19), 12=463(LC 19), 13=261(LC 19), 9=462(LC 20), 8=261(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 3-12=-318/210, 5-9=-318/209

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-15 to 4-10-12, Interior(1) 4-10-12 to 9-11-3, Exterior(2) 9-11-3 to 14-4-0, Interior(1) 14-4-0 to 19-4-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) All plates are 2x4 MT20 unless otherwise indicated.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 13, 8 except (jt=lb) 12=106, 9=105.
  - 7) Non Standard bearing condition. Review required.



December 13, 2022

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Job J1222-6117	Truss VB3	Truss Type VALLEY	Qty 1	Ply 1	Wellco/Geszler-Hamlet Job/Harnett Job Reference (optional)	155697735
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Dec 12 14:23:45 2022 Page 1  
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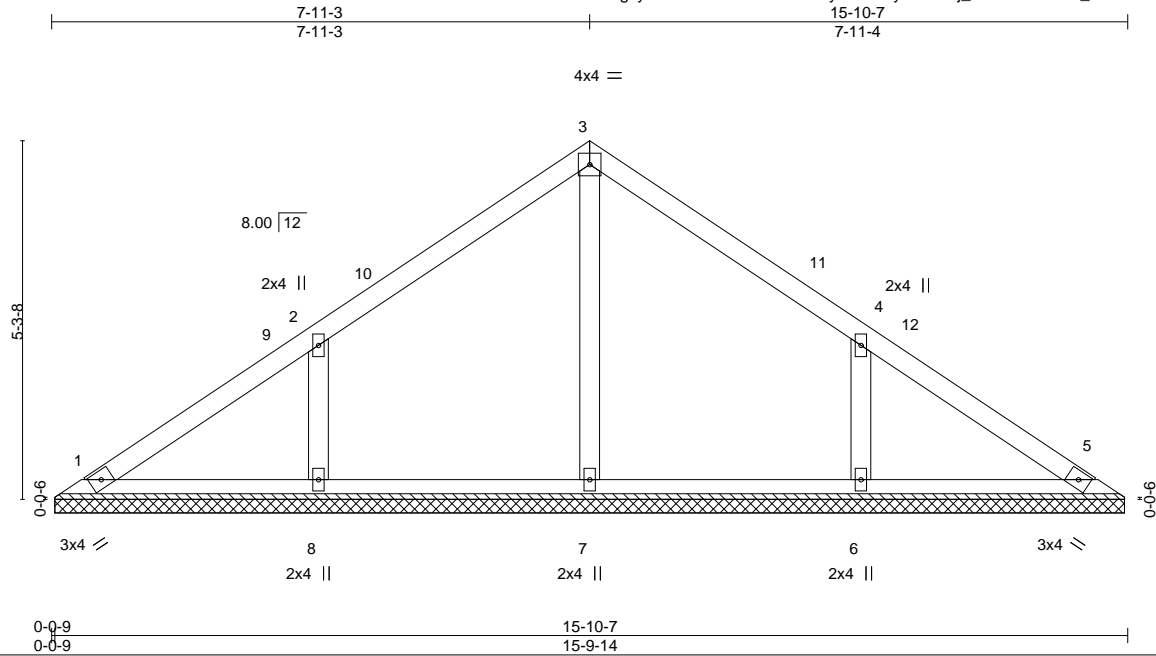


Plate Offsets (X,Y)--	[4:0-0-0,0-0-0]						
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d
TCLL 20.0	Plate Grip DOL	1.15	TC 0.15	Vert(LL)	n/a	-	n/a 999
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	n/a	-	n/a 999
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.00	5	n/a n/a
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S				
							<b>PLATES</b>
							MT20
							<b>GRIP</b>
							244/190
							Weight: 63 lb
							FT = 20%

<b>LUMBER-</b>		<b>BRACING-</b>	
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 15-9-5.  
 (lb) - Max Horz 1=-119(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-107(LC 12), 6=-106(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=376(LC 19), 6=376(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 2-8=-316/209, 4-6=-316/209

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-15 to 4-10-12, Interior(1) 4-10-12 to 7-11-3, Exterior(2) 7-11-3 to 12-4-0, Interior(1) 12-4-0 to 15-4-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=107, 6=106.
  - 6) Non Standard bearing condition. Review required.



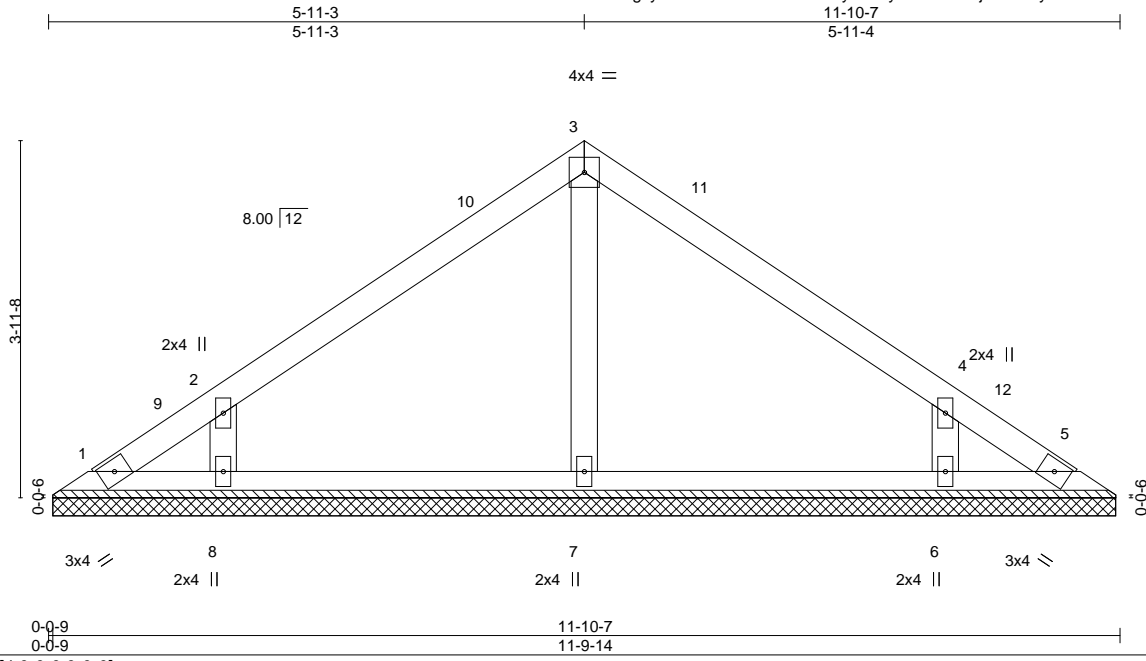
December 13, 2022



Job J1222-6117	Truss VB4	Truss Type VALLEY	Qty 1	Ply 1	Wellco/Geszler-Hamlet Job/Harnett Job Reference (optional)	155697736
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Dec 12 14:23:46 2022 Page 1  
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Scale = 1:25.5

Plate Offsets (X,Y)--	[4:0-0-0,0-0-0]								
<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 0.13	Vert(LL) n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15		BC 0.09	Vert(CT) n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr YES		WB 0.04	Horz(CT) 0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 44 lb	FT = 20%

<b>LUMBER-</b>		<b>BRACING-</b>	
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 11-9-5.  
 (lb) - Max Horz 1=87(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 8, 6  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=264(LC 1), 8=315(LC 19), 6=315(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 2-8=-282/207, 4-6=-282/207

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-15 to 4-10-12, Interior(1) 4-10-12 to 5-11-3, Exterior(2) 5-11-3 to 10-4-0, Interior(1) 10-4-0 to 11-4-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 8, 6.
  - 6) Non Standard bearing condition. Review required.



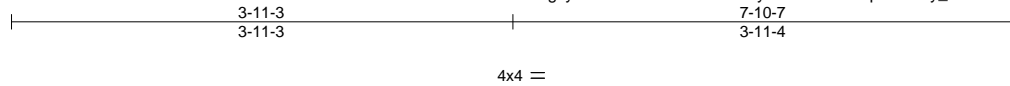
December 13, 2022

Job J1222-6117	Truss VB5	Truss Type VALLEY	Qty 1	Ply 1	Wellco/Geszler-Hamlet Job/Harnett Job Reference (optional)	155697737
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Dec 12 14:23:48 2022 Page 1

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Scale = 1:18.1

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.16	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.09	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.02	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 27 lb	FT = 20%
	Code IRC2015/TPI2014							

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

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

**REACTIONS.** (size) 1=7-9-5, 3=7-9-5, 4=7-9-5  
 Max Horz 1=55(LC 11)  
 Max Uplift 1=24(LC 12), 3=29(LC 13)  
 Max Grav 1=150(LC 1), 3=150(LC 1), 4=251(LC 1)

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=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
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 6) Non Standard bearing condition. Review required.



December 13, 2022

**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

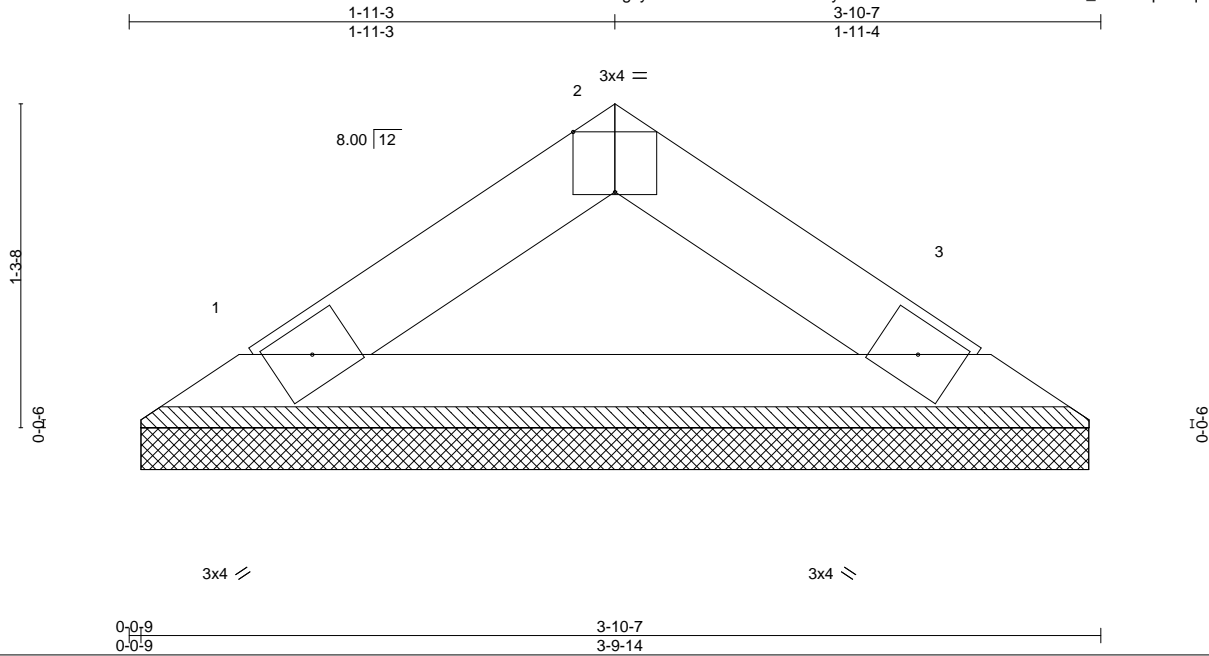


818 Soundside Road  
 Edenton, NC 27932

Job J1222-6117	Truss VB6	Truss Type VALLEY	Qty 1	Ply 1	Wellco/Geszler-Hamlet Job/Harnett Job Reference (optional)	155697738
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Dec 12 14:23:49 2022 Page 1  
ID:7gvyW?ROTCXeMFVfsYvMisy9hrv-McBHWTDrmD5X86Zu44O\_vm8?1qxtE6qmlFQkcsy9h2e



Scale = 1:9.2

Plate Offsets (X,Y)--	[2:0-2-0,Edge]									
<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 0.02	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.07	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: 11 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 3-10-7 oc purlins.
BOT CHORD	2x4 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=3-9-5, 3=3-9-5  
 Max Horz 1=-23(LC 8)  
 Max Uplift 1=-6(LC 12), 3=-6(LC 13)  
 Max Grav 1=115(LC 1), 3=115(LC 1)

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

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=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
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
  - 6) Non Standard bearing condition. Review required.



December 13, 2022

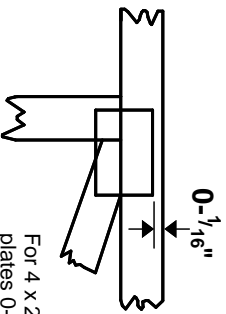
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss 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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p>ENGINEERING BY  <b>TRENCO</b>  <small>A MiTek Affiliate</small></p> <p>818 Soundside Road        Edenton, NC 27932</p>
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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.

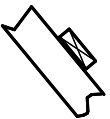
\* Plate location details available in **MITek 20/20 software** or upon request.

## PLATE SIZE

**4 X 4**

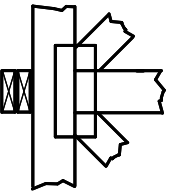
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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/TPI 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/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

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