

RE: J0822-3962  
 Ben Stout/Lot 9 Liberty Meadows/Harnett

Trenco  
 818 Soundside Rd  
 Edenton, NC 27932

**Site Information:**

Customer: Project Name: J0822-3962  
 Lot/Block: Model:  
 Address: Subdivision:  
 City: State:

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

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

This package includes 19 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date
1	I50349821	A1	2/22/2022
2	I50349822	A1GE	2/22/2022
3	I50349823	A2	2/22/2022
4	I50349824	A2A	2/22/2022
5	I50349825	A3	2/22/2022
6	I50349826	A3GE	2/22/2022
7	I50349827	B1	2/22/2022
8	I50349828	B2	2/22/2022
9	I50349829	B3	2/22/2022
10	I50349830	C1	2/22/2022
11	I50349831	C1GE	2/22/2022
12	I50349832	C2GDR	2/22/2022
13	I50349833	M1	2/22/2022
14	I50349834	M1GE	2/22/2022
15	I50349835	P1	2/22/2022
16	I50349836	P1GE	2/22/2022
17	I50349837	VC1	2/22/2022
18	I50349838	VC2	2/22/2022
19	I50349839	VC3	2/22/2022

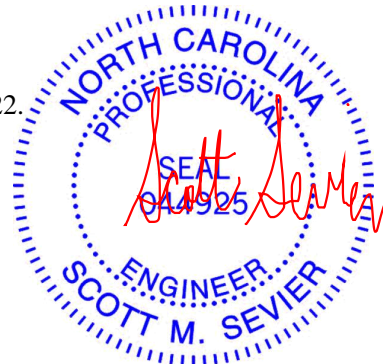
The truss drawing(s) referenced above have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville.

Truss Design Engineer's Name: Sevier, Scott

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

North Carolina COA: C-0844

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



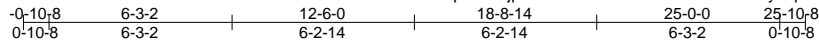
February 22, 2022

Job J0822-3962	Truss A1	Truss Type COMMON	Qty 2	Ply 1	Ben Stout/Lot 9 Liberty Meadows/Harnett 150349821
-------------------	-------------	----------------------	----------	----------	--

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Feb 21 13:22:15 2022 Page 1

ID:7ZHO2pw3t1Ljp9xzPdQGc5zQRh7-NRb94DFbWyCqo?UfOdTyGkmtCv8IKhuWMv7XiNzivAM



5x5 =

Scale = 1:78.8

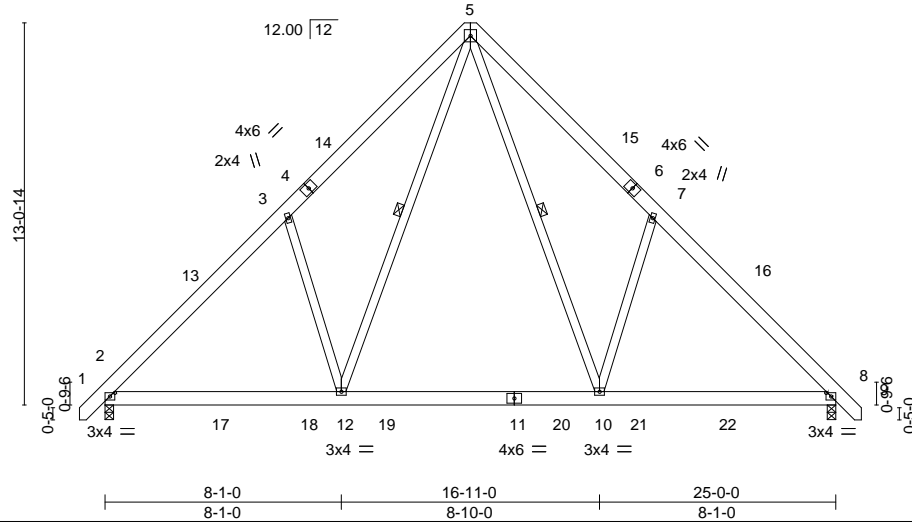


Plate Offsets (X,Y)-- [2:0-2-1,0-1-8], [8:0-2-1,0-1-8]

LOADING (psf)	SPACING-	CSL.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.18	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.29	Vert(LL) -0.06 10-12 >999 360		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.37	Vert(CT) -0.10 10-12 >999 240		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Horz(CT) 0.02 8 n/a n/a		
			Wind(LL) 0.02 2-12 >999 240	Weight: 205 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.  
 WEBS 1 Row at midpt 5-10, 5-12

**REACTIONS.** (size) 2=0-3-8, 8=0-3-8  
 Max Horz 2=-318(LC 8)  
 Max Uplift 2=-67(LC 10), 8=-67(LC 11)  
 Max Grav 2=1117(LC 17), 8=1117(LC 18)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1290/305, 3-5=-1227/540, 5-7=-1227/540, 7-8=-1289/305  
 BOT CHORD 2-12=-110/999, 10-12=-13/646, 8-10=-31/862  
 WEBS 3-12=-498/370, 5-10=-290/754, 7-10=-498/370, 5-12=-290/753

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-2 to 3-7-11, Interior(1) 3-7-11 to 8-1-3, Exterior(2) 8-1-3 to 16-10-13, Interior(1) 16-10-13 to 21-4-5, Exterior(2) 21-4-5 to 25-9-2 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.



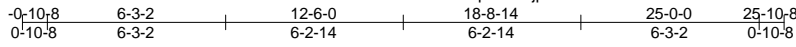
February 22, 2022

Job J0822-3962	Truss A1GE	Truss Type GABLE	Qty 1	Ply 1	Ben Stout/Lot 9 Liberty Meadows/Harnett 150349822
Comtech, Inc, Fayetteville, NC - 28314,					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Feb 21 13:22:16 2022 Page 1

ID:ZHO2pw3t1Ljp9xzPdQGc5zQRh7-sd9XIYGdHGkQ82ryK\_BoyJ4xJYI3AOfbZs4EpzivAL



5x5 =

Scale = 1:80.9

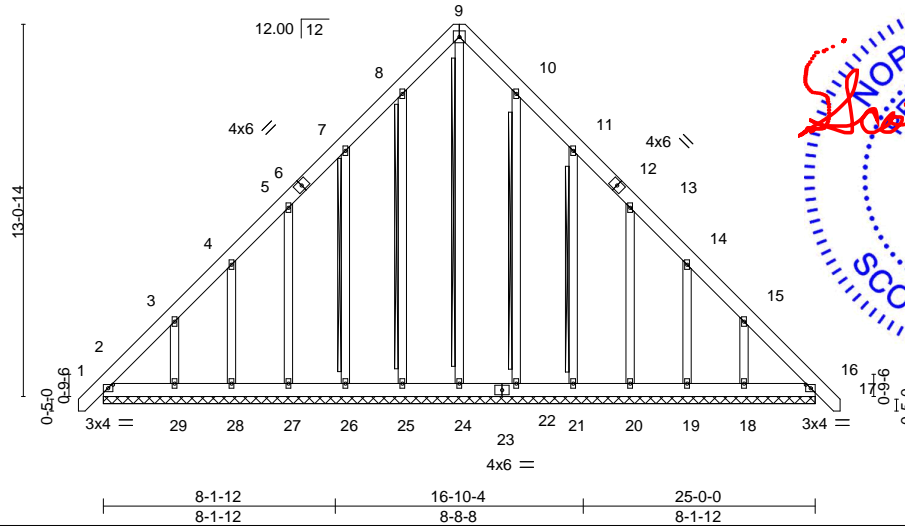


Plate Offsets (X,Y)-- [2:0-2-1,0-1-8], [16:0-2-1,0-1-8]

LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.05	Vert(LL) 0.00	16	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.04	Vert(CT) 0.00	16	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.22	Horz(CT) 0.01	16	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S						
							Weight: 260 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS T-Brace: 2x4 SPF No.2 - 9-24, 8-25, 7-26, 10-22, 11-21  
 Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.  
 Brace must cover 90% of web length.

**REACTIONS.** All bearings 25-0-0.  
 (lb) - Max Horz 2=-397(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 25, 22, 16 except 2=-135(LC 8), 26=-160(LC 10), 27=-145(LC 10), 28=-133(LC 10), 29=-215(LC 10), 21=-163(LC 11), 20=-145(LC 11), 19=-132(LC 11), 18=-211(LC 11)  
 Max Grav All reactions 250 lb or less at joint(s) 25, 26, 27, 28, 29, 22, 21, 20, 19, 18 except 2=337(LC 10), 24=262(LC 11), 16=294(LC 11)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-524/322, 3-4=-342/238, 8-9=-237/264, 9-10=-237/264, 14-15=-286/172, 15-16=-466/322  
 BOT CHORD 2-29=-235/394, 28-29=-236/395, 27-28=-237/395, 26-27=-237/396, 25-26=-238/396, 24-25=-238/396, 22-24=-238/396, 21-22=-238/396, 20-21=-237/395, 19-20=-237/395, 18-19=-236/394, 16-18=-235/393  
 WEBS 9-24=-255/170

- 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=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-9-2 to 3-7-11, Exterior(2) 3-7-11 to 8-1-3, Corner(3) 8-1-3 to 16-10-13, Exterior(2) 16-10-13 to 21-4-5, Corner(3) 21-4-5 to 25-9-2 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 4) All plates are 2x4 MT20 unless otherwise indicated.
  - 5) Gable requires continuous bottom chord bearing.
  - 6) Gable studs spaced at 2-0-0 oc.
  - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 25, 22, 16 except (it=lb) 2=135, 26=160, 27=145, 28=133, 29=215, 21=163, 20=145, 19=132, 18=211.
  - 10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

February 22, 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

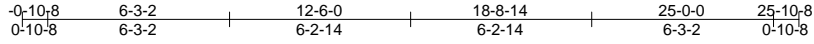


818 Soundside Road  
 Edenton, NC 27932

Job J0822-3962	Truss A2	Truss Type COMMON	Qty 3	Ply 1	Ben Stout/Lot 9 Liberty Meadows/Harnett 150349823
-------------------	-------------	----------------------	----------	----------	--

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Feb 21 13:22:17 2022 Page 1  
ID:7ZHO2pw3t1Ljp9xzPdQGc5zQRh7-KqjwVuHrZ2TY2ld1W2VQL9sCejrPoT9ppqDcemFzivAK



Scale = 1:79.4

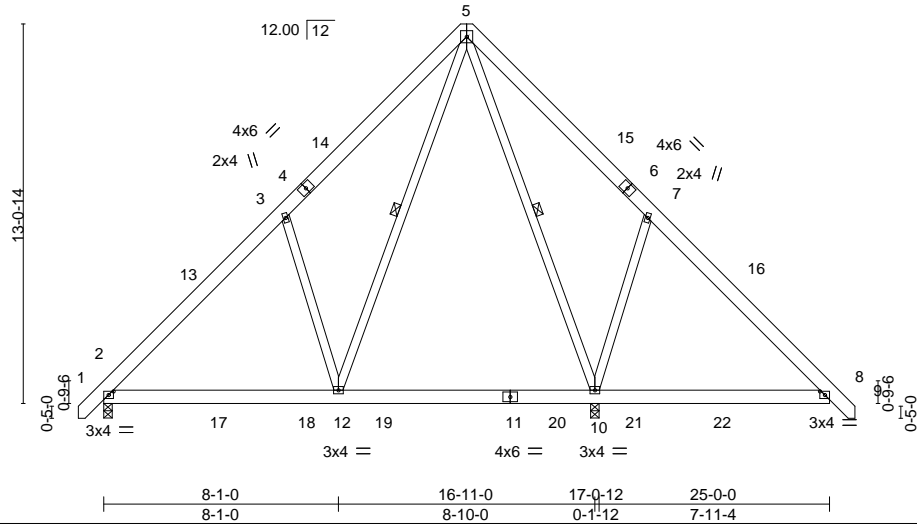


Plate Offsets (X,Y)-- [2:0-2-1,0-1-8], [8:0-2-1,0-1-8]

LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.25	Vert(LL) -0.05	10-12	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.24	Vert(CT) -0.07	10-12	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.89	Horz(CT) 0.00	10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) -0.03	10-12	>999	240		
							Weight: 205 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.  
 WEBS 1 Row at midpt 5-10, 5-12

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8  
 Max Horz 2=318(LC 9)  
 Max Uplift 2=-39(LC 10), 10=-98(LC 11)  
 Max Grav 2=626(LC 23), 10=1637(LC 17)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-606/87, 3-5=-640/251, 5-7=-136/597, 7-8=-388/506  
 BOT CHORD 2-12=-127/503, 10-12=-172/394, 8-10=-239/402  
 WEBS 3-12=-524/387, 5-10=-1119/387, 7-10=-551/420, 5-12=-267/772

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-2 to 3-7-11, Interior(1) 3-7-11 to 8-1-3, Exterior(2) 8-1-3 to 16-10-13, Interior(1) 16-10-13 to 21-4-5, Exterior(2) 21-4-5 to 25-9-2 zone; cantilever 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10.



February 22, 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 J0822-3962	Truss A2A	Truss Type COMMON	Qty 5	Ply 1	Ben Stout/Lot 9 Liberty Meadows/Harnett Job Reference (optional)	150349824
-------------------	--------------	----------------------	----------	----------	---	-----------

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Feb 21 13:22:18 2022 Page 1

ID:7ZHO2pw3t1Ljp9xzPdQGc5zQRh7-o0HljEHTptbOfSCE3l0fuNONT7AcXw\_y2tLBhzivAJ



5x5 =

Scale = 1:79.4

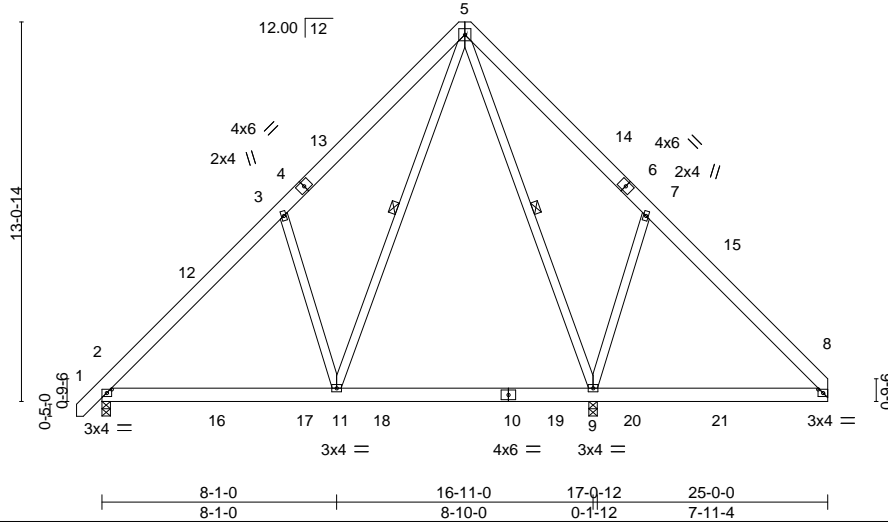


Plate Offsets (X,Y)--	[2:0-2-1,0-1-8], [8:0-2-1,0-1-8]
-----------------------	----------------------------------

LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.24	Vert(LL) -0.05	9-11	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.25	Vert(CT) -0.07	9-11	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.86	Horz(CT) 0.00	9	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) -0.03	9-11	>999	240		
							Weight: 202 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.2	WEBS 1 Row at midpt 5-9, 5-11

**REACTIONS.** (size) 2=0-3-8, 9=0-3-8  
 Max Horz 2=314(LC 7)  
 Max Uplift 2=-40(LC 10), 9=-86(LC 10)  
 Max Grav 2=633(LC 23), 9=1593(LC 17)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-635/94, 3-5=-635/252, 5-7=-72/531, 7-8=-328/441  
 BOT CHORD 2-11=-135/510, 9-11=-192/343, 8-9=-255/324  
 WEBS 3-11=-524/386, 5-9=-1073/315, 7-9=-555/428, 5-11=-265/771

- 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=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-2 to 3-7-11, Interior(1) 3-7-11 to 8-1-3, Exterior(2) 8-1-3 to 16-10-13, Interior(1) 16-10-13 to 20-7-3, Exterior(2) 20-7-3 to 25-0-0 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 9.

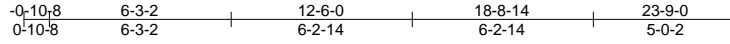


February 22, 2022

Job J0822-3962	Truss A3	Truss Type COMMON	Qty 9	Ply 1	Ben Stout/Lot 9 Liberty Meadows/Harnett 150349825
-------------------	-------------	----------------------	----------	----------	--

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Feb 21 13:22:19 2022 Page 1  
ID:7ZHO2pw3t1Ljp9xzPdQGc5zQRh7-GCrqwal6aBjFHcnQdTXuQaxZCwV5GVu6HX5kr8zivAl



5x5 =

Scale = 1:79.4

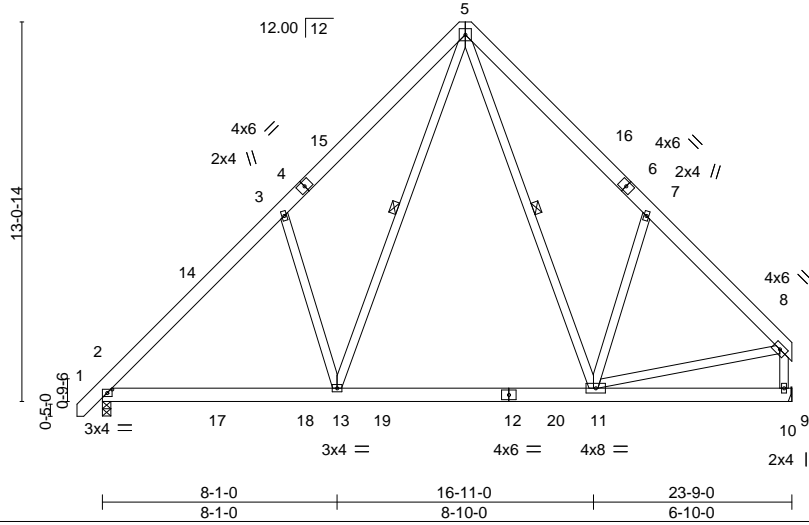


Plate Offsets (X,Y)--	[2:0-2-1,0-1-8]
-----------------------	-----------------

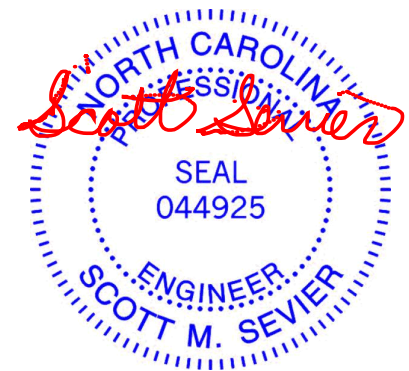
LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.18	Vert(LL) -0.07	11-13	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.29	Vert(CT) -0.11	11-13	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.37	Horz(CT) 0.01	10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.02	2-13	>999	240		
							Weight: 207 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.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	WEBS 1 Row at midpt 5-11, 5-13

**REACTIONS.** (size) 2=0-3-8, 10=Mechanical  
 Max Horz 2=312(LC 7)  
 Max Uplift 2=-63(LC 10), 10=-63(LC 10)  
 Max Grav 2=1043(LC 17), 10=976(LC 17)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1192/295, 3-5=-1153/530, 5-7=-1044/510, 7-8=-1019/278, 8-10=-933/259  
 BOT CHORD 2-13=-132/912, 11-13=-26/553  
 WEBS 3-13=-498/369, 8-11=-91/688, 5-11=-255/501, 7-11=-469/367, 5-13=-291/772

- 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=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-2 to 3-7-11, Interior(1) 3-7-11 to 8-1-3, Exterior(2) 8-1-3 to 16-10-13, Interior(1) 16-10-13 to 18-9-12, Exterior(2) 18-9-12 to 23-5-15 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 20.0psf 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) Refer to girder(s) for truss to truss connections.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10.

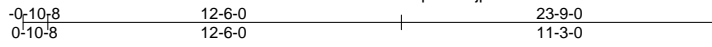


February 22, 2022



Job J0822-3962	Truss A3GE	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	Ben Stout/Lot 9 Liberty Meadows/Harnett 150349826
Comtech, Inc., Fayetteville, NC - 28314,					Job Reference (optional)

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Feb 21 13:22:20 2022 Page 1  
ID:7ZHO2pw3t1Ljp9xzPdQGc5zQRh7-kPP27wJkLUr6vmMcBA27zoUjKwv1?wPFWBqINazivAH



5x5 =

Scale = 1:81.5

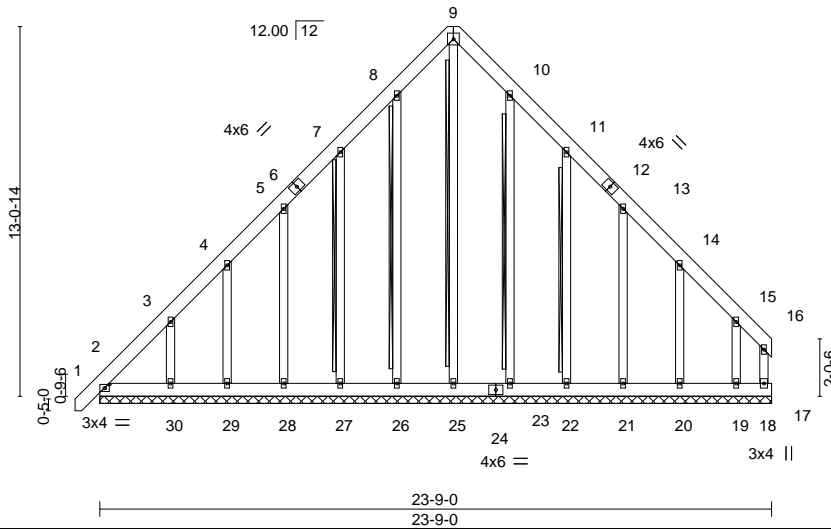


Plate Offsets (X,Y)-- [2:0-2-1,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.16	Vert(LL) -0.00	1	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.06	Vert(CT) 0.00	1	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.48	Horz(CT) 0.00	18	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 252 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS T-Brace: 2x4 SPF No.2 - 9-25, 8-26, 7-27, 10-23, 11-22  
Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.

**REACTIONS.** All bearings 23-9-0.  
(lb) - Max Horz 2=386(LC 7)  
Max Uplift All uplift 100 lb or less at joint(s) 26, 23 except 18=111(LC 9), 2=258(LC 6), 25=137(LC 9), 27=166(LC 10), 28=145(LC 10), 29=132(LC 10), 30=209(LC 10), 22=178(LC 11), 21=146(LC 11), 20=136(LC 11), 19=323(LC 11)  
Max Grav All reactions 250 lb or less at joint(s) 26, 27, 28, 29, 23, 22, 21, 20, 19 except 18=283(LC 11), 2=341(LC 9), 25=566(LC 11), 30=257(LC 17)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-475/443, 3-4=-373/363, 4-5=-338/353, 5-7=-301/401, 7-8=-354/497, 8-9=-393/496, 9-10=-393/470, 10-11=-353/413, 11-13=-230/260  
WEBS 9-25=-546/368

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-9-2 to 3-7-11, Exterior(2) 3-7-11 to 8-1-3, Corner(3) 8-1-3 to 16-10-13, Exterior(2) 16-10-13 to 19-1-2, Corner(3) 19-1-2 to 23-5-15 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 20.0psf 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) 26, 23 except (jt=lb) 18=111, 2=258, 25=137, 27=166, 28=145, 29=132, 30=209, 22=178, 21=146, 20=136, 19=323.
  - Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



February 22, 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 ANSITPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



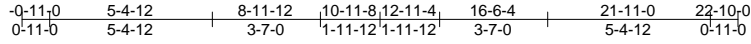
818 Soundside Road  
Edenton, NC 27932

Job J0822-3962	Truss B1	Truss Type ATTIC	Qty 2	Ply 1	Ben Stout/Lot 9 Liberty Meadows/Harnett 150349827
-------------------	-------------	---------------------	----------	----------	--

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Feb 21 13:22:21 2022 Page 1

ID:7ZHO2pw3t1Ljp9xzPdQGc5zQRh7-CbyQLGKM6ozzWwxoluaMV?0qcK7GkS0Pirav0zivAG



6x8 =

Scale = 1:76.4

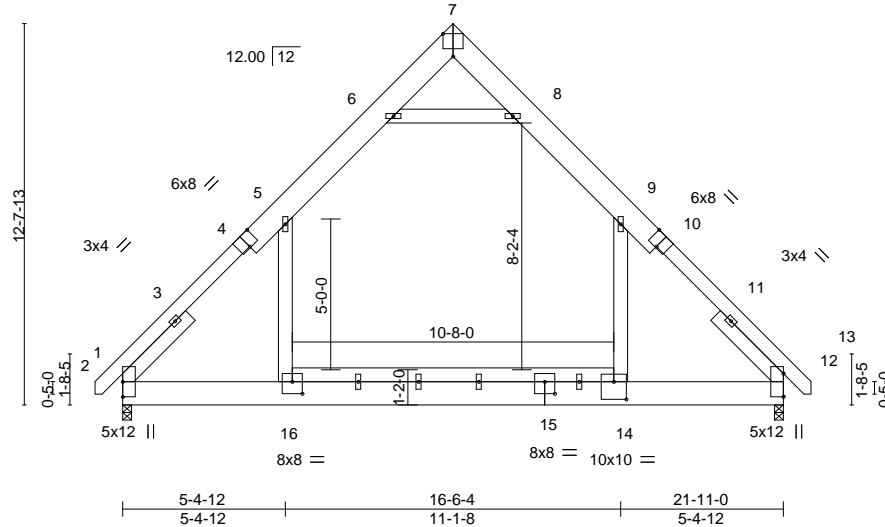


Plate Offsets (X,Y)-- [4:0-4-0,Edge], [7:0-4-0,Edge], [10:0-4-0,Edge], [14:0-5-0,0-7-0], [15:0-4-0,0-4-12], [16:0-4-0,0-4-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.44	Vert(LL) -0.12	14-16	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.57	Vert(CT) -0.21	14-16	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.13	Horz(CT) 0.01	12	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.05	16	>999	240		
							Weight: 273 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x10 SP No.1 \*Except\*  
1-4,10-13: 2x6 SP No.1  
BOT CHORD 2x10 SP No.1  
WEBS 2x6 SP No.1  
SLIDER Left 2x6 SP No.1 3-1-11, Right 2x6 SP No.1 3-1-11

**BRACING-**

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

**REACTIONS.**

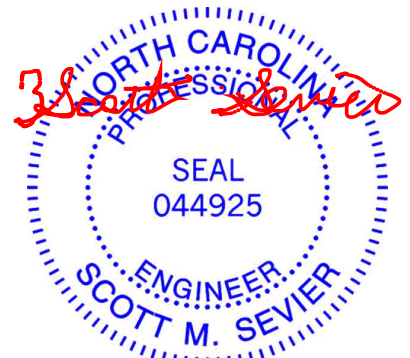
(size) 2=0-3-8, 12=0-3-8  
Max Horz 2=281(LC 6)  
Max Grav 2=1445(LC 18), 12=1445(LC 19)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-5=-1862/27, 5-6=-1034/206, 6-7=-67/399, 7-8=-67/400, 8-9=-1033/206,  
9-12=-1860/27  
BOT CHORD 2-16=0/1087, 14-16=0/1092, 12-14=0/1086  
WEBS 6-8=-1521/416, 5-16=0/948, 9-14=0/948

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; 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 6-7-3, Corner(3) 6-7-3 to 15-4-13, Exterior(2) 15-4-13 to 18-4-5, Corner(3) 18-4-5 to 22-9-2 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 2x6 MT20 unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf 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). 5-6, 8-9, 6-8; Wall dead load (5.0psf) on member(s). 5-16, 9-14
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 14-16
- Attic room checked for L/360 deflection.



February 22, 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

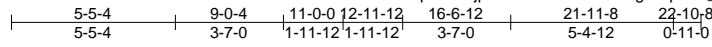


Job J0822-3962	Truss B2	Truss Type ATTIC	Qty 2	Ply 1	Ben Stout/Lot 9 Liberty Meadows/Harnett 150349828
-------------------	-------------	---------------------	----------	----------	--

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Feb 21 13:22:22 2022 Page 1

ID:7ZHO2pw3t1Ljp9xzPdQGc5zQRh7-gnWpYcl\_t55q83W?lb5b2DZ\_EKTUTvDYzVJORTzivAF



6x8 =

Scale = 1:76.4

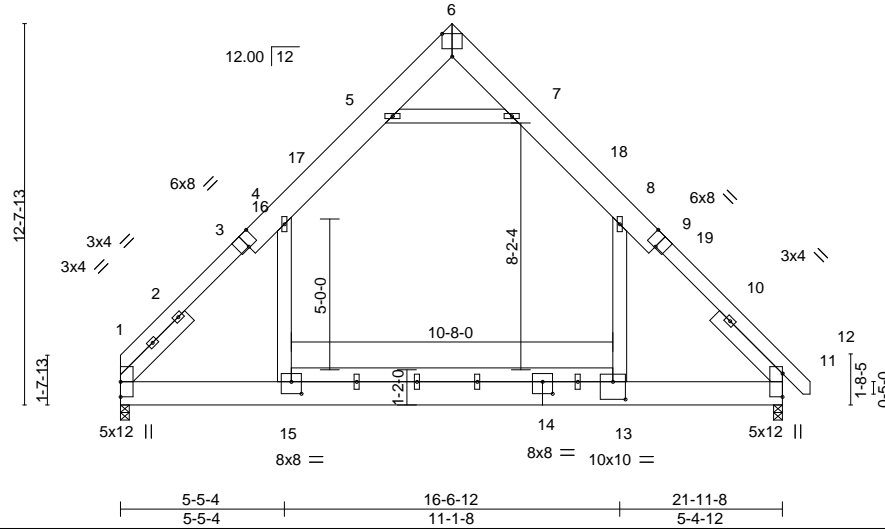


Plate Offsets (X,Y)-- [3:0-4-0,Edge], [6:0-4-0,Edge], [9:0-4-0,Edge], [13:0-5-0,0-7-0], [14:0-4-0,0-4-12], [15:0-4-0,0-4-12]

LOADING (psf)	SPACING-	CSL.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.45	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.57	Vert(LL) -0.13 13-15 >999 360		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.14	Vert(CT) -0.21 13-15 >999 240		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Horz(CT) 0.01 11 n/a n/a		
			Wind(LL) 0.05 15 >999 240	Weight: 271 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x10 SP No.1 \*Except\*  
1-3,9-12: 2x6 SP No.1  
BOT CHORD 2x10 SP No.1  
WEBS 2x6 SP No.1  
SLIDER Left 2x6 SP No.1 3-2-1, Right 2x6 SP No.1 3-1-11

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-5-2 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 1=0-3-8, 11=0-3-8  
Max Horz 1=284(LC 7)  
Max Grav 1=1413(LC 19), 11=1448(LC 19)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-4=-1862/0, 4-5=-1038/189, 5-6=-54/408, 6-7=-56/407, 7-8=-1036/187, 8-11=-1871/12  
BOT CHORD 1-15=0/1094, 13-15=0/1099, 11-13=0/1093  
WEBS 5-7=-1541/374, 4-15=0/936, 8-13=0/956

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; 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 6-7-3, Exterior(2) 6-7-3 to 15-4-13, Interior(1) 15-4-13 to 18-4-5, Exterior(2) 18-4-5 to 22-9-2 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 2x6 MT20 unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf 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 22, 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 J0822-3962	Truss B3	Truss Type ROOF TRUSS	Qty 3	Ply 1	Ben Stout/Lot 9 Liberty Meadows/Harnett 150349829
-------------------	-------------	--------------------------	----------	----------	--

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Feb 21 13:22:23 2022 Page 1

ID:7ZHO2pw3t1Ljp9xzPdQGc5zQRh7-8\_4BmyLcePDhmD5BslcqaQ69p8puCMRhC93y\_vzivAE

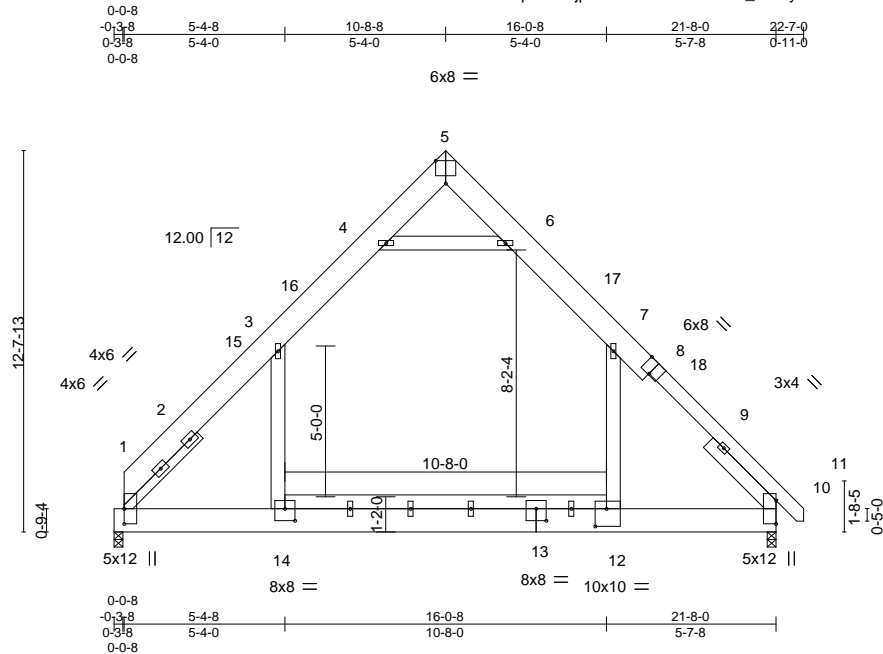


Plate Offsets (X,Y)-- [1:0-6-0,0-0-0], [5:0-4-0,Edge], [8:0-4-0,Edge], [12:0-4-8,0-7-0], [13:0-4-0,0-4-12], [14:0-4-0,0-4-12]

LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.46	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.56	Vert(LL) -0.12 12-14 >999 360		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.14	Vert(CT) -0.20 12-14 >999 240		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Horz(CT) 0.01 10 n/a n/a		
			Wind(LL) 0.05 12 >999 240	Weight: 278 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x10 SP No.1 \*Except\*  
 8-11: 2x6 SP No.1  
 BOT CHORD 2x10 SP No.1  
 WEBS 2x6 SP No.1  
 SLIDER Left 2x4 SP No.2 3-6-1, Right 2x6 SP No.1 3-1-11

**BRACING-**

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

**REACTIONS.**

(size) 1=0-3-8, 10=0-3-8  
 Max Horz 1=284(LC 7)  
 Max Grav 1=1414(LC 19), 10=1426(LC 19)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-3=-1889/0, 3-4=-1018/178, 4-5=-37/361, 5-6=-34/384, 6-7=-1015/188, 7-10=-1808/0  
 BOT CHORD 1-14=0/1054, 12-14=0/1059, 10-12=0/1054  
 WEBS 3-14=0/998, 7-12=0/915, 4-6=-1472/333

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-8 to 4-5-5, Interior(1) 4-5-5 to 6-3-11, Exterior(2) 6-3-11 to 15-1-5, Interior(1) 15-1-5 to 18-0-13, Exterior(2) 18-0-13 to 22-5-10 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 2x6 MT20 unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Ceiling dead load (10.0 psf) on member(s). 3-4, 6-7, 4-6; Wall dead load (5.0psf) on member(s).3-14, 7-12
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-14
- Attic room checked for L/360 deflection.



February 22, 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



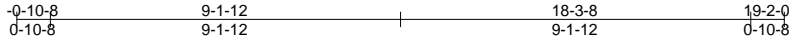
818 Soundside Road  
 Edenton, NC 27932

Job J0822-3962	Truss C1	Truss Type KINGPOST	Qty 2	Ply 1	Ben Stout/Lot 9 Liberty Meadows/Harnett 150349830
-------------------	-------------	------------------------	----------	----------	--

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Feb 21 13:22:24 2022 Page 1

ID:7ZHO2pw3t1Ljp9xzPdQGc5zQRh7-dAeZzIMEQjLYNNgNQ0737eeL0XB\_xporRpoVWLzivAD



5x8 ||

Scale = 1:60.2

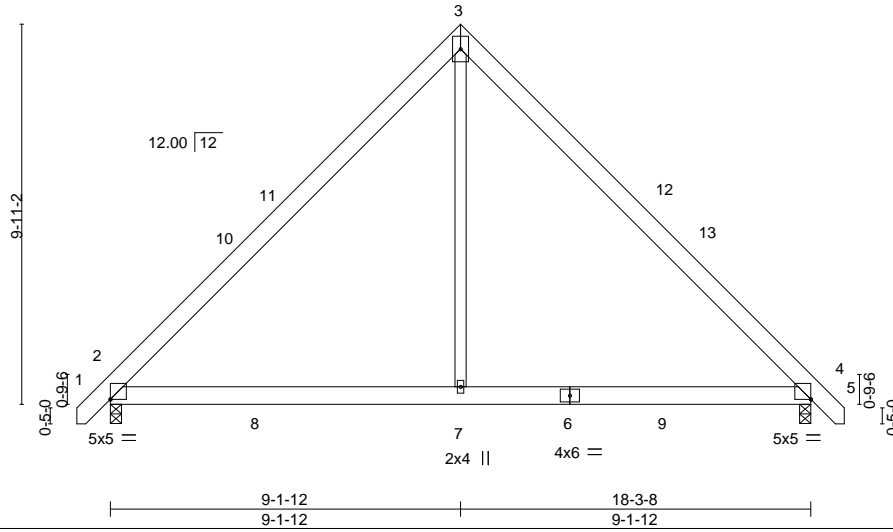


Plate Offsets (X,Y)-- [2:Edge,0-0-1], [4:Edge,0-0-1]

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) -0.06	2-7	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.38	Vert(CT) -0.11	2-7	>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	Wind(LL) 0.05	2-7	>999	240		
							Weight: 123 lb	FT = 20%

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

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

**REACTIONS.** (size) 4=0-3-8, 2=0-3-8  
 Max Horz 2=-237(LC 8)  
 Max Uplift 4=-52(LC 11), 2=-52(LC 10)  
 Max Grav 4=855(LC 18), 2=855(LC 17)

**FORCES.** (lb) - Max. Comp./Max. Ten. - all forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-921/227, 3-4=-921/227  
 BOT CHORD 2-7=-3/576, 4-7=-3/576  
 WEBS 3-7=0/583

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-2 to 3-7-11, Interior(1) 3-7-11 to 4-8-15, Exterior(2) 4-8-15 to 13-6-9, Interior(1) 13-6-9 to 14-7-13, Exterior(2) 14-7-13 to 19-0-10 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.



February 22, 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

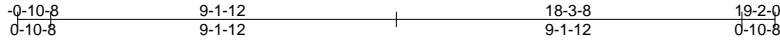


818 Soundside Road  
 Edenton, NC 27932

Job J0822-3962	Truss C1GE	Truss Type GABLE	Qty 1	Ply 1	Ben Stout/Lot 9 Liberty Meadows/Harnett 150349831
-------------------	---------------	---------------------	----------	----------	--

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Feb 21 13:22:25 2022 Page 1  
ID:7ZHO2pw3t1Ljp9xzPdQGc5zQRh7-5MCxBdNs90TP?XEa\_jelgrBcvxcggGy\_fTY32nzivAC



Scale = 1:61.0

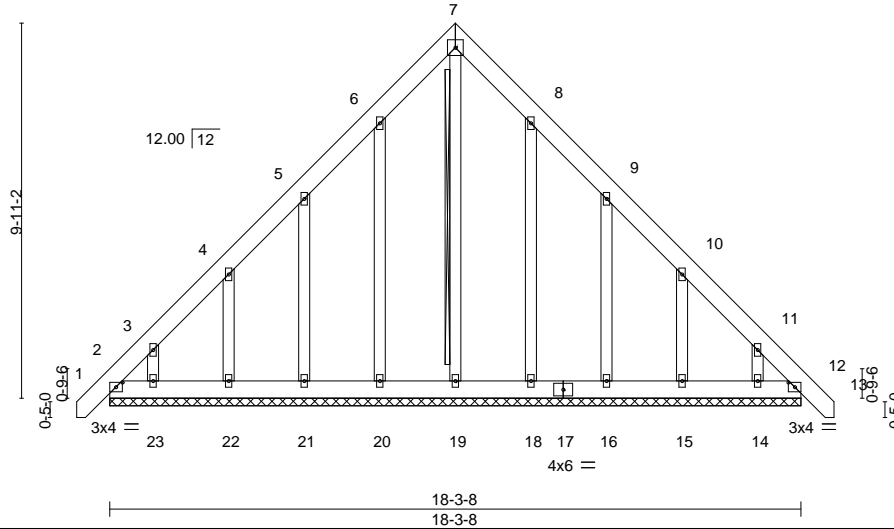


Plate Offsets (X,Y)--	[2:0-2-1,0-1-8], [12:0-2-1,0-1-8]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.04	Vert(LL) -0.00 12 n/r 120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.03	Vert(CT) -0.00 12 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.14	Horz(CT) 0.00 12 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S			
				Weight: 171 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS T-Brace: 2x4 SPF No.2 - 7-19  
Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.  
Brace must cover 90% of web length.

**REACTIONS.** All bearings 18-3-8.  
(lb) - Max Horz 2=-297(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 12 except 20=-117(LC 10), 21=-155(LC 10), 22=-147(LC 10), 23=-163(LC 10), 18=-110(LC 11), 16=-157(LC 11), 15=-147(LC 11), 14=-158(LC 11), 2=-128(LC 8)  
Max Grav All reactions 250 lb or less at joint(s) 12, 19, 20, 21, 22, 23, 18, 16, 15, 14 except 2=281(LC 10)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-410/249, 3-4=-277/188, 11-12=-367/249  
BOT CHORD 2-23=-158/289, 22-23=-160/290, 21-22=-161/290, 20-21=-161/291, 19-20=-162/291, 18-19=-162/291, 16-18=-161/291, 15-16=-161/290, 14-15=-160/289, 12-14=-158/287

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-9-2 to 3-7-11, Exterior(2) 3-7-11 to 4-8-15, Corner(3) 4-8-15 to 13-6-9, Exterior(2) 13-6-9 to 14-7-13, Corner(3) 14-7-13 to 19-0-10 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 20.0psf 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 except (jt=lb) 20=117, 21=155, 22=147, 23=163, 18=110, 16=157, 15=147, 14=158, 2=128.
  - Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



February 22, 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

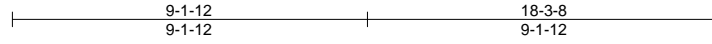


818 Soundside Road  
Edenton, NC 27932

Job J0822-3962	Truss C2GDR	Truss Type COMMON	Qty 1	Ply 2	Ben Stout/Lot 9 Liberty Meadows/Harnett 150349832
-------------------	----------------	----------------------	----------	----------	--

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Feb 21 13:22:26 2022 Page 1  
ID:7ZHO2pw3t1Ljp9xzPdQGc5zQRh7-ZZmJOzOVwKbGdhpmXR9XC3kgLLpwPzf8u7HcaEzivAB



5x8 ||

Scale = 1:59.3

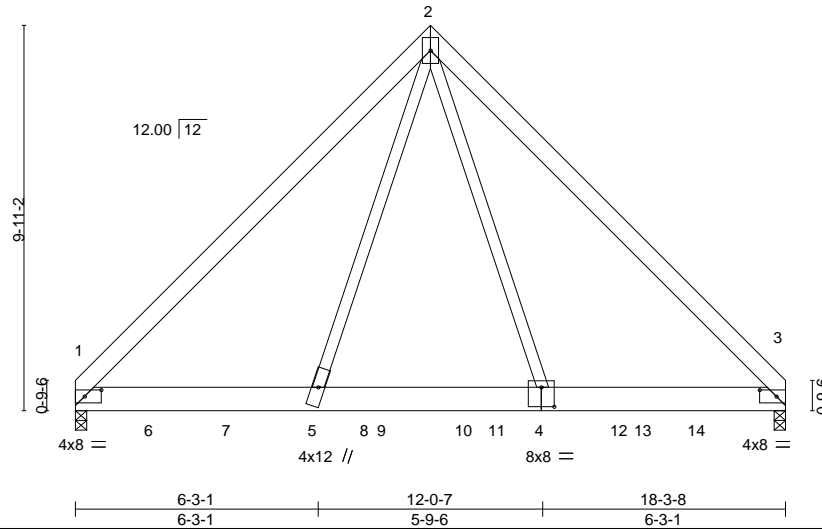


Plate Offsets (X,Y)-- [1:0-5-3,0-2-0], [3:0-5-3,0-2-0], [4:0-4-0,0-6-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.48	Vert(LL) -0.05	3-4	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.60	Vert(CT) -0.09	3-4	>999	240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.41	Horz(CT) 0.02	3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.04	3-4	>999	240		
							Weight: 293 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x8 SP No.1  
 WEBS 2x4 SP No.2

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

**REACTIONS.** (size) 1=0-3-8, 3=0-3-8  
 Max Horz 1=223(LC 24)  
 Max Uplift 1=-340(LC 9), 3=-398(LC 8)  
 Max Grav 1=4466(LC 1), 3=5251(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-4871/438, 2-3=-4827/435  
 BOT CHORD 1-5=-241/3295, 4-5=-173/2308, 3-4=-215/3267  
 WEBS 2-5=-228/3276, 2-4=-229/3326

- 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: 2x8 - 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=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=340, 3=398.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 919 lb down and 83 lb up at 1-11-4, 919 lb down and 83 lb up at 3-11-4, 919 lb down and 83 lb up at 5-11-4, 919 lb down and 83 lb up at 7-11-4, 919 lb down and 83 lb up at 9-11-4, 919 lb down and 83 lb up at 11-11-4, 919 lb down and 83 lb up at 13-11-4, and 919 lb down and 83 lb up at 15-11-4, and 927 lb down and 75 lb up at 18-1-12 on bottom 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=-20, 1-2=-60, 2-3=-60



February 22, 2022

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 J0822-3962	Truss C2GDR	Truss Type COMMON	Qty 1	Ply <b>2</b>	Ben Stout/Lot 9 Liberty Meadows/Harnett Job Reference (optional)	150349832
-------------------	----------------	----------------------	----------	-----------------	---	-----------

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Feb 21 13:22:26 2022 Page 2  
ID:7ZHO2pw3t1Ljp9xzPdQGc5zQRh7-ZZmJOzOVwKbGdhpmXR9XC3kgLLpwPfz8u7HcaEzivAB

**LOAD CASE(S)** Standard

Concentrated Loads (lb)

Vert: 3=-927(F) 5=-919(F) 4=-919(F) 6=-919(F) 7=-919(F) 9=-919(F) 10=-919(F) 12=-919(F) 14=-919(F)

**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

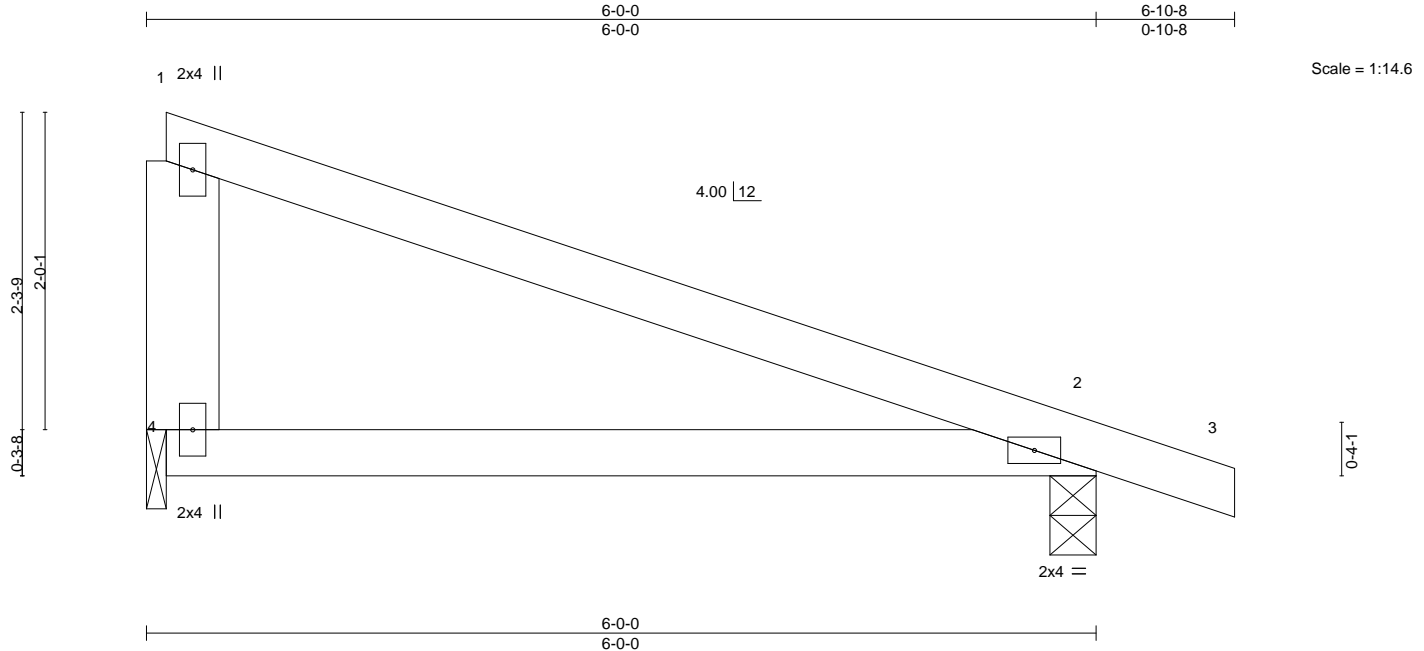


818 Soundside Road  
Edenton, NC 27932

Job J0822-3962	Truss M1	Truss Type ROOF SPECIAL	Qty 8	Ply 1	Ben Stout/Lot 9 Liberty Meadows/Harnett Job Reference (optional)	150349833
-------------------	-------------	----------------------------	----------	----------	---	-----------

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Feb 21 13:22:27 2022 Page 1  
ID:7ZHO2pw3t1Ljp9xzPdQGc5zQRh7-1IKibJO7hej7ErOy58gmIGsFIEz8CbH7m197gzivAA



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.43	Vert(LL) -0.05	2-4	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.29	Vert(CT) -0.11	2-4	>642	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	4	****	240	Weight: 23 lb	FT = 20%

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

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

**REACTIONS.** (size) 2=0-3-8, 4=0-1-8  
Max Horz 4=-76(LC 7)  
Max Uplift 2=-59(LC 7), 4=-40(LC 11)  
Max Grav 2=292(LC 1), 4=219(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=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.



February 22, 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

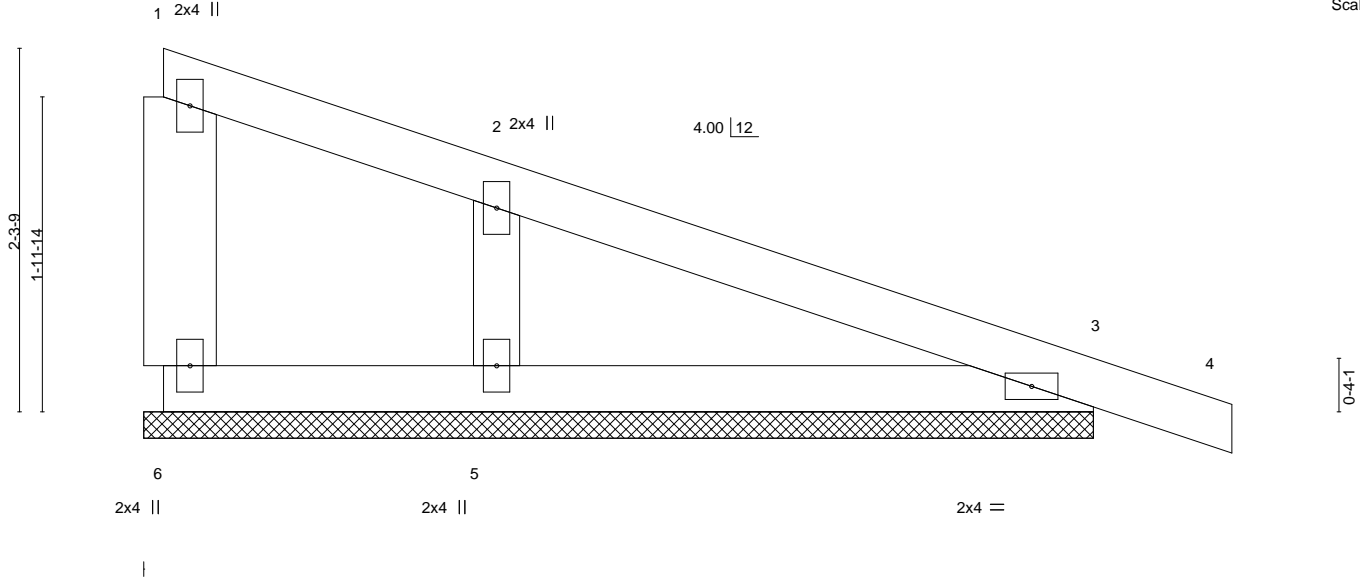
Job J0822-3962	Truss M1GE	Truss Type GABLE	Qty 1	Ply 1	Ben Stout/Lot 9 Liberty Meadows/Harnett 150349834
-------------------	---------------	---------------------	----------	----------	--

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Feb 21 13:22:27 2022 Page 1  
ID:7ZH02pw3t1Ljp9xzPdQGc5zQRh7-1IKibJO7hej7ErOy58gmlGGwyIHH8BaH7m197gzivAA



Scale = 1:14.6



LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.13	Vert(LL) -0.00	4	n/r	120	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.08	Vert(CT) 0.00	4	n/r	120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.07	Horz(CT) 0.00	3	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 25 lb	FT = 20%
	Code IRC2015/TPI2014							

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

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

**REACTIONS.** (size) 6=6-0-0, 3=6-0-0, 5=6-0-0  
Max Horz 6=-76(LC 7)  
Max Uplift 6=-7(LC 7), 3=-37(LC 7), 5=-53(LC 11)  
Max Grav 6=31(LC 1), 3=183(LC 1), 5=300(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 2-5=-222/373

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Corner(3) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 3) Gable requires continuous bottom chord bearing.
  - 4) Gable studs spaced at 2-0-0 oc.
  - 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 20.0psf 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) 6, 3, 5.



February 22, 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**

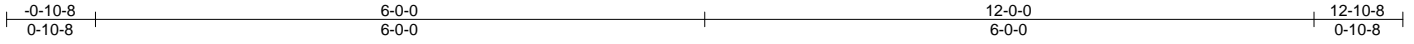
**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road  
Edenton, NC 27932

Job J0822-3962	Truss P1	Truss Type COMMON	Qty 5	Ply 1	Ben Stout/Lot 9 Liberty Meadows/Harnett 150349835
Comtech, Inc., Fayetteville, NC - 28314,					Job Reference (optional)

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Feb 21 13:22:28 2022 Page 1  
ID:7ZHO2pw3t1Ljp9xzPdQGc5zQRh7-Vxt4pfPISr\_s\_z9fsC?HUp259aMtdqQMjif6zivA9



Scale = 1:22.7

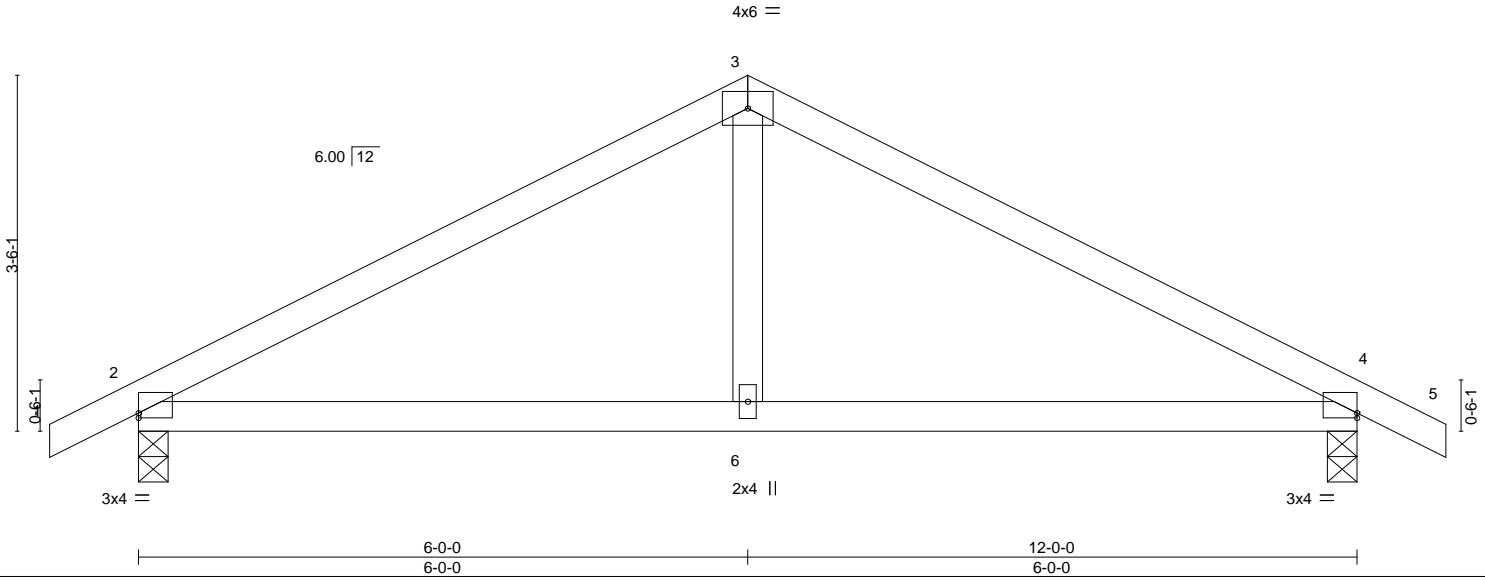


Plate Offsets (X,Y)--	[2:0-0-0,0-0-9], [4:0-0-0,0-0-9]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.36	Vert(LL) -0.02 2-6 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.28	Vert(CT) -0.06 2-6 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.06	Horz(CT) 0.01 4 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.02 2-6 >999 240	Weight: 45 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.
WEBS 2x4 SP No.2	

**REACTIONS.** (size) 2=0-3-8, 4=0-3-8  
 Max Horz 2=-45(LC 8)  
 Max Uplift 2=-54(LC 10), 4=-54(LC 11)  
 Max Grav 2=530(LC 1), 4=530(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-638/261, 3-4=-638/261  
 BOT CHORD 2-6=-102/489, 4-6=-102/489  
 WEBS 3-6=0/284

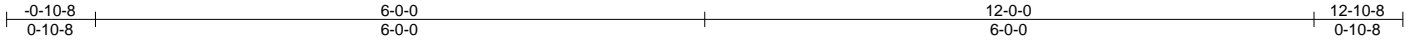
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.



February 22, 2022

Job J0822-3962	Truss P1GE	Truss Type GABLE	Qty 1	Ply 1	Ben Stout/Lot 9 Liberty Meadows/Harnett 150349836
Comtech, Inc., Fayetteville, NC - 28314,					Job Reference (optional)

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Feb 21 13:22:29 2022 Page 1  
ID:7ZHO2pw3t1Ljp9xzPdQGc5zQRh7-z7RS0?QNDFzrU8YLDZjEqhMDrYwbc44aa4WGBZzivA8



Scale = 1:22.7

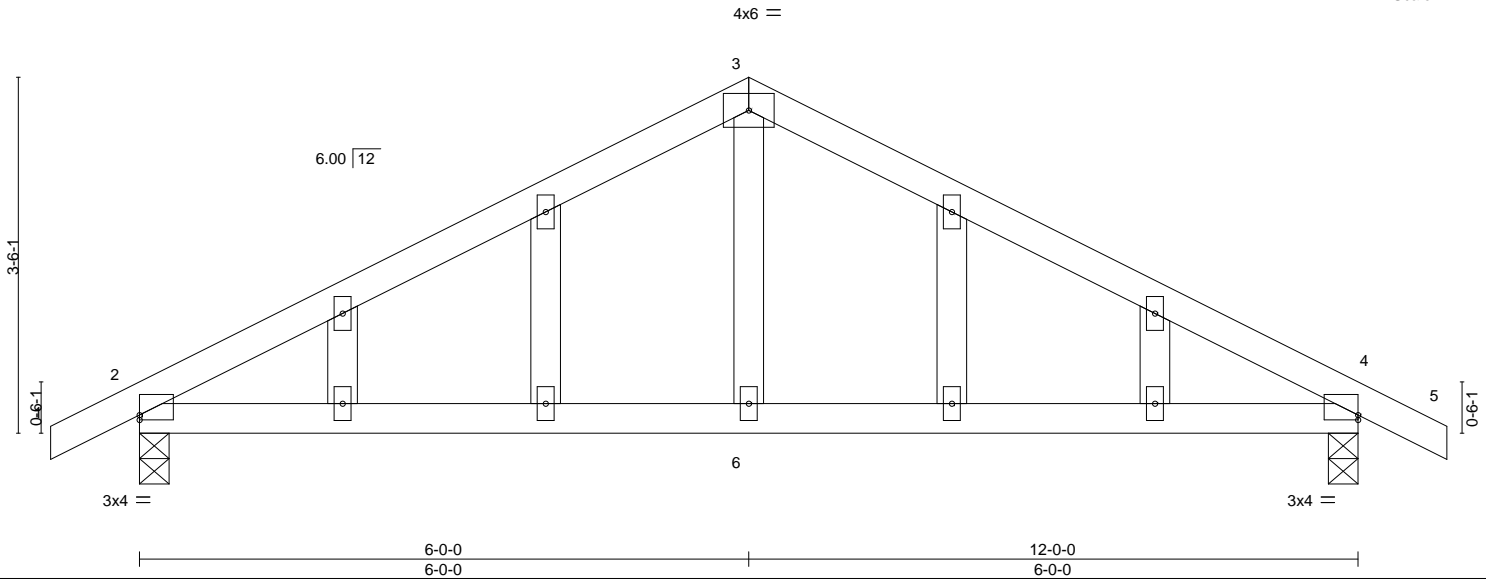


Plate Offsets (X,Y)-- [2:0-0-0,0-0-9], [4:0-0-0,0-0-9]

LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.36	Vert(LL) -0.02	2-6	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.28	Vert(CT) -0.06	2-6	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.06	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: 54 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.  
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=70(LC 10)  
Max Uplift 2=137(LC 10), 4=137(LC 11)  
Max Grav 2=530(LC 1), 4=530(LC 1)

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

TOP CHORD 2-3=-638/261, 3-4=-638/261  
BOT CHORD 2-6=-102/489, 4-6=-102/489  
WEBS 3-6=0/284

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 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 20.0psf 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=137, 4=137.



February 22, 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



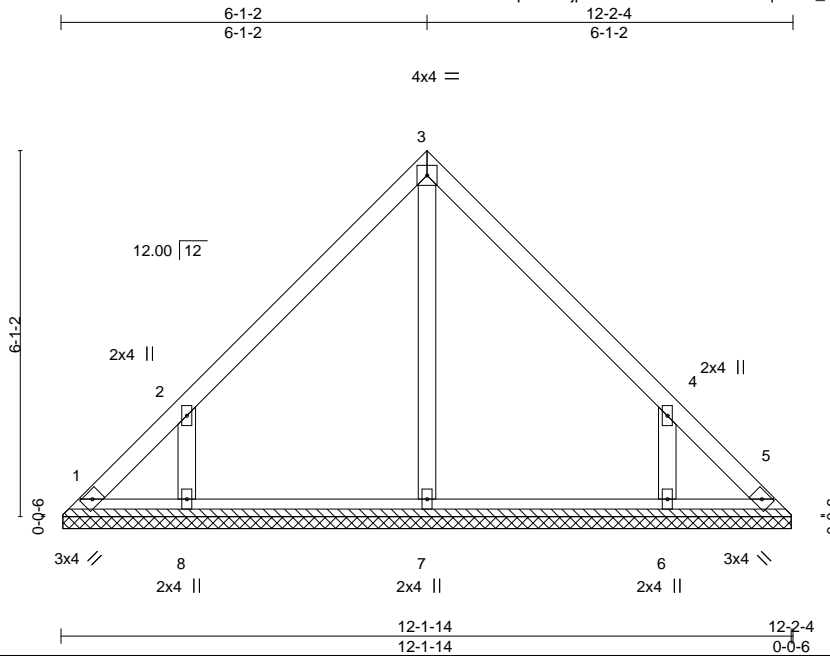
818 Soundside Road  
Edenton, NC 27932



Job J0822-3962	Truss VC1	Truss Type VALLEY	Qty 1	Ply 1	Ben Stout/Lot 9 Liberty Meadows/Harnett Job Reference (optional)	150349837
-------------------	--------------	----------------------	----------	----------	---	-----------

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Feb 21 13:22:30 2022 Page 1  
ID:7ZHO2pw3t1Ljp9xzPdQGc5zQRh7-RK?qELR?\_Z5i5I7XmHETNvuR5ylsLX6jpkFqj?zivA7



Scale = 1:38.4

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 0.14	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.09	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.08	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 55 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 12-1-8.  
(lb) - Max Horz 1=138(LC 6)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=167(LC 10), 6=167(LC 11)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=338(LC 17), 6=338(LC 18)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 2-8=-355/300, 4-6=-355/300

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf 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, 5 except (jt=lb) 8=167, 6=167.



February 22, 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

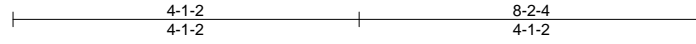
ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

Job J0822-3962	Truss VC2	Truss Type VALLEY	Qty 1	Ply 1	Ben Stout/Lot 9 Liberty Meadows/Harnett Job Reference (optional)	I50349838
-------------------	--------------	----------------------	----------	----------	---	-----------

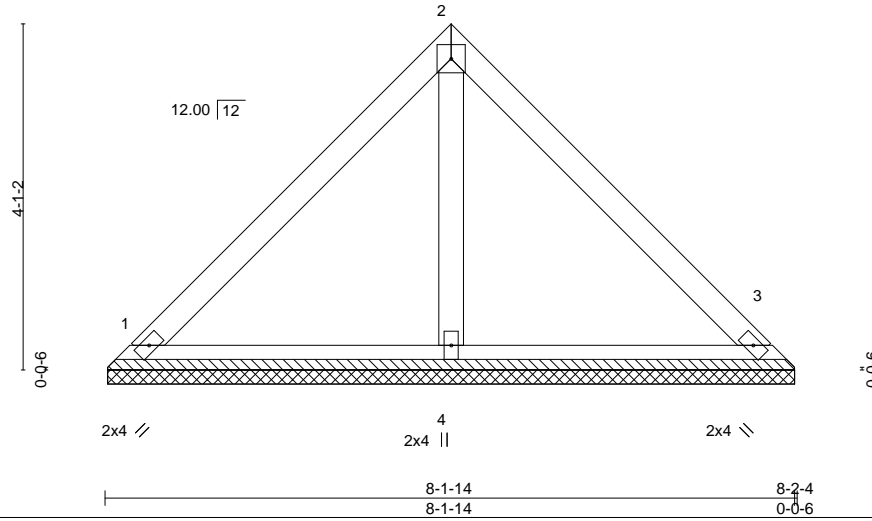
Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Feb 21 13:22:30 2022 Page 1  
ID:7ZHO2pw3t1Ljp9xzPdQGc5zQRh7-RK?qELR?\_Z5i517XmHETNvuQYyleLYnjpkFqj?zivA7



4x4 =

Scale = 1:27.3



LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.24	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.10	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.04	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 33 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=8-1-8, 3=8-1-8, 4=8-1-8  
Max Horz 1=90(LC 6)  
Max Uplift 1=-35(LC 11), 3=-35(LC 11)  
Max Grav 1=182(LC 1), 3=182(LC 1), 4=234(LC 1)

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf 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.



February 22, 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

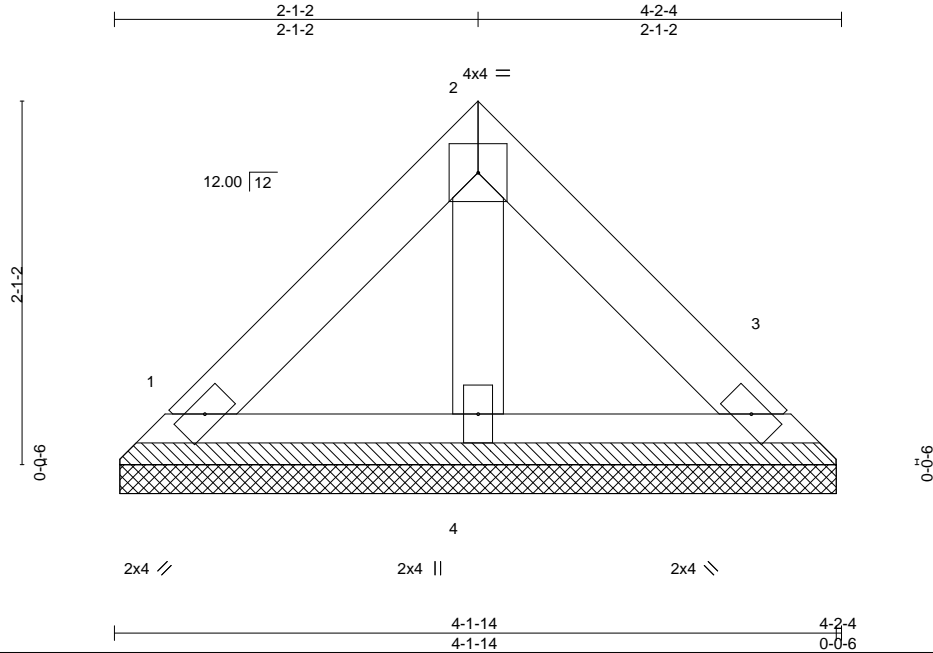


818 Soundside Road  
Edenton, NC 27932

Job J0822-3962	Truss VC3	Truss Type VALLEY	Qty 1	Ply 1	Ben Stout/Lot 9 Liberty Meadows/Harnett 150349839
-------------------	--------------	----------------------	----------	----------	--

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Feb 21 13:22:31 2022 Page 1  
ID:7ZHO2pw3t1Ljp9xzPdQGc5zQRh7-vWZCRhSdlsDYjSjK\_liv6ReHMf84?St2O?NGRziva6



Scale = 1:13.3

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.05	Vert(LL) n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.02	Vert(CT) n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.01	Horz(CT) 0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P					Weight: 16 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 4-2-4 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=4-1-8, 3=4-1-8, 4=4-1-8  
Max Horz 1=42(LC 9)  
Max Uplift 1=-16(LC 11), 3=-16(LC 11)  
Max Grav 1=85(LC 1), 3=85(LC 1), 4=109(LC 1)

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf 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.



February 22, 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

# 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.

© 2012 MITteK® All Rights Reserved



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.