

Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: J0320-1371  
Avery

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: E14236994 thru E14237022

My license renewal date for the state of North Carolina is December 31, 2020.

North Carolina COA: C-0844



March 27, 2020

Gilbert, Eric

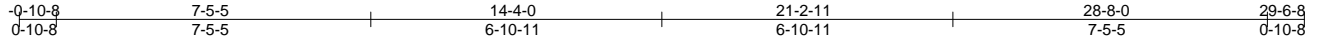
**IMPORTANT NOTE:** The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes),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

Job J0320-1371	Truss A1	Truss Type COMMON	Qty 5	Ply 1	Avery	E14236994
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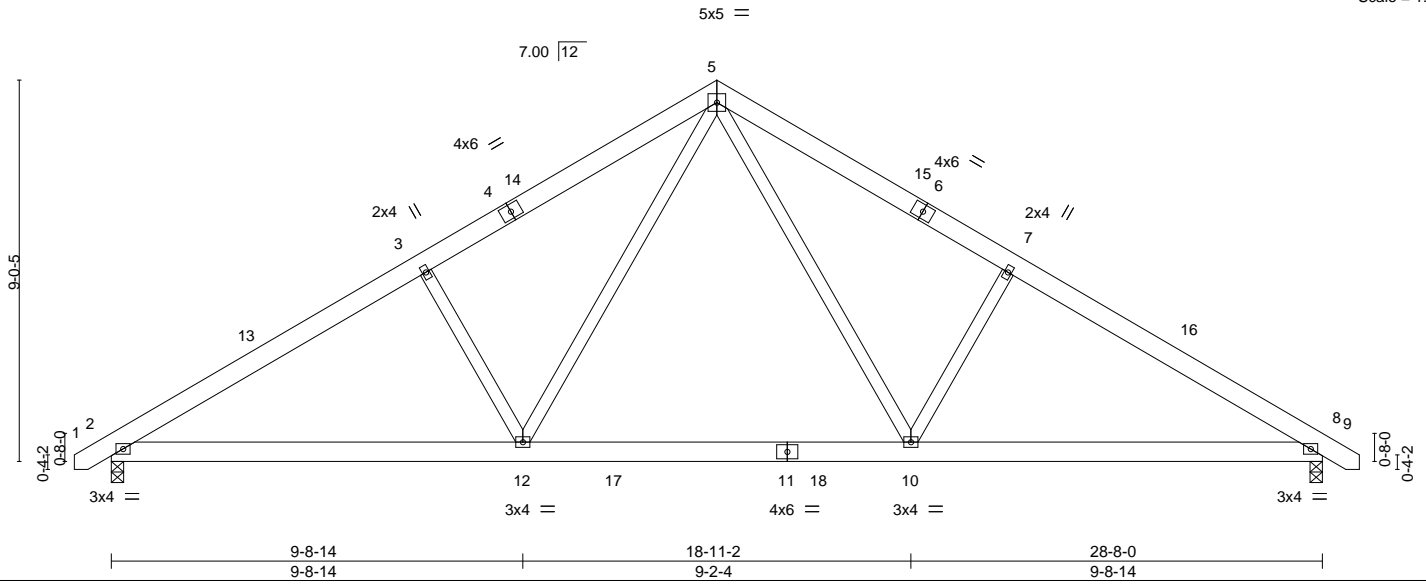
Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Mar 10 2020 MiTek Industries, Inc. Fri Mar 27 11:03:57 2020 Page 1

ID:dRBT\_d1wQgjhj7GT6Be0eMzX2x6-ZHoWBjzpdCIKgAELpyjGEBnygFcEFCvDSi38yczWlcG



Scale = 1:54.5



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.22	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.33	Vert(LL) -0.09 10-12 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.21	Vert(CT) -0.14 10-12 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.03 8 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.03 2-12 >999 240	Weight: 191 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 5-8-3 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

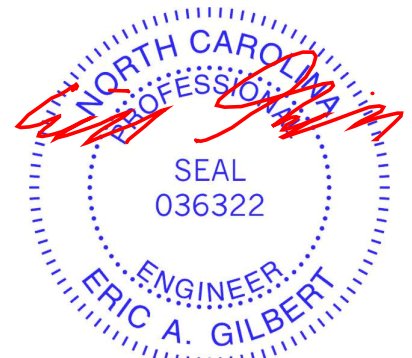
(size) 2=0-3-8, 8=0-3-8  
 Max Horz 2=-210(LC 10)  
 Max Uplift 2=-76(LC 12), 8=-76(LC 13)  
 Max Grav 2=1187(LC 1), 8=1187(LC 1)

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

TOP CHORD 2-3=-1761/366, 3-5=-1590/420, 5-7=-1590/420, 7-8=-1761/366  
 BOT CHORD 2-12=-195/1565, 10-12=-14/1018, 8-10=-202/1419  
 WEBS 5-10=-132/741, 7-10=-449/262, 5-12=-132/741, 3-12=-449/262

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-9 to 3-8-4, Interior(1) 3-8-4 to 14-4-0, Exterior(2) 14-4-0 to 18-8-13, Interior(1) 18-8-13 to 29-4-9 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 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.



March 27, 2020

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



818 Soundside Road  
 Edenton, NC 27932

Job J0320-1371	Truss A1GE	Truss Type GABLE	Qty 1	Ply 1	Avery	E14236995
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Comtech, Inc., Fayetteville, NC - 28314,

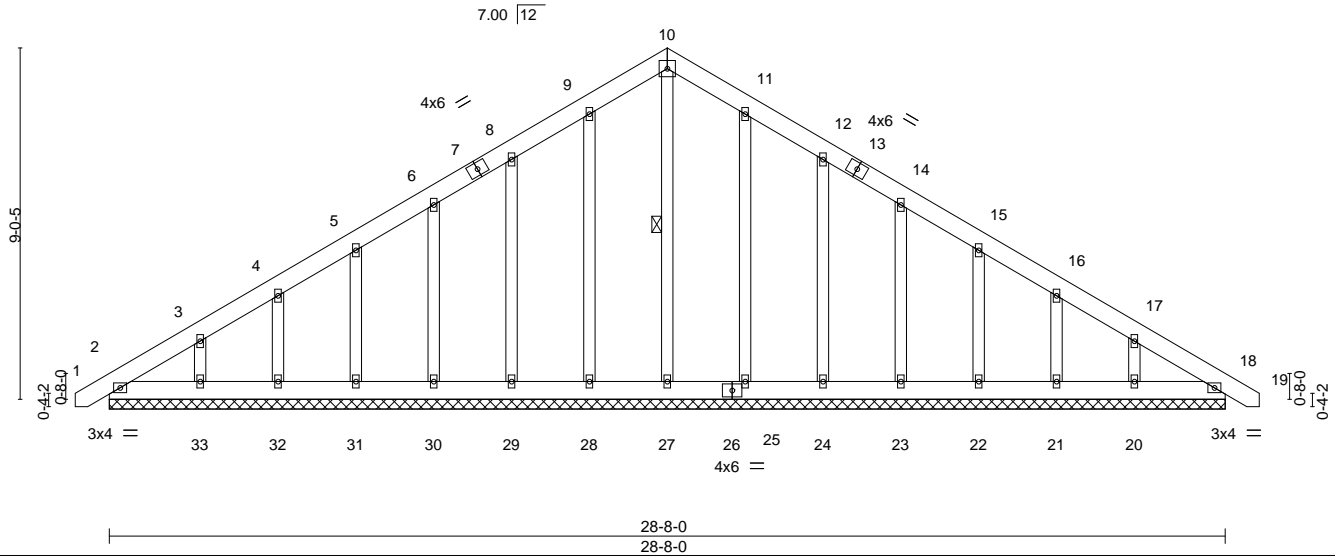
8.330 s Mar 10 2020 MiTek Industries, Inc. Fri Mar 27 11:03:59 2020 Page 1

ID:dRBT\_d1wQgijh7GT6Be0eMzX2x6-VfvGcO\_38pY2wTOjxNlkJcsL33Mbj8mWvBYE1VzWlCe

0-10-8 14-4-0 28-8-0 29-6-8  
0-10-8 14-4-0 14-4-0 0-10-8

5x5 =

Scale = 1:59.2



LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.04	Vert(LL) 0.00	18	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.02	Vert(CT) 0.00	18	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.13	Horz(CT) 0.00	18	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S						
							Weight: 234 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 1 Row at midpt 10-27

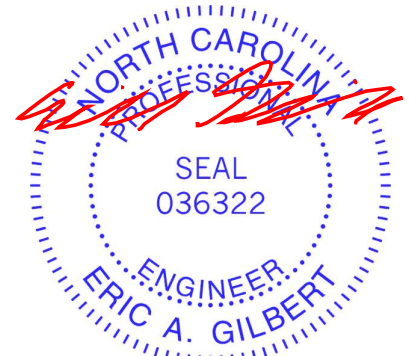
**REACTIONS.**

All bearings 28-8-0.  
(lb) - Max Horz 2=-263(LC 10)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 18, 28, 29, 30, 31, 32, 25, 24, 23, 22, 21 except 33=-108(LC 12), 20=-104(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 2, 18, 27, 28, 29, 30, 31, 32, 33, 25, 24, 23, 22, 21, 20

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-8-9 to 3-8-4, Exterior(2) 3-8-4 to 14-4-0, Corner(3) 14-4-0 to 18-8-13, Exterior(2) 18-8-13 to 29-4-9 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 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, 18, 28, 29, 30, 31, 32, 25, 24, 23, 22, 21 except (jt=lb) 33=108, 20=104.



March 27, 2020

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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



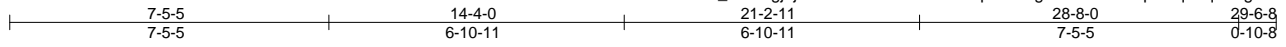
818 Soundside Road  
Edenton, NC 27932

Job J0320-1371	Truss A2	Truss Type COMMON	Qty 1	Ply 1	Avery	E14236996
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Comtech, Inc., Fayetteville, NC - 28314,

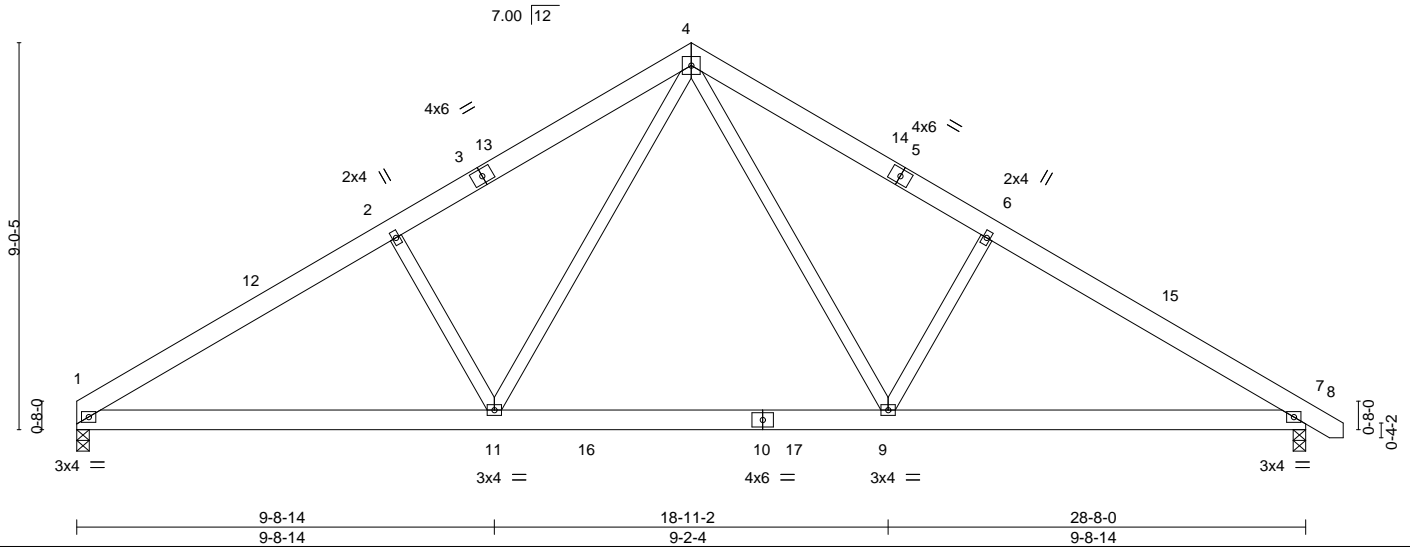
8.330 s Mar 10 2020 MiTek Industries, Inc. Fri Mar 27 11:04:00 2020 Page 1

ID:dRBT\_d1wQgjhj7GT6Be0eMzX2x6-zsTepk?hv7gvXdzwV4GzspOTqTdqSZcg8rloZxzWlcD



5x5 =

Scale = 1:53.7



<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 0.23	Vert(LL)	-0.10 9-11	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.34	Vert(CT)	-0.14 9-11	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.22	Horz(CT)	0.03 7	n/a	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S	Wind(LL)	0.03 1-11	>999	240	Weight: 189 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 5-7-10 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=0-3-8, 7=0-3-8  
 Max Horz 1=-209(LC 8)  
 Max Uplift 1=-64(LC 12), 7=-76(LC 13)  
 Max Grav 1=1134(LC 1), 7=1187(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-1745/376, 2-4=-1594/430, 4-6=-1591/421, 6-7=-1762/367  
 BOT CHORD 1-11=-206/1570, 9-11=-17/1019, 7-9=-205/1420  
 WEBS 4-9=-133/741, 6-9=-449/262, 4-11=-133/745, 2-11=-450/266

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 14-4-0, Exterior(2) 14-4-0 to 18-8-13, Interior(1) 18-8-13 to 29-4-9 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 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) 1, 7.



March 27, 2020

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818 Soundside Road  
 Edenton, NC 27932

Job J0320-1371	Truss B1	Truss Type COMMON	Qty 4	Ply 1	Avery	E14236997
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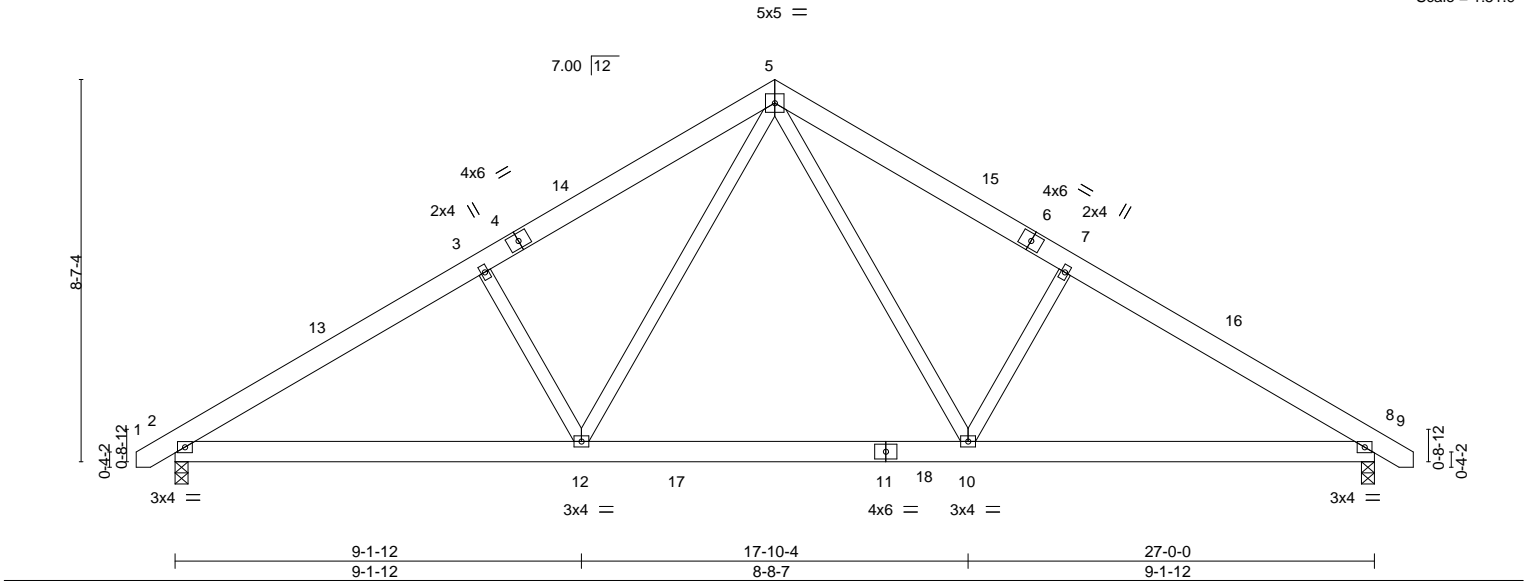
Comtech, Inc., Fayetteville, NC - 28314,

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ID:dRBT\_d1wQgjhjGT6Be0eMzX2x6-R211140KgRom9nY62onCO1xe6t\_IB1RpNV1L6OzWlcC

0-10-8 0-10-8	6-11-11 6-11-11	13-6-0 6-6-5	20-0-5 6-6-6	27-0-0 6-11-11	27-10-8 0-10-8
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Scale = 1:51.9



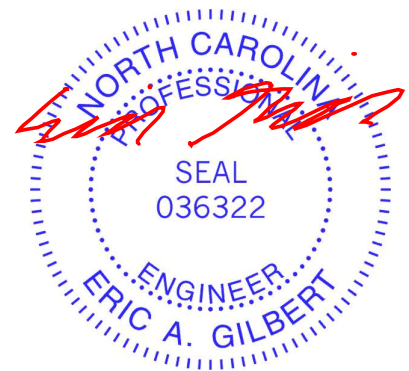
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.19	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.30	Vert(LL) -0.08 10-12 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.18	Vert(CT) -0.12 10-12 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.03 8 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.03 2-12 >999 240	Weight: 181 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-11-5 oc purlins.
BOT CHORD 2x6 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, 8=0-3-8  
 Max Horz 2=199(LC 11)  
 Max Uplift 2=-72(LC 12), 8=-72(LC 13)  
 Max Grav 2=1120(LC 1), 8=1120(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1631/344, 3-5=-1472/396, 5-7=-1472/396, 7-8=-1631/344  
 BOT CHORD 2-12=-184/1444, 10-12=-13/946, 8-10=-188/1311  
 WEBS 5-10=-123/679, 7-10=-409/246, 5-12=-123/679, 3-12=-409/246

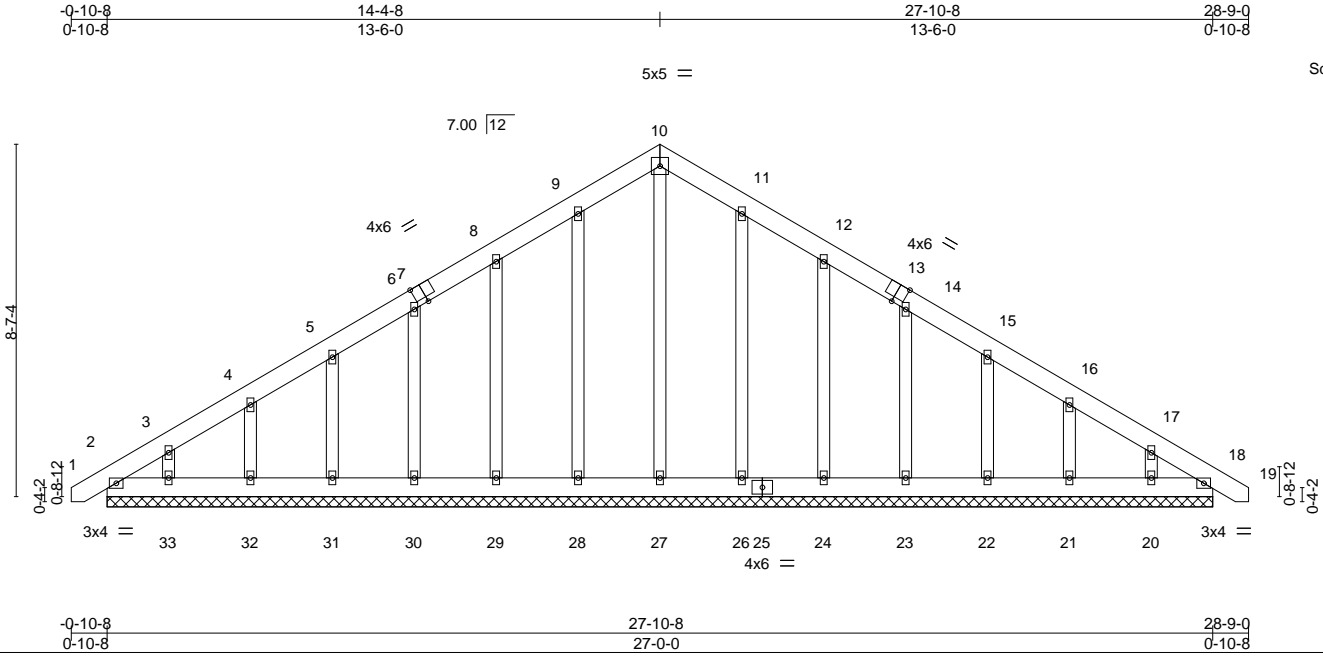
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-9 to 3-8-4, Interior(1) 3-8-4 to 13-6-0, Exterior(2) 13-6-0 to 17-10-13, Interior(1) 17-10-13 to 27-8-9 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 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.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



March 27, 2020

Job J0320-1371	Truss B1GE	Truss Type GABLE	Qty 1	Ply 1	Avery	E14236998
Comtech, Inc., Fayetteville, NC - 28314,						8.330 s Mar 10 2020 MiTek Industries, Inc. Fri Mar 27 11:04:02 2020 Page 1
-0-10-8 0-10-8						ID: dRBT_d1wQgjh7GT6Be0eMzX2x6-vEbPEQ1yRkwdnx7lcVJRxEUsLGOMwU7yc9nueqzWlCb
14-4-8 13-6-0						27-10-8 13-6-0
28-9-0 0-10-8						28-9-0 0-10-8

8.330 s Mar 10 2020 MiTek Industries, Inc. Fri Mar 27 11:04:02 2020 Page 1  
ID: dRBT\_d1wQgjh7GT6Be0eMzX2x6-vEbPEQ1yRkwdnx7lcVJRxEUsLGOMwU7yc9nueqzWlCb



Scale = 1:56.3

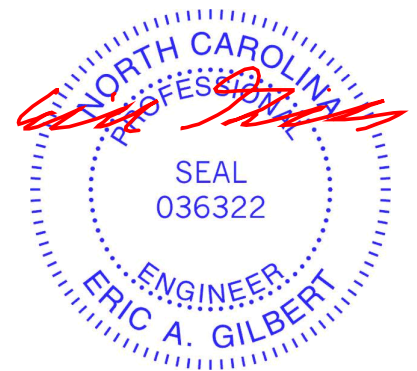
Plate Offsets (X,Y)--		[7:0-3-0,Edge], [13:0-3-0,Edge]	
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.03
TCDL 10.0	Lumber DOL	1.15	BC 0.02
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.15
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S
<b>DEFL.</b>	in (loc)	l/defl	L/d
Vert(LL)	-0.00	18	n/r
Vert(CT)	-0.00	18	n/r
Horz(CT)	0.00	18	n/a
<b>PLATES</b>	<b>GRIP</b>		
MT20	244/190		
Weight: 218 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.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.2	

**REACTIONS.** All bearings 27-0-0.  
 (lb) - Max Horz 2=248(LC 11)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 18, 28, 29, 30, 31, 32, 26, 24, 23, 22, 21, 20 except 33=101(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 18, 27, 28, 29, 30, 31, 32, 33, 26, 24, 23, 22, 21, 20

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-8-9 to 3-6-0, Exterior(2) 3-6-0 to 13-6-0, Corner(3) 13-6-0 to 17-10-13, Exterior(2) 17-10-13 to 27-8-9 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 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, 18, 28, 29, 30, 31, 32, 26, 24, 23, 22, 21, 20 except (it=lb) 33=101.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



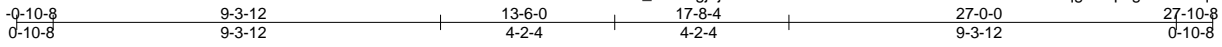
March 27, 2020

Job J0320-1371	Truss B2	Truss Type COMMON	Qty 3	Ply 1	Avery	E14236999
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Comtech, Inc., Fayetteville, NC - 28314,

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ID:dRBT\_d1wQgjhj7GT6Be0eMzX2x6-NR9nSm1aC23UO5hUACqgTS0pxgbdmU6qoWSAGzWlca



4x6 =

Scale = 1:55.4

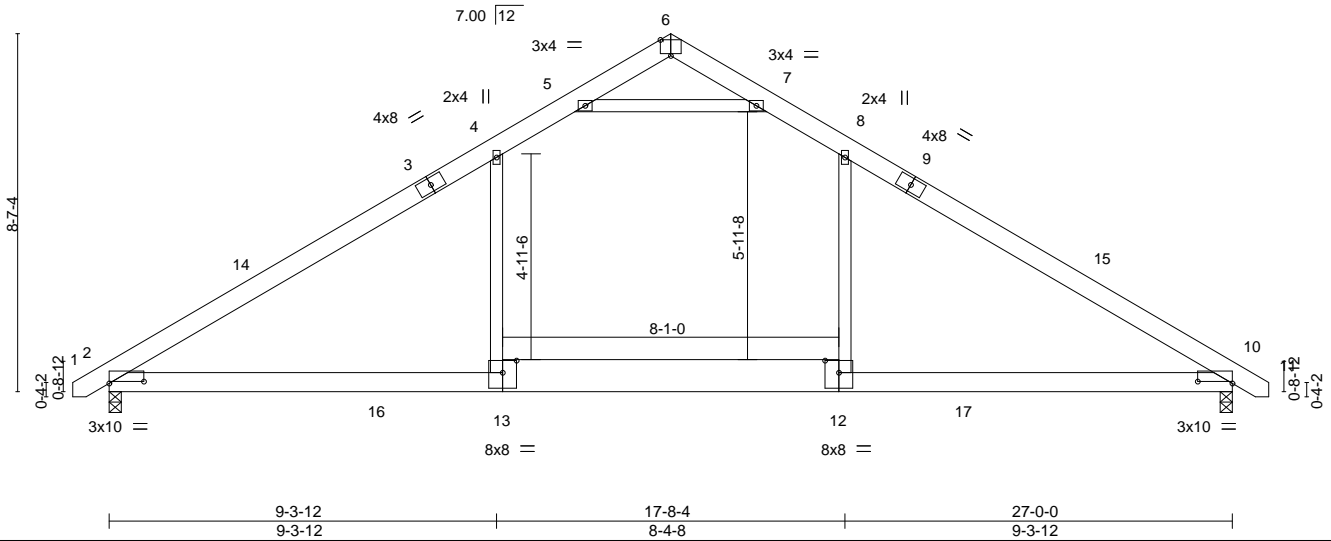


Plate Offsets (X,Y)-- [2:0-10-0,0-0-9], [6:0-3-0,Edge], [10:0-10-0,0-0-9], [12:0-4-0,0-3-8], [13:0-4-0,0-3-8]

<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 0.94	Vert(LL)	-0.26	10-12	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.59	Vert(CT)	-0.38	10-12	>843		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.85	Horz(CT)	0.04	10	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.21	2-13	>999		
								Weight: 177 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1 \*Except\*  
12-13: 2x10 SP No.1  
WEBS 2x4 SP No.2

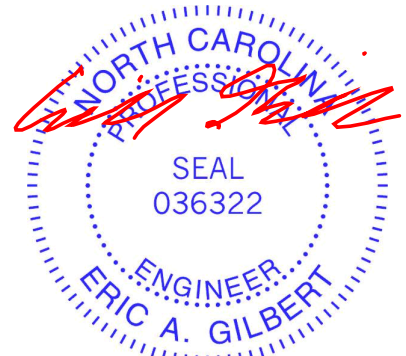
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-4-12 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8  
Max Horz 2=199(LC 11)  
Max Uplift 2=-98(LC 12), 10=-98(LC 13)  
Max Grav 2=1428(LC 19), 10=1428(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=-2110/415, 4-5=-1549/437, 5-6=-196/724, 6-7=-196/724, 7-8=-1550/437,  
8-10=-2112/415  
BOT CHORD 2-13=-195/1699, 12-13=-194/1711, 10-12=-195/1696  
WEBS 4-13=0/668, 8-12=0/669, 5-7=-2523/718

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-9 to 3-8-4, Interior(1) 3-8-4 to 13-6-0, Exterior(2) 13-6-0 to 17-8-4, Interior(1) 17-8-4 to 27-8-9 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard  
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-6=-60, 6-11=-60, 2-13=-20, 12-13=-80, 10-12=-20



March 27, 2020

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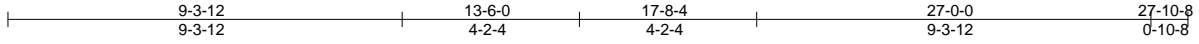
ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate  
818 Soundside Road  
Edenton, NC 27932

Job J0320-1371	Truss B2A	Truss Type COMMON	Qty 3	Ply 1	Avery	E14237000
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Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Mar 10 2020 MiTek Industries, Inc. Fri Mar 27 11:04:04 2020 Page 1

ID:dRBT\_d1wQgjhj7GT6Be0eMzX2x6-rdj9f62CzLBl0EGhkwLv0fZz34xhOCaF3SG?iizWlc9



4x6 =

Scale = 1:54.4

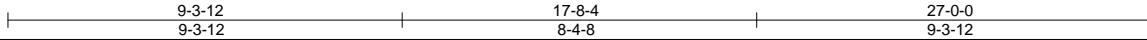
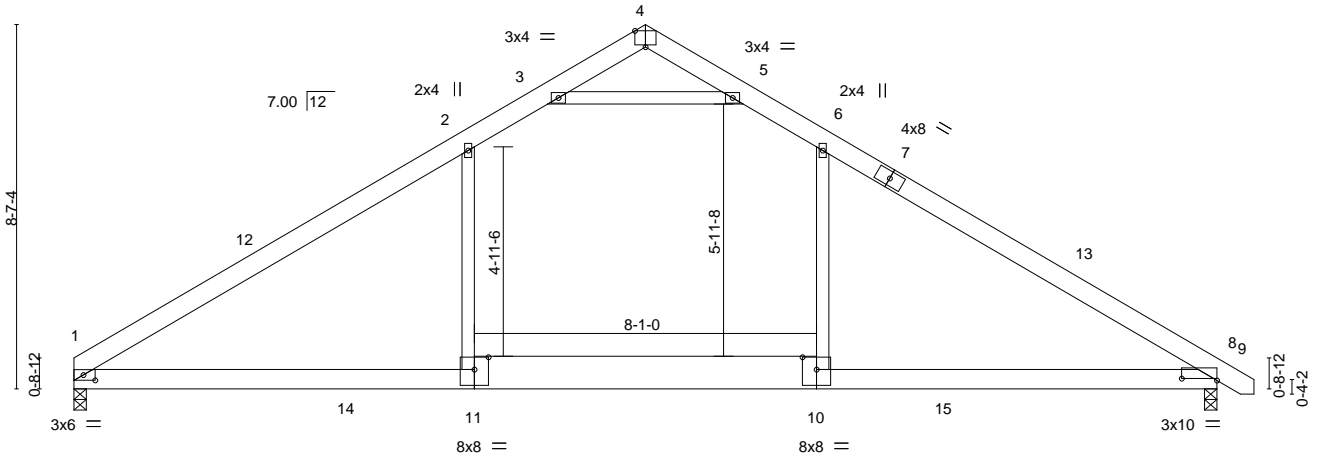


Plate Offsets (X,Y)-- [1:0-3-5,0-1-8], [4:0-3-0,Edge], [8:0-10-0,0-0-9], [10:0-4-0,0-3-8], [11:0-4-0,0-3-8]

<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 0.98	Vert(LL)	-0.27	1-11	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.60	Vert(CT)	-0.40	1-11	>808		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.86	Horz(CT)	0.04	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.21	1-11	>999		
								Weight: 175 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 3-9-8 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 1=0-3-8, 8=0-3-8  
 Max Horz 1=-197(LC 8)  
 Max Uplift 1=-86(LC 12), 8=-98(LC 13)  
 Max Grav 1=1380(LC 19), 8=1429(LC 20)

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

TOP CHORD 1-2=-2108/412, 2-3=-1555/443, 3-4=-202/744, 4-5=-211/749, 5-6=-1550/436,  
 6-8=-2116/416  
 BOT CHORD 1-11=-201/1704, 10-11=-200/1715, 8-10=-201/1700  
 WEBS 2-11=0/654, 6-10=0/679, 3-5=-2553/740

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCCL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 13-6-0, Exterior(2) 13-6-0 to 17-8-4, Interior(1) 17-8-4 to 27-8-9 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCCL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 8.

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-4=-60, 4-9=-60, 1-11=-20, 10-11=-80, 8-10=-20



March 27, 2020

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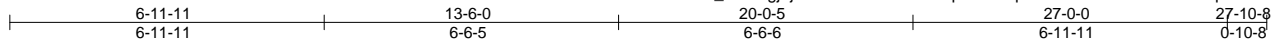


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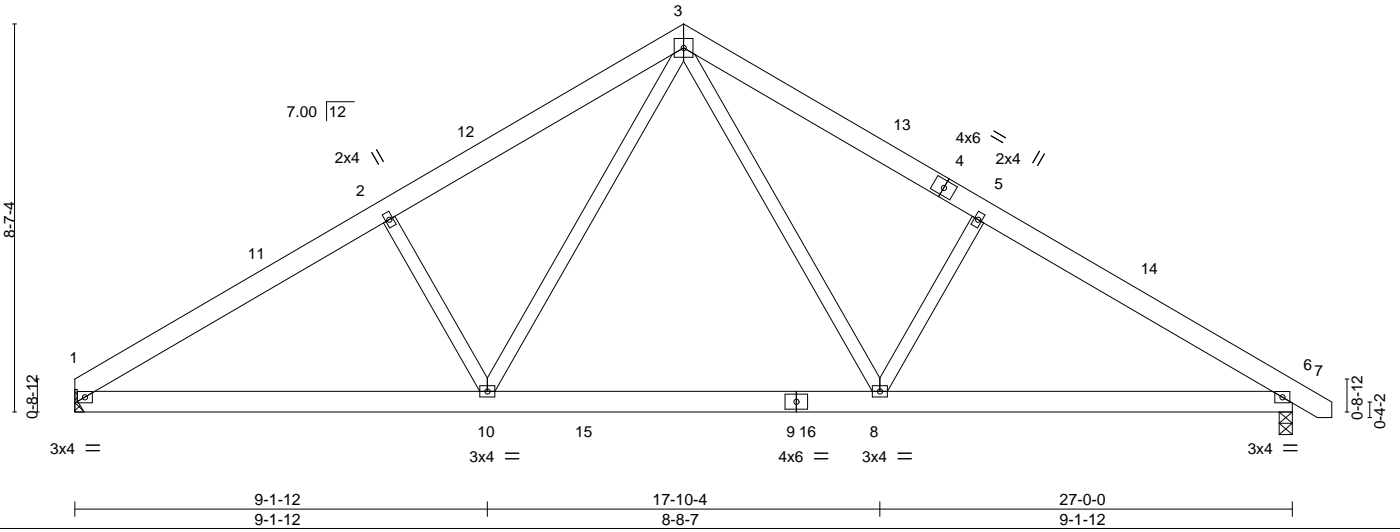
Job J0320-1371	Truss B3	Truss Type COMMON	Qty 3	Ply 1	Avery	E14237001
Comtech, Inc., Fayetteville, NC - 28314,						Job Reference (optional)

8.330 s Mar 10 2020 MiTek Industries, Inc. Fri Mar 27 11:04:05 2020 Page 1  
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5x5 =

Scale = 1:51.1



<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 0.20	Vert(LL)	-0.08 8-10	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.30	Vert(CT)	-0.12 8-10	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.18	Horz(CT)	0.03 6	n/a	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S	Wind(LL)	0.03 10	>999	240		
								Weight: 179 lb	FT = 20%

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

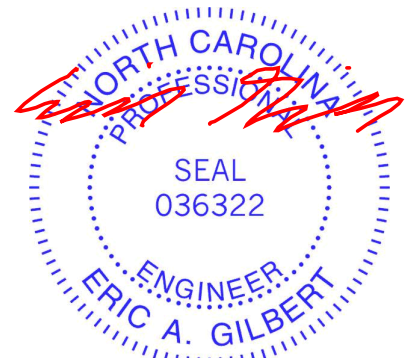
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-10-10 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=Mechanical, 6=0-3-8  
 Max Horz 1=-197(LC 8)  
 Max Uplift 1=-60(LC 12), 6=-72(LC 13)  
 Max Grav 1=1069(LC 1), 6=1122(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-1630/355, 2-3=-1481/407, 3-5=-1476/397, 5-6=-1635/345  
 BOT CHORD 1-10=-194/1457, 8-10=-17/950, 6-8=-192/1315  
 WEBS 3-8=-124/679, 5-8=-409/246, 3-10=-126/689, 2-10=-416/251

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-4 to 4-6-1, Interior(1) 4-6-1 to 13-6-0, Exterior(2) 13-6-0 to 17-10-13, Interior(1) 17-10-13 to 27-8-9 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 6.



March 27, 2020

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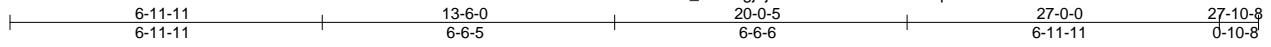
818 Soundside Road  
 Edenton, NC 27932

Job J0320-1371	Truss B3GE	Truss Type GABLE	Qty 1	Ply 1	Avery	E14237002
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Comtech, Inc., Fayetteville, NC - 28314,

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5x12 ||

Scale = 1:51.4

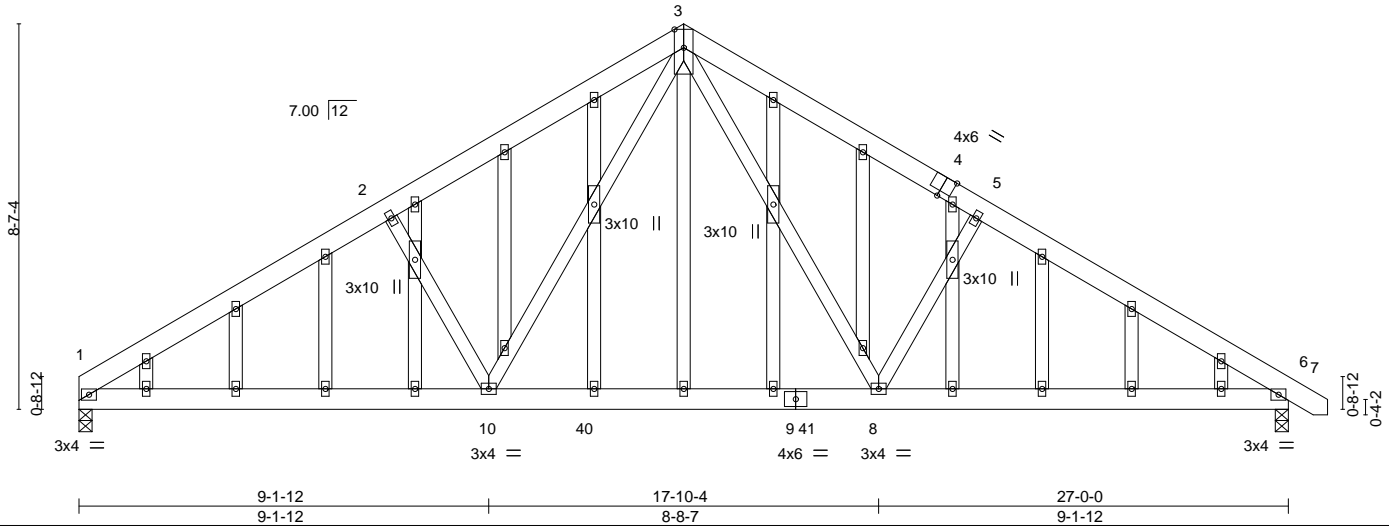


Plate Offsets (X,Y)-- [4:0-3-0,Edge]

<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 0.20	Vert(LL)	-0.08	8-10	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.30	Vert(CT)	-0.12	8-10	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.30	Horz(CT)	0.03	6	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.04	10	>999		
								Weight: 252 lb	FT = 20%

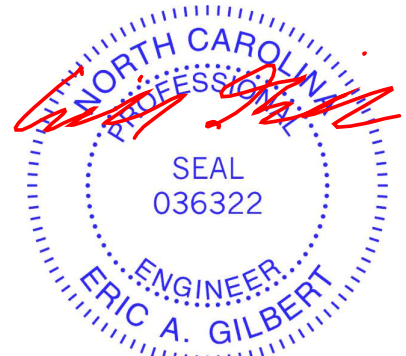
**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2  
 OTHERS 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-10-15 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=0-3-8, 6=0-3-8  
 Max Horz 1=-247(LC 8)  
 Max Uplift 1=-212(LC 12), 6=-237(LC 13)  
 Max Grav 1=1068(LC 1), 6=1121(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-1623/451, 2-3=-1472/506, 3-5=-1473/506, 5-6=-1628/451  
 BOT CHORD 1-10=-336/1479, 8-10=-81/962, 6-8=-270/1312  
 WEBS 3-8=-206/696, 5-8=-409/325, 3-10=-207/700, 2-10=-410/330

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-1-12 to 4-6-9, Exterior(2) 4-6-9 to 13-6-0, Corner(3) 13-6-0 to 17-10-13, Exterior(2) 17-10-13 to 27-8-9 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable 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, 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=212, 6=237.



March 27, 2020

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818 Soundside Road  
 Edenton, NC 27932

Job J0320-1371	Truss C1	Truss Type ATTIC	Qty 1	Ply 1	Avery	E14237003
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Comtech, Inc., Fayetteville, NC - 28314,

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ID:dRBT\_d1wQqjhj7GT6Be0eMzX2x6-GCOIH854GGZwti?GP2ucelBeXHyGbjxhIUfJ1zWlc6

0-11-0 4-0-12 7-5-9 10-3-8 13-1-7 16-6-4 20-7-0 21-6-0  
 0-11-0 4-0-12 3-4-13 2-9-15 2-9-15 3-4-13 4-0-12 0-11-0

6x8 =

Scale = 1:80.6

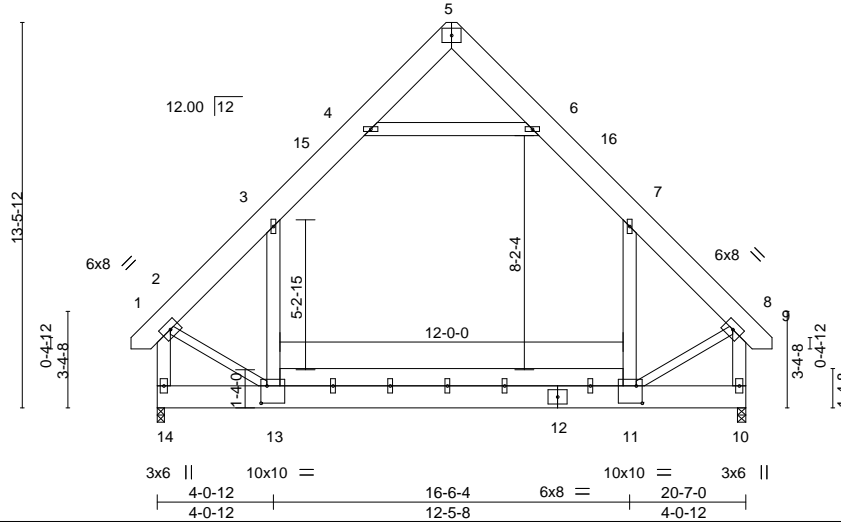


Plate Offsets (X,Y)-- [11:0-2-8,0-7-4], [13:0-2-8,0-7-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.33	Vert(LL)	-0.13 11-13	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.61	Vert(CT)	-0.21 11-13	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.24	Horz(CT)	0.01 10	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.04 11-13	>999	240		
	Code IRC2015/TPI2014						Weight: 306 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x10 SP No.1  
 BOT CHORD 2x10 SP No.1 \*Except\*  
 11-13: 2x8 SP No.1  
 WEBS 2x6 SP No.1 \*Except\*  
 2-13,8-11: 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) 14=0-3-0, 10=0-3-8  
 Max Horz 14=-350(LC 10)  
 Max Grav 14=1472(LC 21), 10=1472(LC 20)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1413/0, 3-4=-937/161, 6-7=-937/161, 7-8=-1412/0, 2-14=-1753/0, 8-10=-1754/0  
 BOT CHORD 13-14=-346/341, 11-13=0/904  
 WEBS 4-6=-958/181, 3-13=-6/668, 7-11=-6/668, 2-13=0/1077, 8-11=0/1079

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-6-13 to 4-0-4, Interior(1) 4-0-4 to 10-3-8, Exterior(2) 10-3-8 to 14-8-5, Interior(1) 14-8-5 to 21-1-13 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are 2x6 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 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.
- 6) Ceiling dead load (10.0 psf) on member(s). 3-4, 6-7, 4-6; Wall dead load (5.0psf) on member(s).3-13, 7-11
- 7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 11-13
- 8) Attic room checked for L/360 deflection.



March 27, 2020

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818 Soundside Road  
 Edenton, NC 27932

Job J0320-1371	Truss C1GE	Truss Type ATTIC	Qty 1	Ply 1	Avery	E14237004
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8.330 s Mar 10 2020 MiTek Industries, Inc. Fri Mar 27 11:04:08 2020 Page 1

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0-11-0 4-0-12 7-5-9 10-3-8 13-1-7 16-6-4 20-7-0 21-6-0  
 0-11-0 4-0-12 3-4-13 2-9-15 2-9-15 3-4-13 4-0-12 0-11-0

6x8 =

Scale = 1:80.6

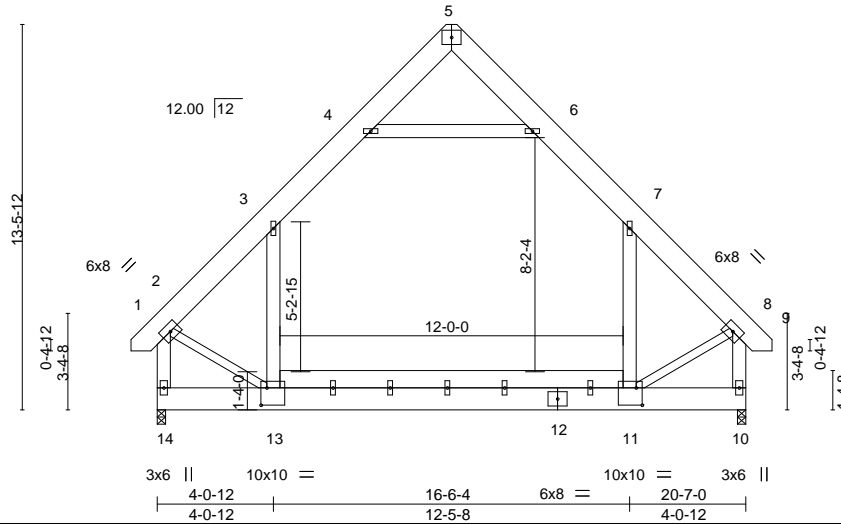


Plate Offsets (X,Y)-- [11:0-2-8,0-7-4], [13:0-2-8,0-7-4]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.33	Vert(LL)	-0.13 11-13	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.61	Vert(CT)	-0.21 11-13	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.24	Horz(CT)	0.01 10	n/a	n/a		
BCDL 10.0	Code IRC2015/TP12014		Matrix-S	Wind(LL)	0.04 11-13	>999	240		
								Weight: 306 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x10 SP No.1  
 BOT CHORD 2x10 SP No.1 \*Except\*  
 11-13: 2x8 SP No.1  
 WEBS 2x6 SP No.1 \*Except\*  
 2-13,8-11: 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) 14=0-3-8, 10=0-3-8  
 Max Horz 14=-438(LC 10)  
 Max Grav 14=1472(LC 21), 10=1472(LC 20)

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

TOP CHORD 2-3=-1427/19, 3-4=-945/190, 6-7=-945/190, 7-8=-1427/19, 2-14=-1771/0, 8-10=-1772/0  
 BOT CHORD 13-14=-433/427, 11-13=0/935  
 WEBS 4-6=-958/240, 3-13=-6/668, 7-11=-6/668, 2-13=0/1113, 8-11=0/1116

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-6-13 to 4-0-4, Exterior(2) 4-0-4 to 10-3-8, Corner(3) 10-3-8 to 14-8-5, Exterior(2) 14-8-5 to 21-1-13 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are 2x6 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 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.
- 6) Ceiling dead load (10.0 psf) on member(s). 3-4, 6-7, 4-6; Wall dead load (5.0psf) on member(s).3-13, 7-11
- 7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 11-13
- 8) Attic room checked for L/360 deflection.



March 27, 2020

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



818 Soundside Road  
 Edenton, NC 27932

Job J0320-1371	Truss C2	Truss Type ATTIC	Qty 1	Ply 1	Avery	E14237005
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Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Mar 10 2020 MiTek Industries, Inc. Fri Mar 27 11:04:09 2020 Page 1

ID:dRBT\_d1wQgjhj7GT6Be0eMzX2x6-CbW2ip6Loupd609eWTx4jjG\_15ek3dQ\_Dk\_mOwzWlc4

0-11-0 4-0-12 7-5-9 10-3-8 13-1-7 16-6-4 20-7-0 21-6-0  
 0-11-0 4-0-12 3-4-13 2-9-15 2-9-15 3-4-13 4-0-12 0-11-0

6x8 =

Scale = 1:80.6

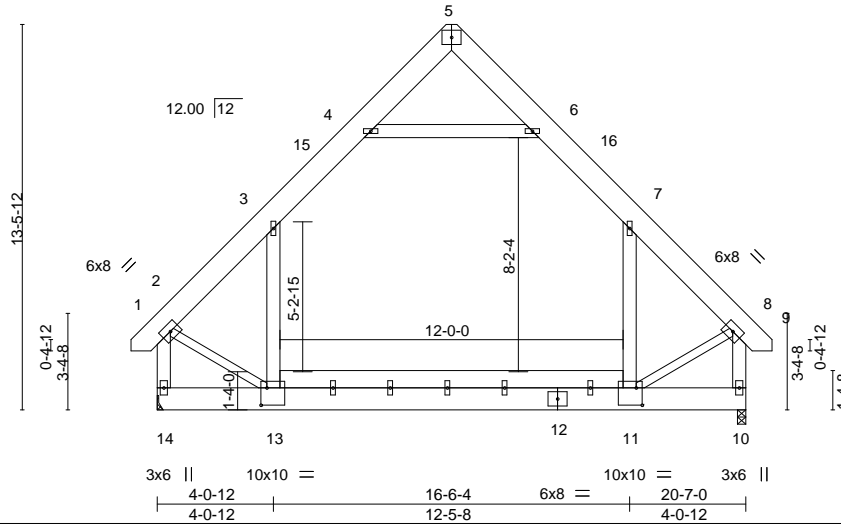


Plate Offsets (X,Y)-- [11:0-2-8,0-7-4], [13:0-2-8,0-7-4]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.33	Vert(LL)	-0.13 11-13	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.61	Vert(CT)	-0.21 11-13	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.24	Horz(CT)	0.01 10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.04 11-13	>999	240	Weight: 306 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x10 SP No.1  
 BOT CHORD 2x10 SP No.1 \*Except\*  
 11-13: 2x8 SP No.1  
 WEBS 2x6 SP No.1 \*Except\*  
 2-13,8-11: 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) 14=Mechanical, 10=0-3-8  
 Max Horz 14=-350(LC 10)  
 Max Grav 14=1472(LC 21), 10=1472(LC 20)

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

TOP CHORD 2-3=-1413/0, 3-4=-937/161, 6-7=-937/161, 7-8=-1412/0, 2-14=-1753/0, 8-10=-1754/0  
 BOT CHORD 13-14=-346/341, 11-13=0/904  
 WEBS 4-6=-958/181, 3-13=-6/668, 7-11=-6/668, 2-13=0/1077, 8-11=0/1079

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-6-13 to 4-0-4, Interior(1) 4-0-4 to 10-3-8, Exterior(2) 10-3-8 to 14-8-5, Interior(1) 14-8-5 to 21-1-13 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are 2x6 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 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.
- 6) Ceiling dead load (10.0 psf) on member(s). 3-4, 6-7, 4-6; Wall dead load (5.0psf) on member(s).3-13, 7-11
- 7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 11-13
- 8) Refer to girder(s) for truss to truss connections.
- 9) Attic room checked for L/360 deflection.



March 27, 2020

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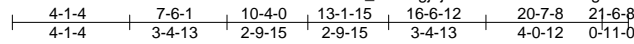
818 Soundside Road  
 Edenton, NC 27932

Job J0320-1371	Truss C2A	Truss Type ATTIC	Qty 7	Ply 1	Avery	E14237006
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Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Mar 10 2020 MiTek Industries, Inc. Fri Mar 27 11:04:10 2020 Page 1

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6x8 =

Scale = 1:80.6

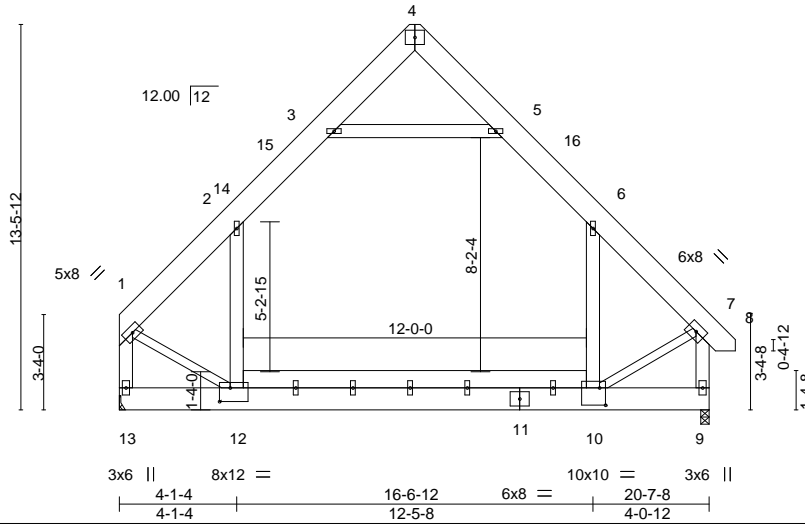


Plate Offsets (X,Y)-- [10:0-2-8,0-7-4], [12:0-4-8,0-5-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.33	Vert(LL)	-0.14	10-12	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.61	Vert(CT)	-0.21	10-12	>999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.24	Horz(CT)	0.01	9	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.03	10-12	>999		
	Code IRC2015/TP12014						Weight: 303 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x10 SP No.1  
 BOT CHORD 2x10 SP No.1 \*Except\*  
 10-12: 2x8 SP No.1  
 WEBS 2x6 SP No.1 \*Except\*  
 1-12,7-10: 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) 13=Mechanical, 9=0-3-8  
 Max Horz 13=319(LC 11)  
 Max Grav 13=1440(LC 21), 9=1472(LC 20)

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

TOP CHORD 1-2=-1424/0, 2-3=-941/161, 5-6=-936/150, 6-7=-1412/0, 1-13=-1712/0, 7-9=-1754/0  
 BOT CHORD 12-13=-326/324, 10-12=0/904  
 WEBS 3-5=-965/183, 2-12=-6/668, 6-10=-4/671, 1-12=0/1061, 7-10=0/1078

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-4 to 4-7-0, Interior(1) 4-7-0 to 10-4-0, Exterior(2) 10-4-0 to 14-8-13, Interior(1) 14-8-13 to 21-2-5 zone; end vertical right exposed; 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). 2-3, 5-6, 3-5; Wall dead load (5.0psf) on member(s). 2-12, 6-10
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 10-12
- Refer to girder(s) for truss to truss connections.
- Attic room checked for L/360 deflection.



March 27, 2020

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**

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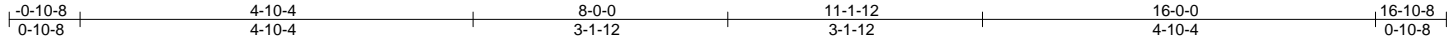
818 Soundside Road  
 Edenton, NC 27932

Job J0320-1371	Truss D1	Truss Type COMMON	Qty 5	Ply 1	Avery	E14237007
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Comtech, Inc., Fayetteville, NC - 28314,

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Scale = 1:28.5

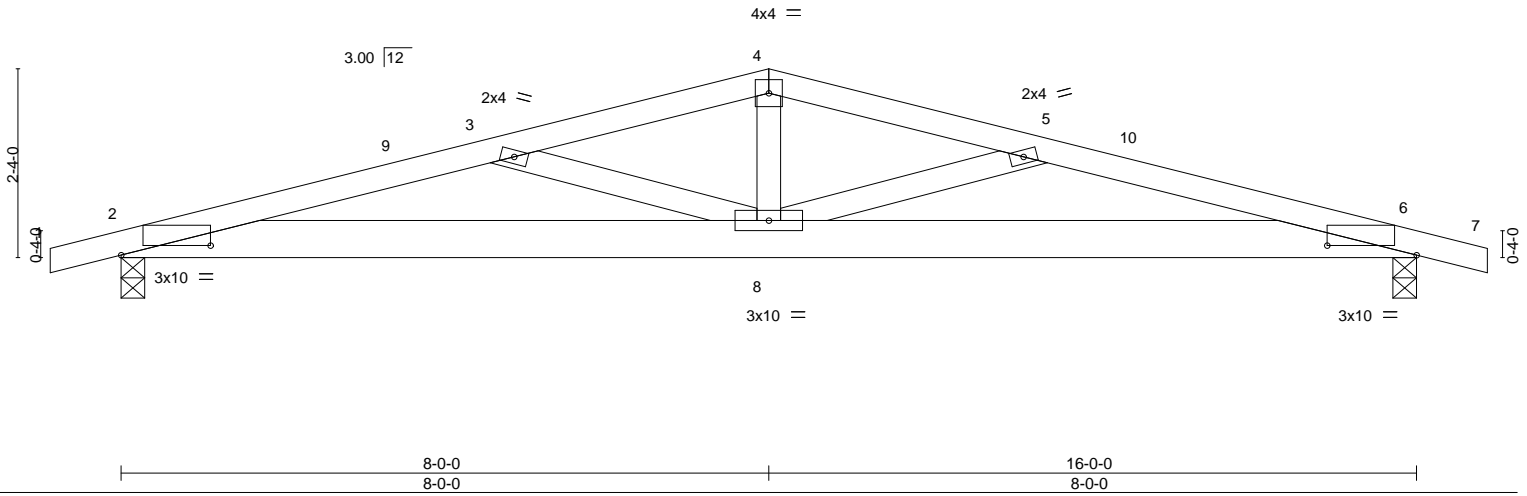


Plate Offsets (X,Y)-- [2:1-1-4,0-1-7], [6:1-1-4,0-1-7]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.20	Vert(LL) -0.06	8	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.32	Vert(CT) -0.13	8	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.11	Horz(CT) 0.02	6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.05	8	>999	240	Weight: 77 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-5-11 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 6=0-3-8  
Max Horz 2=-27(LC 9)  
Max Uplift 2=-86(LC 8), 6=-86(LC 9)  
Max Grav 2=690(LC 1), 6=690(LC 1)

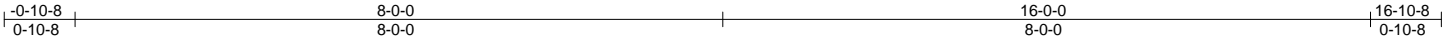
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1800/547, 3-4=-1359/318, 4-5=-1359/320, 5-6=-1800/543  
BOT CHORD 2-8=-486/1715, 6-8=-491/1715  
WEBS 3-8=-459/286, 4-8=-46/459, 5-8=-459/284

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 8-0-0, Exterior(2) 8-0-0 to 12-4-13, Interior(1) 12-4-13 to 16-10-8 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, 6.

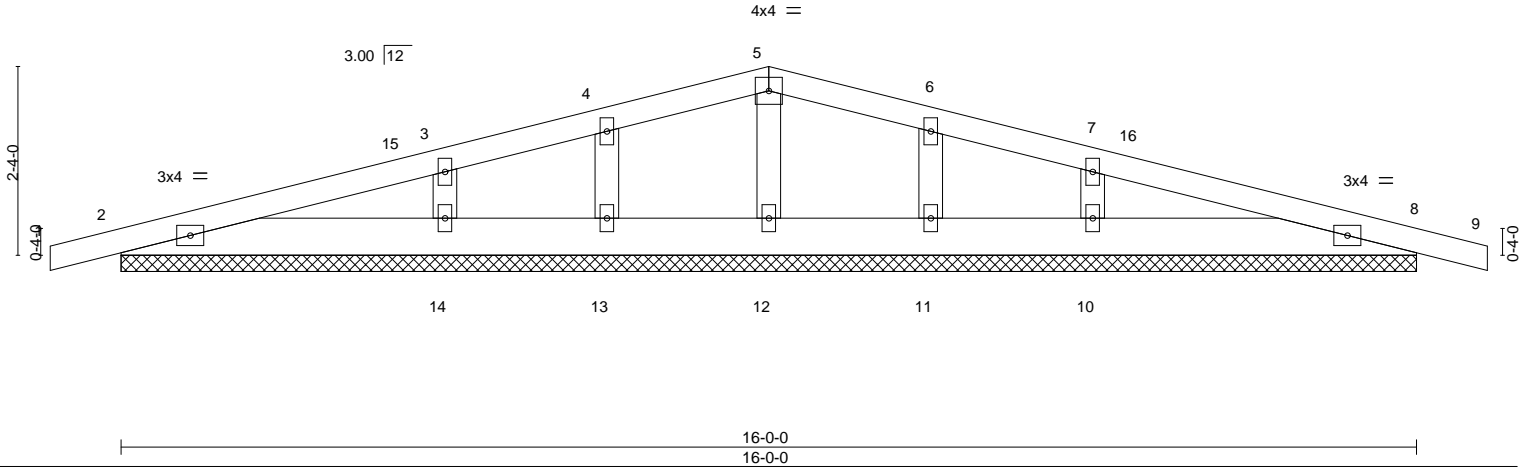


March 27, 2020

Job J0320-1371	Truss D1GE	Truss Type GABLE	Qty 1	Ply 1	Avery	E14237008
Comtech, Inc., Fayetteville, NC - 28314,					8.330 s Mar 10 2020 MiTek Industries, Inc. Fri Mar 27 11:04:12 2020 Page 1	
					ID:dRBT_d1wQgjh7GT6Be0eMzX2x6-cACBLr8D4pBCzTtDCbUnLLuYhloKG1ZRviCQ_FzWlc1	



Scale = 1:28.5



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.11	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.04	Vert(LL) 0.00 9 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.02	Vert(CT) 0.00 9 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 8 n/a n/a		
	Code IRC2015/TPI2014			Weight: 72 lb	FT = 20%

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

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

**REACTIONS.** All bearings 16-0-0.  
(lb) - Max Horz 2=45(LC 17)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10  
Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 11 except 14=314(LC 1), 10=314(LC 1)

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 8-0-0, Exterior(2) 8-0-0 to 12-4-13, Interior(1) 12-4-13 to 16-10-8 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) 2, 8, 12, 13, 14, 11, 10.



March 27, 2020

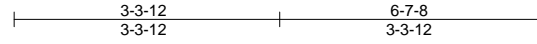


Job J0320-1371	Truss E1	Truss Type COMMON GIRDER	Qty 1	Ply 2	Avery	E14237009
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Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Mar 10 2020 MiTek Industries, Inc. Fri Mar 27 11:04:13 2020 Page 1

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4x4 =

Scale = 1:28.7

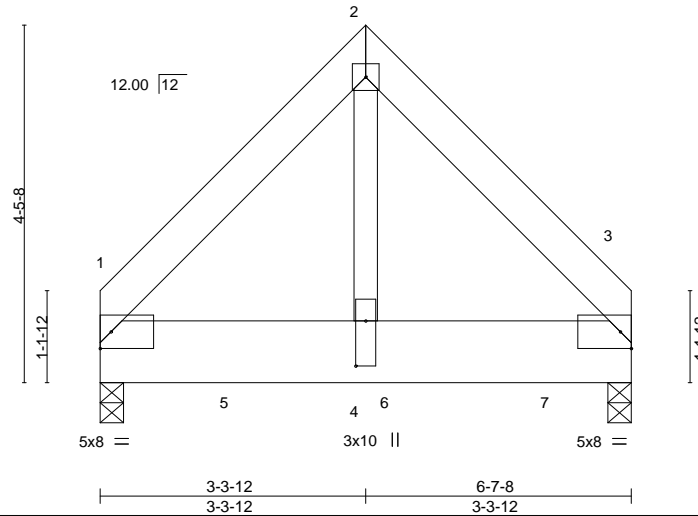


Plate Offsets (X,Y)-- [4:0-6-12,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.14	Vert(LL) -0.01	4	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.18	Vert(CT) -0.01	4	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.23	Horz(CT) 0.00	3	n/a	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-P	Wind(LL) 0.00	4	>999	240		
	Code IRC2015/TPI2014						Weight: 109 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x10 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=-90(LC 4)  
 Max Uplift 1=-107(LC 9), 3=-132(LC 8)  
 Max Grav 1=1641(LC 1), 3=2016(LC 1)

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

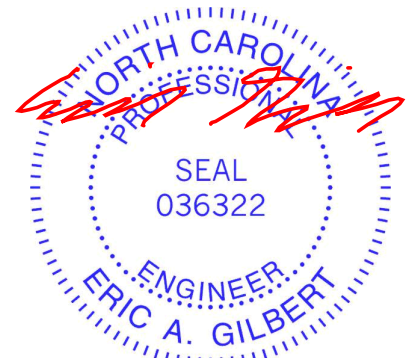
TOP CHORD 1-2=-1391/112, 2-3=-1391/112  
 BOT CHORD 1-4=-58/860, 3-4=-58/860  
 WEBS 2-4=-84/1851

**NOTES-**

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-7-0 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 (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=107, 3=132.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1049 lb down and 80 lb up at 1-8-4, and 1049 lb down and 80 lb up at 3-8-4, and 1051 lb down and 78 lb up at 5-8-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-2=-60, 2-3=-60, 1-3=-20  
 Concentrated Loads (lb)  
 Vert: 5=-1049(B) 6=-1049(B) 7=-1051(B)



March 27, 2020

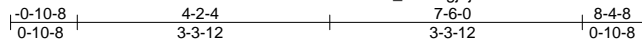
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**

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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



818 Soundside Road  
 Edenton, NC 27932

Job J0320-1371	Truss E1GE	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	Avery	E14237010
Comtech, Inc., Fayetteville, NC - 28314,					8.330 s Mar 10 2020 MiTek Industries, Inc. Fri Mar 27 11:04:14 2020 Page 1	
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4x4 =

Scale = 1:30.2

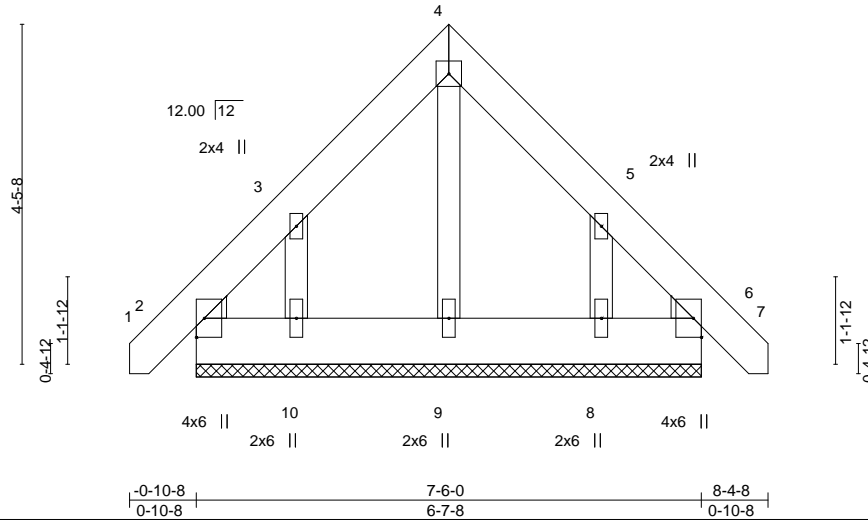


Plate Offsets (X,Y)--	[2:0-0-10,0-0-10], [2:0-1-4,0-3-9], [6:0-0-10,0-0-10], [6:0-1-4,0-3-9]
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LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.03	Vert(LL) -0.00	6	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.01	Vert(CT) -0.00	6	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.03	Horz(CT) 0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P					Weight: 59 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x8 SP No.1  
 OTHERS 2x4 SP No.2  
 WEDGE  
 Left: 2x4 SP No.2, Right: 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 6-7-8.  
 (lb) - Max Horz 2=122(LC 11)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 10=-169(LC 12), 8=-166(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9, 10, 8

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 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, 6 except (jt=lb) 10=169, 8=166.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



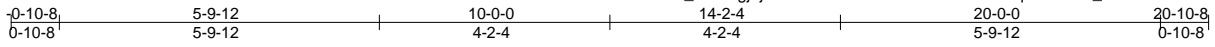
March 27, 2020

Job J0320-1371	Truss G1	Truss Type COMMON	Qty 6	Ply 1	Avery	E14237011
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Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Mar 10 2020 MiTek Industries, Inc. Fri Mar 27 11:04:15 2020 Page 1

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4x6 =

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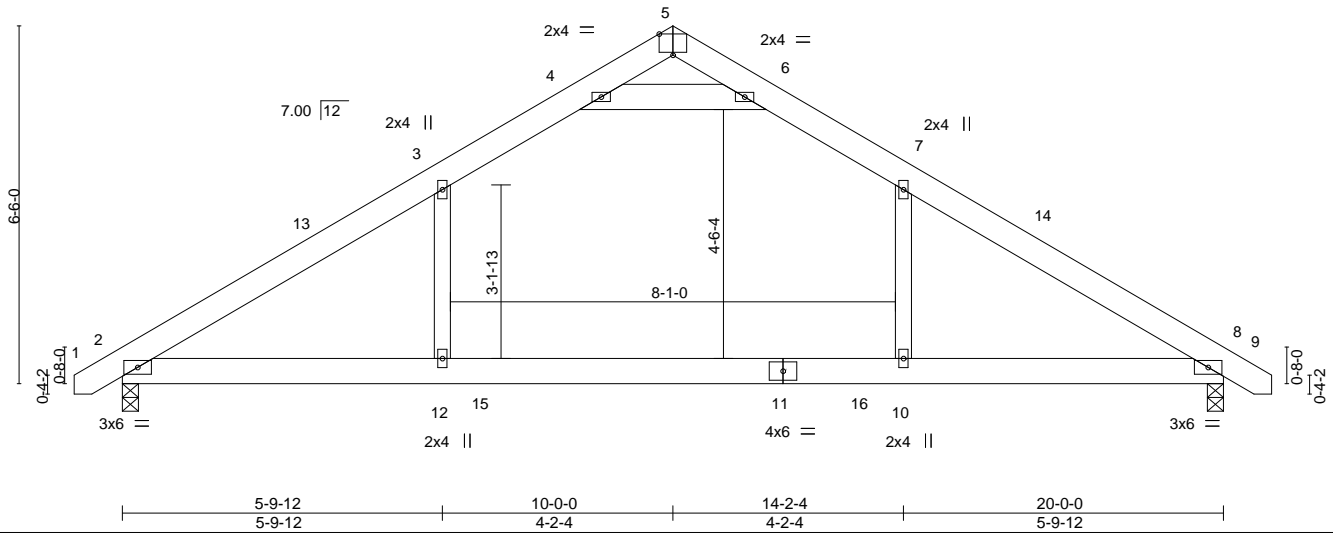


Plate Offsets (X,Y)-- [5:0-3-0,Edge]

<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 0.49	Vert(LL)	-0.15	10-12	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.40	Vert(CT)	-0.24	10-12	>993		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.16	Horz(CT)	0.02	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.07	12	>999	Weight: 124 lb	FT = 20%

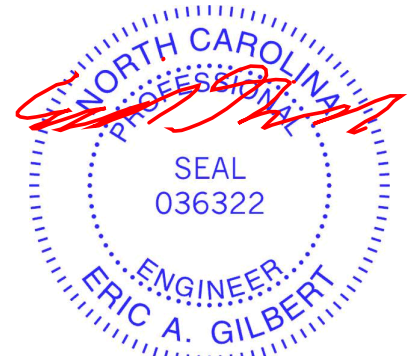
**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 4-6: 2x6 SP No.1

**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, 8=0-3-8  
 Max Horz 2=-150(LC 10)  
 Max Uplift 2=-56(LC 12), 8=-56(LC 13)  
 Max Grav 2=941(LC 19), 8=941(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1347/207, 3-4=-993/268, 4-5=-91/592, 5-6=-91/593, 6-7=-993/268, 7-8=-1347/207  
 BOT CHORD 2-12=-69/1051, 10-12=-69/1051, 8-10=-69/1051  
 WEBS 3-12=0/422, 7-10=0/422, 4-6=-1671/401

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-9 to 3-8-4, Interior(1) 3-8-4 to 10-0-0, Exterior(2) 10-0-0 to 14-2-4, Interior(1) 14-2-4 to 20-8-9 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.



March 27, 2020

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818 Soundside Road  
 Edenton, NC 27932

Job J0320-1371	Truss G1GE	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	Avery	E14237012
Comtech, Inc., Fayetteville, NC - 28314,						Job Reference (optional)

8.330 s Mar 10 2020 MiTek Industries, Inc. Fri Mar 27 11:04:16 2020 Page 1  
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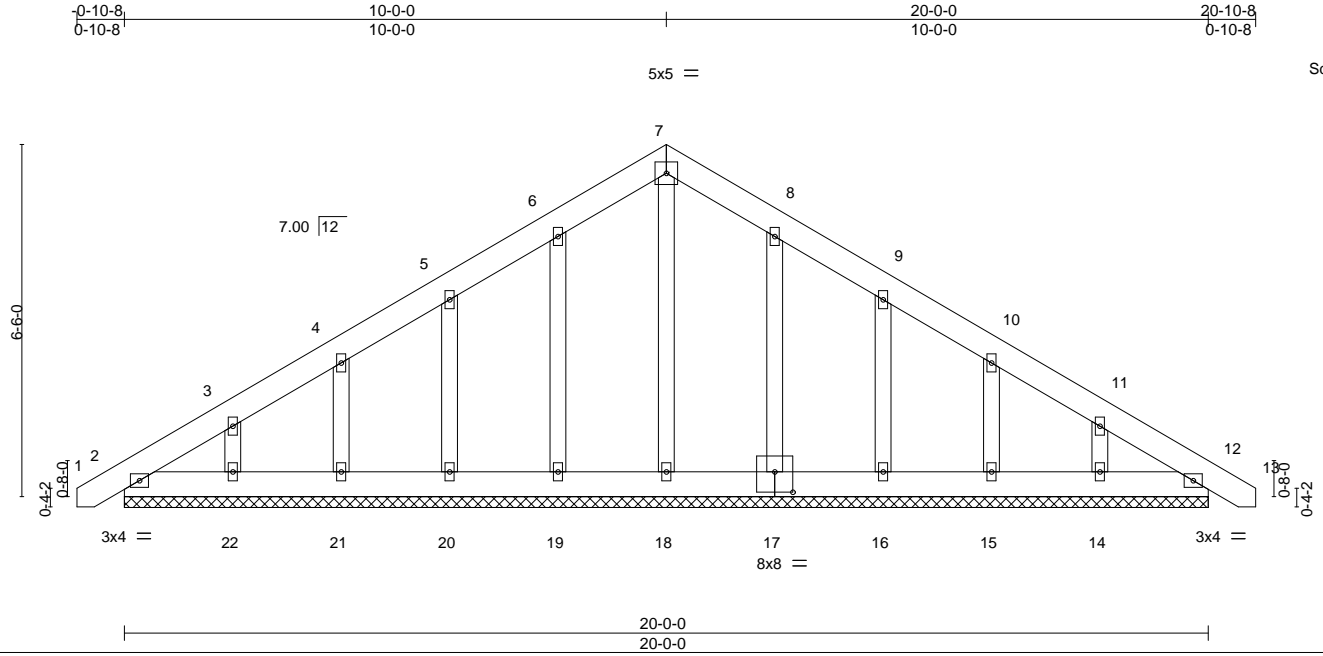


Plate Offsets (X,Y)--	[17:0-4-0,0-4-8]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.03	Vert(LL) 0.00 12 n/r 120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.01	Vert(CT) 0.00 12 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.07	Horz(CT) 0.00 12 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S			
				Weight: 146 lb	FT = 20%

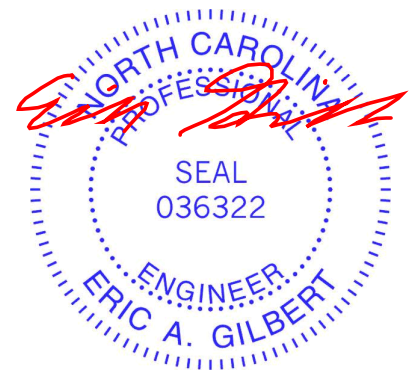
**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 OTHERS 2x4 SP No.2

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

**REACTIONS.** All bearings 20-0-0.  
 (lb) - Max Horz 2=-187(LC 20)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 19, 20, 21, 22, 17, 16, 15, 14  
 Max Grav All reactions 250 lb or less at joint(s) 2, 18, 19, 20, 21, 22, 17, 16, 15, 14, 12

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-8-9 to 3-8-4, Exterior(2) 3-8-4 to 10-0-0, Corner(3) 10-0-0 to 14-4-13, Exterior(2) 14-4-13 to 20-8-9 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 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, 19, 20, 21, 22, 17, 16, 15, 14.
  - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.

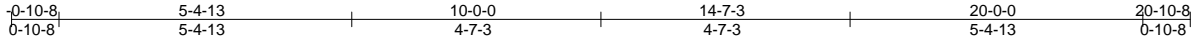


Job J0320-1371	Truss G2	Truss Type COMMON	Qty 1	Ply 2	Avery	E14237013
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Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Mar 10 2020 MiTek Industries, Inc. Fri Mar 27 11:04:17 2020 Page 1

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6x8 ||

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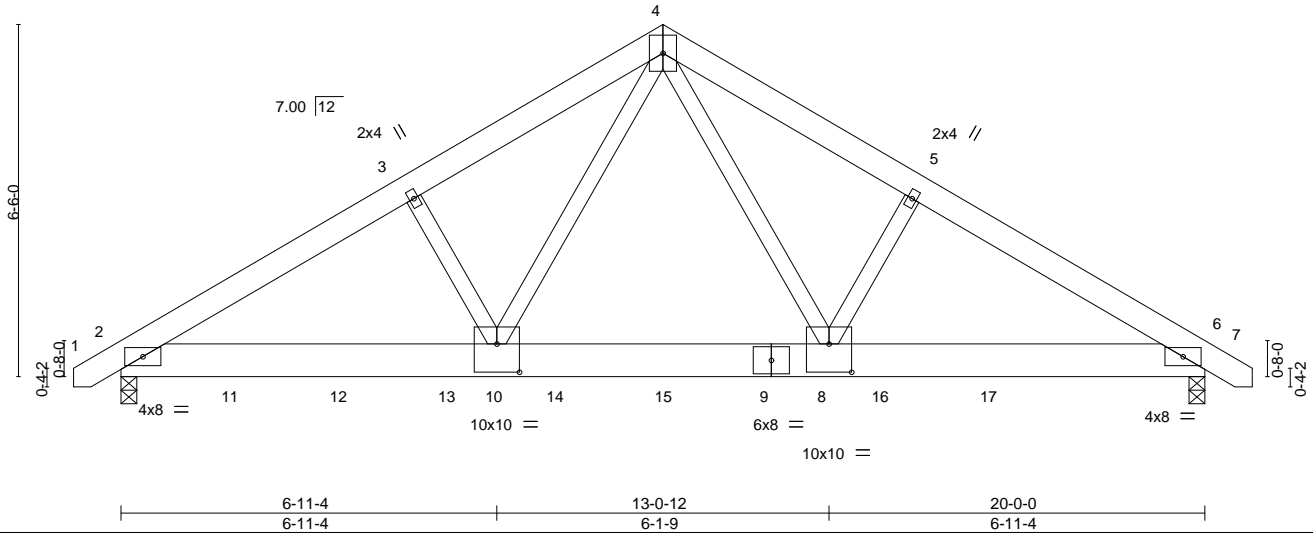


Plate Offsets (X,Y)--	[8:0-5-0,0-6-4], [10:0-5-0,0-6-4]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.43	Vert(LL) -0.09 2-10 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.59	Vert(CT) -0.18 2-10 >999 240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.75	Horz(CT) 0.04 6 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) -0.01 2-10 >999 240	Weight: 298 lb	FT = 20%

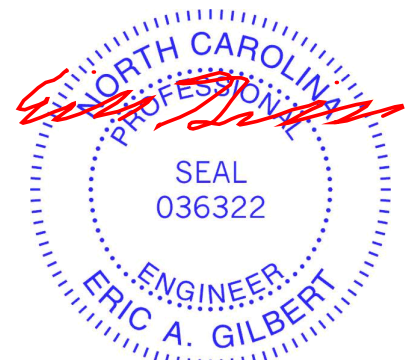
<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-11-6 oc purlins.
BOT CHORD 2x8 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	

**REACTIONS.** (size) 2=0-3-8, 6=0-3-8  
 Max Horz 2=150(LC 26)  
 Max Grav 2=6792(LC 2), 6=5706(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-9841/0, 3-4=-9709/0, 4-5=-9300/0, 5-6=-9437/0  
 BOT CHORD 2-10=0/8361, 8-10=0/5808, 6-8=0/7985  
 WEBS 3-10=-206/264, 4-10=0/5575, 4-8=0/4817, 5-8=-187/298

- 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 0-5-0 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 (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; 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.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1413 lb down at 2-0-12, 1374 lb down at 4-0-12, 1374 lb down at 6-0-12, 1374 lb down at 8-0-12, 1374 lb down at 10-0-12, 1374 lb down at 12-0-12, and 1374 lb down at 14-0-12, and 1374 lb down at 16-0-12 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: 2-6=-20, 1-4=-60, 4-7=-60  
 Concentrated Loads (lb)  
 Vert: 9=-1102(F) 11=-1148(B) 12=-1102(F) 13=-1102(F) 14=-1102(F) 15=-1102(F) 16=-1102(F) 17=-1102(F)



March 27, 2020

Job J0320-1371	Truss M1	Truss Type MONOPITCH	Qty 3	Ply 1	Avery	E14237014
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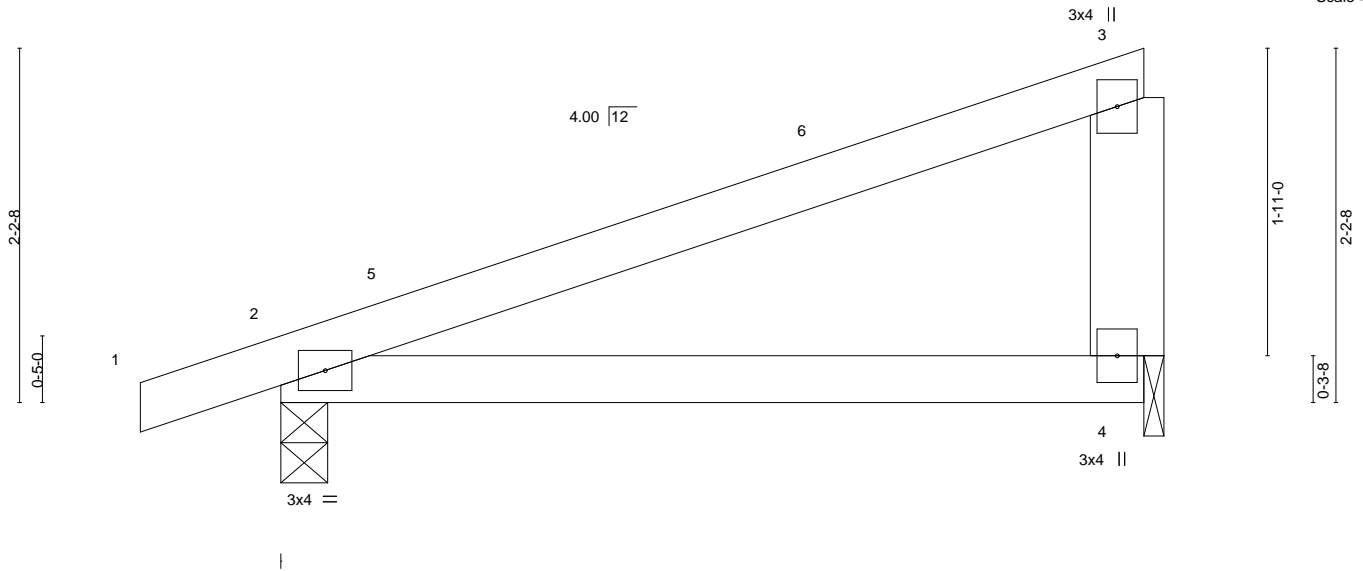
Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Mar 10 2020 MiTek Industries, Inc. Fri Mar 27 11:04:18 2020 Page 1

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Scale = 1:14.3



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 0.35	Vert(LL)	-0.04	2-4	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.24	Vert(CT)	-0.07	2-4	>849		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00		n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P	Wind(LL)	0.08	2-4	>764	Weight: 22 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 5-6-0 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 2=70(LC 8)  
 Max Uplift 2=-109(LC 8), 4=-86(LC 8)  
 Max Grav 2=272(LC 1), 4=199(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 (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 5-3-4 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) 4 except (jt=bl) 2=109.



March 27, 2020

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



818 Soundside Road  
 Edenton, NC 27932

Job J0320-1371	Truss M1GE	Truss Type GABLE	Qty 1	Ply 1	Avery	E14237015
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Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Mar 10 2020 MiTek Industries, Inc. Fri Mar 27 11:04:18 2020 Page 1  
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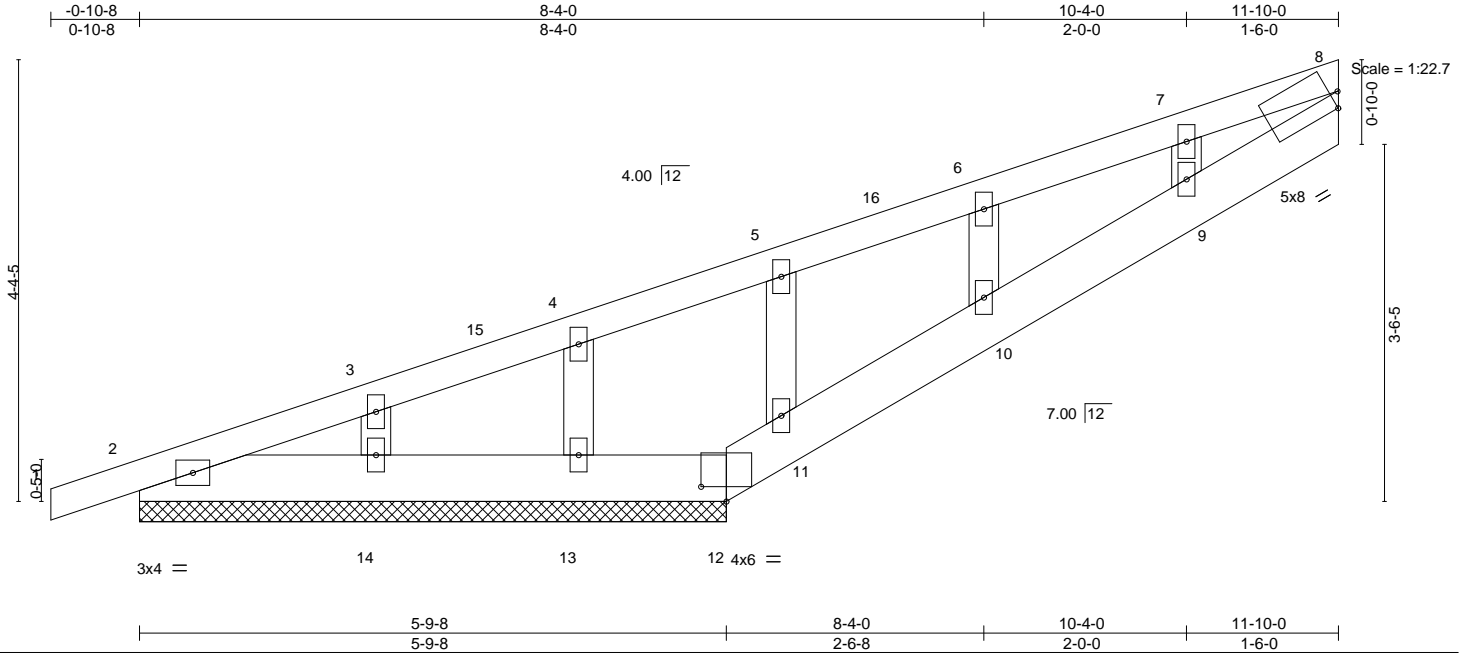


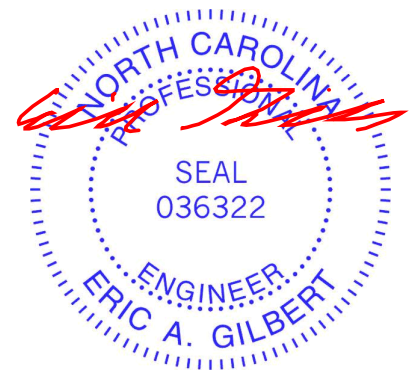
Plate Offsets (X,Y)--	[8:0-0-15,0-1-12], [12:0-3-0,0-1-12]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.26	Vert(LL) 0.00 1 n/r 120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.26	Vert(CT) 0.00 1 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.03	Horz(CT) -0.00 12 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S		Weight: 57 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 9-11-1 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	
OTHERS 2x4 SP No.2	

**REACTIONS.** All bearings 5-9-8.  
 (lb) - Max Horz 2=183(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 14 except 12=353(LC 12), 13=-247(LC 1)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 13 except 12=1047(LC 1), 14=250(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-406/582, 3-4=-375/576, 4-5=-356/591, 5-6=-310/553, 6-7=-279/569, 7-8=-244/534  
 BOT CHORD 2-14=-529/239, 13-14=-529/239, 12-13=-529/239, 11-12=-844/376, 10-11=-699/321,  
 9-10=-649/297, 8-9=-530/238

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 11-10-0 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) All plates are 2x4 MT20 unless otherwise indicated.
  - 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) 2, 14 except (jt=lb) 12=353, 13=247.
  - 8) Non Standard bearing condition. Review required.



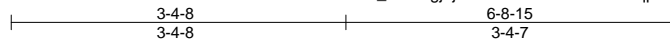
March 27, 2020

Job J0320-1371	Truss VC1	Truss Type VALLEY	Qty 1	Ply 1	Avery	E14237016
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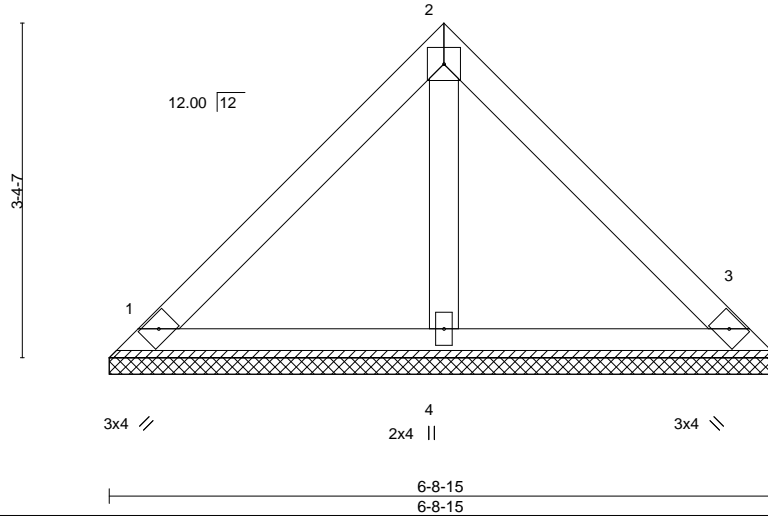
8.330 s Mar 10 2020 MiTek Industries, Inc. Fri Mar 27 11:04:19 2020 Page 1

ID:dRBT\_d1wQgjhj7GT6Be0eMzX2x6-vW7qpEEcRy4DJYwZ6Z6Q7qhkd7AXOCMTWIPIjLzWlwb



4x4 =

Scale = 1:23.2



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	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 0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-P						Weight: 27 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

(size) 1=6-8-15, 3=6-8-15, 4=6-8-15  
 Max Horz 1=-72(LC 8)  
 Max Uplift 1=-26(LC 13), 3=-26(LC 13)  
 Max Grav 1=147(LC 1), 3=147(LC 1), 4=189(LC 1)

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 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.



March 27, 2020

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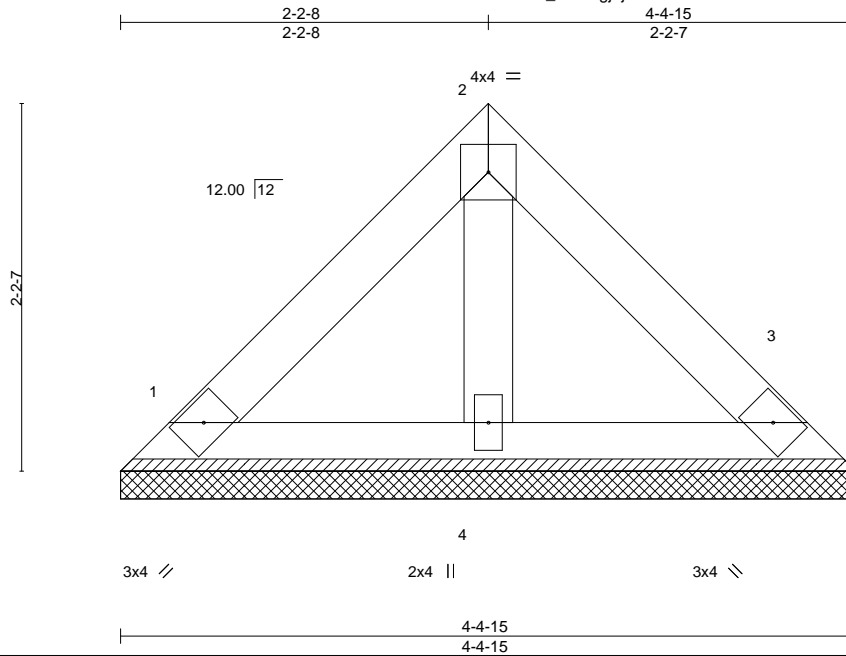


Job J0320-1371	Truss VC2	Truss Type VALLEY	Qty 1	Ply 1	Avery	E14237017
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ID:dRBT\_d1wQgjhj7GT6Be0eMzX2x6-NihC0aFECGC4xiVmgHdfg1ExVXXQ7focyk8rGnzWlBv



Scale = 1:13.8

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.05	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.01	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-P					Weight: 17 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 4-4-15 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 1=4-4-15, 3=4-4-15, 4=4-4-15  
 Max Horz 1=44(LC 11)  
 Max Uplift 1=-16(LC 13), 3=-16(LC 13)  
 Max Grav 1=90(LC 1), 3=90(LC 1), 4=116(LC 1)

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 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.



March 27, 2020

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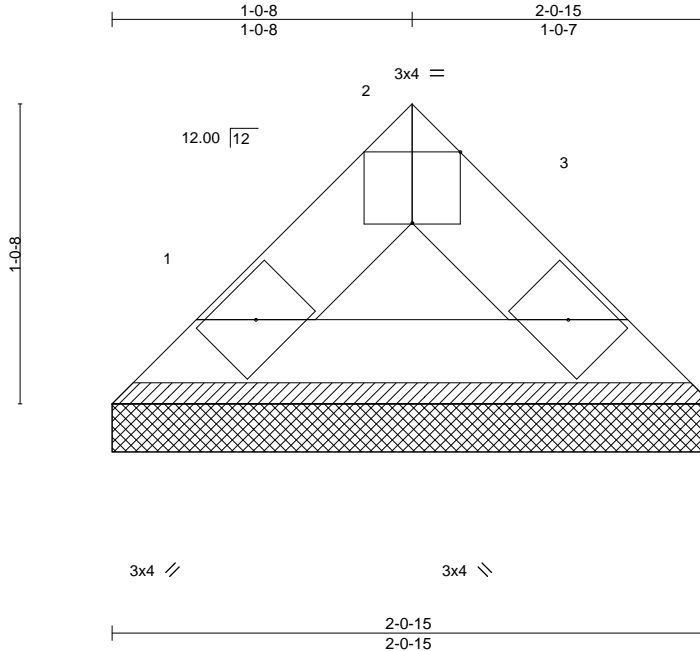
818 Soundside Road  
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Job J0320-1371	Truss VC3	Truss Type VALLEY	Qty 1	Ply 1	Avery	E14237018
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ID:dRBT\_d1wQgjhj7GT6Be0eMzX2x6-NihC0aFECGC4xiVmgHdfg1ExDXc7fwcky8rGnzWlbv



Scale: 1.5"=1'

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.01	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.01	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: 6 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 2-0-15 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

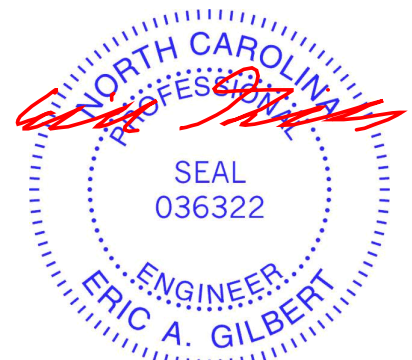
**REACTIONS.**

(size) 1=2-0-15, 3=2-0-15  
Max Horz 1=-16(LC 8)  
Max Uplift 1=-2(LC 12), 3=-2(LC 12)  
Max Grav 1=55(LC 1), 3=55(LC 1)

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 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.



March 27, 2020

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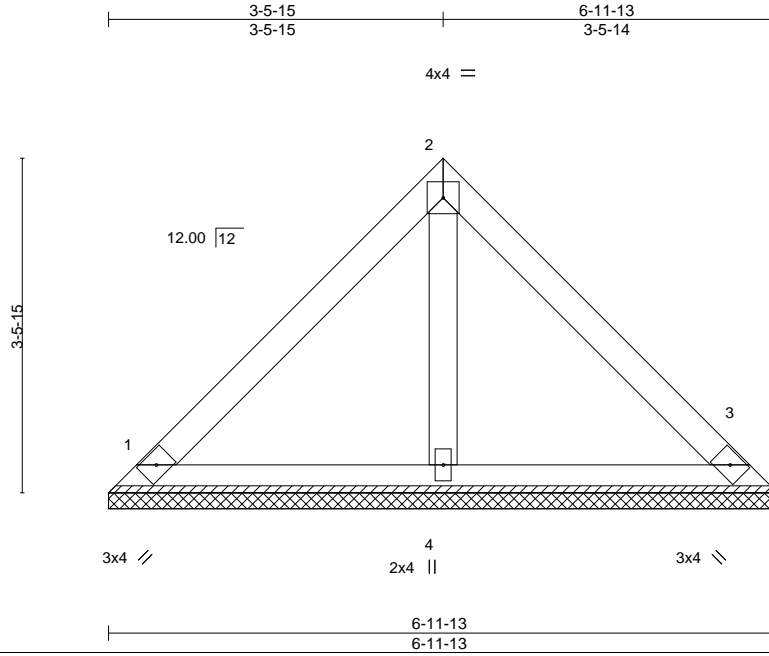
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Job J0320-1371	Truss VE1	Truss Type VALLEY	Qty 1	Ply 1	Avery	E14237019
					Job Reference (optional)	

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ID:dRBT\_d1wQgjh7GT6Be0eMzX2x6-suEaEwFszakWz3yD\_8uCFm4Wxsws6plzcuPoDzWlbu



Scale: 1/2"=1'

LOADING (psf)	SPACING-	CSL.	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 0.07	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: 28 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.

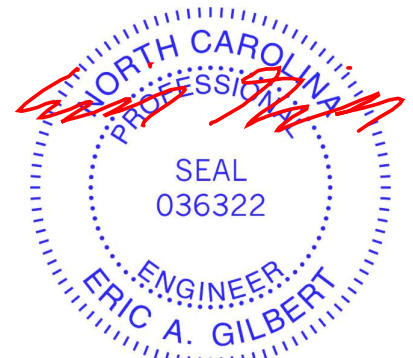
**REACTIONS.**

(size) 1=6-11-13, 3=6-11-13, 4=6-11-13  
 Max Horz 1=-75(LC 8)  
 Max Uplift 1=-27(LC 13), 3=-27(LC 13)  
 Max Grav 1=153(LC 1), 3=153(LC 1), 4=196(LC 1)

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; 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
- 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.



March 27, 2020

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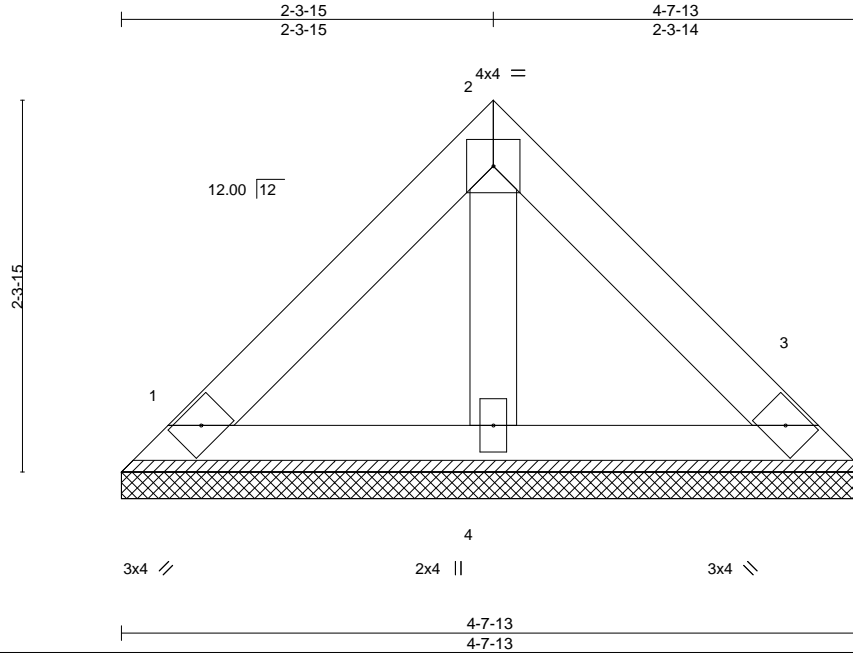
818 Soundside Road  
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Job J0320-1371	Truss VE2	Truss Type VALLEY	Qty 1	Ply 1	Avery	E14237020
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ID:dRBT\_d1wQghj7GT6Be0eMzX2x6-K5ozRGGVktSnA?e8nif7ISJHuKDrbZGvCGdyKgzWlbt



Scale = 1:14.4

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	2-0-0	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 0.01	Horz(CT) 0.00	3	n/a	n/a			
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P						Weight: 18 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 4-7-13 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

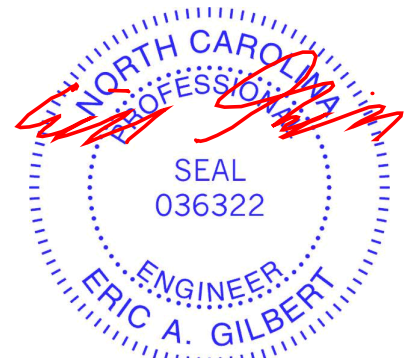
**REACTIONS.**

(size) 1=4-7-13, 3=4-7-13, 4=4-7-13  
 Max Horz 1=47(LC 9)  
 Max Uplift 1=-17(LC 13), 3=-17(LC 13)  
 Max Grav 1=96(LC 1), 3=96(LC 1), 4=123(LC 1)

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 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.



March 27, 2020

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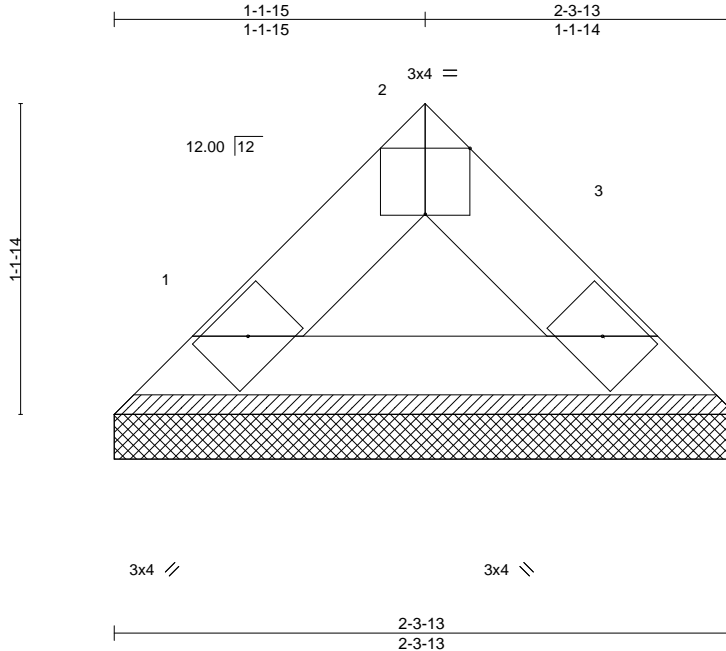
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Job J0320-1371	Truss VE3	Truss Type VALLEY	Qty 1	Ply 1	Avery	E14237021
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8.330 s Mar 10 2020 MiTek Industries, Inc. Fri Mar 27 11:04:23 2020 Page 1

ID:dRBT\_d1wQgjh7GT6Be0eMzX2x6-oHMLecH7VBaeo9DKLPBMHgrSQkZDK?i2RwNWs6zWlbs



Scale = 1:8.6

Plate Offsets (X,Y)-- [2:0-2-0,Edge]	
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0
TCLL 20.0	Plate Grip DOL 1.15
TCDL 10.0	Lumber DOL 1.15
BCLL 0.0 *	Rep Stress Incr YES
BCDL 10.0	Code IRC2015/TPI2014
	<b>CSI.</b>
	TC 0.01
	BC 0.02
	WB 0.00
	Matrix-P
	<b>DEFL.</b> in (loc) l/defl L/d
	Vert(LL) n/a - n/a 999
	Vert(CT) n/a - n/a 999
	Horz(CT) 0.00 3 n/a n/a
	<b>PLATES</b> <b>GRIP</b>
	MT20 244/190
	Weight: 7 lb FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 2-3-13 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=2-3-13, 3=2-3-13  
Max Horz 1=19(LC 8)  
Max Uplift 1=-2(LC 12), 3=-2(LC 12)  
Max Grav 1=65(LC 1), 3=65(LC 1)

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 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.



March 27, 2020

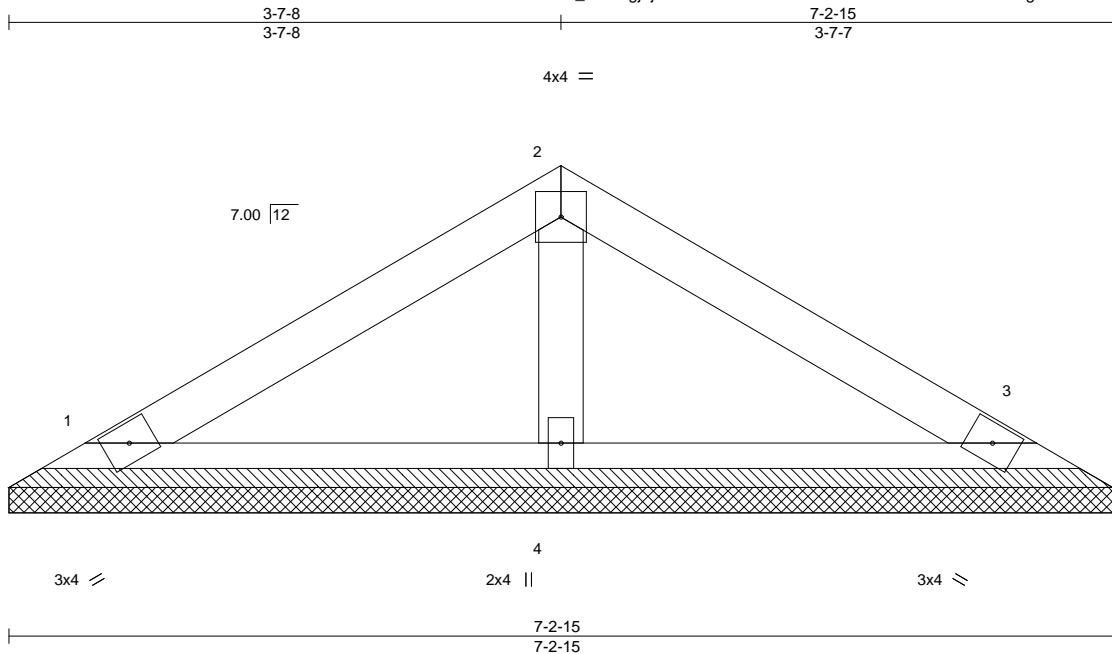
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**

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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



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Job J0320-1371	Truss VG1	Truss Type VALLEY	Qty 1	Ply 1	Avery	E14237022
Comtech, Inc., Fayetteville, NC - 28314,					8.330 s Mar 10 2020 MiTek Industries, Inc. Fri Mar 27 11:04:23 2020 Page 1	
					ID:dRBT_d1wQgjhj7GT6Be0eMzX2x6-oHMLecH7VBaeo9DKLPBMHgrQakYRK?M2RwNWs6zWlbs	



Scale = 1:15.1

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.13	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.07	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						
	Code IRC2015/TPI2014						Weight: 24 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

(size) 1=7-2-15, 3=7-2-15, 4=7-2-15  
 Max Horz 1=43(LC 8)  
 Max Uplift 1=-21(LC 12), 3=-25(LC 13)  
 Max Grav 1=130(LC 1), 3=130(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 (3-second gust) Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 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.



March 27, 2020

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**

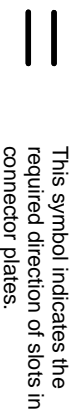
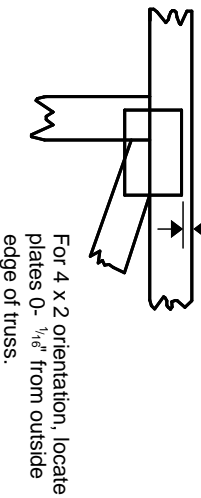
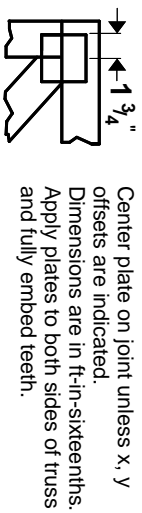
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



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# Symbols

## PLATE LOCATION AND ORIENTATION



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

## PLATE SIZE

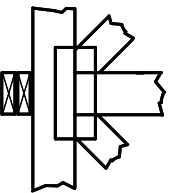
4 X 4

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

## LATERAL BRACING LOCATION



## BEARING

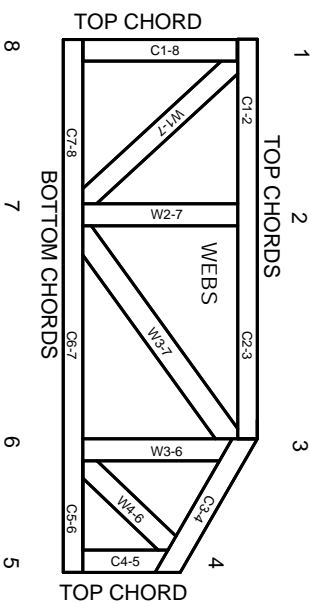


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

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

# Numbering System



**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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MITteK Engineering Reference Sheet: MII-7473 rev. 10/03/2015



# 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. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.