

Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: J0423-1501  
Lot 91 South Creek

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: I57563010 thru I57563029

My license renewal date for the state of North Carolina is December 31, 2023.

North Carolina COA: C-0844



April 4, 2023

Gilbert, Eric

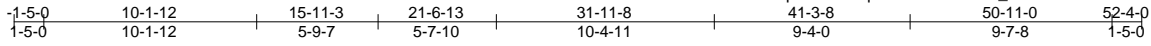
**IMPORTANT NOTE:** The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), 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 J0423-1501	Truss A1	Truss Type ROOF SPECIAL	Qty 2	Ply 1	Lot 91 South Creek Job Reference (optional)	157563010
-------------------	-------------	----------------------------	----------	----------	--	-----------

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 4 09:40:34 2023 Page 1

ID:2W3hk9latme7Qcxb7IDGi8zptHE-UB2qJo2PG80bf7hWu\_tz80U3?Rc2sTVQC\_uG75zU84R



Scale = 1:109.8

6x12 M18AHS =

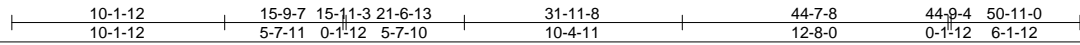
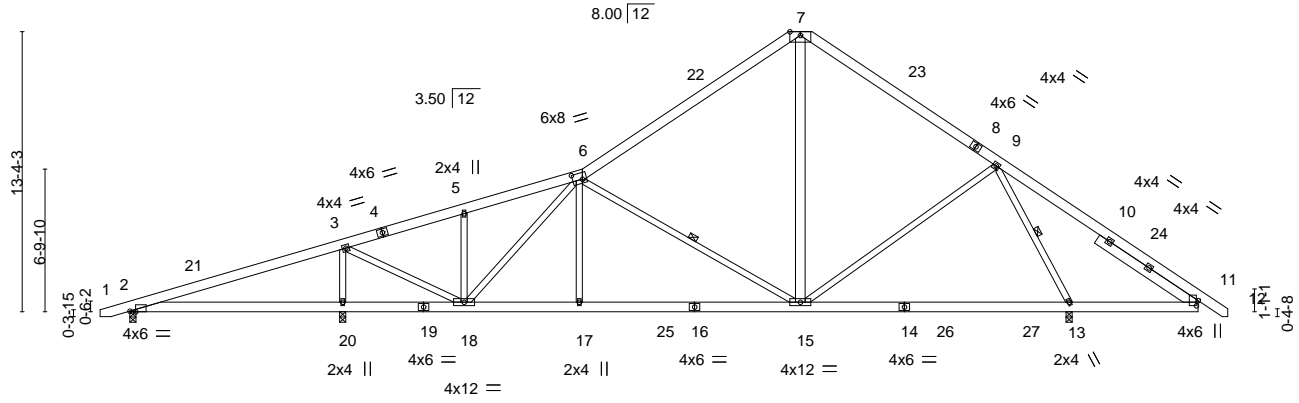


Plate Offsets (X,Y)--	[2:0-3-5,Edge], [6:0-5-8,0-3-12], [11:0-2-15,0-1-0]
-----------------------	---

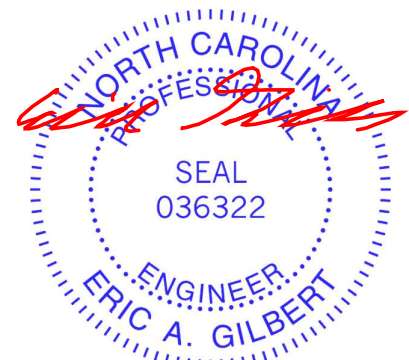
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.57	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.55	Vert(LL) -0.26 13-15 >999 360	M18AHS	186/179
BCLL 0.0 *	Lumber DOL 1.15	WB 0.89	Vert(CT) -0.38 13-15 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.02 13 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.11 2-20 >999 240	Weight: 389 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-8-7 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 *Except* 7-15: 2x6 SP No.1	WEBS 1 Row at midpt 6-15, 9-13
SLIDER Right 2x6 SP No.1 5-8-1	

**REACTIONS.** (size) 2=0-3-8, 13=0-3-8, 20=0-3-8  
 Max Horz 2=330(LC 11)  
 Max Uplift 2=-209(LC 8), 13=-122(LC 13), 20=-191(LC 12)  
 Max Grav 2=313(LC 23), 13=1984(LC 20), 20=1965(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-149/491, 3-5=-1230/159, 5-6=-1181/201, 6-7=-1172/287, 7-9=-1112/292,  
 9-11=-485/704  
 BOT CHORD 2-20=-452/121, 18-20=-452/121, 17-18=-96/1606, 15-17=-98/1599, 13-15=0/516,  
 11-13=-473/519  
 WEBS 3-20=-1712/366, 6-17=0/357, 6-15=-850/277, 7-15=-29/627, 9-15=-40/467,  
 9-13=-1880/741, 3-18=-95/1567, 6-18=-781/136

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-15 to 3-2-14, Interior(1) 3-2-14 to 31-11-8, Exterior(2) 31-11-8 to 36-4-5, Interior(1) 36-4-5 to 52-2-7 zone; cantilever right exposed ; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) All plates are MT20 plates unless otherwise indicated.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 209 lb uplift at joint 2, 122 lb uplift at joint 13 and 191 lb uplift at joint 20.



April 4, 2023

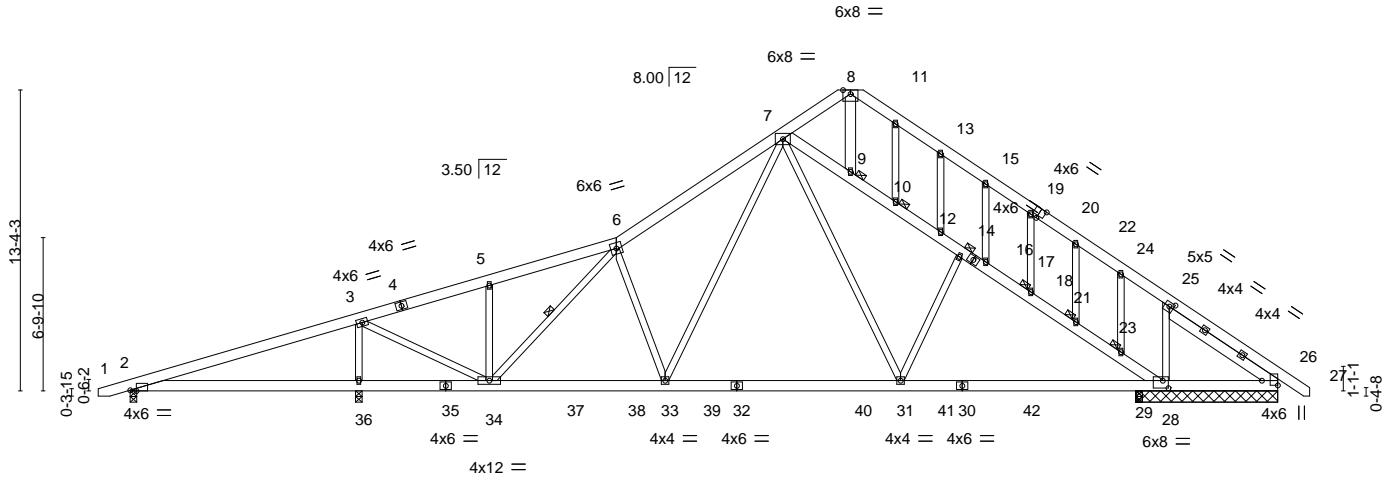
Job	Truss	Truss Type	Qty	Ply	Lot 91 South Creek	157563011
J0423-1501	A1-GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 4 09:40:36 2023 Page 1  
 ID:2W3hk9latme7Qcxb7tDGi8zptHE-RaAbkT4fmGJulrv?PvRDRZQIE11KQDjigINNC\_zU84P

-1-5-0	10-1-12	15-11-3	21-6-13	31-11-8	36-9-8	41-3-8	50-11-0	52-4-0
1-5-0	10-1-12	5-9-7	5-7-10	10-4-11	4-10-0	4-6-0	9-7-8	1-5-0

Scale = 1:102.2



10-1-12	15-9-7	15-11-3	21-6-13	23-8-13	31-11-8	34-2-3	44-7-8	44-9-4	50-11-0
10-1-12	5-7-11	0-1-12	5-7-10	2-2-0	8-2-11	2-2-11	10-5-5	0-1-12	6-1-12

Plate Offsets (X,Y)-- [2:0-3-5,Edge], [20:0-3-0,Edge], [25:0-2-6,0-2-4], [26:Edge,0-8-8], [28:0-3-0-4-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.45	Vert(LL)	-0.18	31-33	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.51	Vert(CT)	-0.28	31-33	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.69	Horz(CT)	0.03	26	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.12	2-36	>999		
								Weight: 453 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-3-2 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
WEBS 2x4 SP No.2	6-0-0 oc bracing: 2-36,34-36.
OTHERS 2x4 SP No.2 *Except*	WEBS 1 Row at midpt 6-34
8-9: 2x6 SP No.1	JOINTS 1 Brace at Jt(s): 14, 9, 10, 18, 21, 23
SLIDER Right 2x6 SP No.1 5-9-15	

**REACTIONS.** All bearings 0-3-8 except (jt=length) 28=6-3-8, 26=6-3-8.  
 (lb) - Max Horz 2=435(LC 11)  
 Max Uplift All uplift 100 lb or less at joint(s) except 28=725(LC 13), 2=274(LC 8), 36=517(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) except 28=1147(LC 20), 2=287(LC 23), 26=395(LC 22), 29=669(LC 20), 29=495(LC 1), 29=495(LC 1), 36=2151(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-279/646, 3-5=-1353/273, 5-6=-1303/341, 6-7=-2031/567, 7-8=-323/133, 7-9=-1643/595, 9-10=-1576/564, 10-12=-1605/590, 12-14=-1691/680, 14-17=-1642/631, 17-18=-1736/715, 18-21=-1763/734, 21-23=-1802/765, 23-28=-1799/766, 8-11=-263/108, 11-13=-281/68, 15-19=-274/11, 19-22=-322/16, 22-24=-376/38, 24-25=-441/16, 25-26=-561/345  
 BOT CHORD 2-36=-654/247, 34-36=-654/247, 33-34=-286/1804, 31-33=-84/1320, 29-31=-151/1676, 28-29=-151/1676, 26-28=-282/506  
 WEBS 3-36=-1908/656, 25-28=-597/443, 3-34=-322/1950, 6-34=-898/148, 6-33=-513/350, 7-33=-257/979, 7-31=-186/894, 14-31=-399/335

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 725 lb uplift at joint 28, 274 lb uplift at joint 2 and 517 lb uplift at joint 36.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 4, 2023

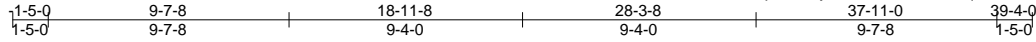
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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

Job J0423-1501	Truss A2	Truss Type COMMON	Qty 9	Ply 1	Lot 91 South Creek Job Reference (optional)	157563012
-------------------	-------------	----------------------	----------	----------	--	-----------

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 4 09:40:38 2023 Page 1  
ID:2W3hk9latme7Qcxb7tDGi8zptHE-NyIL995vJNW17c?l7qxlsem22zjLF?7csUGszU84N



5x10 M18AHS =

Scale = 1:92.1

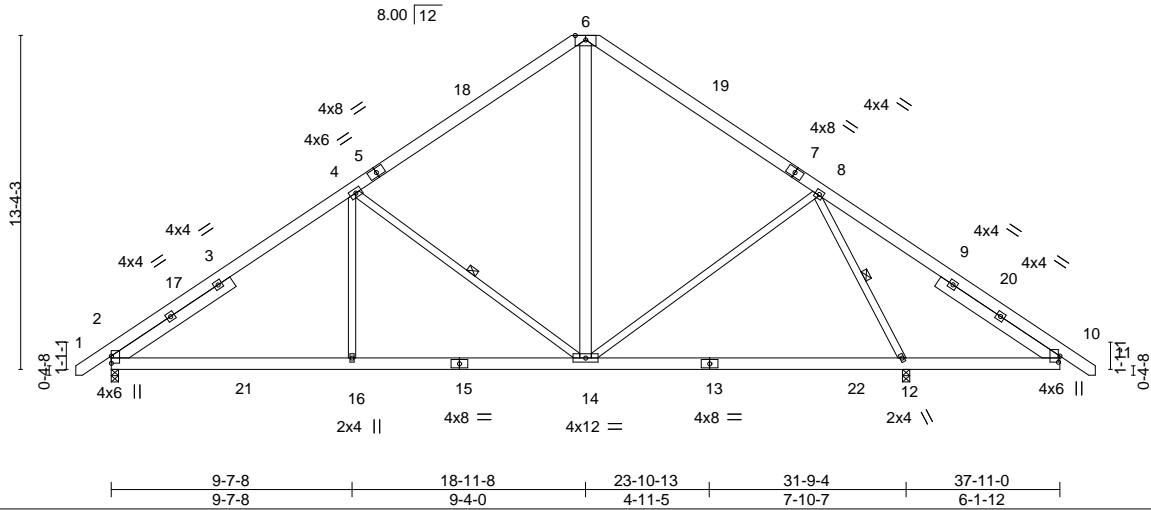


Plate Offsets (X,Y)--	[10:0-2-15,0-0-12]								
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15		TC 0.50	Vert(LL) -0.27	12-14	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15		BC 0.56	Vert(CT) -0.39	12-14	>973	240	M18AHS	186/179
BCLL 0.0 *	Rep Stress Incr YES		WB 0.59	Horz(CT) 0.03	12	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL) -0.03	12-14	>999	240		
								Weight: 313 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-9-7 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
WEBS 2x4 SP No.2 *Except*	6-0-0 oc bracing: 10-12.
6-14: 2x6 SP No.1	WEBS 1 Row at midpt 4-14, 8-12
SLIDER Left 2x6 SP No.1 5-8-14, Right 2x6 SP No.1 5-9-1	


**REACTIONS.** (size) 2=0-3-8, 12=0-3-8  
 Max Horz 2=324(LC 11)  
 Max Uplift 2=92(LC 12), 12=115(LC 13)  
 Max Grav 2=1530(LC 19), 12=1998(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-1954/286, 4-6=-1131/304, 6-8=-1159/287, 8-10=-492/707  
 BOT CHORD 2-16=-120/1713, 14-16=-120/1713, 12-14=0/505, 10-12=-472/521  
 WEBS 4-16=0/593, 4-14=-987/309, 6-14=-71/651, 8-14=-48/521, 8-12=-1808/751

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-3-7 to 3-1-6, Interior(1) 3-1-6 to 18-11-8, Exterior(2) 18-11-8 to 23-4-5, Interior(1) 23-4-5 to 39-2-7 zone; cantilever 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 MT20 plates unless otherwise indicated.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 92 lb uplift at joint 2 and 115 lb uplift at joint 12.



April 4, 2023

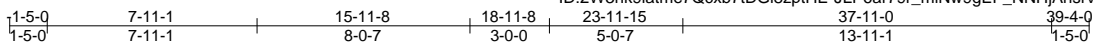
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	 <p>818 Soundside Road Edenton, NC 27932</p>
--	---

Job	Truss	Truss Type	Qty	Ply	Lot 91 South Creek	I57563013
J0423-1501	A2-GE	FINK	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 4 09:40:40 2023 Page 1

ID:2W3hk9latme7Qcxb7tDGi8zptHE-JLP6ar79r\_miNw9gEF\_NNHjAnsVGEQlbwLaLizU84L



5x8 =

Scale = 1:87.0

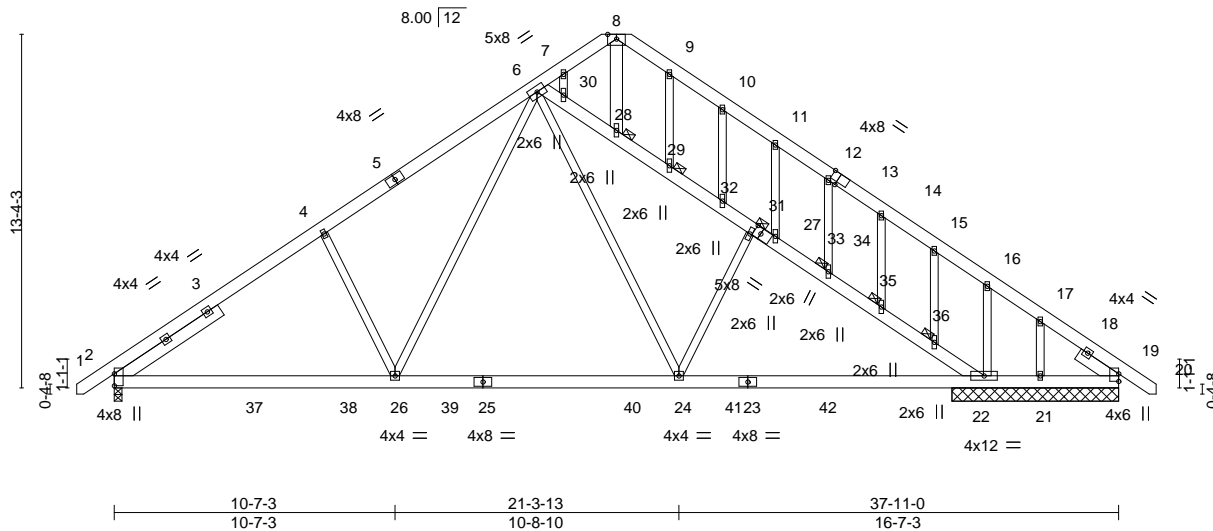


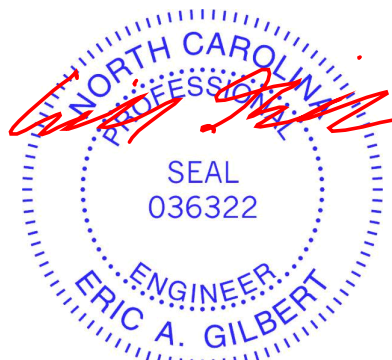
Plate Offsets (X, Y)--	[2:Edge,0-0-0], [13:0-3-4,Edge], [27:0-3-2,0-2-8]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.23	Vert(LL) -0.18 24-26 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.54	Vert(CT) -0.25 24-26 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.67	Horz(CT) 0.04 19 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.05 24-26 >999 240	Weight: 369 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-4-7 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 *Except*	JOINTS 1 Brace at Jt(s): 28, 29, 31, 34, 35, 36
SLIDER 6-27,8-28,22-27: 2x6 SP No.1	
Left 2x6 SP No.1 4-8-12, Right 2x6 SP No.1 1-8-13	

**REACTIONS.** (size) 2=0-3-8, 22=6-3-8, 21=6-3-8, 19=6-3-8  
 Max Horz 2=404(LC 11)  
 Max Uplift 2=-268(LC 12), 22=-541(LC 13), 21=-232(LC 22)  
 Max Grav 2=1631(LC 19), 22=1850(LC 20), 19=434(LC 22)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-2139/423, 4-6=-1988/527, 12-14=-265/69, 14-15=-318/89, 15-16=-350/108,  
 16-17=-443/275, 17-19=-533/309  
 BOT CHORD 2-26=-372/1925, 24-26=-95/1352, 22-24=-160/1720, 21-22=-283/486, 19-21=-283/486  
 WEBS 6-30=-1709/593, 28-30=-1697/578, 28-29=-1687/562, 29-32=-1708/586, 31-32=-1751/666,  
 31-33=-1730/623, 33-34=-1782/719, 34-35=-1797/738, 35-36=-1823/767,  
 22-36=-1870/793, 4-26=-465/394, 24-31=-399/346, 6-26=-250/949, 6-24=-197/915,  
 16-22=-401/300

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) All plates are 2x4 MT20 unless otherwise indicated.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 268 lb uplift at joint 2, 541 lb uplift at joint 22 and 232 lb uplift at joint 21.



April 4, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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

Job J0423-1501	Truss B1	Truss Type ROOF SPECIAL	Qty 3	Ply 1	Lot 91 South Creek Job Reference (optional)	157563014
-------------------	-------------	----------------------------	----------	----------	--	-----------

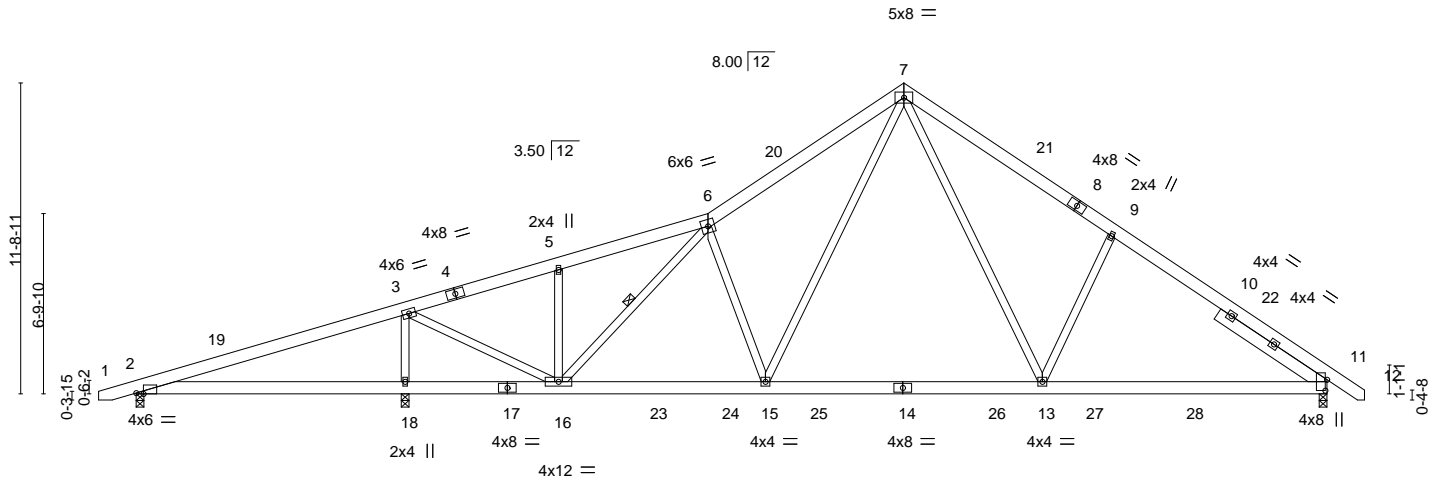
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 4 09:40:41 2023 Page 1

ID:2W3hk9latme7Qcxb7tDGi8zptHE-nXzUnB7ocluc\_4jsoyVcwUGl6F?X?kxSpa48tBzU84K

1-5-0	10-1-12	15-11-3	21-6-13	28-11-8	36-9-8	44-11-0	46-4-0
1-5-0	10-1-12	5-9-7	5-7-11	7-4-11	7-10-0	8-1-8	1-5-0

Scale = 1:86.9



10-1-12	15-11-3	23-8-13	34-2-3	44-11-0
10-1-12	5-9-7	7-9-11	10-5-5	10-8-13

Plate Offsets (X, Y)-- [2:0-3-5,Edge], [11:0-4-15,0-0-12]

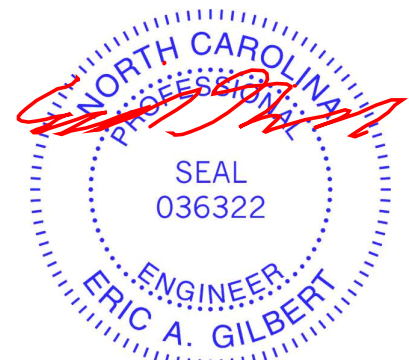
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.45	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.56	Vert(LL) -0.17 13-15 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.46	Vert(CT) -0.26 13-15 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.03 11 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.11 2-18 >999 240	Weight: 328 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-3-5 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.2	WEBS 1 Row at midpt 6-16
SLIDER Right 2x6 SP No.1 4-10-4	

**REACTIONS.** (size) 2=0-3-8, 18=0-3-8, 11=0-3-8  
 Max Horz 2=282(LC 11)  
 Max Uplift 2=200(LC 8), 18=176(LC 12), 11=91(LC 13)  
 Max Grav 2=301(LC 23), 18=2100(LC 2), 11=1644(LC 20)

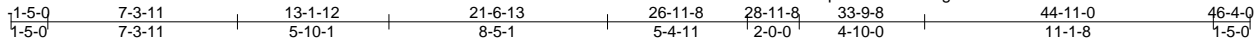
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-117/601, 3-5=-1375/202, 5-6=-1340/249, 6-7=-2030/467, 7-9=-2017/467, 9-11=-2165/368  
 BOT CHORD 2-18=-576/130, 16-18=-576/130, 15-16=-103/1737, 13-15=0/1200, 11-13=-149/1648  
 WEBS 7-13=-154/966, 3-18=-1859/400, 9-13=-473/305, 7-15=-162/978, 6-15=-530/261, 3-16=-148/1883, 6-16=-817/149

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-15 to 3-2-14, Interior(1) 3-2-14 to 28-11-8, Exterior(2) 28-11-8 to 33-4-5, Interior(1) 33-4-5 to 46-2-7 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 200 lb uplift at joint 2, 176 lb uplift at joint 18 and 91 lb uplift at joint 11.

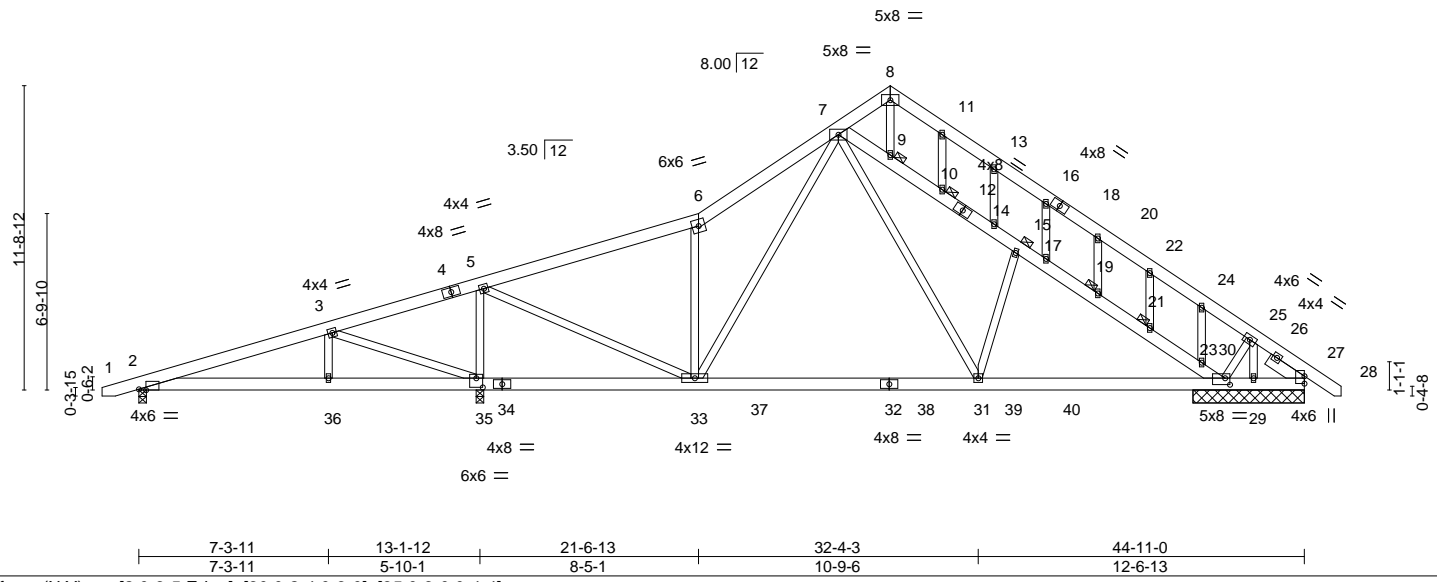


April 4, 2023

Job	Truss	Truss Type	Qty	Ply	Lot 91 South Creek	I57563015
J0423-1501	B1-GE	GABLE	1	1		
Comtech, Inc. Fayetteville, NC - 28314.						8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 4 09:40:44 2023 Page 1
						ID:2W3hk9latme7Qcxb7IDGi8zptHE-C6fcQDAgyDHBxSRT52JY7urOT0rC34uWYJoUWzU84H
						Job Reference (optional)



Scale = 1:88.8



<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 0.32	Vert(LL)	-0.22	31-33	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.52	Vert(CT)	-0.32	31-33	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.57	Horz(CT)	0.02	27	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.04	2-36	>999	Weight: 383 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. Except:
WEBS 2x4 SP No.2	6-0-0 oc bracing: 33-35.
OTHERS 2x4 SP No.2	JOINTS 1 Brace at Jt(s): 15, 9, 10, 19, 21
SLIDER Right 2x6 SP No.1 1-6-13	

**REACTIONS.** All bearings 4-3-8 except (jt=length) 2=0-3-8, 35=0-3-8.  
 (lb) - Max Horz 2=375(LC 11)  
 Max Uplift All uplift 100 lb or less at joint(s) except 30=734(LC 13), 2=296(LC 8), 35=485(LC 12), 29=374(LC 20)  
 Max Grav All reactions 250 lb or less at joint(s) 29 except 30=1612(LC 20), 2=435(LC 23), 35=1917(LC 1), 27=366(LC 22)


**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-399/361, 3-5=-350/546, 5-6=-1203/206, 6-7=-1366/378, 7-8=-344/164, 7-9=-1239/402, 9-10=-1135/357, 10-14=-1172/382, 14-15=-1276/469, 15-17=-1176/382, 17-19=-1269/458, 19-21=-1301/480, 21-23=-1314/498, 23-30=-1494/610, 8-11=-313/140, 11-13=-337/98, 13-16=-283/0, 16-20=-296/0, 20-22=-343/0, 22-24=-408/0, 24-25=-396/104, 25-27=-411/116  
 BOT CHORD 2-36=-343/326, 35-36=-343/326, 33-35=-477/448, 31-33=-9/917, 30-31=-53/1282, 29-30=-105/311, 27-29=-105/311  
 WEBS 7-31=-197/896, 5-35=-1521/628, 15-31=-370/311, 7-33=-158/460, 5-33=-397/1615, 6-33=-720/396, 3-36=-229/267, 3-35=-808/808, 23-24=-325/211

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 734 lb uplift at joint 30, 296 lb uplift at joint 2, 485 lb uplift at joint 35 and 374 lb uplift at joint 29.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 4, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



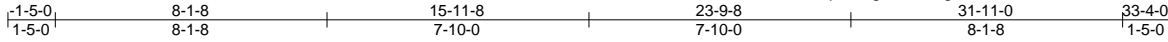
818 Soundside Road  
 Edenton, NC 27932

Job J0423-1501	Truss B2	Truss Type COMMON	Qty 4	Ply 1	Lot 91 South Creek Job Reference (optional)	157563016
-------------------	-------------	----------------------	----------	----------	--	-----------

Comtech, Inc. Fayetteville, NC - 28314,

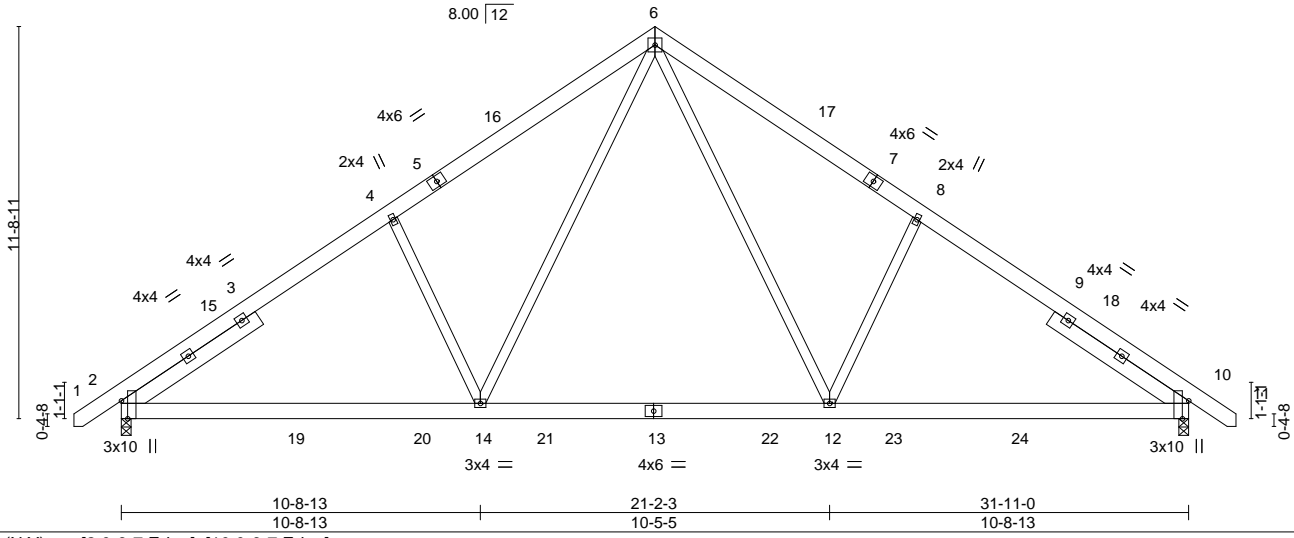
8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 4 09:40:45 2023 Page 1

ID:2W3hk9latme7Qcxb7tDGi8zptHE-gID?dYBlgWP1Th1e1oZY4KR1BtMxYO1kC2L0yzU84G



5x5 =

Scale = 1:68.9



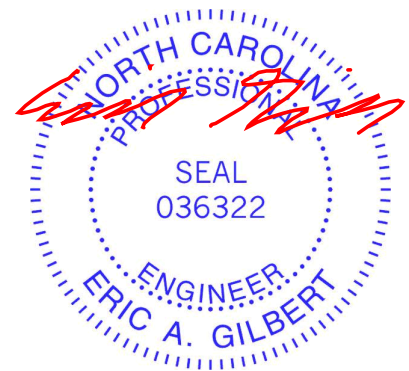
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.25	Vert(LL)	-0.15 12-14	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.53	Vert(CT)	-0.21 12-14	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.43	Horz(CT)	0.04 10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.03 14	>999	240		
								Weight: 249 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-5-15 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	
SLIDER Left 2x6 SP No.1 4-10-4, Right 2x6 SP No.1 4-10-4	

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8  
 Max Horz 2=-276(LC 10)  
 Max Uplift 2=-84(LC 12), 10=-84(LC 13)  
 Max Grav 2=1578(LC 19), 10=1578(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-2051/369, 4-6=-1904/468, 6-8=-1904/468, 8-10=-2051/369  
 BOT CHORD 2-14=-142/1764, 12-14=0/1195, 10-12=-149/1586  
 WEBS 6-12=-163/958, 8-12=-477/306, 6-14=-163/957, 4-14=-477/306

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-3-7 to 3-1-6, Interior(1) 3-1-6 to 15-11-8, Exterior(2) 15-11-8 to 20-4-5, Interior(1) 20-4-5 to 33-2-7 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 84 lb uplift at joint 2 and 84 lb uplift at joint 10.



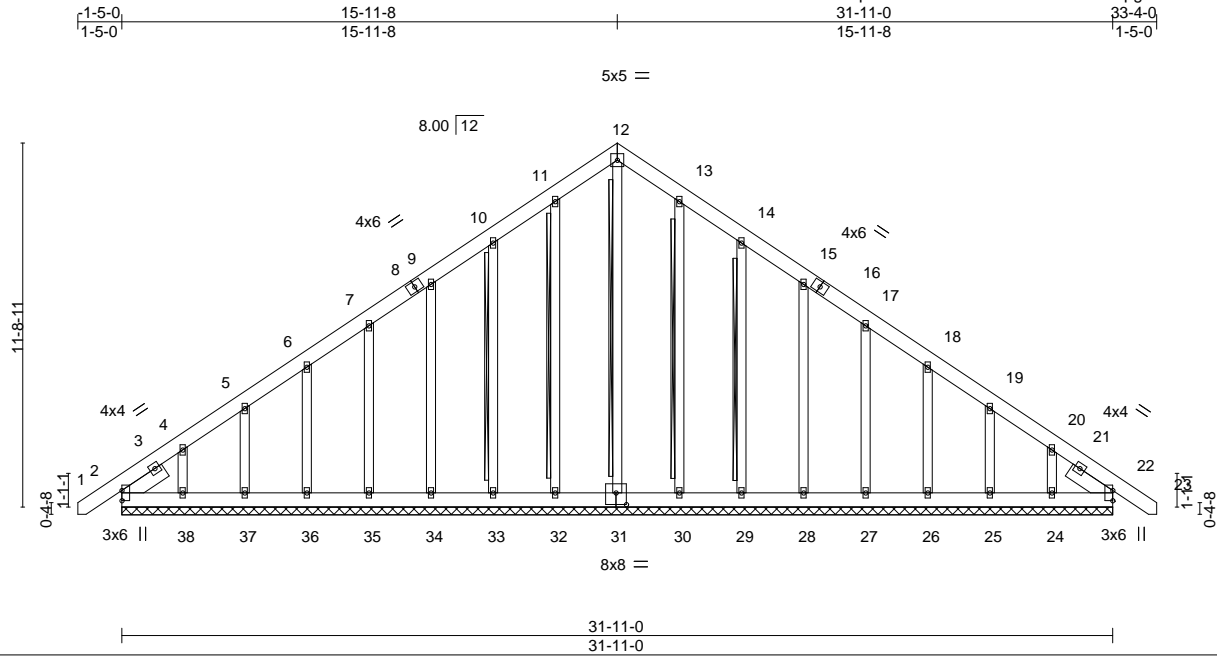


Job	Truss	Truss Type	Qty	Ply	Lot 91 South Creek	157563017
J0423-1501	B2-GE	COMMON SUPPORTED GAB	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 4 09:40:47 2023 Page 1

ID:2W3hk9latme7Qcxb7tDGi8zptHE-chKI2ECYC8fli?B08Dc0AIWQpgA8PWSKWCXWS5rzU84E



Scale = 1:74.2

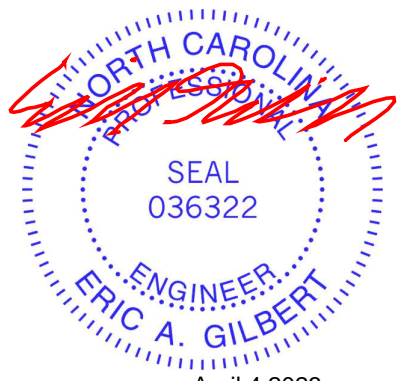
Plate Offsets (X,Y)--	[2:Edge,0-0-0], [22:Edge,0-0-0], [31:0-4-0,0-4-8]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.05	Vert(LL) -0.00 22 n/r 120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.03	Vert(CT) -0.00 23 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.14	Horz(CT) 0.01 22 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S		Weight: 310 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	WEBS T-Brace: 2x4 SPF No.2 - 12-31, 11-32, 10-33, 13-30, 14-29
SLIDER Left 2x6 SP No.1 1-6-14, Right 2x6 SP No.1 1-6-14	Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.

**REACTIONS.** All bearings 31-11-0.  
 (lb) - Max Horz 2=-345(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 32, 33, 34, 35, 36, 37, 30, 28, 27, 26, 25, 22 except 2=-129(LC 8), 38=-191(LC 12), 29=-103(LC 13), 24=-168(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 31, 32, 33, 34, 35, 36, 37, 38, 30, 29, 28, 27, 26, 25, 24, 22 except 2=276(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-382/275, 4-5=-250/215, 10-11=-230/267, 11-12=-263/293, 12-13=-262/292, 20-22=-297/191  
 BOT CHORD 2-38=-171/272, 37-38=-171/272, 36-37=-171/272, 35-36=-171/272, 34-35=-171/272, 33-34=-171/272, 32-33=-171/272, 31-32=-171/272, 30-31=-172/273, 29-30=-172/273, 28-29=-172/273, 27-28=-172/273, 26-27=-172/273, 25-26=-172/273, 24-25=-172/273, 22-24=-172/273

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 4) All plates are 2x4 MT20 unless otherwise indicated.
  - 5) Gable requires continuous bottom chord bearing.
  - 6) Gable studs spaced at 2-0-0 oc.
  - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 8) \* This truss has been designed for a live load of 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.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 32, 33, 34, 35, 36, 37, 30, 28, 27, 26, 25, 22 except (jt=lb) 2=129, 38=191, 29=103, 24=168.
  - 10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



April 4, 2023

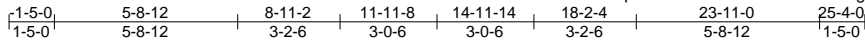


Job J0423-1501	Truss D1	Truss Type ATTIC	Qty 5	Ply 1	Lot 91 South Creek Job Reference (optional)	157563019
-------------------	-------------	---------------------	----------	----------	--	-----------

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 4 09:40:51 2023 Page 1

ID:2W3hk9latme7Qcxb7tDG8zptHE-VSaGucF3FM9BBcUnN3gyKbhuFHLxLGzw78VgEcZU84A



4x6 =

Scale = 1:72.0

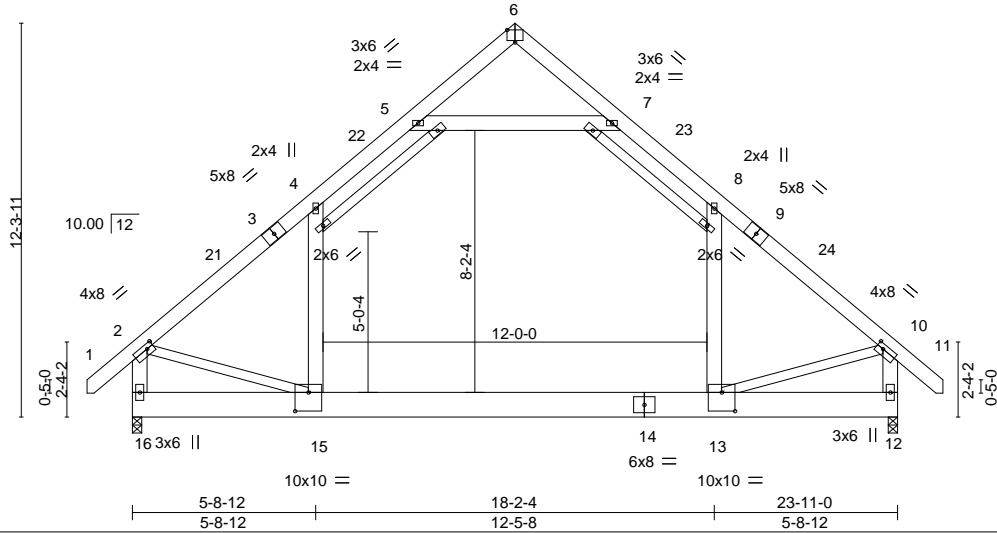


Plate Offsets (X,Y)--	[2:0-2-8,0-1-12], [6:0-3-0,Edge], [10:0-2-8,0-1-12], [13:0-5-0,0-7-0], [15:0-5-0,0-7-0]
-----------------------	---

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.85	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.81	Vert(LL) -0.27 13-15 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.43	Vert(CT) -0.45 13-15 >620 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 12 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.08 13-15 >999 240	Weight: 256 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1 *Except* 17-18,19-20: 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-8-10 oc purlins, except end verticals.
BOT CHORD 2x10 SP No.1	BOT CHORD Rigid ceiling directly applied or 8-11-2 oc bracing.
WEBS 2x6 SP No.1 *Except* 2-15,10-13: 2x4 SP No.2	

**REACTIONS.** (size) 16=0-3-8, 12=0-3-8  
 Max Horz 16=330(LC 11)  
 Max Grav 16=1617(LC 20), 12=1617(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-1751/0, 4-5=-1171/137, 5-6=-58/279, 6-7=-58/279, 7-8=-1171/137, 8-10=-1751/0,  
 2-16=-1699/62, 10-12=-1700/63  
 BOT CHORD 15-16=-282/506, 13-15=0/1215, 12-13=-40/311  
 WEBS 5-7=-1397/118, 4-15=0/678, 8-13=0/678, 2-15=0/1045, 10-13=0/1048

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-3-11 to 3-1-2, Interior(1) 3-1-2 to 11-11-8, Exterior(2) 11-11-8 to 16-4-5, Interior(1) 16-4-5 to 25-2-11 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Ceiling dead load (10.0 psf) on member(s). 4-5, 7-8, 5-7; Wall dead load (5.0psf) on member(s). 4-15, 8-13
  - 6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 13-15
  - 7) Attic room checked for L/360 deflection.



April 4, 2023

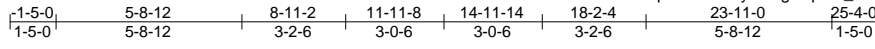
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p>ENGINEERING BY  <b>TRENCO</b>  <small>A MiTek Affiliate</small></p> <p>818 Soundside Road        Edenton, NC 27932</p>
--	---

Job J0423-1501	Truss D1-GE	Truss Type ATTIC	Qty 2	Ply 1	Lot 91 South Creek Job Reference (optional)	157563020
-------------------	----------------	---------------------	----------	----------	--	-----------

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 4 09:40:52 2023 Page 1

ID:2W3hk9latm7Qcxb71DGI8zptHE-zf8e5yGh0gH2pm3\_xmBBtpD3?hhA4ml3LoFdm2zU849



Scale = 1:71.0

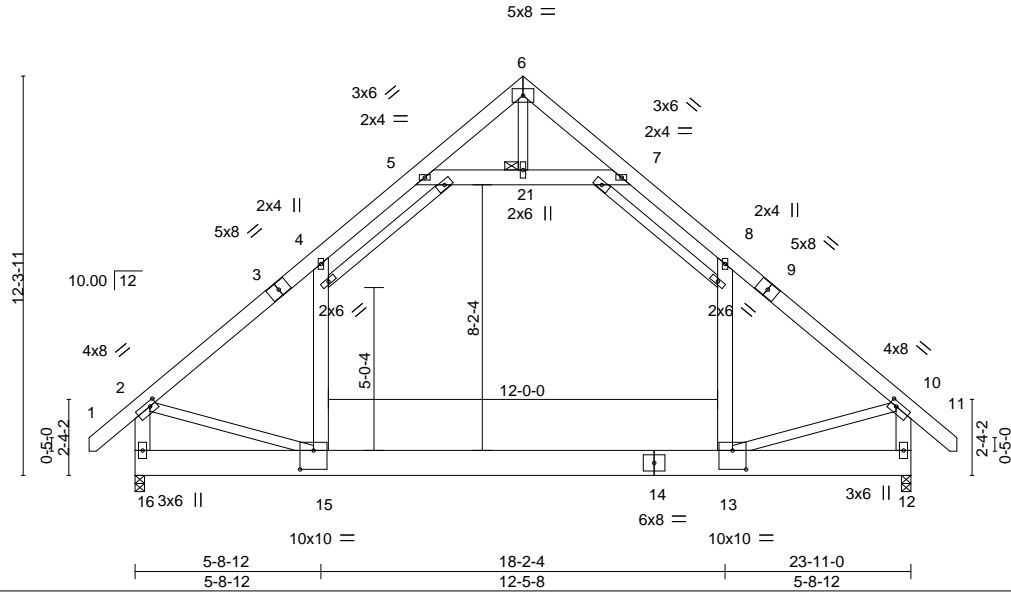


Plate Offsets (X,Y)--	[2:0-2-8,0-1-12], [10:0-2-8,0-1-12], [13:0-5-0,0-7-0], [15:0-5-0,0-7-0]
-----------------------	---

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.85	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.81	Vert(LL) -0.27 13-15 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.23	Vert(CT) -0.45 13-15 >620 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 12 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.11 13-15 >999 240	Weight: 260 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1 *Except* 17-18,19-20: 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-8-10 oc purlins, except end verticals.
BOT CHORD 2x10 SP No.1	BOT CHORD Rigid ceiling directly applied or 8-11-2 oc bracing.
WEBS 2x6 SP No.1 *Except* 2-15,10-13,6-21: 2x4 SP No.2	JOINTS 1 Brace at Jt(s): 21

**REACTIONS.** (size) 16=0-3-8, 12=0-3-8  
 Max Horz 16=-412(LC 10)  
 Max Grav 16=1613(LC 20), 12=1613(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-1766/12, 4-5=-1173/184, 7-8=-1172/184, 8-10=-1766/12, 2-16=-1707/97, 10-12=-1707/97  
 BOT CHORD 15-16=-374/571, 13-15=0/1244, 12-13=-91/311  
 WEBS 5-21=-1330/231, 7-21=-1330/231, 4-15=-18/678, 8-13=-17/678, 2-15=0/1081, 10-13=0/1086

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Ceiling dead load (10.0 psf) on member(s). 4-5, 7-8, 5-21, 7-21; Wall dead load (5.0psf) on member(s).4-15, 8-13
  - 6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 13-15
  - 7) Attic room checked for L/360 deflection.



April 4, 2023

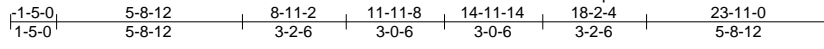
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p>ENGINEERING BY  <b>TRENCO</b>  <small>A MiTek Affiliate</small></p> <p>818 Soundside Road        Edenton, NC 27932</p>
--	---

Job	Truss	Truss Type	Qty	Ply	Lot 91 South Creek	157563021
J0423-1501	D2	ATTIC	13	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 4 09:40:54 2023 Page 1

ID:2W3hk9latme7Qcxb7IDGi8zptHE-v1GOWdlxYHXm24DM3BEfyEJPOVNaYdgMp5kKqxU847



4x6 =

Scale = 1:71.0

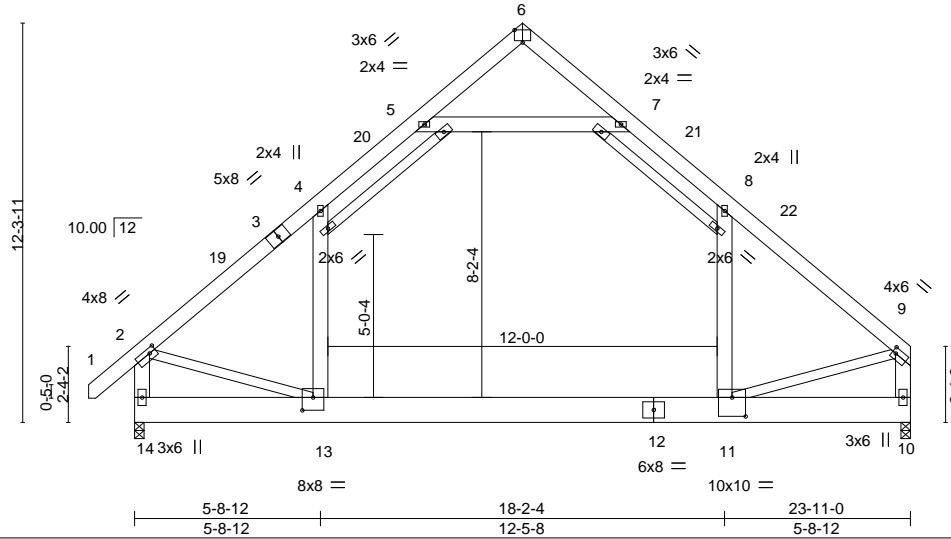


Plate Offsets (X,Y)--	[2:0-2-8,0-1-12], [6:0-3-0,Edge], [9:0-1-4,0-2-0], [11:0-5-0,0-7-0], [13:0-4-0,0-4-12]
-----------------------	--

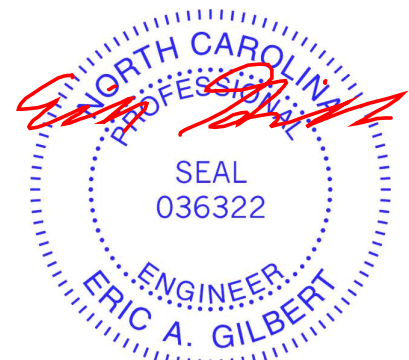
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.86	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.81	Vert(LL) -0.27 11-13 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.43	Vert(CT) -0.46 11-13 >613 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 10 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.08 11-13 >999 240	Weight: 252 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1 *Except* 15-16,17-18: 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-1 oc purlins, except end verticals.
BOT CHORD 2x10 SP No.1	BOT CHORD Rigid ceiling directly applied or 8-10-3 oc bracing.
WEBS 2x6 SP No.1 *Except* 2-13,9-11: 2x4 SP No.2	

**REACTIONS.** (size) 14=0-3-8, 10=0-3-8  
 Max Horz 14=-296(LC 10)  
 Max Grav 14=1620(LC 20), 10=1531(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-1755/0, 4-5=-1171/131, 5-6=-52/284, 6-7=-54/281, 7-8=-1176/142, 8-9=-1739/0,  
 2-14=-1703/56, 9-10=-1633/0  
 BOT CHORD 13-14=-275/482, 11-13=0/1195  
 WEBS 5-7=-1409/130, 4-13=0/683, 8-11=0/649, 2-13=0/1046, 9-11=0/1101

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-3-11 to 3-1-2, Interior(1) 3-1-2 to 11-11-8, Exterior(2) 11-11-8 to 16-4-5, Interior(1) 16-4-5 to 23-8-4 zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Ceiling dead load (10.0 psf) on member(s). 4-5, 7-8, 5-7; Wall dead load (5.0psf) on member(s). 4-13, 8-11
  - 6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 11-13
  - 7) Attic room checked for L/360 deflection.



April 4, 2023

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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

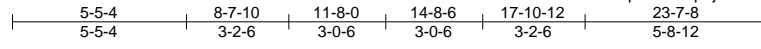
818 Soundside Road  
 Edenton, NC 27932

Job J0423-1501	Truss D2A	Truss Type ATTIC	Qty 3	Ply 1	Lot 91 South Creek Job Reference (optional)	157563022
-------------------	--------------	---------------------	----------	----------	--	-----------

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 4 09:40:55 2023 Page 1

ID:2W3hk9latme7Qcxb7tDGi8zptHE-NEpnjzlaJbfgDoZculuURraYvjxH47W2ITtNNzU846



Scale = 1:72.0

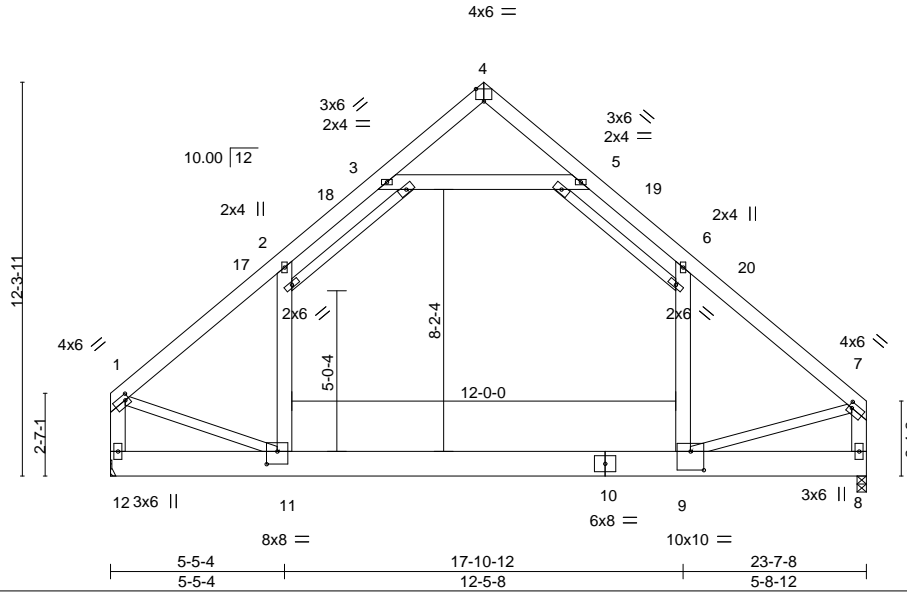


Plate Offsets (X, Y)-- [1:0-1-8,0-2-0], [4:0-3-0,Edge], [7:0-1-4,0-2-0], [9:0-5-0,0-7-0], [11:0-4-0,0-4-12]

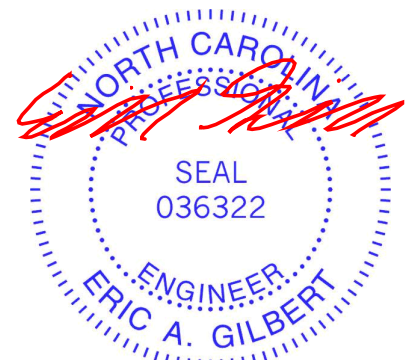
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.83	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.80	Vert(LL) -0.27 9-11 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.42	Vert(CT) -0.45 9-11 >622 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 8 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.08 9-11 >999 240	Weight: 247 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1 *Except* 13-14,15-16: 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-6-8 oc purlins, except end verticals.
BOT CHORD 2x10 SP No.1	BOT CHORD Rigid ceiling directly applied or 8-11-9 oc bracing.
WEBS 2x6 SP No.1 *Except* 1-11,7-9: 2x4 SP No.2	

**REACTIONS.** (size) 12=Mechanical, 8=0-3-8  
 Max Horz 12=-289(LC 10)  
 Max Grav 12=1530(LC 21), 8=1514(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-1700/0, 2-3=-1155/134, 3-4=-60/275, 4-5=-59/276, 5-6=-1156/141, 6-7=-1707/0,  
 1-12=-1679/0, 7-8=-1603/0  
 BOT CHORD 11-12=-260/365, 9-11=0/1171  
 WEBS 3-5=-1375/129, 2-11=-2/639, 6-9=-4/632, 1-11=0/1139, 7-9=0/1075

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-6-4 to 4-11-1, Interior(1) 4-11-1 to 11-11-8, Exterior(2) 11-11-8 to 16-4-5, Interior(1) 16-4-5 to 23-8-4 zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Ceiling dead load (10.0 psf) on member(s), 2-3, 5-6, 3-5; Wall dead load (5.0psf) on member(s), 2-11, 6-9
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room, 9-11
  - Refer to girder(s) for truss to truss connections.
  - Attic room checked for L/360 deflection.



April 4, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

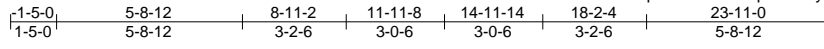
**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932

Job J0423-1501	Truss D3	Truss Type ATTIC	Qty 2	Ply 2	Lot 91 South Creek Job Reference (optional)	157563023
-------------------	-------------	---------------------	----------	----------	--	-----------

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 4 09:40:57 2023 Page 1

ID:2W3hk9latme7Qcxb7tDGi8zptHE-JcxX8fKqrCvLvYyxkJnMaswuaiN01DoV3y\_RGzU844



4x6 =

Scale = 1:71.0

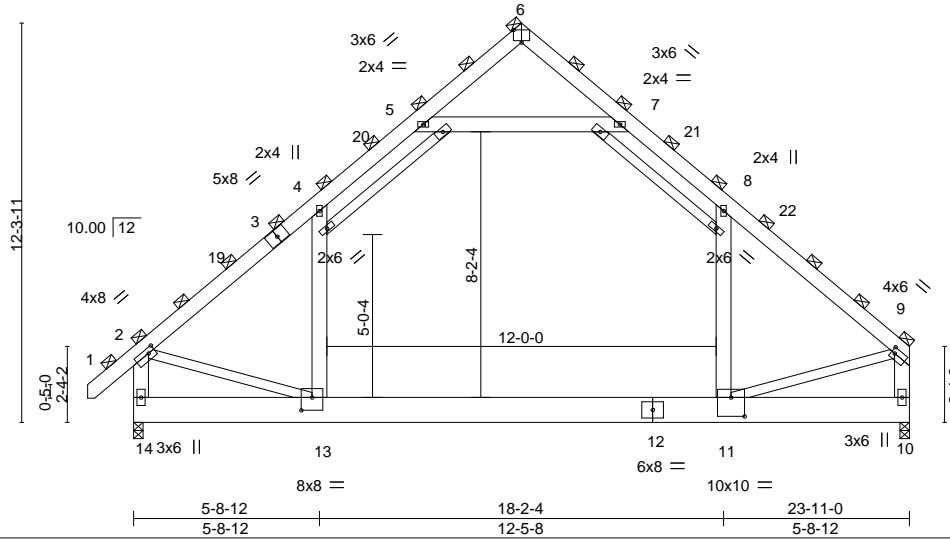


Plate Offsets (X,Y)--	[2:0-2-8,0-1-12], [6:0-3-0,Edge], [9:0-1-4,0-2-0], [11:0-5-0,0-7-0], [13:0-4-0,0-4-12]
-----------------------	--

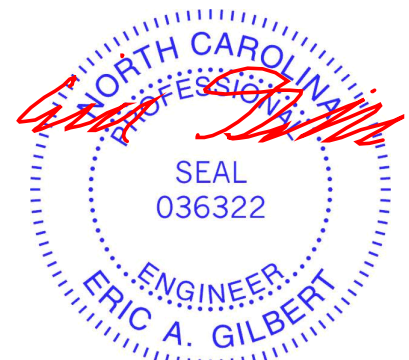
LOADING (psf)	SPACING-	4-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.99	Vert(LL)	-0.27 11-13	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.89	Vert(CT)	-0.46 11-13	>613	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.25	Horz(CT)	0.01 10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.08 11-13	>999	240	Weight: 505 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1 *Except* 15-16,17-18: 2x4 SP No.2	TOP CHORD 2-0-0 oc purlins (5-5-7 max.), except end verticals (Switched from sheeted: Spacing > 2-8-0).
BOT CHORD 2x10 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x6 SP No.1 *Except* 2-13,9-11: 2x4 SP No.2	

**REACTIONS.** (size) 14=0-3-8, 10=0-3-8  
 Max Horz 14=639(LC 9)  
 Max Grav 14=3240(LC 20), 10=3058(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-3516/0, 4-5=-2345/270, 5-6=-104/568, 6-7=-108/563, 7-8=-2351/280, 8-9=-3475/0,  
 2-14=-3412/122, 9-10=-3268/0  
 BOT CHORD 13-14=-601/983, 11-13=0/2408, 10-11=-149/425  
 WEBS 5-7=-2817/252, 4-13=0/1365, 8-11=0/1298, 2-13=0/2097, 9-11=0/2211

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-3-11 to 3-1-2, Interior(1) 3-1-2 to 11-11-8, Exterior(2) 11-11-8 to 16-4-5, Interior(1) 16-4-5 to 23-8-4 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Ceiling dead load (10.0 psf) on member(s). 4-5, 7-8, 5-7; Wall dead load (5.0psf) on member(s).4-13, 8-11
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 11-13
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Attic room checked for L/360 deflection.



April 4, 2023

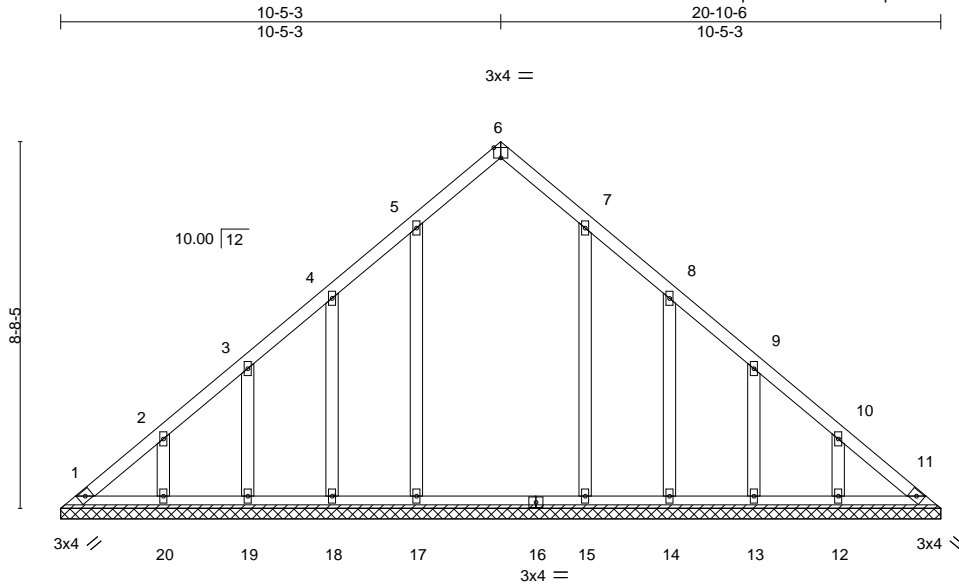
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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

Job J0423-1501	Truss VA-1	Truss Type GABLE	Qty 1	Ply 1	Lot 91 South Creek I57563024
-------------------	---------------	---------------------	----------	----------	---------------------------------

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 4 09:40:59 2023 Page 1  
ID:2W3hk9latme7Qcxb7tDGi8zptHE-G?3HZLL4NqA29r6KrkqrFH0TcWEJDzh5yNR5W8zU842



Scale = 1:54.6

Plate Offsets (X, Y)--	[6:0-2-0,Edge], [7:0-0-0,0-0-0], [8:0-0-0,0-0-0], [9:0-0-0,0-0-0], [10:0-0-0,0-0-0]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.06	Vert(LL) n/a - n/a 999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.14	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.12	Horz(CT) 0.01 11 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S		Weight: 117 lb	FT = 20%

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

**REACTIONS.** All bearings 20-10-6.  
 (lb) - Max Horz 1=250(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 11, 17, 15 except 18=128(LC 12), 19=103(LC 12), 20=127(LC 12), 14=131(LC 13), 13=102(LC 13), 12=127(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 11, 18, 19, 20, 14, 13, 12 except 17=350(LC 19), 15=341(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-377/240, 2-3=-268/149, 9-10=-260/149, 10-11=-369/240  
 BOT CHORD 1-20=-199/313, 19-20=-199/313, 18-19=-199/313, 17-18=-199/313, 15-17=-199/313, 14-15=-199/313, 13-14=-199/313, 12-13=-199/313, 11-12=-199/313

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) All plates are 2x4 MT20 unless otherwise indicated.
  - 4) Gable requires continuous bottom chord bearing.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 11, 17, 15 except (jt=lb) 18=128, 19=103, 20=127, 14=131, 13=102, 12=127.



April 4, 2023

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p>818 Soundside Road Edenton, NC 27932</p>
--	---

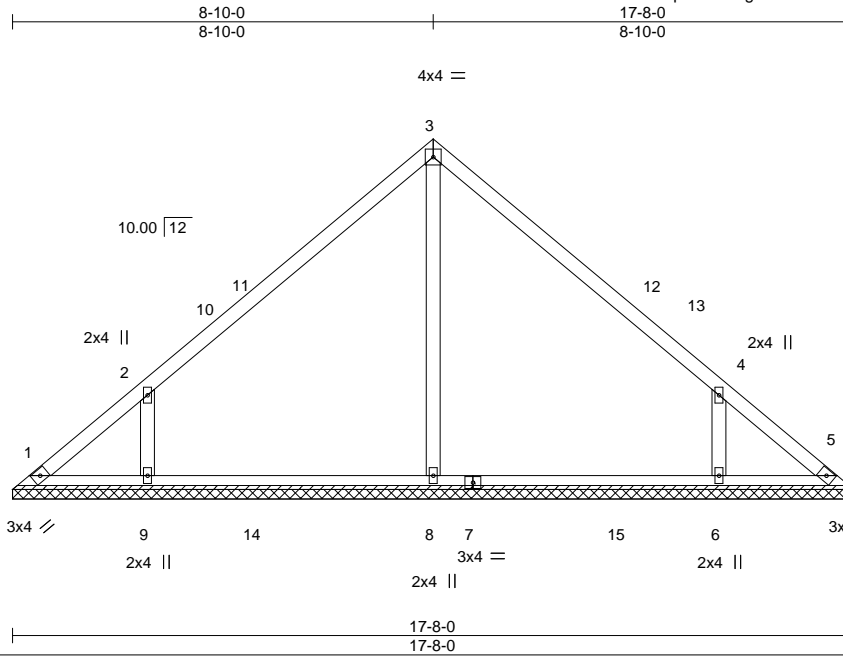


Job J0423-1501	Truss VA-2	Truss Type GABLE	Qty 1	Ply 1	Lot 91 South Creek I57563025
-------------------	---------------	---------------------	----------	----------	---------------------------------

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 4 09:41:00 2023 Page 1

ID:2W3hk9latme7Qcxb7tDG8zptHE-kBdgnhMi87Ivm?gWPSL4BVYaLwX8yOjFB1Be2bzU841



Scale: 1/4"=1'

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 0.32	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.35	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.20	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 74 lb	FT = 20%

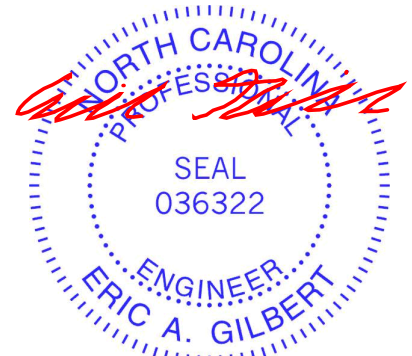
**LUMBER-**  
 TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP No.1  
 OTHERS 2x4 SP No.2

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

**REACTIONS.** All bearings 17-8-0.  
 (lb) - Max Horz 1=-168(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 9=-186(LC 12), 6=-186(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 8=612(LC 19), 9=548(LC 19), 6=548(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 2-9=-461/322, 4-6=-461/322

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-13 to 4-9-10, Interior(1) 4-9-10 to 8-10-0, Exterior(2) 8-10-0 to 13-2-13, Interior(1) 13-2-13 to 17-3-2 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 9=186, 6=186.



April 4, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

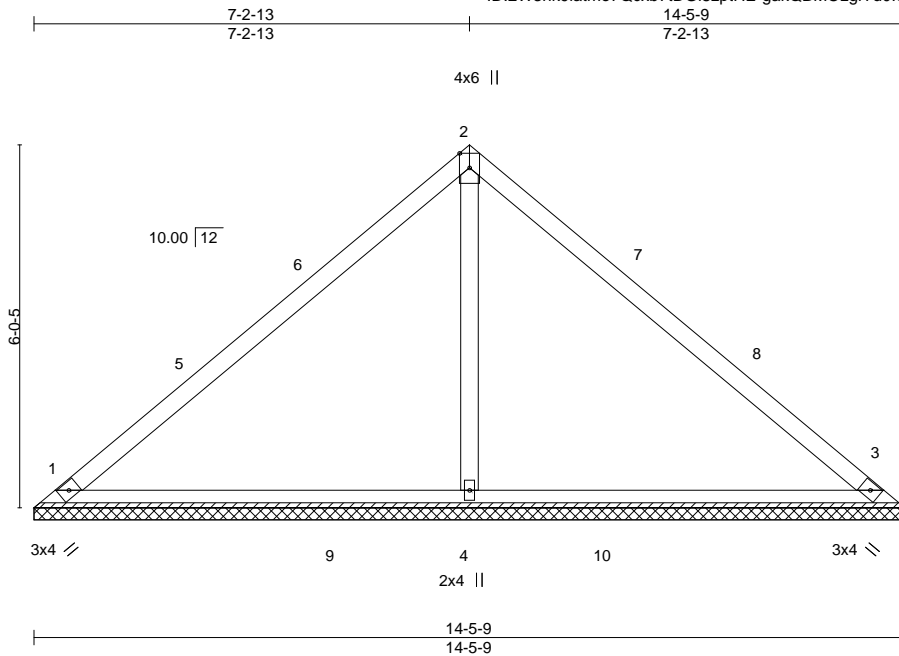


818 Soundside Road  
 Edenton, NC 27932

Job J0423-1501	Truss VA-3	Truss Type GABLE	Qty 1	Ply 1	Lot 91 South Creek Job Reference (optional)	157563026
-------------------	---------------	---------------------	----------	----------	--	-----------

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 4 09:41:02 2023 Page 1  
ID:2W3hk9latme7Qcxb7iDGi8zptHE-gakQBMOzglYd0lqvXsNYHwesejDSQlhXfLgl7TzU84?



Scale = 1:38.3

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.52	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.36	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.17	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 56 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=14-5-9, 3=14-5-9, 4=14-5-9  
Max Horz 1=-136(LC 8)  
Max Uplift 1=-32(LC 13), 3=-45(LC 13)  
Max Grav 1=292(LC 1), 3=292(LC 1), 4=671(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 2-4=-306/115

**NOTES-**

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



April 4, 2023

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

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

**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

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

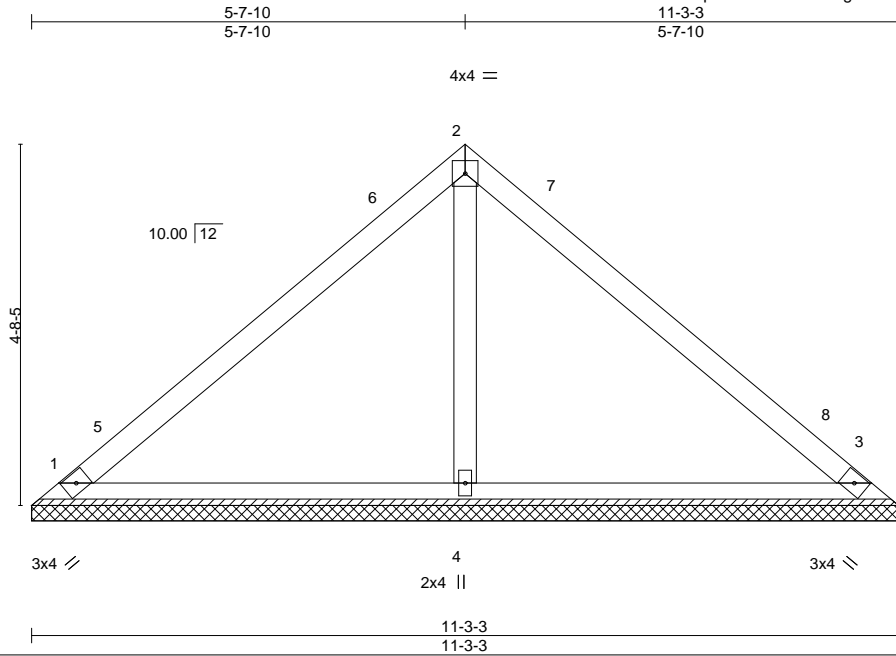


818 Soundside Road  
Edenton, NC 27932

Job J0423-1501	Truss VA-4	Truss Type GABLE	Qty 1	Ply 1	Lot 91 South Creek 157563027
-------------------	---------------	---------------------	----------	----------	---------------------------------

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 4 09:41:03 2023 Page 1  
ID:2W3hk9latme7Qcxb7tDGi8zptHE-8mloPiObQ2gUdSP54aunp7A5\_7aC9mPht?PifwzU84\_



Scale = 1:29.9

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.29	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.20	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.08	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 43 lb	FT = 20%
	Code IRC2015/TPI2014							

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

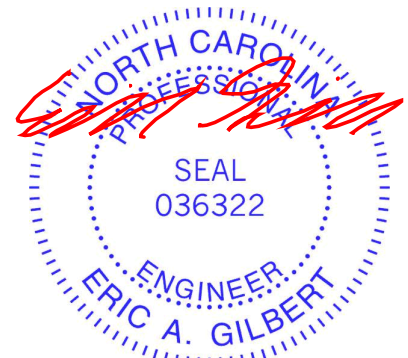
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=11-3-3, 3=11-3-3, 4=11-3-3  
 Max Horz 1=-104(LC 8)  
 Max Uplift 1=-25(LC 13), 3=-34(LC 13)  
 Max Grav 1=223(LC 1), 3=224(LC 1), 4=390(LC 1)

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

**NOTES-**

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



April 4, 2023

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

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

**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

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



818 Soundside Road  
 Edenton, NC 27932

Job J0423-1501	Truss VA-5	Truss Type VALLEY	Qty 1	Ply 1	Lot 91 South Creek 157563028
-------------------	---------------	----------------------	----------	----------	---------------------------------

Comtech, Inc. Fayetteville, NC - 28314,

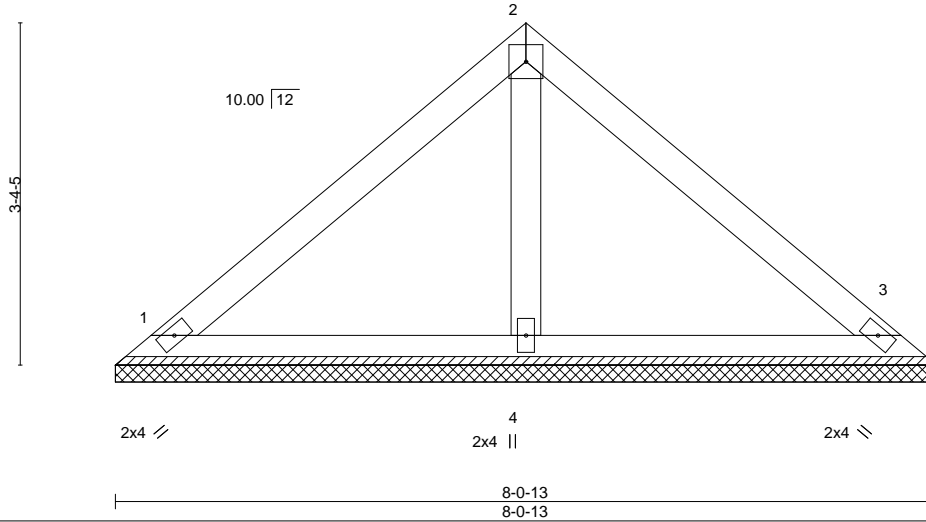
8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 4 09:41:04 2023 Page 1

ID:2W3hk9latme7Qcxb7tDG8zptHE-cysAc2PDBMoLFc\_HeHP0MLjHIXy3uEQq6f9sAMzU83z



4x4 =

Scale = 1:22.6



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.19	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.10	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.03	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 30 lb	FT = 20%
	Code IRC2015/TPI2014							

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

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

**REACTIONS.** (size) 1=8-0-13, 3=8-0-13, 4=8-0-13  
 Max Horz 1=73(LC 9)  
 Max Uplift 1=25(LC 13), 3=32(LC 13)  
 Max Grav 1=168(LC 1), 3=168(LC 1), 4=245(LC 1)

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

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; 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
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
  - 6) N/A



April 4, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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

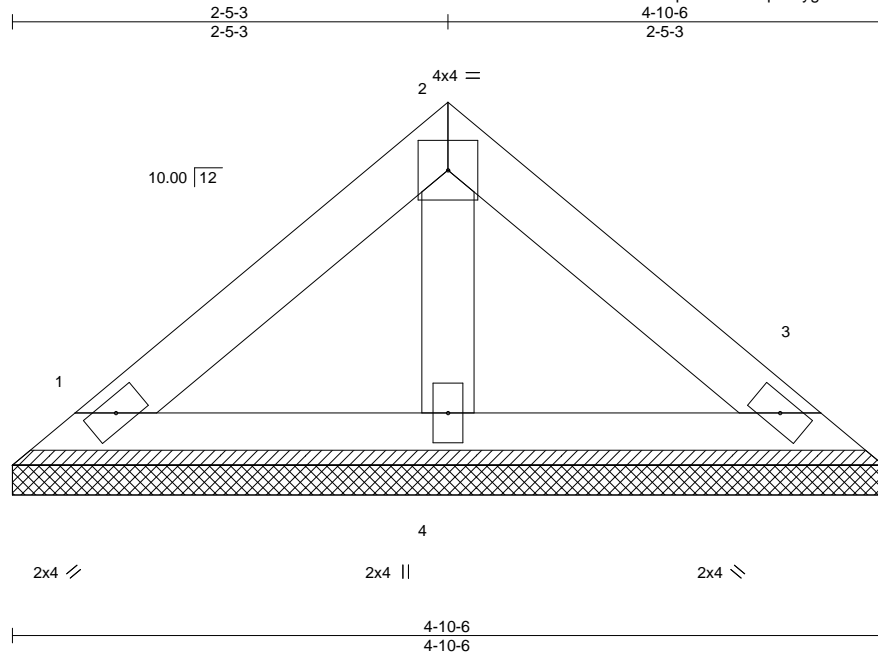
Job J0423-1501	Truss VA-6	Truss Type Valley	Qty 1	Ply 1	Lot 91 South Creek 157563029
-------------------	---------------	----------------------	----------	----------	---------------------------------

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 4 09:41:05 2023 Page 1

ID:2W3hk9latme7Qcxb7tDGi8zptHE-49QYqOQrygwCtmZUC?wFuYGUAXJLdhx\_LJuPiozU83y

Job Reference (optional)



Scale = 1:12.9

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.06	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.03	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.01	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 17 lb	FT = 20%
	Code IRC2015/TPI2014							

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

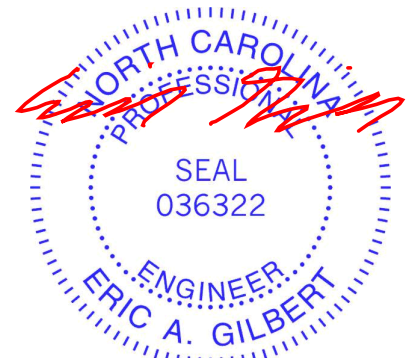
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-10-6 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=4-10-6, 3=4-10-6, 4=4-10-6  
 Max Horz 1=41(LC 8)  
 Max Uplift 1=14(LC 13), 3=18(LC 13)  
 Max Grav 1=94(LC 1), 3=94(LC 1), 4=137(LC 1)

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

**NOTES-**

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



April 4, 2023

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

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

**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

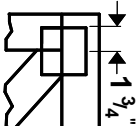
**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



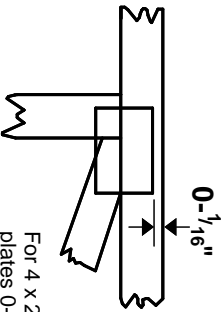
818 Soundside Road  
 Edenton, NC 27932

# Symbols

## PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.



This symbol indicates the required direction of slots in connector plates.

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

## PLATE SIZE

**4 X 4**

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

## LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

## BEARING



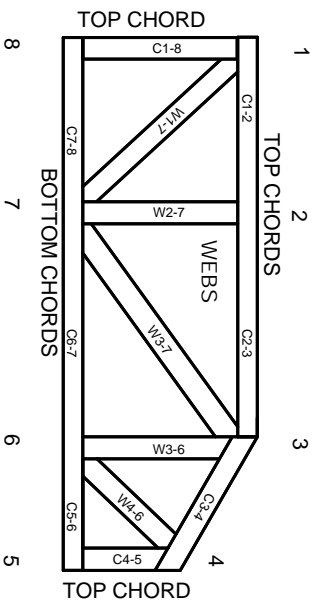
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

### Industry Standards:

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

# Numbering System

6-4-8  
dimensions shown in ft-in-sixteenths  
(Drawings not to scale)



**JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.**

**CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.**

## PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988  
ER-3907, ESR-2362, ESR-1397, ESR-3282

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TFP 1 section 6.3 These truss designs rely on lumber values established by others.

© 2012 MITteK® All Rights Reserved



MITek Engineering Reference Sheet: MII-7473 rev. 5/19/2020



# General Safety Notes

## Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TFP 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TFP 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Rewriting pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TFP 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.