

Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: J1024-5561  
Lot 10 Turlington Acres

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: I68876631 thru I68876654

My license renewal date for the state of North Carolina is December 31, 2024.

North Carolina COA: C-0844



October 16, 2024

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.

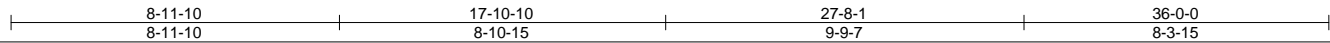
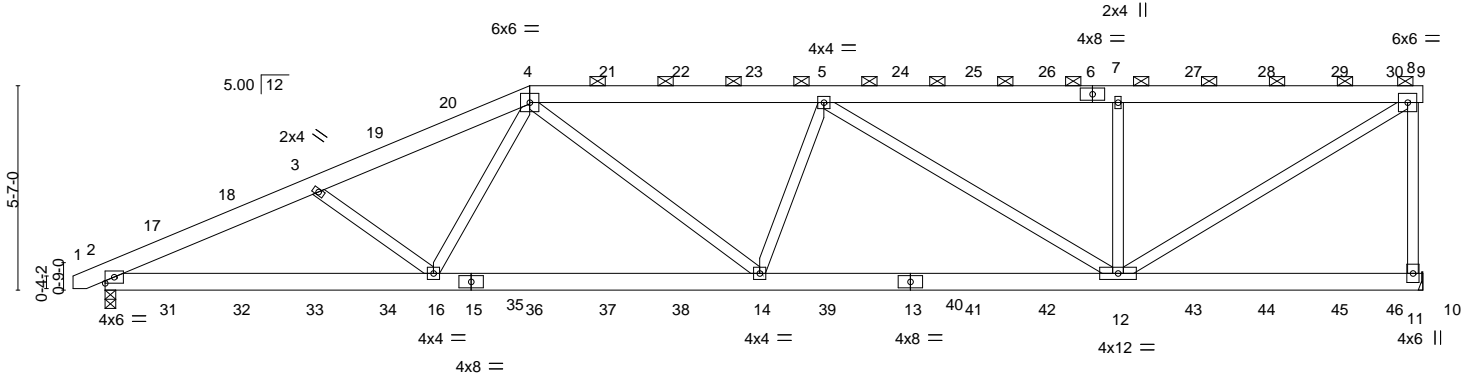
Job J1024-5561	Truss A1	Truss Type Half Hip Girder	Qty 1	Ply 2	Lot 10 Turlington Acres Job Reference (optional)	168876631
-------------------	-------------	-------------------------------	----------	----------	---	-----------

Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Oct 14 08:37:19 2024 Page 1  
ID:0iJ2hz3vp6ahZXSx7jdYHSym1hi-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?f



Scale = 1:62.9



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.32	Vert(LL)	-0.11	14	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.44	Vert(CT)	-0.23	12-14	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.54	Horz(CT)	0.06	11	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.12	14	>999		
								Weight: 494 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-9.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 11=Mechanical, 2=0-3-8  
Max Horz 2=167(LC 8)  
Max Uplift 11=903(LC 5), 2=561(LC 4)  
Max Grav 11=2890(LC 1), 2=2785(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-5541/1271, 3-4=-5099/1187, 4-5=-4887/1367, 5-7=-3591/1082, 7-8=-3591/1082, 8-11=-2725/984  
BOT CHORD 2-16=-1230/4922, 14-16=-1185/4277, 12-14=-1492/4928  
WEBS 3-16=-397/188, 4-16=0/838, 4-14=-236/860, 5-14=-177/388, 5-12=-1586/487, 7-12=-1028/663, 8-12=-1262/4199

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.  
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Wind: ASCE 7-10; Vult=130mph 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
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 903 lb uplift at joint 11 and 561 lb uplift at joint 2.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 16, 2024

Continued on page 2

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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/TP1 Quality Criteria and DSB-22</b> available from Truss Plate Institute (www.tpinst.org) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (www.sbcacomponents.com)</p>	 818 Soundside Road Edenton, NC 27932
--	---

Job	Truss	Truss Type	Qty	Ply	Lot 10 Turlington Acres	168876631
J1024-5561	A1	Half Hip Girder	1	<b>2</b>	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Oct 14 08:37:19 2024 Page 2  
 ID:0iJ2hz3vp6ahZXSx7jdYHSym1hi-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

**NOTES-**

10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 101 lb down and 67 lb up at 1-7-15, 94 lb down and 63 lb up at 3-7-15, 109 lb down and 68 lb up at 5-7-15, 101 lb down and 67 lb up at 7-7-15, 102 lb down and 87 lb up at 9-7-15, 150 lb down and 143 lb up at 11-7-3, 154 lb down and 143 lb up at 13-7-15, 154 lb down and 143 lb up at 15-7-15, 154 lb down and 143 lb up at 17-7-15, 154 lb down and 143 lb up at 19-7-15, 154 lb down and 143 lb up at 21-7-15, 154 lb down and 143 lb up at 23-7-15, 154 lb down and 143 lb up at 25-7-15, 154 lb down and 143 lb up at 27-7-15, 154 lb down and 143 lb up at 29-7-15, 154 lb down and 143 lb up at 31-7-15, and 154 lb down and 143 lb up at 33-7-15, and 153 lb down and 141 lb up at 35-1-15 on top chord, and 80 lb down at 1-7-15, 67 lb down at 3-7-15, 57 lb down at 5-7-15, 70 lb down at 7-7-15, 69 lb down at 9-7-15, 79 lb down at 11-7-15, 79 lb down at 13-7-15, 79 lb down at 15-7-15, 79 lb down at 17-7-15, 79 lb down at 19-7-15, 79 lb down at 21-7-15, 79 lb down at 23-7-15, 79 lb down at 25-7-15, 79 lb down at 27-7-15, 79 lb down at 29-7-15, 79 lb down at 31-7-15, and 79 lb down at 33-7-15, and 82 lb down at 35-1-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-4=-60, 4-8=-60, 8-9=-20, 2-10=-20

Concentrated Loads (lb)

Vert: 4=-115(F) 3=-109(F) 14=-39(F) 5=-115(F) 7=-115(F) 12=-39(F) 17=-101(F) 18=-94(F) 19=-101(F) 20=-102(F) 21=-115(F) 22=-115(F) 23=-115(F) 24=-115(F) 25=-115(F) 26=-115(F) 27=-115(F) 28=-115(F) 29=-115(F) 30=-126(F) 31=-47(F) 32=-48(F) 33=-35(F) 34=-54(F) 35=-53(F) 36=-39(F) 37=-39(F) 38=-39(F) 39=-39(F) 40=-39(F) 41=-39(F) 42=-39(F) 43=-39(F) 44=-39(F) 45=-39(F) 46=-41(F)

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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/TPH Quality Criteria and DSB-22** available from Truss Plate Institute ([www.tpinst.org](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcacomponents.com](http://www.sbcacomponents.com))



818 Soundside Road  
 Edenton, NC 27932

Job J1024-5561	Truss A2	Truss Type HIP	Qty 1	Ply 1	Lot 10 Turlington Acres Job Reference (optional)	168876632
-------------------	-------------	-------------------	----------	----------	---	-----------

Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Oct 14 08:37:20 2024 Page 1

ID:0iJ2hz3vp6ahZXSx7jdYHSym1hi-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWRCDoi7J4zJC?f

0-10-8	7-7-10	14-11-11	25-1-9	35-3-7	36-0-0
0-10-8	7-7-10	7-4-2	10-1-14	10-1-14	0-8-9

Scale = 1:65.2

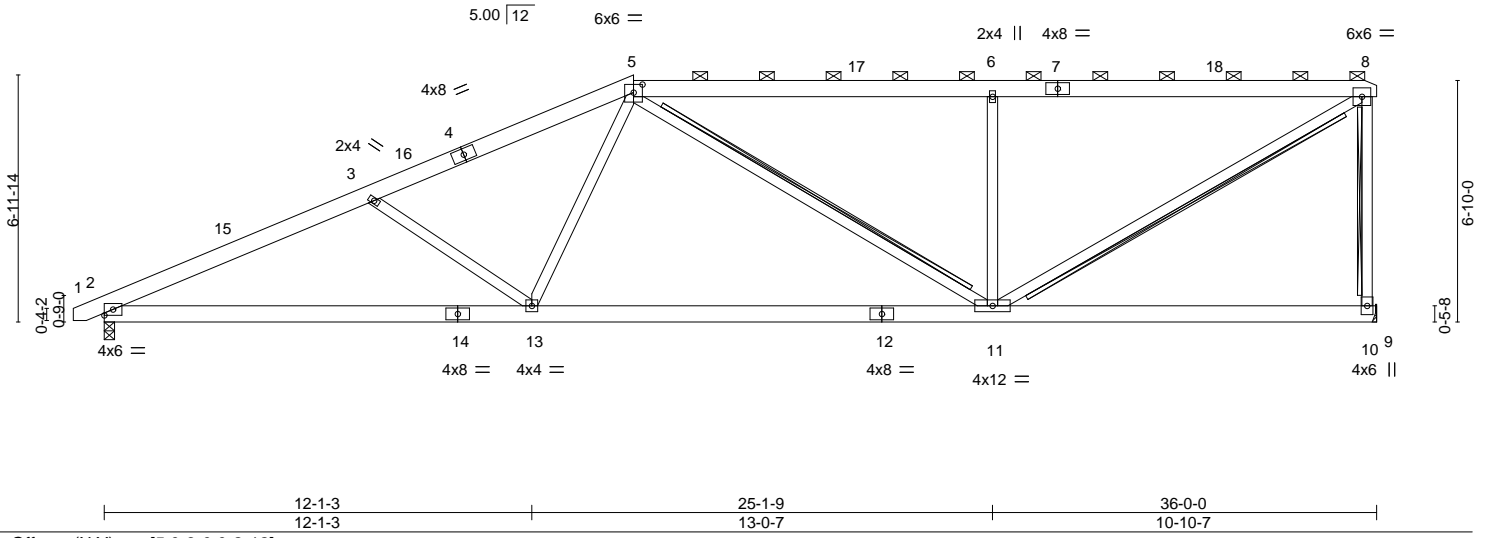


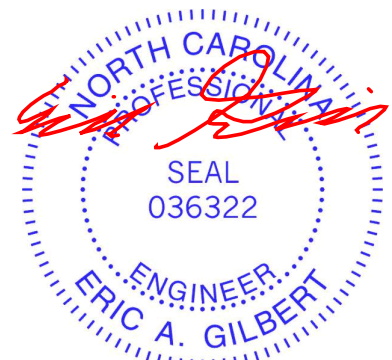
Plate Offsets (X,Y)--	[5:0-3-0,0-2-12]				
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc) l/defl L/d
TCLL 20.0	Plate Grip DOL 1.15	TC 0.54	DEFL. Vert(LL) -0.13 11-13 >999 360	PLATES	GRIP
TCDL 10.0	Lumber DOL 1.15	BC 0.57	DEFL. Vert(CT) -0.30 11-13 >999 240	MT20	244/190
BCLL 0.0 *	Rep Stress Incr YES	WB 0.51	DEFL. Horz(CT) 0.05 10 n/a n/a	Weight: 244 lb	FT = 20%
BCDL 10.0	Code IRC2015/TP12014	Matrix-S	DEFL. Wind(LL) 0.08 11-13 >999 240		

<b>LUMBER-</b>	<b>BRACING-</b>	
TOP CHORD 2x6 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 4-4-5 oc purlins, except end verticals, and 2-0-0 oc purlins (4-11-9 max.): 5-8.
BOT CHORD 2x6 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 8-8-0 oc bracing: 2-13.
WEBS 2x4 SP No.2	WEBS	T-Brace: 2x4 SPF No.2 - 5-11, 8-11, 8-10 Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.

**REACTIONS.** (size) 10=Mechanical, 2=0-3-8  
 Max Horz 2=209(LC 12)  
 Max Uplift 10=137(LC 9), 2=73(LC 12)  
 Max Grav 10=1428(LC 1), 2=1474(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2789/670, 3-5=-2426/552, 5-6=-1809/455, 6-8=-1806/453, 8-10=-1333/416  
 BOT CHORD 2-13=-807/2479, 11-13=-562/1936  
 WEBS 3-13=-390/294, 5-13=-14/654, 6-11=-747/369, 8-11=-521/2079

- 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) -0-8-5 to 3-8-8, Interior(1) 3-8-8 to 14-11-11, Exterior(2) 14-11-11 to 21-2-6, Interior(1) 21-2-6 to 35-8-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 137 lb uplift at joint 10 and 73 lb uplift at joint 2.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



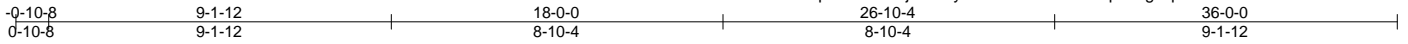
October 16, 2024

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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/TPH Quality Criteria and DSB-22</b> available from Truss Plate Institute (www.tpinst.org) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (www.sbcacomponents.com)</p>	<p>ENGINEERING BY  <b>TRENCO</b>  <small>A MITEK Affiliate</small></p> <p>818 Soundside Road        Edenton, NC 27932</p>
--	---

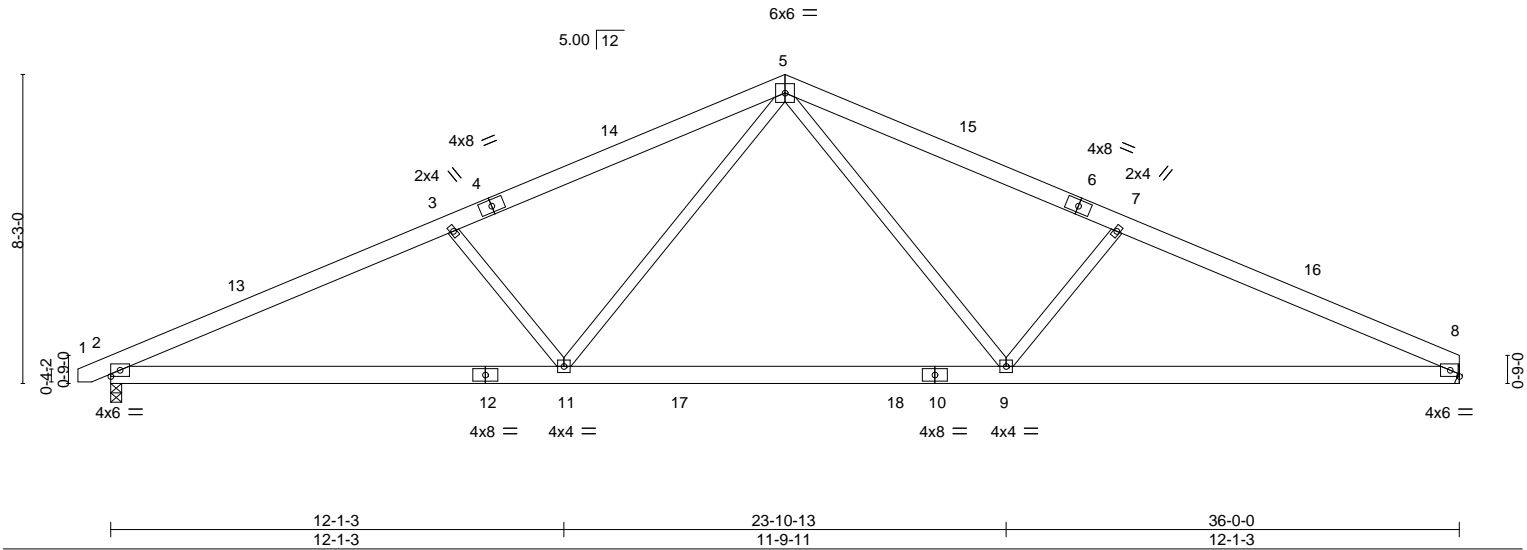
Job J1024-5561	Truss A3	Truss Type COMMON	Qty 1	Ply 1	Lot 10 Turlington Acres 168876633
-------------------	-------------	----------------------	----------	----------	--------------------------------------

Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Oct 14 08:37:20 2024 Page 1  
ID:0iJ2hz3vp6ahZXSx7jdYHSym1hi-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:61.5



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.40	Vert(LL)	-0.33 9-11	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.62	Vert(CT)	-0.46 9-11	>934	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.23	Horz(CT)	0.07 8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.07 2-11	>999	240		
								Weight: 220 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 4-1-14 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 8=Mechanical, 2=0-3-8  
 Max Horz 2=94(LC 12)  
 Max Uplift 8=90(LC 13), 2=-101(LC 12)  
 Max Grav 8=1431(LC 1), 2=1483(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2774/604, 3-5=-2509/576, 5-7=-2519/591, 7-8=-2791/624  
 BOT CHORD 2-11=-456/2468, 9-11=-203/1680, 8-9=-459/2487  
 WEBS 5-9=-118/942, 7-9=-540/308, 5-11=-115/927, 3-11=-526/301

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-5 to 3-8-8, Interior(1) 3-8-8 to 18-0-0, Exterior(2) 18-0-0 to 22-4-13, Interior(1) 22-4-13 to 35-11-4 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) Refer to girder(s) for truss to truss connections.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 90 lb uplift at joint 8 and 101 lb uplift at joint 2.



October 16, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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/TPH Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

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

Job J1024-5561	Truss A3-P	Truss Type COMMON	Qty 3	Ply 1	Lot 10 Turlington Acres 168876634
-------------------	---------------	----------------------	----------	----------	--------------------------------------

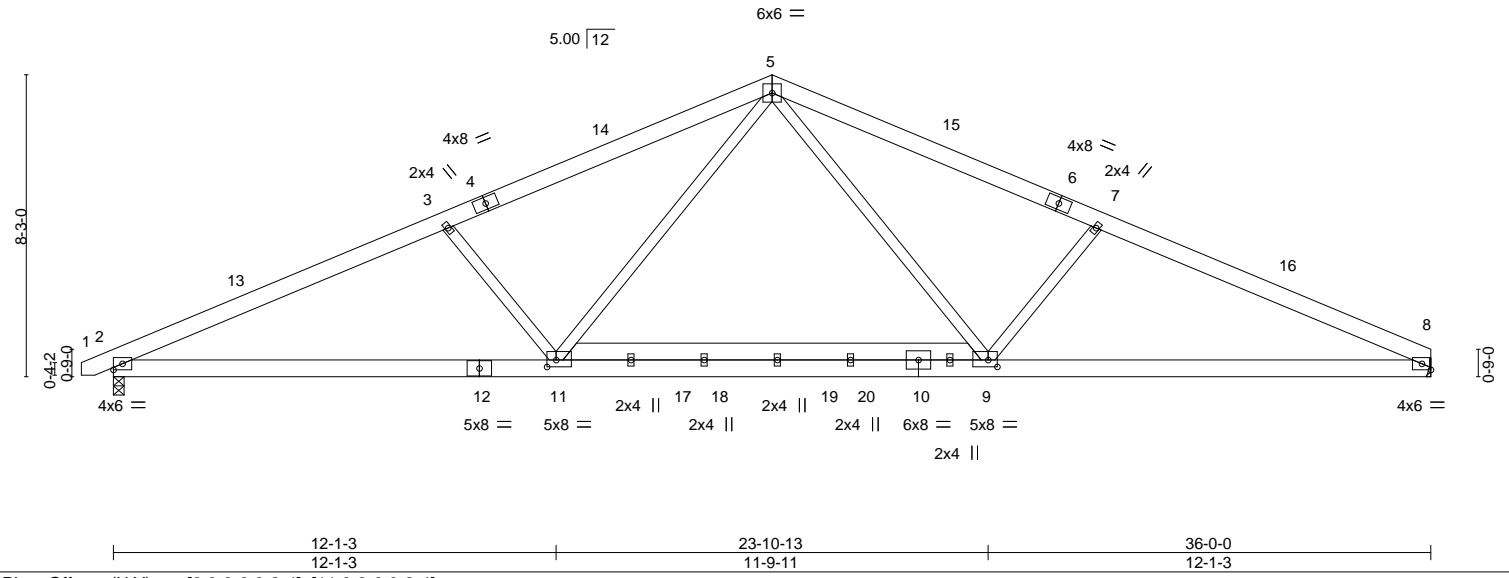
Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Oct 14 08:37:21 2024 Page 1

ID:0iJ2hz3vp6ahZXSx7jdYHSym1hi-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?f



Scale = 1:63.0



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 0.41	Vert(LL)	-0.22	9-11	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.76	Vert(CT)	-0.55	9-11	>785		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.25	Horz(CT)	0.08	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.07	2-11	>999		
								Weight: 247 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 3-11-8 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* 9-11: 2x6 SP No.1	

**REACTIONS.** (size) 8=Mechanical, 2=0-3-8  
 Max Horz 2=94(LC 12)  
 Max Uplift 2=-1(LC 12)  
 Max Grav 8=1531(LC 1), 2=1583(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3046/332, 3-5=-2731/300, 5-7=-2743/315, 7-8=-3064/351  
 BOT CHORD 2-11=-210/2710, 9-11=-26/1838, 8-9=-213/2731  
 WEBS 5-9=0/1002, 7-9=-526/322, 5-11=0/987, 3-11=-510/317

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-5 to 3-8-8, Interior(1) 3-8-8 to 18-0-0, Exterior(2) 18-0-0 to 22-4-13, Interior(1) 22-4-13 to 35-11-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) 200.0lb AC unit load placed on the bottom chord, 18-0-0 from left end, supported at two points, 3-0-0 apart.
  - 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, with BCDL = 10.0psf.
  - 6) Refer to girder(s) for truss to truss connections.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1 lb uplift at joint 2.



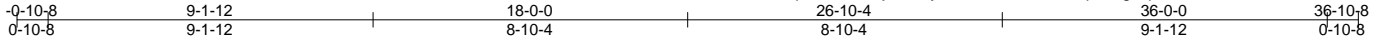


Job J1024-5561	Truss A4	Truss Type COMMON	Qty 2	Ply 1	Lot 10 Turlington Acres 168876635
-------------------	-------------	----------------------	----------	----------	--------------------------------------

Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Oct 14 08:37:21 2024 Page 1

ID:0iJ2hz3vp6ahZXSx7jdYHSym1hi-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:64.8

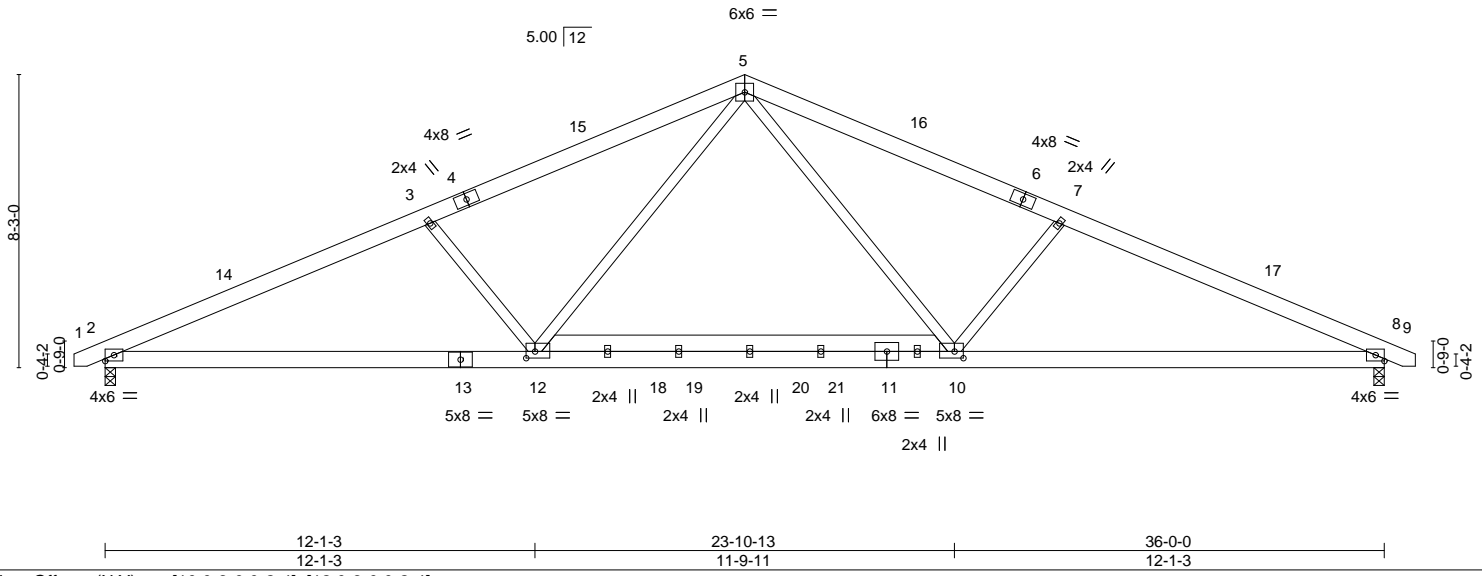


Plate Offsets (X,Y)--	[10:0-3-0,0-2-4], [12:0-3-0,0-2-4]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-3-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.47	Vert(LL) -0.25 10-12 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.89	Vert(CT) -0.59 10-12 >729 240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.27	Horz(CT) 0.09 8 n/a n/a		
BCDL 10.0	Code IRC2015/TP12014	Matrix-S	Wind(LL) 0.08 2-12 >999 240	Weight: 249 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 3-9-5 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 *Except* 10-12: 2x6 SP No.1	

<b>REACTIONS.</b>	(size) 2=0-3-8, 8=0-3-8
	Max Horz 2=-105(LC 17)
	Max Uplift 2=-14(LC 12), 8=-14(LC 13)
	Max Grav 2=1763(LC 1), 8=1763(LC 1)

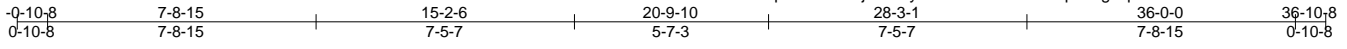
<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-3382/405, 3-5=-3026/370, 5-7=-3026/370, 7-8=-3382/405
BOT CHORD	2-12=-265/3008, 10-12=-50/2036, 8-10=-262/3008
WEBS	5-10=0/1094, 7-10=-576/354, 5-12=0/1094, 3-12=-576/354

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-5 to 3-8-8, Interior(1) 3-8-8 to 18-0-0, Exterior(2) 18-0-0 to 22-4-13, Interior(1) 22-4-13 to 36-8-5 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) 200.0lb AC unit load placed on the bottom chord, 18-0-0 from left end, supported at two points, 3-0-0 apart.
  - 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, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 14 lb uplift at joint 2 and 14 lb uplift at joint 8.

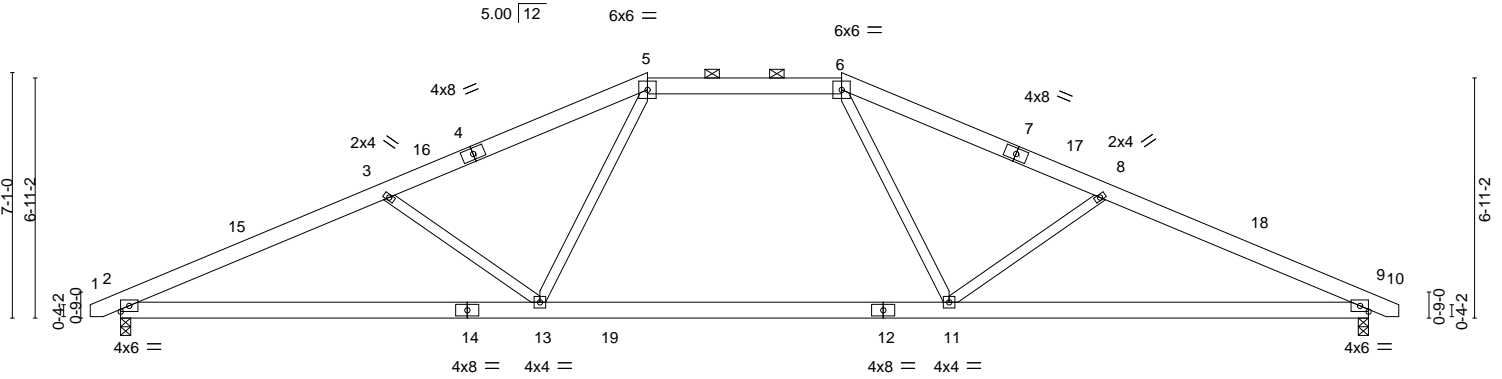


<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. 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/TP1 Quality Criteria and DSB-22</b> available from Truss Plate Institute (www.tpinst.org) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (www.sbcacomponents.com)</p>	<p>818 Soundside Road Edenton, NC 27932</p>
--	---

Job	Truss	Truss Type	Qty	Ply	Lot 10 Turlington Acres	168876636
J1024-5561	A5	HIP	1	1		
Comtech, Inc. Fayetteville, NC - 28314,						8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Oct 14 08:37:22 2024 Page 1
						ID:0iJ2hz3vp6ahZXSx7jdYHSym1hi-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWRCDoi7J4zJC?f
Job Reference (optional)						



Scale = 1:66.5



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	20.0	2-0-0	Plate Grip DOL	1.15	TC	0.33	in (loc)	l/defl	L/d	MT20	244/190
TCDL	10.0	1.15	Lumber DOL	1.15	BC	0.61	Vert(LL)	-0.28 11-13	>999 360		
BCLL	0.0 *	YES	Rep Stress Incr	YES	WB	0.28	Vert(CT)	-0.42 9-11	>999 240		
BCDL	10.0	Code IRC2015/TPI2014	Code	IRC2015/TPI2014	Matrix-S		Horz(CT)	0.07 9	n/a n/a		
										Weight: 216 lb	FT = 20%

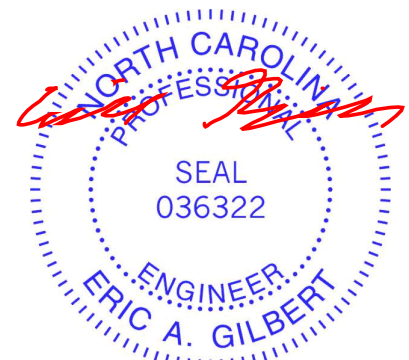
**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-4-9 oc purlins, except 2-0-0 oc purlins (5-6-15 max.): 5-6.  
 BOT CHORD Rigid ceiling directly applied or 9-9-9 oc bracing.

**REACTIONS.** (size) 9=0-3-8, 2=0-3-8  
 Max Horz 2=-79(LC 17)  
 Max Uplift 9=-86(LC 13), 2=-86(LC 12)  
 Max Grav 9=1479(LC 1), 2=1479(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2796/743, 3-5=-2453/625, 5-6=-1921/615, 6-8=-2453/625, 8-9=-2796/743  
 BOT CHORD 2-13=-615/2487, 11-13=-349/1921, 9-11=-603/2487  
 WEBS 3-13=-508/317, 5-13=-28/649, 6-11=-28/650, 8-11=-508/317

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-5 to 3-8-8, Interior(1) 3-8-8 to 15-2-6, Exterior(2) 15-2-6 to 27-0-4, Interior(1) 27-0-4 to 36-8-5 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 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.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 86 lb uplift at joint 9 and 86 lb uplift at joint 2.
  - 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 16, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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/TP1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

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

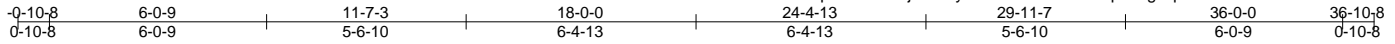


Job J1024-5561	Truss A6	Truss Type Hip Girder	Qty 1	Ply 2	Lot 10 Turlington Acres 168876637
-------------------	-------------	--------------------------	----------	----------	--------------------------------------

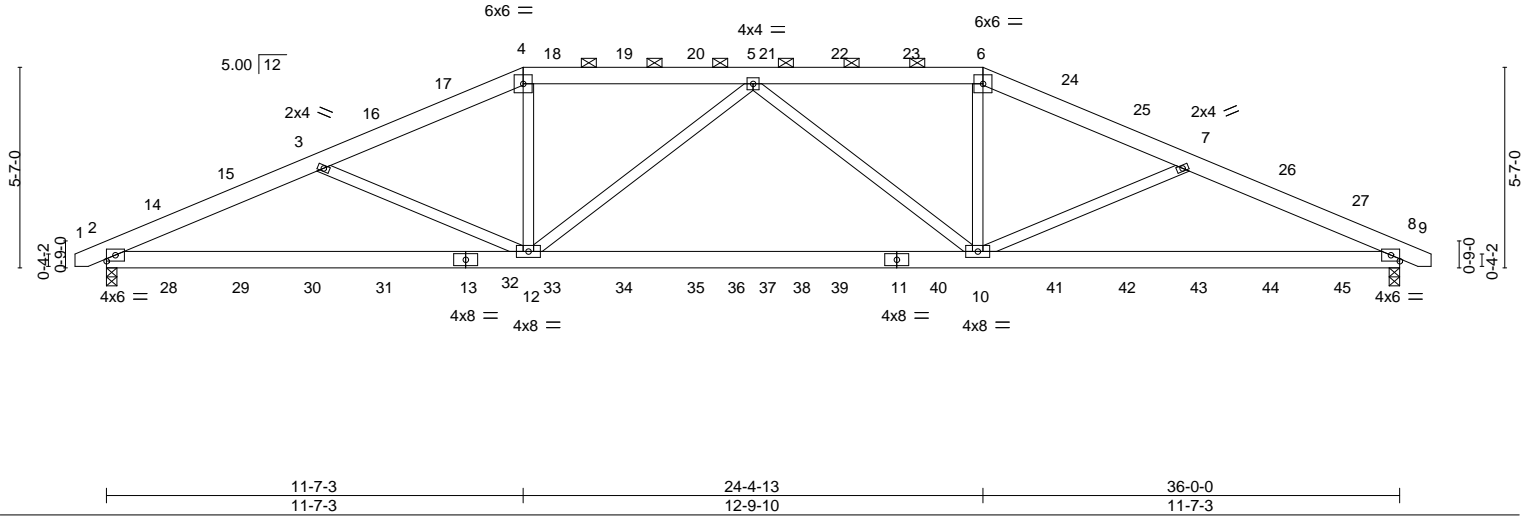
Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Oct 14 08:37:23 2024 Page 1

ID:0iJ2hz3vp6ahZXSx7jdYHSym1hi-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale: 3/16"=1'



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.22	Vert(LL) -0.12	10-12	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.57	Vert(CT) -0.29	10-12	>999	240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.18	Horz(CT) 0.08	8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.11	10-12	>999	240		
							Weight: 466 lb	FT = 20%

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

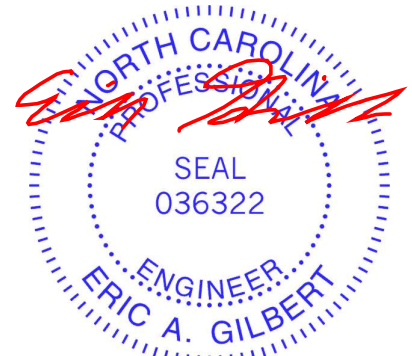
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-6.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 8=0-3-8, 2=0-3-8  
 Max Horz 2=62(LC 31)  
 Max Uplift 8=-531(LC 5), 2=-551(LC 4)  
 Max Grav 8=2823(LC 1), 2=2858(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-5631/1288, 3-4=-5023/1157, 4-5=-4567/1088, 5-6=-4489/1045, 6-7=-4939/1110,  
 7-8=-5552/1244  
 BOT CHORD 2-12=-1147/5011, 10-12=-1270/5020, 8-10=-1079/4940  
 WEBS 3-12=-530/222, 4-12=-4/1204, 5-12=-647/397, 5-10=-749/453, 6-10=-57/1204,  
 7-10=-539/229

**NOTES-**

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 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 531 lb uplift at joint 8 and 551 lb uplift at joint 2.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 16, 2024

Continued on page 2

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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/TPH Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 10 Turlington Acres	I68876637
J1024-5561	A6	Hip Girder	1	2	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Oct 14 08:37:23 2024 Page 2  
 ID:0iJ2hz3vp6ahZXSx7jdYHSym1hi-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?f

**NOTES-**

10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 141 lb down and 67 lb up at 1-7-15, 134 lb down and 63 lb up at 3-7-15, 149 lb down and 68 lb up at 5-7-15, 141 lb down and 67 lb up at 7-7-15, 142 lb down and 87 lb up at 9-7-15, 150 lb down and 143 lb up at 11-7-3, 153 lb down and 143 lb up at 12-4-1, 154 lb down and 143 lb up at 14-4-1, 154 lb down and 143 lb up at 16-4-1, 154 lb down and 143 lb up at 18-4-1, 154 lb down and 143 lb up at 20-4-1, 154 lb down and 143 lb up at 22-4-1, 150 lb down and 143 lb up at 24-4-13, 142 lb down and 87 lb up at 26-4-1, 141 lb down and 67 lb up at 28-4-1, 149 lb down and 68 lb up at 30-4-1, and 134 lb down and 63 lb up at 32-4-1, and 141 lb down and 67 lb up at 34-4-1 on top chord, and 80 lb down at 1-7-15, 67 lb down at 3-7-15, 57 lb down at 5-7-15, 70 lb down at 7-7-15, 69 lb down at 9-7-15, 79 lb down at 11-7-15, 79 lb down at 12-4-1, 79 lb down at 14-4-1, 79 lb down at 16-4-1, 79 lb down at 18-4-1, 79 lb down at 20-4-1, 79 lb down at 22-4-1, 79 lb down at 24-4-1, 69 lb down at 26-4-1, 70 lb down at 28-4-1, 57 lb down at 30-4-1, and 67 lb down at 32-4-1, and 80 lb down at 34-4-1 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-4=-60, 4-6=-60, 6-9=-60, 2-8=-20

Concentrated Loads (lb)

Vert: 4=-115(B) 6=-115(B) 12=-39(B) 3=-109(B) 10=-39(B) 7=-109(B) 14=-101(B) 15=-94(B) 16=-101(B) 17=-102(B) 18=-115(B) 19=-115(B) 20=-115(B) 21=-115(B) 22=-115(B) 23=-115(B) 24=-102(B) 25=-101(B) 26=-94(B) 27=-101(B) 28=-47(B) 29=-48(B) 30=-35(B) 31=-54(B) 32=-53(B) 33=-39(B) 34=-39(B) 35=-39(B) 37=-39(B) 39=-39(B) 40=-39(B) 41=-53(B) 42=-54(B) 43=-35(B) 44=-48(B) 45=-47(B)

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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/TPH Quality Criteria and DSB-22** available from Truss Plate Institute ([www.tpinst.org](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcacomponents.com](http://www.sbcacomponents.com))



818 Soundside Road  
 Edenton, NC 27932

Job J1024-5561	Truss B1	Truss Type GABLE	Qty 1	Ply 1	Lot 10 Turlington Acres Job Reference (optional)	68876638
-------------------	-------------	---------------------	----------	----------	---	----------

Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Oct 14 08:37:24 2024 Page 1

ID:0iJ2hz3vp6ahZXSx7jdYHSym1hi-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

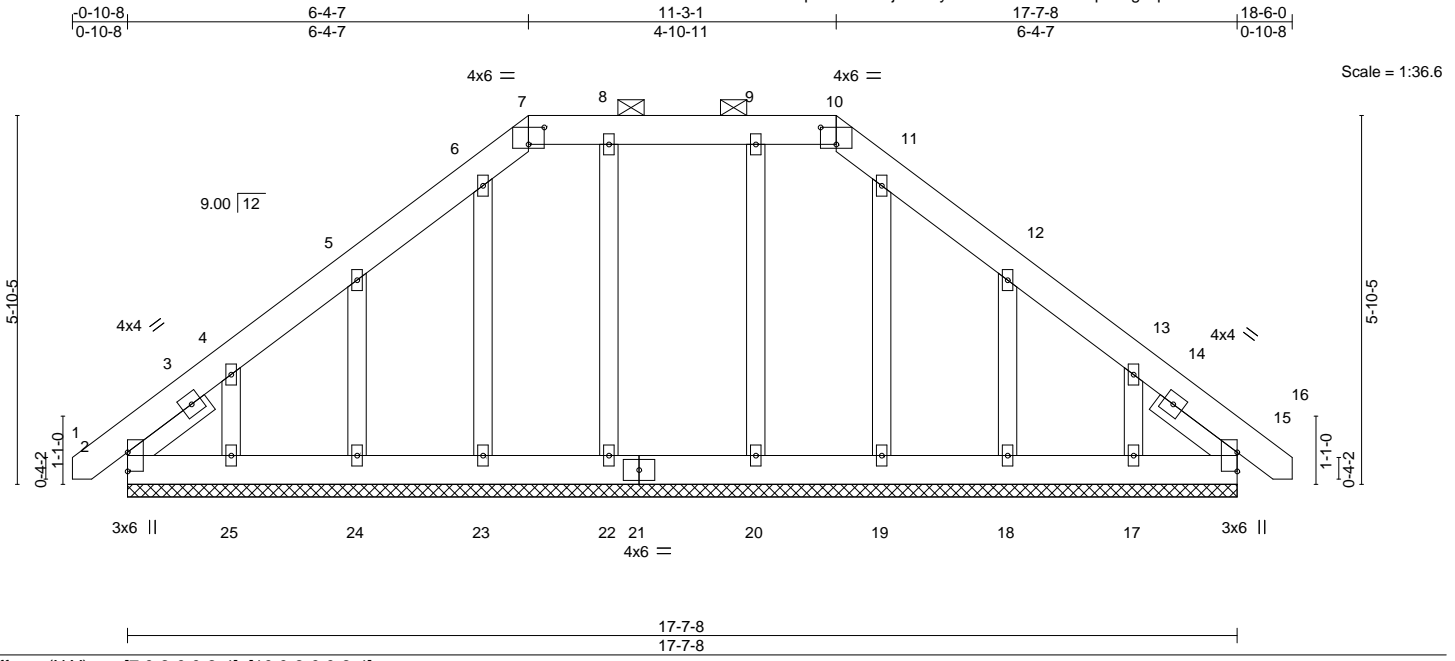


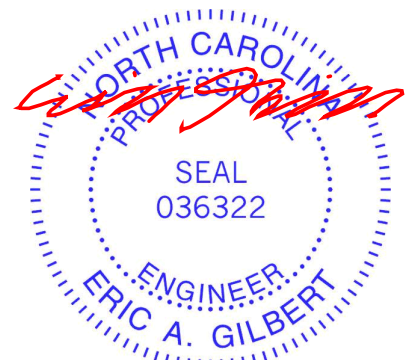
Plate Offsets (X,Y)--	[7:0-3-0,0-3-4], [10:0-3-0,0-3-4]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.03	Vert(LL) -0.00 15 n/r 120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.02	Vert(CT) -0.00 15 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.06	Horz(CT) 0.00 15 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S		Weight: 141 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 7-10.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.2	
SLIDER Left 2x4 SP No.2 1-6-11, Right 2x4 SP No.2 1-6-11	

**REACTIONS.** All bearings 17-7-8.  
 (lb) - Max Horz 2=-162(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 22, 23, 20, 19, 15 except 24=-106(LC 12), 25=-150(LC 12), 18=-109(LC 13), 17=-139(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 22, 23, 24, 25, 20, 19, 18, 15, 17

**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) gable end zone and C-C Corner(3) -0-8-11 to 3-7-12, Exterior(2) 3-7-12 to 6-4-7, Corner(3) 6-4-7 to 10-9-3 to 11-3-1, Corner(3) 11-3-1 to 15-7-14, Exterior(2) 15-7-14 to 18-4-3 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) Provide adequate drainage to prevent water ponding.
  - 5) All plates are 2x4 MT20 unless otherwise indicated.
  - 6) Gable requires continuous bottom chord bearing.
  - 7) Gable studs spaced at 2-0-0 oc.
  - 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 22, 23, 20, 19, 15 except (jt=lb) 24=106, 25=150, 18=109, 17=139.
  - 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 16, 2024

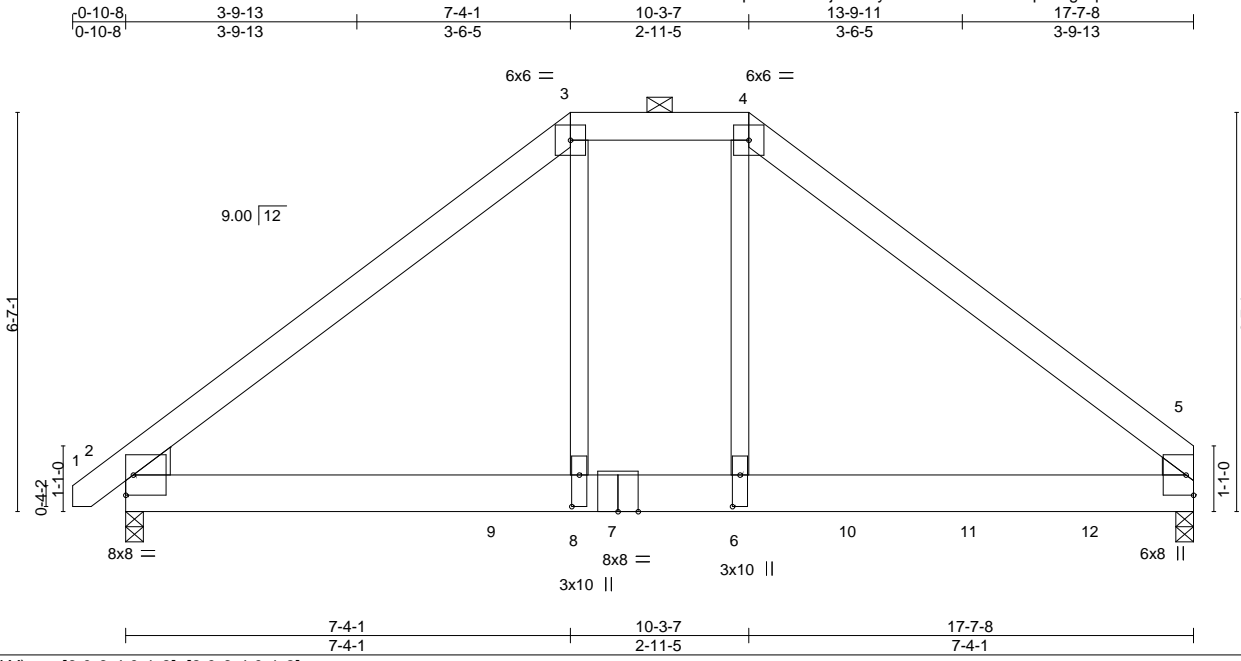
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. 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 and DSB-22</b> available from Truss Plate Institute (www.tpinst.org) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (www.sbcacomponents.com)</p>	<p>ENGINEERING BY</p> <p><b>TRENCO</b></p> <p>A MITEK Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
---	---

Job J1024-5561	Truss B2	Truss Type Hip Girder	Qty 1	Ply 2	Lot 10 Turlington Acres 168876639
-------------------	-------------	--------------------------	----------	----------	--------------------------------------

Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Oct 14 08:37:25 2024 Page 1

ID:0iJ2hz3vp6ahZXSx7jdYHSym1hi-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:38.0

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

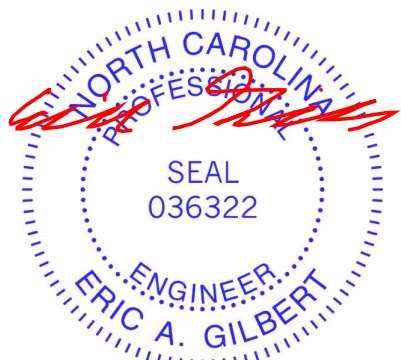
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.76	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.90	Vert(LL) -0.12 5-6 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.51	Vert(CT) -0.25 5-6 >827 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.03 5 n/a n/a		
	Code IRC2015/TP12014		Wind(LL) 0.13 2-8 >999 240	Weight: 253 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-8-14 oc purlins, except
BOT CHORD 2x8 SP No.1 *Except* 5-7: 2x8 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	
WEDGE Left: 2x6 SP No.1 , Right: 2x4 SP No.2	

**REACTIONS.** (size) 2=0-3-8, 5=0-3-8  
 Max Horz 2=145(LC 5)  
 Max Uplift 2=445(LC 8)  
 Max Grav 2=4910(LC 1), 5=6750(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-6963/239, 3-4=-5370/227, 4-5=-6946/245  
 BOT CHORD 2-8=-126/5273, 6-8=-129/5370, 5-6=-129/5270  
 WEBS 3-8=-283/4077, 4-6=0/4195

- 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 0-3-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=445.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2870 lb down and 923 lb up at 6-1-8, 1408 lb down and 157 lb up at 7-11-4, 1411 lb down and 110 lb up at 9-11-4, 1511 lb down at 11-11-4, and 1511 lb down at 13-11-4, and 1511 lb down at 15-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



October 16, 2024

**LOAD CASE(S)** Standard  
 Continued on page 2

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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/TP1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

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

Job J1024-5561	Truss B2	Truss Type Hip Girder	Qty 1	Ply <b>2</b>	Lot 10 Turlington Acres Job Reference (optional)	I68876639
-------------------	-------------	--------------------------	----------	-----------------	---	-----------

Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Oct 14 08:37:25 2024 Page 2  
ID:0iJ2hz3vp6ahZXSx7jdYHSym1hi-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?f

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-3=-60, 3-4=-60, 4-5=-60, 2-5=-20

Concentrated Loads (lb)

Vert: 7=-1408(B) 6=-1411(B) 9=-2870(B) 10=-1511(B) 11=-1511(B) 12=-1511(B)

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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/TP1 Quality Criteria and DSB-22** available from Truss Plate Institute ([www.tpinst.org](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcacomponents.com](http://www.sbcacomponents.com))

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932



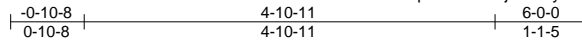




Job J1024-5561	Truss J02	Truss Type Jack-Open	Qty 3	Ply 1	Lot 10 Turlington Acres 168876642
-------------------	--------------	-------------------------	----------	----------	--------------------------------------

Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Oct 14 08:37:26 2024 Page 1  
ID:0iJ2hz3vp6ahZXSx7jdYHSym1hi-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:27.4

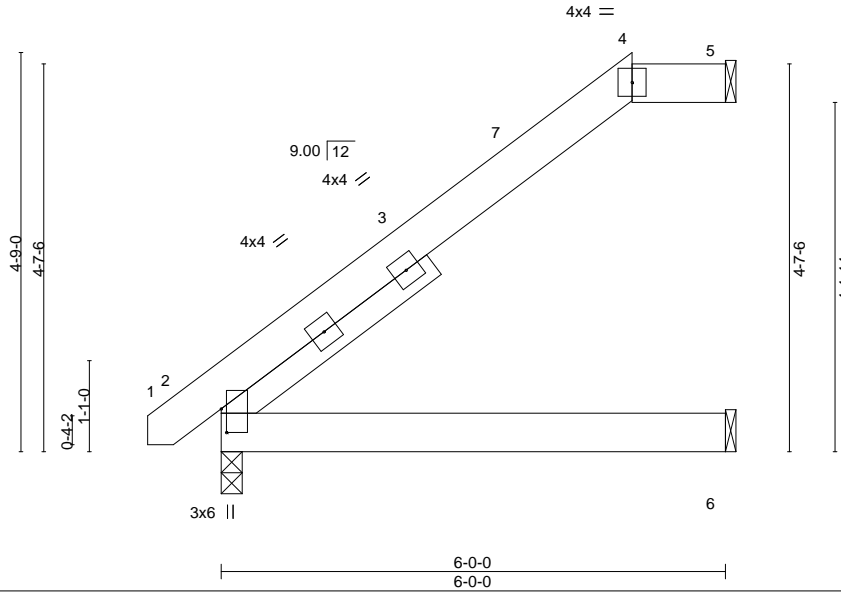


Plate Offsets (X,Y)--	[2:0-3-6,0-0-12]
-----------------------	------------------

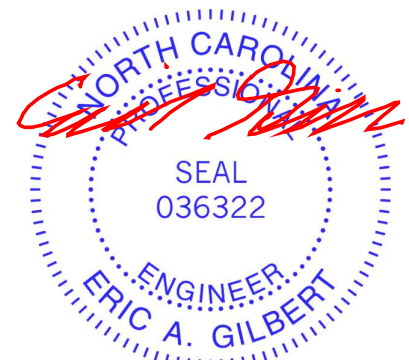
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.19	Vert(LL)	-0.01	2-6	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.13	Vert(CT)	-0.03	2-6	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.03	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P	Wind(LL)	0.02	2-6	>999	Weight: 39 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except
BOT CHORD 2x6 SP No.1	2-0-0 oc purlins: 4-5.
SLIDER Left 2x4 SP No.2 3-1-1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 5=Mechanical, 2=0-3-0, 6=Mechanical  
 Max Horz 2=135(LC 12)  
 Max Uplift 5=74(LC 12)  
 Max Grav 5=162(LC 1), 2=283(LC 1), 6=109(LC 3)

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-11 to 3-8-2, Interior(1) 3-8-2 to 4-10-11, Exterior(2) 4-10-11 to 5-11-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - 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) 5.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



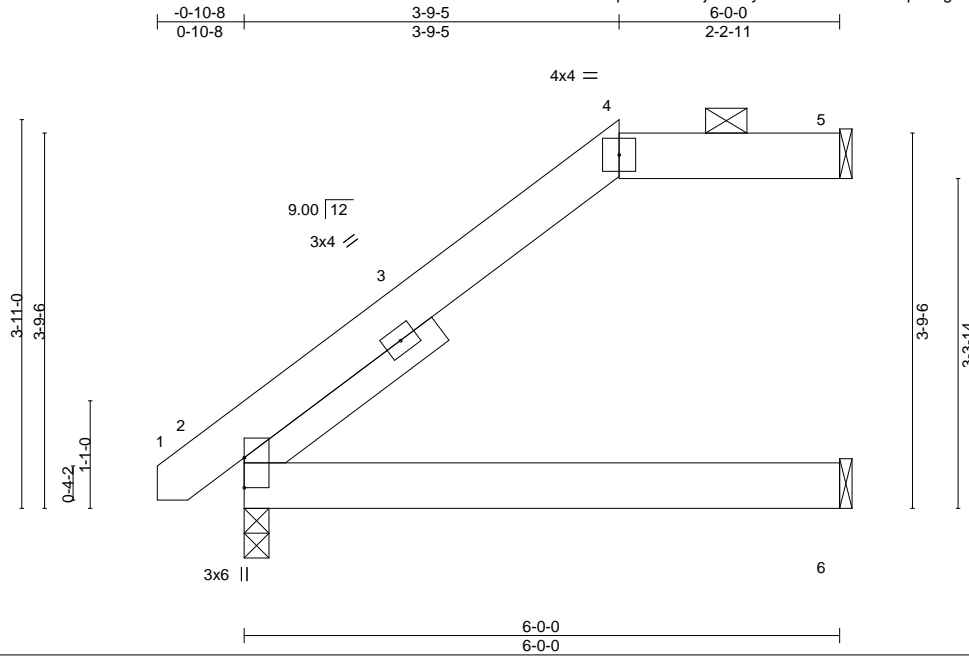
October 16, 2024

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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/TPH Quality Criteria and DSB-22</b> available from Truss Plate Institute (www.tpinst.org) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (www.sbcacomponents.com)</p>	<p>ENGINEERING BY</p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
--	--

Job J1024-5561	Truss J03	Truss Type Jack-Open	Qty 3	Ply 1	Lot 10 Turlington Acres Job Reference (optional)	168876643
-------------------	--------------	-------------------------	----------	----------	---	-----------

Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Oct 14 08:37:26 2024 Page 1  
ID:0iJ2hz3vp6ahZXSx7jdYHSym1hi-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f



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 0.17	Vert(LL)	-0.01	2-6	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	-0.03	2-6	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.04	5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P	Wind(LL)	0.02	2-6	>999	240		
									Weight: 37 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
SLIDER Left 2x4 SP No.2 2-4-11

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins: 4-5.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 5=Mechanical, 2=0-3-0, 6=Mechanical  
Max Horz 2=108(LC 12)  
Max Uplift 5=54(LC 9), 2=1(LC 12)  
Max Grav 5=161(LC 1), 2=283(LC 1), 6=110(LC 3)

**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) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 16, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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/TP1 Quality Criteria and DSB-22** available from Truss Plate Institute ([www.tpinst.org](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcacomponents.com](http://www.sbcacomponents.com))

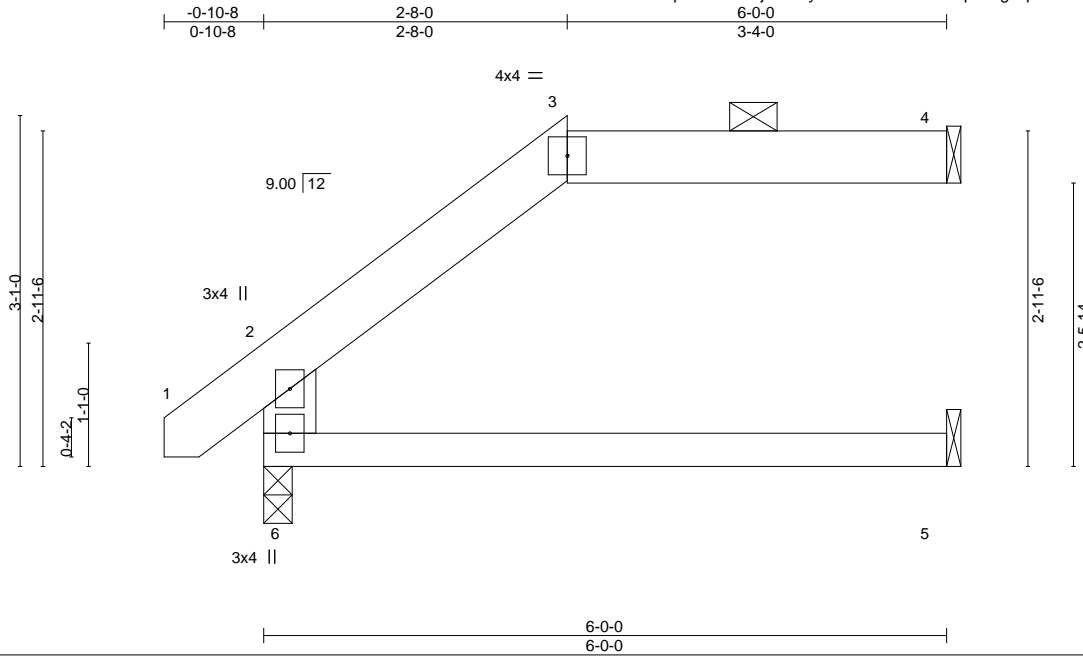


818 Soundside Road  
Edenton, NC 27932

Job J1024-5561	Truss J04	Truss Type Jack-Open	Qty 3	Ply 1	Lot 10 Turlington Acres Job Reference (optional)	168876644
-------------------	--------------	-------------------------	----------	----------	---	-----------

Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Oct 14 08:37:26 2024 Page 1  
ID:0iJ2hz3vp6ahZXSx7jdYHSym1hi-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:20.2

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.19	Vert(LL)	-0.03	5-6	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.22	Vert(CT)	-0.07	5-6	>967		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Horz(CT)	0.05	4	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-R	Wind(LL)	0.02	5-6	>999		
	Code IRC2015/TPI2014						Weight: 29 lb	FT = 20%

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

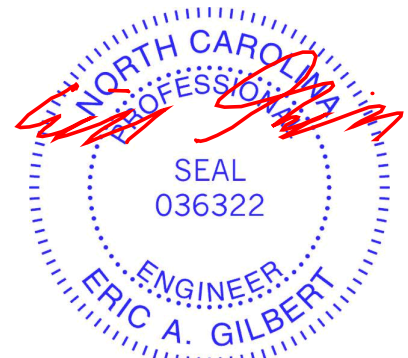
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 6=0-3-0, 4=Mechanical, 5=Mechanical  
 Max Horz 6=76(LC 12)  
 Max Uplift 6=9(LC 12), 4=55(LC 9)  
 Max Grav 6=290(LC 1), 4=169(LC 1), 5=97(LC 3)

**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) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 4.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 16, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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/TP1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



818 Soundside Road  
 Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	Lot 10 Turlington Acres	168876646
J1024-5561	J06	Jack-Open Girder	3	1		
Comtech, Inc. Fayetteville, NC - 28314,						8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Oct 14 08:37:27 2024 Page 1
						ID:0iJ2hz3vp6ahZXSx7jdYHSym1hi-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f
						Job Reference (optional)



Scale = 1:13.8

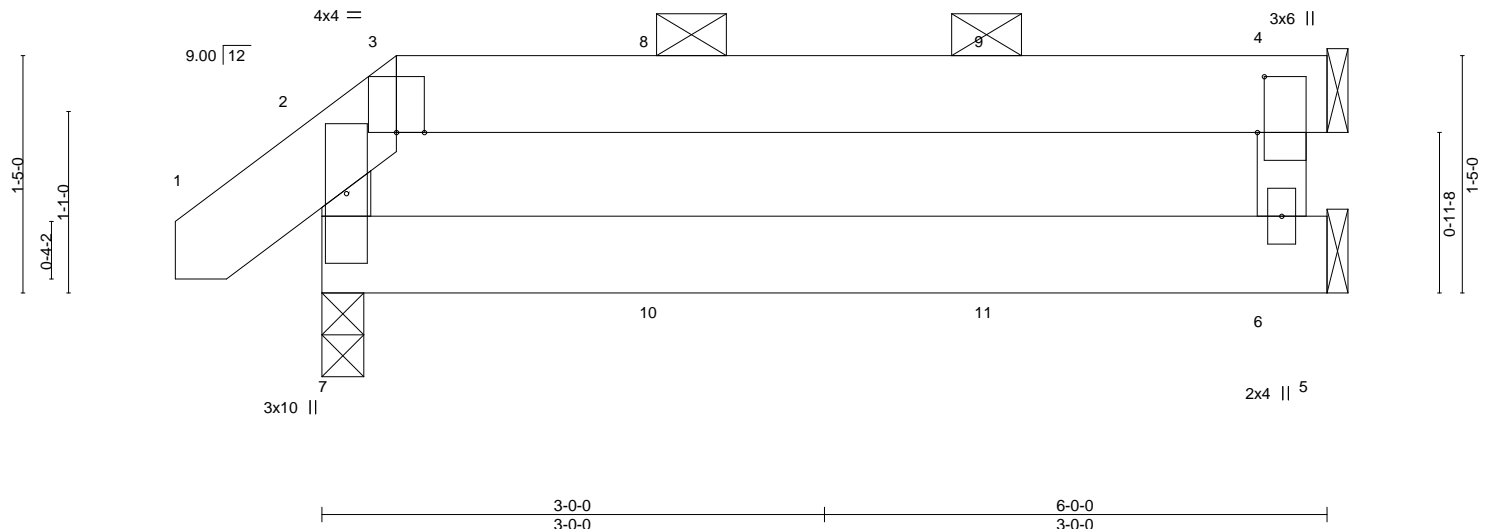


Plate Offsets (X,Y)--	[4:0-4-0,0-0-8]
-----------------------	-----------------

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 0.20	Vert(LL)	-0.01	6-7	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.13	Vert(CT)	-0.02	6-7	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	0.02	4	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.00	6-7	>999	Weight: 32 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	

**REACTIONS.** (size) 7=0-3-0, 4=Mechanical, 6=Mechanical  
 Max Horz 7=24(LC 8)  
 Max Uplift 7=-22(LC 5), 4=-54(LC 5)  
 Max Grav 7=268(LC 1), 4=161(LC 20), 6=120(LC 3)

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - 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) 7, 4.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 14 lb down and 23 lb up at 2-0-12, and 14 lb down and 23 lb up at 4-0-12 on top chord, and 4 lb down at 2-0-12, and 4 lb down at 4-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard  
 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-2=-60, 2-3=-20, 3-4=-60, 5-7=-20





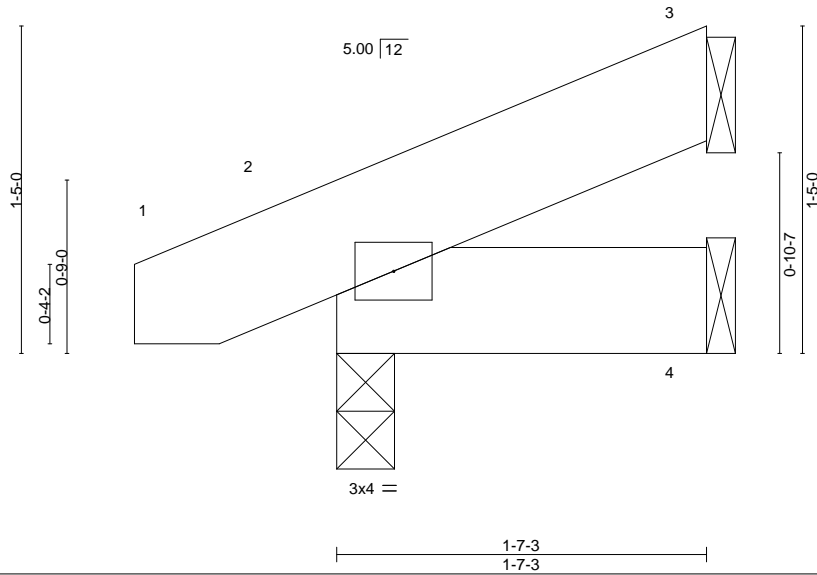
Job J1024-5561	Truss J07	Truss Type Jack-Open	Qty 6	Ply 1	Lot 10 Turlington Acres 168876647
-------------------	--------------	-------------------------	----------	----------	--------------------------------------

Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Oct 14 08:37:28 2024 Page 1  
ID:0iJ2hz3vp6ahZXSx7jdYHSym1hi-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?f



Scale = 1:10.0



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.01	Vert(LL)	-0.00	2	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.01	Vert(CT)	-0.00	2	>999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Wind(LL)	0.00	2	****		
	Code IRC2015/TPI2014						Weight: 10 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 1-7-3 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 3=Mechanical, 2=0-3-0, 4=Mechanical  
 Max Horz 2=31(LC 12)  
 Max Uplift 3=23(LC 12), 2=17(LC 8)  
 Max Grav 3=37(LC 1), 2=115(LC 1), 4=31(LC 3)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; 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
- 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.

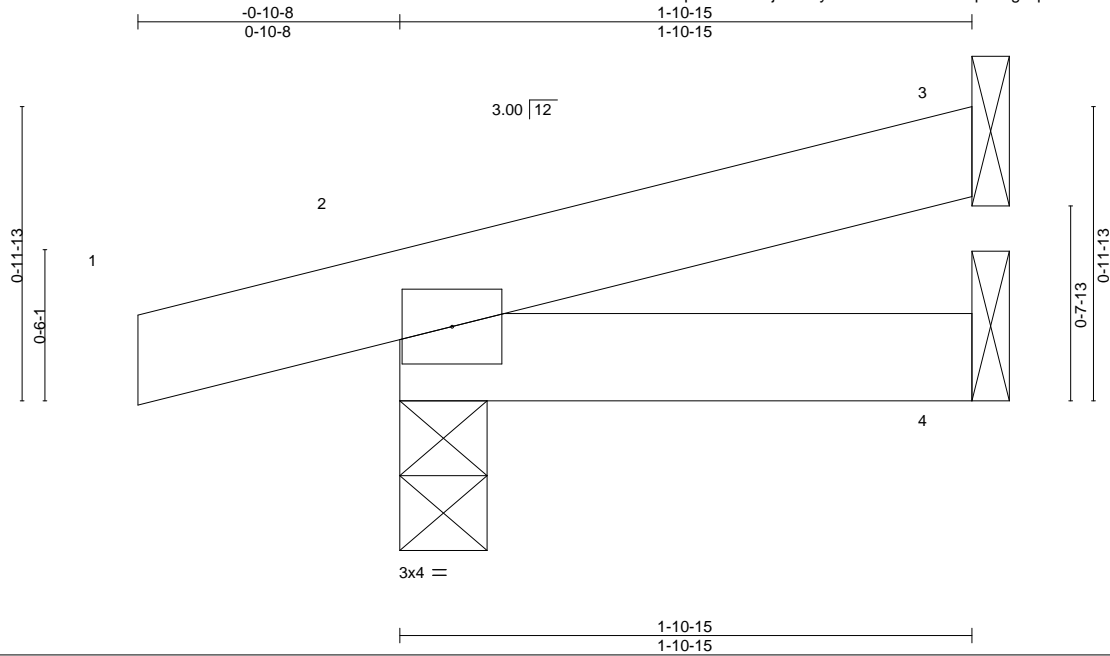


October 16, 2024

Job J1024-5561	Truss J08	Truss Type JACK-OPEN	Qty 2	Ply 1	Lot 10 Turlington Acres Job Reference (optional)	168876648
-------------------	--------------	-------------------------	----------	----------	---	-----------

Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Oct 14 08:37:28 2024 Page 1  
ID:0iJ2hz3vp6ahZXSx7jdYHSym1hi-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.04	Vert(LL)	-0.00	2	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	2-4	>999	240		
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	Wind(LL)	0.00	2-4	>999	240	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 1-10-15 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
Max Horz 2=23(LC 8)  
Max Uplift 3=-20(LC 12), 2=-65(LC 8), 4=-10(LC 8)  
Max Grav 3=43(LC 1), 2=142(LC 1), 4=37(LC 3)

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

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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
  - 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.

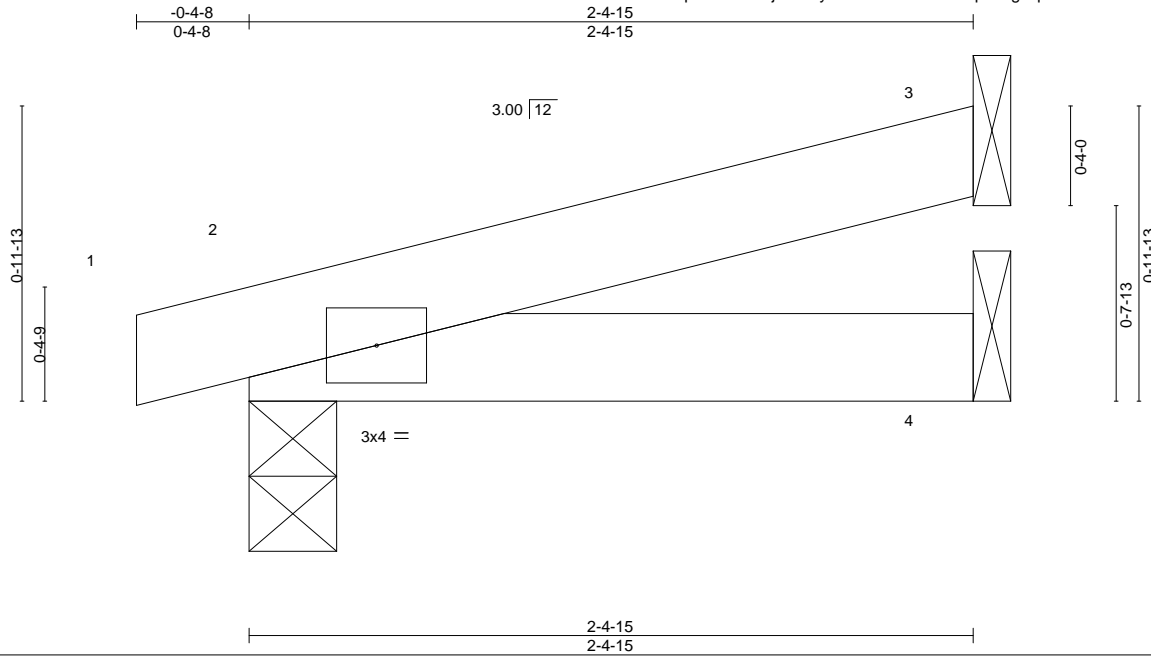


Job J1024-5561	Truss J09	Truss Type JACK-OPEN	Qty 2	Ply 1	Lot 10 Turlington Acres Job Reference (optional)	168876649
-------------------	--------------	-------------------------	----------	----------	---	-----------

Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Oct 14 08:37:28 2024 Page 1

ID:0iJ2hz3vp6ahZXSx7jdYHSym1hi-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



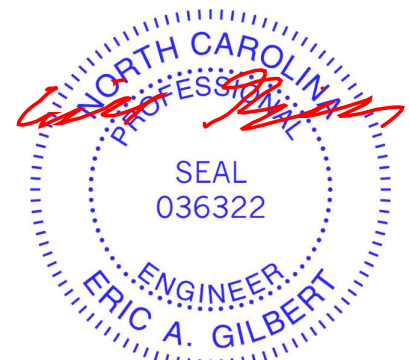
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.05	Vert(LL)	-0.00	2-4	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	-0.00	2-4	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-P	Wind(LL)	0.00	2-4	>999	240	Weight: 8 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 2-4-15 oc purlins.
BOT CHORD 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
 Max Horz 2=22(LC 8)  
 Max Uplift 3=-25(LC 12), 2=-52(LC 8), 4=-11(LC 8)  
 Max Grav 3=62(LC 1), 2=123(LC 1), 4=44(LC 3)

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

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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
  - 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.



October 16, 2024

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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/TPH Quality Criteria and DSB-22</b> available from Truss Plate Institute (www.tpinst.org) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (www.sbcacomponents.com)</p>	<p>ENGINEERING BY</p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
--	--

Job J1024-5561	Truss M01	Truss Type MONOPITCH	Qty 4	Ply 1	Lot 10 Turlington Acres 168876650
-------------------	--------------	-------------------------	----------	----------	--------------------------------------

Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Oct 14 08:37:29 2024 Page 1  
ID:0iJ2hz3vp6ahZXSx7jdYHSym1hi-RfC?PsB70Hq3NSgPqnL8w3uITXbGKwRCDoi7J4zJC?f



Scale = 1:11.3

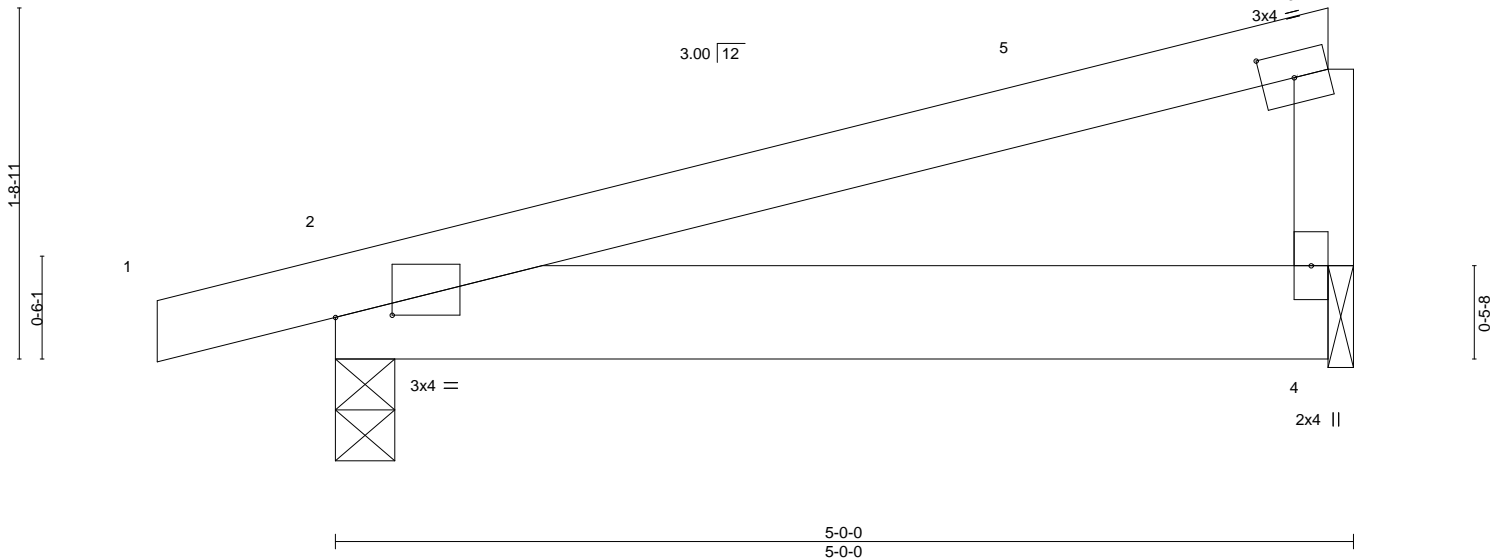


Plate Offsets (X, Y)--	[2:0-3-5,0-0-2], [3:0-1-15,0-1-8]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.28	Vert(LL) -0.01 2-4 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.08	Vert(CT) -0.01 2-4 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.03	Horz(CT) 0.00 4 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P	Wind(LL) 0.01 2-4 >999 240	Weight: 22 lb	FT = 20%

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

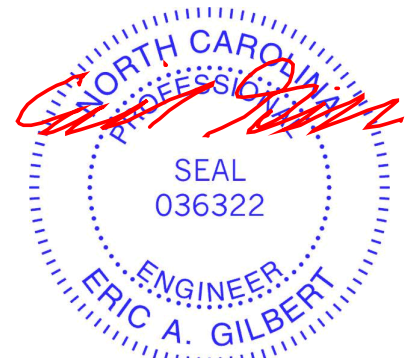
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 4=0-1-8  
Max Horz 2=48(LC 8)  
Max Uplift 2=-107(LC 8), 4=-75(LC 8)  
Max Grav 2=256(LC 1), 4=181(LC 1)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 4-10-1 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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=lb) 2=107.



October 16, 2024

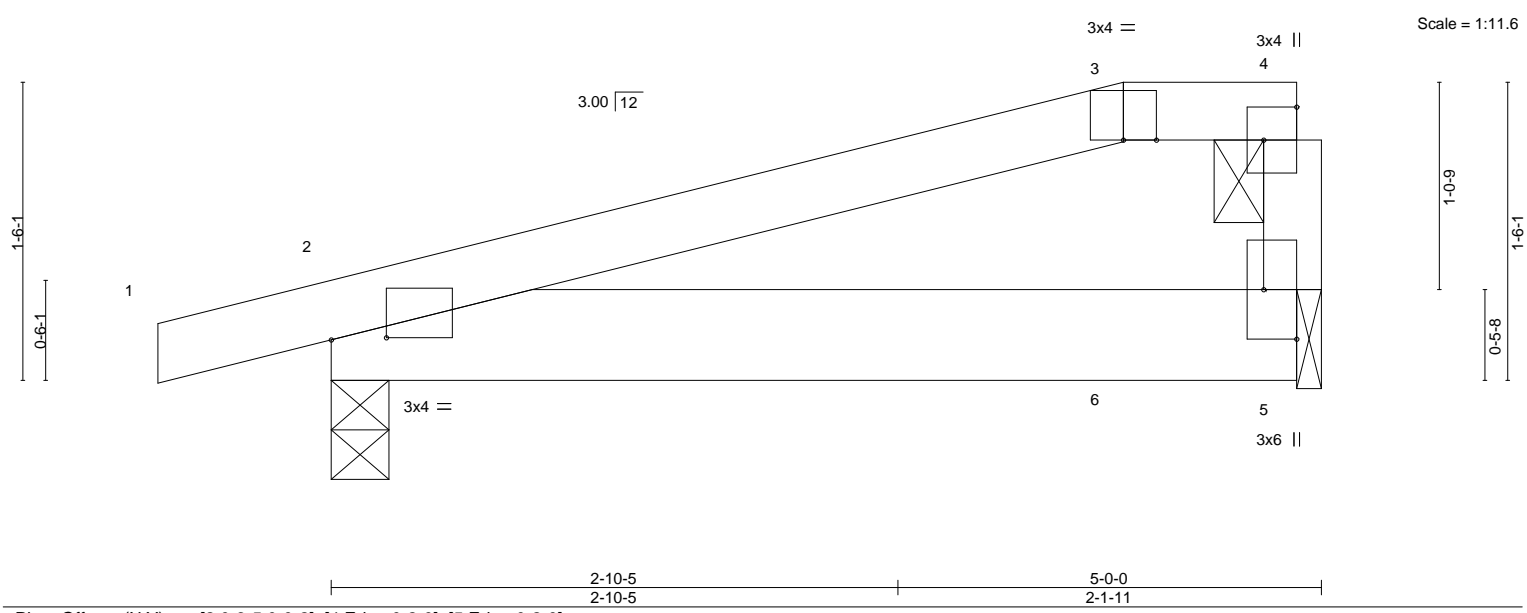
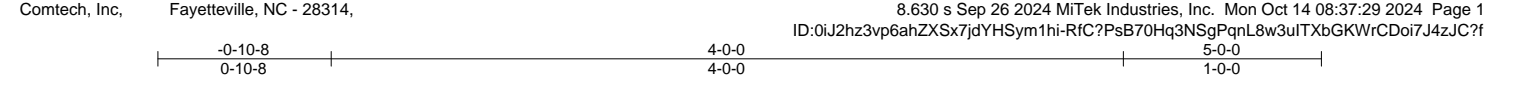
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

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 and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 10 Turlington Acres	168876651
J1024-5561	M02	ROOF SPECIAL GIRDER	2	1		
Comtech, Inc. Fayetteville, NC - 28314,						8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Oct 14 08:37:29 2024 Page 1
						ID:0iJ2hz3vp6ahZXSx7jdYHSym1hi-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.23	Vert(LL)	0.02	2-5	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.20	Vert(CT)	-0.02	2-5	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-R						Weight: 21 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	

**REACTIONS.** (size) 2=0-3-8, 5=0-1-8  
 Max Horz 2=41(LC 4)  
 Max Uplift 2=-133(LC 4), 5=-180(LC 4)  
 Max Grav 2=318(LC 1), 5=458(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); porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - 6) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=133, 5=180.
  - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 338 lb down and 192 lb up at 4-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

<b>LOAD CASE(S)</b> Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-4=-60, 2-5=-20
Concentrated Loads (lb)
Vert: 6=-338(B)



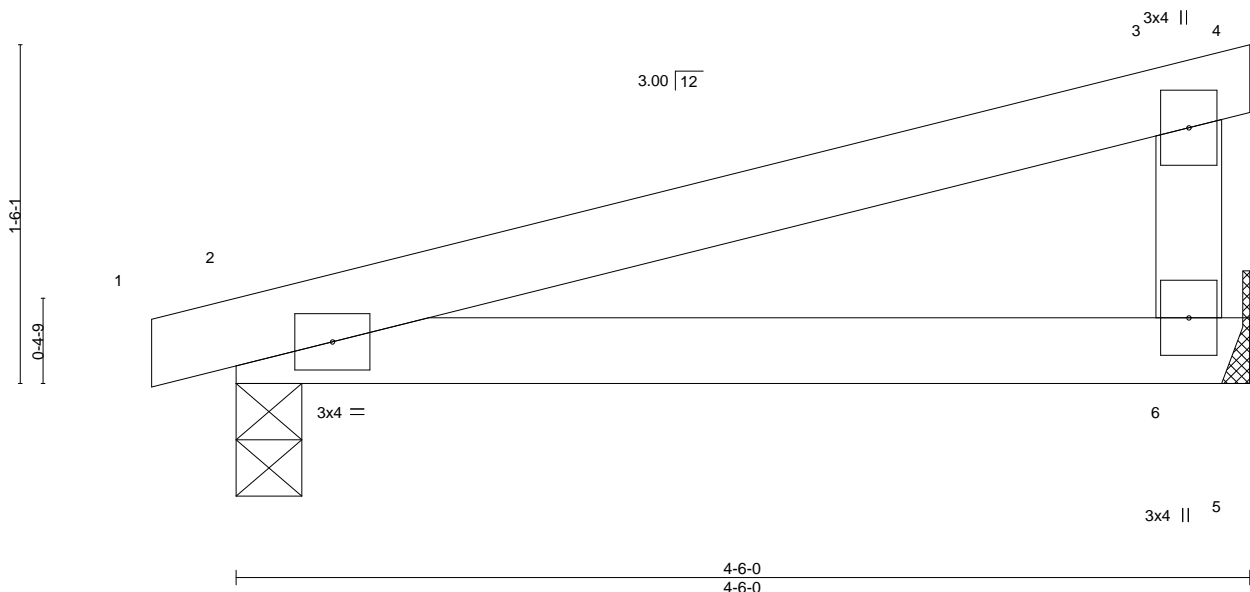
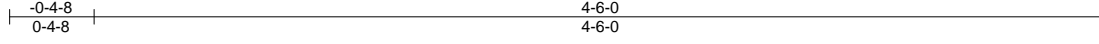
Job J1024-5561	Truss M03	Truss Type JACK-CLOSED	Qty 2	Ply 1	Lot 10 Turlington Acres 168876652
-------------------	--------------	---------------------------	----------	----------	--------------------------------------

Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Oct 14 08:37:29 2024 Page 1

ID:0iJ2hz3vp6ahZXSx7jdYHSym1hi-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Job Reference (optional)



Scale = 1:10.2

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 0.22	Vert(LL)	-0.01	2-6	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.15	Vert(CT)	-0.03	2-6	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00		n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P	Wind(LL)	0.03	2-6	>999	240	Weight: 16 lb	FT = 20%

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

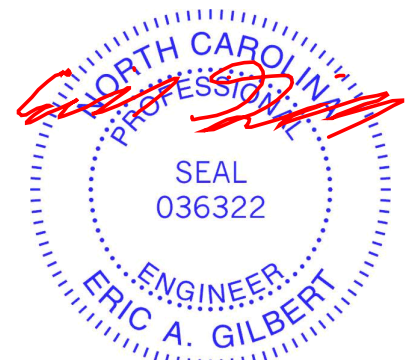
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-6-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 6=Mechanical, 2=0-3-8  
 Max Horz 2=39(LC 8)  
 Max Uplift 6=68(LC 8), 2=77(LC 8)  
 Max Grav 6=173(LC 1), 2=196(LC 1)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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
- 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2.



October 16, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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/TP1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

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

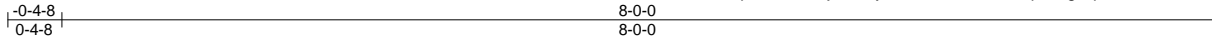


Job J1024-5561	Truss P1	Truss Type GABLE	Qty 2	Ply 1	Lot 10 Turlington Acres Job Reference (optional)	168876653
-------------------	-------------	---------------------	----------	----------	---	-----------

Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Oct 14 08:37:30 2024 Page 1

ID:0iJ2hz3vp6ahZXSx7jdYHSym1hi-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWRCDoi7J4zJC?f



Scale: 3/4"=1'

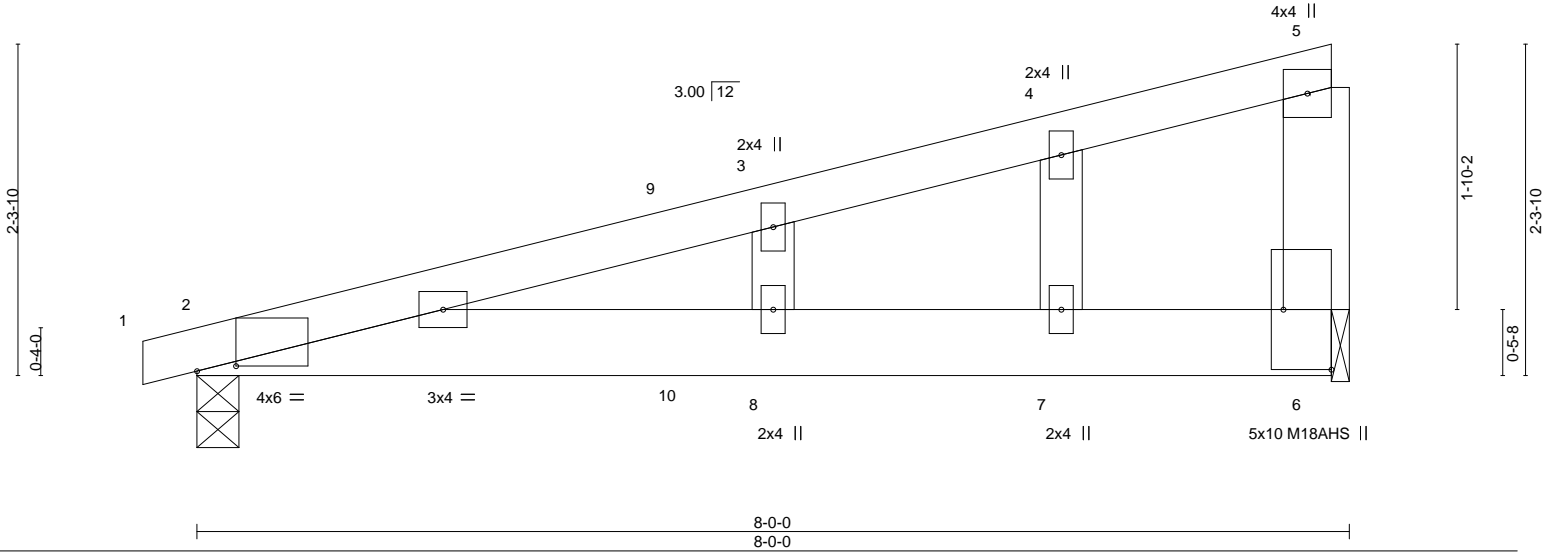


Plate Offsets (X, Y)--	[2:0-3-4,0-0-7], [6:Edge,0-4-0]
------------------------	---------------------------------

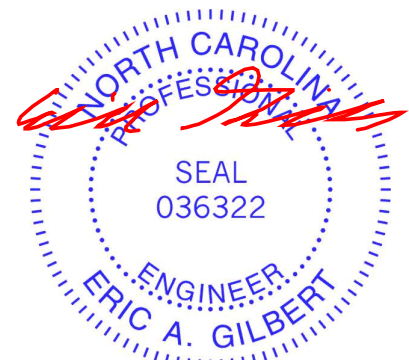
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.29	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.30	Vert(LL) 0.12 8 >741 240	M18AHS	186/179
BCLL 0.0 *	Lumber DOL 1.15	WB 0.03	Vert(CT) -0.09 8 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) -0.00 6 n/a n/a		
	Code IRC2015/TPI2014			Weight: 37 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x6 SP No.1	
OTHERS 2x4 SP No.2	

**REACTIONS.** (size) 2=0-3-8, 6=0-1-8  
 Max Horz 2=98(LC 8)  
 Max Uplift 2=-188(LC 8), 6=-182(LC 8)  
 Max Grav 2=337(LC 1), 6=304(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-244/258, 3-4=-221/304, 4-5=-203/320  
 BOT CHORD 2-8=-365/204, 7-8=-365/204, 6-7=-365/204

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-4-8 to 4-0-0, Exterior(2) 4-0-0 to 7-9-4 zone; porch left exposed; 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 MT20 plates 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - 7) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 8) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 6.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=188, 6=182.



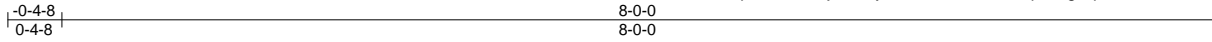
October 16, 2024

Job J1024-5561	Truss P2	Truss Type MONOPICH	Qty 6	Ply 1	Lot 10 Turlington Acres 168876654
-------------------	-------------	------------------------	----------	----------	--------------------------------------

Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Oct 14 08:37:30 2024 Page 1

ID:0iJ2hz3vp6ahZXSx7jdYHSym1hi-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f



Scale: 3/4"=1'

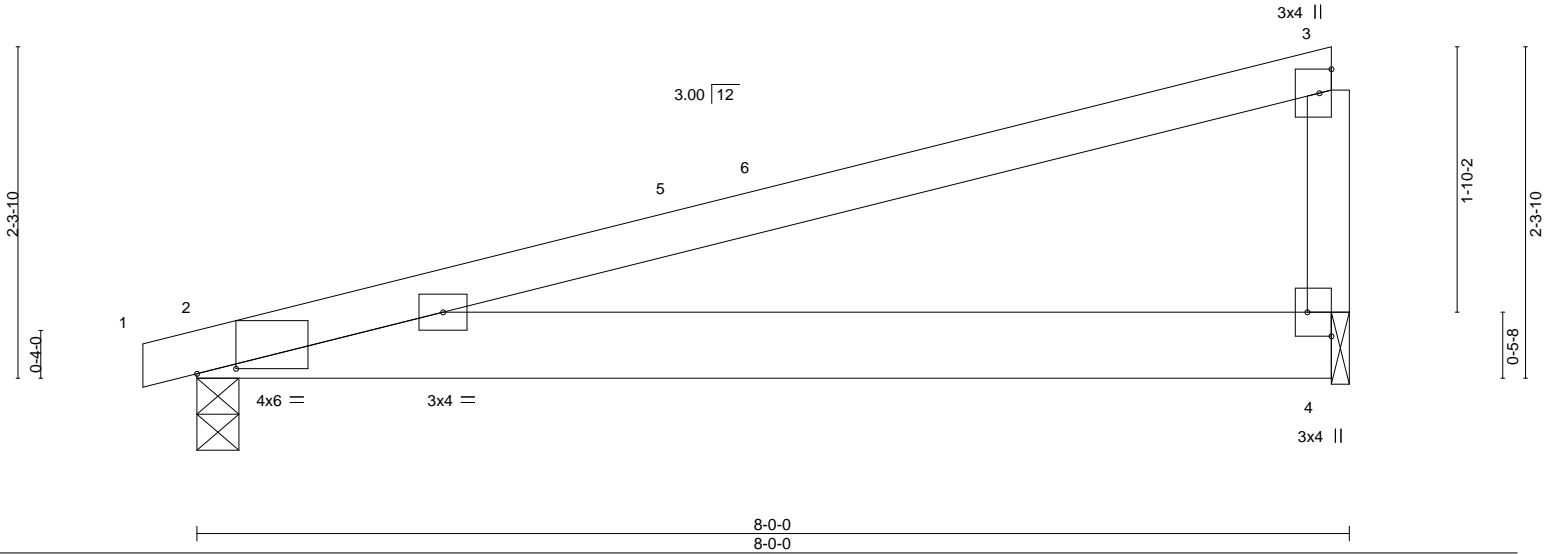


Plate Offsets (X, Y)--	[2:0-3-4,0-0-7], [4:Edge,0-2-0]
------------------------	---------------------------------

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.90	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.24	Vert(LL) -0.05 2-4 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.10 2-4 >969 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 4 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.10 2-4 >886 240	Weight: 33 lb	FT = 20%

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

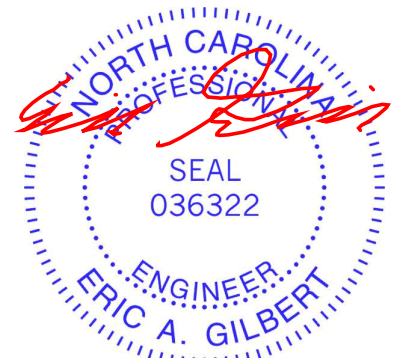
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 4=0-1-8  
Max Horz 2=69(LC 8)  
Max Uplift 2=-131(LC 8), 4=-126(LC 8)  
Max Grav 2=341(LC 1), 4=306(LC 1)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-4-8 to 4-0-5, Interior(1) 4-0-5 to 7-10-1 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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) except (jt=lb) 2=131, 4=126.



October 16, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



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.



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

## PLATE SIZE

4 X 4

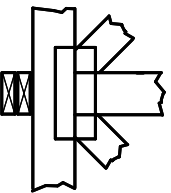
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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

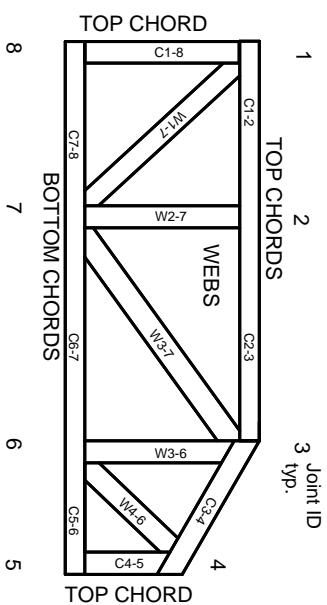


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

## Industry Standards:

ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-22: Design Standard for Bracing.  
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & 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-1988, ESR-2362, ESR-2685, ESR-3282  
ESR-4722, ESL-1388

# Design General Notes

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

Lumber design values are in accordance with ANSI/TP1 section 6.3. These truss designs rely on Lumber values established by others.

© 2023 MITek® All Rights Reserved

**MITek**

ENGINEERING BY  
**TRENGO**  
A MITek Affiliate

MITek Engineering Reference Sheet: MIL-7473 rev. 1/2/2023

# General Safety Notes

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

1. Additional stability/bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.