

Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: J0824-4611  
GMC/Lot 5 River Rd./Wake

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: I67769305 thru I67769349

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

North Carolina COA: C-0844



August 23, 2024

Lassiter, Frank

**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 J0824-4611	Truss A1	Truss Type ROOF TRUSS	Qty 1	Ply 1	GMC/Lot 5 River Rd./Wake 167769305
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Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 23 10:35:55 2024 Page 1

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Scale = 1:85.4

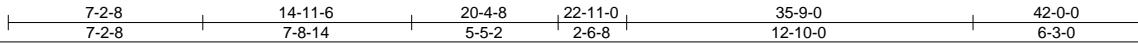
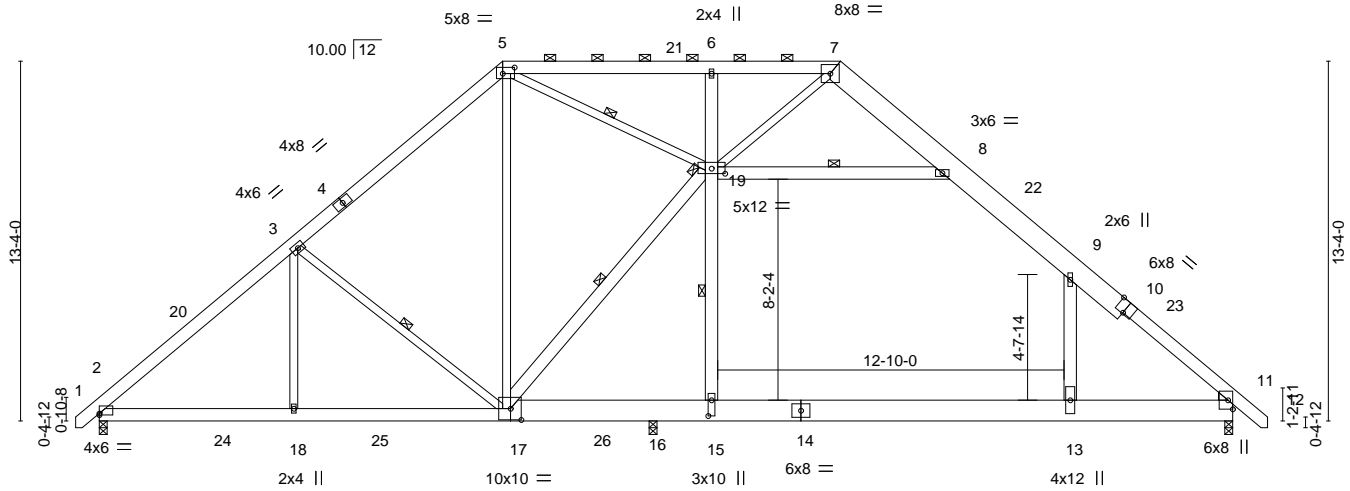


Plate Offsets (X, Y)--	[2:0-0-0,0-0-11], [5:0-5-4,0-2-12], [10:0-4-0,Edge], [15:0-7-0,0-1-8], [17:0-4-12,0-5-0], [19:0-6-0,0-2-4]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.71	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.90	Vert(LL) -0.24 13-15 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.46	Vert(CT) -0.42 13-15 >608 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.05 11 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.07 13-15 >999 240	Weight: 438 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1 *Except* 7-10: 2x10 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-0-3 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-7.
BOT CHORD 2x10 SP No.1 *Except* 2-17: 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 9-6-8 oc bracing.
WEBS 2x4 SP No.2 *Except* 6-15,9-13,8-19,17-19: 2x6 SP No.1	WEBS 1 Row at midpt 3-17, 15-19, 8-19, 5-19, 17-19
WEDGE Right: 2x4 SP No.2	JOINTS 1 Brace at Jt(s): 19

**REACTIONS.** (size) 2=0-3-8, 11=0-3-8, 16=0-3-8  
 Max Horz 2=-316(LC 10)  
 Max Uplift 16=-67(LC 9)  
 Max Grav 2=1798(LC 2), 11=2328(LC 21), 16=933(LC 26)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2420/254, 3-5=-1813/311, 5-6=-945/105, 6-7=-940/104, 7-8=-734/127,  
 8-9=-2254/176, 9-11=-3012/0  
 BOT CHORD 2-18=-44/1888, 17-18=-45/1889, 16-17=0/1946, 15-16=0/1946, 13-15=0/1949,  
 11-13=0/1946  
 WEBS 3-18=0/488, 3-17=-702/293, 5-17=-94/1054, 15-19=-195/901, 6-19=-455/229,  
 9-13=0/1028, 8-19=-1766/208, 5-19=-769/292, 17-19=-1209/20, 7-19=0/739

- 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) -0-9-1 to 3-7-12, Interior(1) 3-7-12 to 14-11-6, Exterior(2) 14-11-6 to 21-2-1, Interior(1) 21-2-1 to 27-3-0, Exterior(2) 27-3-0 to 33-5-11, Interior(1) 33-5-11 to 43-2-1 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 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.
  - Ceiling dead load (10.0 psf) on member(s). 8-9, 8-19; Wall dead load (5.0psf) on member(s).15-19, 9-13
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 13-15
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 67 lb uplift at joint 16.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Attic room checked for L/360 deflection.



August 23, 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.sbccomponents.com)

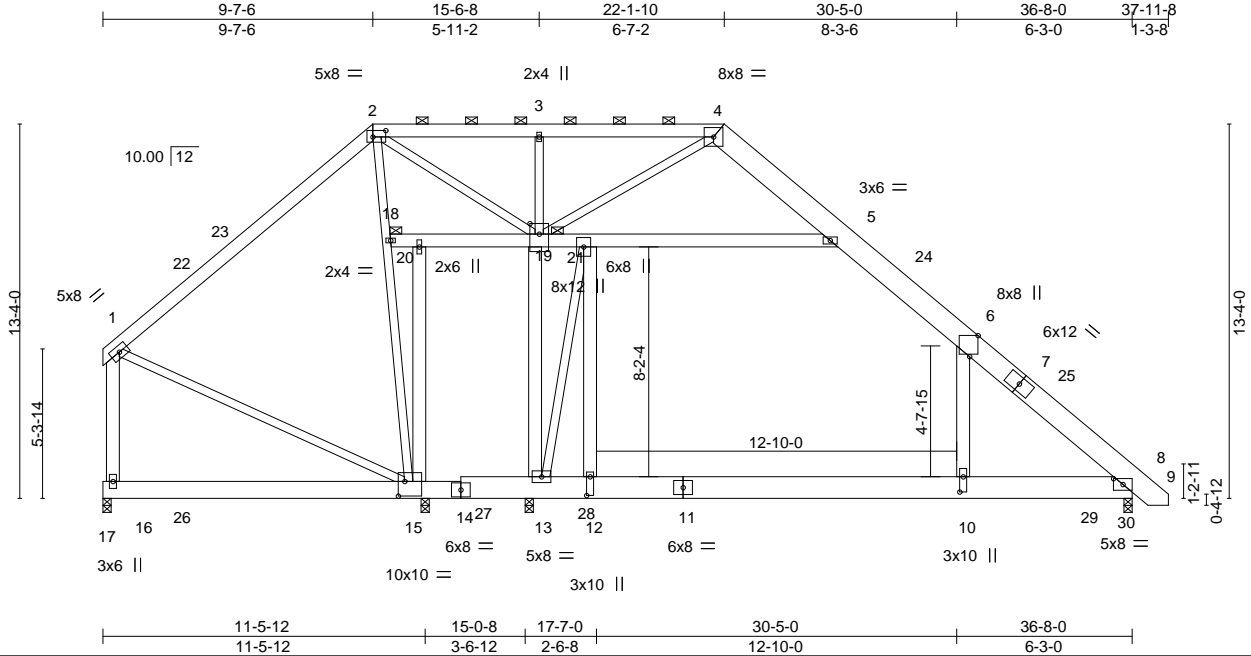
**ENGINEERING BY**  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
 Edenton, NC 27932



Job J0824-4611	Truss A3	Truss Type GABLE	Qty 1	Ply 3	GMC/Lot 5 River Rd./Wake 167769307
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Comtech, Inc., Fayetteville, NC 28309, RSDGTDFD  
 ID:Rf2W5uVqu9dZySjoYfRYfJyV8Y\_-pB\_8UA5dCGEubwAcjM63PWYx51Q8AsVbUMpvKJykwVM  
 8.630 s Jun 15 2023 MiTek Industries, Inc. Fri Aug 23 15:33:43 2024 Page 1



Scale = 1:82.1

Plate Offsets (X,Y)--	[2:0-5-8,0-2-12], [6:0-9-1,Edge], [8:0-4-1,0-2-8], [10:0-6-8,0-1-8], [12:0-8-0,0-1-8], [15:0-2-12,0-6-4], [19:0-4-8,0-4-0]
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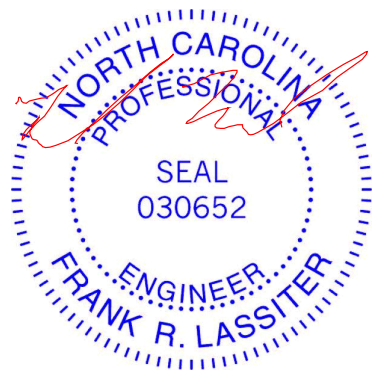
LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.54	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.50	Vert(LL) -0.27 10-12 >918 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.62	Vert(CT) -0.42 10-12 >603 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.02 8 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.13 10-12 >999 240		
				Weight: 1391 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1 *Except* 4-7,7-9: 2x10 SP 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 2-4.
BOT CHORD 2x10 SP 2400F 2.0E *Except* 14-17: 2x8 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x6 SP No.1 *Except* 4-19,2-15,2-19,1-15,3-19: 2x4 SP No.2, 13-21: 2x4 SP No.1	JOINTS 1 Brace at Jt(s): 18, 19 PLY-TO-PLY CONNECTION REQUIRES THAT AN APPROVED FACE MOUNT HANGER (SPECIFIED BY OTHERS) IS REQUIRED FOR LOADS REPORTED IN NOTES. FACE MOUNT HANGER SHALL BE ATTACHED WITH A MINIMUM OF 0.148"x 3" NAILS PER HANGER MANUFACTURER SPECIFICATIONS.

**REACTIONS.** All bearings 0-3-8.  
 (lb) - Max Horz 16=306(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 13 except 16=299(LC 13), 8=501(LC 13), 15=5855(LC 21)  
 Max Grav All reactions 250 lb or less at joint(s) except 16=3990(LC 21), 8=11084(LC 21), 15=567(LC 13), 13=7022(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=3718/807, 2-3=0/582, 3-4=0/583, 4-5=-12/489, 5-6=-4149/714, 6-8=-7397/877, 1-16=-3767/817  
 BOT CHORD 15-16=-235/325, 13-15=-291/3030, 12-13=-439/4629, 10-12=-439/4629, 8-10=-438/4613  
 WEBS 6-10=-414/4760, 19-21=-3986/699, 5-21=-5621/847, 4-19=-45/406, 2-18=-710/4475, 15-18=-712/4375, 2-19=-4549/854, 1-15=-426/2984, 13-19=-2301/546, 3-19=-445/184, 12-21=-826/7371, 13-21=-8177/741

- NOTES-**
- 1) N/A
  - 2) 3-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, 2x10 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x10 - 5 rows staggered at 0-4-0 oc.  
 Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
  - 3) 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.
  - 4) Unbalanced roof live loads have been considered for this design.
  - 5) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-9-1, Interior(1) 4-9-1 to 9-7-6, Exterior(2) 9-7-6 to 15-6-8, Interior(1) 15-6-8 to 21-11-0, Exterior(2) 21-11-0 to 28-1-11, Interior(1) 28-1-11 to 37-7-2 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 6) 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.
  - 7) Provide adequate drainage to prevent water ponding.
  - 8) Gable studs spaced at 2-0-0 oc.
  - 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 10) \* 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.



On this 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/TPI 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)



Job J0824-4611	Truss A3	Truss Type GABLE	Qty 1	Ply 3	GMC/Lot 5 River Rd./Wake 167769307
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Comtech, Inc., Fayetteville, NC 28309, RSDGTDF

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**NOTES-**

- 12) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 10-12
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13 except (jt=lb) 16=299, 8=501, 15=5855.
- 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 15) This truss has large uplift reaction(s) from gravity load case(s). Proper connection is required to secure truss against upward movement at the bearings. Building designer must provide for uplift reactions indicated.
- 16) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 5776 lb down and 981 lb up at 35-4-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 17) Attic room checked for L/360 deflection.

**LOAD CASE(S)**

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-2=-60, 2-4=-60, 4-5=-60, 5-6=-80, 6-9=-60, 12-17=-20, 10-12=-235(F=-195), 10-29=-215(F=-195), 8-29=-20, 5-18=-20  
 Drag: 6-10=-10, 12-21=-10  
 Concentrated Loads (lb)  
 Vert: 30=-3278(F)
- 2) Dead + 0.75 Roof Live (balanced) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-2=-50, 2-4=-50, 4-5=-50, 5-6=-70, 6-9=-50, 16-17=-20, 16-26=-65, 26-27=-20, 27-28=-65, 12-28=-20, 10-12=-417(F=-317), 10-29=-337(F=-317), 8-29=-20, 5-18=-20  
 Drag: 6-10=-10, 12-21=-10  
 Concentrated Loads (lb)  
 Vert: 30=-5327(F)
- 3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25  
 Uniform Loads (plf)  
 Vert: 1-2=-20, 2-4=-20, 4-5=-20, 5-6=-40, 6-9=-20, 12-17=-40, 12-29=-186(F=-146), 8-29=-40, 5-18=-20  
 Drag: 6-10=-10, 12-21=-10  
 Concentrated Loads (lb)  
 Vert: 30=-2458(F)
- 4) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-23=32, 2-23=25, 2-3=36, 3-4=28, 4-5=32, 5-24=20, 6-24=13, 6-8=25, 8-9=18, 12-17=-12, 10-12=34(F=58), 10-29=46(F=58), 8-29=-12, 5-18=-12  
 Horz: 1-23=-44, 2-23=-37, 4-24=44, 8-24=37, 8-9=30  
 Drag: 2-3=0, 3-4=0, 6-10=-10, 12-21=-10  
 Concentrated Loads (lb)  
 Vert: 30=981(F)
- 5) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-22=25, 2-22=32, 2-3=28, 3-4=36, 4-5=25, 5-6=13, 6-25=25, 8-25=32, 8-9=55, 12-17=-12, 10-12=34(F=58), 10-29=46(F=58), 8-29=-12, 5-18=-12  
 Horz: 1-22=-37, 2-22=-44, 4-25=37, 8-25=44, 8-9=67  
 Drag: 2-3=0, 3-4=0, 6-10=-10, 12-21=-10  
 Concentrated Loads (lb)  
 Vert: 30=981(F)
- 6) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-57, 2-4=-34, 4-5=-57, 5-6=-77, 6-8=-57, 8-9=-50, 12-17=-20, 10-12=-227(F=-187), 10-29=-207(F=-187), 8-29=-20, 5-18=-20  
 Horz: 1-2=37, 4-8=37, 8-9=30  
 Drag: 2-3=0, 3-4=-0, 6-10=-10, 12-21=-10  
 Concentrated Loads (lb)  
 Vert: 30=-3143(F)
- 7) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-57, 2-4=-34, 4-5=-57, 5-6=-77, 6-8=-57, 8-9=10, 12-17=-20, 10-12=-227(F=-187), 10-29=-207(F=-187), 8-29=-20, 5-18=-20  
 Horz: 1-2=37, 4-8=-37, 8-9=30  
 Drag: 2-3=0, 3-4=-0, 6-10=-10, 12-21=-10  
 Concentrated Loads (lb)  
 Vert: 30=-3143(F)
- 8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-13, 2-4=21, 4-5=11, 5-6=-1, 6-8=11, 8-9=4, 12-17=-12, 10-12=-3(F=21), 10-29=9(F=21), 8-29=-12, 5-18=-12  
 Horz: 1-2=1, 4-8=23, 8-9=16  
 Drag: 2-3=0, 3-4=0, 6-10=-10, 12-21=-10  
 Concentrated Loads (lb)  
 Vert: 30=352(F)
- 9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=11, 2-4=21, 4-5=-13, 5-6=-25, 6-8=-13, 8-9=2, 12-17=-12, 10-12=-3(F=21), 10-29=9(F=21), 8-29=-12, 5-18=-12  
 Horz: 1-2=-23, 4-8=-1, 8-9=14  
 Drag: 2-3=0, 3-4=0, 6-10=-10, 12-21=-10  
 Concentrated Loads (lb)  
 Vert: 30=352(F)
- 10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60

Continued on page 3

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818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	GMC/Lot 5 River Rd./Wake	167769307
J0824-4611	A3	GABLE	1	3	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309, RSDGTFD

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 ID:Rf2W5uVqu9dZySjoYfRfYfJyV8Y\_-pB\_8UA5dCGEubwAcjM63PWYx51Q8AsVbUMpvKJykwVM

**LOAD CASE(S)**

- Uniform Loads (plf)
  - Vert: 1-2=-35, 2-4=-1, 4-5=-11, 5-6=-31, 6-8=-11, 8-9=-4, 12-17=-20, 10-12=-173(F=-133), 10-29=-153(F=-133), 8-29=-20, 5-18=-20
  - Horz: 1-2=15, 4-8=9, 8-9=16
  - Drag: 2-3=-0, 3-4=0, 6-10=-10, 12-21=-10
- Concentrated Loads (lb)
  - Vert: 30=-2238(F)
- 11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=-11, 2-4=-1, 4-5=-35, 5-6=-55, 6-8=-35, 8-9=-28, 12-17=-20, 10-12=-173(F=-133), 10-29=-153(F=-133), 8-29=-20, 5-18=-20
    - Horz: 1-2=-9, 4-8=-15, 8-9=8
    - Drag: 2-3=-0, 3-4=0, 6-10=-10, 12-21=-10
  - Concentrated Loads (lb)
    - Vert: 30=-2238(F)
- 12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=21, 2-4=9, 4-5=9, 5-6=-3, 6-8=9, 8-9=2, 12-17=-12, 10-12=-3(F=21), 10-29=9(F=21), 8-29=-12, 5-18=-12
    - Horz: 1-2=-33, 4-8=21, 8-9=14
    - Drag: 2-3=-0, 3-4=0, 6-10=-10, 12-21=-10
  - Concentrated Loads (lb)
    - Vert: 30=352(F)
- 13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=9, 2-4=9, 4-5=21, 5-6=9, 6-8=21, 8-9=14, 12-17=-12, 10-12=-3(F=21), 10-29=9(F=21), 8-29=-12, 5-18=-12
    - Horz: 1-2=-21, 4-8=33, 8-9=26
    - Drag: 2-3=-0, 3-4=0, 6-10=-10, 12-21=-10
  - Concentrated Loads (lb)
    - Vert: 30=352(F)
- 14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=21, 2-4=9, 4-5=9, 5-6=-3, 6-8=9, 8-9=2, 12-17=-12, 10-12=-3(F=21), 10-29=9(F=21), 8-29=-12, 5-18=-12
    - Horz: 1-2=-33, 4-8=21, 8-9=14
    - Drag: 2-3=-0, 3-4=0, 6-10=-10, 12-21=-10
  - Concentrated Loads (lb)
    - Vert: 30=352(F)
- 15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=9, 2-4=9, 4-5=21, 5-6=9, 6-8=21, 8-9=14, 12-17=-12, 10-12=-3(F=21), 10-29=9(F=21), 8-29=-12, 5-18=-12
    - Horz: 1-2=-21, 4-8=33, 8-9=26
    - Drag: 2-3=-0, 3-4=0, 6-10=-10, 12-21=-10
  - Concentrated Loads (lb)
    - Vert: 30=352(F)
- 16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=-1, 2-4=-13, 4-5=-13, 5-6=-33, 6-8=-13, 8-9=-6, 12-17=-20, 10-12=-154(F=-114), 10-29=-134(F=-114), 8-29=-20, 5-18=-20
    - Horz: 1-2=-19, 4-8=7, 8-9=14
    - Drag: 2-3=-0, 3-4=0, 6-10=-10, 12-21=-10
  - Concentrated Loads (lb)
    - Vert: 30=-1915(F)
- 17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=-13, 2-4=-13, 4-5=-1, 5-6=-21, 6-8=-1, 8-9=6, 12-17=-20, 10-12=-154(F=-114), 10-29=-134(F=-114), 8-29=-20, 5-18=-20
    - Horz: 1-2=-7, 4-8=19, 8-9=26
    - Drag: 2-3=-0, 3-4=0, 6-10=-10, 12-21=-10
  - Concentrated Loads (lb)
    - Vert: 30=-1915(F)
- 18) Dead + Uninhab. Attic Storage + Attic Floor: Lumber Increase=1.00, Plate Increase=1.00
  - Uniform Loads (plf)
    - Vert: 1-2=-20, 2-4=-20, 4-5=-20, 5-6=-40, 6-9=-20, 16-17=-20, 16-26=80, 26-27=-20, 27-28=-80, 12-28=-20, 10-12=-412(F=-292), 10-29=-312(F=-292), 8-29=-20, 5-18=-20
    - Drag: 6-10=-10, 12-21=-10
  - Concentrated Loads (lb)
    - Vert: 30=-4917(F)
- 19) Dead + Uninhabitable Attic Storage: Lumber Increase=1.00, Plate Increase=1.00
  - Uniform Loads (plf)
    - Vert: 1-2=-20, 2-4=-20, 4-5=-20, 5-6=-40, 6-9=-20, 16-17=-20, 16-26=80, 26-27=-20, 27-28=-80, 12-28=-20, 10-12=-412(F=-292), 10-29=-312(F=-292), 8-29=-20, 5-18=-20
    - Drag: 6-10=-10, 12-21=-10
  - Concentrated Loads (lb)
    - Vert: 30=-4917(F)
- 20) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60

Continued on page 4

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818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	GMC/Lot 5 River Rd./Wake	167769307
J0824-4611	A3	GABLE	1	3	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309, RSDGTFD

8.630 s Jun 15 2023 MiTek Industries, Inc. Fri Aug 23 15:33:43 2024 Page 4  
 ID:Rf2W5uVqu9dZySjoYfRYfJyV8Y\_-pB\_8UA5dCGEubwAcjM63PWYx51Q8AsVbUMpvKJykwVM

**LOAD CASE(S)**

Uniform Loads (plf)

Vert: 1-2=-61, 2-4=-36, 4-5=-43, 5-6=-63, 6-8=-43, 8-9=-38, 16-17=-20, 16-26=-65, 26-27=-20, 27-28=-65, 12-28=-20, 10-12=-444(F=-344), 10-29=-364(F=-344),  
 8-29=-20, 5-18=-20  
 Horz: 1-2=11, 4-8=7, 8-9=12  
 Drag: 2-3=-0, 3-4=0, 6-10=-10, 12-21=-10

Concentrated Loads (lb)

Vert: 30=-5776(F)

21) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-43, 2-4=-36, 4-5=-61, 5-6=-81, 6-8=-61, 8-9=-56, 16-17=-20, 16-26=-65, 26-27=-20, 27-28=-65, 12-28=-20, 10-12=-444(F=-344), 10-29=-364(F=-344),  
 8-29=-20, 5-18=-20  
 Horz: 1-2=-7, 4-8=-11, 8-9=-6  
 Drag: 2-3=-0, 3-4=0, 6-10=-10, 12-21=-10

Concentrated Loads (lb)

Vert: 30=-5776(F)

22) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-36, 2-4=-45, 4-5=-45, 5-6=-65, 6-8=-45, 8-9=-40, 16-17=-20, 16-26=-65, 26-27=-20, 27-28=-65, 12-28=-20, 10-12=-429(F=-329), 10-29=-349(F=-329),  
 8-29=-20, 5-18=-20  
 Horz: 1-2=-14, 4-8=5, 8-9=10  
 Drag: 2-3=-0, 3-4=0, 6-10=-10, 12-21=-10

Concentrated Loads (lb)

Vert: 30=-5534(F)

23) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-45, 2-4=-45, 4-5=-36, 5-6=-56, 6-8=-36, 8-9=-31, 16-17=-20, 16-26=-65, 26-27=-20, 27-28=-65, 12-28=-20, 10-12=-429(F=-329), 10-29=-349(F=-329),  
 8-29=-20, 5-18=-20  
 Horz: 1-2=-5, 4-8=14, 8-9=19  
 Drag: 2-3=-0, 3-4=0, 6-10=-10, 12-21=-10

Concentrated Loads (lb)

Vert: 30=-5534(F)

24) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-60, 2-4=-60, 4-5=-20, 5-6=-40, 6-9=-20, 12-17=-20, 10-12=-235(F=-195), 10-29=-215(F=-195), 8-29=-20, 5-18=-20  
 Drag: 6-10=-10, 12-21=-10

Concentrated Loads (lb)

Vert: 30=-3278(F)

25) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-20, 2-4=-60, 4-5=-60, 5-6=-80, 6-9=-60, 12-17=-20, 10-12=-235(F=-195), 10-29=-215(F=-195), 8-29=-20, 5-18=-20  
 Drag: 6-10=-10, 12-21=-10

Concentrated Loads (lb)

Vert: 30=-3278(F)

26) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-50, 2-4=-50, 4-5=-20, 5-6=-40, 6-9=-20, 16-17=-20, 16-26=-65, 26-27=-20, 27-28=-65, 12-28=-20, 10-12=-417(F=-317), 10-29=-337(F=-317), 8-29=-20,  
 5-18=-20  
 Drag: 6-10=-10, 12-21=-10

Concentrated Loads (lb)

Vert: 30=-5327(F)

27) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-20, 2-4=-50, 4-5=-50, 5-6=-70, 6-9=-50, 16-17=-20, 16-26=-65, 26-27=-20, 27-28=-65, 12-28=-20,  
 10-12=-417(F=-317), 10-29=-337(F=-317), 8-29=-20, 5-18=-20  
 Drag: 6-10=-10, 12-21=-10

Concentrated Loads (lb)

Vert: 30=-5327(F)

28) Reversal: Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-23=32, 2-23=25, 2-3=36, 3-4=28, 4-5=32, 5-24=20, 6-24=13, 6-8=25, 8-9=18, 12-17=-12, 10-12=34(F=58),  
 10-29=46(F=58), 8-29=-12, 5-18=-12  
 Horz: 1-23=-44, 2-23=-37, 4-24=44, 8-24=37, 8-9=30  
 Drag: 2-3=-0, 3-4=0, 6-10=-10, 12-21=-10

Concentrated Loads (lb)

Vert: 30=981(F)

29) Reversal: Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-22=25, 2-22=32, 2-3=28, 3-4=36, 4-5=25, 5-6=13, 6-25=25, 8-25=32, 8-9=55, 12-17=-12, 10-12=34(F=58),  
 10-29=46(F=58), 8-29=-12, 5-18=-12  
 Horz: 1-22=-37, 2-22=-44, 4-25=37, 8-25=44, 8-9=67  
 Drag: 2-3=-0, 3-4=0, 6-10=-10, 12-21=-10

Concentrated Loads (lb)

Vert: 30=981(F)

30) Reversal: Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60

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818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	GMC/Lot 5 River Rd./Wake
J0824-4611	A3	GABLE	1	3	167769307

Comtech, Inc., Fayetteville, NC 28309, RSDGTDF

8.630 s Jun 15 2023 MiTek Industries, Inc. Fri Aug 23 15:33:43 2024 Page 5  
 ID:Rf2W5uVqu9dZySjoYfRfYfJyV8Y\_-pB\_8UA5dCGEubwAcjM63PWYx51Q8AsVbUMpvKJykwVM

**LOAD CASE(S)**

- Uniform Loads (plf)
  - Vert: 1-2=-57, 2-4=-34, 4-5=-57, 5-6=-77, 6-8=-57, 8-9=-50, 12-17=-20, 10-12=-227(F=-187), 10-29=-207(F=-187), 8-29=-20, 5-18=-20
  - Horz: 1-2=37, 4-8=-37, 8-9=30
  - Drag: 2-3=0, 3-4=0, 6-10=-10, 12-21=-10
- Concentrated Loads (lb)
  - Vert: 30=-3143(F)
- 31) Reversal: Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=-57, 2-4=-34, 4-5=-57, 5-6=-77, 6-8=-57, 8-9=10, 12-17=-20, 10-12=-227(F=-187), 10-29=-207(F=-187), 8-29=-20, 5-18=-20
    - Horz: 1-2=37, 4-8=-37, 8-9=30
    - Drag: 2-3=0, 3-4=0, 6-10=-10, 12-21=-10
  - Concentrated Loads (lb)
    - Vert: 30=-3143(F)
- 32) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=-13, 2-4=21, 4-5=11, 5-6=-1, 6-8=11, 8-9=4, 12-17=-12, 10-12=-3(F=21), 10-29=9(F=21), 8-29=-12, 5-18=-12
    - Horz: 1-2=1, 4-8=23, 8-9=16
    - Drag: 2-3=-0, 3-4=0, 6-10=-10, 12-21=-10
  - Concentrated Loads (lb)
    - Vert: 30=352(F)
- 33) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=11, 2-4=21, 4-5=-13, 5-6=-25, 6-8=-13, 8-9=2, 12-17=-12, 10-12=-3(F=21), 10-29=9(F=21), 8-29=-12, 5-18=-12
    - Horz: 1-2=-23, 4-8=-1, 8-9=14
    - Drag: 2-3=-0, 3-4=0, 6-10=-10, 12-21=-10
  - Concentrated Loads (lb)
    - Vert: 30=352(F)
- 34) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=-35, 2-4=-1, 4-5=-11, 5-6=-31, 6-8=-11, 8-9=-4, 12-17=-20, 10-12=-173(F=-133), 10-29=-153(F=-133), 8-29=-20, 5-18=-20
    - Horz: 1-2=15, 4-8=9, 8-9=16
    - Drag: 2-3=-0, 3-4=0, 6-10=-10, 12-21=-10
  - Concentrated Loads (lb)
    - Vert: 30=-2238(F)
- 35) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=-11, 2-4=-1, 4-5=-35, 5-6=-55, 6-8=-35, 8-9=-28, 12-17=-20, 10-12=-173(F=-133), 10-29=-153(F=-133), 8-29=-20, 5-18=-20
    - Horz: 1-2=-9, 4-8=-15, 8-9=8
    - Drag: 2-3=-0, 3-4=0, 6-10=-10, 12-21=-10
  - Concentrated Loads (lb)
    - Vert: 30=-2238(F)
- 36) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=21, 2-4=9, 4-5=9, 5-6=-3, 6-8=9, 8-9=2, 12-17=-12, 10-12=-3(F=21), 10-29=9(F=21), 8-29=-12, 5-18=-12
    - Horz: 1-2=-33, 4-8=21, 8-9=14
    - Drag: 2-3=-0, 3-4=0, 6-10=-10, 12-21=-10
  - Concentrated Loads (lb)
    - Vert: 30=352(F)
- 37) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=9, 2-4=9, 4-5=21, 5-6=9, 6-8=21, 8-9=14, 12-17=-12, 10-12=-3(F=21), 10-29=9(F=21), 8-29=-12, 5-18=-12
    - Horz: 1-2=-21, 4-8=33, 8-9=26
    - Drag: 2-3=-0, 3-4=0, 6-10=-10, 12-21=-10
  - Concentrated Loads (lb)
    - Vert: 30=352(F)
- 38) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=21, 2-4=9, 4-5=9, 5-6=-3, 6-8=9, 8-9=2, 12-17=-12, 10-12=-3(F=21), 10-29=9(F=21), 8-29=-12, 5-18=-12
    - Horz: 1-2=-33, 4-8=21, 8-9=14
    - Drag: 2-3=-0, 3-4=0, 6-10=-10, 12-21=-10
  - Concentrated Loads (lb)
    - Vert: 30=352(F)
- 39) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=9, 2-4=9, 4-5=21, 5-6=9, 6-8=21, 8-9=14, 12-17=-12, 10-12=-3(F=21), 10-29=9(F=21), 8-29=-12, 5-18=-12
    - Horz: 1-2=-21, 4-8=33, 8-9=26
    - Drag: 2-3=-0, 3-4=0, 6-10=-10, 12-21=-10
  - Concentrated Loads (lb)
    - Vert: 30=352(F)
- 40) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60

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818 Soundside Road  
 Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	GMC/Lot 5 River Rd./Wake	167769307
J0824-4611	A3	GABLE	1	3	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309, RSDGTDF

8.630 s Jun 15 2023 MiTek Industries, Inc. Fri Aug 23 15:33:43 2024 Page 6  
 ID:Rf2W5uVqu9dZySjoYfRfYfJyV8Y\_-pB\_8UA5dCGEubwAcjM63PWYx51Q8AsVbUMpvKJykwVM

**LOAD CASE(S)**

Uniform Loads (plf)

Vert: 1-2=-1, 2-4=-13, 4-5=-13, 5-6=-33, 6-8=-13, 8-9=-6, 12-17=-20, 10-12=-154(F=-114), 10-29=-134(F=-114), 8-29=-20, 5-18=-20

Horz: 1-2=-19, 4-8=7, 8-9=14

Drag: 2-3=-0, 3-4=0, 6-10=-10, 12-21=-10

Concentrated Loads (lb)

Vert: 30=-1915(F)

41) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-13, 2-4=-13, 4-5=-1, 5-6=-21, 6-8=-1, 8-9=6, 12-17=-20, 10-12=-154(F=-114), 10-29=-134(F=-114), 8-29=-20, 5-18=-20

Horz: 1-2=-7, 4-8=19, 8-9=26

Drag: 2-3=-0, 3-4=0, 6-10=-10, 12-21=-10

Concentrated Loads (lb)

Vert: 30=-1915(F)

42) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-61, 2-4=-36, 4-5=-43, 5-6=-63, 6-8=-43, 8-9=-38, 16-17=-20, 16-26=-65, 26-27=-20, 27-28=-65, 12-28=-20, 10-12=-444(F=-344), 10-29=-364(F=-344), 8-29=-20, 5-18=-20

Horz: 1-2=11, 4-8=7, 8-9=12

Drag: 2-3=-0, 3-4=0, 6-10=-10, 12-21=-10

Concentrated Loads (lb)

Vert: 30=-5776(F)

43) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-43, 2-4=-36, 4-5=-61, 5-6=-81, 6-8=-61, 8-9=-56, 16-17=-20, 16-26=-65, 26-27=-20, 27-28=-65, 12-28=-20, 10-12=-444(F=-344), 10-29=-364(F=-344), 8-29=-20, 5-18=-20

Horz: 1-2=-7, 4-8=-11, 8-9=-6

Drag: 2-3=-0, 3-4=0, 6-10=-10, 12-21=-10

Concentrated Loads (lb)

Vert: 30=-5776(F)

44) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-36, 2-4=-45, 4-5=-45, 5-6=-65, 6-8=-45, 8-9=-40, 16-17=-20, 16-26=-65, 26-27=-20, 27-28=-65, 12-28=-20, 10-12=-429(F=-329), 10-29=-349(F=-329), 8-29=-20, 5-18=-20

Horz: 1-2=-14, 4-8=5, 8-9=10

Drag: 2-3=-0, 3-4=0, 6-10=-10, 12-21=-10

Concentrated Loads (lb)

Vert: 30=-5534(F)

45) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-45, 2-4=-45, 4-5=-36, 5-6=-56, 6-8=-36, 8-9=-31, 16-17=-20, 16-26=-65, 26-27=-20, 27-28=-65, 12-28=-20, 10-12=-429(F=-329), 10-29=-349(F=-329), 8-29=-20, 5-18=-20

Horz: 1-2=-5, 4-8=14, 8-9=19

Drag: 2-3=-0, 3-4=0, 6-10=-10, 12-21=-10

Concentrated Loads (lb)

Vert: 30=-5534(F)

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818 Soundside Road  
 Edenton, NC 27932

Job J0824-4611	Truss A3X	Truss Type GABLE	Qty 0	Ply 3	GMC/Lot 5 River Rd./Wake 167769308
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Comtech, Inc., Fayetteville, NC 28309, RSDGTDF

8.630 s Jun 15 2023 MiTek Industries, Inc. Fri Aug 23 15:34:15 2024 Page 1  
ID:Rf2W5uVqu9dZySjoYfRfYJyV8Y\_-tLVEB6Uif5GLRrcIb4hZiFiP5xKvglYIrlZcRSykwUs

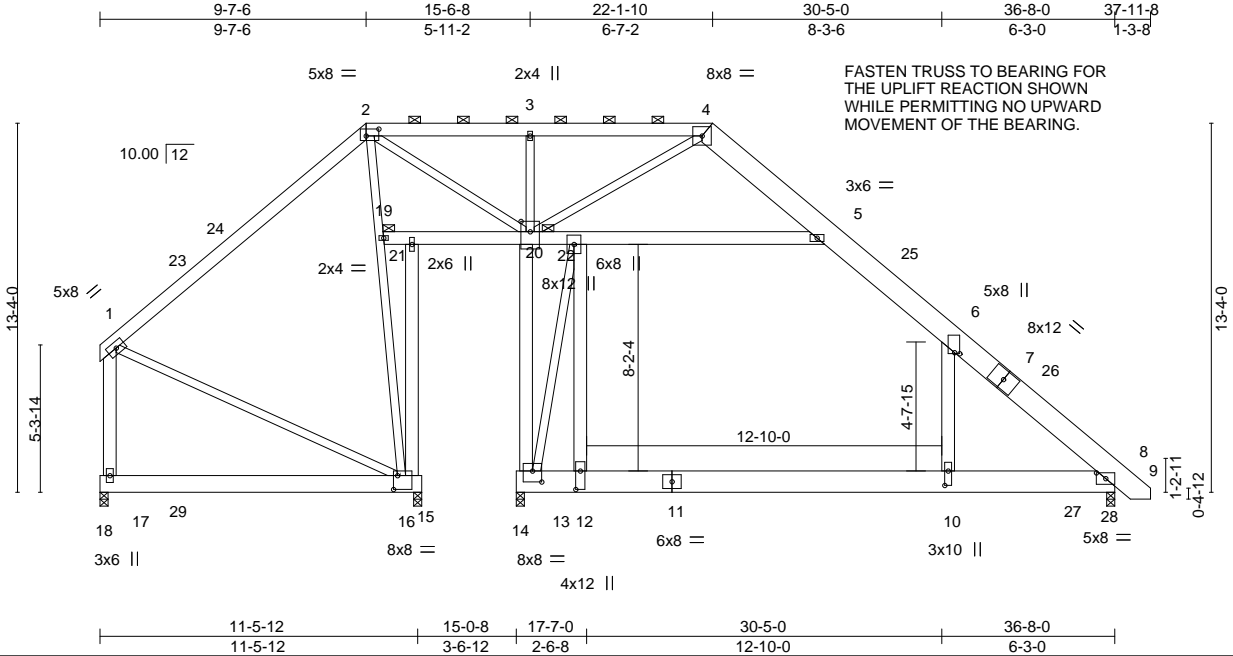


Plate Offsets (X,Y)--	[2:0-5-8,0-3-0], [6:0-0-7,0-2-4], [8:0-4-1,0-2-8], [10:0-6-4,0-1-8], [12:0-8-0,0-2-0], [13:0-4-0,0-4-12], [16:0-1-12,0-6-0], [20:0-4-8,0-4-0]
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LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.54	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.55	Vert(LL) -0.31 10-12 >809 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.81	Vert(CT) -0.48 10-12 >529 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.16 8 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.15 10-12 >999 240		
				Weight: 1354 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1 *Except* 4-7,7-9: 2x10 SP 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 2-4.
BOT CHORD 2x10 SP 2400F 2.0E *Except* 15-18: 2x8 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x6 SP No.1 *Except* 4-20,2-16,2-20,1-16,3-20: 2x4 SP No.2, 13-22: 2x4 SP No.1	JOINTS 1 Brace at Jt(s): 19, 20

PLY-TO-PLY CONNECTION REQUIRES THAT AN APPROVED FACE MOUNT HANGER (SPECIFIED BY OTHERS) IS REQUIRED FOR LOADS REPORTED IN NOTES. FACE MOUNT HANGER SHALL BE ATTACHED WITH A MINIMUM OF 0.148"x 3" NAILS PER HANGER MANUFACTURER SPECIFICATIONS.

**REACTIONS.** All bearings 0-3-8.  
 (lb) - Max Horz 17=306(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 13 except 17=334(LC 13), 8=520(LC 13), 16=2693(LC 21)  
 Max Grav All reactions 250 lb or less at joint(s) except 17=269(LC 11), 8=9075(LC 21), 16=581(LC 8), 13=9408(LC 21)

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

TOP CHORD	BOT CHORD	WEBS
1-2=-243/702, 2-3=-351/5176, 3-4=-351/5178, 4-5=-145/2975, 5-6=-1095/434, 6-8=-4016/571, 1-17=-337/451	12-13=-186/2140, 10-12=-186/2140, 8-10=-185/2126, 16-17=-238/329	6-10=-366/4248, 20-22=-2789/588, 5-22=-4891/769, 4-20=-2973/335, 2-19=-583/3093, 16-19=-603/3160, 2-20=-6366/1046, 1-16=-579/185, 16-21=-271/13, 13-20=-4521/766, 3-20=-524/196, 12-22=-950/9291, 13-22=-10598/920

- NOTES-**
- 1) N/A
  - 2) 3-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, 2x10 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x10 - 5 rows staggered at 0-4-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
  - 3) 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.
  - 4) Unbalanced roof live loads have been considered for this design.
  - 5) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-9-1, Interior(1) 4-9-1 to 9-7-6, Exterior(2) 9-7-6 to 15-6-8, Interior(1) 15-6-8 to 21-11-0, Exterior(2) 21-11-0 to 28-1-11, Interior(1) 28-1-11 to 37-7-2 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 6) 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.
  - 7) Provide adequate drainage to prevent water ponding.
  - 8) Gable studs spaced at 2-0-0 oc.
  - 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 10) \* 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.



On this page 2  
 10.0 psf dead (10.0 psf) on member(s): 5-6, 19-21, 20-21, 20-22, 5-22; Wall dead load (5.0psf) on member(s): 6-10, 12-22

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

818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	GMC/Lot 5 River Rd./Wake	167769308
J0824-4611	A3X	GABLE	0	3	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309, RSDGTDF

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**NOTES-**

- 12) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 10-12
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13 except (jt=lb) 17=334, 8=520, 16=2693.
- 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 15) This truss has large uplift reaction(s) from gravity load case(s). Proper connection is required to secure truss against upward movement at the bearings. Building designer must provide for uplift reactions indicated.
- 16) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 5776 lb down and 981 lb up at 35-4-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 17) Attic room checked for L/360 deflection.

**LOAD CASE(S)**

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
  - Uniform Loads (plf)
    - Vert: 1-2=-60, 2-4=-60, 4-5=-60, 5-6=-80, 6-9=-60, 12-14=-20, 10-12=-235(F=-195), 10-27=-215(F=-195), 8-27=-20, 5-19=-20, 15-18=-20
    - Drag: 6-10=-10, 12-22=-10
  - Concentrated Loads (lb)
    - Vert: 28=-3278(F)
- 2) Dead + 0.75 Roof Live (balanced) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
  - Uniform Loads (plf)
    - Vert: 1-2=-50, 2-4=-50, 4-5=-50, 5-6=-70, 6-9=-50, 12-14=-20, 10-12=-417(F=-317), 10-27=-337(F=-317), 8-27=-20, 5-19=-20, 17-18=-20, 17-29=-65, 15-29=-20
    - Drag: 6-10=-10, 12-22=-10
  - Concentrated Loads (lb)
    - Vert: 28=-5327(F)
- 3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
  - Uniform Loads (plf)
    - Vert: 1-2=-20, 2-4=-20, 4-5=-20, 5-6=-40, 6-9=-20, 12-14=-40, 12-27=-186(F=-146), 8-27=-40, 5-19=-20, 15-18=-40
    - Drag: 6-10=-10, 12-22=-10
  - Concentrated Loads (lb)
    - Vert: 28=-2458(F)
- 4) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-24=32, 2-24=25, 2-3=36, 3-4=28, 4-5=32, 5-25=20, 6-25=13, 6-8=25, 8-9=18, 12-14=-12, 10-12=34(F=58), 10-27=46(F=58), 8-27=-12, 5-19=-12, 15-18=-12
    - Horz: 1-24=-44, 2-24=-37, 4-25=44, 8-25=37, 8-9=30
    - Drag: 2-3=0, 3-4=0, 6-10=-10, 12-22=-10
  - Concentrated Loads (lb)
    - Vert: 28=981(F)
- 5) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-23=25, 2-23=32, 2-3=28, 3-4=36, 4-5=25, 5-6=13, 6-26=25, 8-26=32, 8-9=55, 12-14=-12, 10-12=34(F=58), 10-27=46(F=58), 8-27=-12, 5-19=-12, 15-18=-12
    - Horz: 1-23=-37, 2-23=-44, 4-26=37, 8-26=44, 8-9=67
    - Drag: 2-3=0, 3-4=0, 6-10=-10, 12-22=-10
  - Concentrated Loads (lb)
    - Vert: 28=981(F)
- 6) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=-57, 2-4=-34, 4-5=-57, 5-6=-77, 6-8=-57, 8-9=-50, 12-14=-20, 10-12=-227(F=-187), 10-27=-207(F=-187), 8-27=-20, 5-19=-20, 15-18=-20
    - Horz: 1-2=37, 4-8=-37, 8-9=30
    - Drag: 2-3=0, 3-4=-0, 6-10=-10, 12-22=-10
  - Concentrated Loads (lb)
    - Vert: 28=-3143(F)
- 7) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=-57, 2-4=-34, 4-5=-57, 5-6=-77, 6-8=-57, 8-9=10, 12-14=-20, 10-12=-227(F=-187), 10-27=-207(F=-187), 8-27=-20, 5-19=-20, 15-18=-20
    - Horz: 1-2=37, 4-8=-37, 8-9=30
    - Drag: 2-3=0, 3-4=-0, 6-10=-10, 12-22=-10
  - Concentrated Loads (lb)
    - Vert: 28=-3143(F)
- 8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=-13, 2-4=21, 4-5=11, 5-6=-1, 6-8=11, 8-9=4, 12-14=-12, 10-12=-3(F=21), 10-27=9(F=21), 8-27=-12, 5-19=-12, 15-18=-12
    - Horz: 1-2=1, 4-8=23, 8-9=16
    - Drag: 2-3=0, 3-4=0, 6-10=-10, 12-22=-10
  - Concentrated Loads (lb)
    - Vert: 28=352(F)
- 9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=11, 2-4=21, 4-5=-13, 5-6=-25, 6-8=-13, 8-9=2, 12-14=-12, 10-12=-3(F=21), 10-27=9(F=21), 8-27=-12, 5-19=-12, 15-18=-12
    - Horz: 1-2=-23, 4-8=-1, 8-9=14
    - Drag: 2-3=0, 3-4=0, 6-10=-10, 12-22=-10
  - Concentrated Loads (lb)
    - Vert: 28=352(F)
- 10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60

Continued on page 3

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818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	GMC/Lot 5 River Rd./Wake	167769308
J0824-4611	A3X	GABLE	0	3	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309, RSDGTDF

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**LOAD CASE(S)**

- Uniform Loads (plf)
  - Vert: 1-2=-35, 2-4=-1, 4-5=-11, 5-6=-31, 6-8=-11, 8-9=-4, 12-14=-20, 10-12=-173(F=-133), 10-27=-153(F=-133), 8-27=-20, 5-19=-20, 15-18=-20
  - Horz: 1-2=15, 4-8=9, 8-9=16
  - Drag: 2-3=-0, 3-4=0, 6-10=-10, 12-22=-10
- Concentrated Loads (lb)
  - Vert: 28=-2238(F)
- 11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=-11, 2-4=-1, 4-5=-35, 5-6=-55, 6-8=-35, 8-9=-28, 12-14=-20, 10-12=-173(F=-133), 10-27=-153(F=-133), 8-27=-20, 5-19=-20, 15-18=-20
    - Horz: 1-2=-9, 4-8=-15, 8-9=8
    - Drag: 2-3=-0, 3-4=0, 6-10=-10, 12-22=-10
  - Concentrated Loads (lb)
    - Vert: 28=-2238(F)
- 12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=21, 2-4=9, 4-5=9, 5-6=-3, 6-8=9, 8-9=2, 12-14=-12, 10-12=-3(F=21), 10-27=9(F=21), 8-27=-12, 5-19=-12, 15-18=-12
    - Horz: 1-2=-33, 4-8=21, 8-9=14
    - Drag: 2-3=-0, 3-4=0, 6-10=-10, 12-22=-10
  - Concentrated Loads (lb)
    - Vert: 28=352(F)
- 13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=9, 2-4=9, 4-5=21, 5-6=9, 6-8=21, 8-9=14, 12-14=-12, 10-12=-3(F=21), 10-27=9(F=21), 8-27=-12, 5-19=-12, 15-18=-12
    - Horz: 1-2=-21, 4-8=33, 8-9=26
    - Drag: 2-3=-0, 3-4=0, 6-10=-10, 12-22=-10
  - Concentrated Loads (lb)
    - Vert: 28=352(F)
- 14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=21, 2-4=9, 4-5=9, 5-6=-3, 6-8=9, 8-9=2, 12-14=-12, 10-12=-3(F=21), 10-27=9(F=21), 8-27=-12, 5-19=-12, 15-18=-12
    - Horz: 1-2=-33, 4-8=21, 8-9=14
    - Drag: 2-3=-0, 3-4=0, 6-10=-10, 12-22=-10
  - Concentrated Loads (lb)
    - Vert: 28=352(F)
- 15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=9, 2-4=9, 4-5=21, 5-6=9, 6-8=21, 8-9=14, 12-14=-12, 10-12=-3(F=21), 10-27=9(F=21), 8-27=-12, 5-19=-12, 15-18=-12
    - Horz: 1-2=-21, 4-8=33, 8-9=26
    - Drag: 2-3=-0, 3-4=0, 6-10=-10, 12-22=-10
  - Concentrated Loads (lb)
    - Vert: 28=352(F)
- 16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=-1, 2-4=-13, 4-5=-13, 5-6=-33, 6-8=-13, 8-9=-6, 12-14=-20, 10-12=-154(F=-114), 10-27=-134(F=-114), 8-27=-20, 5-19=-20, 15-18=-20
    - Horz: 1-2=-19, 4-8=7, 8-9=14
    - Drag: 2-3=-0, 3-4=0, 6-10=-10, 12-22=-10
  - Concentrated Loads (lb)
    - Vert: 28=-1915(F)
- 17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=-13, 2-4=-13, 4-5=-1, 5-6=-21, 6-8=-1, 8-9=6, 12-14=-20, 10-12=-154(F=-114), 10-27=-134(F=-114), 8-27=-20, 5-19=-20, 15-18=-20
    - Horz: 1-2=-7, 4-8=19, 8-9=26
    - Drag: 2-3=-0, 3-4=0, 6-10=-10, 12-22=-10
  - Concentrated Loads (lb)
    - Vert: 28=-1915(F)
- 18) Dead + Uninhab. Attic Storage + Attic Floor: Lumber Increase=1.00, Plate Increase=1.00
  - Uniform Loads (plf)
    - Vert: 1-2=-20, 2-4=-20, 4-5=-20, 5-6=-40, 6-9=-20, 12-14=-20, 10-12=-412(F=-292), 10-27=-312(F=-292), 8-27=-20, 5-19=-20, 17-18=-20, 17-29=-80, 15-29=-20
    - Drag: 6-10=-10, 12-22=-10
  - Concentrated Loads (lb)
    - Vert: 28=-4917(F)
- 19) Dead + Uninhabitable Attic Storage: Lumber Increase=1.00, Plate Increase=1.00
  - Uniform Loads (plf)
    - Vert: 1-2=-20, 2-4=-20, 4-5=-20, 5-6=-40, 6-9=-20, 12-14=-20, 10-12=-412(F=-292), 10-27=-312(F=-292), 8-27=-20, 5-19=-20, 17-18=-20, 17-29=-80, 15-29=-20
    - Drag: 6-10=-10, 12-22=-10
  - Concentrated Loads (lb)
    - Vert: 28=-4917(F)
- 20) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60

Continued on page 4

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Job	Truss	Truss Type	Qty	Ply	GMC/Lot 5 River Rd./Wake	167769308
J0824-4611	A3X	GABLE	0	3	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309, RSDGTDF

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 ID:Rf2W5uVqu9dZySjoYfRYJyV8Y\_-tLvEB6Uif5GLRclb4hZiFtP5xKvgiYlLZcRSykwUs

**LOAD CASE(S)**

Uniform Loads (plf)

Vert: 1-2=-61, 2-4=-36, 4-5=-43, 5-6=-63, 6-8=-43, 8-9=-38, 12-14=-20, 10-12=-444(F=-344), 10-27=-364(F=-344), 8-27=-20, 5-19=-20, 17-18=-20, 17-29=-65, 15-29=-20

Horz: 1-2=11, 4-8=7, 8-9=12

Drag: 2-3=-0, 3-4=0, 6-10=-10, 12-22=-10

Concentrated Loads (lb)

Vert: 28=-5776(F)

21) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-43, 2-4=-36, 4-5=-61, 5-6=-81, 6-8=-61, 8-9=-56, 12-14=-20, 10-12=-444(F=-344), 10-27=-364(F=-344), 8-27=-20, 5-19=-20, 17-18=-20, 17-29=-65, 15-29=-20

Horz: 1-2=-7, 4-8=-11, 8-9=-6

Drag: 2-3=-0, 3-4=0, 6-10=-10, 12-22=-10

Concentrated Loads (lb)

Vert: 28=-5776(F)

22) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-36, 2-4=-45, 4-5=-45, 5-6=-65, 6-8=-45, 8-9=-40, 12-14=-20, 10-12=-429(F=-329), 10-27=-349(F=-329), 8-27=-20, 5-19=-20, 17-18=-20, 17-29=-65, 15-29=-20

Horz: 1-2=-14, 4-8=5, 8-9=10

Drag: 2-3=-0, 3-4=0, 6-10=-10, 12-22=-10

Concentrated Loads (lb)

Vert: 28=-5534(F)

23) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-45, 2-4=-45, 4-5=-36, 5-6=-56, 6-8=-36, 8-9=-31, 12-14=-20, 10-12=-429(F=-329), 10-27=-349(F=-329), 8-27=-20, 5-19=-20, 17-18=-20, 17-29=-65, 15-29=-20

Horz: 1-2=-5, 4-8=14, 8-9=19

Drag: 2-3=-0, 3-4=0, 6-10=-10, 12-22=-10

Concentrated Loads (lb)

Vert: 28=-5534(F)

24) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-60, 2-4=-60, 4-5=-20, 5-6=-40, 6-9=-20, 12-14=-20, 10-12=-235(F=-195), 10-27=-215(F=-195), 8-27=-20, 5-19=-20, 15-18=-20

Drag: 6-10=-10, 12-22=-10

Concentrated Loads (lb)

Vert: 28=-3278(F)

25) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-20, 2-4=-60, 4-5=-60, 5-6=-80, 6-9=-60, 12-14=-20, 10-12=-235(F=-195), 10-27=-215(F=-195), 8-27=-20, 5-19=-20, 15-18=-20

Drag: 6-10=-10, 12-22=-10

Concentrated Loads (lb)

Vert: 28=-3278(F)

26) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-50, 2-4=-50, 4-5=-20, 5-6=-40, 6-9=-20, 12-14=-20, 10-12=-417(F=-317), 10-27=-337(F=-317), 8-27=-20, 5-19=-20, 17-18=-20, 17-29=-65, 15-29=-20

Drag: 6-10=-10, 12-22=-10

Concentrated Loads (lb)

Vert: 28=-5327(F)

27) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-20, 2-4=-50, 4-5=-50, 5-6=-70, 6-9=-50, 12-14=-20, 10-12=-417(F=-317), 10-27=-337(F=-317), 8-27=-20,

5-19=-20, 17-18=-20, 17-29=-65, 15-29=-20

Drag: 6-10=-10, 12-22=-10

Concentrated Loads (lb)

Vert: 28=-5327(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))



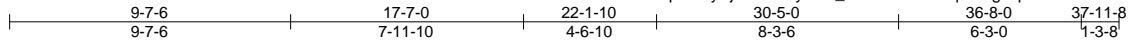
818 Soundside Road  
 Edenton, NC 27932

Job J0824-4611	Truss A4	Truss Type ROOF TRUSS	Qty 1	Ply 1	GMC/Lot 5 River Rd./Wake 167769309
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Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 23 10:35:58 2024 Page 1

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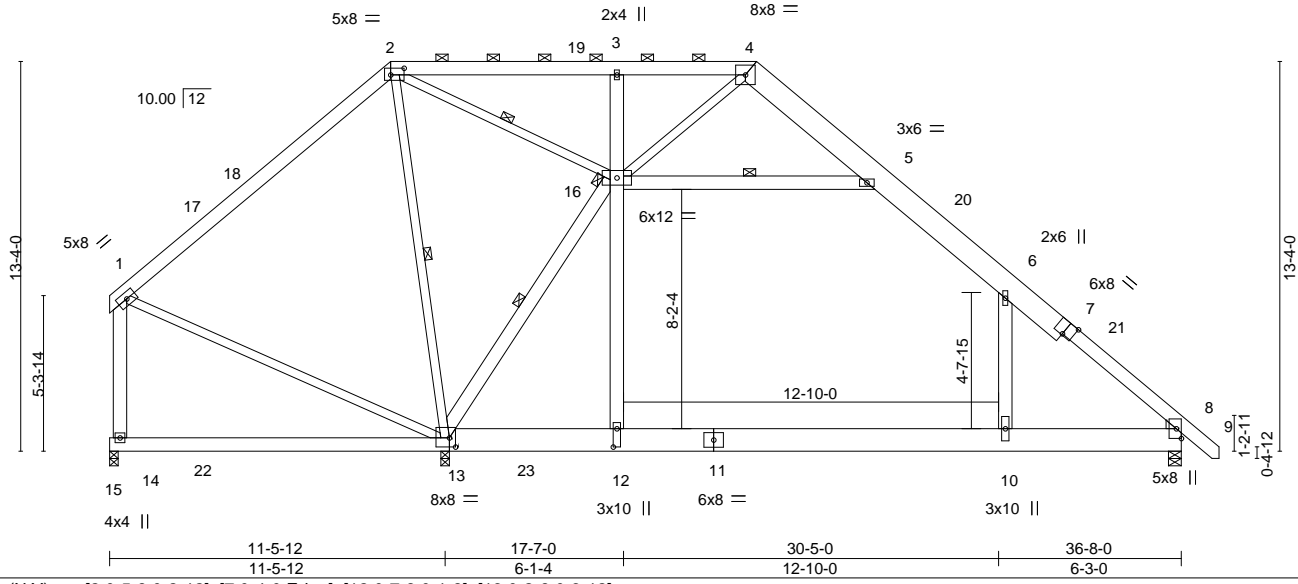


Plate Offsets (X,Y)--	[2:0-5-8,0-2-12], [7:0-4-0,Edge], [12:0-7-8,0-1-8], [13:0-2-8,0-3-12]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.67	Vert(LL)	-0.21	10-12	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.83	Vert(CT)	-0.36	10-12	>818		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.63	Horz(CT)	0.02	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.06	10-12	>999	Weight: 407 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1 *Except* 4-7: 2x10 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-5-9 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 2-4.
BOT CHORD 2x10 SP No.1 *Except* 13-15: 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 9-5-1 oc bracing.
WEBS 2x6 SP No.1 *Except* 4-16,2-13,2-16,1-13: 2x4 SP No.2	WEBS 1 Row at midpt 5-16, 13-16, 2-13, 2-16 1 Brace at Jt(s): 16
WEDGE Right: 2x4 SP No.2	JOINTS

REACTIONS.	(size)
Max Horz	13=0-3-8, 14=0-3-8, 8=0-5-4
Max Uplift	14=306(LC 8)
Max Grav	14=105(LC 21)
	13=1766(LC 2), 14=844(LC 21), 8=1887(LC 21)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-595/271, 5-6=-1603/197, 6-8=-2325/0, 1-14=-650/283
BOT CHORD	13-14=-232/333, 12-13=0/1435, 10-12=0/1436, 8-10=0/1434
WEBS	6-10=0/974, 12-16=0/1452, 3-16=-465/203, 5-16=-1710/202, 13-16=-2252/35, 2-13=-329/373, 2-16=-723/269, 1-13=-93/324

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-9-1, Interior(1) 4-9-1 to 9-7-6, Exterior(2) 9-7-6 to 15-10-1, Interior(1) 15-10-1 to 21-11-0, Exterior(2) 21-11-0 to 28-1-11, Interior(1) 28-1-11 to 37-10-1 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 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.
  - Ceiling dead load (10.0 psf) on member(s). 5-6, 5-16; Wall dead load (5.0psf) on member(s).6-10, 12-16
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 10-12
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=105.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Attic room checked for L/360 deflection.



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Job	Truss	Truss Type	Qty	Ply	GMC/Lot 5 River Rd./Wake	167769311
J0824-4611	A5	ROOF TRUSS	1	3		

Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 23 10:36:00 2024 Page 1  
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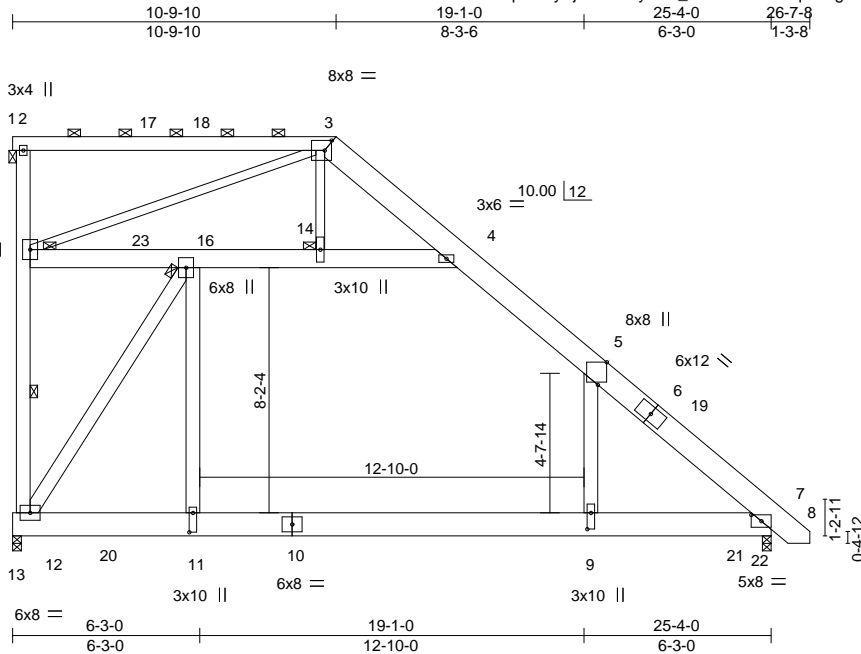


Plate Offsets (X,Y)-- [3:0-2-12,0-4-0], [5:0-9-1,Edge], [7:0-4-1,0-2-8], [9:0-6-8,0-1-8], [11:0-7-12,0-1-8]

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 0.54	Vert(LL)	-0.26	9-11	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.47	Vert(CT)	-0.40	9-11	>745		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.55	Horz(CT)	0.02	7	n/a		
BCDL 10.0	Code IRC2015/TP12014		Matrix-S	Wind(LL)	0.13	9-11	>999		
								Weight: 1055 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x10 SP 2400F 2.0E \*Except\*  
 1-3: 2x6 SP No.1  
 BOT CHORD 2x10 SP 2400F 2.0E  
 WEBS 2x6 SP No.1 \*Except\*  
 3-14,3-15: 2x4 SP No.2, 4-15: 2x8 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 (6-0-0 max.): 1-3.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 12-15  
 JOINTS 1 Brace at Jt(s): 2, 14, 15, 16

**REACTIONS.** (size) 12=0-3-8, 7=0-3-8  
 Max Horz 12=-425(LC 13)  
 Max Uplift 12=-82(LC 8), 7=-314(LC 13)  
 Max Grav 12=5702(LC 21), 7=10756(LC 21)

PLY-TO-PLY CONNECTION REQUIRES THAT AN APPROVED FACE MOUNT HANGER (SPECIFIED BY OTHERS) IS REQUIRED FOR LOADS REPORTED IN NOTES. FACE MOUNT HANGER SHALL BE ATTACHED WITH A MINIMUM OF 0.148"x3" NAILS PER HANGER MANUFACTURER SPECIFICATIONS.

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-15=-335/185, 3-4=-298/1050, 4-5=-3936/352, 5-7=-7177/444  
 BOT CHORD 11-12=-116/4471, 9-11=-116/4471, 7-9=-115/4455  
 WEBS 3-14=-814/463, 5-9=-296/4683, 15-16=-1359/192, 14-16=-5956/810, 4-14=-5890/773,  
 11-16=-545/5112, 12-16=-8541/1149, 3-15=-230/1426

- NOTES-**
- N/A
  - 3-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, 2x10 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x10 - 5 rows staggered at 0-4-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc, 2x8 - 2 rows staggered at 0-6-0 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) and C-C Exterior(2) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 10-7-0, Exterior(2) 10-7-0 to 15-1-1, Interior(1) 15-1-1 to 26-3-2 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 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.
  - Ceiling dead load (10.0 psf) on member(s). 4-5, 15-16, 14-16, 4-14; Wall dead load (5.0psf) on member(s). 5-9, 11-16
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 9-11
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12 except (jt=lb) 7=314.
  - 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) 5161 lb down and 877 lb up at 24-0-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - Attic room checked for L/360 deflection.



August 23, 2024

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

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Job J0824-4611	Truss A5	Truss Type ROOF TRUSS	Qty 1	Ply <b>3</b>	GMC/Lot 5 River Rd./Wake I67769311 Job Reference (optional)
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Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 23 10:36:00 2024 Page 2  
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**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-2=-60, 2-3=-60, 3-4=-60, 4-5=-80, 5-8=-60, 11-13=-20, 9-11=-235(F=-195), 9-22=-215(F=-195), 7-22=-20, 4-15=-20

Drag: 5-9=-10, 11-16=-10

Concentrated Loads (lb)

Vert: 21=-2929(B) 23=-728(B)

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

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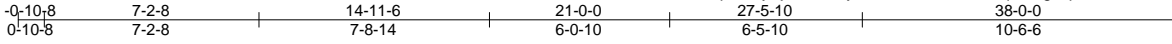
818 Soundside Road  
Edenton, NC 27932

Job J0824-4611	Truss A6	Truss Type PIGGYBACK BASE	Qty 8	Ply 1	GMC/Lot 5 River Rd./Wake 167769312
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8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 23 10:36:01 2024 Page 1

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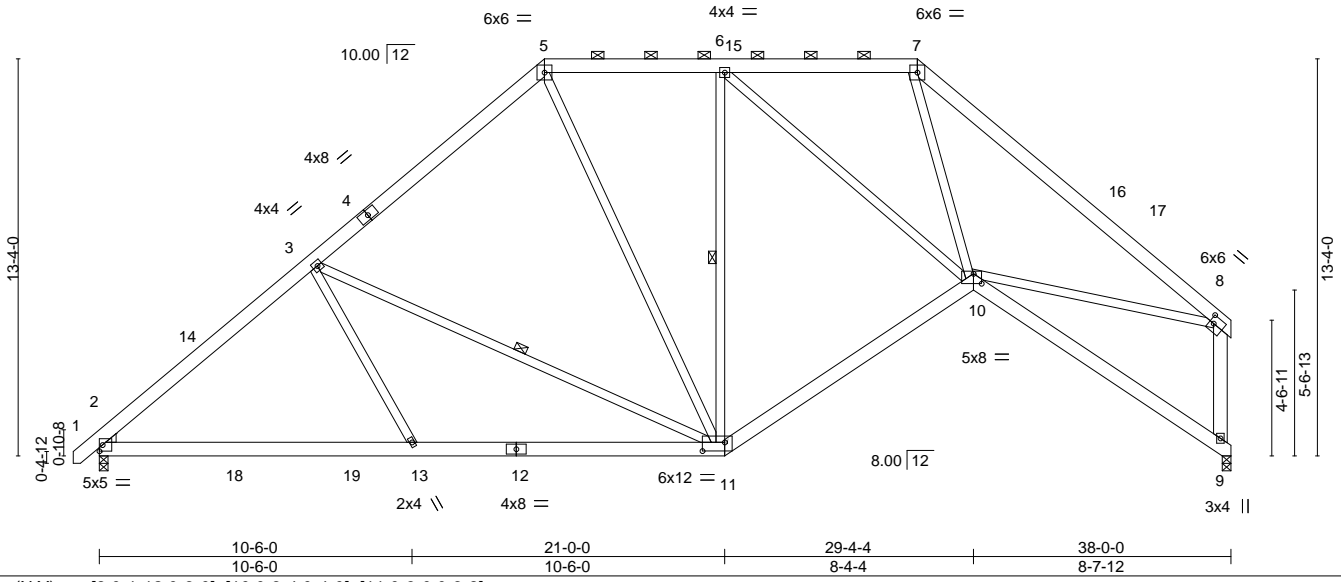


Plate Offsets (X,Y)--	[8:0-1-12,0-3-0], [10:0-3-4,0-4-0], [11:0-9-0,0-3-8]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.77	Vert(LL)	-0.16	2-13	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.52	Vert(CT)	-0.26	2-13	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.91	Horz(CT)	0.14	9	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.05	2-13	>999	Weight: 328 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 3-5-2 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-7.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 8-9: 2x6 SP No.1	WEBS 1 Row at midpt 3-11, 6-11
WEDGE Left: 2x4 SP No.3	

REACTIONS.	(size)
2=0-3-8, 9=0-3-8	
Max Horz 2=307(LC 9)	
Max Uplift 2=-60(LC 12), 9=-23(LC 13)	
Max Grav 2=1555(LC 1), 9=1499(LC 1)	

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-1953/457, 3-5=-1368/469, 5-6=-1100/491, 6-7=-1458/528, 7-8=-2397/516, 8-9=-1469/438
BOT CHORD	2-13=-387/1467, 11-13=-309/1676, 10-11=-205/1359
WEBS	5-11=-88/438, 3-11=-915/208, 3-13=0/545, 6-11=-688/193, 6-10=-60/501, 8-10=-129/1618, 7-10=-24/942

- 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) -0-9-1 to 3-7-12, Interior(1) 3-7-12 to 14-11-6, Exterior(2) 14-11-6 to 21-2-1, Interior(1) 21-2-1 to 27-5-10, Exterior(2) 27-5-10 to 33-8-5, Interior(1) 33-8-5 to 37-7-12 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Bearing at joint(s) 9 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 capable of withstanding 100 lb uplift at joint(s) 2, 9.
  - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



August 23, 2024

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818 Soundside Road  
Edenton, NC 27932

Job J0824-4611	Truss A7	Truss Type PIGGYBACK BASE	Qty 3	Ply 1	GMC/Lot 5 River Rd./Wake 167769313
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8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 23 10:36:01 2024 Page 1

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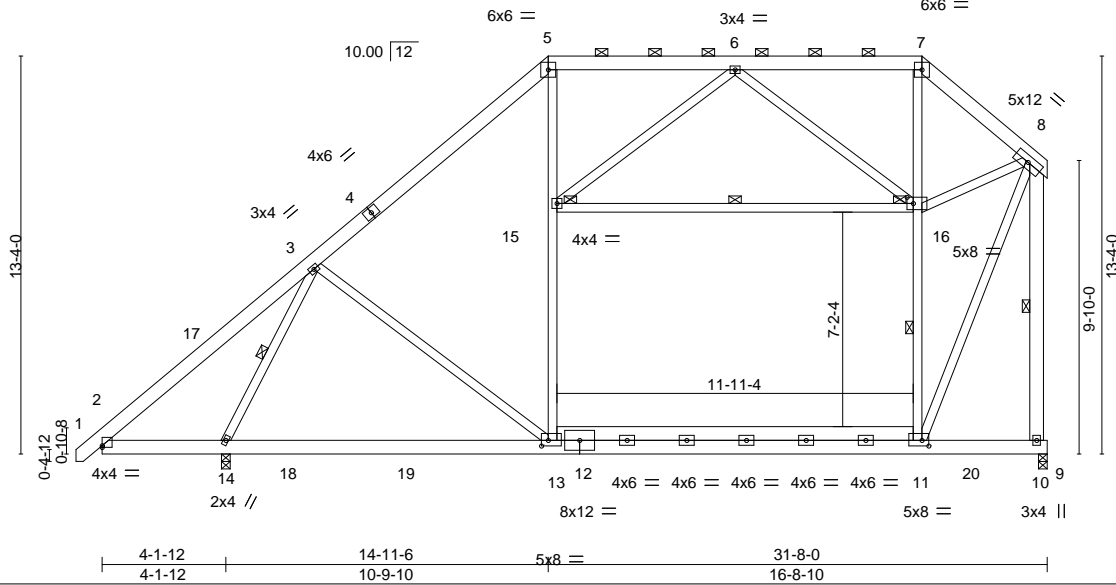


Plate Offsets (X,Y)--	[2:0-0,0,0-0-11], [11:0-2-12,0-2-4], [13:0-2-12,0-2-4], [16:0-2-8,0-2-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.29	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.44	Vert(LL) -0.13 11-13 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.85	Vert(CT) -0.19 11-13 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.02 10 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.04 13 >999 240	Weight: 337 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-7.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 8-10,11-13: 2x6 SP No.1	WEBS 1 Row at midpt 3-14, 11-16, 8-10, 15-16
	JOINTS 1 Brace at Jt(s): 15, 16

REACTIONS.
(size) 14=0-3-8, 10=0-3-8
Max Horz 14=356(LC 2)
Max Uplift 14=38(LC 12), 10=43(LC 12)
Max Grav 14=1661(LC 2), 10=1417(LC 2)

FORCES.
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-302/431, 3-5=-1066/268, 5-6=-728/313, 7-8=-146/279, 8-10=-1422/338
BOT CHORD 2-14=-260/341, 13-14=-311/633, 11-13=-178/743
WEBS 3-14=-1425/511, 3-13=-124/353, 13-15=0/553, 5-15=0/368, 11-16=-1110/469, 7-16=-366/187, 8-11=-404/1872, 15-16=-296/68, 6-15=-86/395, 6-16=-801/321, 8-16=-935/255

- 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) -0-9-1 to 3-7-12, Interior(1) 3-7-12 to 14-11-6, Exterior(2) 14-11-6 to 21-2-8, Interior(1) 21-2-8 to 27-5-10, Exterior(2) 27-5-10 to 31-5-15 zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 10.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



August 23, 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)

818 Soundside Road  
Edenton, NC 27932



Job J0824-4611	Truss B1	Truss Type FINK	Qty 3	Ply 1	GMC/Lot 5 River Rd./Wake I67769315
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Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 23 10:36:03 2024 Page 1

ID:Rf2W5uVqu9dZySjoYfRYfJyV8Y\_-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



5x5 =

Scale = 1:73.6

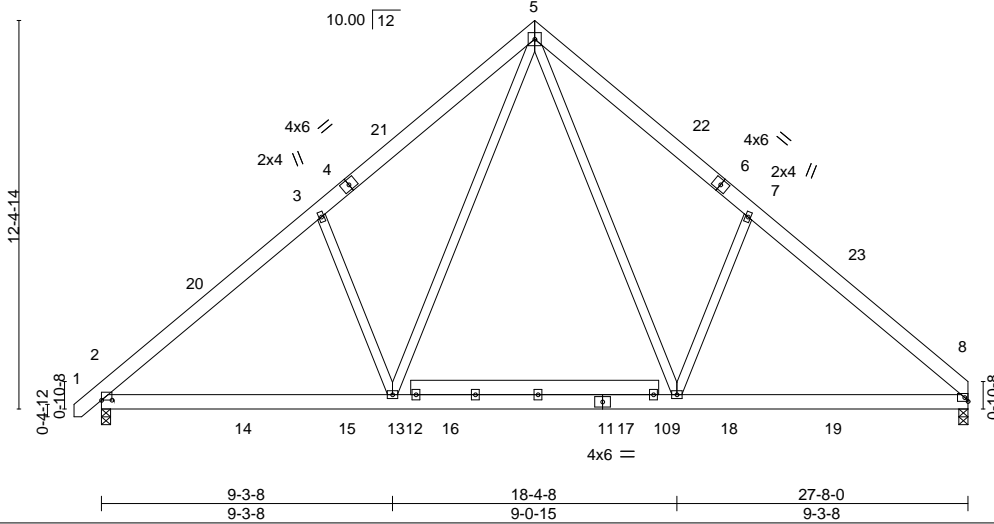


Plate Offsets (X,Y)--	[2:0-4-0,0-0-1]
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<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.21	Vert(LL) -0.06 8-9 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.39	Vert(CT) -0.12 8-9 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.59	Horz(CT) 0.02 8 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.03 2-13 >999 240	Weight: 226 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 10-12: 2x6 SP No.1	

**REACTIONS.** (size) 2=0-3-8, 8=0-3-8  
 Max Horz 2=289(LC 11)  
 Max Uplift 2=-58(LC 12), 8=-46(LC 13)  
 Max Grav 2=1327(LC 19), 8=1275(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1595/306, 3-5=-1498/466, 5-7=-1501/476, 7-8=-1598/311  
 BOT CHORD 2-13=-98/1303, 9-13=0/859, 8-9=-91/1154  
 WEBS 3-13=-479/325, 5-13=-210/860, 5-9=-211/866, 7-9=-481/330

- 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) -0-9-1 to 3-7-12, Interior(1) 3-7-12 to 13-10-0, Exterior(2) 13-10-0 to 18-2-13, Interior(1) 18-2-13 to 27-6-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) All plates are 3x4 MT20 unless otherwise indicated.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.



August 23, 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>818 Soundside Road Edenton, NC 27932</p>
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Job J0824-4611	Truss B1GE	Truss Type GABLE	Qty 1	Ply 1	GMC/Lot 5 River Rd./Wake 167769316
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Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 23 10:36:03 2024 Page 1

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5x5 =

Scale = 1:73.6

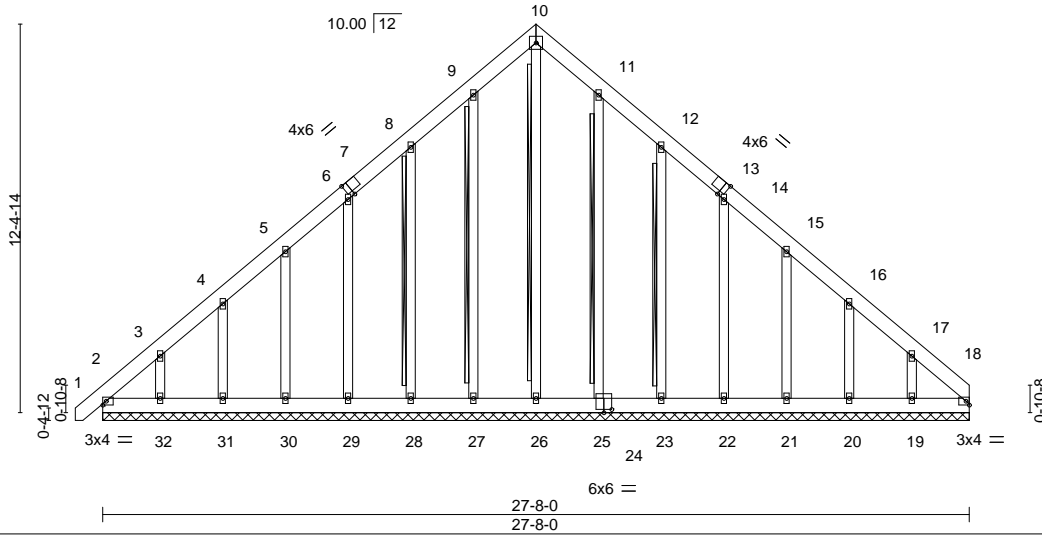


Plate Offsets (X,Y)--	[7:0-2-0,Edge], [13:0-2-0,Edge], [24:0-3-0,0-1-4]
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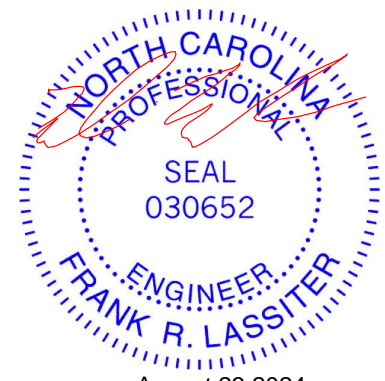
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.05	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.03	Vert(LL) -0.00 1 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.17	Vert(CT) 0.00 1 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 18 n/a n/a		
	Code IRC2015/TPI2014			Weight: 270 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.2	WEBS T-Brace: 2x4 SPF No.2 - 10-26, 9-27, 8-28, 11-25, 12-23
	Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.

**REACTIONS.** All bearings 27-8-0.  
 (lb) - Max Horz 2=361(LC 11)  
 Max Uplift All uplift 100 lb or less at joint(s) 18, 27, 25 except 2=136(LC 10), 28=126(LC 12), 29=111(LC 12), 30=110(LC 12), 31=112(LC 12), 32=178(LC 12), 23=129(LC 13), 22=111(LC 13), 21=110(LC 13), 20=110(LC 13), 19=177(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 26, 27, 28, 29, 30, 31, 32, 25, 23, 22, 21, 20, 19 except 2=292(LC 12), 18=271(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-466/296, 3-4=-322/234, 9-10=-249/272, 10-11=-249/272, 16-17=-258/152, 17-18=-403/265  
 BOT CHORD 2-32=-206/318, 31-32=-207/319, 30-31=-207/319, 29-30=-207/319, 28-29=-207/319, 27-28=-207/319, 26-27=-207/319, 25-26=-207/319, 23-25=-207/319, 22-23=-207/319, 21-22=-207/319, 20-21=-207/319, 19-20=-207/318, 18-19=-206/318

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-9-1 to 3-10-0, Exterior(2) 3-10-0 to 13-10-0, Corner(3) 13-10-0 to 18-2-13, Exterior(2) 18-2-13 to 27-8-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 4) All plates are 2x4 MT20 unless otherwise indicated.
  - 5) Gable requires continuous bottom chord bearing.
  - 6) Gable studs spaced at 2-0-0 oc.
  - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 8) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18, 27, 25 except (jt=lb) 2=136, 28=126, 29=111, 30=110, 31=112, 32=178, 23=129, 22=111, 21=110, 20=110, 19=177.
  - 10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



**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)

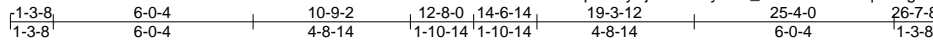
**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932

Job J0824-4611	Truss C1	Truss Type ATTIC	Qty 2	Ply 1	GMC/Lot 5 River Rd./Wake I67769317
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Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 23 10:36:04 2024 Page 1

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6x8 =

Scale = 1:69.4

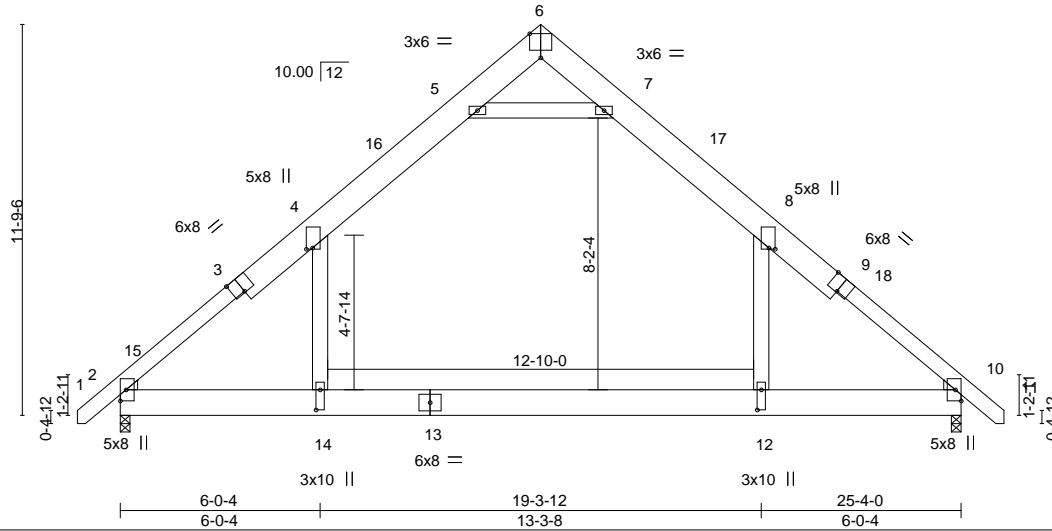


Plate Offsets (X, Y)--	[3:0-4-0,Edge], [4:0-0-7,0-2-4], [6:0-4-0,Edge], [8:0-0-7,0-2-4], [9:0-4-0,Edge], [12:0-7-4,0-1-8], [14:0-7-4,0-1-8]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.73	Vert(LL)	-0.26 12-14	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.83	Vert(CT)	-0.44 12-14	>690	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.22	Horz(CT)	0.02 10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.07 12-14	>999	240	Weight: 257 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x10 SP No.1 *Except* 1-3,9-11: 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-6-10 oc purlins.
BOT CHORD 2x10 SP No.1	BOT CHORD Rigid ceiling directly applied or 9-2-13 oc bracing.
WEBS 2x6 SP No.1	
WEDGE Left: 2x4 SP No.2 , Right: 2x4 SP No.2	

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8  
 Max Horz 2=-272(LC 10)  
 Max Grav 2=1707(LC 20), 10=1707(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-2318/0, 4-5=-1418/140, 5-6=-3/820, 6-7=-3/821, 7-8=-1417/140, 8-10=-2317/0  
 BOT CHORD 2-14=0/1484, 12-14=0/1487, 10-12=0/1484  
 WEBS 5-7=-2424/179, 4-14=0/1158, 8-12=0/1158

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-2-1 to 3-2-12, Interior(1) 3-2-12 to 12-8-0, Exterior(2) 12-8-0 to 17-0-13, Interior(1) 17-0-13 to 26-6-1 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Ceiling dead load (10.0 psf) on member(s). 4-5, 7-8, 5-7; Wall dead load (5.0psf) on member(s).4-14, 8-12
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-14
  - Attic room checked for L/360 deflection.



August 23, 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/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>
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Job J0824-4611	Truss D1GE	Truss Type GABLE	Qty 1	Ply 1	GMC/Lot 5 River Rd./Wake 167769319
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Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 23 10:36:05 2024 Page 1  
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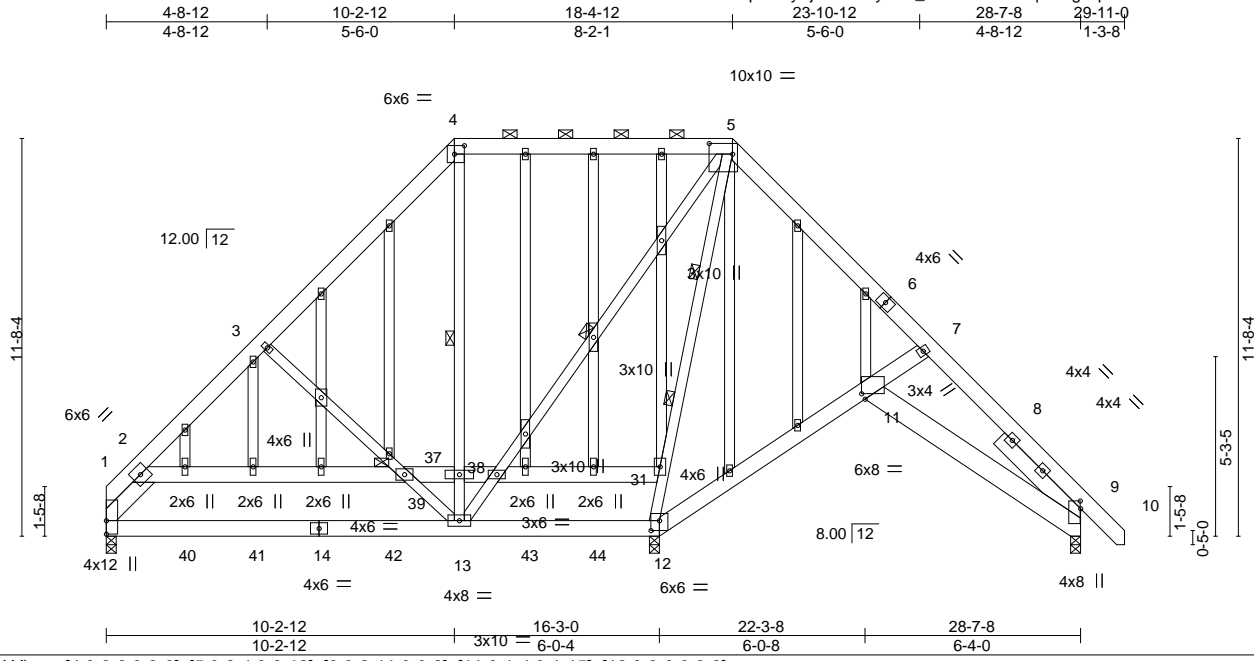


Plate Offsets (X, Y)--	[4:0-3-8,0-3-0], [5:0-8-4,0-3-12], [9:0-2-11,0-0-2], [11:0-1-4,0-1-15], [12:0-3-0,0-3-8]
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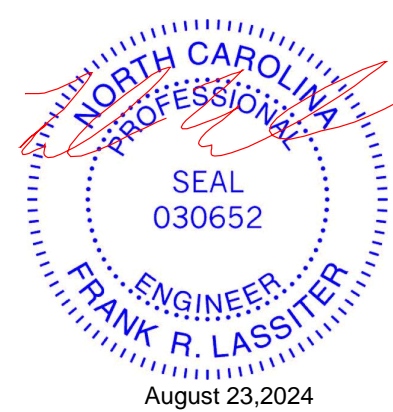
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.35	Vert(LL)	-0.09	1-13	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.48	Vert(CT)	-0.22	1-13	>902		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.57	Horz(CT)	0.10	9	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.12	1-13	>999		
								Weight: 379 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 *Except* 9-11: 2x8 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except:
WEBS 2x6 SP No.1 *Except* 3-13,4-13,5-12,5-13: 2x4 SP No.2	WEBS 1 Row at midpt 4-13, 5-13 2 Rows at 1/3 pts 5-12
OTHERS 2x4 SP No.2	JOINTS 1 Brace at Jt(s): 37
SLIDER Left 2x6 SP No.1 1-9-10, Right 2x6 SP No.1 3-4-4	

**REACTIONS.** (size) 1=0-3-8, 12=0-3-8, 9=0-3-8  
 Max Horz 1=-342(LC 25)  
 Max Uplift 1=-306(LC 8), 12=-181(LC 8), 9=-231(LC 9)  
 Max Grav 1=806(LC 19), 12=1932(LC 1), 9=274(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-709/313, 2-3=-644/353, 3-4=-470/396, 4-5=-248/367, 5-7=0/481  
 BOT CHORD 1-13=-409/548, 12-13=-399/225, 11-12=-431/298, 7-11=-308/320  
 WEBS 3-37=-299/337, 13-37=-287/328, 13-39=-435/157, 4-39=-435/157, 12-31=-1613/203,  
 5-31=-1643/207, 13-38=-290/1153, 5-38=-292/1170

- 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; 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 studs spaced at 2-0-0 oc.
  - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 8) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 9) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 1=306, 12=181, 9=231.
  - 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 85 lb down and 54 lb up at 2-3-8, 77 lb down and 54 lb up at 4-4-4, 77 lb down and 54 lb up at 6-4-4, 77 lb down and 54 lb up at 8-4-4, 77 lb down and 54 lb up at 10-4-4, and 77 lb down and 54 lb up at 12-4-4, and 77 lb down and 54 lb up at 14-4-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- On the CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).



**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**  
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**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	GMC/Lot 5 River Rd./Wake	I67769319
J0824-4611	D1GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 23 10:36:05 2024 Page 2  
 ID:Rf2W5uVqu9dZySjoYfRYfJyV8Y\_-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-4=-60, 4-5=-60, 5-10=-60, 1-12=-20, 11-12=-20, 9-11=-20

Concentrated Loads (lb)

Vert: 14=-77(F) 13=-77(F) 40=-85(F) 41=-77(F) 42=-77(F) 43=-77(F) 44=-77(F)

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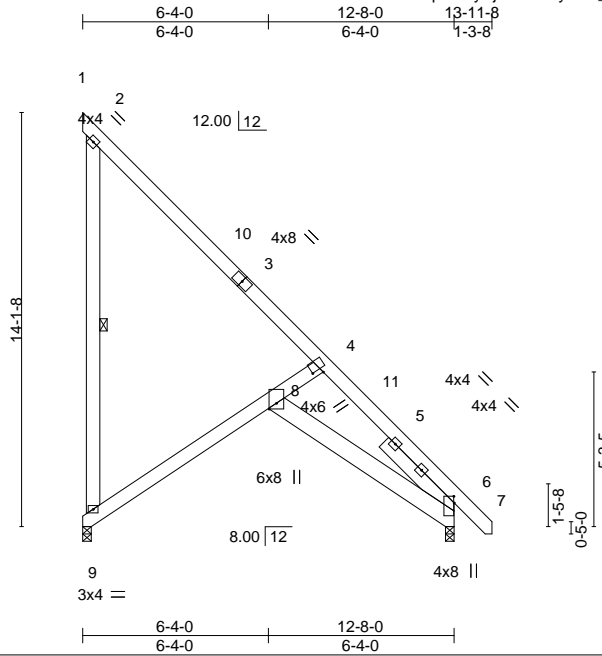


818 Soundside Road  
 Edenton, NC 27932

Job J0824-4611	Truss D2	Truss Type ROOF SPECIAL	Qty 1	Ply 1	GMC/Lot 5 River Rd./Wake 167769320
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Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 23 10:36:06 2024 Page 1  
ID:Rf2W5uVqu9dZySjoYfRYfJyV8Y\_-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:78.6

Plate Offsets (X,Y)--	[4:0-3-15,0-1-15], [6:0-2-11,0-0-2]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.43	Vert(LL) -0.19 8-9 >742 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.78	Vert(CT) -0.42 8-9 >342 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.54 6 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-R	Wind(LL) -0.16 8-9 >926 240		
				Weight: 131 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.1 *Except* 6-8: 2x8 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x6 SP No.1	WEBS 1 Row at midpt 2-9
SLIDER Right 2x6 SP No.1 3-4-4	

**REACTIONS.** (size) 9=0-3-8, 6=0-3-8  
 Max Horz 9=-446(LC 13)  
 Max Uplift 9=-300(LC 13)  
 Max Grav 9=581(LC 20), 6=575(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-9=-346/230, 4-6=-808/63  
 BOT CHORD 8-9=-646/658, 4-8=-504/421, 6-8=-168/611

- 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) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 13-10-2 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 4) Bearing at joint(s) 9, 6 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 capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=300.



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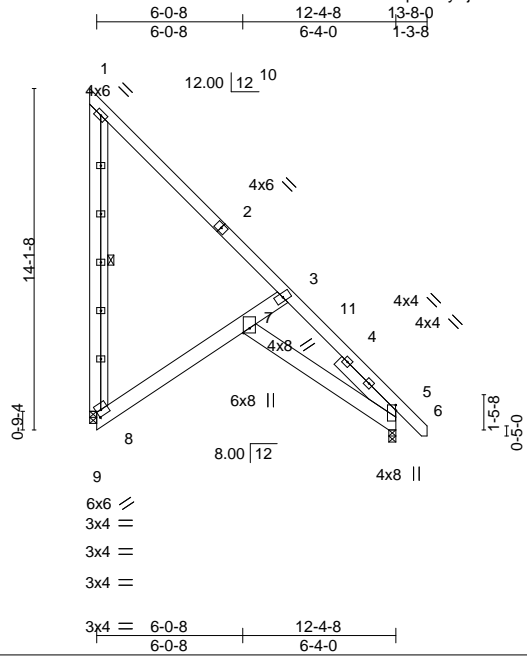
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. 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  <b>TRENCO</b>  <small>A MITEK Affiliate</small></p> <p>818 Soundside Road        Edenton, NC 27932</p>
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Job J0824-4611	Truss D3	Truss Type ROOF SPECIAL	Qty 3	Ply 1	GMC/Lot 5 River Rd./Wake 167769321
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8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 23 10:36:06 2024 Page 1

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Scale: 1/8"=1'

Plate Offsets (X,Y)--	[5:0-2-11,0-0-2], [8:0-2-6,0-3-0]
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LOADING (psf)	SPACING-	2-0-0	3x4	CSF	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	-0.09	7-8	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.20	7-8	>722	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.25	5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-R		Wind(LL)	-0.06	7-8	>999	240	Weight: 155 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x8 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except*	WEBS 1 Row at midpt 1-8
SLIDER 1-8: 2x6 SP No.1 Right 2x6 SP No.1 3-4-4	

**REACTIONS.** (size) 8=0-3-8, 5=0-3-8  
 Max Horz 8=-429(LC 13)  
 Max Uplift 8=-256(LC 13)  
 Max Grav 8=546(LC 20), 5=566(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-8=-300/226, 3-5=-798/10  
 BOT CHORD 7-8=-613/600, 3-7=-495/382, 5-7=-135/590

- 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) 0-3-12 to 4-8-9, Interior(1) 4-8-9 to 13-6-10 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 4) Bearing at joint(s) 8, 5 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 capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=256.



August 23, 2024

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Job J0824-4611	Truss E1	Truss Type SCISSORS	Qty 1	Ply 1	GMC/Lot 5 River Rd./Wake 167769322
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8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 23 10:36:07 2024 Page 1  
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5x5 =

Scale = 1:46.8

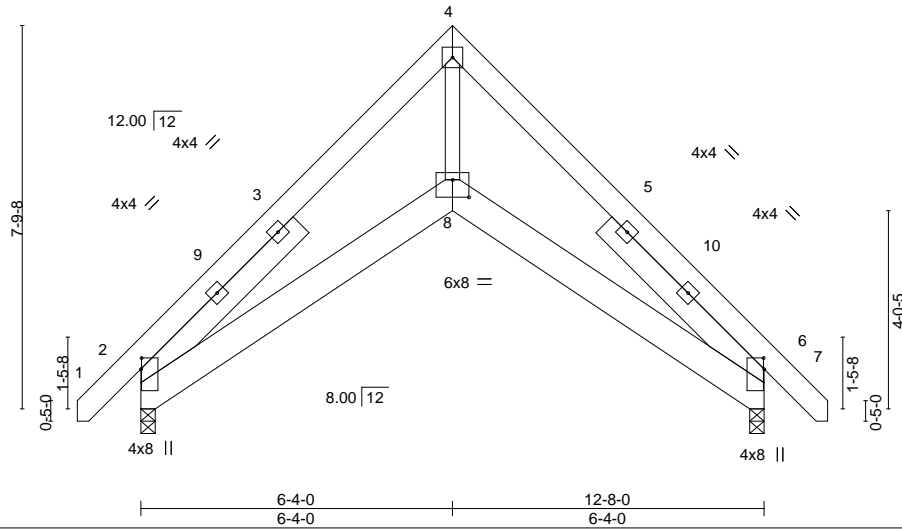


Plate Offsets (X,Y)--	[2:0-2-11,0-0-2], [6:0-2-11,0-0-2], [8:0-4-0,0-4-4]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.16	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.10	Vert(LL) -0.01 8 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.17	Vert(CT) -0.03 2-8 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.04 6 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) -0.02 8 >999 240	Weight: 125 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x8 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	
SLIDER Left 2x6 SP No.1 4-6-14, Right 2x6 SP No.1 4-6-14	

**REACTIONS.** (size) 2=0-3-8, 6=0-3-8  
 Max Horz 2=-180(LC 10)  
 Max Uplift 2=-31(LC 12), 6=-31(LC 13)  
 Max Grav 2=571(LC 1), 6=571(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-843/0, 4-6=-890/46  
 BOT CHORD 2-8=-53/677, 6-8=-35/659  
 WEBS 4-8=0/812

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-2-2 to 3-2-11, Interior(1) 3-2-11 to 6-4-0, Exterior(2) 6-4-0 to 10-8-13, Interior(1) 10-8-13 to 13-10-2 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Bearing at joint(s) 2, 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.



August 23, 2024

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

Job J0824-4611	Truss E1GE	Truss Type GABLE	Qty 1	Ply 1	GMC/Lot 5 River Rd./Wake 167769323
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8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 23 10:36:07 2024 Page 1  
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5x5 =

Scale = 1:46.8

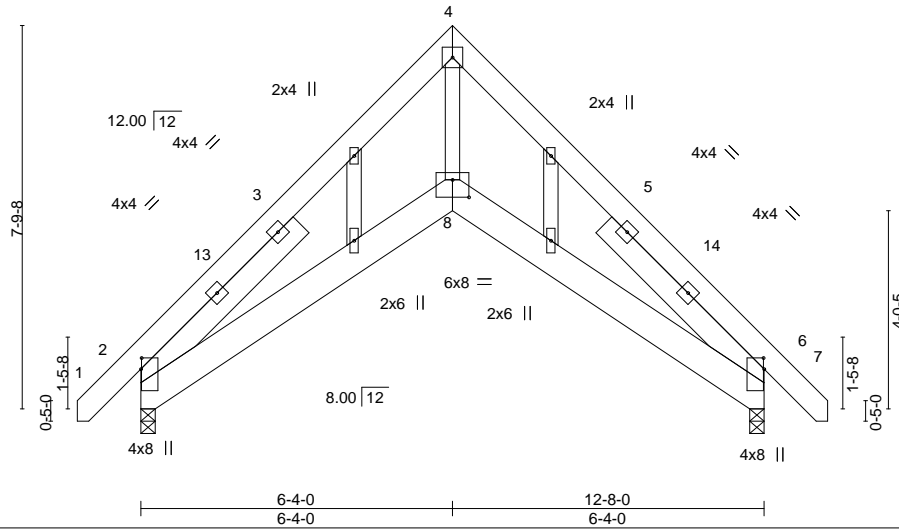


Plate Offsets (X,Y)--	[2:0-2-11,0-0-2], [6:0-2-11,0-0-2], [8:0-4-0,0-4-4]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.20	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.12	Vert(LL) -0.03 8 >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.17	Vert(CT) -0.04 8 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.06 6 n/a n/a		
	Code IRC2015/TPI2014			Weight: 131 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x8 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	
OTHERS 2x4 SP No.2	
SLIDER Left 2x6 SP No.1 4-6-14, Right 2x6 SP No.1 4-6-14	

**REACTIONS.** (size) 2=0-3-8, 6=0-3-8  
 Max Horz 2=225(LC 11)  
 Max Uplift 2=-109(LC 12), 6=-109(LC 13)  
 Max Grav 2=571(LC 1), 6=571(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-844/59, 4-6=-925/145  
 BOT CHORD 2-8=-110/722, 6-8=-87/700  
 WEBS 4-8=-24/856

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-2-2 to 3-2-11, Interior(1) 3-2-11 to 6-4-0, Exterior(2) 6-4-0 to 10-8-13, Interior(1) 10-8-13 to 13-10-2 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 4) 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 7) Bearing at joint(s) 2, 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 capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=109, 6=109.



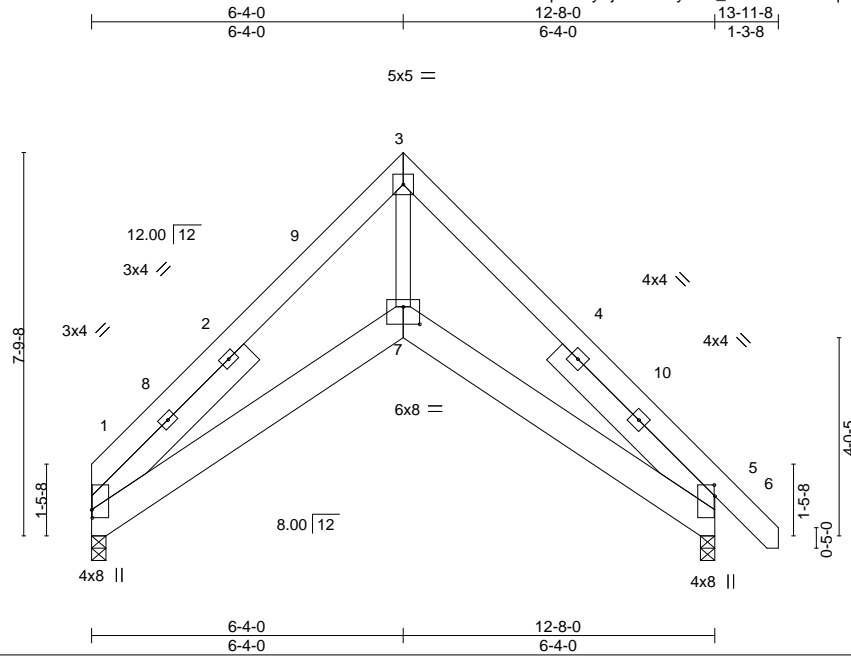
August 23, 2024

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Job J0824-4611	Truss E2	Truss Type SCISSORS	Qty 1	Ply 1	GMC/Lot 5 River Rd./Wake I67769324
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8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 23 10:36:08 2024 Page 1  
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Scale = 1:46.8

Plate Offsets (X,Y)-- [1:0-1-15,0-0-2], [5:0-2-11,0-0-2], [7:0-4-0,0-4-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.17	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.09	Vert(LL) -0.01 1-7 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.18	Vert(CT) -0.03 1-7 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.04 5 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) -0.02 7 >999 240	Weight: 121 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x8 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	
SLIDER Left 2x6 SP No.1 4-6-14, Right 2x6 SP No.1 4-6-14	

**REACTIONS.** (size) 1=0-3-8, 5=0-3-8  
 Max Horz 1=-177(LC 8)  
 Max Uplift 1=-21(LC 13), 5=-31(LC 13)  
 Max Grav 1=474(LC 1), 5=576(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-3=-831/24, 3-5=-907/47  
 BOT CHORD 1-7=-53/694, 5-7=-36/673  
 WEBS 3-7=0/831

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



August 23, 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/TPI 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)

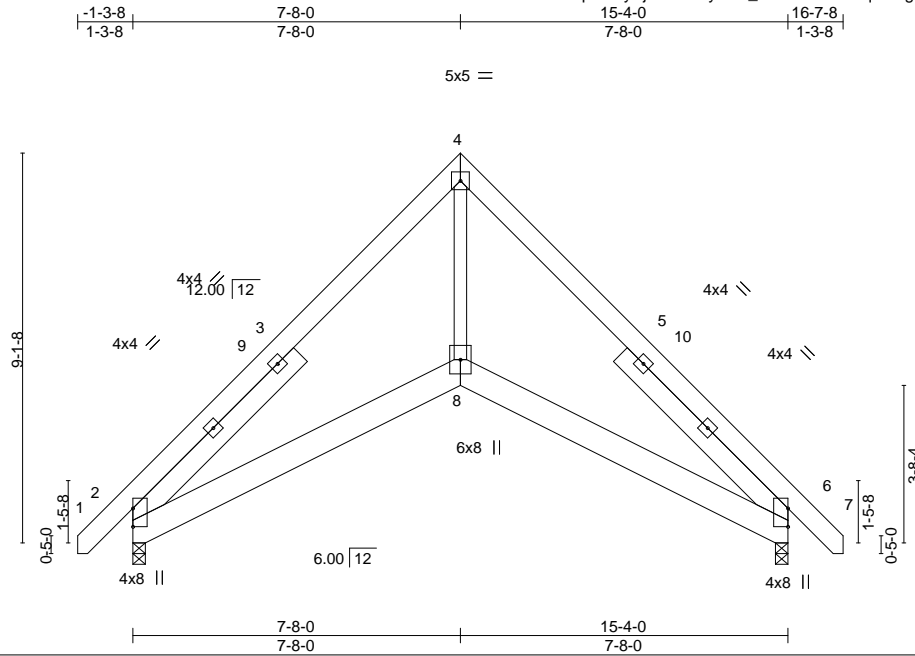
**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate

818 Soundside Road  
 Edenton, NC 27932

Job J0824-4611	Truss G1	Truss Type SCISSORS	Qty 3	Ply 1	GMC/Lot 5 River Rd./Wake 167769325
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Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 23 10:36:08 2024 Page 1  
ID:Rf2W5uVqu9dZySjoYfRYfJyV8Y\_-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:53.9

<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 0.22	Vert(LL)	-0.02 6-8	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	-0.03 6-8	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.16	Horz(CT)	0.04 6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	-0.03 8	>999	240		
								Weight: 147 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x8 SP No.1  
 WEBS 2x4 SP No.2  
 SLIDER Left 2x6 SP No.1 5-6-3, Right 2x6 SP No.1 5-6-3

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

**REACTIONS.** (size) 2=0-3-8, 6=0-3-8  
 Max Horz 2=-212(LC 10)  
 Max Uplift 2=-33(LC 12), 6=-33(LC 13)  
 Max Grav 2=678(LC 1), 6=678(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-898/78, 4-6=-906/69  
 BOT CHORD 2-8=-48/663, 6-8=-30/649  
 WEBS 4-8=0/714

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-2-2 to 3-2-11, Interior(1) 3-2-11 to 7-8-0, Exterior(2) 7-8-0 to 12-0-13, Interior(1) 12-0-13 to 16-6-2 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 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.
  - Bearing at joint(s) 2, 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.



August 23, 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)



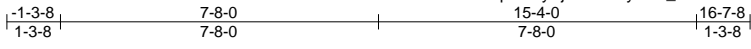
818 Soundside Road  
 Edenton, NC 27932



Job J0824-4611	Truss G1GE	Truss Type GABLE	Qty 1	Ply 1	GMC/Lot 5 River Rd./Wake 167769326
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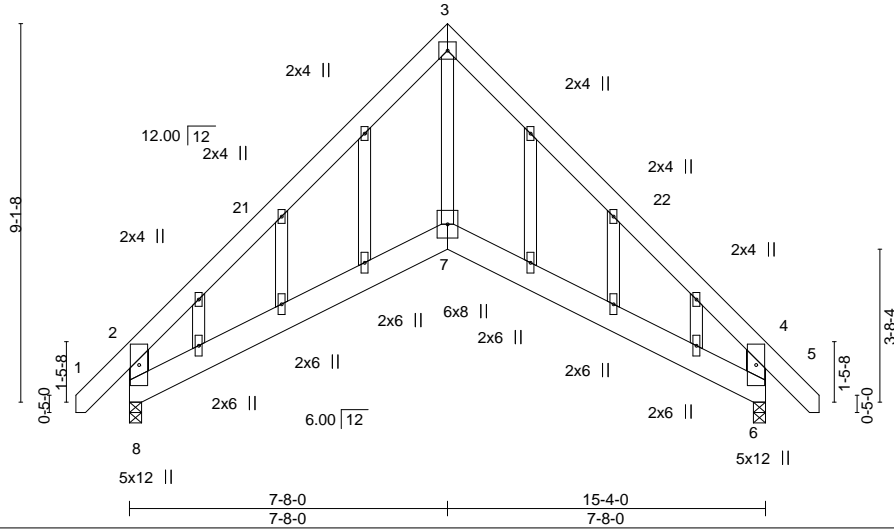
Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 23 10:36:09 2024 Page 1  
ID:Rf2W5uVqu9dZySjoYfRYfJyV8Y\_-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



5x5 =

Scale = 1:55.5



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.26	Vert(LL)	-0.04	7	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.17	Vert(CT)	-0.06	7	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.14	Horz(CT)	0.07	6	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-R					Weight: 145 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x8 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x6 SP No.1 *Except* 3-7: 2x4 SP No.2	
OTHERS 2x4 SP No.2	

**REACTIONS.** (size) 8=0-3-8, 6=0-3-8  
 Max Horz 8=-265(LC 10)  
 Max Uplift 8=-124(LC 12), 6=-124(LC 13)  
 Max Grav 8=679(LC 1), 6=679(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-844/104, 3-4=-902/203, 2-8=-810/237, 4-6=-809/206  
 BOT CHORD 7-8=-75/678, 6-7=-51/660  
 WEBS 3-7=0/668

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-2-2 to 3-2-11, Interior(1) 3-2-11 to 7-8-0, Exterior(2) 7-8-0 to 12-0-13, Interior(1) 12-0-13 to 16-6-2 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Bearing at joint(s) 8, 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=124, 6=124.



August 23, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**  
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818 Soundside Road  
Edenton, NC 27932

Job J0824-4611	Truss G2	Truss Type SCISSORS	Qty 3	Ply 1	GMC/Lot 5 River Rd./Wake 167769327
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Comtech, Inc. Fayetteville, NC - 28314,

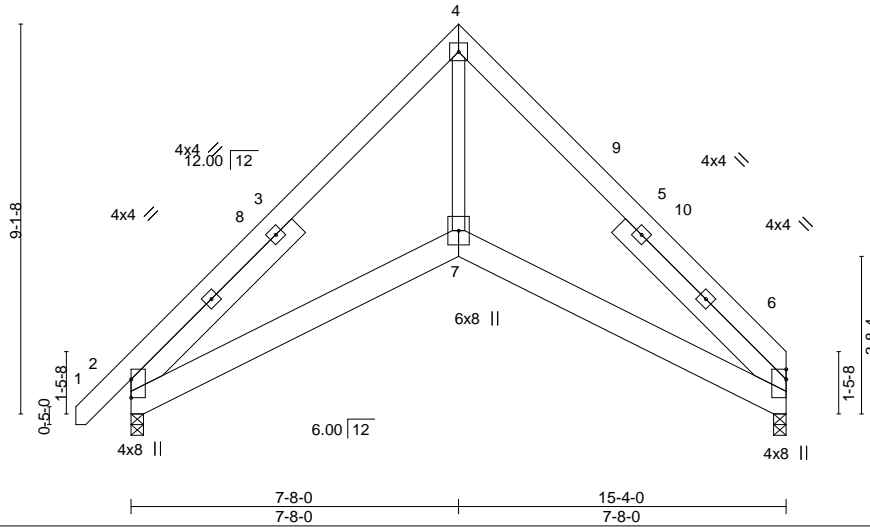
8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 23 10:36:09 2024 Page 1

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5x5 =

Scale = 1:53.9



<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 0.23	Vert(LL)	-0.02 6-7	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	-0.04 6-7	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.16	Horz(CT)	0.04 6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	-0.03 7	>999	240		
								Weight: 143 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x8 SP No.1  
 WEBS 2x4 SP No.2  
 SLIDER Left 2x6 SP No.1 5-6-3, Right 2x6 SP No.1 5-6-3

**BRACING-**

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

**REACTIONS.**

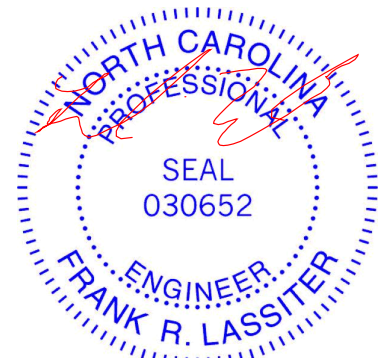
(size) 6=0-3-8, 2=0-3-8  
 Max Horz 2=209(LC 9)  
 Max Uplift 6=-25(LC 12), 2=-33(LC 12)  
 Max Grav 6=587(LC 1), 2=683(LC 1)

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

TOP CHORD 2-4=-909/93, 4-6=-910/96  
 BOT CHORD 2-7=-59/660, 6-7=-41/648  
 WEBS 4-7=0/716

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-2-2 to 3-2-11, Interior(1) 3-2-11 to 7-8-0, Exterior(2) 7-8-0 to 12-0-13, Interior(1) 12-0-13 to 15-0-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 6, 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2.



August 23, 2024

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818 Soundside Road  
 Edenton, NC 27932

Job J0824-4611	Truss H1	Truss Type GABLE	Qty 3	Ply 1	GMC/Lot 5 River Rd./Wake 167769328
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8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 23 10:36:09 2024 Page 1

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Scale = 1:58.2

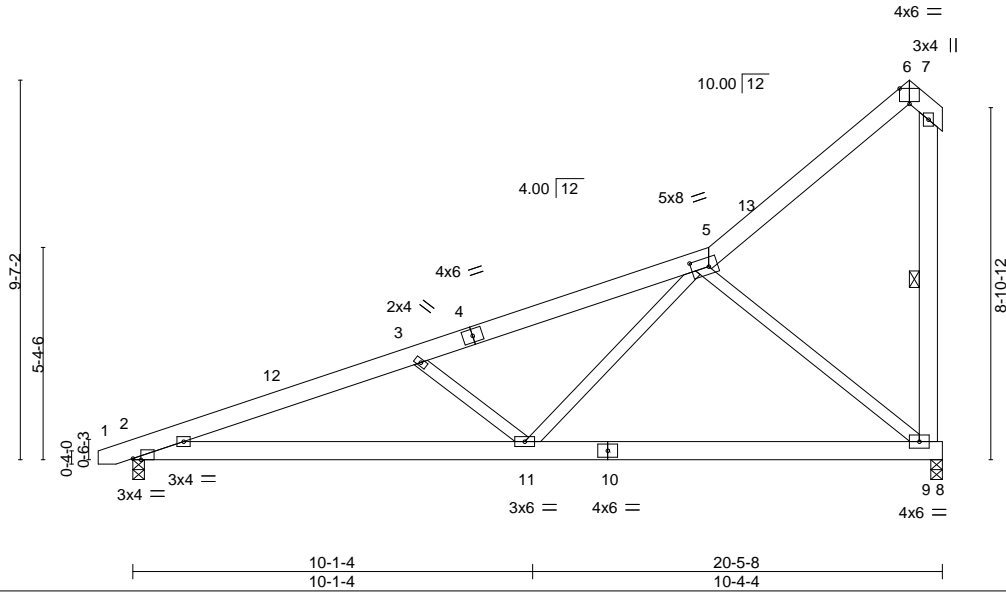


Plate Offsets (X, Y)--	[2:0-2-7,Edge], [5:0-5-4,0-2-12], [6:0-3-0,Edge]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.21	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.38	Vert(LL) -0.06 9-11 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.80	Vert(CT) -0.14 9-11 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.02 9 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.03 2-11 >999 240	Weight: 150 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-9-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 7-9: 2x6 SP No.1	WEBS 1 Row at midpt 7-9

**REACTIONS.** (size) 9=0-3-8, 2=0-3-8  
 Max Horz 2=292(LC 12)  
 Max Uplift 9=139(LC 12), 2=-76(LC 8)  
 Max Grav 9=805(LC 1), 2=847(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1727/148, 3-5=-1337/37  
 BOT CHORD 2-11=-406/1593, 9-11=-175/658  
 WEBS 3-11=-518/268, 5-11=-50/791, 5-9=-852/227

- 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) -0-7-13 to 3-9-0, Interior(1) 3-9-0 to 19-7-8, Exterior(2) 19-7-8 to 20-1-4 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) 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 9=139.
  - 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



August 23, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**  
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818 Soundside Road  
 Edenton, NC 27932

Job J0824-4611	Truss H1GE	Truss Type GABLE	Qty 1	Ply 1	GMC/Lot 5 River Rd./Wake 167769329
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Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 23 10:36:10 2024 Page 1

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0-10-8 7-3-5 14-6-10 19-7-8 20-5-8  
0-10-8 7-3-5 7-3-5 5-0-14 0-10-0

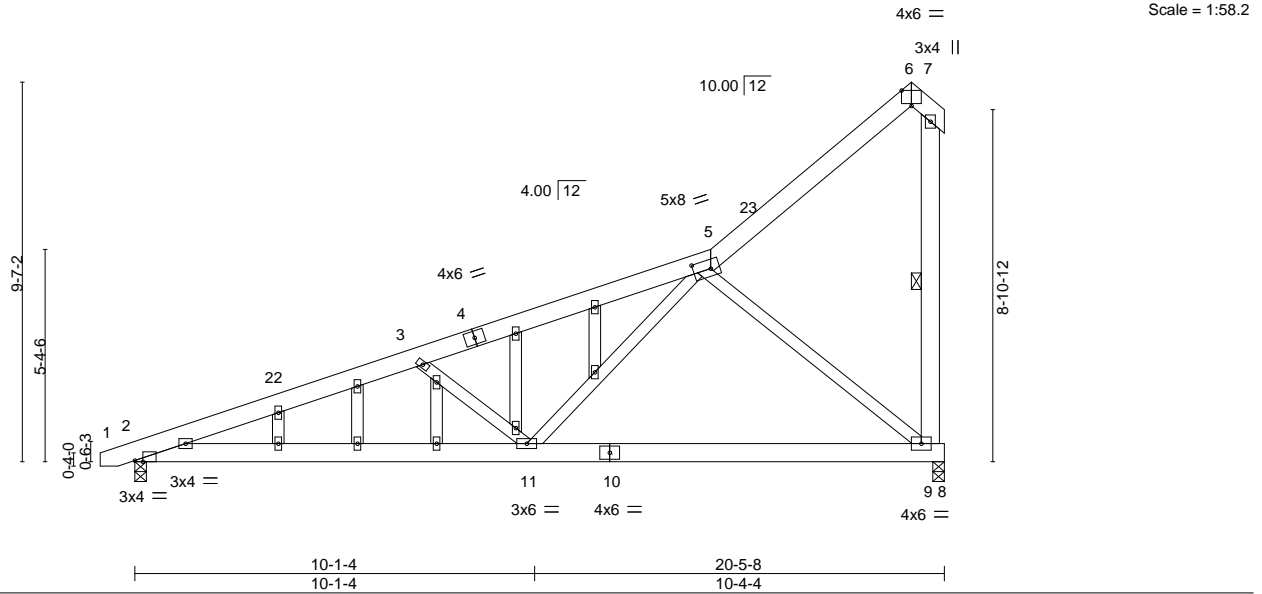


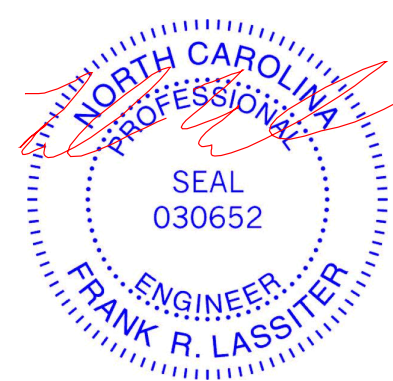
Plate Offsets (X, Y)--	[2:0-2-7,Edge], [5:0-5-4,0-2-12], [6:0-3-0,Edge]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.21	Vert(LL) -0.06 9-11 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.38	Vert(CT) -0.14 9-11 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.80	Horz(CT) 0.02 9 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.05 2-11 >999 240	Weight: 162 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-9-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 7-9: 2x6 SP No.1	WEBS 1 Row at midpt 7-9
OTHERS 2x4 SP No.2	

**REACTIONS.** (size) 9=0-3-8, 2=0-3-8  
 Max Horz 2=421(LC 12)  
 Max Uplift 9=305(LC 12), 2=-212(LC 8)  
 Max Grav 9=805(LC 1), 2=847(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1727/381, 3-5=-1337/219  
 BOT CHORD 2-11=-602/1593, 9-11=-253/658  
 WEBS 3-11=-518/362, 5-11=-136/791, 5-9=-852/331

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-7-13 to 3-9-0, Interior(1) 3-9-0 to 19-7-8, Exterior(2) 19-7-8 to 20-1-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 4) All plates are 2x4 MT20 unless otherwise indicated.
  - 5) Gable studs spaced at 2-0-0 oc.
  - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 7) \* 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.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=305, 2=212.
  - 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



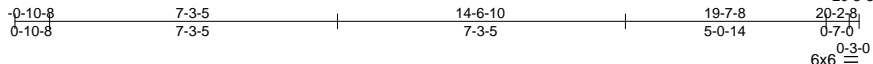
August 23, 2024

<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 (<a href="http://www.tpinst.org">www.tpinst.org</a>) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (<a href="http://www.sbcacomponents.com">www.sbcacomponents.com</a>)</p>	<p>ENGINEERING BY  <b>TRENCO</b>  <small>A MiTek Affiliate</small></p> <p>818 Soundside Road        Edenton, NC 27932</p>
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Job J0824-4611	Truss H2	Truss Type ROOF TRUSS	Qty 1	Ply 1	GMC/Lot 5 River Rd./Wake 167769330
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Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 23 10:36:10 2024 Page 1  
ID:Rf2W5uVqu9dZySjoYfRYfJyV8Y\_-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:58.2

Plate Offsets (X,Y)--	[2:0-2-7,Edge], [5:0-5-4,0-2-12], [9:0-1-8,0-2-0]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.21	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.37	Vert(LL) -0.06 9-11 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.74	Vert(CT) -0.13 9-11 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.02 9 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.03 2-11 >999 240	Weight: 149 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-9-10 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 6-9: 2x6 SP No.1	WEBS 1 Row at midpt 6-9


**REACTIONS.** (size) 9=Mechanical, 2=0-3-8  
 Max Horz 2=290(LC 12)  
 Max Uplift 9=-141(LC 12), 2=-84(LC 8)  
 Max Grav 9=831(LC 1), 2=836(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1696/153, 3-5=-1304/58  
 BOT CHORD 2-11=-402/1563, 9-11=-175/626  
 WEBS 3-11=-521/269, 5-11=-55/785, 5-9=-828/233

- 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) -0-7-13 to 3-9-0, Interior(1) 3-9-0 to 19-7-8, Exterior(2) 19-7-8 to 20-5-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 3) Gable studs spaced at 2-0-0 oc.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) 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) 2 except (jt=lb) 9=141.
  - 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



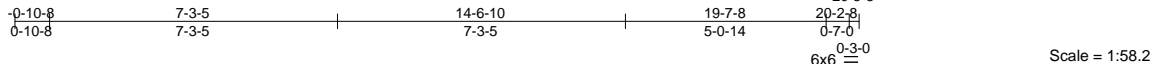
August 23, 2024

<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>A MITEK Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job	Truss	Truss Type	Qty	Ply	GMC/Lot 5 River Rd./Wake	167769331
J0824-4611	H2GE	GABLE	1	1	Job Reference (optional)	

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8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 23 10:36:11 2024 Page 1  
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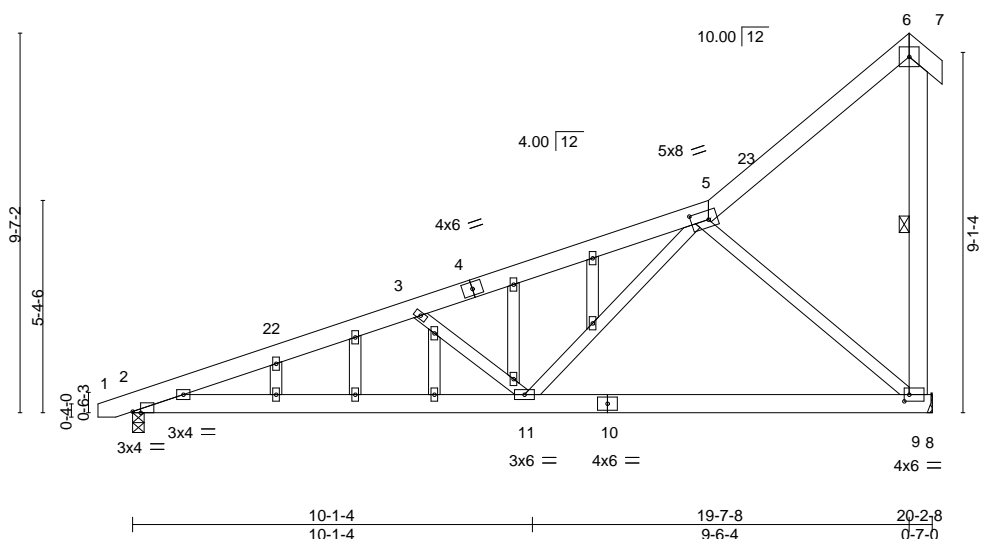


Plate Offsets (X,Y)--	[2:0-2-7,Edge], [5:0-5-4,0-2-12], [9:0-1-8,0-2-0]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.21	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.37	Vert(LL) -0.06 9-11 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.74	Vert(CT) -0.13 9-11 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.02 9 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.04 2-11 >999 240	Weight: 162 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-9-10 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except*	WEBS 1 Row at midpt 6-9
6-9: 2x6 SP No.1	
OTHERS 2x4 SP No.2	

**REACTIONS.** (size) 9=Mechanical, 2=0-3-8  
 Max Horz 2=418(LC 12)  
 Max Uplift 9=310(LC 12), 2=-220(LC 8)  
 Max Grav 9=831(LC 1), 2=836(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1696/405, 3-5=-1304/243  
 BOT CHORD 2-11=-594/1563, 9-11=-239/626  
 WEBS 3-11=-521/361, 5-11=-137/785, 5-9=-828/319

- 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 Exterior(2) -0-7-13 to 3-9-0, Interior(1) 3-9-0 to 19-7-8, Exterior(2) 19-7-8 to 20-5-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 3) All plates are 2x4 MT20 unless otherwise indicated.
  - 4) Gable studs spaced at 2-0-0 oc.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 7) Refer to girder(s) for truss to truss connections.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=310, 2=220.
  - 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



August 23, 2024

Job J0824-4611	Truss J03	Truss Type Jack-Open	Qty 7	Ply 1	GMC/Lot 5 River Rd./Wake 167769332
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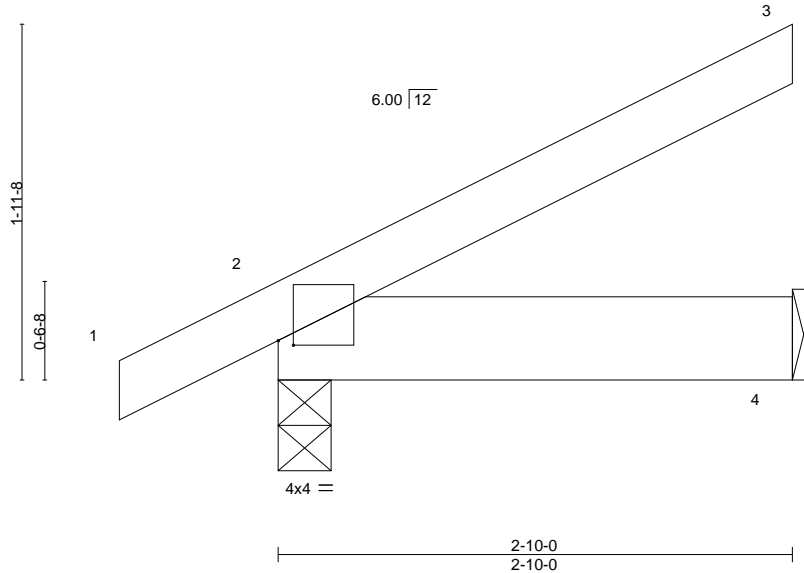
Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 23 10:36:11 2024 Page 1

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Scale = 1:12.7



VERTICAL SUPPORT OF FREE END OF CHORD IS REQUIRED.

Plate Offsets (X,Y)--	[2:0-1-0,0-0-5]				
<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 0.45	Vert(LL) -0.00 2-4 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.17	Vert(CT) -0.00 2-4 >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		Weight: 13 lb	FT = 20%

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

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

**REACTIONS.** (size) 2=0-3-8, 4=Mechanical  
Max Horz 2=72(LC 9)  
Max Uplift 2=35(LC 9), 4=34(LC 9)  
Max Grav 2=178(LC 1), 4=97(LC 1)

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

**NOTES-**

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



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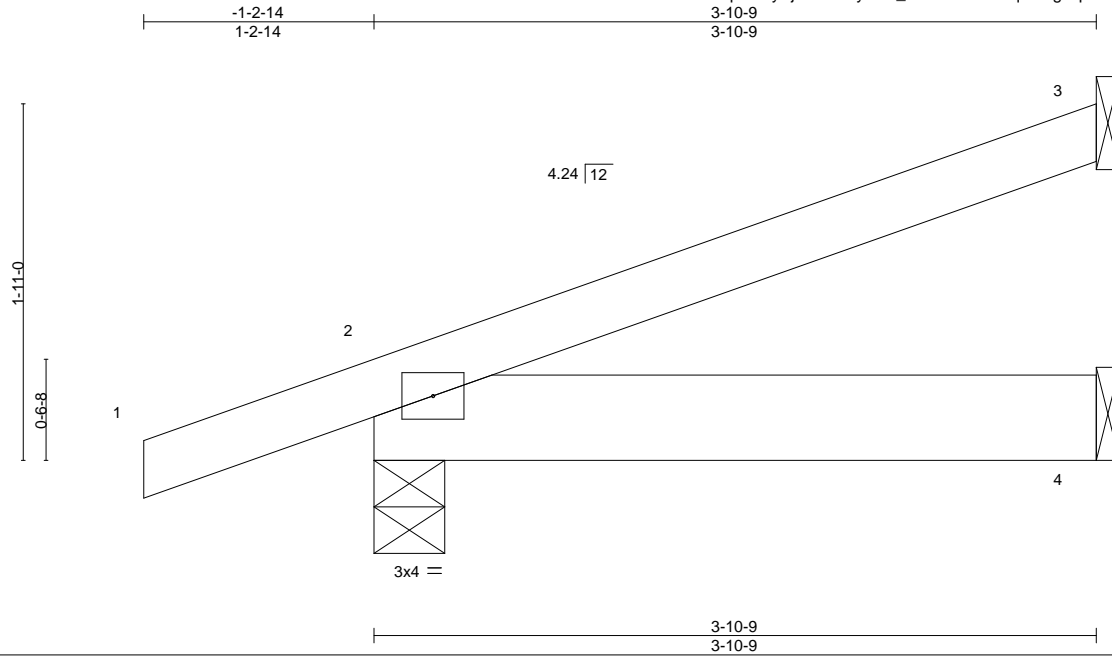
818 Soundside Road  
Edenton, NC 27932

Job J0824-4611	Truss J04	Truss Type Jack-Open	Qty 1	Ply 1	GMC/Lot 5 River Rd./Wake I67769333
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8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 23 10:36:12 2024 Page 1

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Scale = 1:12.4

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 0.16	Vert(LL)	-0.00	2-4	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.05	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	****	240		
									Weight: 17 lb	FT = 20%

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

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

**REACTIONS.** (size) 3=Mechanical, 2=0-4-9, 4=Mechanical  
 Max Horz 2=63(LC 8)  
 Max Uplift 3=-43(LC 12), 2=-68(LC 8)  
 Max Grav 3=92(LC 1), 2=248(LC 1), 4=73(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 Corner(3) 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.



August 23, 2024

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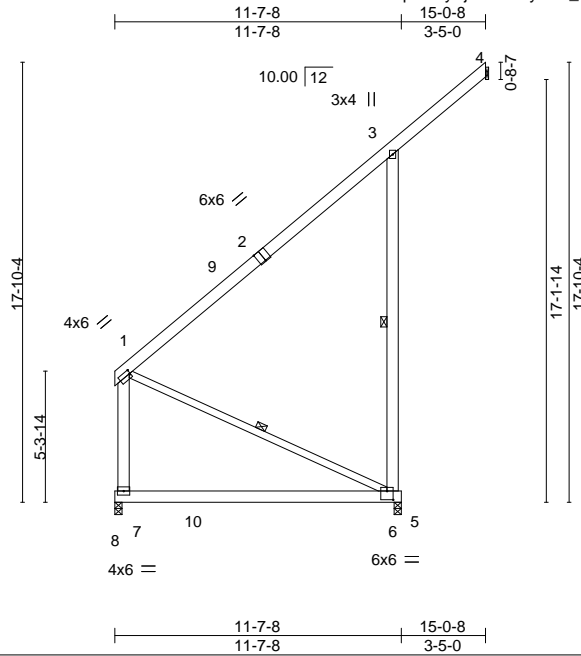


Job J0824-4611	Truss M1	Truss Type MONOPICH	Qty 5	Ply 1	GMC/Lot 5 River Rd./Wake I67769334
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Scale = 1:93.5

Plate Offsets (X,Y)--	[1:0-0-8,0-2-0], [2:0-3-0,Edge], [6:0-3-0,0-4-4]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.51	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.33	Vert(LL) -0.11 6-7 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.38	Vert(CT) -0.21 6-7 >624 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) -0.02 4 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) -0.01 6-7 >999 240	Weight: 134 lb	FT = 20%

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

**REACTIONS.** (size) 4=Mechanical, 6=0-3-8, 7=0-3-8  
 Max Horz 7=397(LC 12)  
 Max Uplift 4=-28(LC 19), 6=-570(LC 12)  
 Max Grav 4=24(LC 12), 6=902(LC 19), 7=569(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-3=-455/455, 3-6=-843/577, 1-7=-364/214  
 BOT CHORD 6-7=-540/567  
 WEBS 1-6=-606/591

- 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) 0-4-4 to 4-9-1, Interior(1) 4-9-1 to 14-11-12 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 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.
  - 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) 4 except (jt=lb) 6=570.



August 23, 2024

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Job J0824-4611	Truss PB2	Truss Type GABLE	Qty 14	Ply 1	GMC/Lot 5 River Rd./Wake 167769335
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8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 23 10:36:12 2024 Page 1

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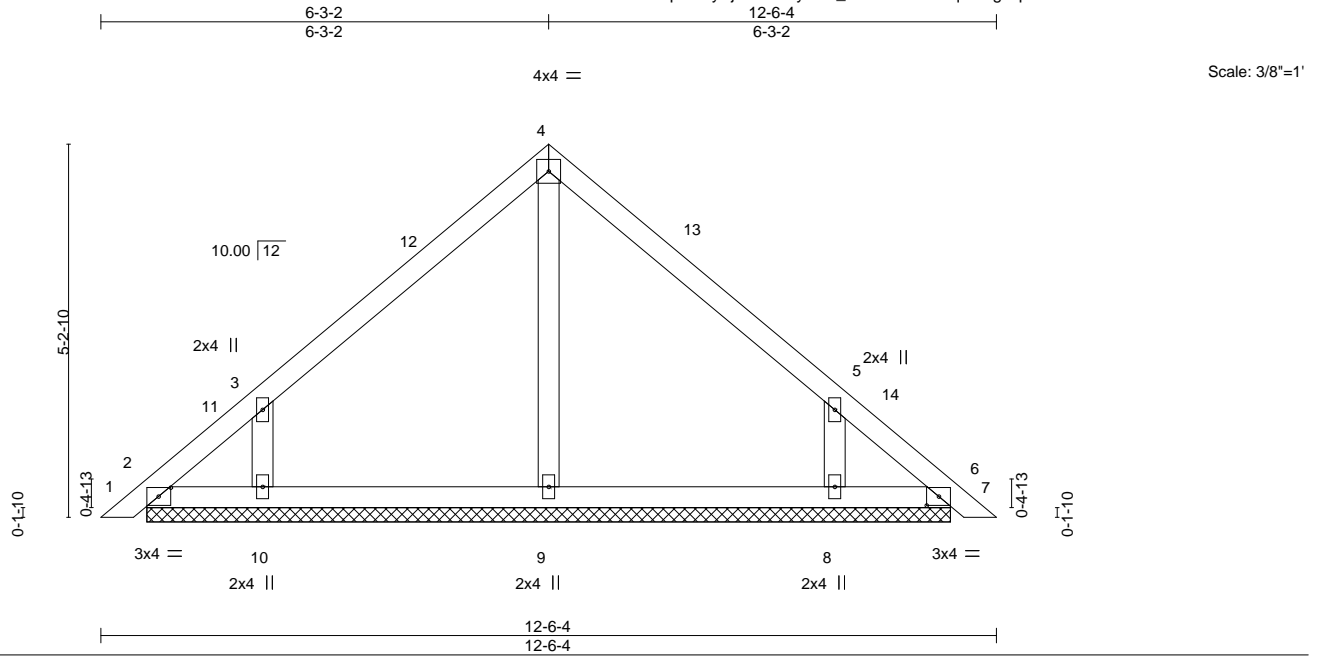


Plate Offsets (X,Y)--	[2:0-2-1,0-1-8], [6:0-2-1,0-1-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.13	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.09	Vert(LL) -0.00 6 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.06	Vert(CT) -0.00 6 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 6 n/a n/a		
	Code IRC2015/TPI2014			Weight: 51 lb	FT = 20%

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

**REACTIONS.** All bearings 11-2-13.  
 (lb) - Max Horz 2=121(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 10=125(LC 12), 8=124(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9 except 10=321(LC 19), 8=320(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 3-10=318/250, 5-8=318/250

- 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) 0-2-12 to 4-7-9, Interior(1) 4-7-9 to 6-3-2, Exterior(2) 6-3-2 to 10-7-15, Interior(1) 10-7-15 to 12-3-8 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) Gable requires continuous bottom chord bearing.
  - 5) Gable studs spaced at 4-0-0 oc.
  - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 7) \* 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.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6 except (jt=lb) 10=125, 8=124.
  - 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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Job J0824-4611	Truss PB2GE	Truss Type GABLE	Qty 2	Ply 1	GMC/Lot 5 River Rd./Wake 167769336
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8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 23 10:36:13 2024 Page 1  
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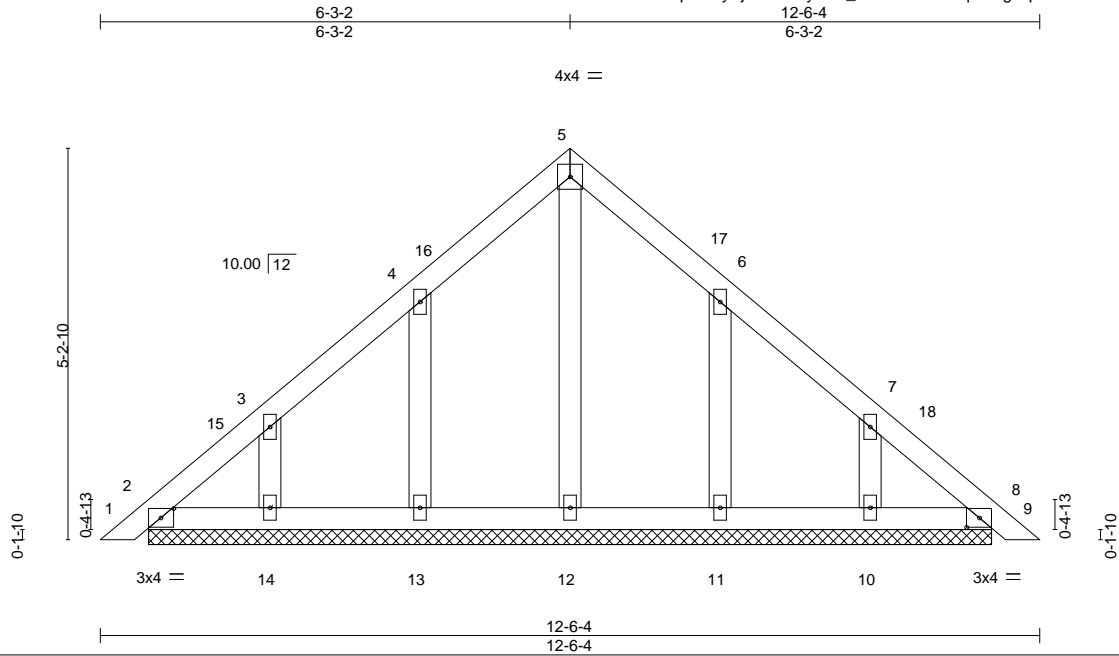


Plate Offsets (X, Y)-- [2:0-2-1,0-1-8], [6:0-0-0,0-0-0], [7:0-0-0,0-0-0], [8:0-2-1,0-1-8]

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 0.04	Vert(LL)	0.00	8	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	0.00	8	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 60 lb	FT = 20%

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

**REACTIONS.** All bearings 11-2-13.  
 (lb) - Max Horz 2=-151(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 8 except 13=-117(LC 12), 14=-113(LC 12), 11=-116(LC 13), 10=-113(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

**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; TC DL=6.0psf; BC DL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-2-12 to 4-7-9, Interior(1) 4-7-9 to 6-3-2, Exterior(2) 6-3-2 to 10-7-15, Interior(1) 10-7-15 to 12-3-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8 except (jt=lb) 13=117, 14=113, 11=116, 10=113.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



August 23, 2024

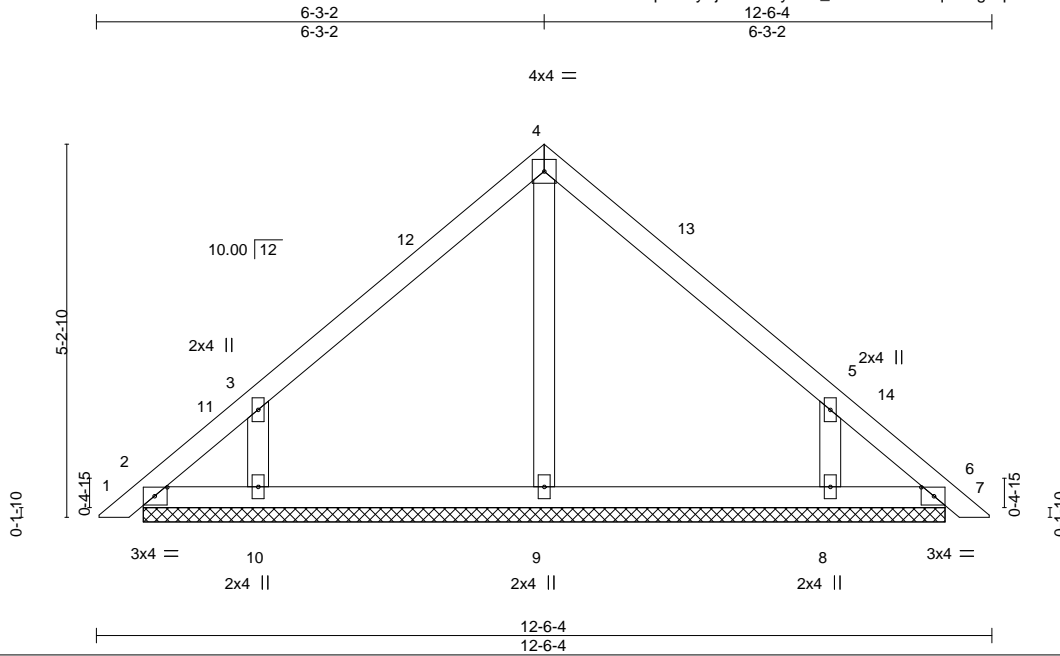
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. 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>
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Job J0824-4611	Truss PB3	Truss Type GABLE	Qty 1	Ply 3	GMC/Lot 5 River Rd./Wake 167769337
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Scale: 3/8"=1'

Plate Offsets (X, Y)--	[2:0-2-2,0-1-8], [5:0-0-0,0-0-0], [6:0-2-2,0-1-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.04	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.03	Vert(LL) -0.00 6 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.01	Vert(CT) -0.00 6 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 6 n/a n/a		
	Code IRC2015/TPI2014			Weight: 153 lb	FT = 20%

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

**REACTIONS.** All bearings 11-2-8.  
 (lb) - Max Horz 2=120(LC 11)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 10=125(LC 12), 8=124(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9 except 10=321(LC 19), 8=320(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 3-10=-318/251, 5-8=-319/251

- NOTES-**
- 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
 Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-15 to 4-7-12, Interior(1) 4-7-12 to 6-3-2, Exterior(2) 6-3-2 to 10-7-15, Interior(1) 10-7-15 to 12-3-5 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 4-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6 except (jt=lb) 10=125, 8=124.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



Job J0824-4611	Truss PB4	Truss Type PIGGYBACK	Qty 1	Ply 1	GMC/Lot 5 River Rd./Wake I67769338
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4x4 =

Scale = 1:27.0

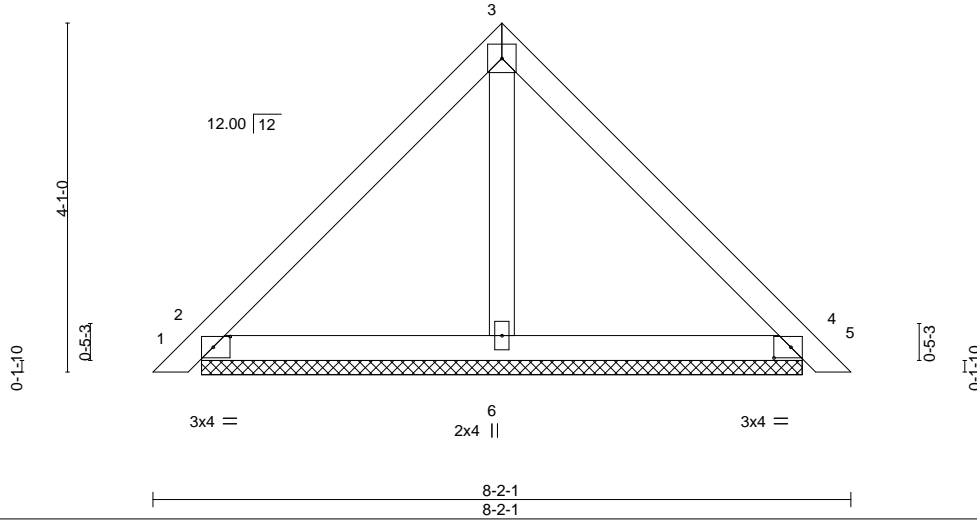


Plate Offsets (X,Y)--	[2:0-2-6,0-1-8], [4:0-2-6,0-1-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.22	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.09	Vert(LL) 0.01 5 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.03	Vert(CT) 0.01 5 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 4 n/a n/a		
	Code IRC2015/TPI2014			Weight: 32 lb	FT = 20%

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

**REACTIONS.** (size) 2=7-0-6, 4=7-0-6, 6=7-0-6  
 Max Horz 2=93(LC 10)  
 Max Uplift 2=33(LC 13), 4=37(LC 13)  
 Max Grav 2=195(LC 1), 4=195(LC 1), 6=219(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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 6) Non Standard bearing condition. Review required.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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<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>
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Job J0824-4611	Truss PB4GE	Truss Type GABLE	Qty 1	Ply 1	GMC/Lot 5 River Rd./Wake 167769339
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8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 23 10:36:14 2024 Page 1

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4x4 =

Scale = 1:27.0

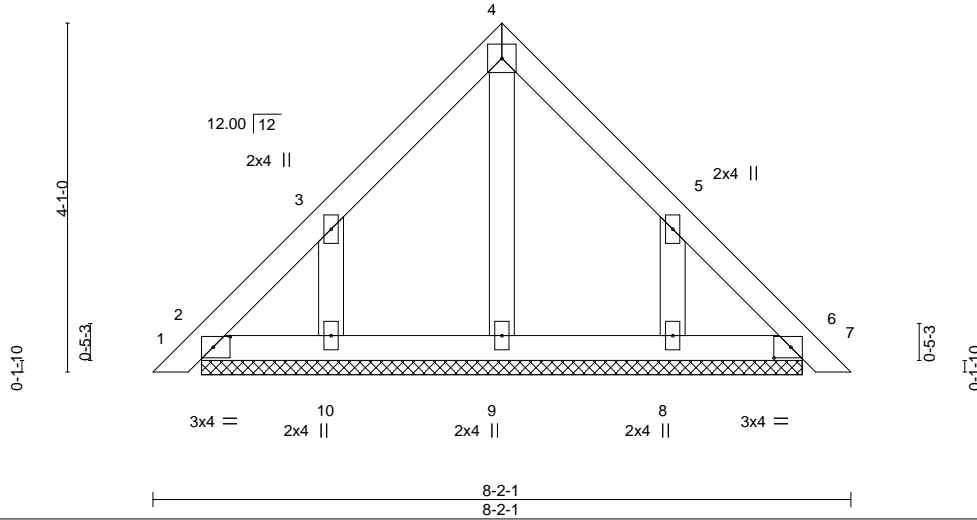


Plate Offsets (X, Y)--	[2:0-2-6,0-1-8], [5:0-0-0,0-0-0], [6:0-2-6,0-1-8]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.05	Vert(LL)	0.00	6	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	0.00	6	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	6	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P						
								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.
BOT CHORD 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.2	

**REACTIONS.** All bearings 7-0-6.  
 (lb) - Max Horz 2=116(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 10=159(LC 12), 8=158(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9, 10, 8

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6 except (jt=lb) 10=159, 8=158.
  - Non Standard bearing condition. Review required.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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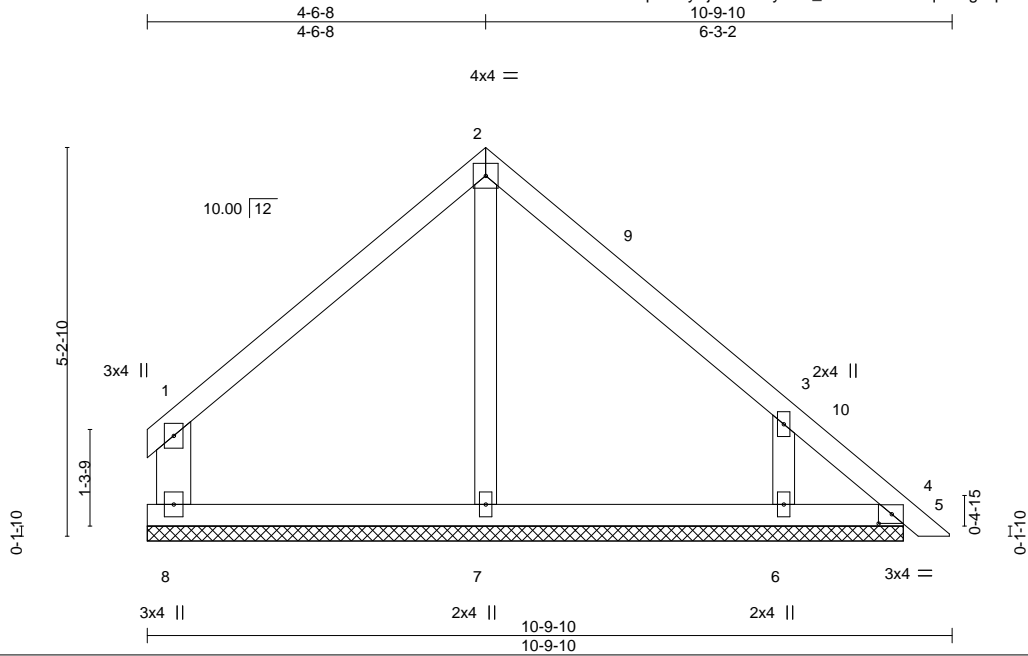
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. 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>818 Soundside Road Edenton, NC 27932</p>
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Job J0824-4611	Truss PB5	Truss Type GABLE	Qty 1	Ply 3	GMC/Lot 5 River Rd./Wake 167769340
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Scale = 1:30.9

Plate Offsets (X,Y)--	[4:0-2-2,0-1-8]				
<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 0.05	Vert(LL) -0.00 4 n/r 120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.03	Vert(CT) -0.00 4 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.01	Horz(CT) 0.00 4 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S		Weight: 142 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 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.** All bearings 10-1-12.  
 (lb) - Max Horz 8=117(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 8, 4 except 6=125(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 8, 4 except 7=264(LC 20), 6=319(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 3-6=312/246

- NOTES-**
- 3-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: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 8-11-5, Interior(1) 8-11-5 to 10-6-11 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 4-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 4 except (jt=lb) 6=125.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



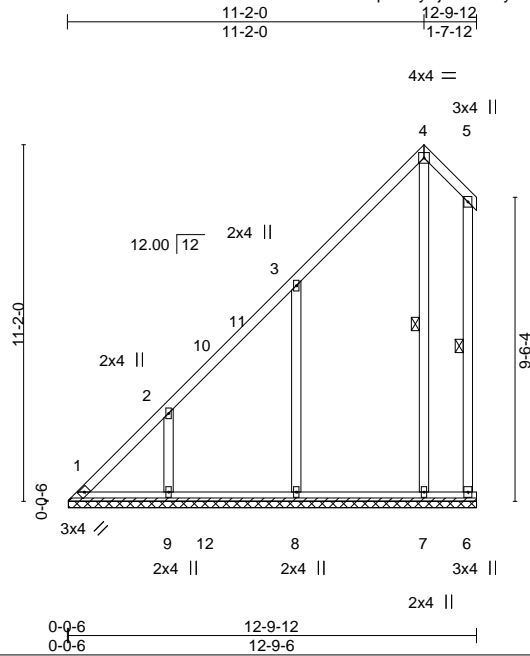
August 23, 2024

Job J0824-4611	Truss VD1	Truss Type VALLEY	Qty 1	Ply 1	GMC/Lot 5 River Rd./Wake 167769341
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8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 23 10:36:15 2024 Page 1

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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.19	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.18	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.33	Horz(CT)	-0.00	6	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 89 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 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.2	WEBS 1 Row at midpt 5-6, 4-7
OTHERS 2x4 SP No.2	

**REACTIONS.** All bearings 12-9-6.  
 (lb) - Max Horz 1=324(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 6, 7 except 1=-101(LC 10), 8=-182(LC 12), 9=-152(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 6 except 1=282(LC 12), 7=373(LC 19), 8=592(LC 19), 9=386(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-497/470, 2-3=-310/283  
 WEBS 3-8=-418/327, 2-9=-345/281

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 11-2-0, Exterior(2) 11-2-0 to 12-6-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 7 except (jt=lb) 1=101, 8=182, 9=152.



August 23, 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><b>TRENCO</b></p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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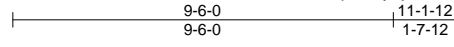


Job J0824-4611	Truss VD2	Truss Type VALLEY	Qty 1	Ply 1	GMC/Lot 5 River Rd./Wake 167769342
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Comtech, Inc. Fayetteville, NC - 28314,

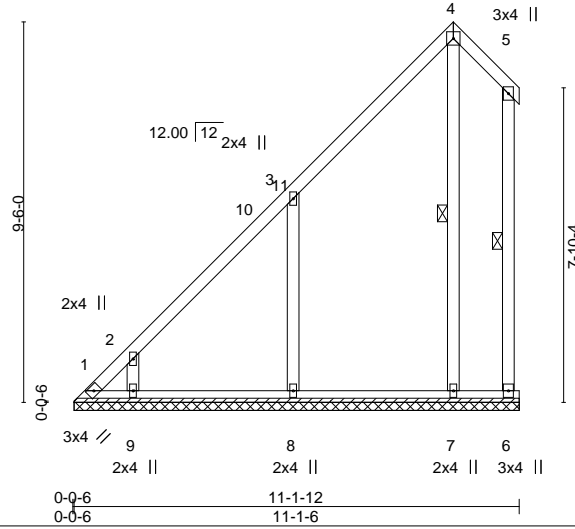
8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 23 10:36:16 2024 Page 1

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4x4 =

Scale = 1:57.5



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.19	Horz(CT)	-0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						Weight: 73 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
WEBS 1 Row at midpt 5-6, 4-7

**REACTIONS.** All bearings 11-1-6.  
(lb) - Max Horz 1=270(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 6, 7 except 1=165(LC 10), 8=185(LC 12), 9=133(LC 12)  
Max Grav All reactions 250 lb or less at joint(s) 6 except 1=280(LC 12), 7=393(LC 19), 8=502(LC 19), 9=276(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-490/457, 2-3=-318/288  
WEBS 3-8=-426/338, 2-9=-319/282

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 9-6-0, Exterior(2) 9-6-0 to 10-10-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 7 except (jt=lb) 1=165, 8=185, 9=133.



August 23, 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)



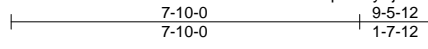
818 Soundside Road  
Edenton, NC 27932

Job J0824-4611	Truss VD3	Truss Type VALLEY	Qty 1	Ply 1	GMC/Lot 5 River Rd./Wake 167769343
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Comtech, Inc. Fayetteville, NC - 28314,

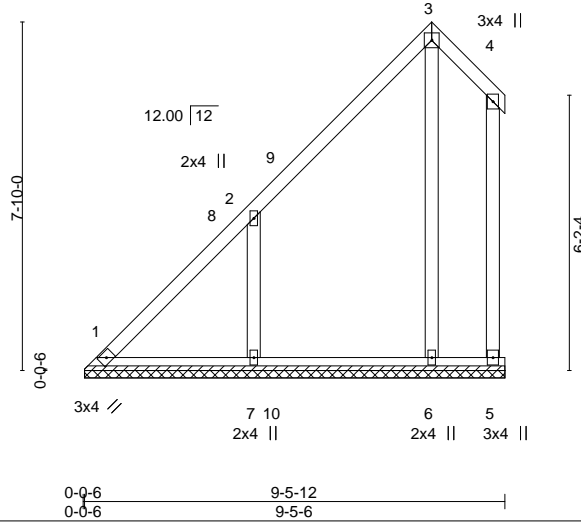
8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 23 10:36:16 2024 Page 1

ID:Rf2W5uVqu9dZySjoYfRYfJyV8Y\_-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



4x4 =

Scale = 1:51.8



<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 0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.19	Horz(CT)	-0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						Weight: 58 lb	FT = 20%

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

**REACTIONS.** All bearings 9-5-6.  
 (lb) - Max Horz 1=215(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 6 except 7=-187(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=392(LC 19), 7=488(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-317/289  
 WEBS 2-7=-426/344

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 7-10-0, Exterior(2) 7-10-0 to 9-2-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Gable requires continuous bottom chord bearing.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 6 except (jt=lb) 7=187.



August 23, 2024

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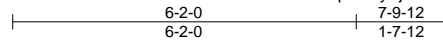
**ENGINEERING BY**  
**TRENCO**  
 A MITEK Affiliate  
 818 Soundside Road  
 Edenton, NC 27932

Job J0824-4611	Truss VD4	Truss Type VALLEY	Qty 1	Ply 1	GMC/Lot 5 River Rd./Wake I67769344
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Comtech, Inc. Fayetteville, NC - 28314,

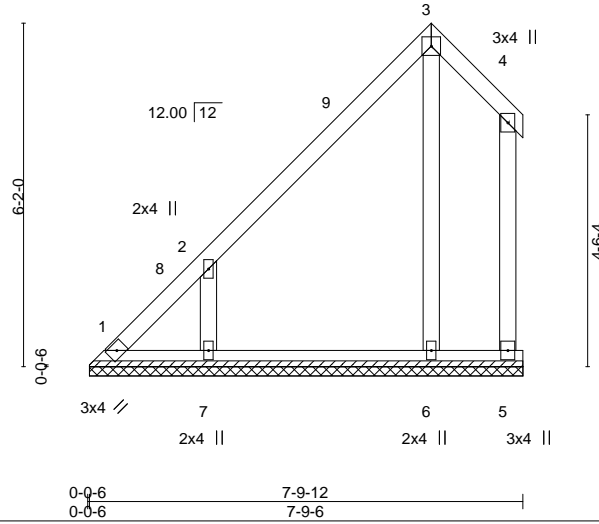
8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 23 10:36:17 2024 Page 1

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4x4 =

Scale = 1:41.4



<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 0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.07	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.09	Horz(CT)	0.00		n/a	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-P						Weight: 45 lb	FT = 20%

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

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

**REACTIONS.** All bearings 7-9-6.  
 (lb) - Max Horz 1=161(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 6 except 7=176(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 6 except 7=365(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-297/266  
 WEBS 2-7=-404/348

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 6-2-0, Exterior(2) 6-2-0 to 7-6-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Gable requires continuous bottom chord bearing.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 6 except (jt=lb) 7=176.



August 23, 2024

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818 Soundside Road  
 Edenton, NC 27932

Job J0824-4611	Truss VD5	Truss Type VALLEY	Qty 1	Ply 1	GMC/Lot 5 River Rd./Wake I67769345
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Comtech, Inc. Fayetteville, NC - 28314,

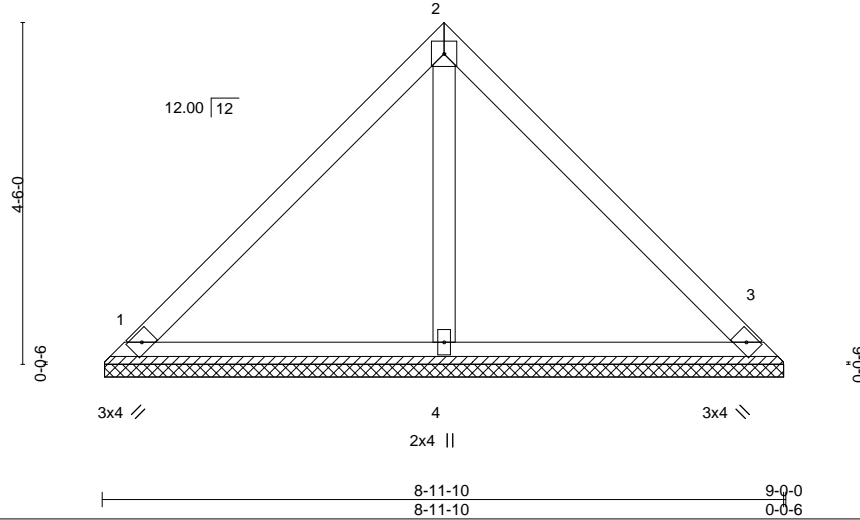
8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 23 10:36:17 2024 Page 1

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4x4 =

Scale = 1:30.3



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.30	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.13	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P						Weight: 37 lb	FT = 20%

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

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

**REACTIONS.** (size) 1=8-11-4, 3=8-11-4, 4=8-11-4  
 Max Horz 1=99(LC 8)  
 Max Uplift 1=36(LC 13), 3=36(LC 13)  
 Max Grav 1=202(LC 1), 3=202(LC 1), 4=260(LC 1)

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

**NOTES-**

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



August 23, 2024

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

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818 Soundside Road  
 Edenton, NC 27932

Job J0824-4611	Truss VD6	Truss Type VALLEY	Qty 1	Ply 1	GMC/Lot 5 River Rd./Wake 167769346
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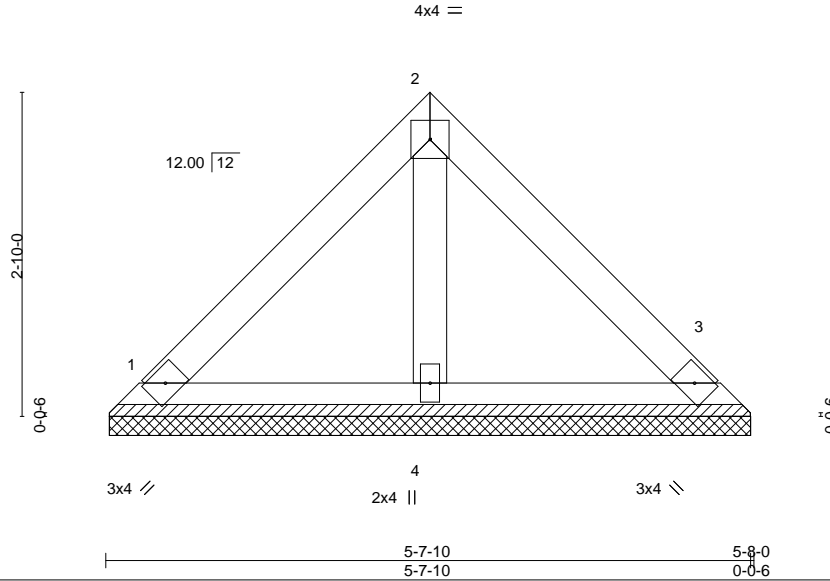
Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 23 10:36:17 2024 Page 1

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Scale = 1:20.1



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.10	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.01	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P					Weight: 22 lb	FT = 20%

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

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

**REACTIONS.** (size) 1=5-7-4, 3=5-7-4, 4=5-7-4  
Max Horz 1=59(LC 10)  
Max Uplift 1=22(LC 13), 3=22(LC 13)  
Max Grav 1=121(LC 1), 3=121(LC 1), 4=155(LC 1)

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

**NOTES-**

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



August 23, 2024

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

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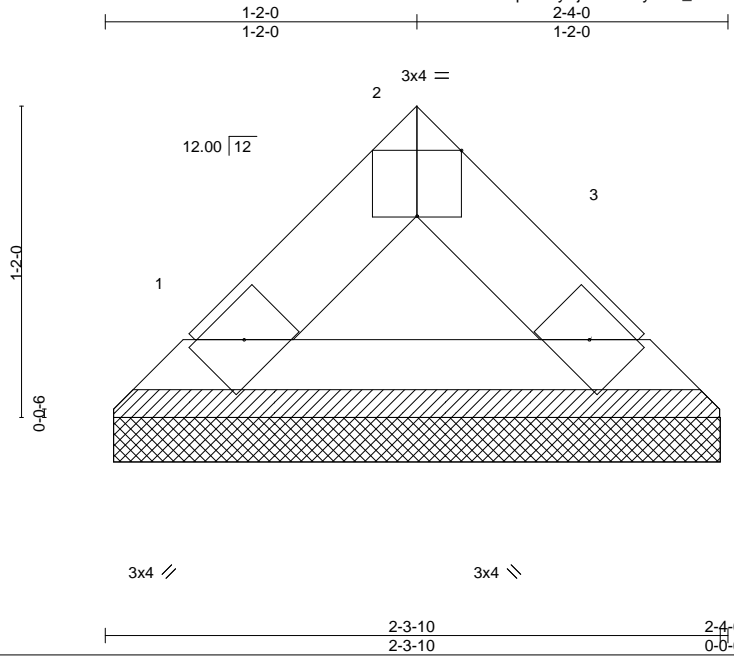
818 Soundside Road  
Edenton, NC 27932

Job J0824-4611	Truss VD7	Truss Type VALLEY	Qty 1	Ply 1	GMC/Lot 5 River Rd./Wake 167769347
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Comtech, Inc, Fayetteville, NC - 28314,

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 23 10:36:18 2024 Page 1

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Scale = 1:8.6

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

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

**REACTIONS.** (size) 1=2-3-4, 3=2-3-4  
 Max Horz 1=-20(LC 8)  
 Max Uplift 1=-2(LC 12), 3=-2(LC 12)  
 Max Grav 1=65(LC 1), 3=65(LC 1)

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

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

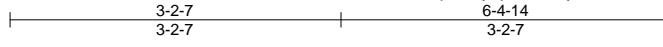


Job J0824-4611	Truss VG1	Truss Type VALLEY	Qty 1	Ply 1	GMC/Lot 5 River Rd./Wake 167769348
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Comtech, Inc. Fayetteville, NC - 28314,

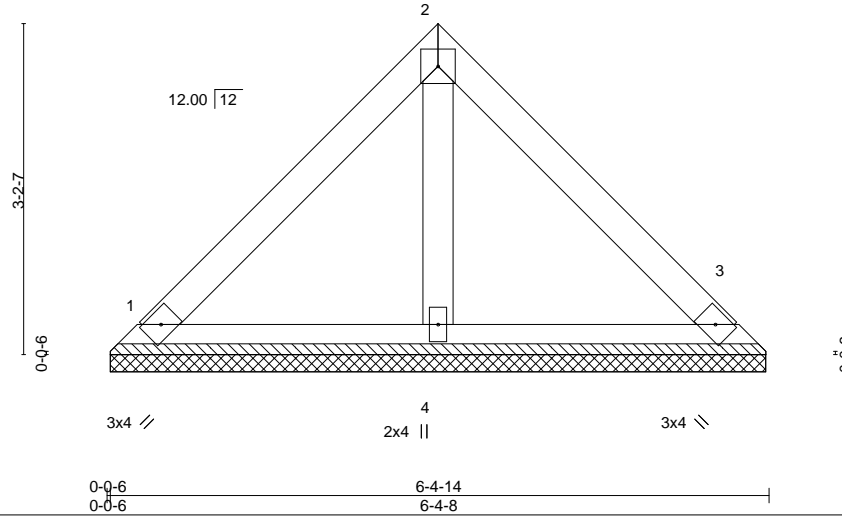
8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 23 10:36:18 2024 Page 1

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4x4 =

Scale = 1:22.3



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Strz Incr	YES	WB 0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P						Weight: 25 lb	FT = 20%

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

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

**REACTIONS.** (size) 1=6-4-2, 3=6-4-2, 4=6-4-2  
Max Horz 1=68(LC 10)  
Max Uplift 1=25(LC 13), 3=25(LC 13)  
Max Grav 1=139(LC 1), 3=139(LC 1), 4=178(LC 1)

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

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



August 23, 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))



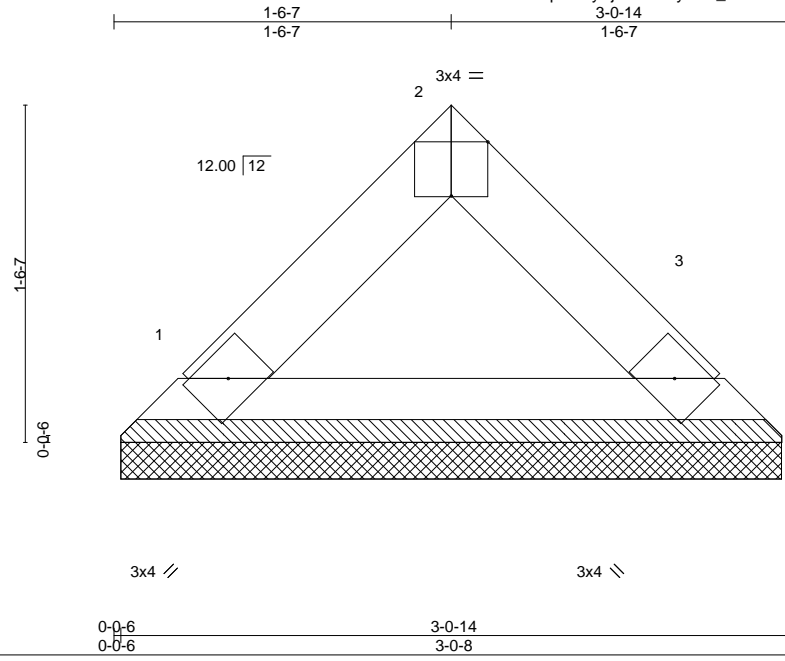
818 Soundside Road  
Edenton, NC 27932

Job J0824-4611	Truss VG2	Truss Type VALLEY	Qty 1	Ply 1	GMC/Lot 5 River Rd./Wake I67769349
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Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 23 10:36:19 2024 Page 1

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Scale = 1:10.5

Plate Offsets (X,Y)-- [2:0-2-0,Edge]		CSI.		DEFL.				PLATES	GRIP
LOADING (psf)	SPACING-	2-0-0	TC	in	(loc)	l/defl	L/d	MT20	244/190
TCLL 20.0	Plate Grip DOL	1.15	BC	n/a	-	n/a	999		
TCDL 10.0	Lumber DOL	1.15	WB	Vert(LL)	n/a	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	Matrix-P	Vert(CT)	n/a	n/a	999		
BCDL 10.0	Code	IRC2015/TPI2014		Horz(CT)	0.00	3	n/a		
								Weight: 10 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 3-0-14 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=3-0-2, 3=3-0-2  
Max Horz 1=-28(LC 8)  
Max Uplift 1=-3(LC 13), 3=-3(LC 13)  
Max Grav 1=95(LC 1), 3=95(LC 1)

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

**NOTES-**

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



August 23, 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)

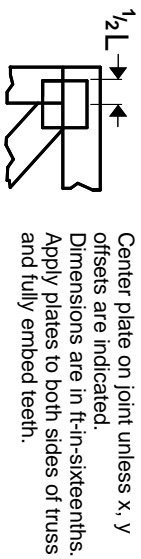


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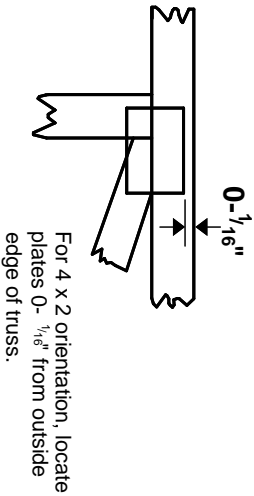


# Symbols

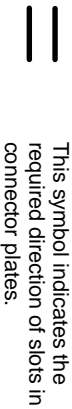
## PLATE LOCATION AND ORIENTATION



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



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



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

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

## PLATE SIZE

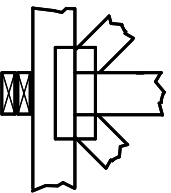
**4 X 4**  
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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

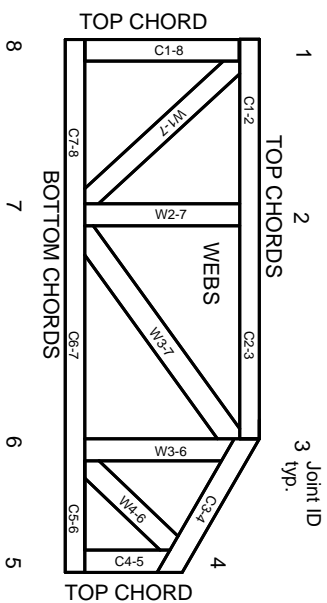


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

## 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.

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**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.