

Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: B0419-1688  
Jordan C

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: E12889258 thru E12889293

My license renewal date for the state of North Carolina is December 31, 2019.

North Carolina COA: C-0844



April 5, 2019

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Gilbert, Eric

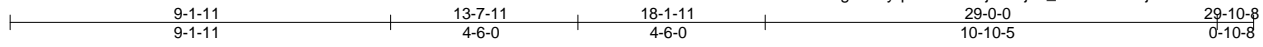
**IMPORTANT NOTE:** Truss Engineer's responsibility is solely for design of individual trusses based upon design parameters shown on referenced truss drawings. Parameters have not been verified as appropriate for any use. Any location identification specified is for file reference only and has not been used in preparing design. Suitability of truss designs for any particular building is the responsibility of the building designer, not the Truss Engineer, per ANSI/TPI-1, Chapter 2.

Job B0419-1688	Truss A1	Truss Type GABLE	Qty 1	Ply 1	Jordan C	E12889258
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Apr 5 14:58:48 2019 Page 1

ID:3B2liU9aTYR6OtFvgEVAlyq8tk-4KwBojWuFj4u\_YZOhSPI6ZjMuihaHhWdWv44mVzTkk5



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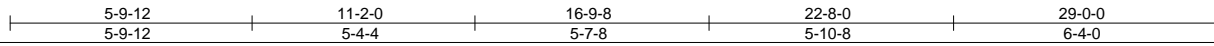
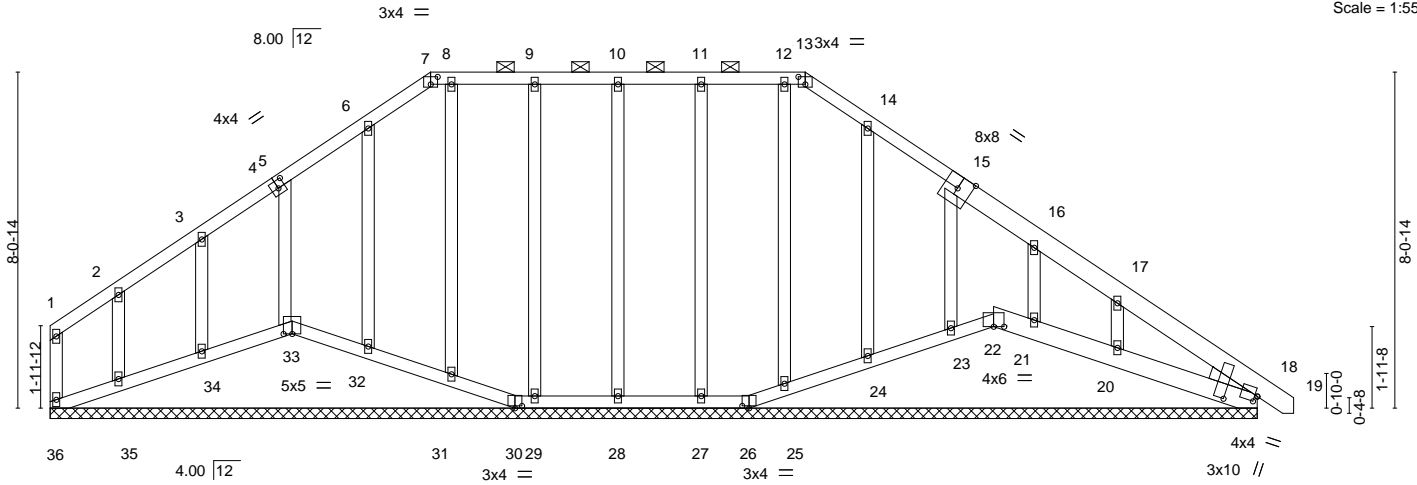


Plate Offsets (X,Y)-- [4:0-0-0,0-1-12], [4:0-2-0,0-2-4], [5:0-2-2,0-0-0], [7:0-2-0,0-2-3], [13:0-2-0,0-2-3], [18:0-3-11,0-9-1], [18:0-0-12,0-1-12], [22:0-3-0,0-0-0], [26:0-2-0,0-0-11], [30:0-2-0,0-0-11], [33:0-2-8,0-0-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0 Plate Grip DOL 1.15	TC 0.07	Vert(LL) 0.00	18	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.04	Vert(CT) 0.00	19	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.17	Horz(CT) 0.01	18	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 208 lb	FT = 20%

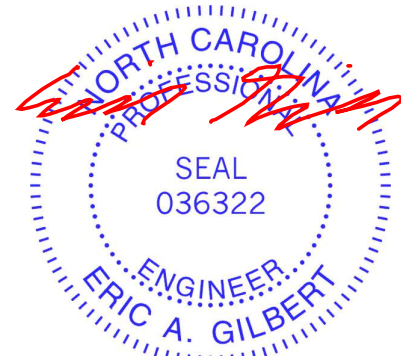
**LUMBER-**  
TOP CHORD 2x4 SP No.1 \*Except\*  
15-19: 2x6 SP No.1  
BOT CHORD 2x4 SP No.1 \*Except\*  
18-22: 2x6 SP No.1  
WEBS 2x4 SP No.3  
OTHERS 2x4 SP No.3  
WEDGE  
Right: 2x4 SP No.3

**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.): 7-13.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS.** All bearings 29-0-0.  
(lb) - Max Horz 36=-229(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 36, 30, 26, 22, 18, 28, 29, 31, 32, 34, 27, 25, 24, 21 except 33=-149(LC 9), 35=-128(LC 12), 23=-104(LC 13), 20=-177(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 36, 30, 26, 22, 18, 28, 29, 31, 32, 34, 35, 27, 25, 24, 23, 21 except 33=267(LC 19), 20=314(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 6-7=-230/269, 13-14=-231/278, 14-15=-190/261, 7-8=-207/253, 8-9=-207/253, 9-10=-207/253, 10-11=-207/253, 11-12=-207/253, 12-13=-207/253

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-1-12 to 4-6-9, Exterior(2) 4-6-9 to 9-1-11, Corner(3) 9-1-11 to 22-6-8, Exterior(2) 22-6-8 to 29-8-15 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - Provide adequate drainage to prevent water ponding.
  - 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 with a clearance greater than 6-0-0 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) 36, 30, 26, 22, 18, 28, 29, 31, 32, 34, 27, 25, 24, 21 except (jt=lb) 33=149, 35=128, 23=104, 20=177.
  - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 33, 22, 31, 32, 34, 35, 25, 24, 23, 21, 20.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 5, 2019

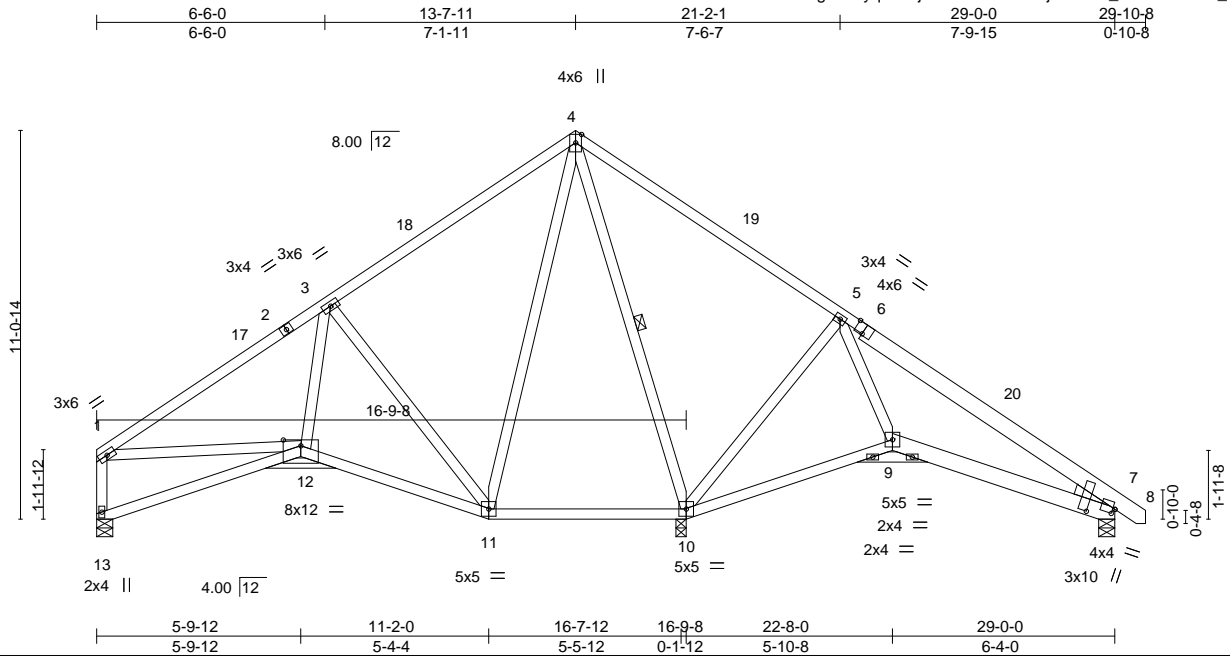
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**  
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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

Job B0419-1688	Truss A2	Truss Type ROOF SPECIAL	Qty 4	Ply 1	Jordan C	E12889259
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Apr 5 14:58:50 2019 Page 1  
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Scale = 1:65.6

Plate Offsets (X,Y)--	[6:0-3-0,Edge], [7:0-3-11,0-9-1], [7:0-0-12,0-1-12], [12:0-6-0,0-2-0], [16:0-5-4,0-1-12]
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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 0.56	Vert(LL)	-0.11	10-11	>999	360	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.42	Vert(CT)	-0.15	10-11	>999	240	
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.81	Horz(CT)	0.03	7	n/a	n/a	
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.02	12	>999	240	
								Weight: 197 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.1 *Except* 6-8: 2x6 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 *Except* 7-9: 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 4-11,4-10: 2x4 SP No.2	WEBS 1 Row at midpt 4-10
WEDGE Right: 2x4 SP No.3	

**REACTIONS.** (lb/size) 13=538/0-5-8, 10=1448/0-3-8, 7=362/0-5-8  
 Max Horz 13=-257(LC 8)  
 Max Uplift 13=-37(LC 12), 10=-36(LC 12), 7=-63(LC 13)  
 Max Grav 13=569(LC 23), 10=1530(LC 19), 7=387(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-3=-786/145, 3-4=-341/240, 4-5=0/429, 5-7=-382/36, 1-13=-556/153  
 BOT CHORD 12-13=-246/309, 11-12=-209/744  
 WEBS 3-12=-65/408, 3-11=-730/218, 4-11=-113/605, 4-10=-1037/105, 5-10=-597/235,  
 5-9=0/302, 1-12=-10/510

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 13-7-11, Exterior(2) 13-7-11 to 18-0-8 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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
  - 5) Bearing at joint(s) 13, 7 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) 13, 10, 7.



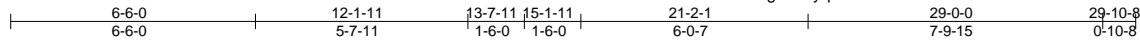
April 5, 2019

Job B0419-1688	Truss A2C	Truss Type ROOF SPECIAL	Qty 1	Ply 1	Jordan C	E12889260
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Apr 5 14:58:51 2019 Page 1

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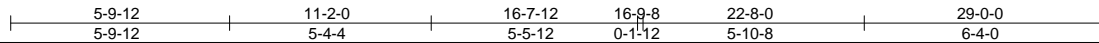
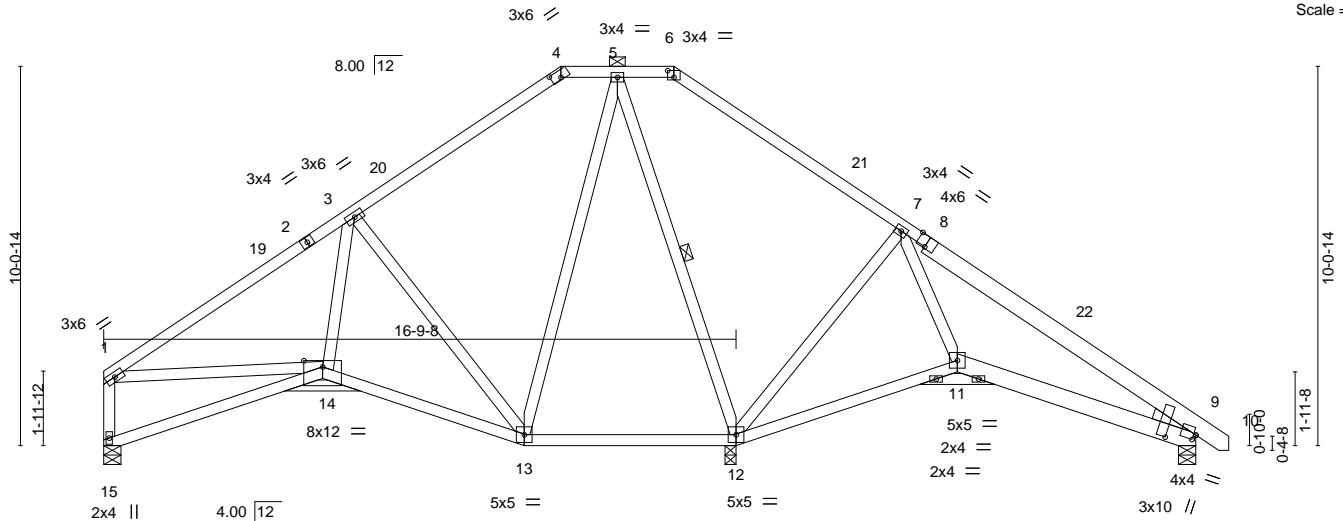


Plate Offsets (X,Y)-- [4:0-3-0,0-2-3], [6:0-2-0,0-2-3], [8:0-3-0,Edge], [9:0-3-11,0-9-1], [9:0-0-12,0-1-12], [14:0-6-0,0-2-0], [18:0-5-4,0-1-12]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.52	Vert(LL)	-0.12	12-13	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.43	Vert(CT)	-0.16	12-13	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.77	Horz(CT)	0.06	9	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.03	13-14	>999		
								Weight: 193 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.1 \*Except\*  
8-10: 2x6 SP No.1  
BOT CHORD 2x4 SP No.1 \*Except\*  
9-11: 2x6 SP No.1  
WEBS 2x4 SP No.3  
WEDGE  
Right: 2x4 SP No.3

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-6-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-6.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 5-12

**REACTIONS.**

(lb/size) 15=708/0-5-8, 12=1043/0-3-8, 9=598/0-5-8  
Max Horz 15=-234(LC 8)  
Max Uplift 15=-37(LC 12), 12=-23(LC 12), 9=-87(LC 13)  
Max Grav 15=708(LC 1), 12=1168(LC 19), 9=618(LC 24)

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

TOP CHORD 1-3=-994/227, 3-4=-505/298, 7-9=-1045/195, 1-15=-686/206, 4-5=-456/295, 5-6=-213/266  
BOT CHORD 14-15=-216/292, 13-14=-157/892, 12-13=-32/292, 11-12=-53/565, 9-11=-42/800  
WEBS 3-14=-41/455, 3-13=-696/195, 5-13=-89/529, 5-12=-673/86, 7-12=-704/260, 7-11=0/592, 1-14=-48/664

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 12-1-11, Exterior(2) 12-1-11 to 15-1-11, Interior(1) 19-6-8 to 29-8-15 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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
- Bearing at joint(s) 15, 9 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) 15, 12, 9.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 5, 2019

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

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



818 Soundside Road  
Edenton, NC 27932

Job B0419-1688	Truss A3	Truss Type ROOF SPECIAL	Qty 1	Ply 1	Jordan C	E12889261
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Apr 5 14:58:52 2019 Page 1

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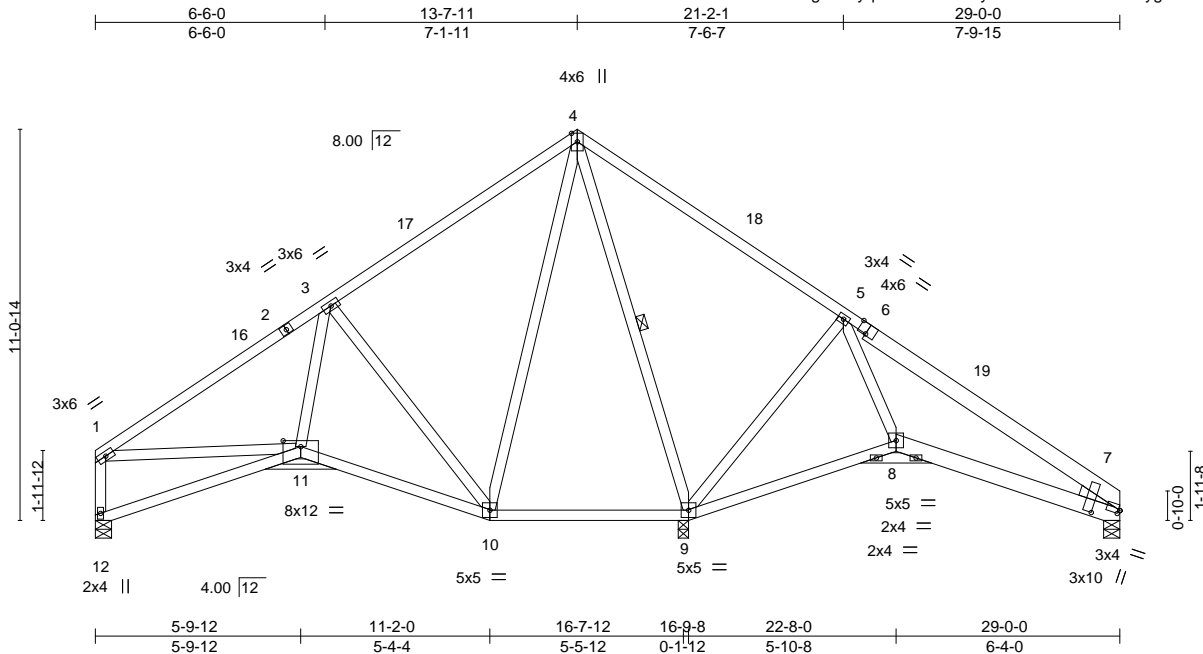


Plate Offsets (X,Y)--	[6:0-3-0,Edge], [7:0-3-11,0-9-1], [7:0-0-9,0-1-4], [11:0-6-0,0-2-0], [15:0-5-4,0-1-12]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.56	Vert(LL)	-0.11	9-10	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.42	Vert(CT)	-0.15	9-10	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.81	Horz(CT)	0.03	7	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.02	11	>999		
								Weight: 194 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.1 *Except* 6-7: 2x6 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 *Except* 7-8: 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 4-10,4-9: 2x4 SP No.2	WEBS 1 Row at midpt 4-9
WEDGE Right: 2x4 SP No.3	

**REACTIONS.** (lb/size) 12=538/0-5-8, 9=1451/0-3-8, 7=301/0-5-8  
 Max Horz 12=-255(LC 8)  
 Max Uplift 12=-37(LC 12), 9=-36(LC 12), 7=-50(LC 13)  
 Max Grav 12=568(LC 23), 9=1533(LC 19), 7=327(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-3=-798/144, 3-4=-340/240, 4-5=0/430, 5-7=-383/42, 1-12=-559/153  
 BOT CHORD 11-12=-247/308, 10-11=-210/739  
 WEBS 3-11=-70/415, 3-10=-726/220, 4-10=-113/606, 4-9=-1038/104, 5-9=-597/239, 5-8=0/302, 1-11=-8/521

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 13-7-11, Exterior(2) 13-7-11 to 18-0-8 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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
  - 5) Bearing at joint(s) 12, 7 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) 12, 9, 7.



April 5, 2019

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

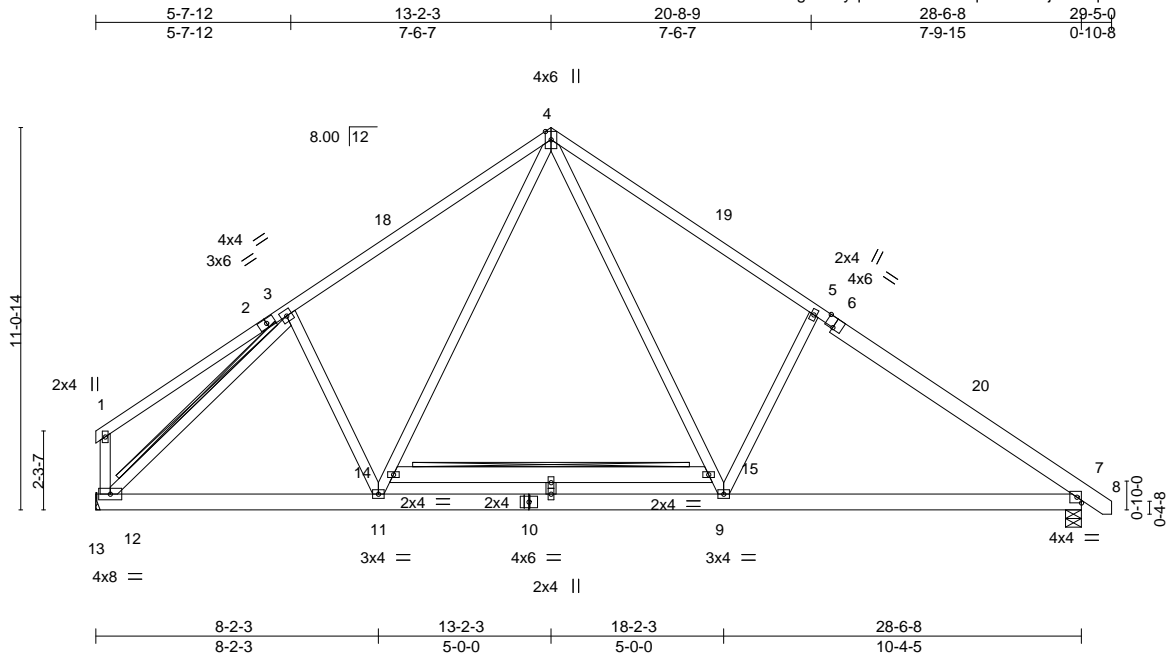




Job B0419-1688	Truss A5	Truss Type COMMON	Qty 1	Ply 1	Jordan C	E12889263
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Apr 5 14:58:54 2019 Page 1  
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Scale = 1:66.7

Plate Offsets (X,Y)--	[6:0-3-0,Edge]				
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSL</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.85	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.41	Vert(LL) -0.07 7-9 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.79	Vert(CT) -0.16 7-9 >999 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.03 7 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.04 9 >999 240		
				Weight: 215 lb	FT = 20%

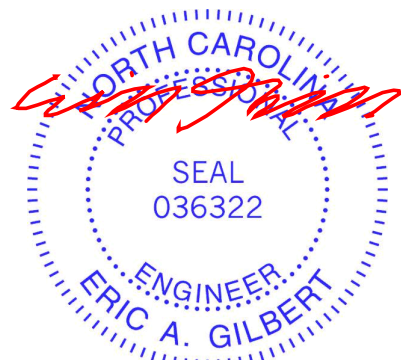
<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.1 *Except* 6-8: 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied, except end verticals. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
BOT CHORD 2x6 SP No.1	WEBS T-Brace: 2x4 SPF No.2 - 3-12, 14-15
WEBS 2x4 SP No.3 *Except* 4-11,4-9: 2x4 SP No.2, 14-15: 2x6 SP No.1	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.** (lb/size) 12=1432/Mechanical, 7=1442/0-5-8  
Max Horz 12=-256(LC 8)  
Max Uplift 12=-79(LC 12), 7=-101(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 3-4=-1608/502, 4-5=-1809/527, 5-7=-1952/438  
BOT CHORD 11-12=-153/1269, 9-11=-46/1150, 7-9=-221/1497  
WEBS 11-14=-80/286, 4-14=-155/606, 4-15=-228/994, 9-15=-144/672, 5-9=-432/286,  
3-12=-1646/322

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) 0-3-4 to 4-8-1, Interior(1) 4-8-1 to 13-2-3, Exterior(2) 13-2-3 to 17-7-0 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12 except (jt=lb) 7=101.
  - Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

**LOAD CASE(S)** Standard  
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-4=-60, 4-8=-60, 7-13=-20, 14-15=-60



April 5, 2019



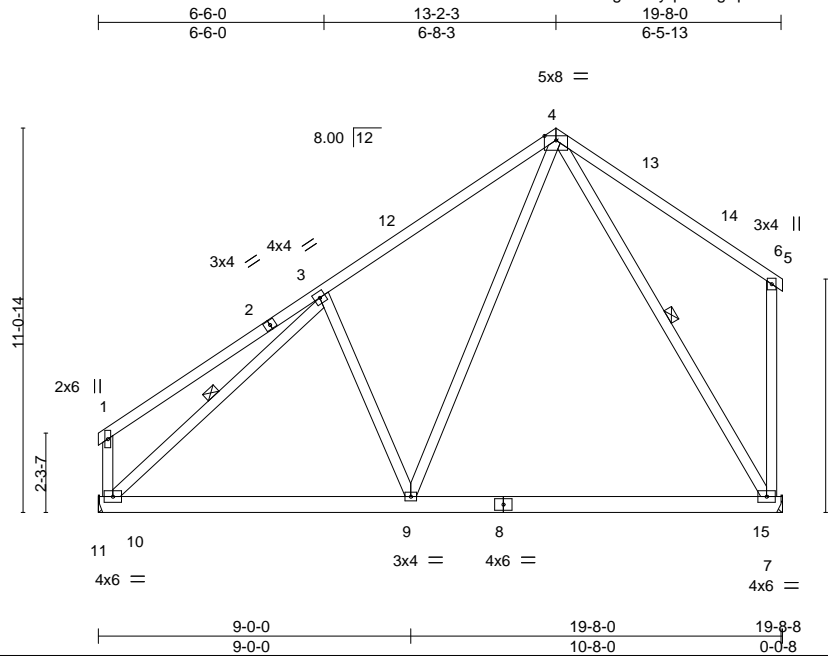


Job B0419-1688	Truss A7	Truss Type COMMON	Qty 4	Ply 1	Jordan C	E12889265
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Apr 5 14:58:55 2019 Page 1

ID:3B2lllU9aTYR6OtFvgEVAlyq8tk-NgrqG6cHbtzuJdckbQ1Ov2WQnXwpQMhE7UHxVbzTkK\_



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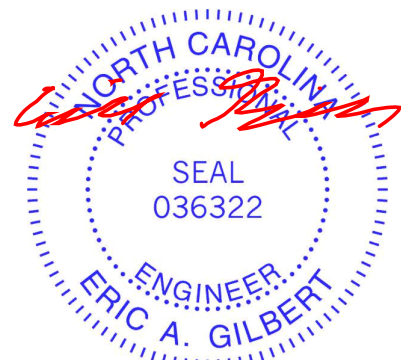
LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.61	Vert(LL) -0.30	7-9	>759	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.65	Vert(CT) -0.39	7-9	>595	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.49	Horz(CT) 0.01	7	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.01	9	>999	240		
							Weight: 149 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 4-9,4-7: 2x4 SP No.2	WEBS 1 Row at midpt 3-10, 4-7

**REACTIONS.** (lb/size) 10=770/Mechanical, 7=784/Mechanical  
 Max Horz 10=198(LC 9)  
 Max Uplift 10=-13(LC 12), 7=-74(LC 12)  
 Max Grav 10=843(LC 19), 7=1064(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 3-4=-865/264, 5-7=-254/183  
 BOT CHORD 9-10=-199/778, 7-9=-59/396  
 WEBS 3-9=-341/267, 4-9=-110/796, 3-10=-893/43, 4-7=-733/98

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) 0-3-4 to 4-8-1, Interior(1) 4-8-1 to 13-2-3, Exterior(2) 13-2-3 to 17-7-0 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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 7.

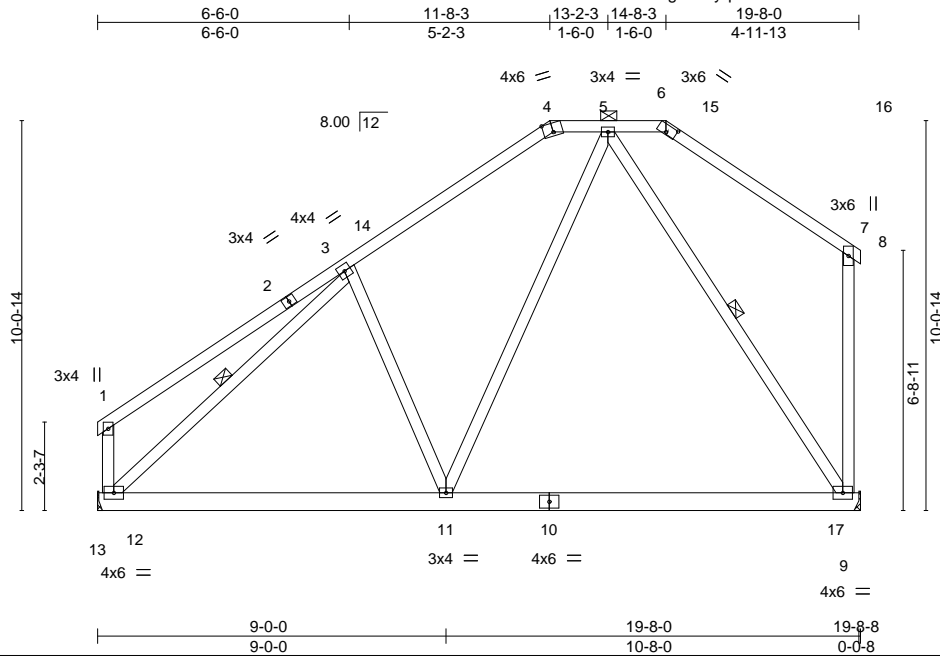


April 5, 2019

Job B0419-1688	Truss A7C	Truss Type COMMON	Qty 1	Ply 1	Jordan C	E12889266
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Apr 5 14:58:56 2019 Page 1  
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Scale = 1:59.5

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

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.74	Vert(LL) -0.32	9-11	>715	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.65	Vert(CT) -0.42	9-11	>543	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.38	Horz(CT) 0.01	9	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.04	11	>999	240		
							Weight: 146 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.3 \*Except\*  
 5-11,5-9: 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-6.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 3-12, 5-9

**REACTIONS.**

(lb/size) 12=770/Mechanical, 9=784/Mechanical  
 Max Horz 12=181(LC 12)  
 Max Uplift 12=-13(LC 12), 9=-57(LC 12)  
 Max Grav 12=836(LC 19), 9=1024(LC 19)

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

TOP CHORD 3-4=-810/250, 1-12=-275/170, 7-9=-268/167, 4-5=-641/265  
 BOT CHORD 11-12=-203/723, 9-11=-85/387  
 WEBS 3-11=-265/233, 5-11=-74/702, 3-12=-798/41, 5-9=-645/141

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) 0-3-4 to 4-8-1, Interior(1) 4-8-1 to 11-8-11, Exterior(2) 11-8-11 to 14-8-3, Interior(1) 19-1-0 to 19-8-8 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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 9.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 5, 2019

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

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



818 Soundside Road  
 Edenton, NC 27932

Job B0419-1688	Truss A8	Truss Type GABLE	Qty 1	Ply 1	Jordan C	E12889267
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Apr 5 14:58:58 2019 Page 1  
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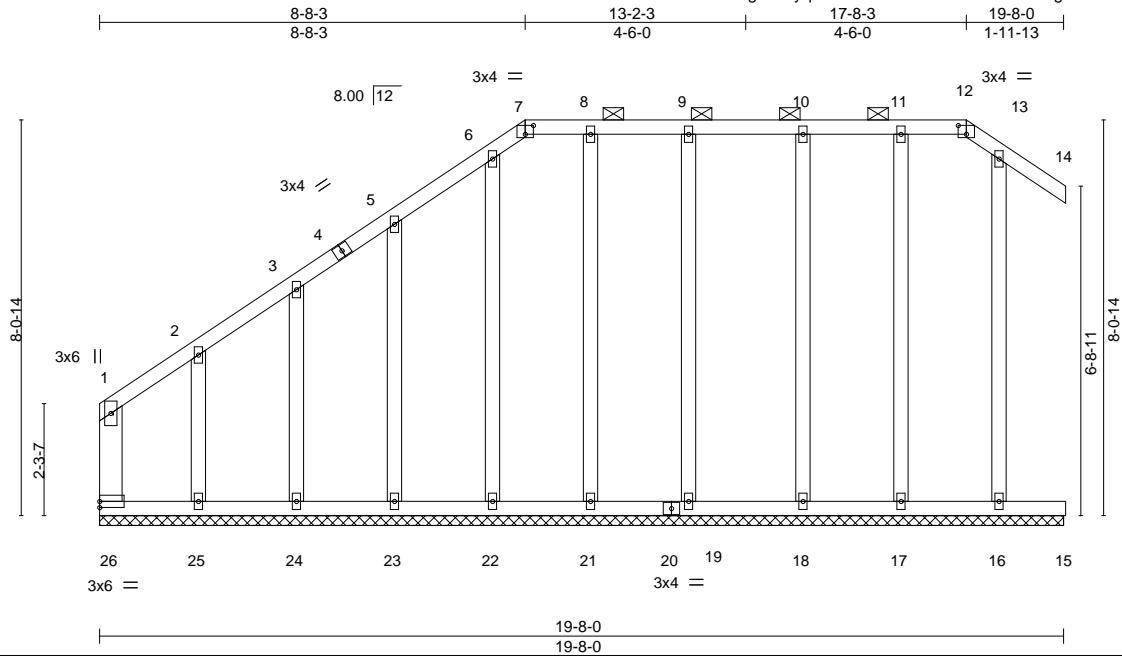


Plate Offsets (X,Y)-- [7:0-2-0,0-2-3], [12:0-2-0,0-2-3]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.28	Vert(LL)	-0.01 13-14	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.33	Vert(CT)	-0.01 13-14	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.17	Horz(CT)	0.00	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S						
							Weight: 152 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP No.1  
 WEBS 2x6 SP No.1  
 OTHERS 2x4 SP No.3

**BRACING-**  
 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.): 7-12.  
 BOT CHORD Rigid ceiling directly applied or 10'-0-0 oc bracing.

**REACTIONS.** All bearings 19-8-0.  
 (lb) - Max Horz 26=235(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 19, 21, 22, 18, 17, 16 except 26=-211(LC 10), 23=-115(LC 12), 25=-510(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 21, 23, 24, 17, 16 except 26=471(LC 12), 19=255(LC 26), 22=263(LC 19), 25=349(LC 10), 18=259(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-26=-272/237, 1-2=-346/332  
 WEBS 2-25=-324/301

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-2-12 to 4-7-9, Exterior(2) 4-7-9 to 8-8-3, Corner(3) 8-8-3 to 19-8-8 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.
  - Provide adequate drainage to prevent water ponding.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - 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 with a clearance greater than 6'-0-0 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) 19, 21, 22, 18, 17, 16 except (jt=lb) 26=211, 23=115, 25=510.
  - Non Standard bearing condition. Review required.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 5, 2019

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ENGINEERING BY  
**TRENCO**  
 A MiTek Affiliate

818 Soundside Road  
 Edenton, NC 27932

Job B0419-1688	Truss B1	Truss Type ATTIC	Qty 1	Ply 1	Jordan C	E12889268
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Apr 5 14:58:59 2019 Page 1

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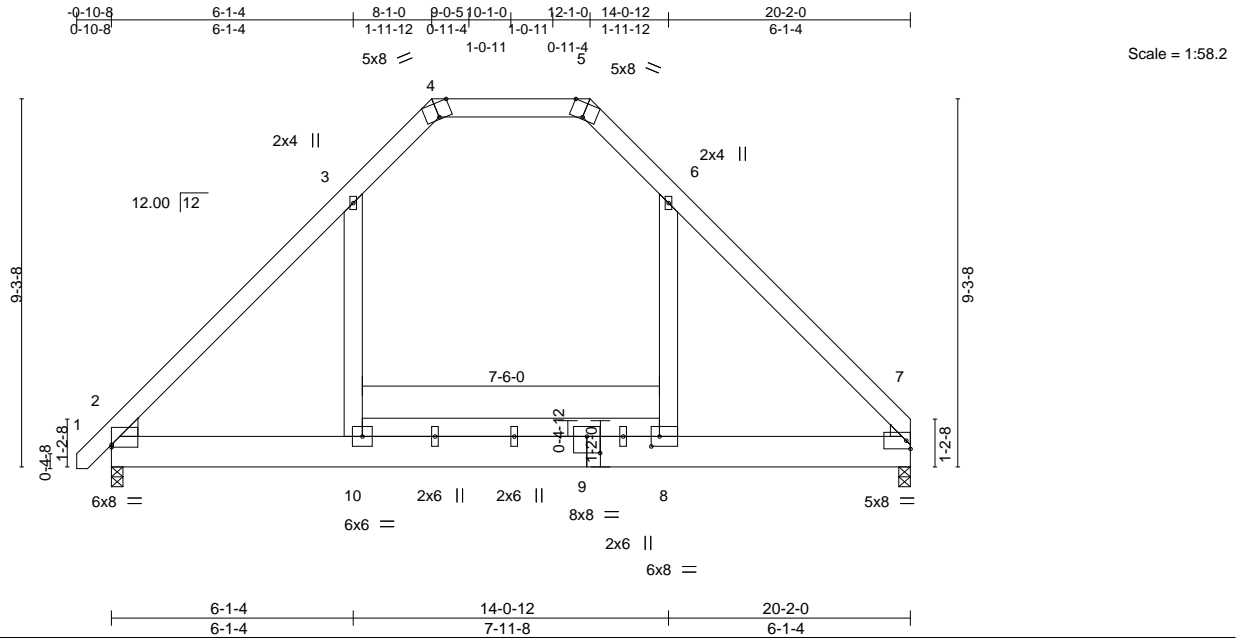


Plate Offsets (X,Y)-- [2:0-0-0,0-0-12], [4:0-4-0,Edge], [5:0-4-0,Edge], [8:0-2-8,0-3-0], [9:0-4-0,0-5-0]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.67	Vert(LL)	-0.13	8-10	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.46	Vert(CT)	-0.26	8-10	>909		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.08	Horz(CT)	0.01	7	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.13	8-10	>999		
								Weight: 194 lb	FT = 20%

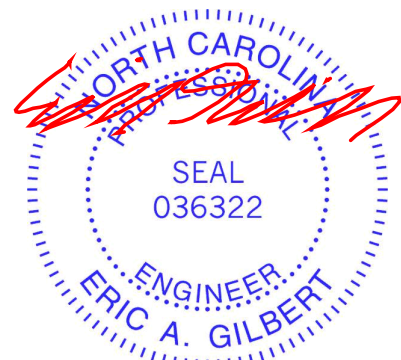
**LUMBER-**  
TOP CHORD 2x6 SP No.1  
BOT CHORD 2x10 SP No.1  
WEBS 2x6 SP No.1  
WEDGE  
Left: 2x6 SP No.2, Right: 2x4 SP No.3

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

**REACTIONS.** (lb/size) 2=1074/0-3-8, 7=1019/0-3-8  
Max Horz 2=265(LC 9)  
Max Grav 2=1205(LC 2), 7=1159(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1391/0, 3-4=-724/164, 5-6=-732/171, 6-7=-1366/0, 4-5=-751/191  
BOT CHORD 2-10=0/808, 8-10=0/808, 7-8=0/808  
WEBS 3-10=-8/633, 6-8=-17/586

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-8-14 to 3-7-15, Exterior(2) 3-7-15 to 8-2-3, Corner(3) 8-2-3 to 11-11-13, Exterior(2) 16-4-10 to 20-0-4 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - 6) Ceiling dead load (10.0 psf) on member(s). 3-4, 5-6, 4-5; Wall dead load (5.0psf) on member(s).3-10, 6-8
  - 7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 8-10
  - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 9) Attic room checked for L/360 deflection.



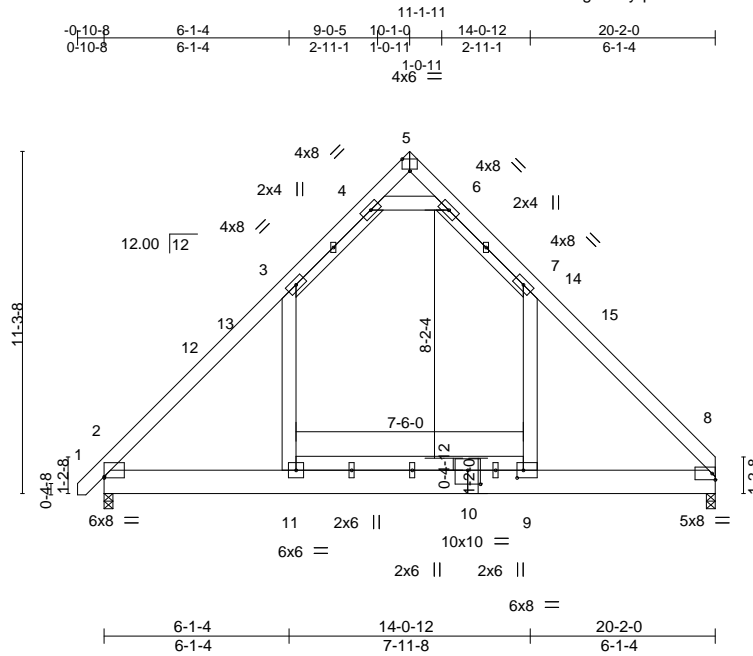
April 5, 2019

Job B0419-1688	Truss B2	Truss Type ATTIC	Qty 2	Ply 1	Jordan C	E12889269
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Apr 5 14:58:59 2019 Page 1

ID:3B2llIU9aTYR6OIFvgEVAlyq8tk-GR5L5Tfof6TKoFvVqG6K3ug388KoMG\_q26F9dMzTKJw



Scale = 1:76.0

Plate Offsets (X,Y)-- [2:0-0-0,0-0-8], [5:0-3-0,Edge], [9:0-2-8,0-3-0], [10:0-5-0,0-5-8]

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 0.77	Vert(LL)	-0.13	9-11	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.45	Vert(CT)	-0.25	9-11	>948		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.08	Horz(CT)	0.01	8	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S	Wind(LL)	0.09	9-11	>999		
								Weight: 215 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x10 SP No.1  
 WEBS 2x6 SP No.1 \*Except\*  
 3-4,6-7: 2x4 SP No.3

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-6-9 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

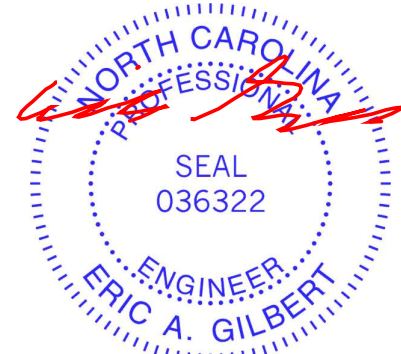
(lb/size) 2=1074/0-3-8, 8=1019/0-3-8  
 Max Horz 2=258(LC 9)  
 Max Grav 2=1224(LC 20), 8=1184(LC 20)

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

TOP CHORD 2-3=-1484/0, 3-4=-774/140, 4-5=-127/630, 5-6=-113/624, 6-7=-783/149, 7-8=-1459/0  
 BOT CHORD 2-11=0/865, 9-11=0/865, 8-9=0/865  
 WEBS 4-6=-1672/365, 3-11=0/620, 7-9=-0/574

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-14 to 3-7-15, Interior(1) 3-7-15 to 10-1-0, Exterior(2) 10-1-0 to 14-5-13 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 5) Ceiling dead load (10.0 psf) on member(s). 3-4, 6-7, 4-6; Wall dead load (5.0psf) on member(s).3-11, 7-9
- 6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 9-11
- 7) Attic room checked for L/360 deflection.



April 5, 2019

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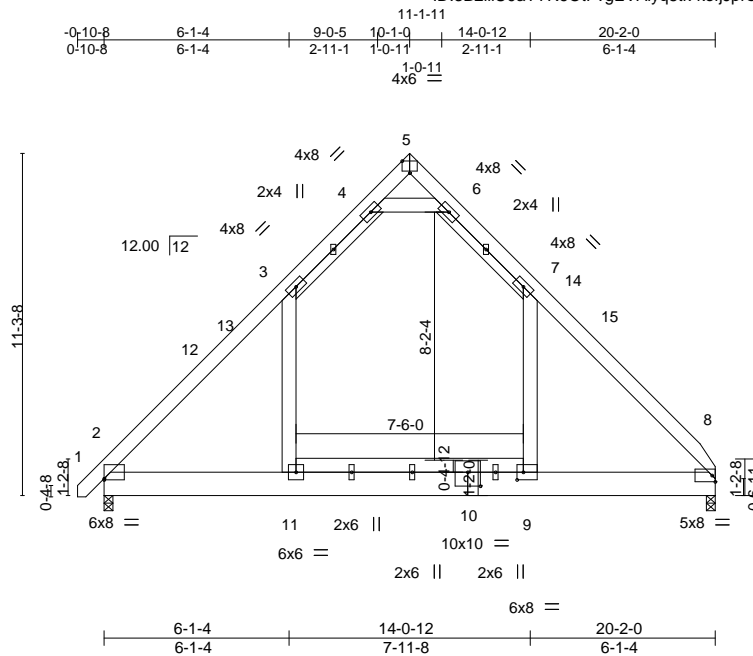
818 Soundside Road  
 Edenton, NC 27932



Job B0419-1688	Truss B3	Truss Type ATTIC	Qty 2	Ply 1	Jordan C	E12889270
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Apr 5 14:59:00 2019 Page 1  
ID:3B2lliU9aTYR6OtFvgEVAlyq8tk-kefJpQQPbBQPUIOzdZc5DEuYg15jE\_Hm\_iApzTkJv



Scale = 1:76.0

Plate Offsets (X,Y)-- [2:0-0-0,0-0-8], [5:0-3-0,Edge], [9:0-2-8,0-3-0], [10:0-5-0,0-5-8]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.77	Vert(LL) -0.13	9-11	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.45	Vert(CT) -0.25	9-11	>948	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.08	Horz(CT) 0.01	8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.09	9-11	>999	240		
							Weight: 215 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
BOT CHORD 2x10 SP No.1  
WEBS 2x6 SP No.1 \*Except\*  
3-4,6-7: 2x4 SP No.3

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-6-9 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

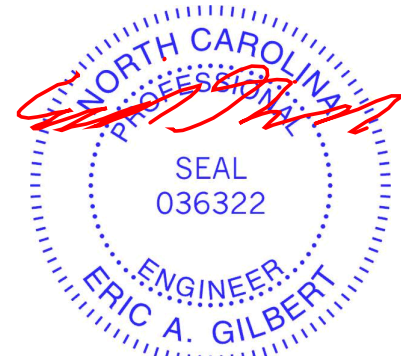
(lb/size) 2=1074/0-3-8, 8=1019/0-3-8  
Max Horz 2=258(LC 11)  
Max Grav 2=1224(LC 20), 8=1184(LC 20)

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

TOP CHORD 2-3=-1484/0, 3-4=-774/140, 4-5=-127/630, 5-6=-113/624, 6-7=-783/149, 7-8=-1459/0  
BOT CHORD 2-11=0/865, 9-11=0/865, 8-9=0/865  
WEBS 4-6=-1672/365, 3-11=0/620, 7-9=-0/574

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-14 to 3-7-15, Interior(1) 3-7-15 to 10-1-0, Exterior(2) 10-1-0 to 14-5-13 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 5) Ceiling dead load (10.0 psf) on member(s). 3-4, 6-7, 4-6; Wall dead load (5.0psf) on member(s).3-11, 7-9
- 6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 9-11
- 7) Attic room checked for L/360 deflection.



April 5, 2019

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

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818 Soundside Road  
Edenton, NC 27932

Job B0419-1688	Truss C1	Truss Type GABLE	Qty 1	Ply 1	Jordan C	E12889271
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Apr 5 14:59:01 2019 Page 1

ID:3B2lliU9aTYR6OtFvgEVAlyq8tk-CqC5W9g2Bij22Y3uxh8o8Jlb3y7uqAh7VQkGfZTkJu

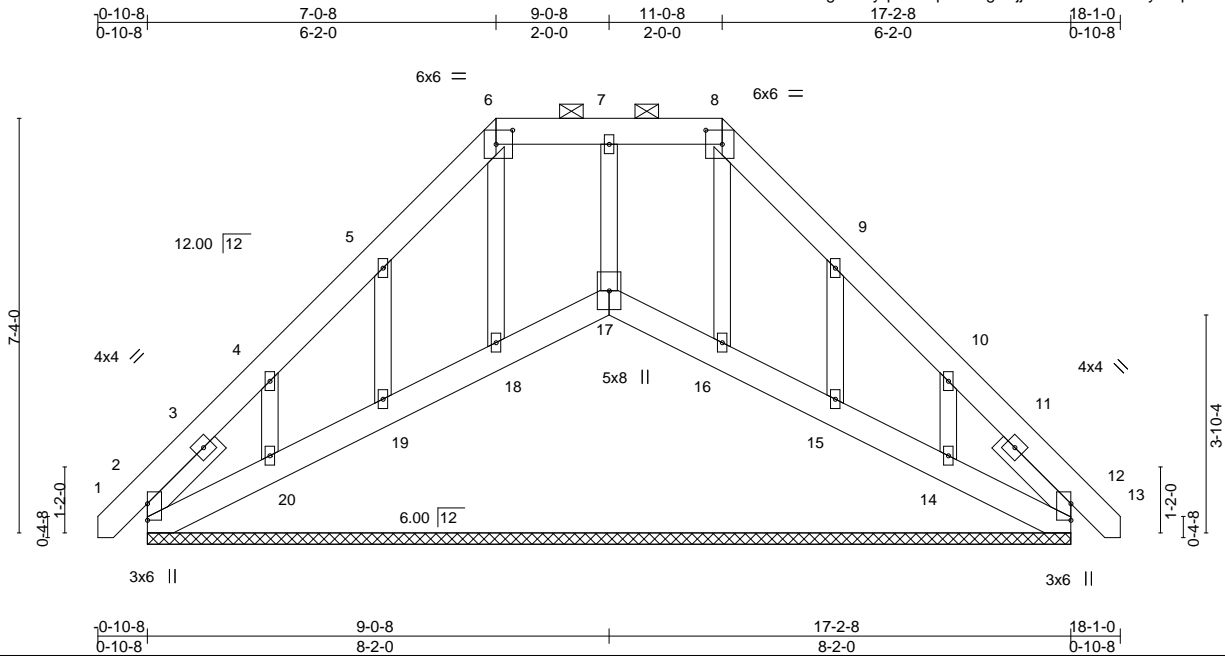


Plate Offsets (X,Y)--	[6:0-3-8,0-3-0], [8:0-3-8,0-3-0]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.04	Vert(LL)	-0.00	12	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	12	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.00	12	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 132 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
BOT CHORD 2x6 SP No.1	2-0-0 oc purlins (6-0-0 max.): 6-8.
OTHERS 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
SLIDER Left 2x4 SP No.3 1-10-3, Right 2x4 SP No.3 1-10-3	

**REACTIONS.** All bearings 16-4-0.  
 (lb) - Max Horz 2=208(LC 11)  
 Max Uplift All uplift 100 lb or less at joint(s) 12, 18 except 2=184(LC 8), 17=-105(LC 9), 19=-125(LC 12), 20=-239(LC 12), 15=-127(LC 13), 14=-219(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 17, 12, 18, 19, 20, 16, 15, 14 except 2=262(LC 20)

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-8-14 to 3-7-15, Exterior(2) 3-7-15 to 6-2-0, Corner(3) 6-2-0 to 10-2-0, Exterior(2) 14-6-13 to 17-0-14 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.
  - Provide adequate drainage to prevent water ponding.
  - 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 18 except (jt=lb) 2=184, 17=105, 19=125, 20=239, 15=127, 14=219.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

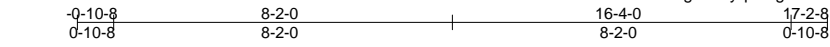


April 5, 2019

Job B0419-1688	Truss C2	Truss Type SCISSORS	Qty 1	Ply 1	Jordan C	E12889272
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Apr 5 14:59:02 2019 Page 1  
ID:3B2liU9aTYR6OtFvgEVAlyq8tk-g0mUkVhgy1rvfie4VO1fhWlinLQKZaKGk4TpEhzTkJt



5x5 =

Scale = 1:55.6

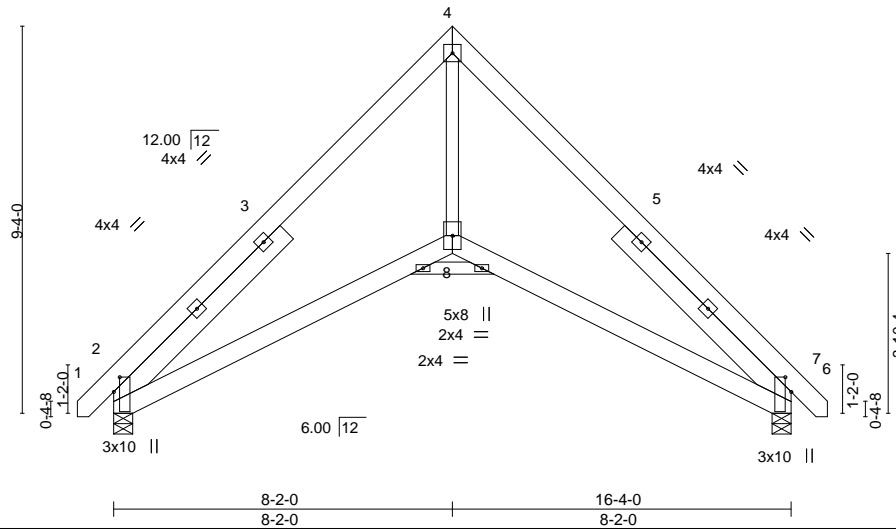


Plate Offsets (X,Y)-- [2:0-4-4,0-1-11], [6:0-4-4,0-1-11]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSL.</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 0.30	Vert(LL)	-0.04	6-8	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.21	Vert(CT)	-0.08	6-8	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.30	Horz(CT)	0.04	6	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	-0.03	8	>999		
								Weight: 141 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x4 SP No.3  
SLIDER Left 2x6 SP No.1 5-10-1, Right 2x6 SP No.1 5-10-1

**BRACING-**

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

**REACTIONS.**

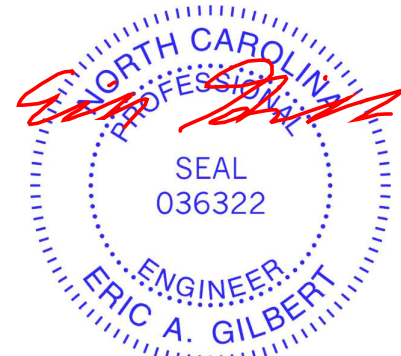
(lb/size) 2=694/0-5-8, 6=694/0-5-8  
Max Horz 2=213(LC 11)  
Max Uplift 2=-28(LC 12), 6=-28(LC 13)

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

TOP CHORD 2-4=-970/78, 4-6=-996/76  
BOT CHORD 2-8=-50/744, 6-8=-38/734  
WEBS 4-8=0/798

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-14 to 3-7-15, Interior(1) 3-7-15 to 8-2-0, Exterior(2) 8-2-0 to 12-6-13 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 with a clearance greater than 6-0-0 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.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



April 5, 2019

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

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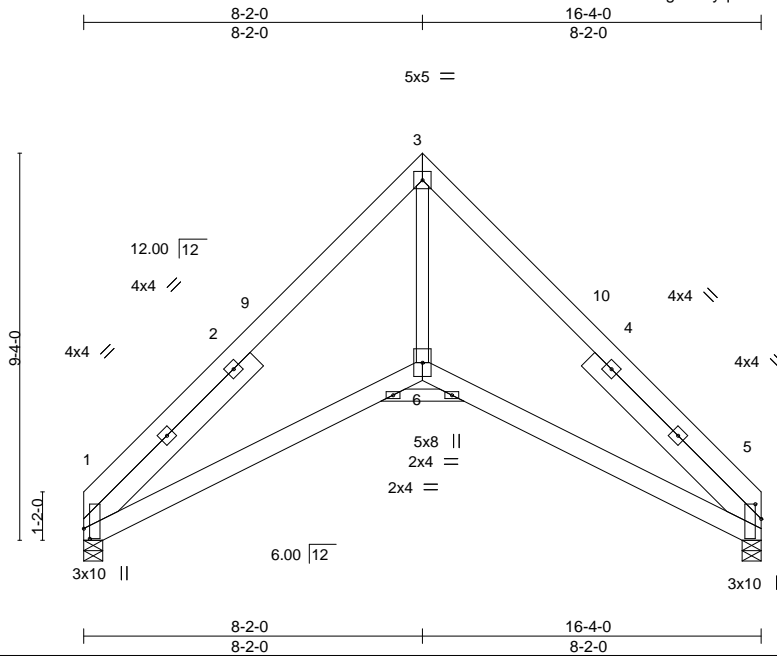


818 Soundside Road  
Edenton, NC 27932

Job B0419-1688	Truss C3	Truss Type SCISSORS	Qty 4	Ply 1	Jordan C	E12889273
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Apr 5 14:59:03 2019 Page 1  
ID:3B2lllU9aTYR6OtFvgEVAlyq8tk-8DKsxriilKzmHsDG36BGDjrtVIIU1VQzkDMn8zTkJs



Scale = 1:55.6

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.30	Vert(LL)	-0.04	5-6	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.21	Vert(CT)	-0.08	5-6	>999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.31	Horz(CT)	0.05	5	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL)	-0.03	6	>999		
	Code IRC2015/TPI2014						Weight: 136 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.3  
 SLIDER Left 2x6 SP No.1 5-10-1, Right 2x6 SP No.1 5-10-1

**BRACING-**

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

**REACTIONS.**

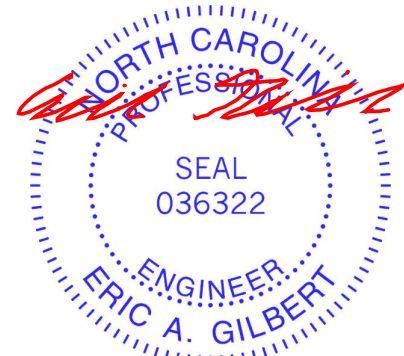
(lb/size) 1=637/0-5-8, 5=637/0-5-8  
 Max Horz 1=-213(LC 8)  
 Max Uplift 1=-26(LC 13), 5=-26(LC 12)

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

TOP CHORD 1-3=-978/86, 3-5=-1002/78  
 BOT CHORD 1-6=-51/749, 5-6=-39/740  
 WEBS 3-6=0/804

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-7 to 4-7-4, Interior(1) 4-7-4 to 8-2-0, Exterior(2) 8-2-0 to 12-6-13 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5.



April 5, 2019

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

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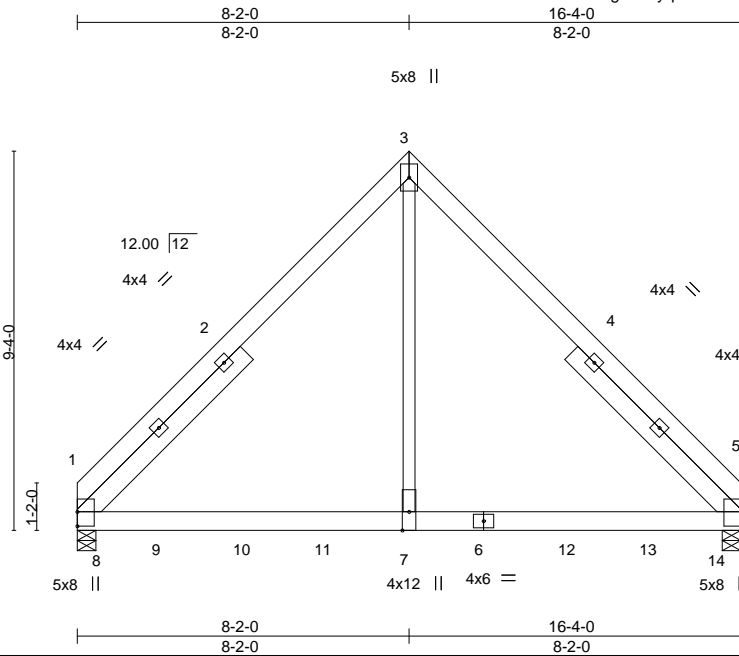


818 Soundside Road  
 Edenton, NC 27932

Job B0419-1688	Truss C4	Truss Type Common Girder	Qty 1	Ply 2	Jordan C	E12889274
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Apr 5 14:59:04 2019 Page 1  
ID:3B2IliU9aTYR60tFvgEVAlyq8tk-cPuE8BjxTe5cv0oTdpiVmxN3g9wR1OCZCOywJazTkJr



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 0.93	Vert(LL) -0.17 1-7 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.66	Vert(CT) -0.29 5-7 >678 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.02 5 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.11 5-7 >999 240	Weight: 266 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP 2400F 2.0E  
 WEBS 2x4 SP No.2  
 SLIDER Left 2x6 SP No.1 5-8-9, Right 2x6 SP No.1 5-8-9

**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.**

(lb/size) 1=653/0-5-8, 5=653/0-5-8  
 Max Horz 1=-211(LC 4)  
 Max Uplift 1=-322(LC 9), 5=-479(LC 8)  
 Max Grav 1=4518(LC 2), 5=5760(LC 2)

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

TOP CHORD 1-3=-4207/392, 3-5=-4195/389  
 BOT CHORD 1-7=-203/2838, 5-7=-203/2838  
 WEBS 3-7=-330/5384

**NOTES-**

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- Concentrated loads from layout are not present in Load Case(s): #1 Dead + Roof Live (balanced); #6 Dead + 0.6 MWFRS Wind (Neg. Internal) Left; #7 Dead + 0.6 MWFRS Wind (Neg. Internal) Right; #12 Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel; #13 Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel; #14 Dead + Uninhabitable Attic Storage; #18 Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Left); #19 Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Right); #20 Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel); #21 Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel); #22 1st Dead + Roof Live (unbalanced); #23 2nd Dead + Roof Live (unbalanced); #24 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage; #25 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage.
- 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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=322, 5=479.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1001 lb down and 79 lb up at 2-0-12, 1001 lb down and 79 lb up at 4-0-12, 1001 lb down and 79 lb up at 6-0-12, 1007 lb down and 79 lb up at 8-0-12, 1001 lb down and 79 lb up at 10-0-12, 1145 lb down and 119 lb up at 12-0-12, and 1145 lb down and 119 lb up at 14-0-12, and 1153 lb down and 119 lb up at 16-4-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



April 5, 2019

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**  
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Job B0419-1688	Truss C4	Truss Type Common Girder	Qty 1	Ply <b>2</b>	Jordan C Job Reference (optional)	E12889274
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Apr 5 14:59:04 2019 Page 2  
ID:3B2lliU9aTYR6OtFvgEVAlyq8tk-cPue8BjxTe5cv0oTdpiVmxN3g9wR1OCZCOywJazTkJr

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-60, 3-5=-60, 1-5=-20

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

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ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

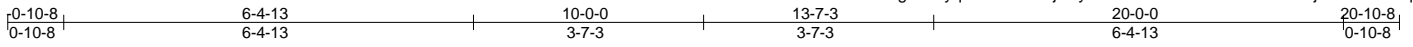
818 Soundside Road  
Edenton, NC 27932

Job B0419-1688	Truss G1	Truss Type GABLE	Qty 1	Ply 1	Jordan C Job Reference (optional)	E12889275
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Apr 5 14:59:05 2019 Page 1

ID:3B2liiU9aTYR6OfVgEVAlyq8tk-5bScMXjZEyETWANfAXDkJ8wG2ZU3m?wjQ2iTrOzTkJq



Scale = 1:36.0

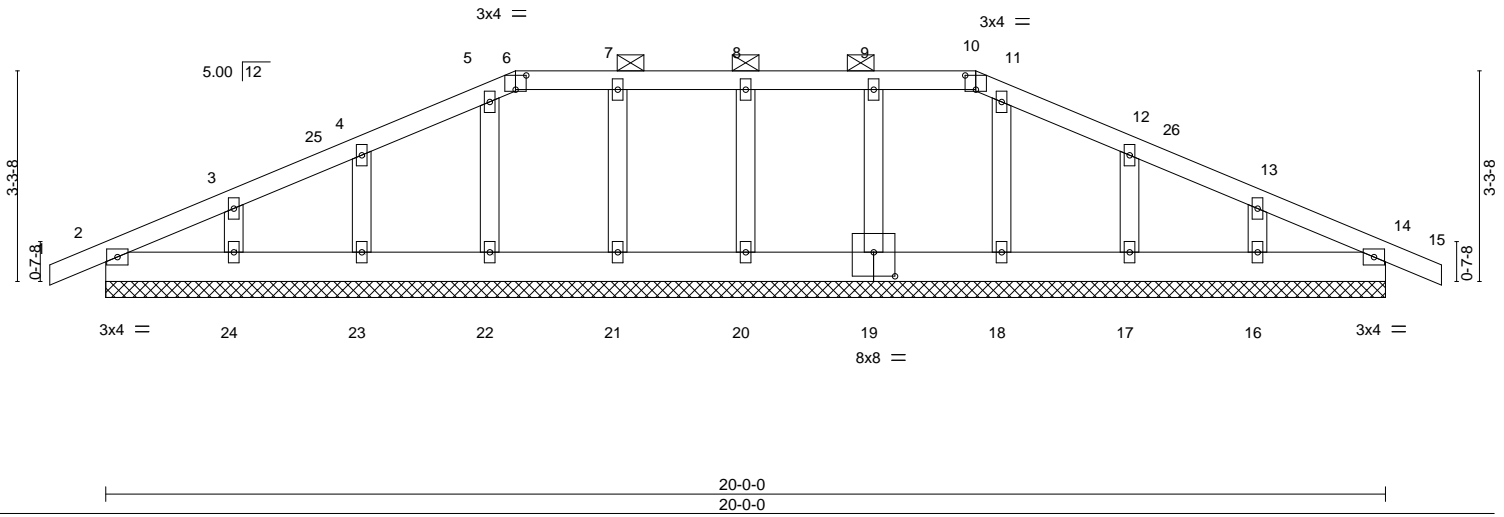


Plate Offsets (X,Y)-- [6:0-2-0,0-2-11], [10:0-2-0,0-2-11], [19:0-4-0,0-4-8]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.04	Vert(LL)	-0.00	14	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.01	Vert(CT)	-0.00	14	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	14	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S						
								Weight: 107 lb	FT = 20%

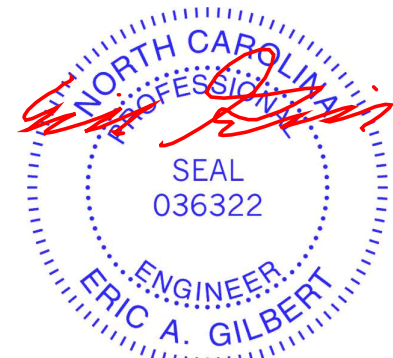
**LUMBER-**  
 TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x6 SP No.1  
 OTHERS 2x4 SP No.3

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

**REACTIONS.** All bearings 20-0-0.  
 (lb) - Max Horz 2=-62(LC 17)  
 Max Uplift All uplift 100 lb or less at joint(s) 14, 2, 20, 21, 22, 23, 24, 19, 18, 17, 16  
 Max Grav All reactions 250 lb or less at joint(s) 14, 2, 20, 21, 22, 23, 24, 19, 18, 17, 16

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-10-8 to 3-6-5, Exterior(2) 3-6-5 to 6-4-13, Corner(3) 6-4-13 to 18-0-0, Exterior(2) 18-0-0 to 20-10-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - Provide adequate drainage to prevent water ponding.
  - 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 2, 20, 21, 22, 23, 24, 19, 18, 17, 16.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 5, 2019

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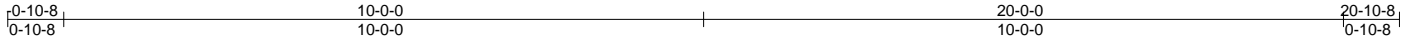


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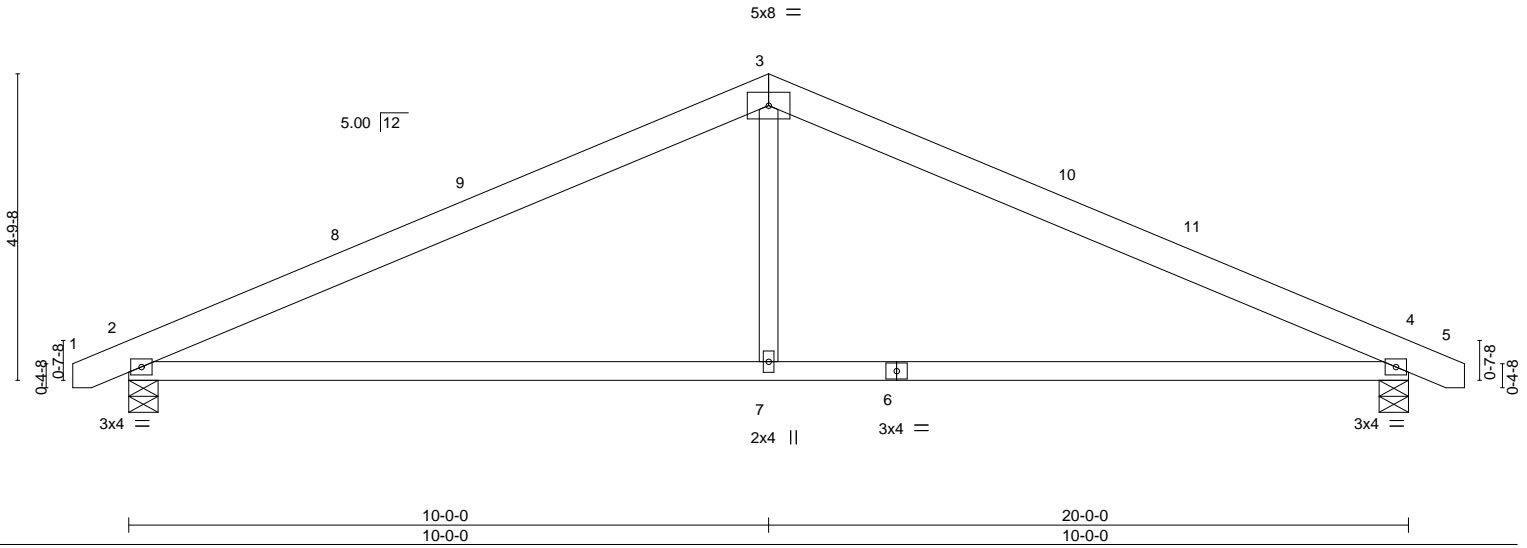
Job B0419-1688	Truss G2	Truss Type Common	Qty 5	Ply 1	Jordan C	E12889276
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Apr 5 14:59:06 2019 Page 1  
ID:3B2IliU9aTYR6OtFvgEVAlyq8tk-Zo0\_ZskB?FMK8KyrkEkzrMTJZzfvVQKsfIR1NSzTkJp



Scale = 1:36.0



LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.57	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.74	Vert(LL) -0.16 4-7 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.17	Vert(CT) -0.35 4-7 >666 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.03 4 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.05 2-7 >999 240	Weight: 91 lb	FT = 20%

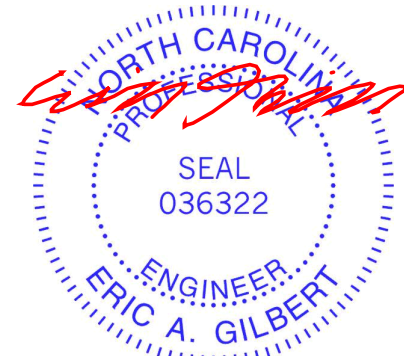
**LUMBER-**  
TOP CHORD 2x6 SP No.1  
BOT CHORD 2x4 SP No.1  
WEBS 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-8-3 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 4=839/0-5-8, 2=839/0-5-8  
Max Horz 2=54(LC 16)  
Max Uplift 4=-62(LC 13), 2=-62(LC 12)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1181/282, 3-4=-1181/282  
BOT CHORD 2-7=-133/1003, 4-7=-133/1003  
WEBS 3-7=0/453

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-12 to 3-8-1, Interior(1) 3-8-1 to 10-0-0, Exterior(2) 10-0-0 to 14-4-13 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



April 5, 2019

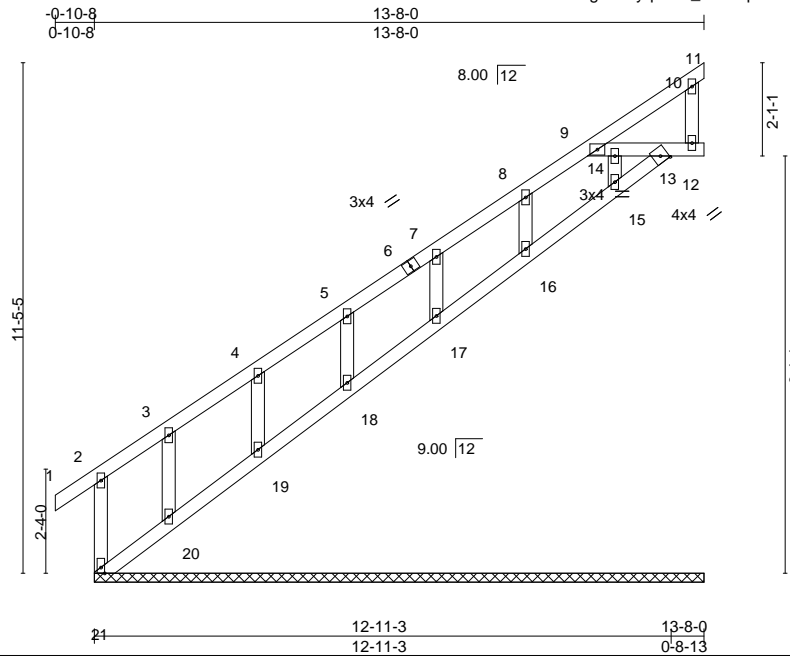
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**  
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ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate  
818 Soundside Road  
Edenton, NC 27932

Job B0419-1688	Truss J1	Truss Type GABLE	Qty 1	Ply 1	Jordan C	E12889277
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Apr 5 14:59:07 2019 Page 1  
ID:3B2liiU9aTYR6OfFvgEVAlyq8tk-1\_aNnClpmZUBmTW2lxFCOZ?aqM98Evg0uMBawvzTkJo



Scale = 1:51.7

LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.15	Vert(LL) 0.00	1	n/r	120	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.10	Vert(CT) -0.00	1	n/r	120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.04	Horz(CT) -0.02	11	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-R					Weight: 73 lb	FT = 20%
	Code IRC2015/TPI2014							

**LUMBER-**

TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
WEBS 2x4 SP No.3  
OTHERS 2x4 SP No.3

**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. Except: 10-0-0 oc bracing: 12-13.

**REACTIONS.**

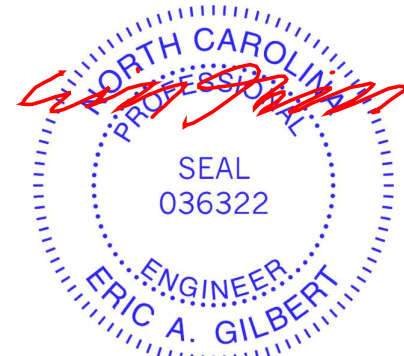
All bearings 13-8-0.  
(lb) - Max Horz 21=449(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 21, 11, 12, 16, 18, 19 except 13=342(LC 12), 17=104(LC 12), 20=112(LC 12)  
Max Grav All reactions 250 lb or less at joint(s) 12, 13, 15, 16, 17, 18, 19, 20 except 21=287(LC 12)

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

TOP CHORD 5-7=-208/268, 7-8=-275/349, 8-9=-300/374  
BOT CHORD 20-21=-556/445, 19-20=-544/435, 18-19=-548/437, 17-18=-547/437, 16-17=-547/437, 15-16=-548/437, 13-15=-543/426, 9-14=-326/417, 13-14=-326/417

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 3-8-0, Exterior(2) 3-8-0 to 13-8-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 8) Bearing at joint(s) 21, 11, 13, 15, 16, 17, 18, 19, 20 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 21, 11, 12, 16, 18, 19 except (jt=lb) 13=342, 17=104, 20=112.
- 10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 11, 12, 13, 15, 16, 17, 18, 19, 20.



April 5, 2019

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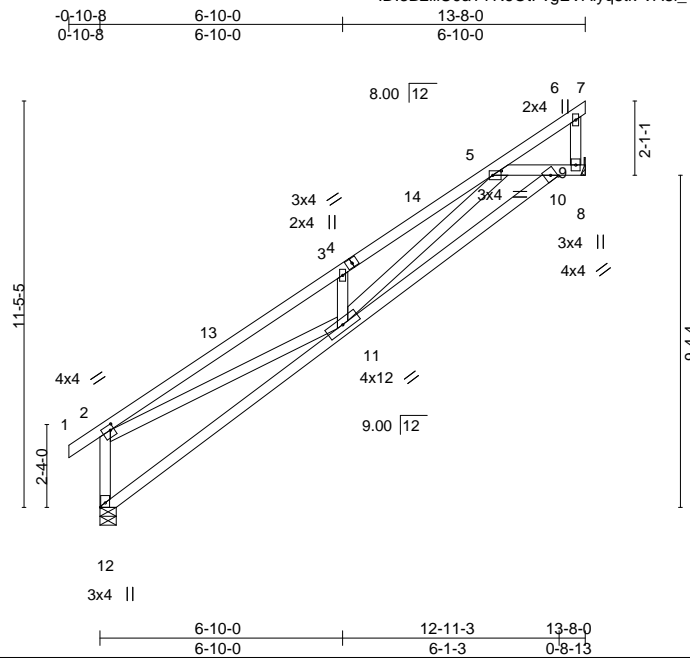


818 Soundside Road  
Edenton, NC 27932

Job B0419-1688	Truss J2	Truss Type Monopitch	Qty 9	Ply 1	Jordan C	E12889278
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Apr 5 14:59:08 2019 Page 1  
ID:3B2lliU9aTYR6OtFvgEVAlyq8tk-VA8l\_YmRXtc2Nd5EsfmRwnYdCmRxxE7970w7SLzTkJn



Scale = 1:64.9

Plate Offsets (X,Y)--	[2:0-1-4,0-1-12], [5:0-2-14,0-1-8]				
<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 0.69	Vert(LL) -0.07 11-12 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.32	Vert(CT) -0.17 11-12 >954 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.47	Horz(CT) 0.04 9 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.07 11 >999 240	Weight: 81 lb	FT = 20%

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD 2x4 SP No.1		TOP CHORD	Structural wood sheathing directly applied or 4-3-3 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1		BOT CHORD	Rigid ceiling directly applied or 7-11-7 oc bracing.
WEBS 2x4 SP No.3			

**REACTIONS.** (lb/size) 12=593/0-5-8, 9=539/Mechanical  
 Max Horz 12=310(LC 12)  
 Max Uplift 9=210(LC 12)  
 Max Grav 12=593(LC 1), 9=597(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-12=-668/356, 2-3=-1629/571, 3-5=-1740/715  
 BOT CHORD 11-12=-568/617, 10-11=-616/1236, 5-10=-870/429  
 WEBS 2-11=-319/1229, 3-11=-410/254, 5-11=-374/834

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 13-8-0 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Bearing at joint(s) 12 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) except (jt=lb) 9=210.



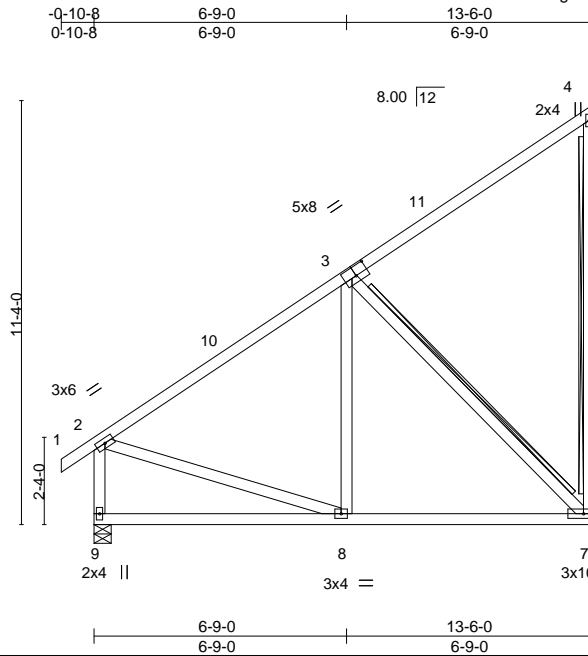
April 5, 2019



Job B0419-1688	Truss J3	Truss Type MONOPITCH	Qty 1	Ply 1	Jordan C	E12889279
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8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Apr 5 14:59:09 2019 Page 1  
ID:3B2liU9aTYR6OtFvgEVAlyq8tk-zNh7Cum3IAkv?ngQPMHgT\_5ruAkfiktLggh\_nzTkJm



Scale = 1:61.6

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.50	Vert(LL) -0.17	7-8	>911	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.55	Vert(CT) -0.21	7-8	>747	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.31	Horz(CT) 0.01	7	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL) 0.00	8	>999	240		
	Code IRC2015/TPI2014						Weight: 97 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
WEBS 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 9-6-15 oc bracing.  
WEBS T-Brace: 2x4 SPF No.2 - 4-7, 3-7  
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.** (lb/size) 7=532/Mechanical, 9=587/0-5-8  
Max Horz 9=307(LC 12)  
Max Uplift 7=-203(LC 12)  
Max Grav 7=792(LC 19), 9=612(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-526/0, 2-9=-573/32  
BOT CHORD 8-9=-427/432, 7-8=-194/444  
WEBS 3-8=0/303, 3-7=-613/270, 2-8=-3/390

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 13-6-0 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 with a clearance greater than 6-0-0 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) except (jt=lb) 7=203.
  - 6) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



April 5, 2019

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

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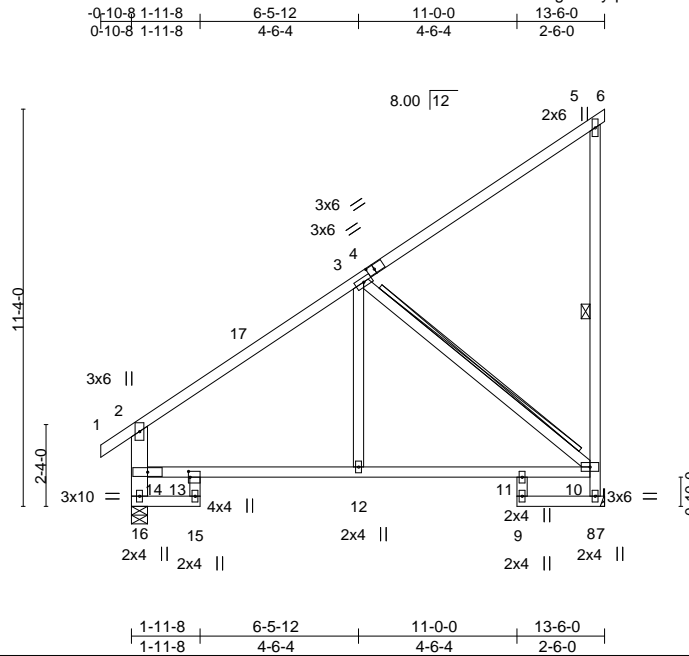
818 Soundside Road  
Edenton, NC 27932

Job B0419-1688	Truss J4	Truss Type MONOPITCH	Qty 1	Ply 1	Jordan C	E12889280
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8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Apr 5 14:59:10 2019 Page 1

ID:3B2lllU9aTYR6OtFvgEVAlyq8tk-RZFPVEnh3UsmdxFdz4pv0Cd1Aa3kRBJsAkPEWEzTkJl



Scale = 1:65.7

Plate Offsets (X,Y)-- [4:0-2-8,0-1-8], [13:0-2-0,0-0-8]

<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 0.40	Vert(LL)	-0.05	11-12	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.56	Vert(CT)	-0.12	11-12	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.30	Horz(CT)	0.03	8	n/a		
BCDL 10.0	Code IRC2015/TP12014		Matrix-S	Wind(LL)	0.07	12-13	>999	Weight: 94 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1 \*Except\*  
13-15,9-11: 2x4 SP No.3  
WEBS 2x4 SP No.3 \*Except\*  
5-8: 2x4 SP No.2, 2-16: 2x6 SP No.1

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
WEBS 1 Row at midpt 5-8  
T-Brace: 2x4 SPF No.2 - 3-10  
Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.  
Brace must cover 90% of web length.

**REACTIONS.** (lb/size) 8=528/Mechanical, 16=589/0-5-8  
Max Horz 16=306(LC 12)  
Max Uplift 8=203(LC 12)  
Max Grav 8=585(LC 19), 16=589(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-524/0, 8-10=-655/291, 14-16=-516/117, 2-14=-488/120  
BOT CHORD 15-16=-347/151, 13-14=0/528, 12-13=-259/517, 11-12=-259/517, 10-11=-273/517  
WEBS 3-10=-651/333

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 13-6-0 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=203.
  - 6) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



April 5, 2019

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

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



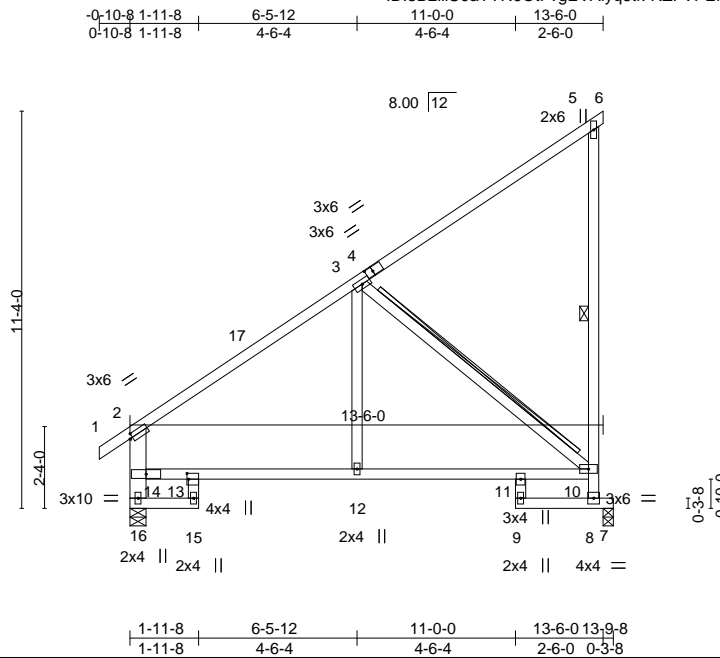
818 Soundside Road  
Edenton, NC 27932

Job B0419-1688	Truss J5	Truss Type ROOF SPECIAL	Qty 6	Ply 1	Jordan C	E12889281
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Comtech, Inc., Fayetteville, NC 28309

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ID:3B2lllU9aTYR6OtFvgEVAlyq8tk-RZFPVEnh3UsmdxFdz4pv0Cd1?a3vRB4SakPEWEzTkJl



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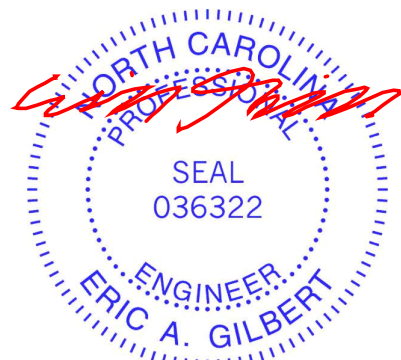
Plate Offsets (X,Y)--	[2:0-1-0,0-1-8], [4:0-2-8,0-1-8], [13:0-2-0,0-0-8]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSL.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.41	Vert(LL) -0.08 11-12 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.54	Vert(CT) -0.19 11-12 >848 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.32	Horz(CT) 0.05 7 n/a n/a		
BCDL 10.0	Code IRC2015/TP12014	Matrix-S	Wind(LL) 0.06 12-13 >999 240	Weight: 94 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 *Except* 13-15,9-11: 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 15-16,13-15.
WEBS 2x4 SP No.3 *Except* 5-8: 2x4 SP No.2, 2-16: 2x6 SP No.1	WEBS 1 Row at midpt 5-8 T-Brace: 2x4 SPF No.2 - 3-10 Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.

**REACTIONS.** (lb/size) 16=605/0-5-8, 7=515/0-3-8  
 Max Horz 16=306(LC 12)  
 Max Uplift 7=195(LC 12)  
 Max Grav 16=605(LC 1), 7=570(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-554/14, 8-10=-722/317, 14-16=-531/124, 2-14=-508/130  
 BOT CHORD 15-16=-341/136, 13-14=0/563, 12-13=-271/547, 11-12=-271/547, 10-11=-229/402  
 WEBS 3-10=-683/345, 3-12=-30/277

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 13-6-0 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=195.
  - 5) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

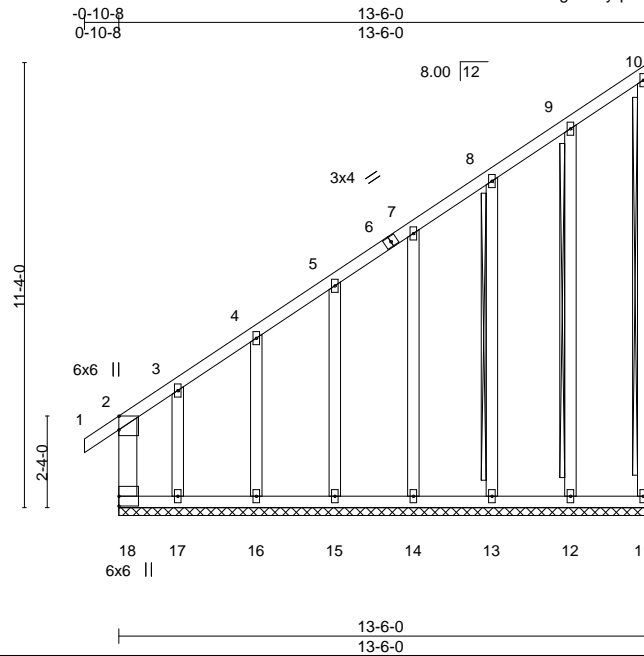


April 5, 2019

Job B0419-1688	Truss J6	Truss Type MONOPITCH SUPPORTED	Qty 1	Ply 1	Jordan C	E12889282
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Apr 5 14:59:11 2019 Page 1  
ID:3B2lliU9aTYR6OfVgEVAlYq8tk-vlptdaoKqo\_dE5qpXnK8YPAAX\_Q\_AgSbp\_9o3gzTkJk



Scale = 1:58.7

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.56	Vert(LL) 0.00	2	n/r	120	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.49	Vert(CT) 0.00	2	n/r	120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.18	Horz(CT) -0.00	11	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-R						
	Code IRC2015/TPI2014						Weight: 121 lb	FT = 20%

**LUMBER-**

TOP CHORD	2x4 SP No.1
BOT CHORD	2x4 SP No.1
WEBS	2x6 SP No.1 *Except*
	10-11: 2x4 SP No.2
OTHERS	2x4 SP No.3

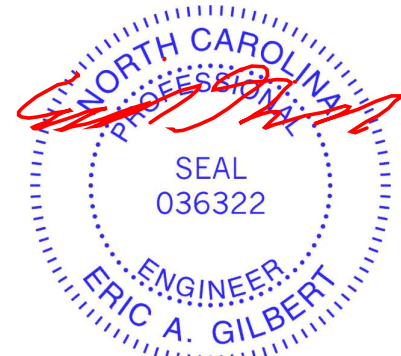
**BRACING-**

TOP CHORD	Structural wood sheathing directly applied or 5-10-11 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	T-Brace: 2x4 SPF No.2 - 10-11, 9-12, 8-13 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 13-6-0.  
(lb) - Max Horz 18=439(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 11, 12, 13, 14 except 18=329(LC 10), 15=117(LC 12), 17=1041(LC 12)  
Max Grav All reactions 250 lb or less at joint(s) 11, 15, 16 except 18=1078(LC 12), 12=276(LC 19), 13=265(LC 19), 14=271(LC 19), 17=444(LC 10)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-18=670/535, 2-3=-727/582, 3-4=-385/317, 4-5=-339/278, 5-7=-260/214  
WEBS 3-17=-521/602

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 3-6-0, Exterior(2) 3-6-0 to 13-4-4 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 requires continuous bottom chord bearing.
  - 5) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - 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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 12, 13, 14 except (jt=lb) 18=329, 15=117, 17=1041.
  - 10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



April 5, 2019

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

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

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

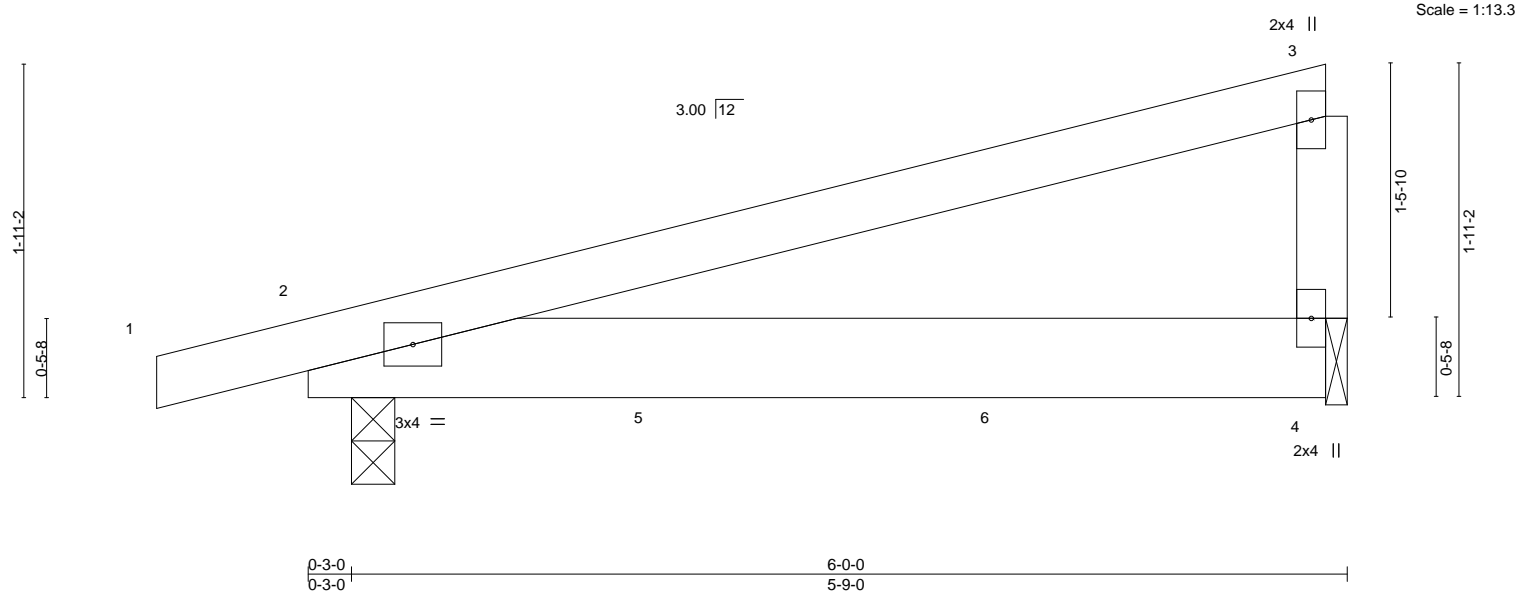
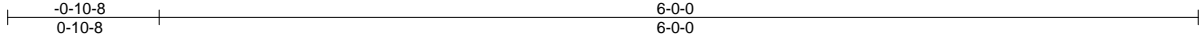
818 Soundside Road  
Edenton, NC 27932

Job B0419-1688	Truss M1	Truss Type MONOPITCH	Qty 1	Ply 1	Jordan C	E12889283
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Apr 5 14:59:12 2019 Page 1

ID:3B2lllU9aTYR6OtFvgEVAlyq8tk-OyNGqwpvb56UsFP?5VrN5djlSNpgv9VI1euLb6zTkJj



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.52	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.27	Vert(LL) -0.02 2-4 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.06 2-4 >999 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-P	Horz(CT) 0.00 4 n/a n/a	Weight: 26 lb	FT = 20%
	Code IRC2015/TPI2014		Wind(LL) 0.01 2-4 >999 240		

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

**REACTIONS.** (lb/size) 4=326/0-1-8, 2=376/0-3-0  
 Max Horz 2=57(LC 4)  
 Max Uplift 4=-32(LC 8), 2=-45(LC 4)

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

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope); 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
  - 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 76 lb down at 2-0-12, and 117 lb down and 23 lb up at 4-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-3=-60, 2-4=-20  
 Concentrated Loads (lb)  
 Vert: 5=-68(B) 6=-117(B)

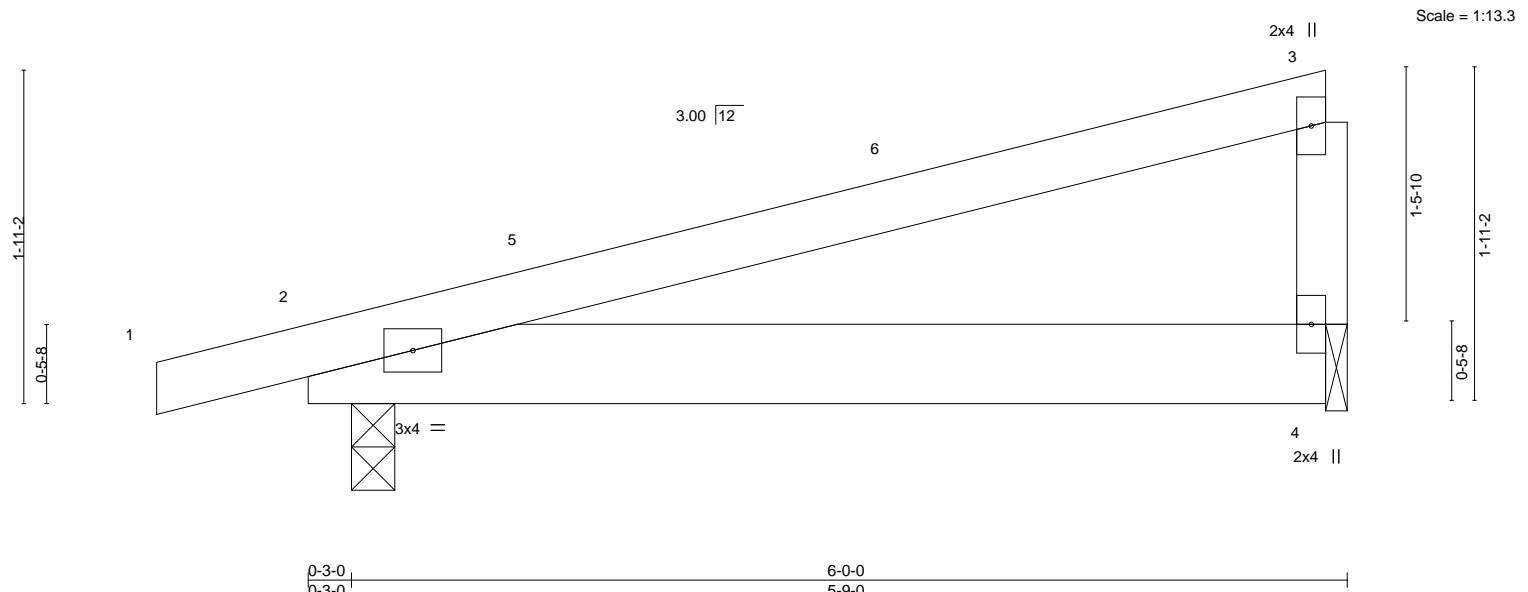


Job B0419-1688	Truss M2	Truss Type MONOPITCH	Qty 2	Ply 1	Jordan C	E12889284
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Apr 5 14:59:13 2019 Page 1

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<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.45	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.32	Vert(LL) -0.01 2-4 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.03 2-4 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 4 n/a n/a	Weight: 26 lb	FT = 20%
	Code IRC2015/TPI2014		Wind(LL) 0.00 2 **** 240		

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x4 SP No.3

**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.** (lb/size) 4=223/0-1-8, 2=294/0-3-0  
Max Horz 2=57(LC 8)  
Max Uplift 4=-30(LC 12), 2=-57(LC 8)

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

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 5-10-1 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.



April 5, 2019



Job B0419-1688	Truss M3	Truss Type Roof Special	Qty 5	Ply 1	Jordan C	E12889285
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Apr 5 14:59:13 2019 Page 1  
ID:3B2llIU9aTYR6OIFvgEVAlyq8tk-s8xe1GpaMPELUO\_BeCMcdqFZUn4SecuGHeu7ZzTkJi



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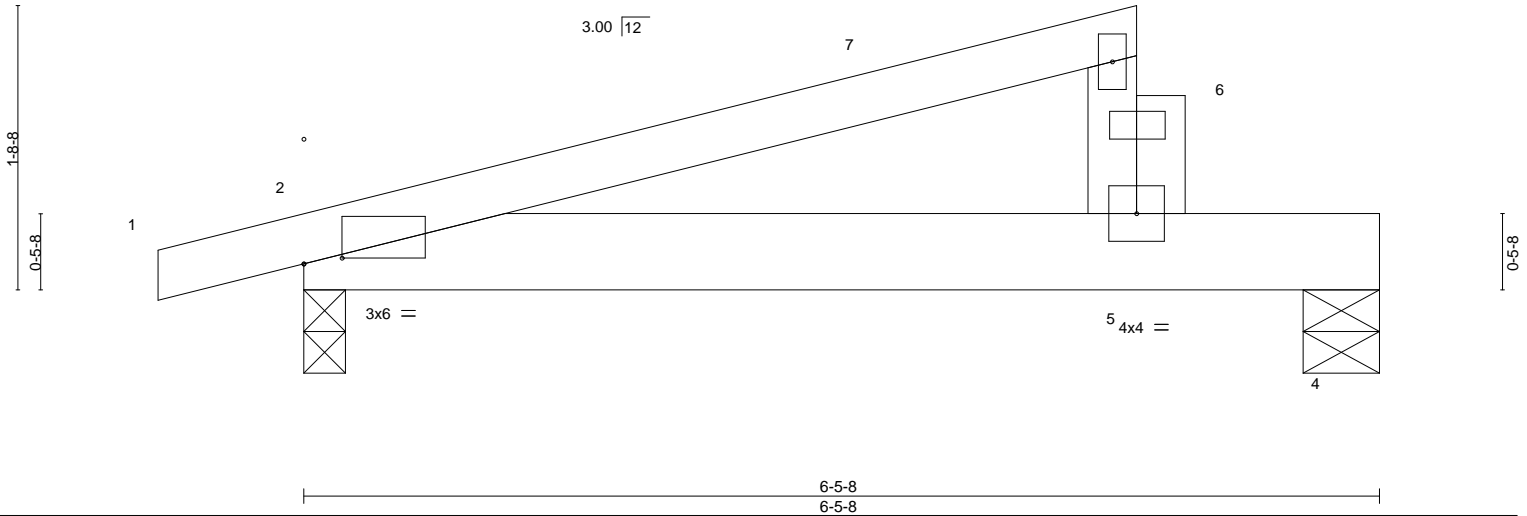


Plate Offsets (X,Y)--	[2:0-2-12,0-0-7], [2:0-0-0,0-9-0]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.33	Vert(LL) -0.05 2-5 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.62	Vert(CT) -0.11 2-5 >672 240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.00	Horz(CT) 0.00 4 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P	Wind(LL) 0.08 2-5 >917 240	Weight: 27 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x4 SP No.3

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 2=400/0-3-0, 4=565/0-5-8  
Max Horz 2=49(LC 8)  
Max Uplift 2=-69(LC 8), 4=-47(LC 12)

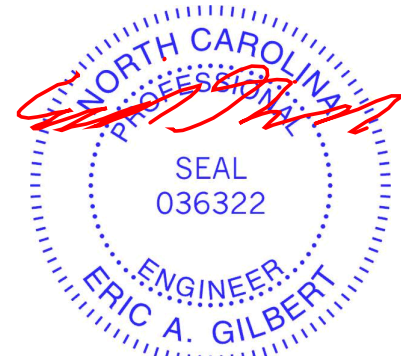
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 4-10-4 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 5) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) . The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-60, 2-4=-20  
Concentrated Loads (lb)  
Vert: 5=-500



April 5, 2019

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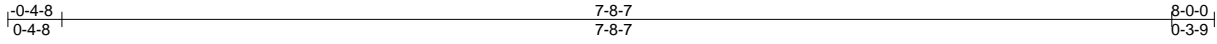


818 Soundside Road  
Edenton, NC 27932

Job B0419-1688	Truss P8	Truss Type MONOPITCH	Qty 5	Ply 1	Jordan C	E12889286
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8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Apr 5 14:59:15 2019 Page 1  
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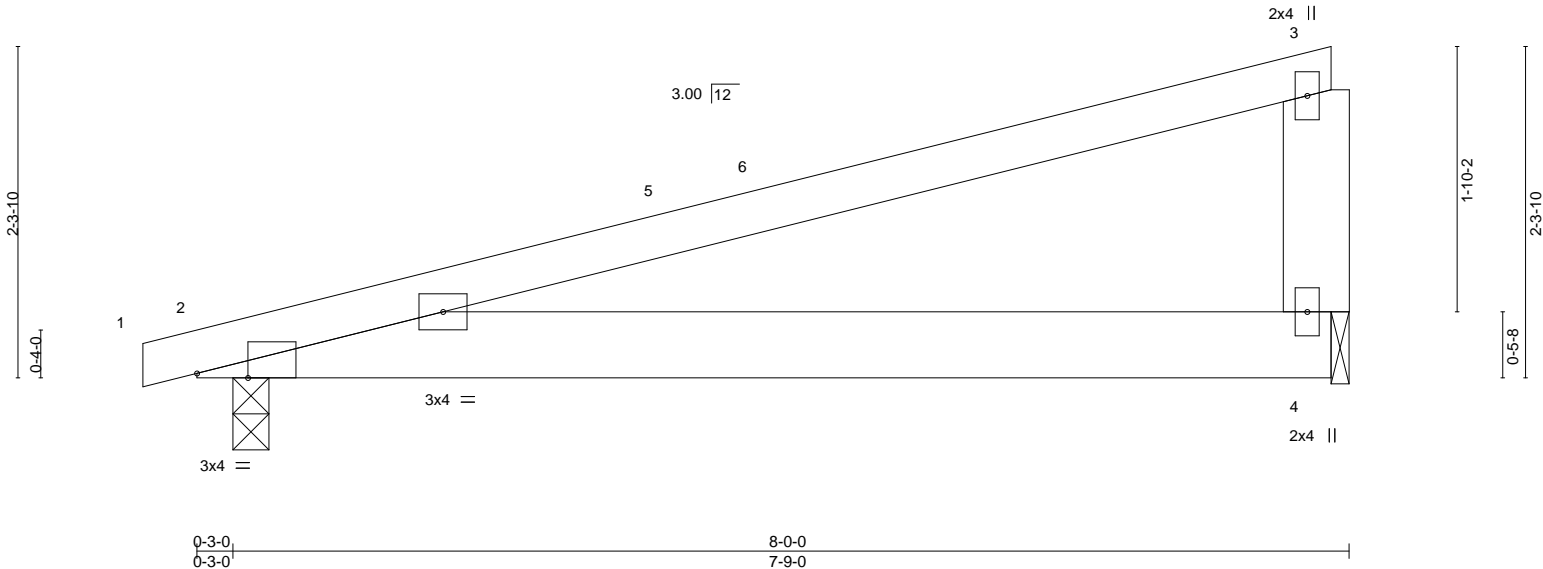


Plate Offsets (X,Y)--	[2:0-4-4,Edge]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.89	Vert(LL)	-0.05	2-4	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.58	Vert(CT)	-0.09	2-4	>993		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Horz(CT)	0.00		n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Wind(LL)	0.10	2-4	>908		
	Code IRC2015/TPI2014						Weight: 35 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 2-2-0 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	

**REACTIONS.** (lb/size) 2=337/0-3-0, 4=305/0-1-8  
Max Horz 2=69(LC 8)  
Max Uplift 2=-129(LC 8), 4=-125(LC 8)

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

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) -0-4-8 to 4-0-5, Interior(1) 4-0-5 to 7-9-4 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=129, 4=125.
  - 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

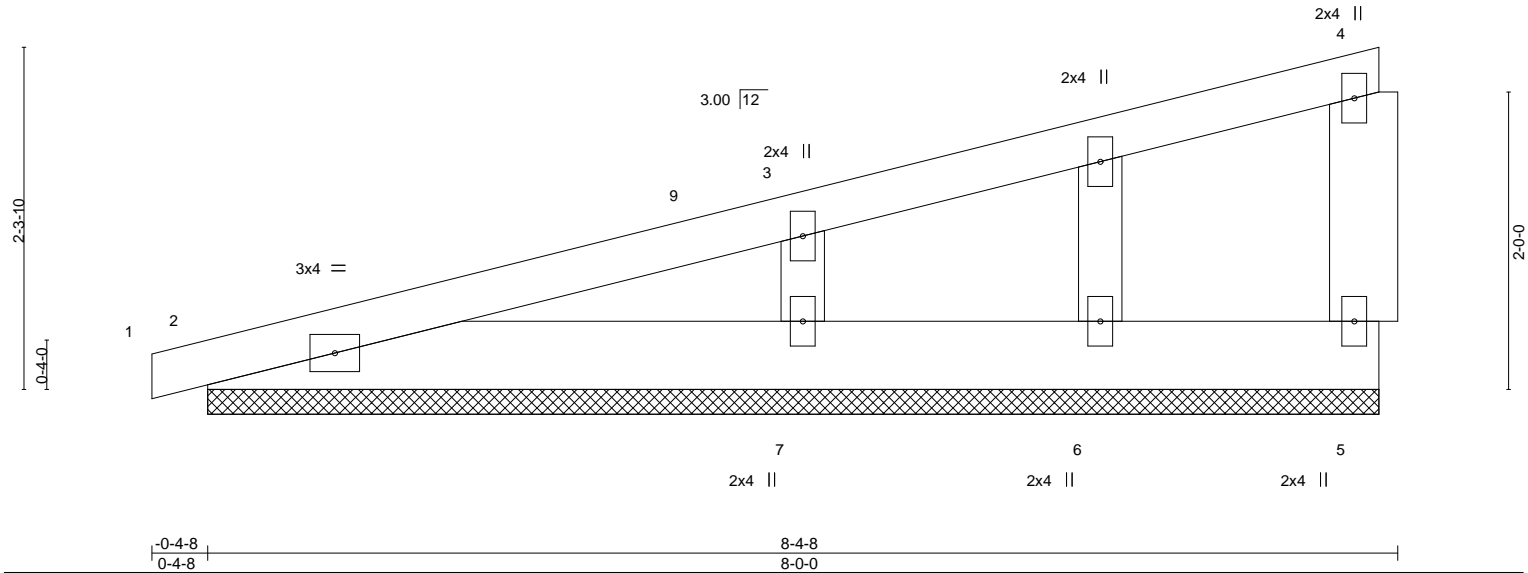
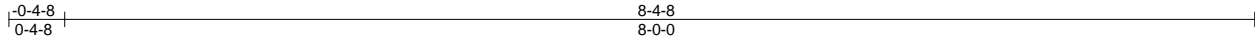


April 5, 2019

Job B0419-1688	Truss P8G	Truss Type GABLE	Qty 2	Ply 1	Jordan C	E12889287
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Apr 5 14:59:16 2019 Page 1  
ID:3B2lliU9aTYR6OtFvgEVAlyq8tk-GjcmgHsSeKcvLsimKKvJFT7C?EBrymKyFsYktzTkJf



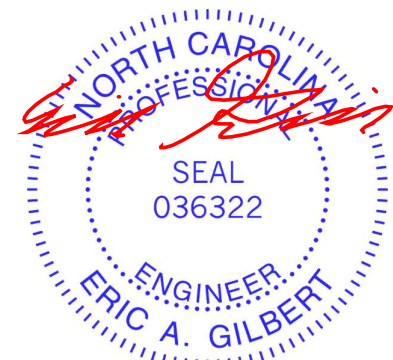
LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.18	Vert(LL) -0.00	1	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.04	Vert(CT) 0.00	1	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.11	Horz(CT) 0.00		n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P					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, except end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x6 SP No.1	
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 7-10-8.  
 (lb) - Max Horz 2=98(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 5, 2 except 7=132(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 5, 2, 6 except 7=372(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 3-7=290/372

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-4-8 to 4-0-0, Exterior(2) 4-0-0 to 7-9-4 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 3) Gable requires continuous bottom chord bearing.
  - 4) Gable studs spaced at 2-0-0 oc.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2 except (jt=lb) 7=132.
  - 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



April 5, 2019

Job B0419-1688	Truss P12	Truss Type MONOPITCH	Qty 5	Ply 1	Jordan C	E12889288
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Apr 5 14:59:14 2019 Page 1  
ID:3B2lliU9aTYR6OtFvgEVAlyq8tk-KKV0FbqC7jMC5YZOCwtrA2oiEBSyN?f1VxNSf?zTkJh



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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.46	Vert(LL) -0.16	2-5	>885	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.47	Vert(CT) -0.34	2-5	>415	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.28	Horz(CT) 0.01	5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.04	2-5	>999	240	Weight: 59 lb	FT = 20%

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

**REACTIONS.** (lb/size) 2=496/0-3-0, 5=465/0-1-8  
Max Horz 2=101(LC 8)  
Max Uplift 2=-57(LC 8), 5=-62(LC 12)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-765/247  
BOT CHORD 2-5=-325/696  
WEBS 3-5=-686/369

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) -0-4-8 to 4-0-5, Interior(1) 4-0-5 to 11-9-4 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - 4) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 5.
  - 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

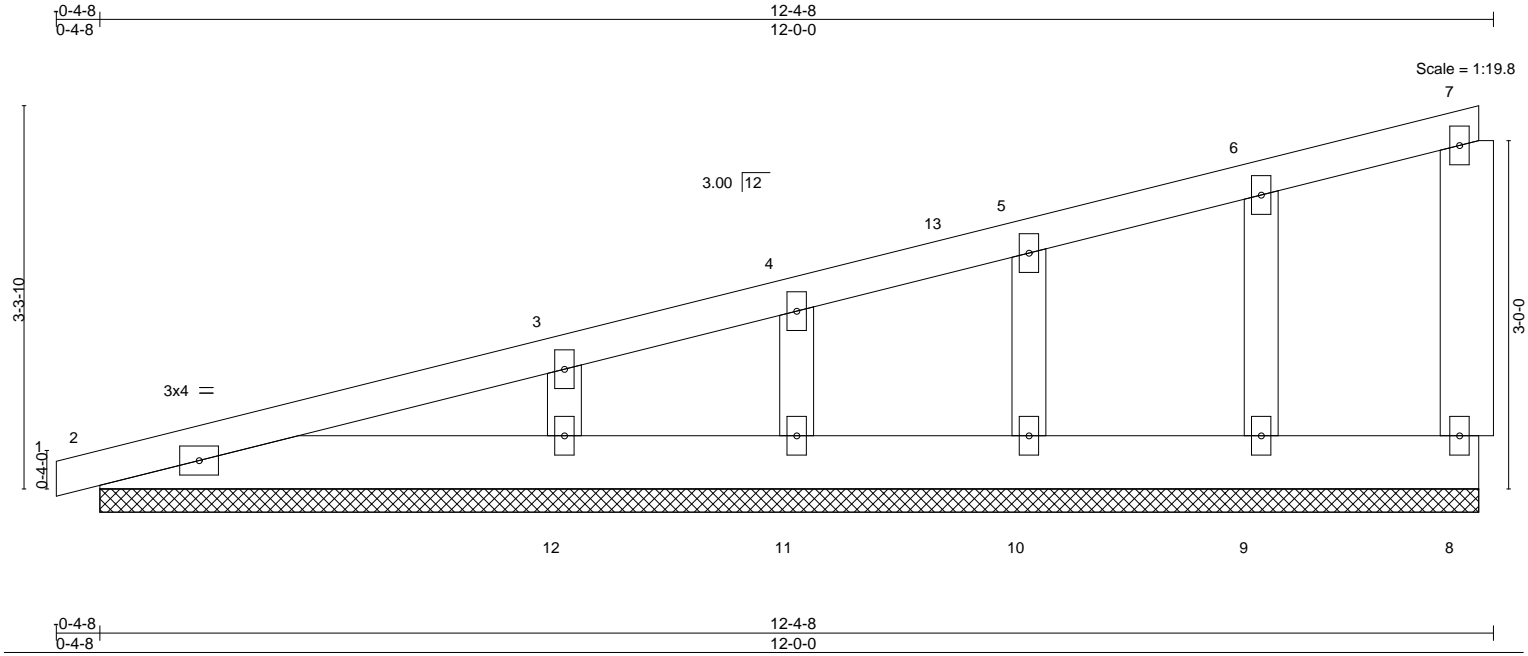


April 5, 2019

Job B0419-1688	Truss P12G	Truss Type GABLE	Qty 2	Ply 1	Jordan C	E12889289
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Apr 5 14:59:15 2019 Page 1  
ID:3B2lliU9aTYR6OtFvgEVAlyq8tk-oW3OSxrqu0U3ji8amdO4iFLzXbvq6V4Bkb7?CRzTkJg



LOADING (psf)	SPACING-	CSL.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.11	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.05	Vert(LL) -0.00 1 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.08	Vert(CT) 0.00 1 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) -0.00 8 n/a n/a		
	Code IRC2015/TPI2014			Weight: 61 lb	FT = 20%

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

**REACTIONS.** All bearings 11-10-8.  
 (lb) - Max Horz 2=144(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 8, 2, 9, 10, 11 except 12=102(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 8, 2, 9, 10, 11 except 12=326(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 3-12=213/254

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-4-8 to 4-0-0, Exterior(2) 4-0-0 to 11-9-4 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 requires continuous bottom chord bearing.
  - 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 with a clearance greater than 6-0-0 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) 8, 2, 9, 10, 11 except (jt=lb) 12=102.
  - 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



April 5, 2019

Job B0419-1688	Truss W1	Truss Type Monopitch	Qty 1	Ply 1	Jordan C	E12889290
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Apr 5 14:59:17 2019 Page 1

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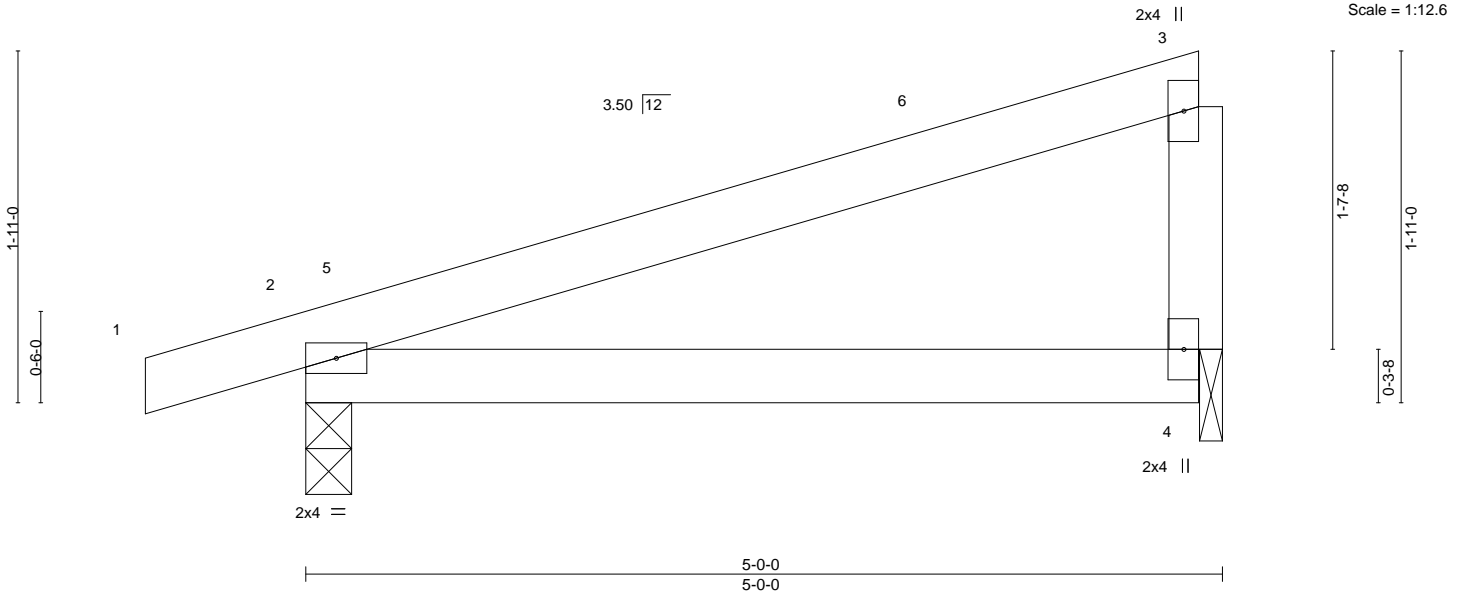


Plate Offsets (X,Y)-- [3:0-0-0,0-0-0], [4:0-0-0,0-0-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.38	Vert(LL) -0.03	2-4	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.20	Vert(CT) -0.05	2-4	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P	Wind(LL) 0.00	2	****	240		
							Weight: 18 lb	FT = 20%

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

**REACTIONS.** (lb/size) 2=256/0-3-0, 4=181/0-1-8  
 Max Horz 2=55(LC 8)  
 Max Uplift 2=-51(LC 8), 4=-27(LC 12)

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

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Corner(3) -0-10-8 to 3-6-5, Exterior(2) 3-6-5 to 4-9-15 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.



April 5, 2019



Job B0419-1688	Truss W2	Truss Type Monopitch	Qty 2	Ply 1	Jordan C	E12889291
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Apr 5 14:59:17 2019 Page 1

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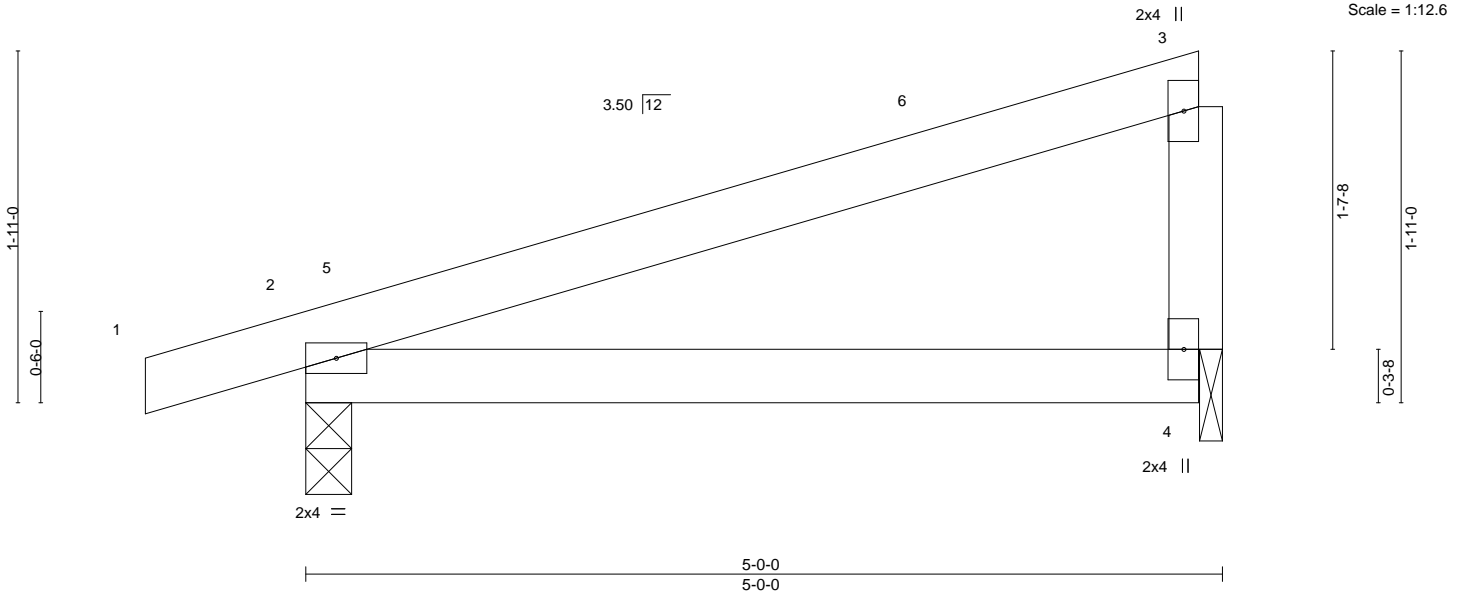
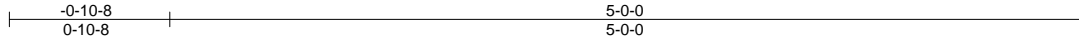


Plate Offsets (X,Y)-- [3:0-0-0,0-0-0], [4:0-0-0,0-0-0]

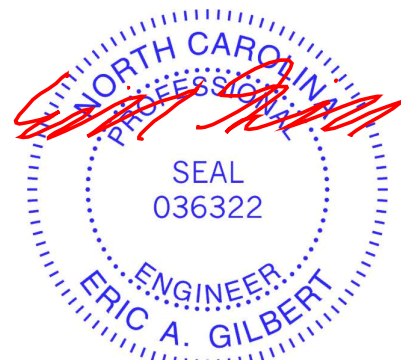
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.29	Vert(LL)	-0.03	2-4	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.20	Vert(CT)	-0.05	2-4	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	4	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P	Wind(LL)	0.00	2	****	Weight: 18 lb	FT = 20%

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

**REACTIONS.** (lb/size) 2=256/0-3-0, 4=181/0-1-8  
 Max Horz 2=55(LC 8)  
 Max Uplift 2=-51(LC 8), 4=-27(LC 12)

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

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 4-9-15 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.



April 5, 2019

Job B0419-1688	Truss W3	Truss Type HALF HIP	Qty 1	Ply 1	Jordan C	E12889292
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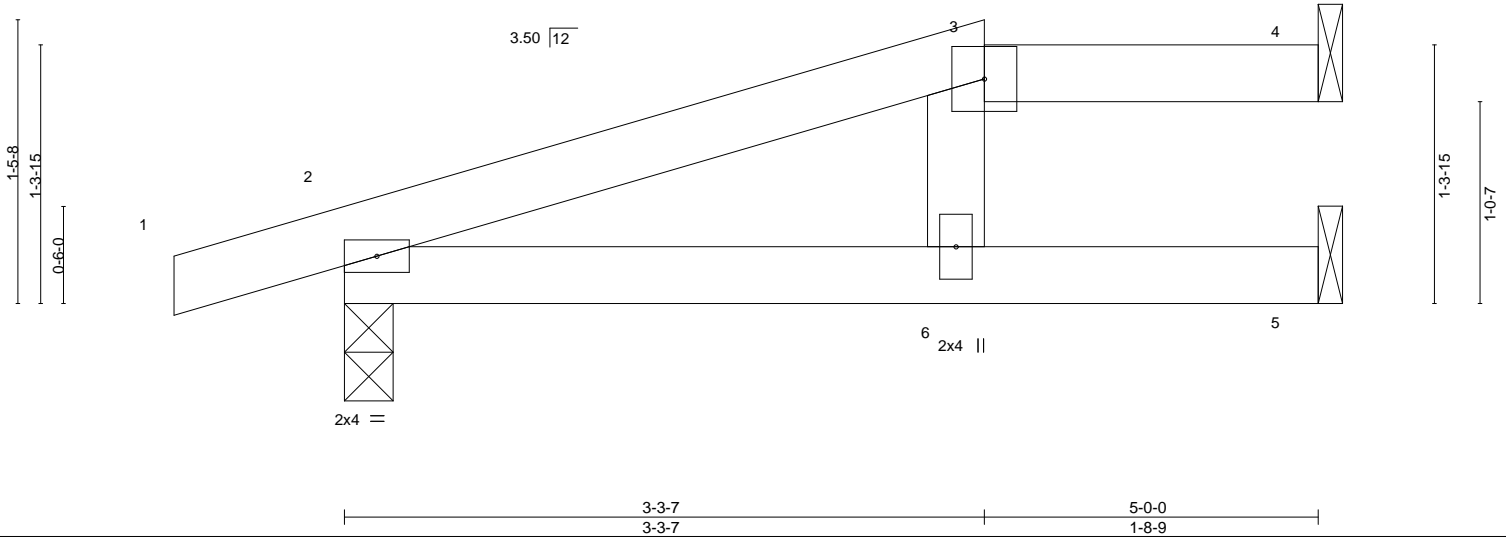
Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Apr 5 14:59:18 2019 Page 1  
ID:3B2lliu9aTYR6OtFvgEVAlyq8tk-C5kX5zjAxSdaAs9RlyoKuzUjoqBJtGdQZLfomzTkJd



4x4 =

Scale = 1:11.8



LOADING (psf)	SPACING-	CSL.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.11	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.39	Vert(LL) -0.04 2-6 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.05	Vert(CT) -0.09 2-6 >651 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.03 4 n/a n/a	Weight: 18 lb	FT = 20%
	Code IRC2015/TPI2014		Wind(LL) 0.05 2-6 >999 240		

**LUMBER-**  
 TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP No.1  
 WEBS 2x4 SP No.3

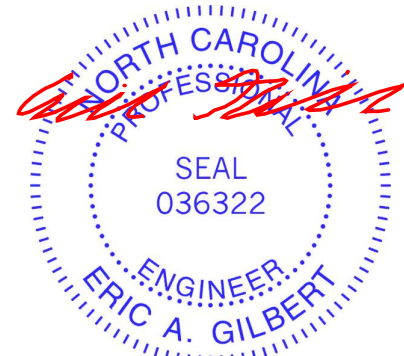
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins, except 2-0-0 oc purlins: 3-4.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS.** (lb/size) 4=50/Mechanical, 2=259/0-3-0, 5=137/Mechanical  
 Max Horz 2=36(LC 8)  
 Max Uplift 4=-17(LC 8), 2=-57(LC 8), 5=-3(LC 8)

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) 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
- 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2, 5.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 5, 2019

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

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



818 Soundside Road  
 Edenton, NC 27932

Job B0419-1688	Truss W4	Truss Type HALF HIP	Qty 1	Ply 1	Jordan C	E12889293
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Apr 5 14:59:19 2019 Page 1  
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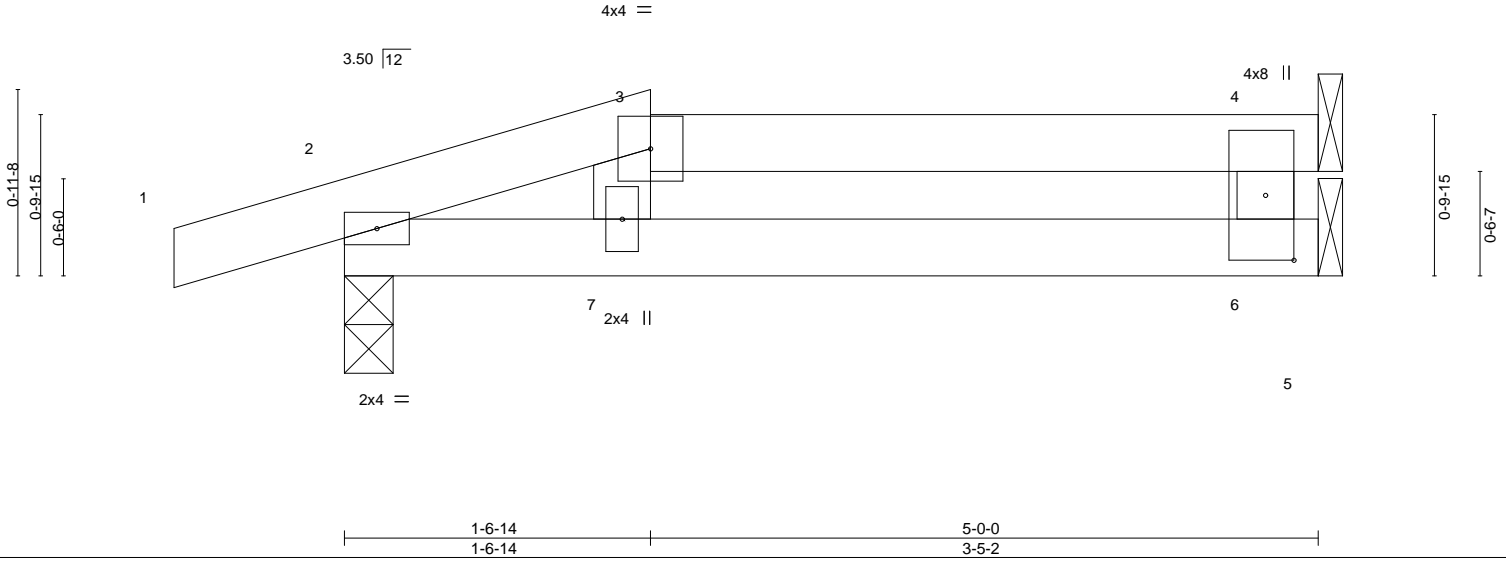


Plate Offsets (X,Y)--	[4:0-0-0,0-1-12], [4:0-4-0,0-1-12], [6:0-0-0,0-1-12]
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LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.14	Vert(LL) -0.03	6-7	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.30	Vert(CT) -0.06	6-7	>860	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.04	Horz(CT) 0.03	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P	Wind(LL) 0.04	6-7	>999	240	Weight: 17 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
WEBS 2x4 SP No.3

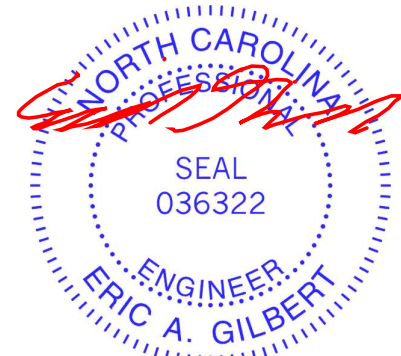
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS.** (lb/size) 4=95/Mechanical, 6=88/Mechanical, 2=251/0-3-0  
Max Horz 2=20(LC 8)  
Max Uplift 4=-33(LC 8), 2=-59(LC 8)  
Max Grav 4=95(LC 1), 6=116(LC 3), 2=251(LC 1)

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.



April 5, 2019

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

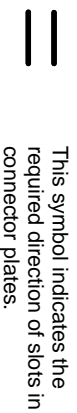
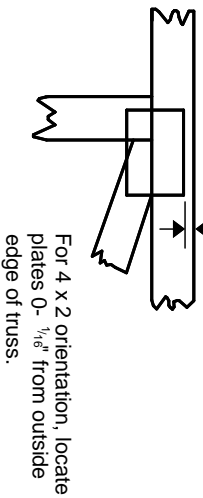
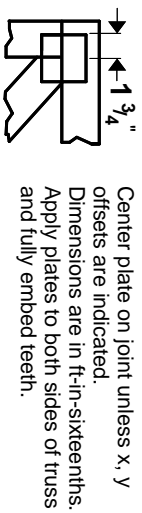
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



818 Soundside Road  
Edenton, NC 27932

# Symbols

## PLATE LOCATION AND ORIENTATION



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

## PLATE SIZE

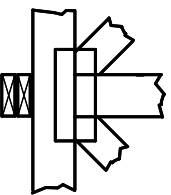
**4 X 4**

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

## LATERAL BRACING LOCATION



## BEARING

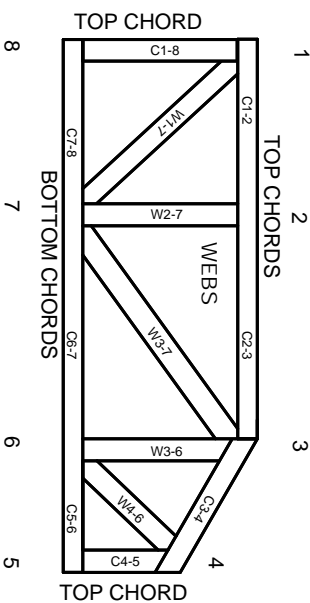


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

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

# Numbering System



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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



# General Safety Notes

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

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