

RE: J1120-5310  
 Watermark/Lot 65 South Creek/Harnett

Trenco  
 818 Soundside Rd  
 Edenton, NC 27932

**Site Information:**

Customer: Project Name: J1120-5310  
 Lot/Block: Model:  
 Address: Subdivision:  
 City: State:

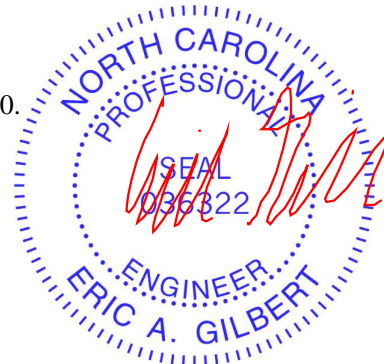
**General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):**

Design Code: IRC2015/TPI2014 Design Program: MiTek 20/20 8.3  
 Wind Code: ASCE 7-10 Wind Speed: 130 mph  
 Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 25 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	E15007716	A1	11/12/2020	21	E15007736	VB3	11/12/2020
2	E15007717	A2	11/12/2020	22	E15007737	VB4	11/12/2020
3	E15007718	A3	11/12/2020	23	E15007738	VB5	11/12/2020
4	E15007719	A3GE	11/12/2020	24	E15007739	VC1	11/12/2020
5	E15007720	A4	11/12/2020	25	E15007740	VC2	11/12/2020
6	E15007721	A5	11/12/2020				
7	E15007722	A5A	11/12/2020				
8	E15007723	A5GE	11/12/2020				
9	E15007724	B1	11/12/2020				
10	E15007725	B1GE	11/12/2020				
11	E15007726	B2	11/12/2020				
12	E15007727	B3	11/12/2020				
13	E15007728	C1GE	11/12/2020				
14	E15007729	C2	11/12/2020				
15	E15007730	C3GDR	11/12/2020				
16	E15007731	D1	11/12/2020				
17	E15007732	D1GE	11/12/2020				
18	E15007733	M1GE	11/12/2020				
19	E15007734	VB1	11/12/2020				
20	E15007735	VB2	11/12/2020				

The truss drawing(s) referenced above have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville. Truss Design Engineer's Name: Gilbert, Eric My license renewal date for the state of North Carolina is December 31, 2020. North Carolina COA: C-0844



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

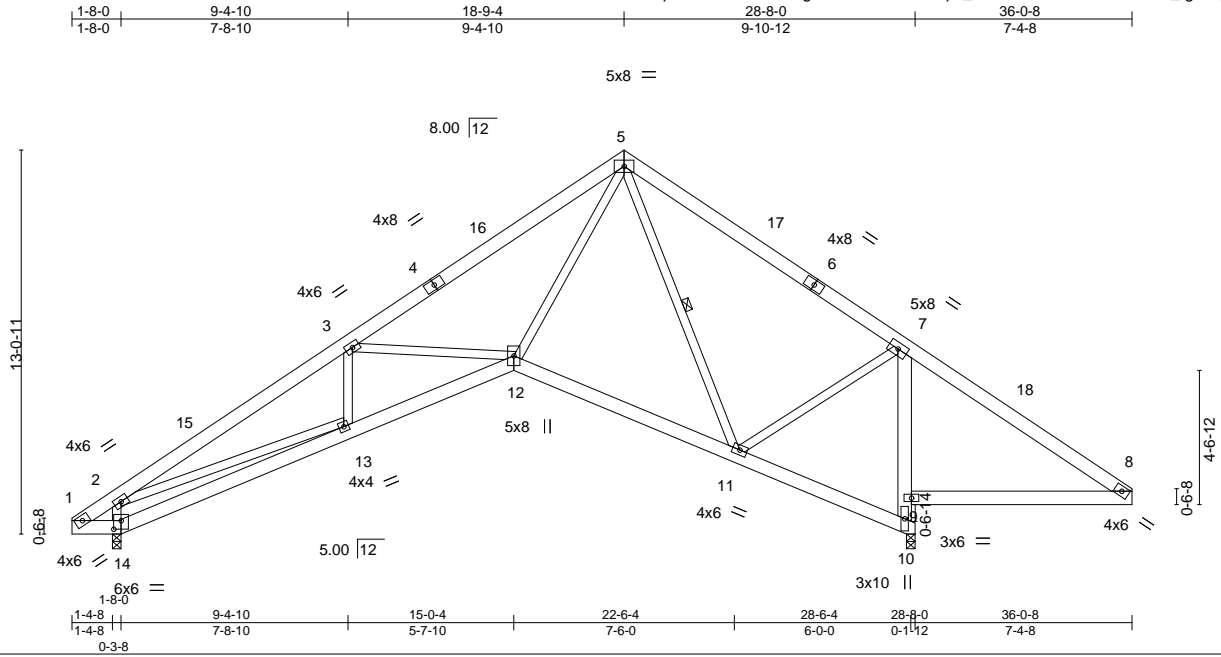
November 12, 2020

Job	Truss	Truss Type	Qty	Ply	Watermark/Lot 65 South Creek/Harnett	E15007716
J1120-5310	A1	ROOF SPECIAL	5	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

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ID:72Rk7VqdTmkJWHwdWE6g2Zz706C-PUWWqm\_sX21eYkHterJAGKIWRbm\_tg3Sq7EJhtyQwob



Scale = 1:78.3

Plate Offsets (X,Y)-- [14:0-3-0,0-3-8]

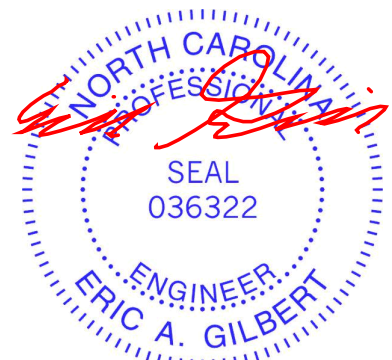
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.43	Vert(LL)	-0.08 12-13	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.30	Vert(CT)	-0.17 12-13	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.44	Horz(CT)	0.14 10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.07 12-13	>999	240	Weight: 267 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-0-15 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except:
WEBS 2x4 SP No.2	5-11-0 oc bracing: 9-10
	WEBS 1 Row at midpt 5-11

**REACTIONS.** (size) 14=0-3-8, 10=0-3-8  
 Max Horz 14=300(LC 9)  
 Max Uplift 14=-77(LC 12), 10=-90(LC 13)  
 Max Grav 14=1114(LC 1), 10=1770(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-329/49, 2-3=-2337/285, 3-5=-1700/179, 5-7=-636/159, 7-8=-350/573  
 BOT CHORD 1-14=-58/355, 13-14=-328/497, 12-13=-315/2227, 11-12=-28/775, 10-11=-350/382,  
 9-10=-1613/618, 7-9=-1511/474, 8-9=-362/365  
 WEBS 2-14=-1056/312, 2-13=-83/1672, 3-12=-755/393, 5-12=-72/1513, 5-11=-717/129,  
 7-11=-21/818

- 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) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 18-9-4, Exterior(2) 18-9-4 to 23-2-1, Interior(1) 23-2-1 to 36-0-8 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Bearing at joint(s) 10 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) 14, 10.



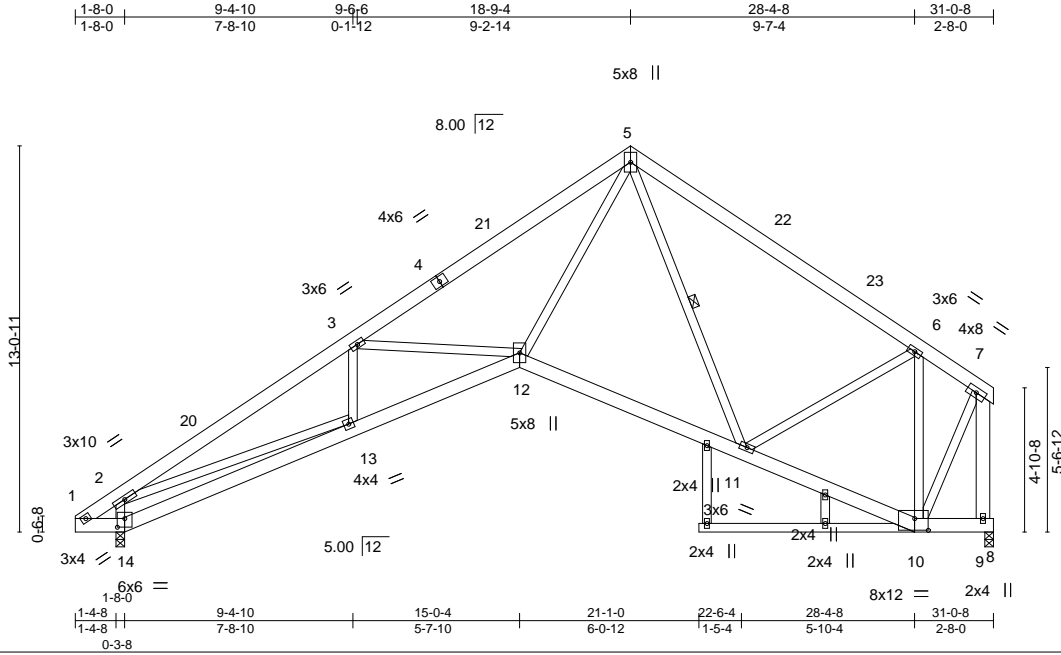
October 22, 2020

Job	Truss	Truss Type	Qty	Ply	Watermark/Lot 65 South Creek/Harnett	E15007717
J1120-5310	A2	ROOF SPECIAL	4	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

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Scale = 1:77.9

Plate Offsets (X,Y)-- [10:0-5-8,0-4-12], [14:0-3-0,0-3-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.49	Vert(LL) -0.11	12-13	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.34	Vert(CT) -0.22	12-13	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.65	Horz(CT) 0.19	9	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.09	12-13	>999	240	Weight: 270 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-6-1 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 7-9: 2x6 SP No.1	WEBS 1 Row at midpt 5-11

**REACTIONS.** (size) 14=0-3-8, 9=0-3-8  
 Max Horz 14=296(LC 9)  
 Max Uplift 14=70(LC 12), 9=46(LC 12)  
 Max Grav 14=1298(LC 1), 9=1164(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-374/53, 2-3=-2805/585, 3-5=-2297/488, 5-6=-1204/347, 6-7=-494/117,  
 7-9=-1117/252  
 BOT CHORD 1-14=-66/402, 13-14=-320/478, 12-13=-567/2588, 11-12=-102/1084, 10-11=-144/521  
 WEBS 2-13=-356/2070, 2-14=-1213/431, 6-10=-1081/366, 7-10=-298/1049, 5-12=-248/1798,  
 5-11=-385/123, 6-11=-4/533, 3-12=-639/318

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) 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) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 18-9-4, Exterior(2) 18-9-4 to 23-2-1, Interior(1) 23-2-1 to 30-8-4 zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 9.



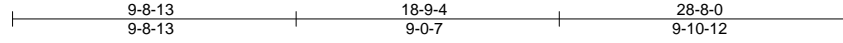
October 22, 2020

Job	Truss	Truss Type	Qty	Ply	Watermark/Lot 65 South Creek/Harnett	E15007718
J1120-5310	A3	COMMON	11	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

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ID:72Rk7VqdTmkJWHwdWE6g2Zz706C-tg4u26?UUL9V9us4CZrPpXqeK?0Wc5lc2n\_tDKyQwaa



5x5 =

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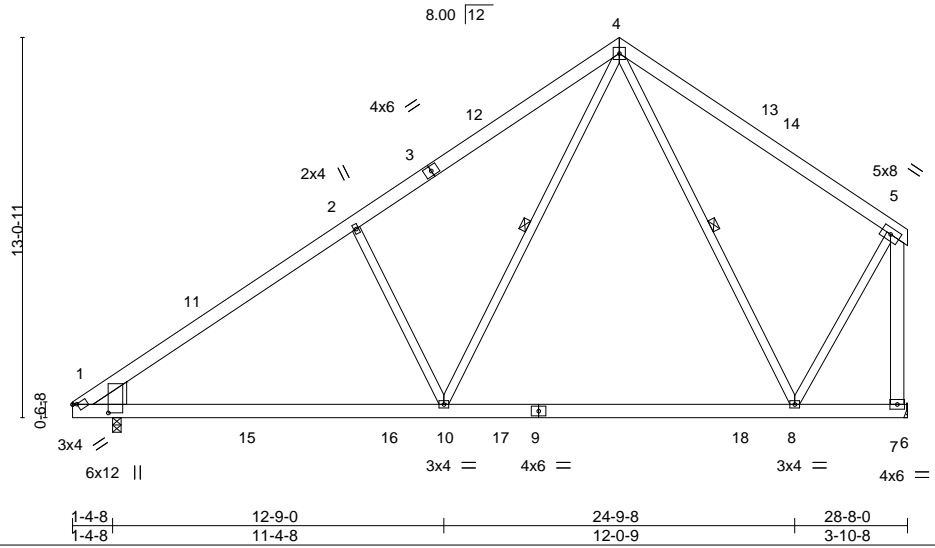


Plate Offsets (X,Y)-- [1:0-1-8,0-0-13], [1:0-3-8,1-2-11]

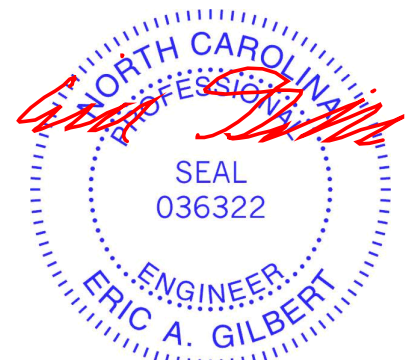
LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.55	Vert(LL) -0.16	8-10	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.60	Vert(CT) -0.31	1-10	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.54	Horz(CT) 0.02	7	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.05	1-10	>999	240		
							Weight: 227 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-7-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 5-7: 2x6 SP No.1	WEBS 1 Row at midpt 4-10, 4-8
WEDGE Left: 2x10 SP No.1	

**REACTIONS.** (size) 7=Mechanical, 1=0-3-8  
 Max Horz 1=294(LC 9)  
 Max Uplift 7=69(LC 12), 1=-53(LC 12)  
 Max Grav 7=1247(LC 19), 1=1245(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-1652/292, 2-4=-1497/406, 4-5=-682/221, 5-7=-1314/232  
 BOT CHORD 1-10=-323/1445, 8-10=-84/696  
 WEBS 2-10=-624/363, 4-10=-191/1162, 4-8=-491/132, 5-8=0/932

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) 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) 0-4-5 to 4-9-1, Interior(1) 4-9-1 to 18-9-4, Exterior(2) 18-9-4 to 23-2-1, Interior(1) 23-2-1 to 28-3-12 zone; cantilever left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 5) Refer to girder(s) for truss to truss connections.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 1.



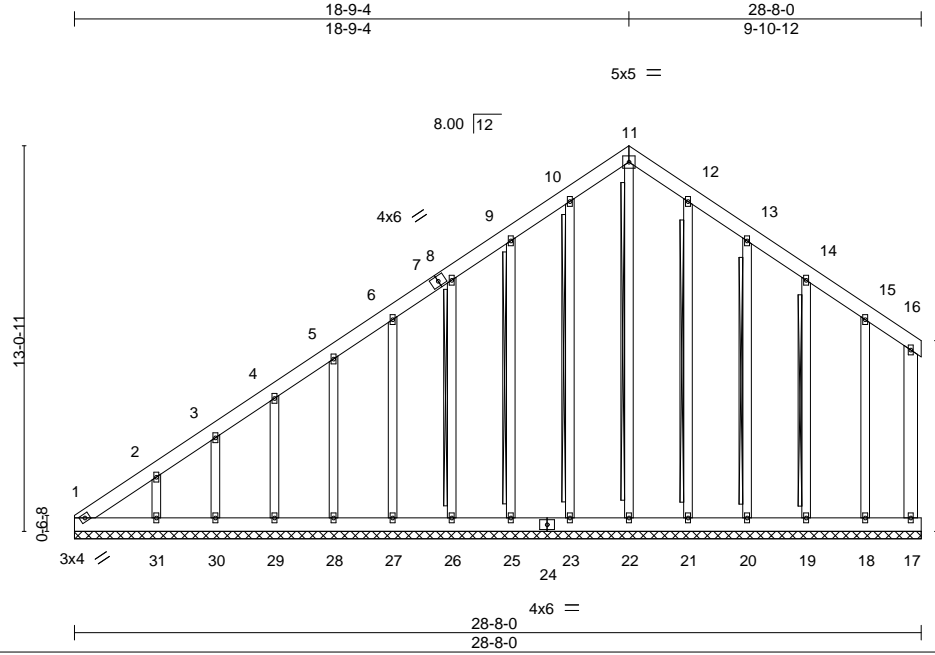
October 22, 2020

Job	Truss	Truss Type	Qty	Ply	Watermark/Lot 65 South Creek/Harnett	E15007719
J1120-5310	A3GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

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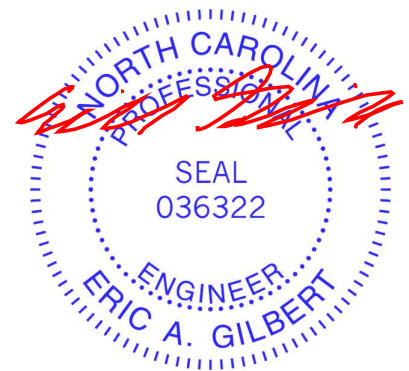
LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.05	Vert(LL) n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.02	Vert(CT) n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.20	Horz(CT) 0.00	17	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 305 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x6 SP No.1	WEBS T-Brace: 2x4 SPF No.2 - 11-22, 10-23, 9-25, 8-26, 12-21, 13-20, 14-19
OTHERS 2x4 SP No.2	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 28-8-0.  
 (lb) - Max Horz 1=419(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 17, 22, 23, 25, 26, 27, 28, 29, 30, 21, 19, 18 except 1=139(LC 10), 31=140(LC 12), 20=105(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 17, 23, 25, 26, 27, 28, 29, 30, 21, 20, 19, 18 except 22=257(LC 13), 31=252(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-473/359, 2-3=-362/307, 3-4=-308/284, 4-5=-265/257, 8-9=-191/256, 9-10=-211/305, 10-11=-244/318, 11-12=-244/303, 12-13=-211/258

- 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 4-9-4, Exterior(2) 4-9-4 to 18-9-4, Corner(3) 18-9-4 to 23-2-1, Exterior(2) 23-2-1 to 28-3-12 zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17, 22, 23, 25, 26, 27, 28, 29, 30, 21, 19, 18 except (jt=1b) 1=139, 31=140, 20=105.
  - Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



October 22, 2020

Job	Truss	Truss Type	Qty	Ply	Watermark/Lot 65 South Creek/Harnett	E15007720
J1120-5310	A4	COMMON	5	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

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ID:72Rk7VqdTmkJWHwdWE6g2Zz706C-HFIOg81NbGX31MaethO6Q9SAnC\_DpNL2lkCXqfyQwoX

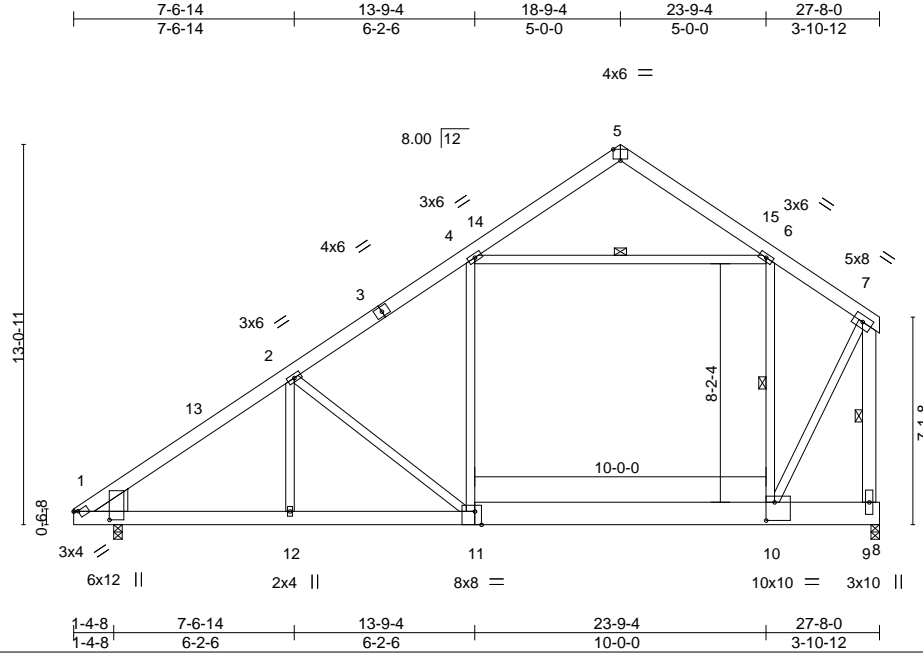


Plate Offsets (X,Y)-- [1:0-3-8,1-2-11], [1:0-1-8,0-0-13], [5:0-3-0,Edge], [10:0-3-8,0-7-8], [11:0-2-12,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.48	Vert(LL) -0.27	11-12	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.86	Vert(CT) -0.51	11-12	>632	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.87	Horz(CT) 0.02	9	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.27	11-12	>999	240	Weight: 253 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1 \*Except\*  
8-11: 2x10 SP 2400F 2.0E  
WEBS 2x4 SP No.2 \*Except\*  
7-9: 2x6 SP No.1  
WEDGE  
Left: 2x10 SP No.1

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-9-5 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
WEBS 1 Row at midpt 7-9, 6-10, 4-6

**REACTIONS.** (size) 9=0-3-8, 1=0-3-8  
Max Horz 1=293(LC 9)  
Max Uplift 9=78(LC 12), 1=47(LC 12)  
Max Grav 9=1329(LC 19), 1=1164(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-1770/275, 2-4=-1125/243, 4-5=-279/133, 5-6=-378/153, 6-7=-1020/220, 7-9=-2288/429  
BOT CHORD 1-12=-360/1534, 11-12=-359/1532, 10-11=-153/914  
WEBS 4-11=0/347, 7-10=-339/2030, 4-6=-697/220, 2-11=-822/274, 2-12=0/425

- 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) 0-4-5 to 4-9-1, Interior(1) 4-9-1 to 18-9-4, Exterior(2) 18-9-4 to 23-2-1, Interior(1) 23-2-1 to 27-3-12 zone; cantilever left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 1.



Job	Truss	Truss Type	Qty	Ply	Watermark/Lot 65 South Creek/Harnett	E15007721
J1120-5310	A5	COMMON	4	1		

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ID:72Rk7VqdTmkJWHwdWE6g2Zz706C-HFI0g81NbGX31MaethO6Q9SD1C3ppSp2lKCXqfyQwoX



4x6 =

Scale = 1:79.1

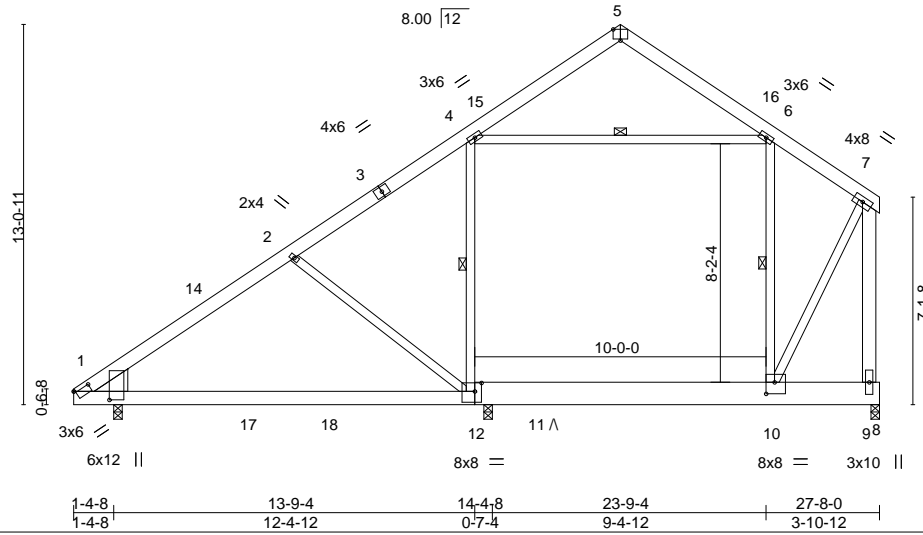


Plate Offsets (X,Y)-- [1:0-3-8,1-2-11], [1:0-6-8,0-0-13], [5:0-3-0,Edge], [1:0-0-3-8,0-4-12], [12:0-2-12,0-3-8]

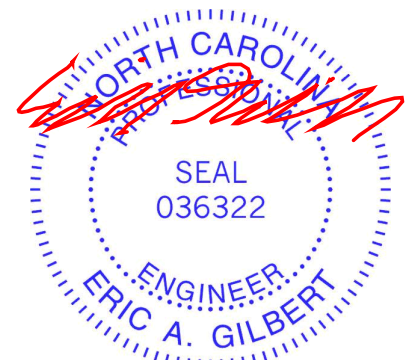
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.27	Vert(LL)	-0.17	1-12	>957	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.56	Vert(CT)	-0.36	1-12	>463	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.52	Horz(CT)	0.01	9	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.15	1-12	>999	240	Weight: 246 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.1 *Except*	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except*	WEBS 1 Row at midpt
7-9: 2x6 SP No.1	4-12, 6-10, 4-6
WEDGE	
Left: 2x10 SP No.1	

**REACTIONS.** (size) 9=0-3-8, 1=0-3-8, 11=0-3-8  
 Max Horz 1=293(LC 9)  
 Max Uplift 9=78(LC 12), 1=47(LC 12), 11=REL  
 Max Grav 9=796(LC 20), 1=688(LC 20), 11=1320(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-807/291, 2-4=-542/236, 4-5=-350/132, 5-6=-346/152, 6-7=-368/212, 7-9=-778/414  
 BOT CHORD 1-12=-373/597, 11-12=-169/383, 10-11=-147/267  
 WEBS 4-12=-377/118, 6-10=-324/156, 7-10=-328/577, 2-12=-491/297

- 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) 0-4-5 to 4-9-1, Interior(1) 4-9-1 to 18-9-4, Exterior(2) 18-9-4 to 23-2-1, Interior(1) 23-2-1 to 27-3-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 1.
  - "A" indicates Released bearing: allow for upward movement at joint(s) 11.



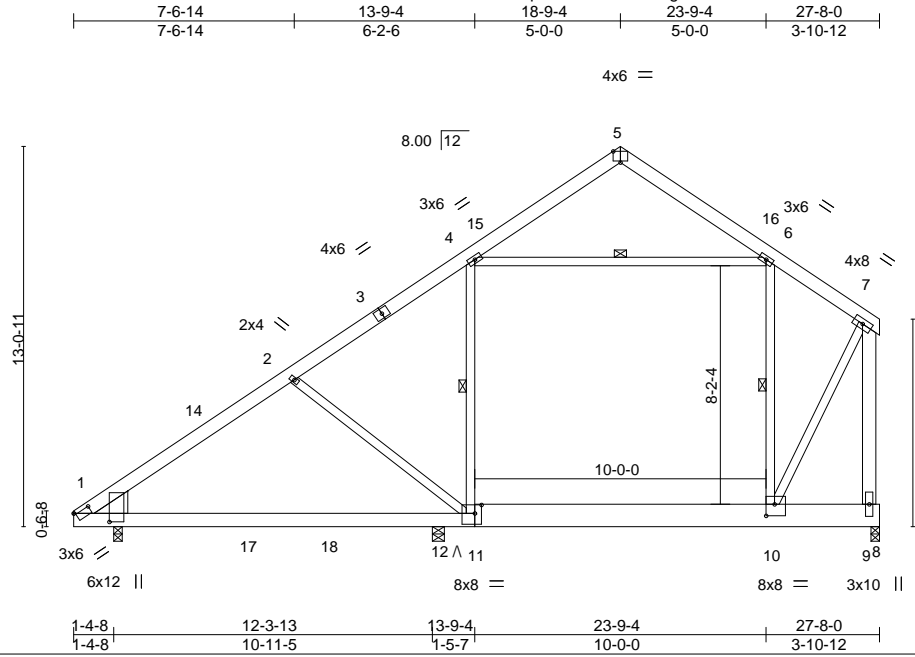
October 22, 2020

Job	Truss	Truss Type	Qty	Ply	Watermark/Lot 65 South Creek/Harnett	E15007722
J1120-5310	A5A	COMMON	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Oct 22 07:34:37 2020 Page 1

ID:72Rk7VqdTmkJWHwdWE6g2Zz706C-ISJPtU2?MafweV9rROvLzN?OicPJYwHBzOy4N5yQwoW



Scale = 1:79.1

Plate Offsets (X,Y)-- [1:0-3-8,1-2-11], [1:0-6-8,0-0-13], [5:0-3-0,Edge], [10:0-3-8,0-4-12], [11:0-2-12,0-3-8]

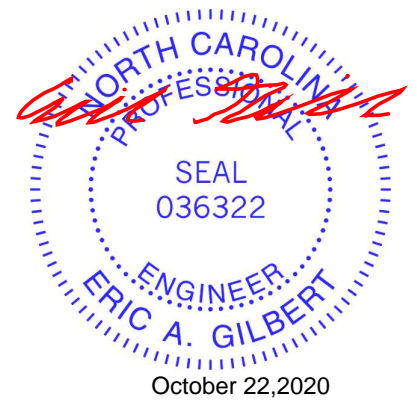
LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.27	Vert(LL) -0.13	1-12	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.55	Vert(CT) -0.24	1-12	>602	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.50	Horz(CT) 0.01	9	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.11	12	>999	240	Weight: 246 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.1 *Except*	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except*	WEBS 1 Row at midpt 4-11, 6-10, 4-6
WEDGE Left: 2x10 SP No.1	

**REACTIONS.** (size) 9=0-3-8, 1=0-3-8, 12=0-4-15  
 Max Horz 1=293(LC 9)  
 Max Uplift 9=78(LC 12), 1=47(LC 12), 12=REL  
 Max Grav 9=951(LC 20), 1=743(LC 20), 12=1027(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-929/288, 2-4=-667/233, 4-5=-350/132, 5-6=-347/152, 6-7=-496/211, 7-9=-1059/410  
 BOT CHORD 1-12=-371/731, 11-12=-365/683, 10-11=-147/387  
 WEBS 4-11=-308/118, 6-10=-255/155, 7-10=-324/840, 2-11=-477/296

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) 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) 0-4-5 to 4-9-1, Interior(1) 4-9-1 to 18-9-4, Exterior(2) 18-9-4 to 23-2-1, Interior(1) 23-2-1 to 27-3-12 zone; cantilever left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 1.
  - 6) "A" indicates Released bearing: allow for upward movement at joint(s) 12.



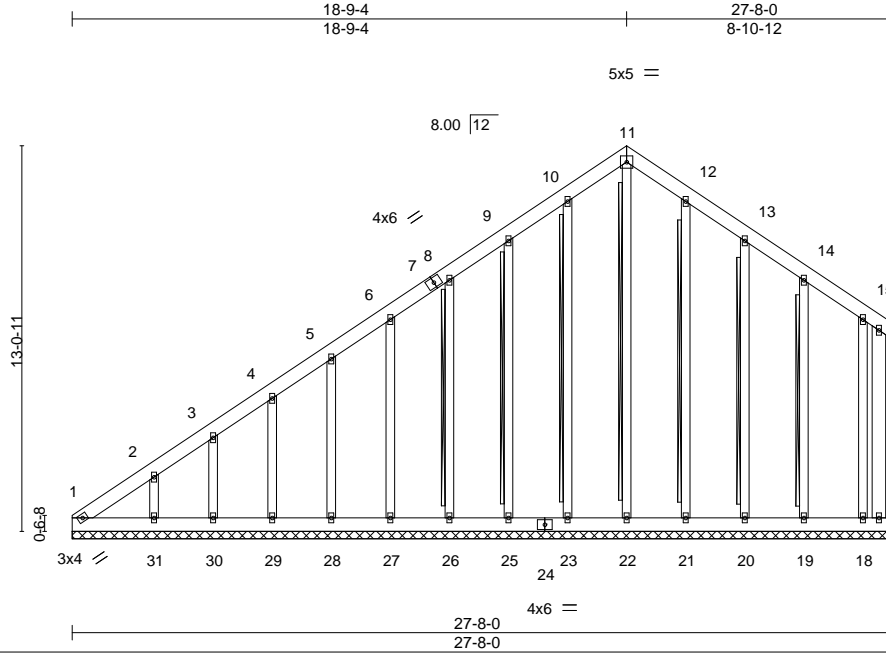


Job	Truss	Truss Type	Qty	Ply	Watermark/Lot 65 South Creek/Harnett	E15007723
J1120-5310	A5GE	GABLE	1	1	Job Reference (optional)	

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ID:72Rk7VqdTmkJWHwdWE6g2Zz706C-Detn5q3d7tnGfk1\_6QaWaYdx0tqHSILC2hevXyQwoV



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.05	Vert(LL) n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.02	Vert(CT) n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.17	Horz(CT) 0.00	17	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 302 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x6 SP No.1	WEBS T-Brace: 2x4 SPF No.2 - 11-22, 10-23, 9-25, 8-26, 12-21, 13-20, 14-19
OTHERS 2x4 SP No.2	Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.

**REACTIONS.** All bearings 27-8-0.  
 (lb) - Max Horz 1=436(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 17, 22, 23, 25, 26, 27, 28, 29, 30, 21, 19, 18 except 1=133(LC 10), 31=141(LC 12), 20=104(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 17, 22, 23, 25, 26, 27, 28, 29, 30, 21, 20, 19, 18 except 1=261(LC 12), 31=252(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-494/349, 2-3=-383/298, 3-4=-312/274, 4-5=-263/247, 9-10=-182/268, 10-11=-218/284, 11-12=-218/269

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-1-12 to 4-9-4, Exterior(2) 4-9-4 to 18-9-4, Corner(3) 18-9-4 to 23-2-1, Exterior(2) 23-2-1 to 27-3-12 zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17, 22, 23, 25, 26, 27, 28, 29, 30, 21, 19, 18 except (jt=18) 1=133, 31=141, 20=104.
  - Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

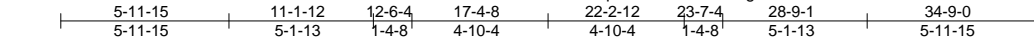


Job	Truss	Truss Type	Qty	Ply	Watermark/Lot 65 South Creek/Harnett	E15007724
J1120-5310	B1	ATTIC	7	1	Job Reference (optional)	

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6x8 =

Scale = 1:82.2

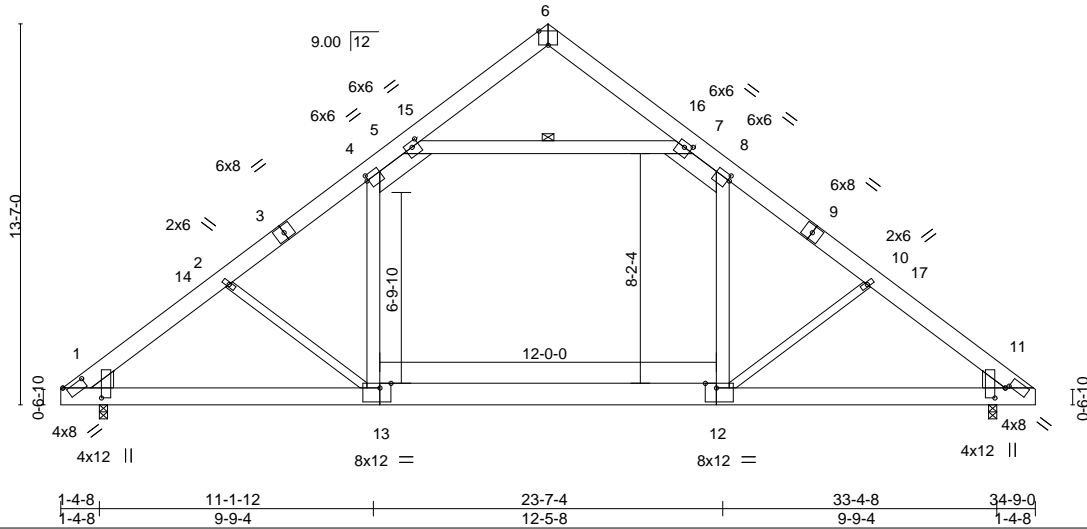


Plate Offsets (X,Y)-- [1:0-4-4,1-4-8], [1:0-8-13,0-1-10], [4:0-0-11,0-2-4], [5:0-3-0,0-2-4], [6:0-4-0,Edge], [7:0-3-0,0-2-4], [8:0-0-11,0-2-4], [11:0-4-4,0-4-7], [11:0-0-13,0-1-10], [12:0-4-12,Edge], [13:0-4-12,Edge]

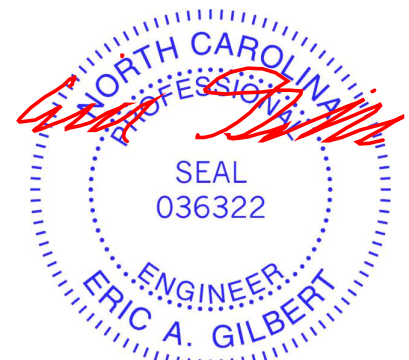
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.65	Vert(LL)	-0.19 12-13	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.80	Vert(CT)	-0.30 12-13	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.95	Horz(CT)	0.04 11	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.15 1-13	>999	240	Weight: 348 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x8 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-4-5 oc purlins.
BOT CHORD 2x8 SP No.1 *Except*	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x6 SP No.1 *Except*	WEBS 1 Row at midpt 5-7
WEDGE	
Left: 2x8 SP No.1 , Right: 2x8 SP No.1	

**REACTIONS.** (size) 1=0-3-8, 11=0-3-8  
 Max Horz 1=309(LC 8)  
 Max Grav 1=1919(LC 20), 11=1919(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-2815/41, 2-4=-2633/19, 4-5=-1908/126, 5-6=-275/148, 6-7=-275/148,  
 7-8=-1908/126, 8-10=-2634/19, 10-11=-2815/41  
 BOT CHORD 1-13=0/2342, 12-13=0/2091, 11-12=0/2123  
 WEBS 5-7=-1963/70, 4-13=0/1025, 8-12=0/1025, 2-13=-348/230, 10-12=-348/230

- 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) 0-8-1 to 5-0-14, Interior(1) 5-0-14 to 17-4-8, Exterior(2) 17-4-8 to 21-9-5 to 34-0-15 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Ceiling dead load (10.0 psf) on member(s). 4-5, 7-8, 5-7; Wall dead load (5.0psf) on member(s).4-13, 8-12
  - 6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-13
  - 7) Attic room checked for L/360 deflection.



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

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

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

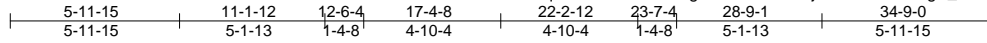
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Watermark/Lot 65 South Creek/Harnett	E15007725
J1120-5310	B1GE	GABLE	1	1	Job Reference (optional)	

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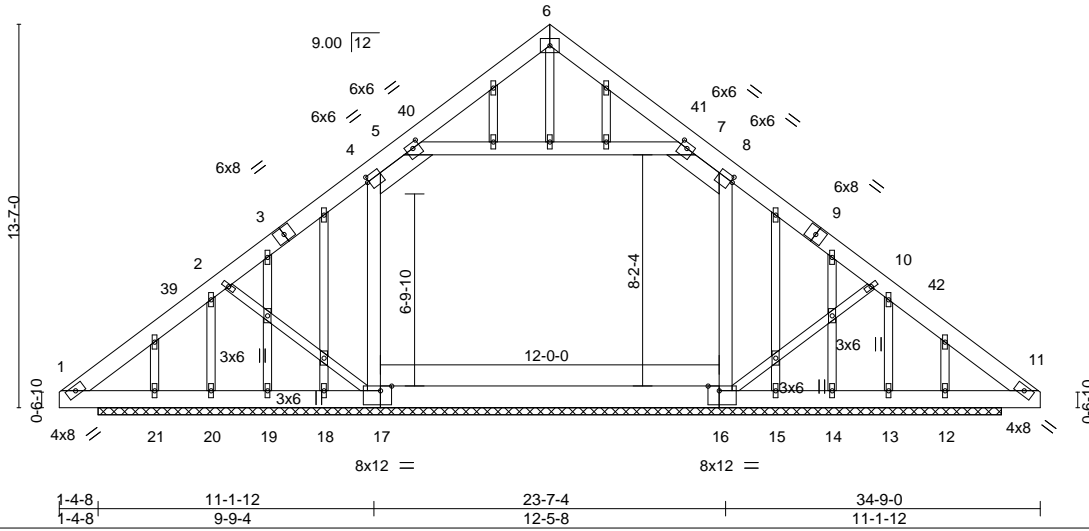


Plate Offsets (X,Y)-- [4:0-0-11,0-2-4], [5:0-3-0,0-2-4], [7:0-3-0,0-2-4], [8:0-0-11,0-2-4], [16:0-4-12,Edge], [17:0-4-12,Edge]

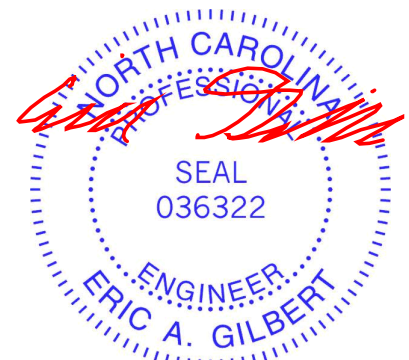
LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.22	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.25	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.49	Horz(CT)	0.01	12	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 402 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x8 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x8 SP No.1 *Except*	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
16-17: 2x10 SP No.1	
WEBS 2x6 SP No.1 *Except*	
2-17,10-16: 2x4 SP No.2, 4-5,7-8: 2x8 SP No.1	
OTHERS 2x4 SP No.2	

**REACTIONS.** All bearings 32-0-0.  
 (lb) - Max Horz 21=387(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 21, 12 except 17=362(LC 12), 16=349(LC 13), 18=443(LC 18), 20=341(LC 24), 15=443(LC 18), 13=341(LC 25)  
 Max Grav All reactions 250 lb or less at joint(s) 19, 20, 14, 13 except 17=1605(LC 20), 16=1590(LC 21), 21=552(LC 24), 12=552(LC 25)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=96/263, 2-4=138/504, 5-6=387/157, 6-7=387/157, 8-10=125/490  
 BOT CHORD 20-21=338/285, 19-20=338/285, 18-19=338/285, 17-18=336/287, 16-17=440/379  
 WEBS 5-7=0/562, 4-17=805/350, 8-16=802/341, 2-17=321/284, 10-16=321/284

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) 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 Exterior(2) 0-2-1 to 4-6-13, Interior(1) 4-6-13 to 17-4-8, Exterior(2) 17-4-8 to 21-9-5, Interior(1) 21-9-5 to 34-6-15 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 4) All plates are 2x6 MT20 unless otherwise indicated.
  - 5) Gable studs spaced at 2-0-0 oc.
  - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 21, 12 except (jt=lb) 17=362, 16=349, 18=443, 20=341, 15=443, 13=341.
  - 9) Non Standard bearing condition. Review required.
  - 10) Attic room checked for L/360 deflection.



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

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

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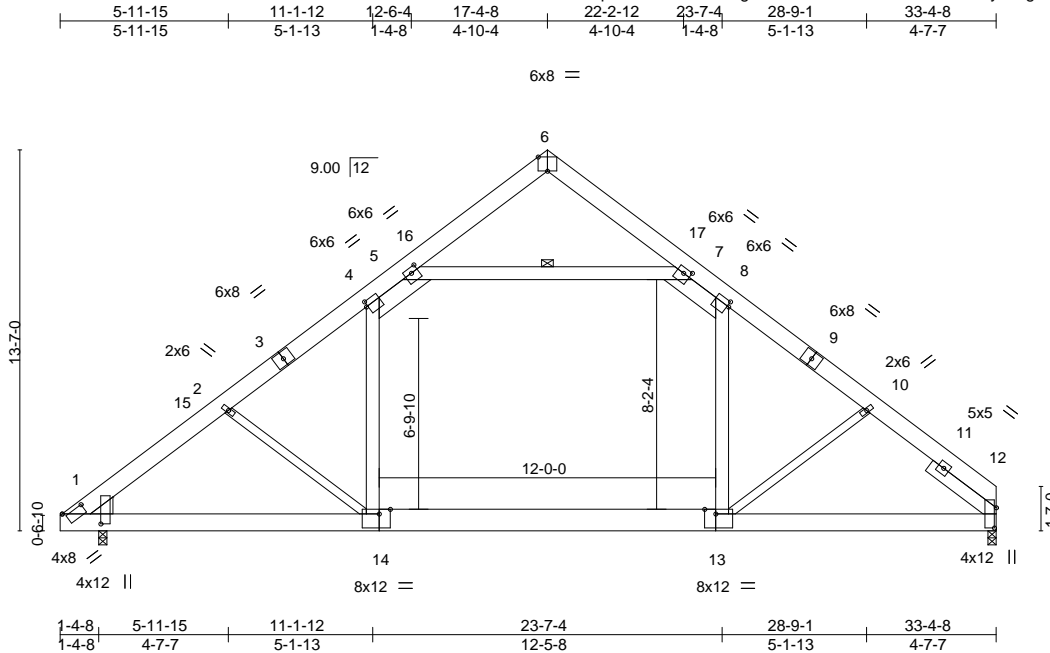
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Watermark/Lot 65 South Creek/Harnett	E15007726
J1120-5310	B2	ATTIC	2	1		

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ID:72Rk7VqdTmkJWHwdWE6g2Zz706C-6P7lwB68A6HDH2oDyVWgQiAnd2ZD4Gx7gr2lyQwoR



Scale = 1:82.2

Plate Offsets (X,Y)-- [1:0-4-4,1-4-8], [1:0-8-13,0-1-10], [4:0-0-11,0-2-4], [5:0-3-0,0-2-4], [6:0-4-0,Edge], [7:0-3-0,0-2-4], [8:0-0-11,0-2-4], [12:0-8-11,0-0-13], [13:0-4-12,Edge], [14:0-4-12,Edge]

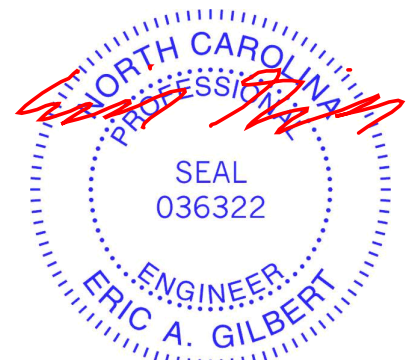
LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.63	Vert(LL)	-0.19 13-14	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.80	Vert(CT)	-0.29 13-14	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.90	Horz(CT)	0.04 12	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL)	0.15 1-14	>999	240		
							Weight: 345 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x8 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-0-15 oc purlins.
BOT CHORD 2x8 SP No.1 *Except* 13-14: 2x10 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x6 SP No.1 *Except* 2-14,10-13: 2x4 SP No.2, 4-5,7-8: 2x8 SP No.1	WEBS 1 Row at midpt 5-7
WEDGE Left: 2x8 SP No.1 SLIDER Right 2x6 SP No.1 -x 2-11-6	

**REACTIONS.** (size) 1=0-3-8, 12=0-3-8  
Max Horz 1=309(LC 8)  
Max Grav 1=1879(LC 20), 12=1902(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-2742/41, 2-4=-2551/20, 4-5=-1831/127, 5-6=-260/148, 6-7=-286/147,  
7-8=-1859/127, 8-10=-2477/19, 10-12=-2570/45  
BOT CHORD 1-14=0/2292, 13-14=0/2017, 12-13=0/1799  
WEBS 5-7=-1891/73, 4-14=0/1017, 8-13=0/895, 2-14=-375/229, 10-13=-122/280

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-8-1 to 5-0-14, Interior(1) 5-0-14 to 17-4-8, Exterior(2) 17-4-8 to 21-9-5, Interior(1) 21-9-5 to 33-4-8 zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Ceiling dead load (10.0 psf) on member(s). 4-5, 7-8, 5-7; Wall dead load (5.0psf) on member(s).4-14, 8-13
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 13-14
  - Attic room checked for L/360 deflection.



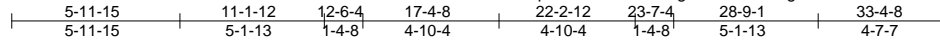
October 22,2020

Job	Truss	Truss Type	Qty	Ply	Watermark/Lot 65 South Creek/Harnett	E15007727
J1120-5310	B3	ATTIC	1	2		

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Oct 22 07:34:43 2020 Page 1

ID:72Rk7VqdTmkJWHwdWE6g2Zz706C-achg8X7mxQP4MQc?nf0lDeFMx1QzycN4MKPPalyQwoQ



6x8 =

Scale = 1:82.2

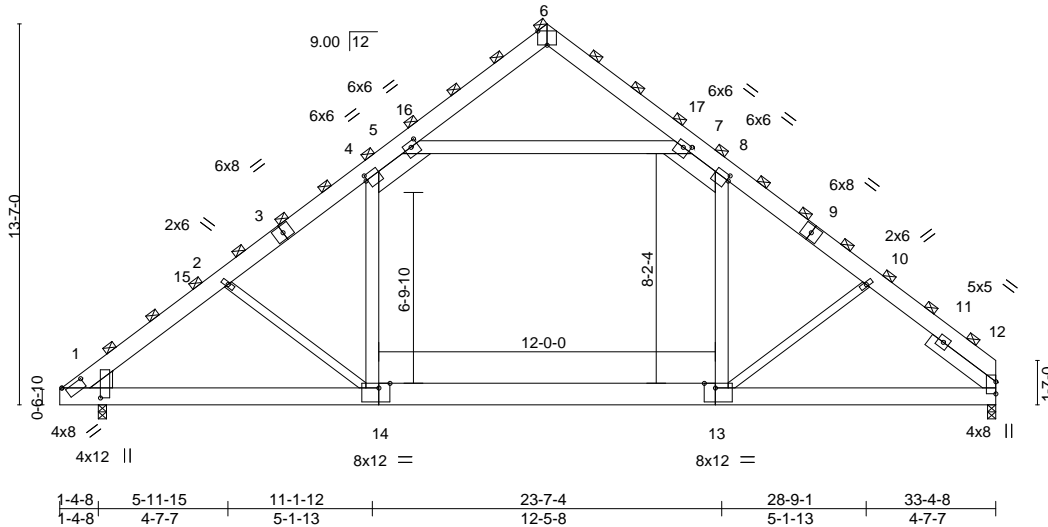


Plate Offsets (X,Y)-- [1:0-4-4,1-4-8], [1:0-8-13,0-1-10], [4:0-0-11,0-2-4], [5:0-3-0,0-2-4], [6:0-4-0,Edge], [7:0-3-0,0-2-4], [8:0-0-11,0-2-4], [13:0-4-12,Edge], [14:0-4-12,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.54	Vert(LL) -0.14	13-14	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.66	Vert(CT) -0.22	13-14	>999	240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.59	Horz(CT) 0.03	12	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.11	1-14	>999	240	Weight: 690 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x8 SP No.1  
 BOT CHORD 2x8 SP No.1 \*Except\*  
 13-14: 2x10 SP No.1  
 WEBS 2x6 SP No.1 \*Except\*  
 2-14,10-13: 2x4 SP No.2, 4-5,7-8: 2x8 SP No.1

WEDGE  
 Left: 2x8 SP No.1  
 SLIDER Right 2x6 SP No.1 -x 2-11-6

**REACTIONS.** (size) 1=0-3-8, 12=0-3-8  
 Max Horz 1=464(LC 10)  
 Max Grav 1=2819(LC 20), 12=2854(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-4113/62, 2-4=-3826/29, 4-5=-2746/191, 5-6=-390/222, 6-7=-430/221,  
 7-8=-2789/191, 8-10=-3716/28, 10-12=-3856/67  
 BOT CHORD 1-14=0/3438, 13-14=0/3026, 12-13=0/2699  
 WEBS 5-7=-2837/109, 4-14=0/1525, 8-13=0/1342, 2-14=-563/344, 10-13=-183/419

**NOTES-**

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x10 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-8-1 to 5-0-14, Interior(1) 5-0-14 to 17-4-8, Exterior(2) 17-4-8 to 21-9-5, Interior(1) 21-9-5 to 33-4-8 zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Ceiling dead load (10.0 psf) on member(s). 4-5, 7-8, 5-7; Wall dead load (5.0psf) on member(s).4-14, 8-13
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 13-14
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Attic room checked for L/360 deflection.



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



818 Soundside Road  
 Edenton, NC 27932

Job J1120-5310	Truss C1GE	Truss Type GABLE	Qty 1	Ply 1	Watermark/Lot 65 South Creek/Harnett E15007728
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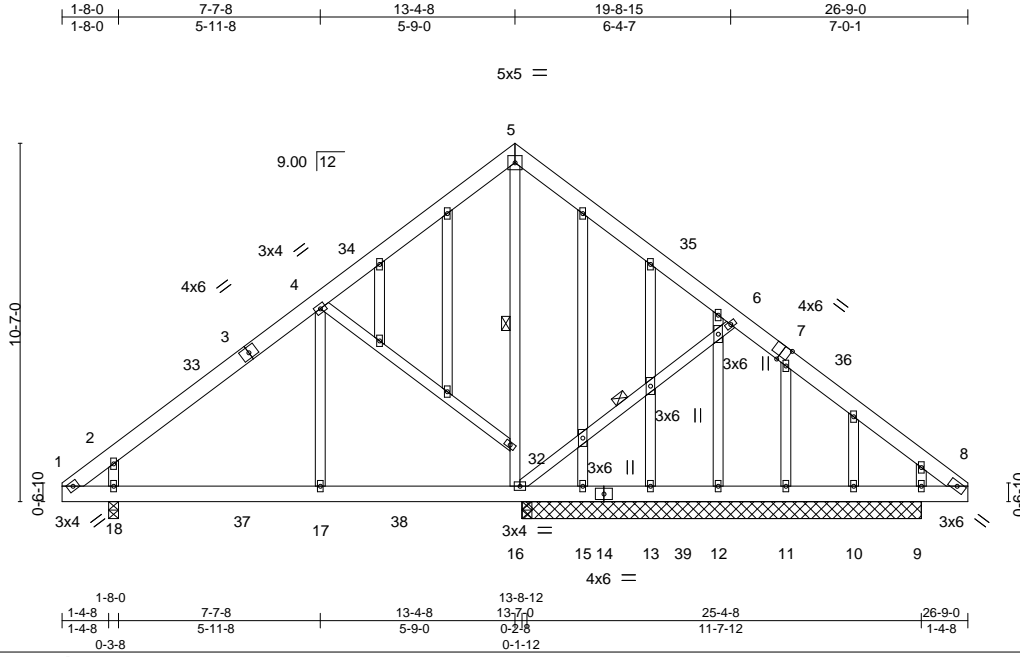


Plate Offsets (X,Y)-- [7:0-2-13,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.18	Vert(LL)	-0.07 17	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.34	Vert(CT)	-0.13 17-18	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.76	Horz(CT)	0.01 9	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.12 17-18	>999	240		
	Code IRC2015/TPI2014						Weight: 237 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 6-16, 5-16

**REACTIONS.**

All bearings 11-9-8 except (jt=length) 18=0-3-8.  
 (lb) - Max Horz 18=302(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 12, 11 except 18=234(LC 12), 16=220(LC 13), 15=296(LC 19), 10=316(LC 19), 9=365(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 15, 13, 12, 11, 10 except 18=693(LC 19), 16=1059(LC 20), 16=1041(LC 1), 9=753(LC 1)

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

TOP CHORD 1-2=-294/0, 2-4=-480/203, 4-5=-287/288, 5-6=-351/359, 6-8=-568/353  
 BOT CHORD 1-18=0/284, 17-18=-248/477, 16-17=-246/478, 15-16=-193/393, 13-15=-193/393, 12-13=-193/393, 11-12=-193/393, 10-11=-193/393, 9-10=-193/393, 8-9=-193/393  
 WEBS 2-18=-450/309, 6-16=-447/379, 16-32=-470/0, 5-32=-347/54, 4-32=-318/170

**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 Exterior(2) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 13-4-8, Exterior(2) 13-4-8 to 17-9-5, Interior(1) 17-9-5 to 26-9-0 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13, 12, 11 except (jt=lb) 18=234, 16=220, 15=296, 10=316, 9=365.



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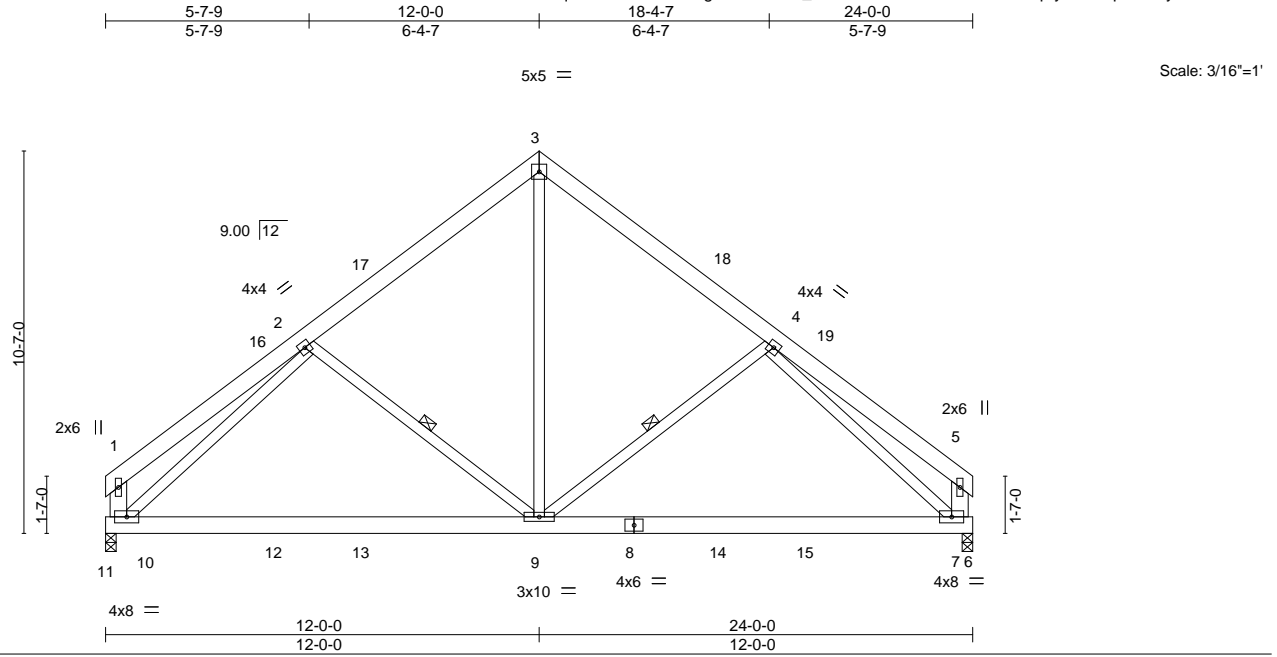
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Watermark/Lot 65 South Creek/Harnett	E15007729
J1120-5310	C2	QUEENPOST	3	1	Job Reference (optional)	

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ID:72Rk7VqdTmkJWHwdWE6g2Zz706C-W\_oQZD80T1fckmNv42DI3Kn9qAyQW8NpeuVfdyGwoO



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.24	Vert(LL)	-0.07	9-10	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.37	Vert(CT)	-0.13	9-10	>999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.64	Horz(CT)	0.02	7	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.01	9	>999		
	Code IRC2015/TPI2014						Weight: 190 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 1-10,5-7: 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 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 2-9, 4-9

**REACTIONS.**

(size) 10=0-3-8, 7=0-3-8  
 Max Horz 10=-209(LC 10)  
 Max Uplift 10=-35(LC 12), 7=-35(LC 13)  
 Max Grav 10=939(LC 1), 7=939(LC 1)

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

TOP CHORD 1-2=-439/72, 2-3=-855/285, 3-4=-855/285, 4-5=-439/72, 1-10=-356/100, 5-7=-355/100  
 BOT CHORD 9-10=-129/852, 7-9=-129/732  
 WEBS 2-9=-314/229, 3-9=-131/623, 4-9=-314/229, 2-10=-717/245, 4-7=-717/245

**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) 0-4-4 to 4-9-1, Interior(1) 4-9-1 to 12-0-0, Exterior(2) 12-0-0 to 16-4-13, Interior(1) 16-4-13 to 23-7-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 7.



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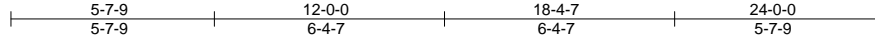
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Watermark/Lot 65 South Creek/Harnett	E15007730
J1120-5310	C3GDR	Common Girder	1	2	Job Reference (optional)	

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ID:72Rk7VqdTmkJWHwdWE6g2Zz706C-\_BMomZ9eLnfDuLZSnZSqGts4EXJ9vBW2ld3B4yQwoN



5x8 ||

Scale: 3/16"=1'

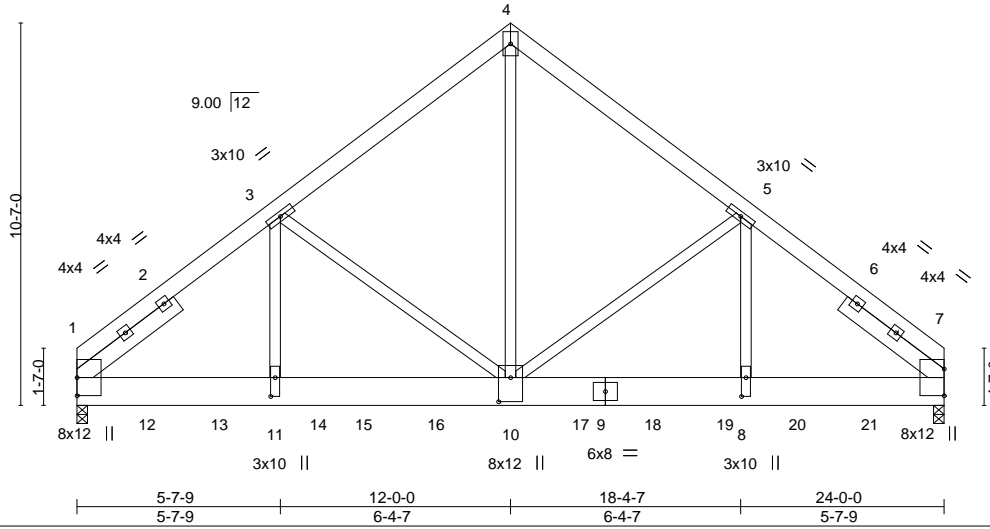


Plate Offsets (X,Y)-- [8:0-6-4,0-1-8], [10:0-8-0,0-4-0], [11:0-6-4,0-1-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.61	Vert(LL)	-0.08 8-10	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.30	Vert(CT)	-0.16 8-10	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.84	Horz(CT)	0.03 7	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.06 10-11	>999	240	Weight: 464 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x10 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	
SLIDER Left 2x6 SP No.1 -x 3-5-12, Right 2x6 SP No.1 -x 3-5-12	

**REACTIONS.** (size) 1=0-3-8, 7=0-3-8  
 Max Horz 1=-238(LC 4)  
 Max Uplift 1=-489(LC 8), 7=-485(LC 9)  
 Max Grav 1=7306(LC 2), 7=7245(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-3=-8809/616, 3-4=-6299/533, 4-5=-6298/534, 5-7=-8810/617  
 BOT CHORD 1-11=-482/6536, 10-11=-482/6536, 8-10=-389/6535, 7-8=-389/6535  
 WEBS 4-10=-494/6886, 5-10=-1907/282, 5-8=-152/3093, 3-10=-1908/281, 3-11=-149/3091

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 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; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 1=489, 7=485.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1170 lb down and 89 lb up at 1-11-4, 1170 lb down and 89 lb up at 3-11-4, 1170 lb down and 89 lb up at 5-11-4, 1170 lb down and 89 lb up at 7-11-4, 1170 lb down and 89 lb up at 9-11-4, 1170 lb down and 89 lb up at 11-11-4, 1170 lb down and 89 lb up at 13-11-4, 1170 lb down and 89 lb up at 15-11-4, 1170 lb down and 89 lb up at 17-11-4, and 1170 lb down and 89 lb up at 19-11-4, and 1170 lb down and 89 lb up at 21-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard  
 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15



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Continued on page 2

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
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ENGINEERING BY  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	Watermark/Lot 65 South Creek/Harnett	E15007730
J1120-5310	C3GDR	Common Girder	1	2	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Oct 22 07:34:46 2020 Page 2  
 ID:72Rk7VqdTmkJWHwdWE6g2Zz706C-\_BMomZ9eELnfDuLZSnZSqGts4EXJ9vBW2ld3B4yQwoN

**LOAD CASE(S)** Standard

Uniform Loads (plf)

Vert: 1-4=-60, 4-7=-60, 1-7=-20

Concentrated Loads (lb)

Vert: 10=-1105(F) 12=-1105(F) 13=-1105(F) 14=-1105(F) 15=-1105(F) 16=-1105(F) 17=-1105(F) 18=-1105(F) 19=-1105(F) 20=-1105(F) 21=-1105(F)

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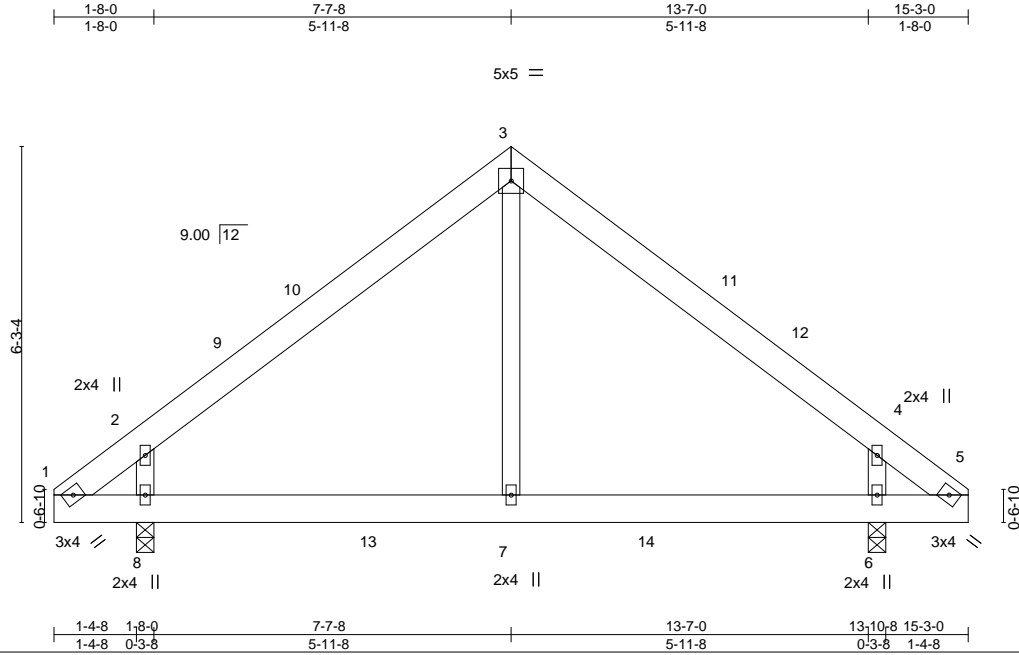
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Watermark/Lot 65 South Creek/Harnett	E15007731
J1120-5310	D1	ROOF SPECIAL	2	1		

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Oct 22 07:34:47 2020 Page 1

ID:72Rk7VqdTmkJWHwdWE6g2Zz706C-TNwB\_uAG?ewVr2wm0V5hNUP8nevfuzmgHyNcjWyQwoM



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.17	Vert(LL) -0.01	7	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.16	Vert(CT) -0.02	7	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.06	Horz(CT) 0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.01	7-8	>999	240	Weight: 91 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

(size) 6=0-3-8, 8=0-3-8  
 Max Horz 8=138(LC 9)  
 Max Uplift 6=-32(LC 13), 8=-32(LC 12)  
 Max Grav 6=610(LC 1), 8=610(LC 1)

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

TOP CHORD 1-2=-350/9, 2-3=-504/138, 3-4=-504/138, 4-5=-350/9  
 BOT CHORD 1-8=0/341, 7-8=0/341, 6-7=0/341, 5-6=0/341  
 WEBS 4-6=-481/316, 2-8=-481/316

**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) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 7-7-8, Exterior(2) 7-7-8 to 12-0-5, Interior(1) 12-0-5 to 15-3-0 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 8.



October 22, 2020

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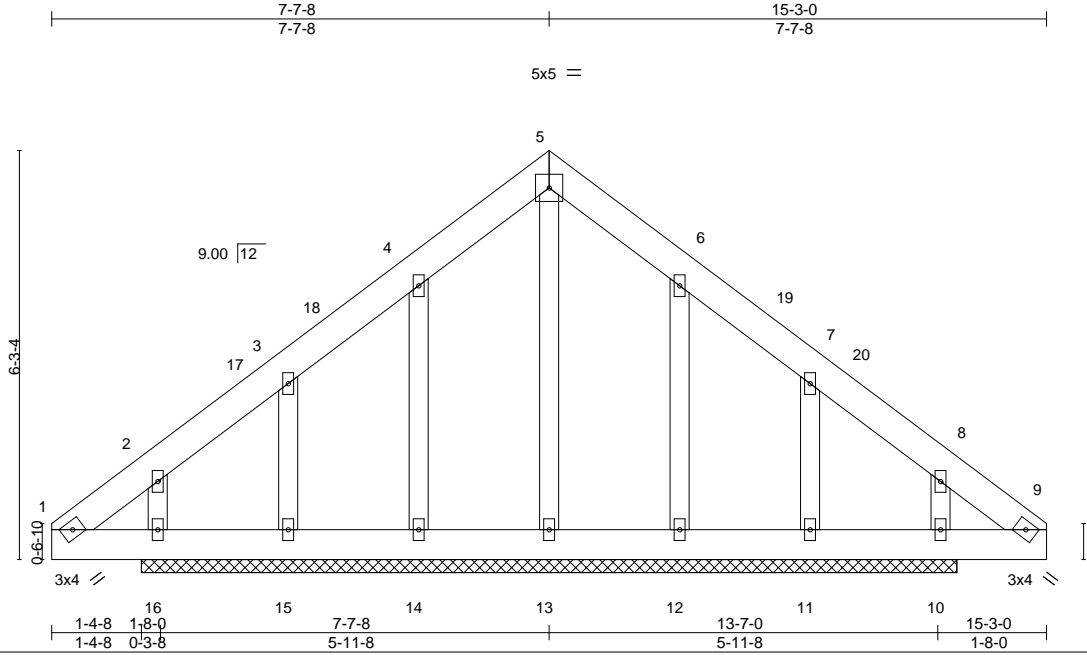
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Watermark/Lot 65 South Creek/Harnett	E15007732
J1120-5310	D1GE	GABLE	1	1	Job Reference (optional)	

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8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Oct 22 07:34:48 2020 Page 1

ID:72Rk7VqdTmkJWHwdWE6g2Zz706C-xZUZBEBvmy2MTCVyaCcwwhyLe2Hkd\_SpVc6AFyyQwoL



Scale = 1:35.3

<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 0.03	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.04	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.09	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 10 n/a n/a		
	Code IRC2015/TPI2014			Weight: 109 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 OTHERS 2x4 SP No.2

**BRACING-**

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

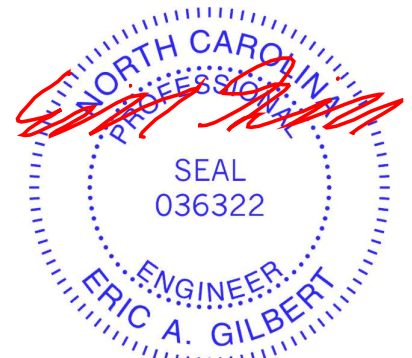
**REACTIONS.**

All bearings 12-6-0.  
 (lb) - Max Horz 16=-172(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 14, 16, 12, 10 except 15=-177(LC 12), 11=-170(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 13, 14, 15, 16, 12, 11, 10

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (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 Exterior(2) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 7-7-8, Exterior(2) 7-7-8 to 12-0-5, Interior(1) 12-0-5 to 15-3-0 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 16, 12, 10 except (jt=lb) 15=177, 11=170.
- Non Standard bearing condition. Review required.



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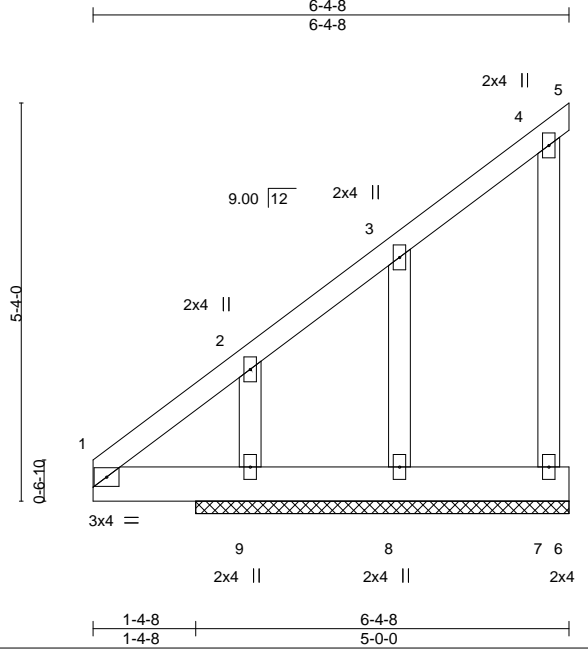
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Watermark/Lot 65 South Creek/Harnett
J1120-5310	M1GE	MONOPITCH SUPPORTED	1	1	E15007733

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ID:72Rk7VqdTmkJWHwdWE6g2Zz706C-xZUZBEBvmy2MTCVyaCcwwhyKy2FCd?NpVc6AFyyQwoL



Scale = 1:30.9

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.08	Vert(LL)	-0.00	4	n/r	120	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.14	Vert(CT)	0.00	4	n/r	120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.03	Horz(CT)	-0.00	7	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S						Weight: 40 lb	FT = 20%
	Code IRC2015/TPI2014								

<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 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 6-7.
WEBS 2x4 SP No.2	
OTHERS 2x4 SP No.2	

**REACTIONS.** (size) 7=5-0-0, 8=5-0-0, 9=5-0-0  
 Max Horz 9=229(LC 12)  
 Max Uplift 7=-28(LC 12), 8=-300(LC 12)  
 Max Grav 7=93(LC 19), 8=184(LC 10), 9=343(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-262/210

- 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) 0-0-0 to 4-1-4, Exterior(2) 4-1-4 to 6-4-8 zone; cantilever 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 studs spaced at 2-0-0 oc.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 8=300.
  - 7) Non Standard bearing condition. Review required.



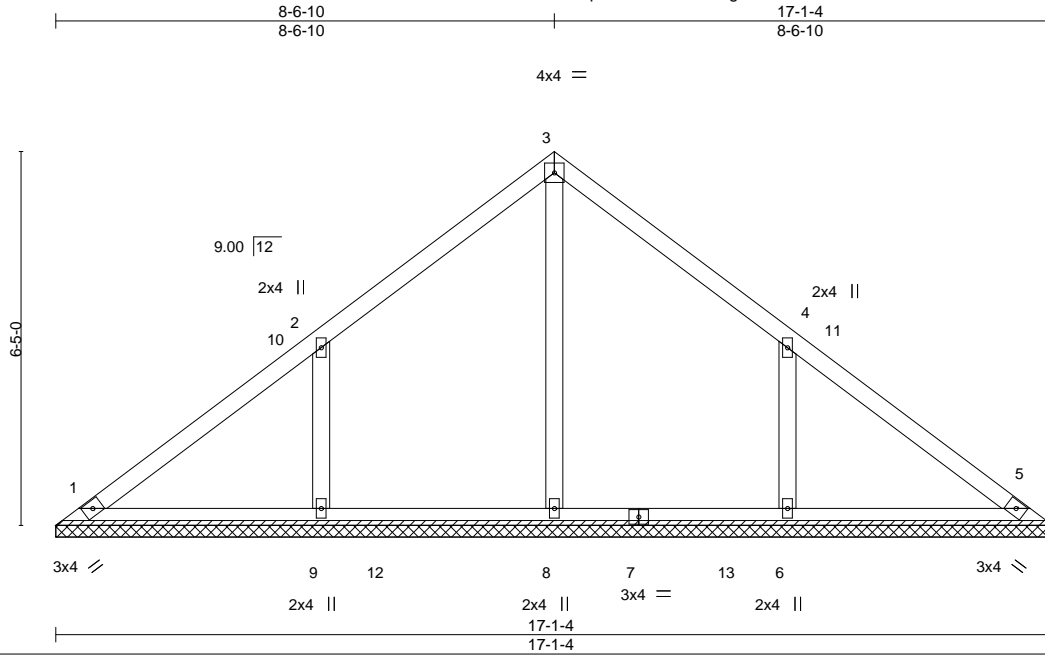
October 22, 2020

Job	Truss	Truss Type	Qty	Ply	Watermark/Lot 65 South Creek/Harnett	E15007734
J1120-5310	VB1	VALLEY	1	1		

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ID:72Rk7VqdTmkJWHwdWE6g2Zz706C-Pl2xPaBXXGAD4L488w79SvVT7RckMRbykGsjoOyQwoK



Scale = 1:39.5

Plate Offsets (X,Y)-- [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 0.18	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.10	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S					Weight: 73 lb	FT = 20%

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

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

**REACTIONS.** All bearings 17-1-4.  
 (lb) - Max Horz 1=146(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 1 except 9=135(LC 12), 6=134(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 8=347(LC 19), 9=450(LC 19), 6=450(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 2-9=-364/243, 4-6=-364/243

- 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) 0-5-4 to 4-6-10, Interior(1) 4-6-10 to 8-6-10, Exterior(2) 8-6-10 to 12-11-7, Interior(1) 12-11-7 to 16-8-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 9=135, 6=134.



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Job	Truss	Truss Type	Qty	Ply	Watermark/Lot 65 South Creek/Harnett	E15007735
J1120-5310	VB2	VALLEY	1	1	Job Reference (optional)	

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8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Oct 22 07:34:50 2020 Page 1

ID:72Rk7VqdTmkJWHwdWE6g2Zz706C-tycJwC9IzI4iVfLhdeO?61efryW5uM6zwbGKryQwoJ

13-6-10  
6-9-5

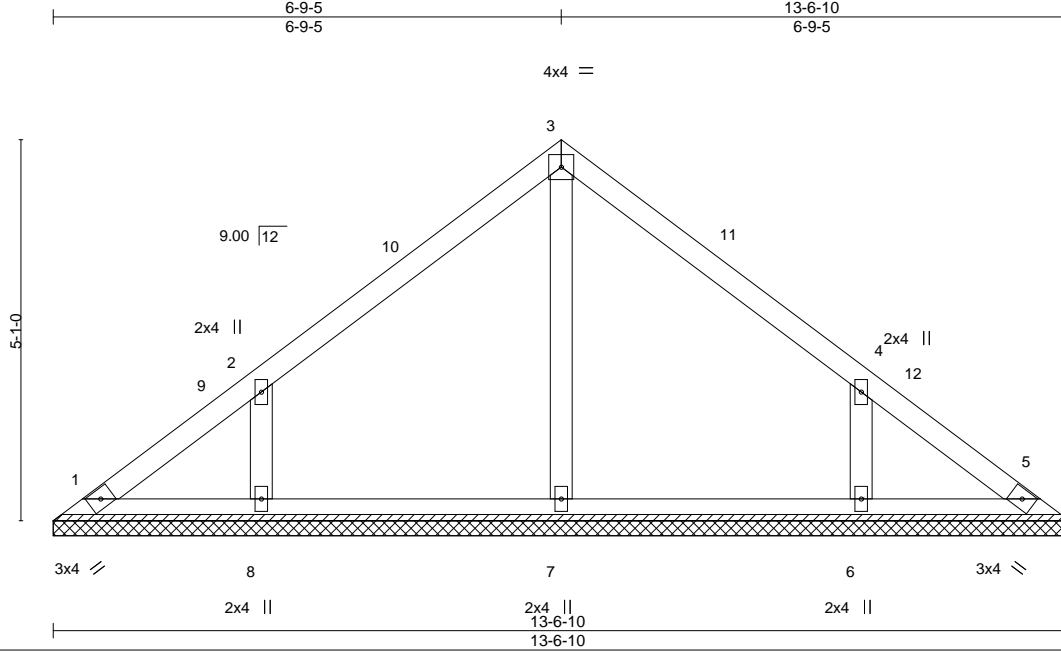


Plate Offsets (X,Y)-- [4:0-0-0,0-0-0]

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 0.13	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S					Weight: 55 lb	FT = 20%

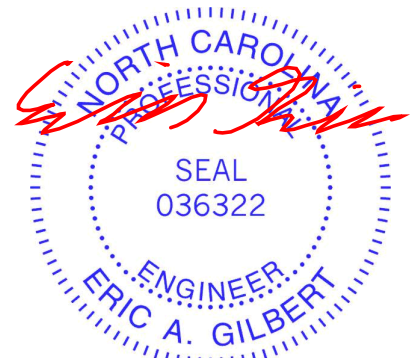
**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
OTHERS 2x4 SP No.2

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

**REACTIONS.** All bearings 13-6-10.  
(lb) - Max Horz 1=114(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=110(LC 12), 6=110(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=252(LC 1), 8=332(LC 19), 6=332(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 2-8=300/217, 4-6=300/217

- 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) 0-5-4 to 4-10-1, Interior(1) 4-10-1 to 6-9-5, Exterior(2) 6-9-5 to 11-2-2, Interior(1) 11-2-2 to 13-1-6 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=110, 6=110.
  - Non Standard bearing condition. Review required.



October 22,2020

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ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

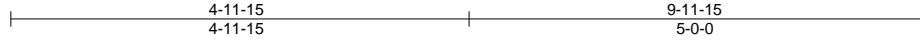
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Watermark/Lot 65 South Creek/Harnett	E15007736
J1120-5310	VB3	VALLEY	1	1	Job Reference (optional)	

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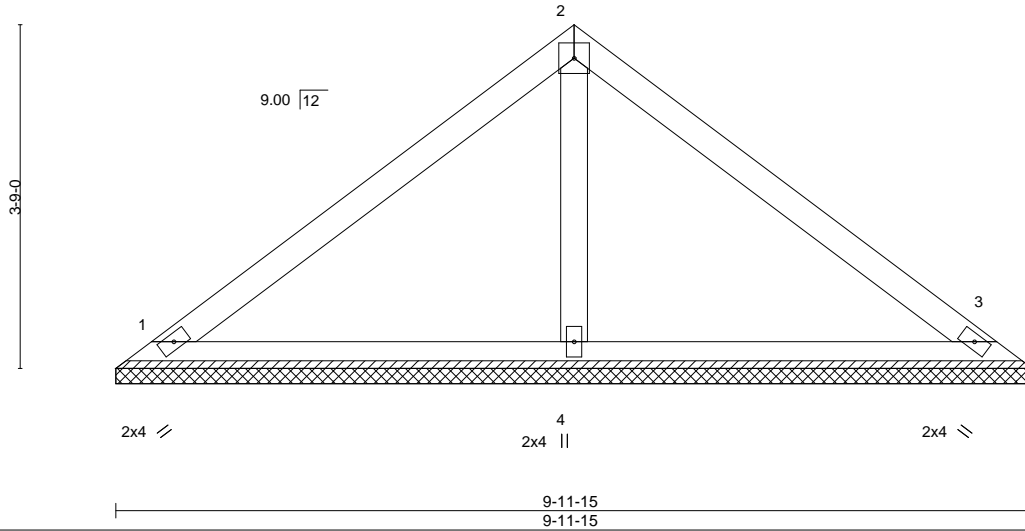
8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Oct 22 07:34:51 2020 Page 1

ID:72Rk7VqdTmkJWHwdWE6g2Zz706C-L89hpGDn3tQxKfEXFL9dXKao1FHkqMtFBaLqshyQwol



4x4 =

Scale = 1:25.1



LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.22	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.15	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.05	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S						Weight: 37 lb	FT = 20%
	Code IRC2015/TPI2014								

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

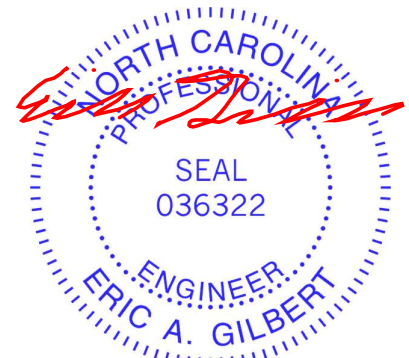
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=9-11-15, 3=9-11-15, 4=9-11-15  
 Max Horz 1=82(LC 10)  
 Max Uplift 1=22(LC 12), 3=30(LC 13)  
 Max Grav 1=188(LC 1), 3=188(LC 1), 4=353(LC 1)

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



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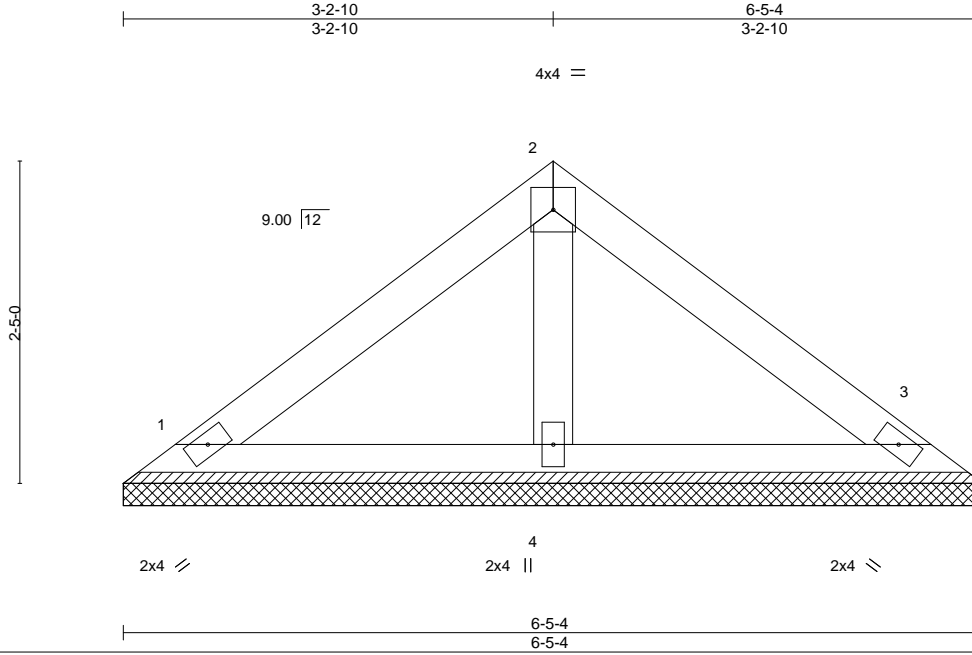
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Watermark/Lot 65 South Creek/Harnett	E15007737
J1120-5310	VB4	VALLEY	1	1	Job Reference (optional)	

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ID:72Rk7VqdTmkJWHwdWE6g2Zz706C-L89hpGDn3tQxKfEXFL9dXKaqpFJEqMMFBaLqshyQwol



Scale = 1:17.3

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.10	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.06	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.02	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 23 lb	FT = 20%
	Code IRC2015/TPI2014							

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

(size) 1=6-5-4, 3=6-5-4, 4=6-5-4  
 Max Horz 1=50(LC 9)  
 Max Uplift 1=-19(LC 12), 3=-24(LC 13)  
 Max Grav 1=125(LC 1), 3=125(LC 1), 4=195(LC 1)

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



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Job	Truss	Truss Type	Qty	Ply	Watermark/Lot 65 South Creek/Harnett	E15007738
J1120-5310	VB5	VALLEY	1	1	Job Reference (optional)	

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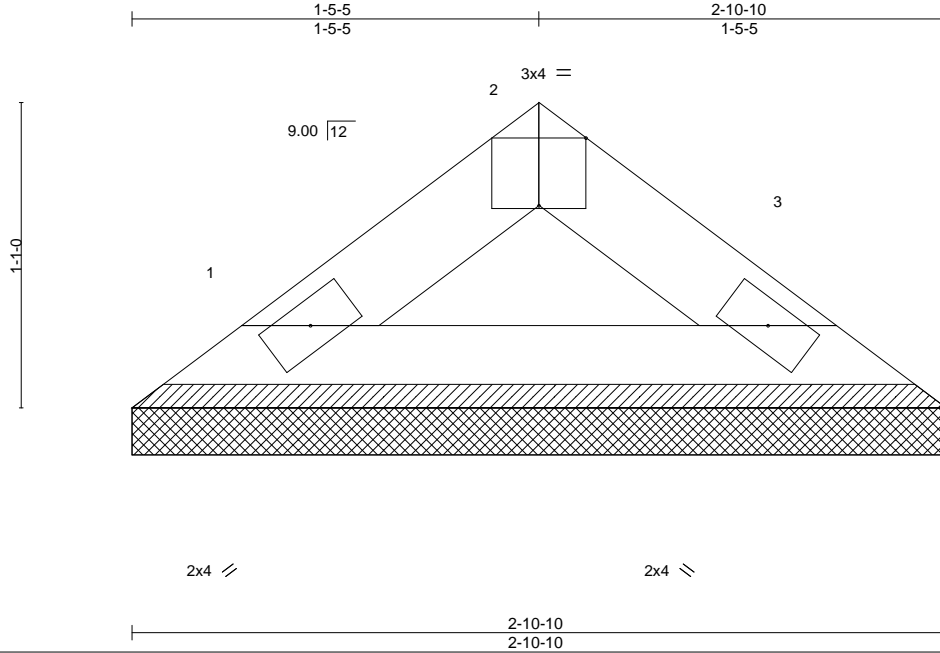


Plate Offsets (X,Y)-- [2:0-2-0,Edge]

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 0.01	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-P					Weight: 8 lb	FT = 20%

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

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

**REACTIONS.** (size) 1=2-10-10, 3=2-10-10  
Max Horz 1=18(LC 11)  
Max Uplift 1=-4(LC 12), 3=-4(LC 13)  
Max Grav 1=80(LC 1), 3=80(LC 1)

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (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
- 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 6) Non Standard bearing condition. Review required.



October 22,2020

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ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

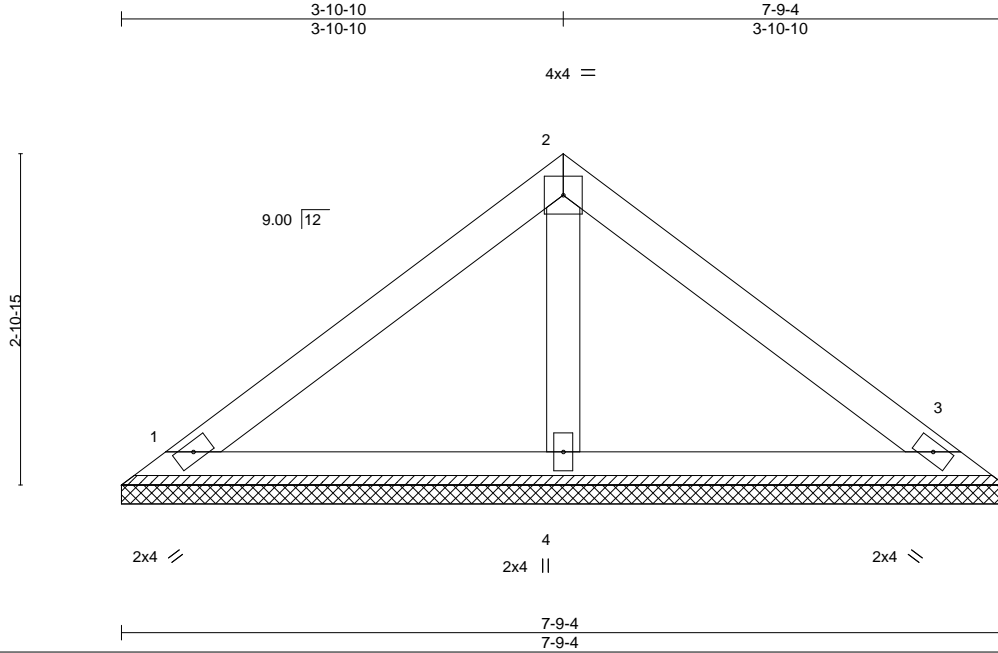
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Watermark/Lot 65 South Creek/Harnett	E15007739
J1120-5310	VC1	VALLEY	1	1	Job Reference (optional)	

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Scale = 1:20.3

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.17	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.09	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.02	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 28 lb	FT = 20%
	Code IRC2015/TPI2014							

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

(size) 1=7-9-4, 3=7-9-4, 4=7-9-4  
 Max Horz 1=62(LC 11)  
 Max Uplift 1=24(LC 12), 3=30(LC 13)  
 Max Grav 1=155(LC 1), 3=155(LC 1), 4=242(LC 1)

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (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
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



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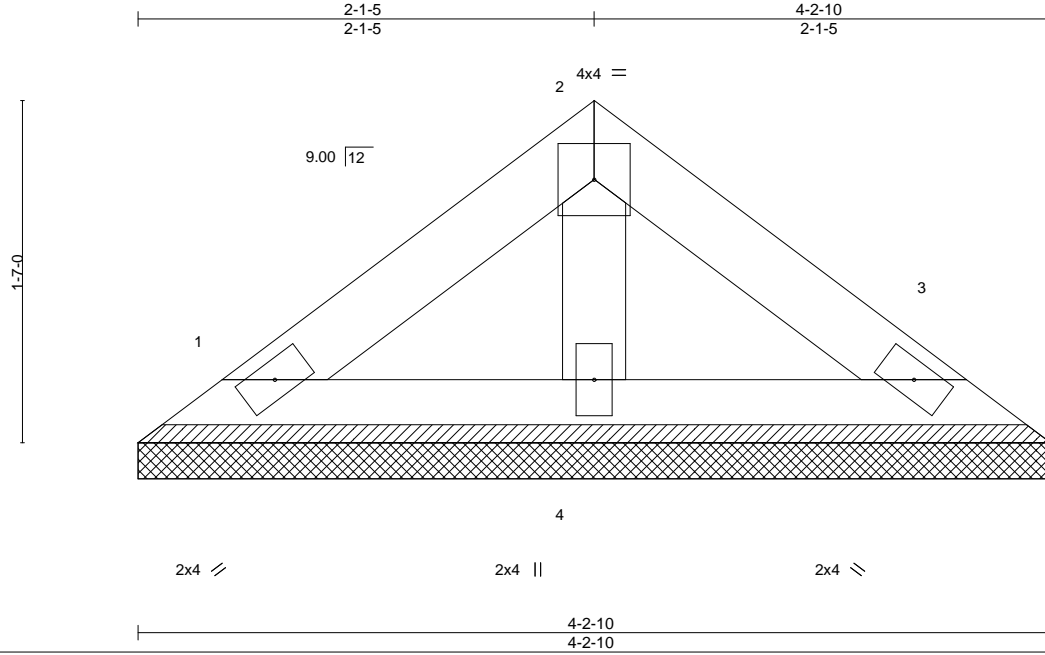
818 Soundside Road  
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Job	Truss	Truss Type	Qty	Ply	Watermark/Lot 65 South Creek/Harnett	E15007740
J1120-5310	VC2	VALLEY	1	1	Job Reference (optional)	

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Scale = 1:10.7

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.03	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.02	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.01	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 14 lb	FT = 20%
	Code IRC2015/TPI2014							

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-2-10 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

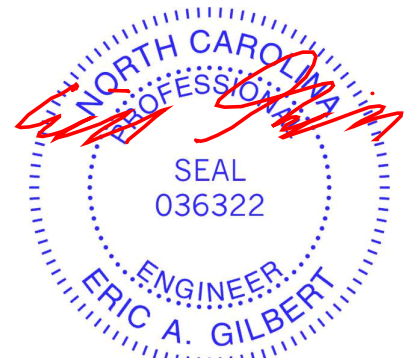
**REACTIONS.**

(size) 1=4-2-10, 3=4-2-10, 4=4-2-10  
 Max Horz 1=-30(LC 8)  
 Max Uplift 1=-12(LC 12), 3=-15(LC 13)  
 Max Grav 1=75(LC 1), 3=75(LC 1), 4=117(LC 1)

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 6) Non Standard bearing condition. Review required.



October 22, 2020

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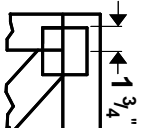
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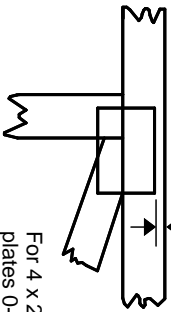
818 Soundside Road  
 Edenton, NC 27932

# Symbols

## PLATE LOCATION AND ORIENTATION



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



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



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

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

## PLATE SIZE

4 X 4

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

## LATERAL BRACING LOCATION



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

## BEARING



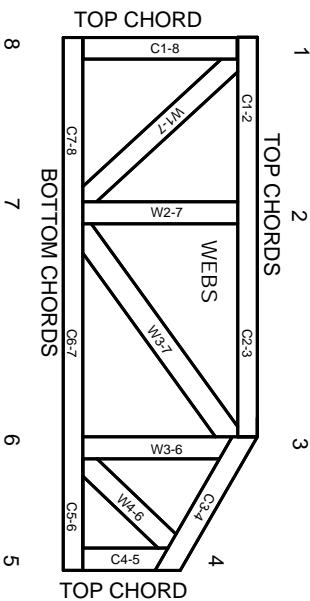
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

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

# Numbering System

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



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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



# General Safety Notes

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

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