

RE: J1120-5305  
 Lot 45 South Creek

Trenco  
 818 Soundside Rd  
 Edenton, NC 27932

**Site Information:**

Customer: Project Name: J1120-5305  
 Lot/Block: Model:  
 Address: Subdivision:  
 City: State:

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

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.3  
 Wind Code: N/A Wind Speed: 120 mph  
 Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 30 individual, dated Truss Design Drawings and 1 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	E15040880	A1	11/17/2020	21	E15040900	C2	11/17/2020
2	E15040881	A1GE	11/17/2020	22	E15040901	C3	11/17/2020
3	E15040882	A2	11/17/2020	23	E15040902	C4	11/17/2020
4	E15040883	A3	11/17/2020	24	E15040903	D1GE	11/17/2020
5	E15040884	A4	11/17/2020	25	E15040904	VC1	11/17/2020
6	E15040885	A5	11/17/2020	26	E15040905	VC2	11/17/2020
7	E15040886	A5A	11/17/2020	27	E15040906	VC3	11/17/2020
8	E15040887	A6	11/17/2020	28	E15040907	VC4	11/17/2020
9	E15040888	A7	11/17/2020	29	E15040908	VC5	11/17/2020
10	E15040889	A8	11/17/2020	30	E15040909	Z1	11/17/2020
11	E15040890	A9	11/17/2020				
12	E15040891	A10	11/17/2020				
13	E15040892	A11	11/17/2020				
14	E15040893	B1	11/17/2020				
15	E15040894	B1GE	11/17/2020				
16	E15040895	B2	11/17/2020				
17	E15040896	B3	11/17/2020				
18	E15040897	B3GE	11/17/2020				
19	E15040898	C1	11/17/2020				
20	E15040899	C1GE	11/17/2020				

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



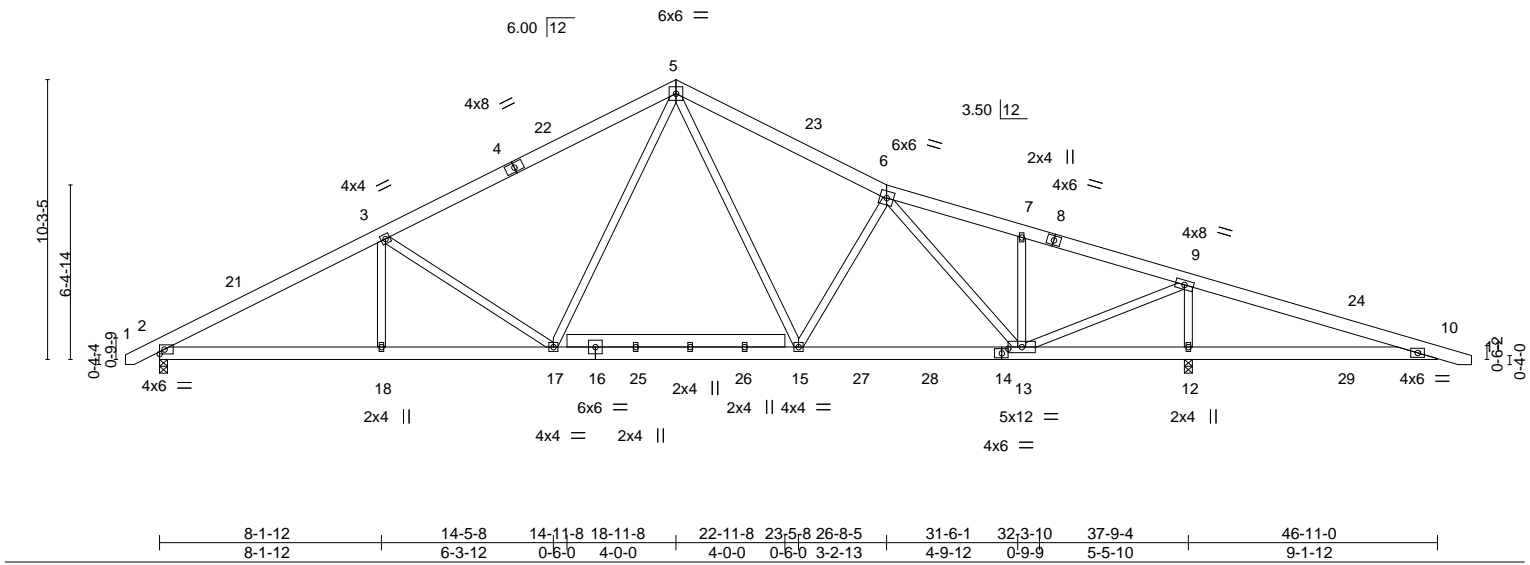
**IMPORTANT NOTE:** The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), 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 17, 2020

Job	Truss	Truss Type	Qty	Ply	Lot 45 South Creek	E15040880
J1120-5305	A1	ROOF SPECIAL	3	1		

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 26-8-5 31-6-1 32-3-10 37-9-4 39-2-6 46-11-0 48-2-0  
 -1-3-0 8-1-12 18-11-8 26-8-5 31-6-1 32-3-10 37-9-4 39-2-6 46-11-0 48-2-0  
 1-3-0 8-1-12 10-9-12 7-8-13 4-9-12 0-9-9 5-5-10 1-5-2 7-8-10 1-3-0

Scale = 1:84.6



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) -0.16	15-17	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.48	Vert(CT) -0.25	15-17	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.93	Horz(CT) 0.05	12	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.05	17	>999	240	Weight: 341 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 19-20: 2x6 SP No.1

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

**REACTIONS.** (size) 2=0-3-8, 12=0-3-8  
 Max Horz 2=-113(LC 10)  
 Max Uplift 2=-30(LC 12), 12=-222(LC 9)  
 Max Grav 2=1649(LC 2), 12=2660(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2784/448, 3-5=-2186/407, 5-6=-2062/384, 6-7=-1397/114, 7-9=-1456/65,  
 9-10=-669/1312  
 BOT CHORD 2-18=-307/2465, 17-18=-307/2465, 15-17=-24/1531, 13-15=-61/1905, 12-13=-1184/682,  
 10-12=-1184/682  
 WEBS 3-18=0/294, 9-13=-545/2669, 9-12=-2296/651, 3-17=-736/300, 5-17=-88/834,  
 5-15=-7/698, 6-13=-917/318

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-1-2 to 3-3-11, Interior(1) 3-3-11 to 18-11-8, Exterior(2R) 18-11-8 to 23-4-5, Interior(1) 23-4-5 to 47-11-1 zone; cantilever right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 12=222.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 30,2020

Job J1120-5305	Truss A1GE	Truss Type ROOF SPECIAL	Qty 1	Ply 1	Lot 45 South Creek	E15040881
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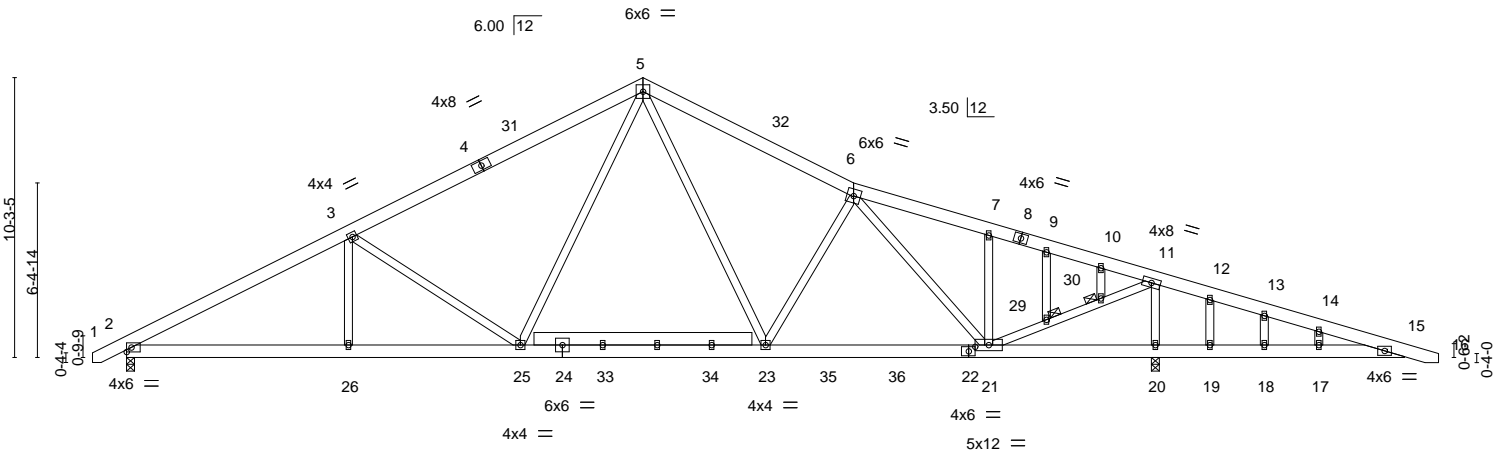
Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Oct 30 13:16:30 2020 Page 1

ID:L1J54eQhkyo6whVlnXZxPFzEJO5-aiQXn8gkv17wdjvYjaHdtGV1pR2zcKn77OMlmdyOD2?

1-3-0	8-1-12	18-11-8	26-8-5	31-6-1	32-3-10	35-9-4	37-9-4	39-2-6	41-9-4	43-9-4	46-11-0	48-2-0
1-3-0	8-1-12	10-9-12	7-8-13	4-9-12	0-9-9	1-5-10	2-0-0	1-5-2	2-0-0	2-0-0	3-1-12	1-3-0
								0-6-14				

Scale = 1:84.6



8-1-12	14-5-8	14-11-8	18-11-8	22-11-8	23-5-8	26-8-5	31-6-1	32-3-10	37-9-4	39-9-4	41-9-4	43-9-4	46-11-0
8-1-12	6-3-12	0-6-0	4-0-0	4-0-0	0-6-0	3-2-13	4-9-12	0-9-9	5-5-10	2-0-0	2-0-0	2-0-0	3-1-12

Plate Offsets (X,Y)-- [22:0-2-13,0-2-0]

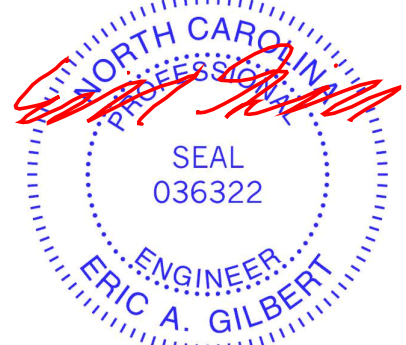
LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.48	Vert(LL) -0.16	23-25	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.48	Vert(CT) -0.25	23-25	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.92	Horz(CT) 0.05	20	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.06	25	>999	240		
							Weight: 352 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-4-12 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 27-28: 2x6 SP No.1	JOINTS 1 Brace at Jt(s): 29, 30

**REACTIONS.** (size) 2=0-3-8, 20=0-3-8  
 Max Horz 2=-173(LC 17)  
 Max Uplift 2=-224(LC 12), 20=-508(LC 9)  
 Max Grav 2=1649(LC 2), 20=2660(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2784/362, 3-5=-2186/308, 5-6=-2062/283, 6-7=-1357/190, 7-9=-1347/154,  
 9-10=-1407/147, 10-11=-1410/139, 11-12=-575/1291, 12-13=-582/1277, 13-14=-595/1244,  
 14-15=-617/1228  
 BOT CHORD 2-26=-390/2420, 25-26=-390/2420, 23-25=-78/1518, 21-23=-95/1877, 20-21=-1177/630,  
 19-20=-1177/630, 18-19=-1177/630, 17-18=-1177/630, 15-17=-1177/630  
 WEBS 3-26=0/294, 11-20=-2235/439, 3-25=-736/326, 5-25=-106/825, 5-23=-81/687,  
 7-21=-313/163, 6-21=-905/171, 21-29=-276/2690, 29-30=-274/2639, 11-30=-277/2676

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-1-2 to 3-3-11, Interior(1) 3-3-11 to 18-11-8, Exterior(2R) 18-11-8 to 23-4-5, Interior(1) 23-4-5 to 47-11-1 zone; cantilever right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) All plates are 2x4 MT20 unless otherwise indicated.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=224, 20=508.
  - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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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/TPI 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	Truss	Truss Type	Qty	Ply	Lot 45 South Creek	E15040882
J1120-5305	A2	ROOF SPECIAL	1	1	Job Reference (optional)	

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ID:L1J54eQhkyo6whVlnXZxPFzEJO5-2u\_v?UhMgLFnFsUkHHosPT1B0rOfLqNGM25s13yOD2\_

9-7-14	10-1-7	18-11-8	26-8-5	32-11-5	37-9-4	39-2-6	46-11-0	48-2-0
9-7-14	0-5-9	8-10-1	7-8-13	6-3-1	4-9-15	1-5-2	7-8-10	1-3-0

Scale = 1:82.1

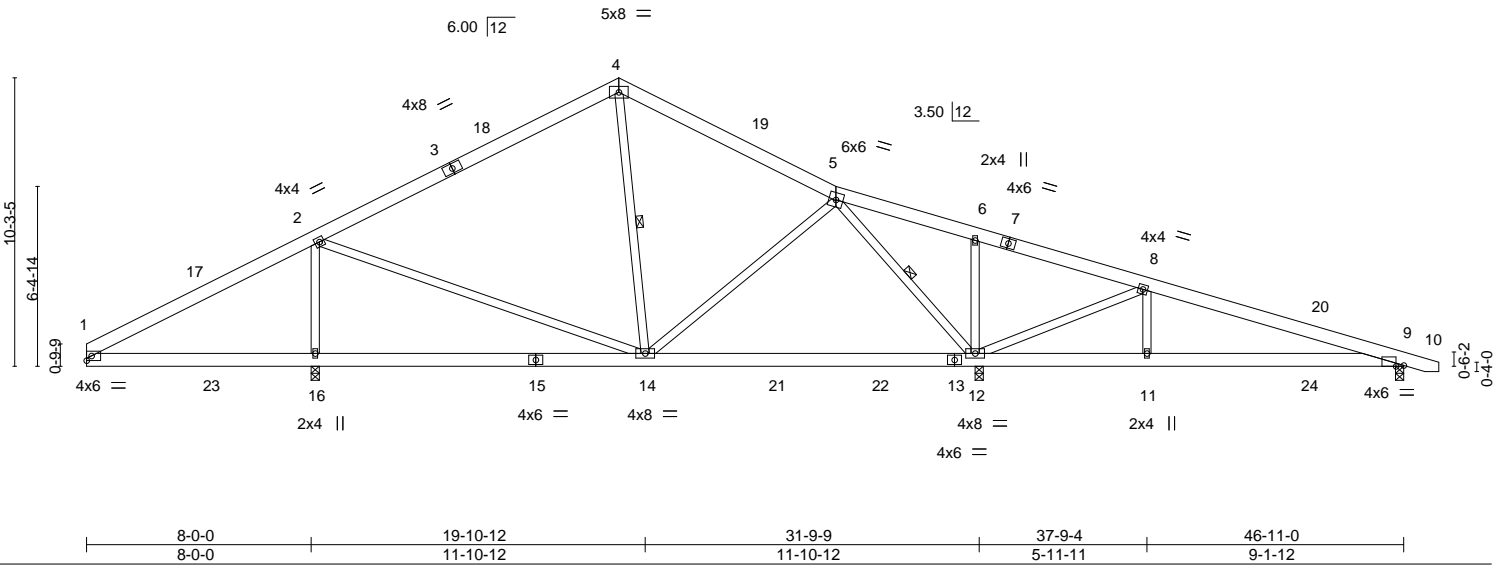


Plate Offsets (X,Y)-- [9:0-3-5,Edge]

LOADING (psf)	SPACING-	CS.I.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.52	Vert(LL) -0.19	12-14	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.46	Vert(CT) -0.27	12-14	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.77	Horz(CT) 0.01	9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.07	9-11	>999	240		
							Weight: 313 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 6-0-0 oc bracing.  
 WEBS 1 Row at midpt 5-12, 4-14

**REACTIONS.**

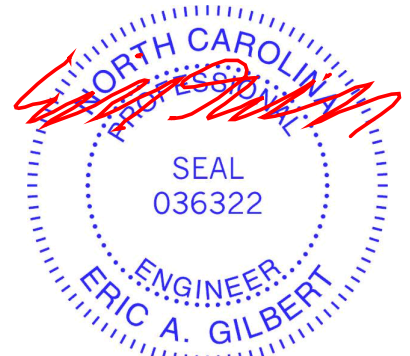
(size) 16=0-3-8, 12=0-3-8, 9=0-3-8  
 Max Horz 16=-113(LC 8)  
 Max Uplift 16=-34(LC 12), 12=-177(LC 9), 9=-171(LC 9)  
 Max Grav 16=1706(LC 2), 12=1938(LC 2), 9=508(LC 28)

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

TOP CHORD 1-2=-326/623, 2-4=-612/159, 4-5=-575/136, 5-6=-214/613, 6-8=-272/613, 8-9=-509/308  
 BOT CHORD 1-16=-437/331, 14-16=-437/330, 12-14=0/284, 11-12=-226/420, 9-11=-226/420  
 WEBS 2-16=-1352/531, 2-14=-125/925, 5-14=0/335, 8-12=-1015/685, 8-11=-206/297,  
 6-12=-297/140, 5-12=-1131/342

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 18-11-8, Exterior(2R) 18-11-8 to 23-4-5, Interior(1) 23-4-5 to 47-11-1 zone; cantilever left exposed ; porch right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16 except (jt=lb) 12=177, 9=171.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 30,2020

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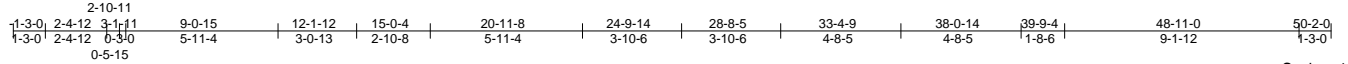


818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 45 South Creek	E15040883
J1120-5305	A3	ROOF SPECIAL GIRDER	1	1		

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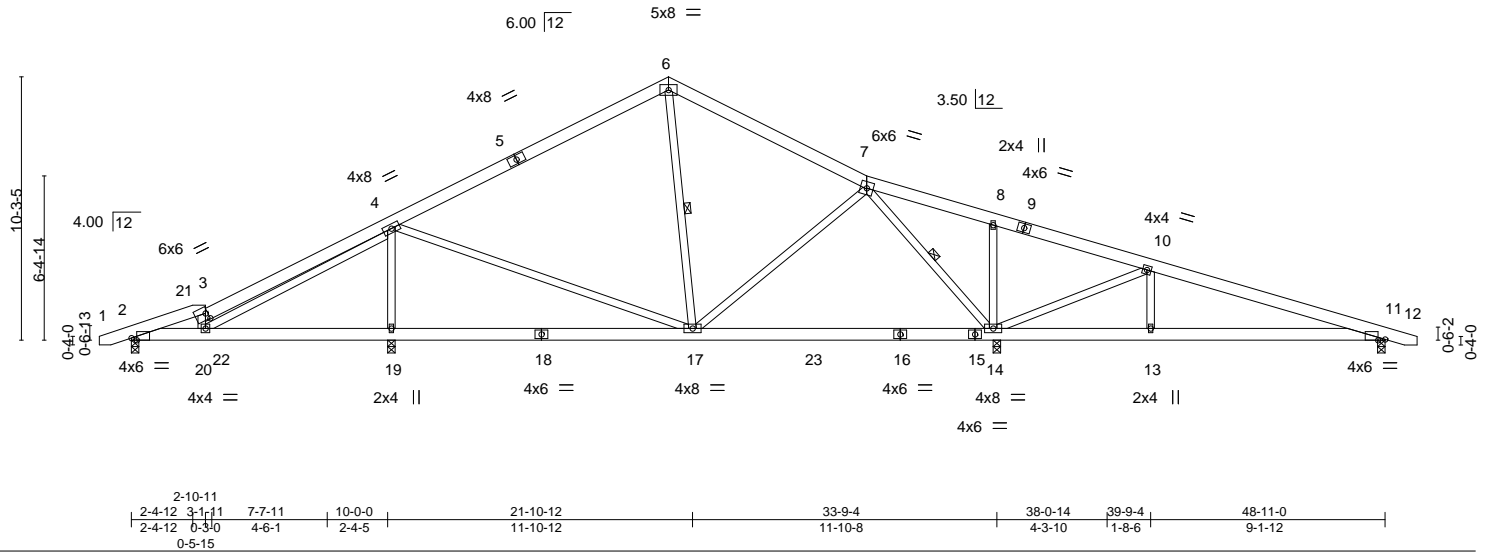


Plate Offsets (X,Y)-- [2:0-2-8,Edge], [3:0-1-0,0-3-0], [11:0-3-5,Edge]

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)	-0.18 14-17	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.50	Vert(CT)	-0.26 14-17	>999	240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.77	Horz(CT)	0.01 11	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL)	0.07 11-13	>999	240		
							Weight: 339 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 6-0-0 oc bracing.  
WEBS 1 Row at midpt 7-14, 6-17

**REACTIONS.**

All bearings 0-3-8.  
(lb) - Max Horz 2=103(LC 30)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 19 except 14=160(LC 26), 11=169(LC 26)  
Max Grav All reactions 250 lb or less at joint(s) except 2=349(LC 1), 14=1979(LC 2), 19=1522(LC 2), 11=513(LC 24)

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

TOP CHORD 2-3=431/96, 3-4=497/146, 4-6=708/98, 6-7=652/77, 7-8=64/586, 8-10=112/587, 10-11=522/189  
BOT CHORD 2-20=31/403, 14-17=0/361, 13-14=120/433, 11-13=120/433  
WEBS 4-17=0/648, 7-17=0/358, 7-14=1188/47, 10-14=1019/360, 10-13=87/299, 3-20=276/80, 4-19=1167/196, 8-14=299/99, 4-20=211/637

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); porch left and right exposed; 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) 2, 19 except (jt=lb) 14=160, 11=169.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 35 lb down and 26 lb up at 2-4-12 on top chord, and 13 lb down and 29 lb up at 2-4-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-60, 3-6=-60, 6-7=-60, 7-12=-60, 2-11=-20  
Concentrated Loads (lb)  
Vert: 22=-2(F)



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818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 45 South Creek	E15040884
J1120-5305	A4	ROOF SPECIAL	1	1		

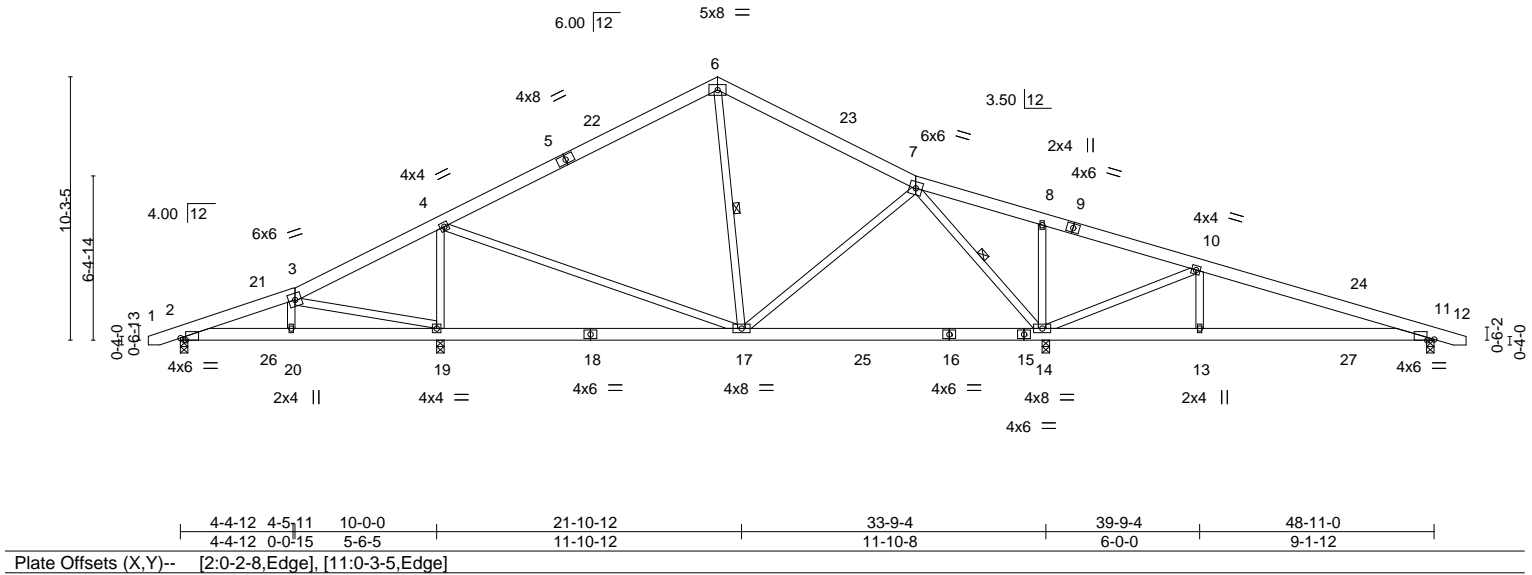
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ID:L1J54eQhkyo6whVlnXZxPFzEJO5-ST1dWjFzFdM6KDjyQLZ16fjE2PJYA\_i20KWuOyOD1x

-1-3-0	4-4-12	4-5-11	12-1-12	12-8-9	20-11-8	28-8-5	34-11-5	39-9-4	41-2-6	48-11-0	50-2-0
1-3-0	4-4-12	0-0-15	7-8-1	0-6-13	8-2-15	7-8-13	6-3-1	4-9-15	1-5-2	7-8-10	1-3-0

Scale = 1:89.9



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.46	Vert(LL) -0.18 14-17 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.46	Vert(CT) -0.25 14-17 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.78	Horz(CT) 0.01 11 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.07 11-13 >999 240	Weight: 336 lb	FT = 20%

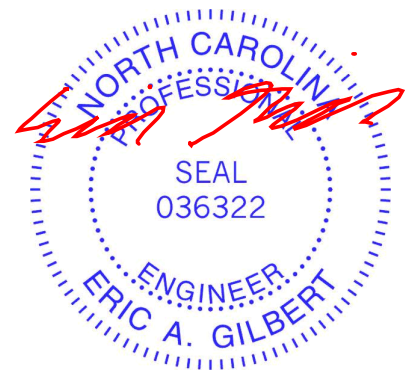
**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2

**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, Except:  
 6-0-0 oc bracing: 17-19.  
 WEBS 1 Row at midpt 7-14, 16-17

**REACTIONS.** All bearings 0-3-8.  
 (lb) - Max Horz 2=103(LC 17)  
 Max Uplift All uplift 100 lb or less at joint(s) 19 except 2=118(LC 8), 14=162(LC 9), 11=169(LC 9)  
 Max Grav All reactions 250 lb or less at joint(s) except 2=399(LC 2), 19=1446(LC 2), 14=1996(LC 2), 11=516(LC 28)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-476/222, 4-6=-728/171, 6-7=-678/163, 7-8=-210/574, 8-10=-268/576, 10-11=-530/314  
 BOT CHORD 2-20=-170/430, 19-20=-157/418, 14-17=0/377, 13-14=-232/441, 11-13=-232/441  
 WEBS 3-19=-437/341, 4-17=-4/572, 7-17=0/365, 10-14=-1019/686, 10-13=-206/299, 4-19=-1020/385, 8-14=-299/141, 7-14=-1212/352

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-0-5 to 3-4-8, Interior(1) 3-4-8 to 20-11-8, Exterior(2R) 20-11-8 to 25-4-5, Interior(1) 25-4-5 to 49-11-1 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19 except (jt=lb) 2=118, 14=162, 11=169.
  - 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 30, 2020

Job	Truss	Truss Type	Qty	Ply	Lot 45 South Creek	E15040885
J1120-5305	A5	ROOF SPECIAL	4	1		

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 ID:L1J54eQhkyo6whVlnXZxPFzEJO5-Psno2CIVVtt4LeNh4rO16XI3hs3S040?VKpdzHyOD1v  
 28-8-5 33-7-8 41-2-6 44-3-4 48-11-0 50-2-0  
 1-3-0 4-7-8 12-1-12 12-9-8 20-11-8 7-8-13 4-11-3 7-6-14 3-0-14 4-7-12 1-3-0

Scale = 1:89.9

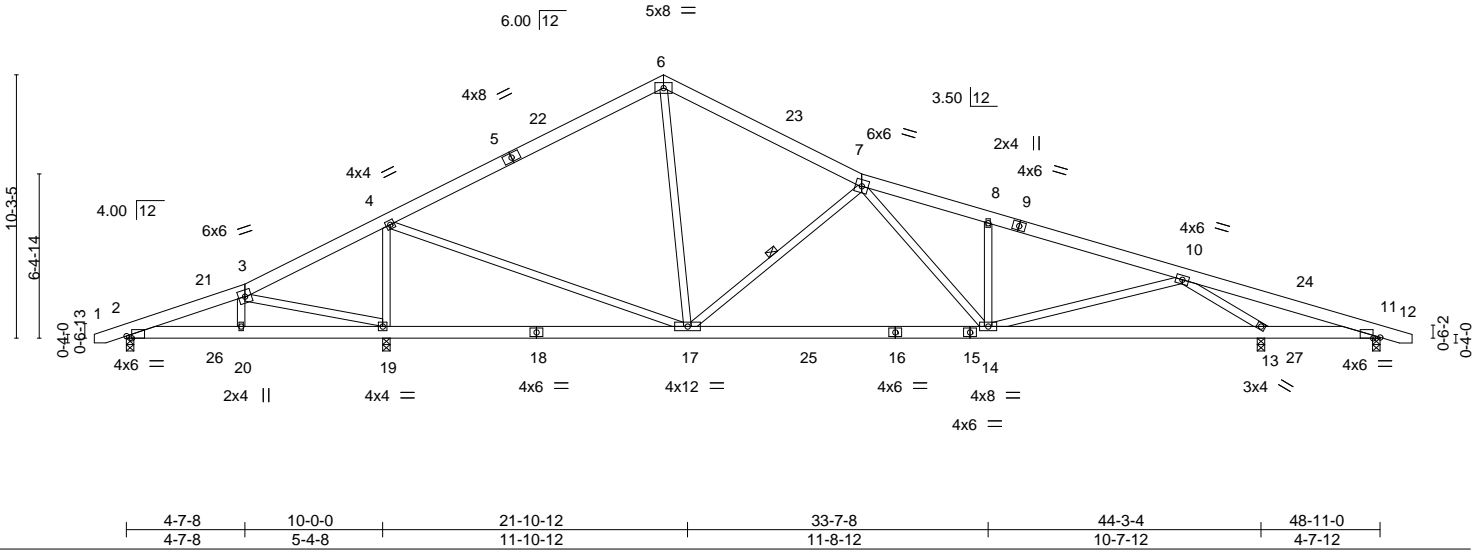


Plate Offsets (X,Y)--	[2:0-2-8,Edge], [11:0-3-5,Edge]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.46	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.61	Vert(LL) -0.22 14-17 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.74	Vert(CT) -0.35 14-17 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.03 13 n/a n/a	Weight: 340 lb	FT = 20%
	Code IRC2018/TPI2014		Wind(LL) 0.06 14-17 >999 240		

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-9-13 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.2	WEBS 1 Row at midpt 7-17

**REACTIONS.** All bearings 0-3-8.  
 (lb) - Max Horz 2=103(LC 13)  
 Max Uplift All uplift 100 lb or less at joint(s) 19, 13 except 2=132(LC 8), 11=111(LC 9)  
 Max Grav All reactions 250 lb or less at joint(s) 11 except 2=328(LC 25), 19=2188(LC 2), 13=1908(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=254/169, 3-4=149/458, 4-6=1338/328, 6-7=1356/329, 7-8=2490/488,  
 8-10=2515/423, 10-11=163/754  
 BOT CHORD 17-19=319/208, 14-17=212/1934, 13-14=324/1585, 11-13=666/195  
 WEBS 3-19=378/328, 4-17=187/1492, 7-17=1056/326, 4-19=1739/534, 8-14=356/175,  
 7-14=70/677, 10-14=0/823, 10-13=2725/624, 6-17=2/703

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-0-5 to 3-4-8, Interior(1) 3-4-8 to 20-11-8, Exterior(2R) 20-11-8 to 25-4-5, Interior(1) 25-4-5 to 49-11-1 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19, 13 except (jt=lb) 2=132, 11=111.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Job	Truss	Truss Type	Qty	Ply	Lot 45 South Creek	E15040886
J1120-5305	A5A	ROOF SPECIAL	1	1		

Comtech, Inc., Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Oct 30 13:16:38 2020 Page 1  
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 28-8-5 33-7-8 39-9-4 44-3-4 48-11-0 50-2-0  
 -1-3-0 4-7-8 12-1-12 12-9-8 20-11-8 7-8-13 4-11-3 6-1-12 4-6-0 4-7-12 1-3-0  
 1-3-0 4-7-8 7-6-4 0-7-12 8-2-0

Scale = 1:89.9

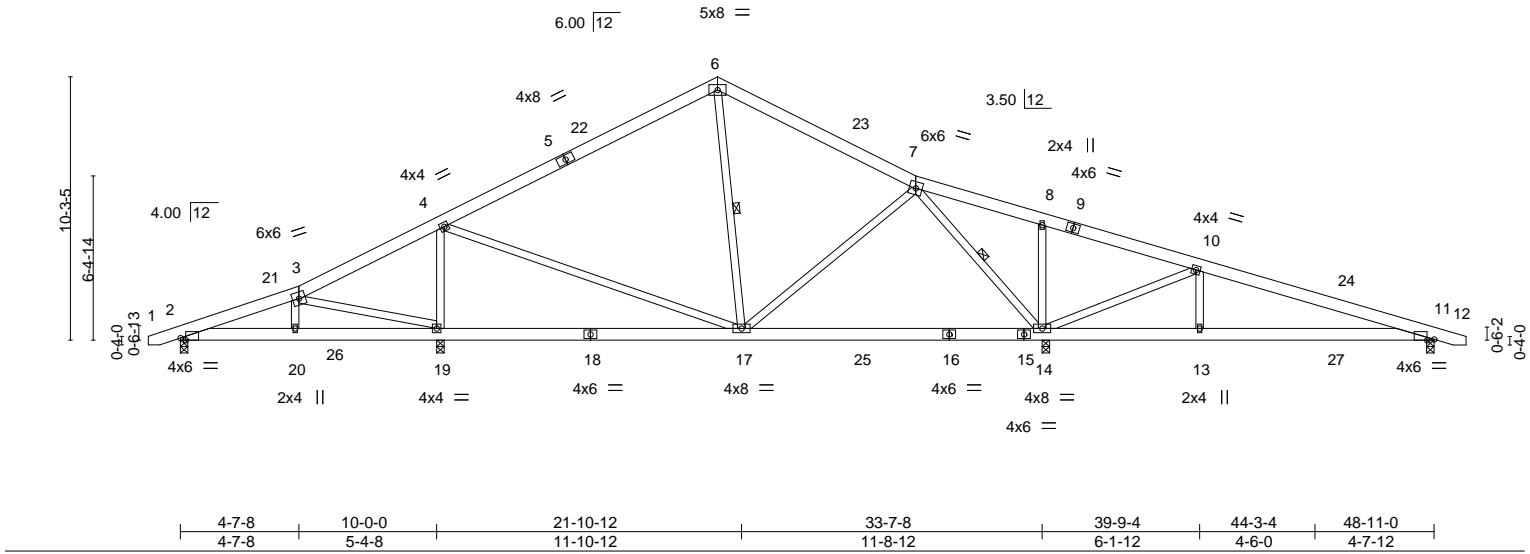


Plate Offsets (X,Y)-- [2:0-2-8,Edge], [11:0-3-5,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.46	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.46	Vert(LL) -0.18 14-17 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.78	Vert(CT) -0.25 14-17 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 11 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) 0.07 11-13 >999 240	Weight: 336 lb	FT = 20%

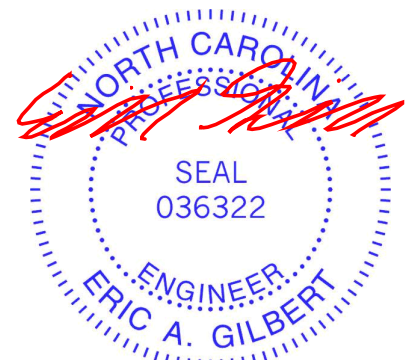
**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2

**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, Except:  
 WEBS 1 Row at midpt 7-14, 6-17

**REACTIONS.** All bearings 0-3-8.  
 (lb) - Max Horz 2=103(LC 13)  
 Max Uplift All uplift 100 lb or less at joint(s) 19 except 2=120(LC 8), 14=162(LC 9), 11=169(LC 9)  
 Max Grav All reactions 250 lb or less at joint(s) except 2=401(LC 2), 19=1442(LC 2), 14=1997(LC 2), 11=516(LC 28)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-467/214, 4-6=-729/177, 6-7=-680/168, 7-8=-210/574, 8-10=-267/575, 10-11=-530/315  
 BOT CHORD 2-20=-163/420, 19-20=-151/409, 14-17=0/378, 13-14=-232/441, 11-13=-232/441  
 WEBS 3-19=-425/330, 4-17=-3/569, 7-17=0/366, 4-19=-1014/387, 8-14=-299/141, 7-14=-1213/358, 10-14=-1019/687, 10-13=-206/299

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-0-5 to 3-10-6, Interior(1) 3-10-6 to 20-11-8, Exterior(2R) 20-11-8 to 25-10-3, Interior(1) 25-10-3 to 49-11-1 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3'-6-0 tall by 2'-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19 except (jt=lb) 2=120, 14=162, 11=169.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 30, 2020



Job	Truss	Truss Type	Qty	Ply	Lot 45 South Creek	E15040887
J1120-5305	A6	ROOF SPECIAL	1	1		

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ID:L1J54eQhkyo6whVInXZxPFzEJO5-pRSwgDnNooFeC56Glzkk9Naw34CDUXSCI1HacyOD1s

-1-3-0	4-4-12	4-5-11	12-1-12	12-8-9	20-11-8	28-8-5	33-7-8	36-4-14	41-2-6	44-5-0
1-3-0	4-4-12	0-0-15	7-8-1	0-6-13	8-2-15	7-8-13	4-11-3	2-9-6	4-9-8	3-2-10

Scale = 1:80.9

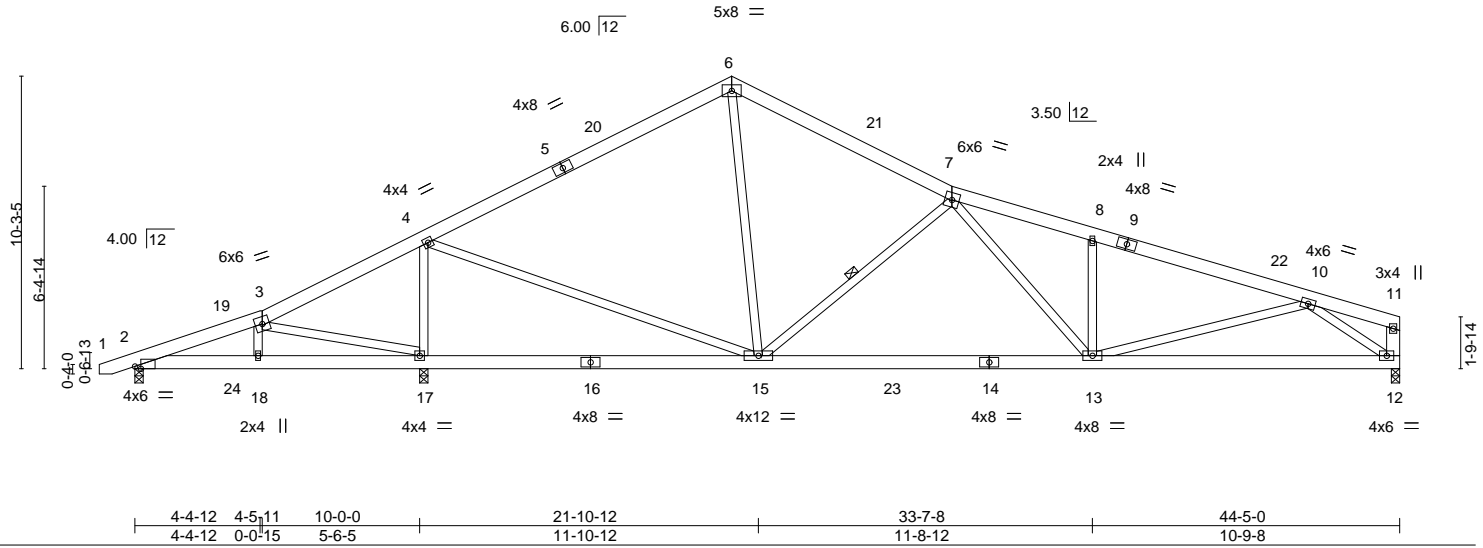


Plate Offsets (X,Y)-- [2:0-2-8,Edge]

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) -0.22	13-15	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.60	Vert(CT) -0.34	13-15	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.56	Horz(CT) 0.04	12	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.05	13-15	>999	240	Weight: 317 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 11-12: 2x6 SP No.1

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-7-12 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
 WEBS 1 Row at midpt 7-15

**REACTIONS.**

(size) 2=0-3-8, 17=0-3-8, 12=0-3-8  
 Max Horz 2=130(LC 12)  
 Max Uplift 2=124(LC 8), 17=23(LC 9), 12=38(LC 13)  
 Max Grav 2=332(LC 25), 17=2189(LC 2), 12=1440(LC 2)

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

TOP CHORD 2-3=-278/148, 3-4=-178/427, 4-6=-1365/319, 6-7=-1385/318, 7-8=-2600/481, 8-10=-2616/411  
 BOT CHORD 15-17=-292/164, 13-15=-261/1992, 12-13=-338/1710  
 WEBS 3-17=-392/330, 4-15=-205/1489, 7-15=-1097/322, 4-17=-1738/549, 8-13=-389/189, 7-13=-76/744, 6-15=0/727, 10-13=0/784, 10-12=-1957/461

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-0-5 to 3-4-8, Interior(1) 3-4-8 to 20-11-8, Exterior(2R) 20-11-8 to 25-4-5, Interior(1) 25-4-5 to 44-2-4 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17, 12 except (jt=lb) 2=124.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 30, 2020

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

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



818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 45 South Creek	E15040888
J1120-5305	A7	ROOF SPECIAL GIRDER	1	1	Job Reference (optional)	

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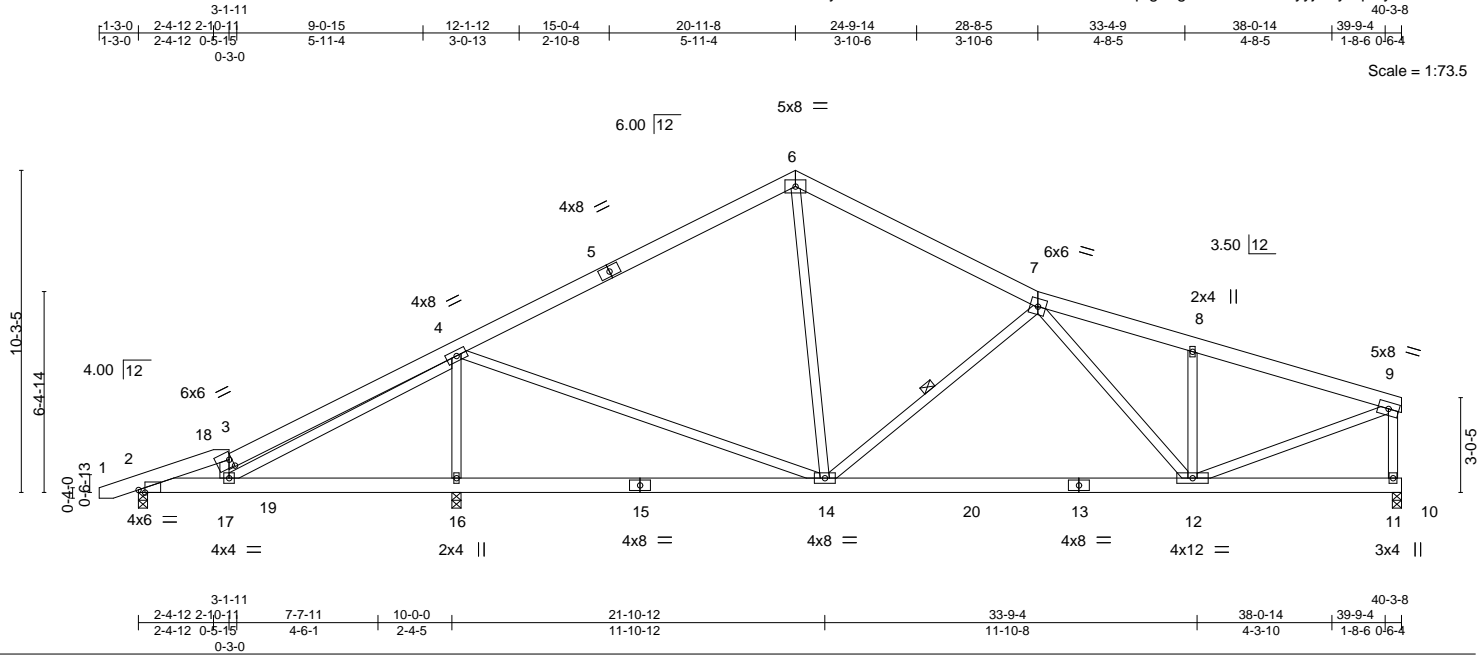


Plate Offsets (X,Y)-- [2:0-2-8,Edge], [3:0-1-0,0-3-0]

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 0.54	Vert(LL)	-0.20 12-14	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.62	Vert(CT)	-0.31 12-14	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.50	Horz(CT)	0.01 11	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.04 16-17	>999	240	Weight: 295 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 5-10-15 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
 WEBS 1 Row at midpt 7-14

**REACTIONS.**

(size) 2=0-3-8, 16=0-3-8, 11=0-3-8  
 Max Horz 2=152(LC 8)  
 Max Uplift 2=90(LC 4), 16=60(LC 8), 11=26(LC 30)  
 Max Grav 2=327(LC 21), 16=1976(LC 2), 11=1281(LC 2)

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

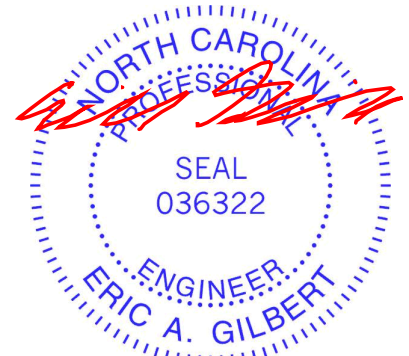
TOP CHORD 2-3=-342/89, 3-4=-409/138, 4-6=-1159/98, 6-7=-1158/78, 7-8=-1633/86, 8-9=-1640/39, 9-11=-1216/51  
 BOT CHORD 2-17=-87/300, 12-14=-11/1454  
 WEBS 4-14=0/1207, 7-14=-667/139, 9-12=0/1625, 3-17=-263/77, 4-16=-1598/181, 8-12=-363/128, 4-17=-209/616, 6-14=0/547

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDD=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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) 2, 16, 11.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 35 lb down and 26 lb up at 2-4-12 on top chord, and 13 lb down and 29 lb up at 2-4-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-3=-60, 3-6=-60, 6-7=-60, 7-9=-60, 2-10=-20  
 Concentrated Loads (lb)  
 Vert: 19=-2(B)



October 30, 2020

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

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



818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 45 South Creek	E15040889
J1120-5305	A8	ROOF SPECIAL	1	1		

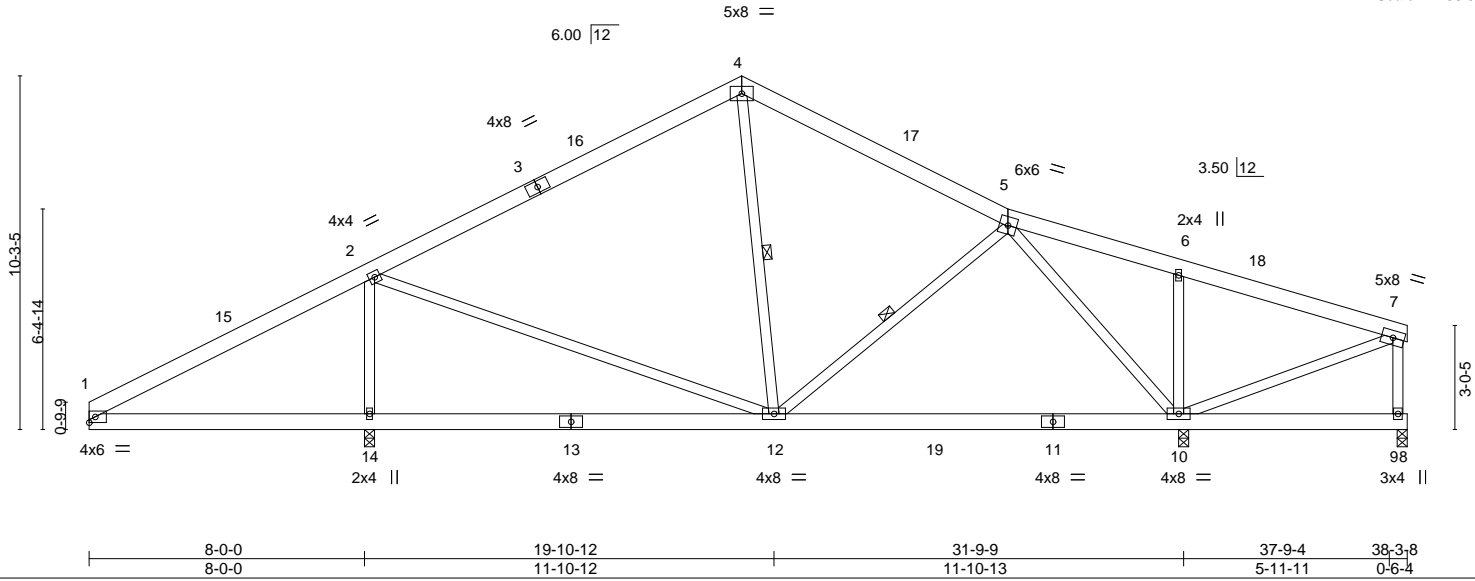
Comtech, Inc., Fayetteville, NC - 28314,

8,330 s Oct 7 2020 MiTek Industries, Inc. Fri Oct 30 13:16:41 2020 Page 1

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Scale = 1:66.9



<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 0.52	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.46	Vert(LL) -0.18 10-12 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.88	Vert(CT) -0.25 10-12 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) -0.00 10 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) 0.01 12 >999 240	Weight: 269 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.2	WEBS 1 Row at midpt 5-12, 4-12

**REACTIONS.** (size) 14=0-3-8, 10=0-3-8, 9=0-3-8  
 Max Horz 14=146(LC 12)  
 Max Uplift 14=-25(LC 12), 10=-34(LC 13), 9=-16(LC 9)  
 Max Grav 14=1776(LC 19), 10=1505(LC 2), 9=124(LC 26)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-111/633, 2-4=-681/228, 4-5=-630/236  
 BOT CHORD 1-14=-448/149, 12-14=-443/63, 10-12=-73/392  
 WEBS 2-14=-1423/439, 2-12=-49/987, 6-10=-393/192, 5-10=-864/210

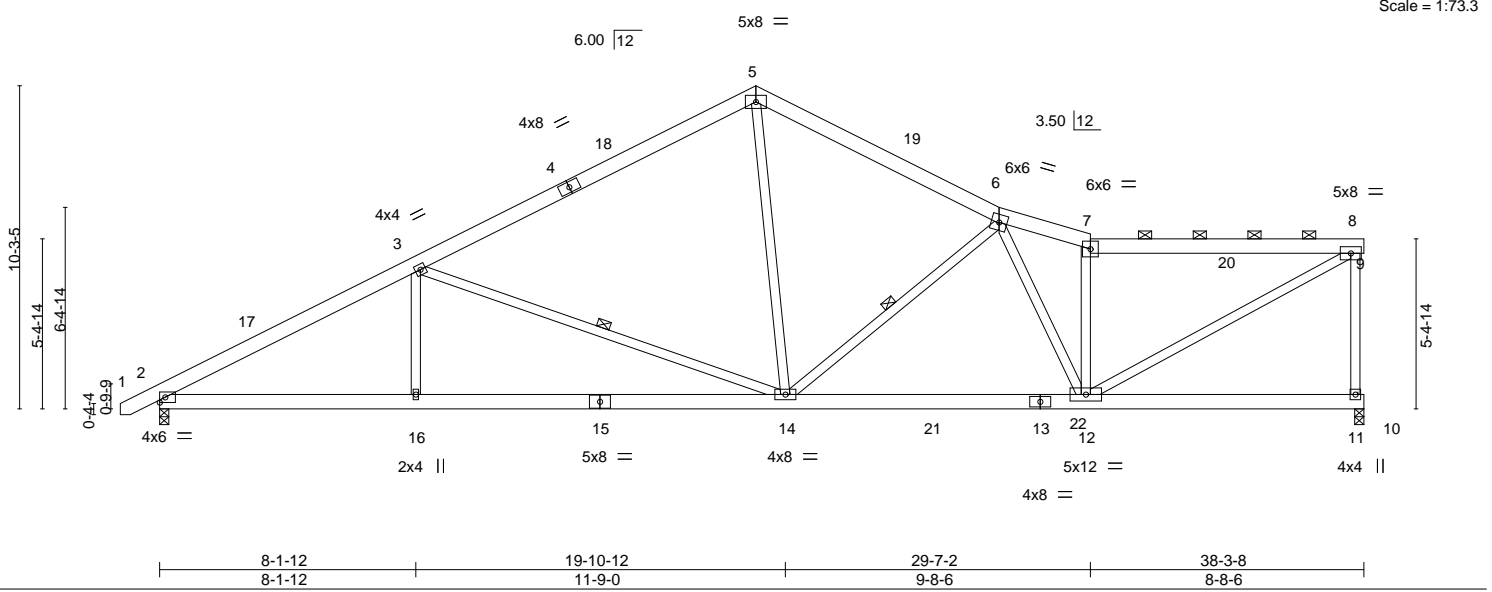
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 18-11-8, Exterior(2R) 18-11-8 to 23-4-5, Interior(1) 23-4-5 to 38-0-4 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) 14, 10, 9.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 30,2020

Job	Truss	Truss Type	Qty	Ply	Lot 45 South Creek	E15040890
J1120-5305	A9	ROOF SPECIAL	1	1		

Comtech, Inc., Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Oct 30 13:16:42 2020 Page 1  
 ID:L1J54eQhkyo6whVlnXZxPFzEJO5-D083JFpG4jdD3ZqrQ5VRMo??5H6CQo9uuGGxAxyOD1p



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.85	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.59	Vert(LL) -0.16 12-14 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.76	Vert(CT) -0.34 14-16 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.07 11 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) 0.07 14-16 >999 240	Weight: 278 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-4-15 oc purlins, except end verticals, and 2-0-0 oc purlins (4-6-12 max.): 7-9.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	WEBS 1 Row at midpt 3-14, 6-14

**REACTIONS.** (size) 11=0-3-8, 2=0-3-8  
 Max Horz 2=192(LC 12)  
 Max Uplift 11=19(LC 13), 2=16(LC 12)  
 Max Grav 11=1683(LC 2), 2=1700(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2935/505, 3-5=-1946/434, 5-6=-2026/458, 6-7=-2407/443, 7-8=-2305/406, 8-11=-1544/342  
 BOT CHORD 2-16=-562/2548, 14-16=-562/2548, 12-14=-425/2251  
 WEBS 3-16=0/433, 3-14=-1002/303, 6-14=-699/201, 7-12=-985/286, 8-12=-458/2618, 5-14=-103/1221

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-1-2 to 3-3-11, Interior(1) 3-3-11 to 18-11-8, Exterior(2R) 18-11-8 to 23-4-5, Interior(1) 23-4-5 to 38-3-8 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 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) 11, 2.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



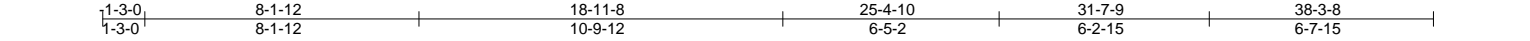
Job	Truss	Truss Type	Qty	Ply	Lot 45 South Creek	E15040891
J1120-5305	A10	ROOF SPECIAL	1	1		

Comtech, Inc., Fayetteville, NC - 28314,

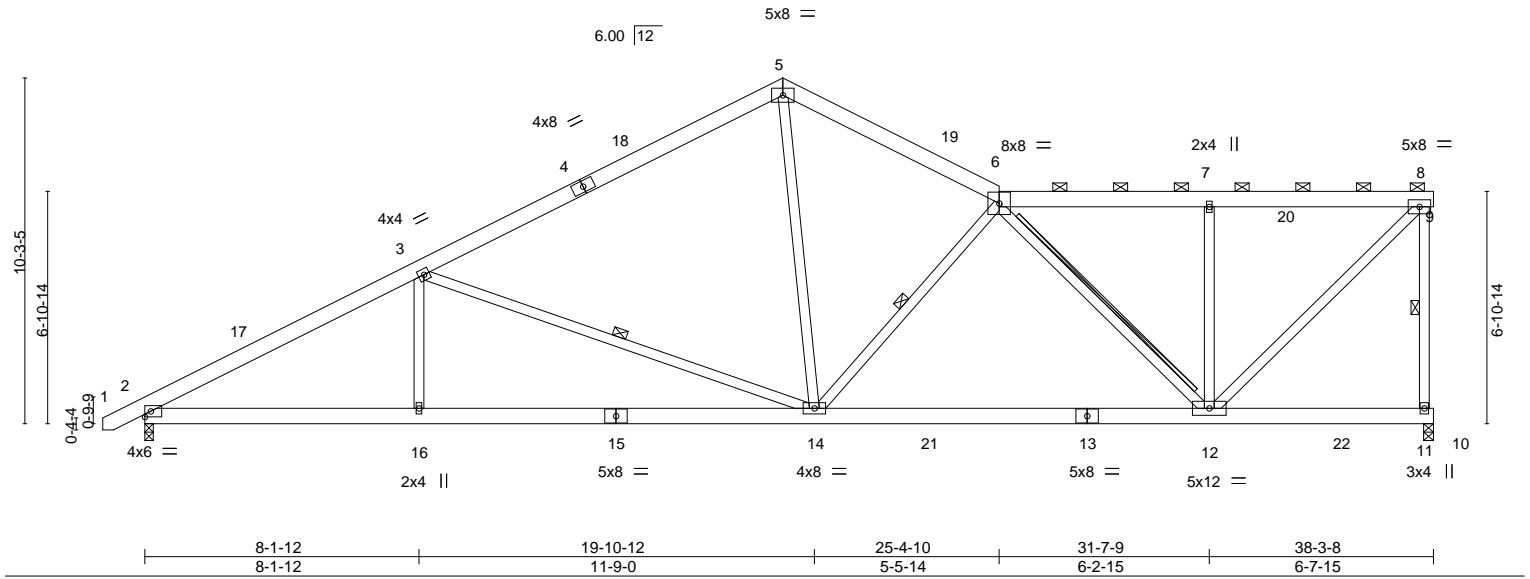
8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Oct 30 13:16:28 2020 Page 1

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Job Reference (optional)



Scale = 1:68.5



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.50	Vert(LL) -0.26	12-14	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.69	Vert(CT) -0.40	12-14	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.69	Horz(CT) 0.07	11	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL) 0.06	14-16	>999	240		
	Code IRC2018/TPI2014						Weight: 283 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-4-7 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-9.
BOT CHORD 2x6 SP No.1	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	1 Row at midpt 8-11, 3-14, 6-14
	T-Brace: 2x4 SPF No.2 - 6-12
	Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.
	Brace must cover 90% of web length.

**REACTIONS.** (size) 11=0-3-8, 2=0-3-0  
 Max Horz 2=218(LC 12)  
 Max Uplift 11=-25(LC 13), 2=-12(LC 12)  
 Max Grav 11=1791(LC 2), 2=1721(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2973/306, 3-5=-2006/289, 5-6=-2089/308, 6-7=-1530/167, 7-8=-1528/166, 8-11=-1673/228  
 BOT CHORD 2-16=-417/2580, 14-16=-417/2580, 12-14=-293/2202  
 WEBS 3-16=0/419, 3-14=-981/220, 6-14=-634/149, 6-12=-973/186, 7-12=-453/155, 8-12=-232/2159, 5-14=-36/1327

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-1-2 to 3-3-11, Interior(1) 3-3-11 to 18-11-8, Exterior(2R) 18-11-8 to 23-4-5, Interior(1) 23-4-5 to 38-3-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 2.
  - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 9) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



October 30, 2020

Job	Truss	Truss Type	Qty	Ply	Lot 45 South Creek	E15040892
J1120-5305	A11	ROOF SPECIAL	2	1		

Comtech, Inc., Fayetteville, NC - 28314,

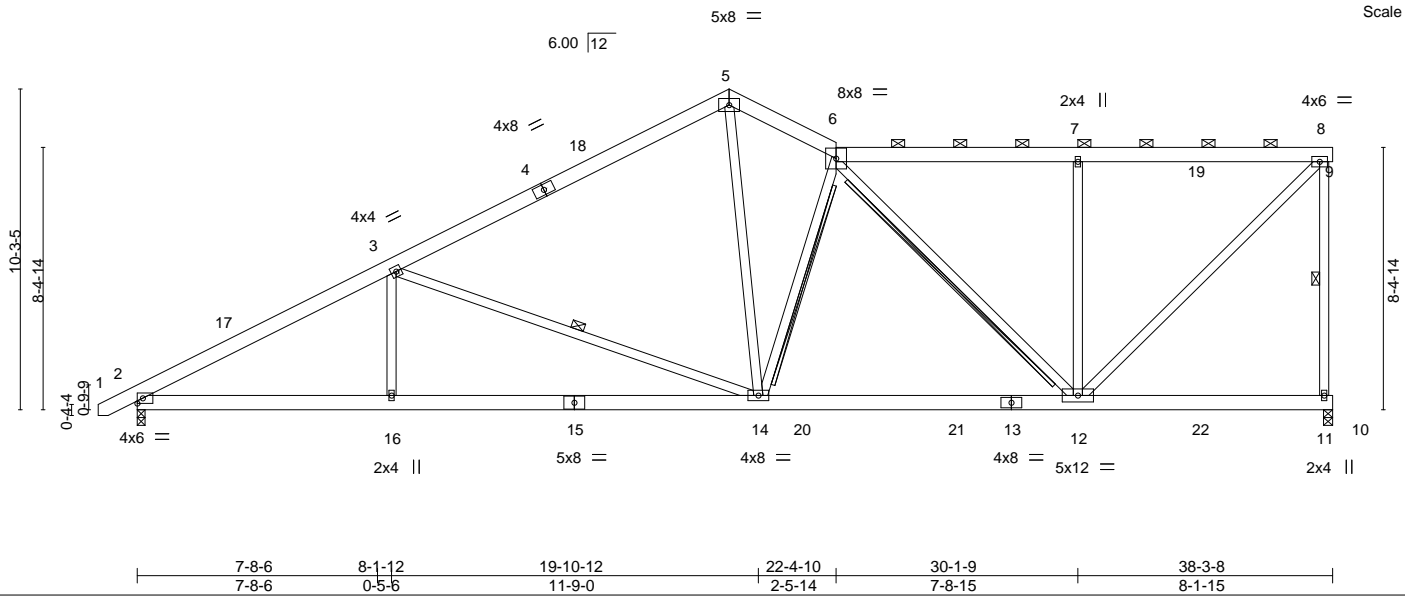
8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Oct 30 13:16:29 2020 Page 1

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Job Reference (optional)



Scale = 1:73.8



<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 0.49	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.63	Vert(LL) -0.18 12-14 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.70	Vert(CT) -0.31 14-16 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.07 11 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) 0.06 14-16 >999 240	Weight: 293 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-4-3 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 6-9.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	WEBS 1 Row at midpt 8-11, 3-14
	T-Brace: 2x4 SPF No.2 - 6-12, 6-14
	Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.
	Brace must cover 90% of web length.

**REACTIONS.** (size) 11=0-3-8, 2=0-3-0  
 Max Horz 2=245(LC 12)  
 Max Uplift 11=33(LC 13), 2=7(LC 12)  
 Max Grav 11=1830(LC 2), 2=1735(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=3008/279, 3-5=2027/252, 5-6=2077/302, 6-7=1473/179, 7-8=1471/177  
 BOT CHORD 2-16=446/2607, 14-16=446/2607, 12-14=274/2007  
 WEBS 8-11=1641/252, 3-14=991/216, 6-12=774/140, 7-12=580/196, 8-12=251/2088,  
 3-16=0/431, 6-14=624/116, 5-14=45/1405

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-1-2 to 3-3-11, Interior(1) 3-3-11 to 18-11-8, Exterior(2E) 18-11-8 to 22-4-10, Interior(1) 22-4-10 to 38-3-8 zone; end vertical right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 2.
  - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 9) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



October 30, 2020

**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

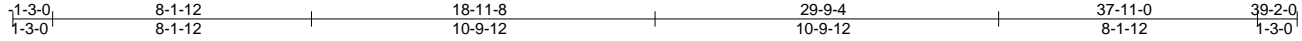
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 45 South Creek	E15040893
J1120-5305	B1	COMMON	2	1		

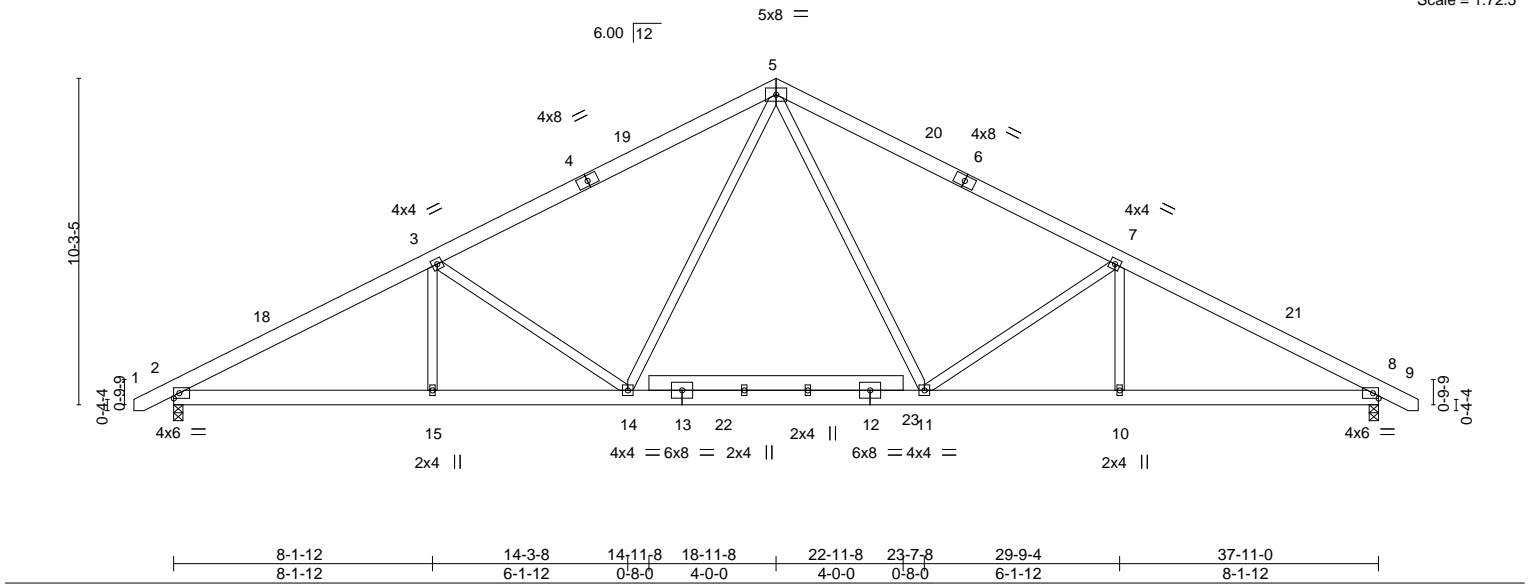
Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Oct 30 13:16:43 2020 Page 1

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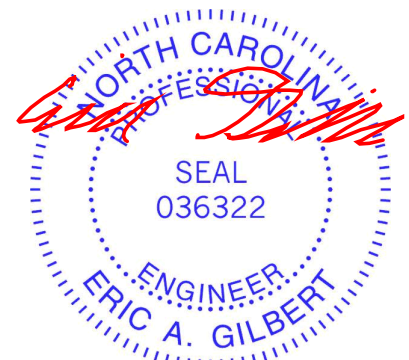
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.50	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.50	Vert(LL) -0.19 11-14 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.71	Vert(CT) -0.31 11-14 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.08 8 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) 0.05 14 >999 240	Weight: 278 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-4-6 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except*	
16-17: 2x6 SP No.1	

**REACTIONS.** (size) 2=0-3-8, 8=0-3-8  
 Max Horz 2=-111(LC 10)  
 Max Uplift 2=-22(LC 12), 8=-22(LC 13)  
 Max Grav 2=1736(LC 2), 8=1736(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2958/352, 3-5=-2392/360, 5-7=-2392/360, 7-8=-2958/352  
 BOT CHORD 2-15=-228/2600, 14-15=-228/2600, 11-14=-36/1677, 10-11=-220/2551, 8-10=-220/2551  
 WEBS 7-10=0/280, 3-15=0/280, 3-14=-720/217, 5-14=-35/861, 5-11=-35/861, 7-11=-720/217

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-1-2 to 3-3-11, Interior(1) 3-3-11 to 18-11-8, Exterior(2R) 18-11-8 to 23-4-5, Interior(1) 23-4-5 to 39-0-2 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.
  - 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 30, 2020

Job	Truss	Truss Type	Qty	Ply	Lot 45 South Creek	E15040894
J1120-5305	B1GE	GABLE	1	1		

Comtech, Inc., Fayetteville, NC - 28314,

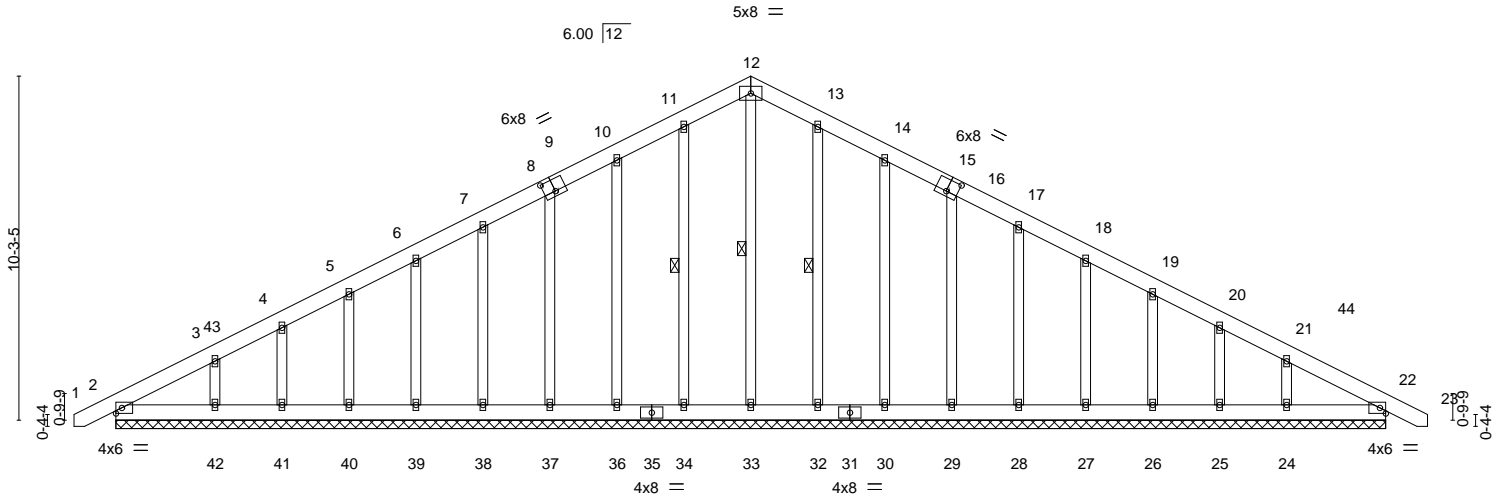
8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Oct 30 13:16:45 2020 Page 1

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Job Reference (optional)

1-3-0, 18-11-8, 37-11-0, 39-2-0, 1-3-0  
 1-3-0, 18-11-8, 18-11-8, 18-11-8, 1-3-0

Scale = 1:68.8



14-3-8	14-11-8	22-11-8	23-7-8	37-11-0
14-3-8	0'-8-0	8-0-0	0'-8-0	14-3-8

Plate Offsets (X,Y)-- [8:0-1-15,0-0-0], [9:0-4-0,0-4-4], [9:0-0-0,0-2-12], [15:0-4-0,0-4-4], [15:0-0-0,0-2-12], [16:0-1-15,0-0-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.04	Vert(LL) 0.00	22	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.02	Vert(CT) 0.00	22	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.12	Horz(CT) 0.01	22	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S					Weight: 325 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 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 12-33, 11-34, 13-32

**REACTIONS.** All bearings 37-11-0.  
 (lb) - Max Horz 2=173(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 34, 36, 37, 38, 39, 40, 41, 42, 32, 30, 29, 28, 27, 26, 25, 24  
 Max Grav All reactions 250 lb or less at joint(s) 2, 22, 33, 34, 36, 37, 38, 39, 40, 41, 42, 32, 30, 29, 28, 27, 26, 25, 24

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 10-11=-103/268, 11-12=-115/302, 12-13=-115/302, 13-14=-103/268

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-1-2 to 3-3-11, Exterior(2N) 3-3-11 to 18-11-8, Corner(3R) 18-11-8 to 23-4-5, Exterior(2N) 23-4-5 to 39-0-2 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 34, 36, 37, 38, 39, 40, 41, 42, 32, 30, 29, 28, 27, 26, 25, 24.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 30, 2020

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

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



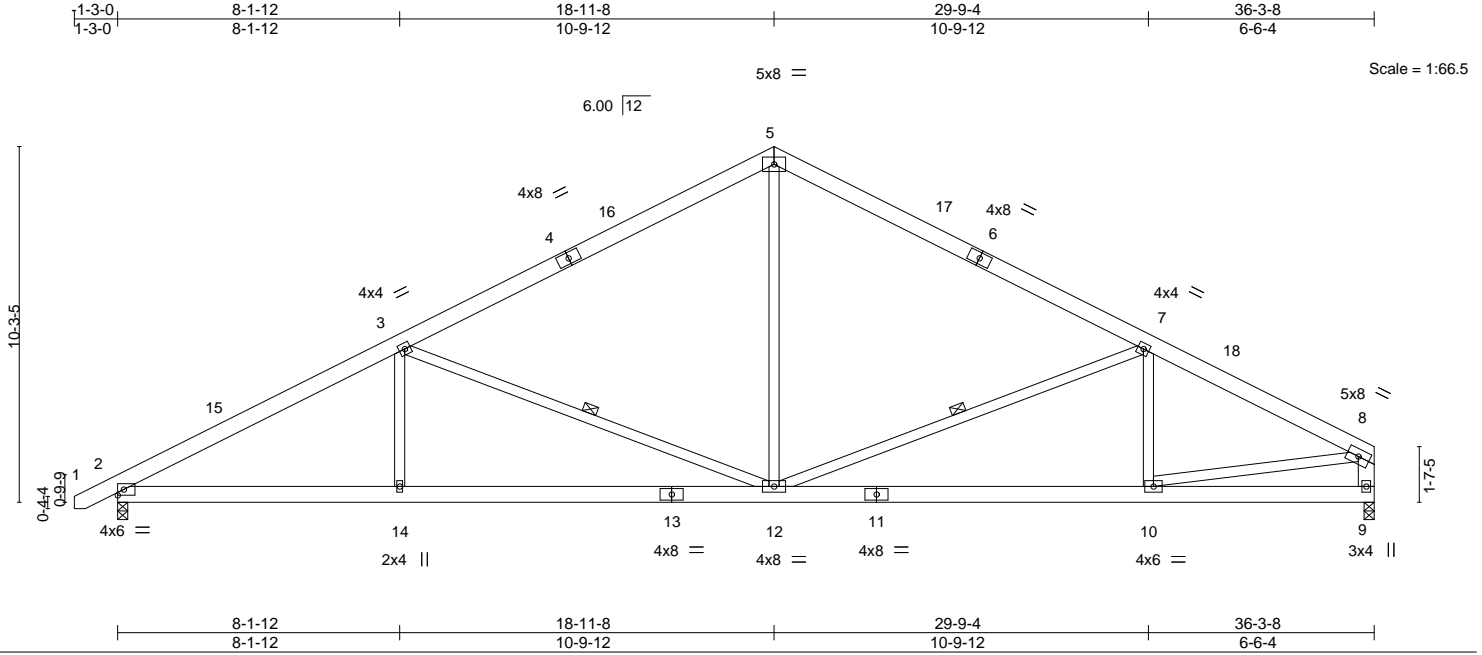
818 Soundside Road  
 Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	Lot 45 South Creek	E15040895
J1120-5305	B2	COMMON	9	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Oct 30 13:16:46 2020 Page 1  
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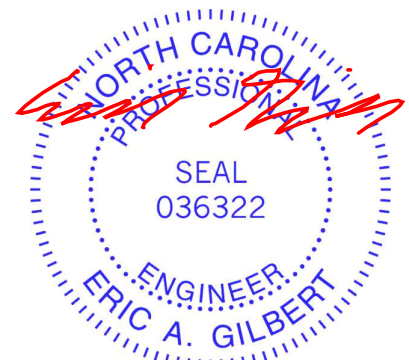
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.51	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.46	Vert(LL) -0.08 10-12 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.56	Vert(CT) -0.20 10-12 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.06 9 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) 0.05 12-14 >999 240	Weight: 254 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-8-6 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except*	WEBS 1 Row at midpt 3-12, 7-12
8-9: 2x6 SP No.1	

**REACTIONS.** (size) 2=0-3-8, 9=0-3-8  
 Max Horz 2=127(LC 12)  
 Max Uplift 2=-25(LC 12), 9=-4(LC 13)  
 Max Grav 2=1512(LC 1), 9=1435(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2573/324, 3-5=-1688/312, 5-7=-1686/316, 7-8=-2102/294, 8-9=-1370/211  
 BOT CHORD 2-14=-258/2180, 12-14=-258/2180, 10-12=-203/1830  
 WEBS 3-14=0/394, 3-12=-913/216, 5-12=-7/832, 7-12=-586/173, 8-10=-197/1719

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-1-2 to 3-3-11, Interior(1) 3-3-11 to 18-11-8, Exterior(2R) 18-11-8 to 23-4-5, Interior(1) 23-4-5 to 36-0-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 9.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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Job	Truss	Truss Type	Qty	Ply	Lot 45 South Creek	E15040896
J1120-5305	B3	ROOF SPECIAL	1	1		

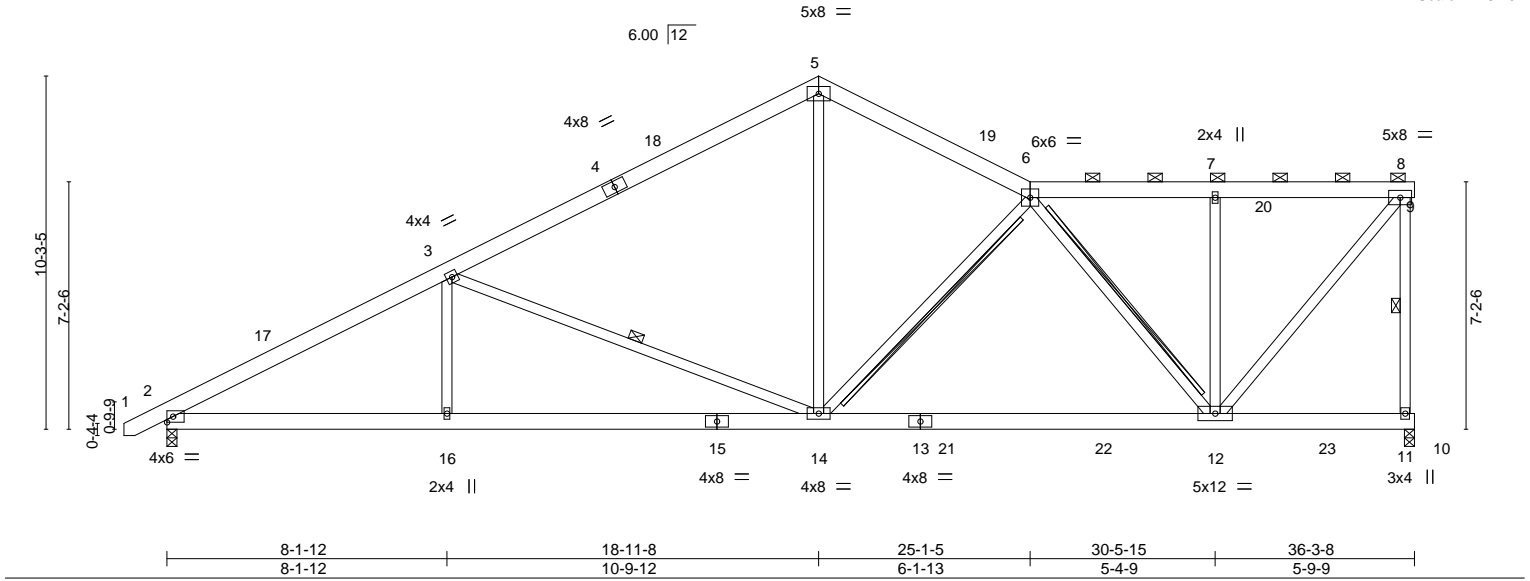
Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Oct 30 13:16:47 2020 Page 1

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Scale = 1:67.0



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.48	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.63	Vert(LL) -0.23 12-14 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.57	Vert(CT) -0.37 12-14 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.06 11 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) 0.05 14-16 >999 240	Weight: 273 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-6-7 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-9.
BOT CHORD 2x6 SP No.1	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	1 Row at midpt 8-11, 3-14
	T-Brace: 2x4 SPF No.2 - 6-14, 6-12
	Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.
	Brace must cover 90% of web length.

**REACTIONS.** (size) 11=0-3-8, 2=0-3-8  
 Max Horz 2=224(LC 12)  
 Max Uplift 11=-21(LC 13), 2=-14(LC 12)  
 Max Grav 11=1699(LC 2), 2=1632(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2773/286, 3-5=-1867/266, 5-6=-1790/284, 6-7=-1227/135, 7-8=-1227/135, 8-11=-1612/217  
 BOT CHORD 2-16=-408/2408, 14-16=-408/2408, 12-14=-253/1813  
 WEBS 3-16=0/390, 3-14=-935/225, 5-14=-15/1116, 6-14=-432/107, 6-12=-937/192, 7-12=-374/135, 8-12=-210/1927

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-1-2 to 3-3-11, Interior(1) 3-3-11 to 18-11-8, Exterior(2R) 18-11-8 to 23-4-5, Interior(1) 23-4-5 to 36-3-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 2.
  - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 9) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



October 30, 2020

Job	Truss	Truss Type	Qty	Ply	Lot 45 South Creek	E15040897
J1120-5305	B3GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

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5x8 =

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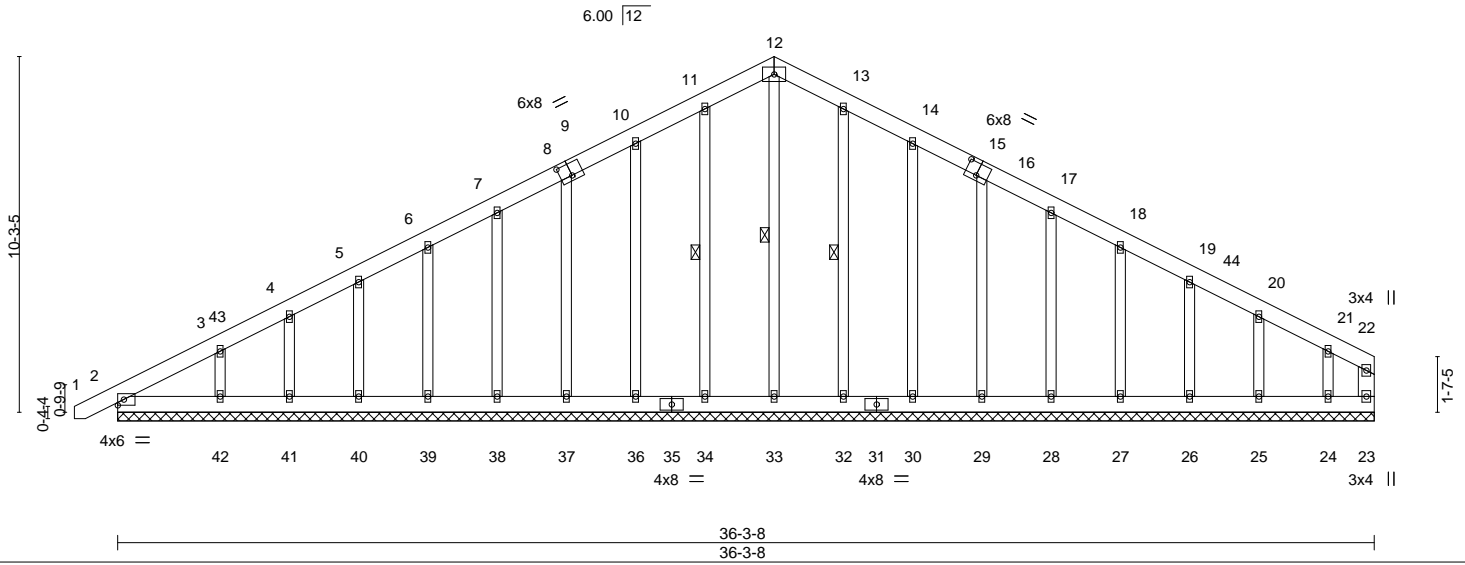


Plate Offsets (X,Y)-- [8:0-1-15,0-0-0], [9:0-4-0,0-4-4], [9:0-0-0,0-2-12], [15:0-4-0,0-4-4], [15:0-0-0,0-2-12], [16:0-1-15,0-0-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.05	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 0.12	Horz(CT) 0.00	23	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S						
							Weight: 316 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 12-33, 11-34, 13-32

**REACTIONS.**

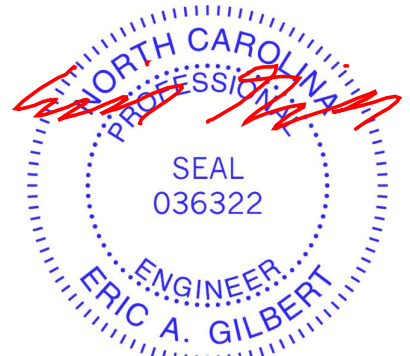
All bearings 36-3-8.  
 (lb) - Max Horz 2=205(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 34, 36, 37, 38, 39, 40, 41, 42, 32, 30, 29, 28, 27, 26, 25 except 24=-169(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 23, 33, 34, 36, 37, 38, 39, 40, 41, 42, 32, 30, 29, 28, 27, 26, 25, 24

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

TOP CHORD 10-11=-107/295, 11-12=-118/327, 12-13=-118/327, 13-14=-107/295

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-1-2 to 3-3-11, Exterior(2N) 3-3-11 to 18-11-8, Corner(3R) 18-11-8 to 23-4-5, Exterior(2N) 23-4-5 to 36-0-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 34, 36, 37, 38, 39, 40, 41, 42, 32, 30, 29, 28, 27, 26, 25 except (jt=lb) 24=169.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 30, 2020

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

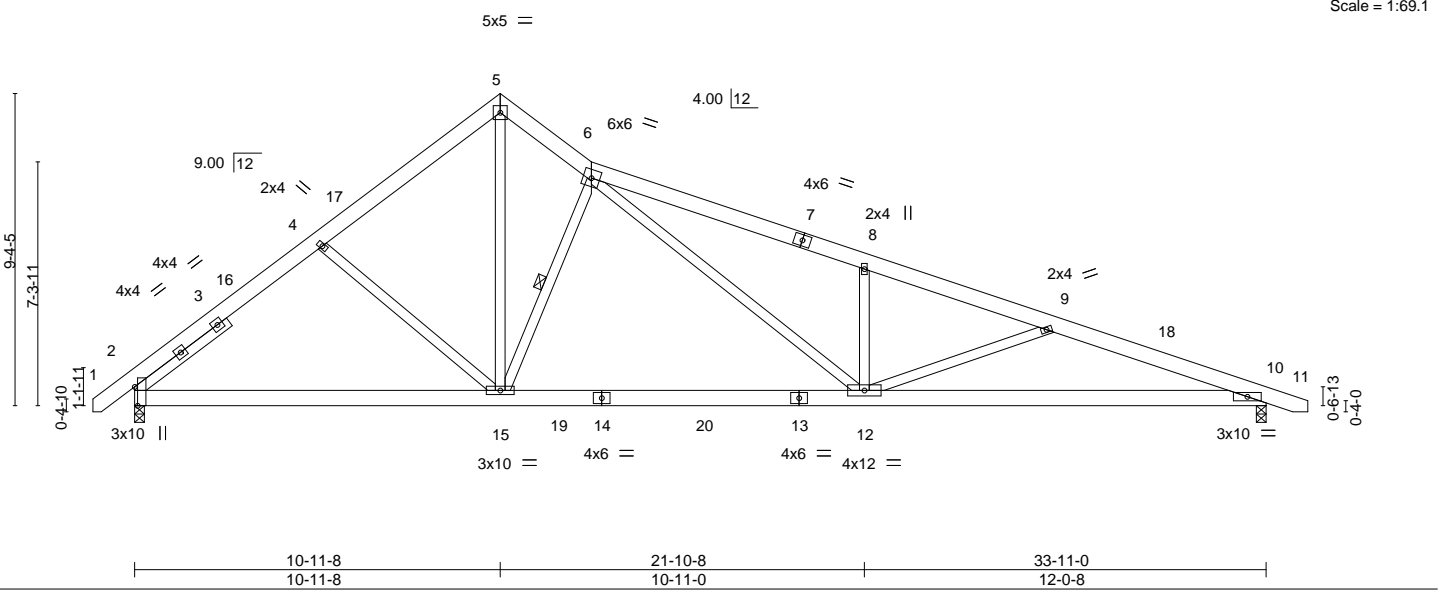
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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/TPI 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	Truss	Truss Type	Qty	Ply	Lot 45 South Creek	E15040898
J1120-5305	C1	ROOF SPECIAL	6	1		

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 ID:L1J54eQhkyo6whVlnXZxPFzEJO5-\_Yd5\_wHCAe51nROuneJgUKUZVp?IU83jVCMStyOD1h



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.37	Vert(LL) -0.24 12-15 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.72	Vert(CT) -0.37 12-15 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.50	Horz(CT) 0.07 10 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.09 12 >999 240	Weight: 245 lb	FT = 20%

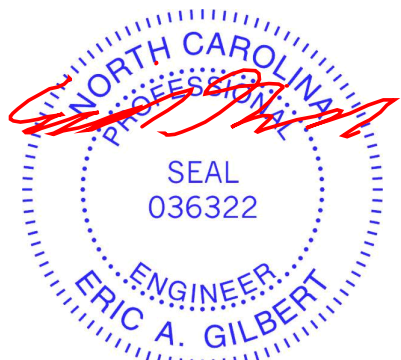
**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2  
 SLIDER Left 2x4 SP No.2 -H 3-6-1

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 3-10-9 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 6-15

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8  
 Max Horz 2=194(LC 10)  
 Max Uplift 10=59(LC 9)  
 Max Grav 2=1586(LC 19), 10=1552(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-1957/411, 4-5=-1746/401, 5-6=-1721/454, 6-8=-3240/658, 8-9=-3211/552, 9-10=-3552/685  
 BOT CHORD 2-15=-216/1543, 12-15=-186/1873, 10-12=-569/3314  
 WEBS 5-15=-364/1777, 6-15=-1318/378, 6-12=-255/1517, 8-12=-464/237, 9-12=-411/205

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-1-8 to 3-3-5, Interior(1) 3-3-5 to 10-11-8, Exterior(2E) 10-11-8 to 13-8-5, Interior(1) 13-8-5 to 34-11-5 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) 10.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 30, 2020

Job	Truss	Truss Type	Qty	Ply	Lot 45 South Creek	E15040899
J1120-5305	C1GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Oct 30 13:16:52 2020 Page 1

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Scale: 3/16"=1'

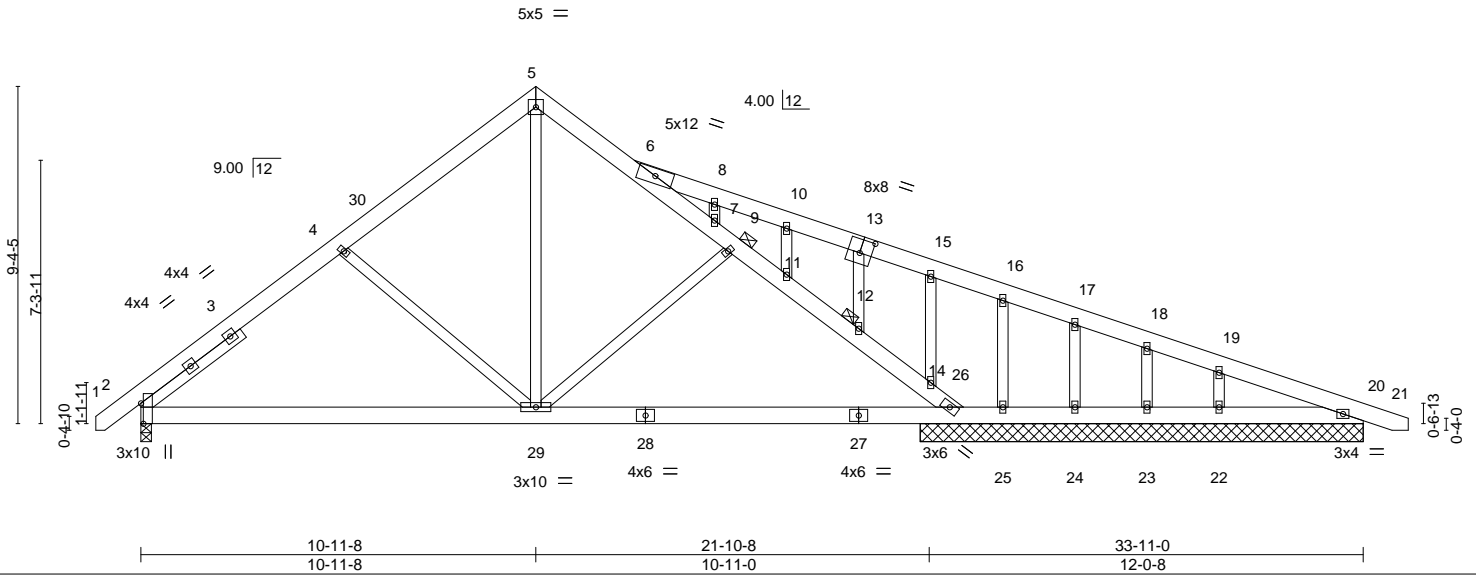


Plate Offsets (X,Y)-- [2:0-6-13,Edge], [13:0-4-0,0-4-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.14	Vert(LL) -0.07	2-29	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.37	Vert(CT) -0.14	2-29	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.25	Horz(CT) 0.02	26	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.02	2-29	>999	240	Weight: 264 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
SLIDER	Left 2x4 SP No.2 -H 3-6-1

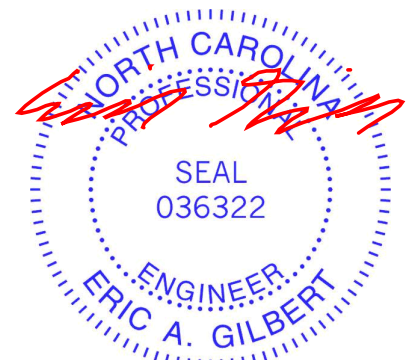
**BRACING-**

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 2-29,26-29.
JOINTS	1 Brace at Jt(s): 9, 12

**REACTIONS.** All bearings 12-3-8 except (jt=length) 2=0-3-8.  
 (lb) - Max Horz 2=264(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 20, 22, 23, 24 except 26=104(LC 13), 2=118(LC 12), 25=369(LC 3)  
 Max Grav All reactions 250 lb or less at joint(s) 20, 23, 24 except 26=1365(LC 1), 2=947(LC 1), 22=311(LC 26)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=1061/155, 4-5=824/155, 5-6=724/173, 6-7=838/95, 7-9=959/125, 9-11=1019/160, 11-12=1093/203, 12-14=1092/211, 14-26=1220/268  
 BOT CHORD 2-29=154/835, 26-29=25/786  
 WEBS 4-29=276/244, 5-29=62/589, 9-29=285/193

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-1-8 to 3-3-5, Interior(1) 3-3-5 to 10-11-8, Exterior(2E) 10-11-8 to 13-7-0, Interior(1) 13-7-0 to 34-11-5 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 22, 23, 24 except (jt=lb) 26=104, 2=118, 25=369.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 30, 2020

**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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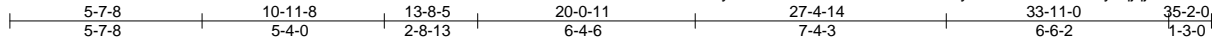
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 45 South Creek	E15040900
J1120-5305	C2	ROOF SPECIAL	3	1	Job Reference (optional)	

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5x5 =

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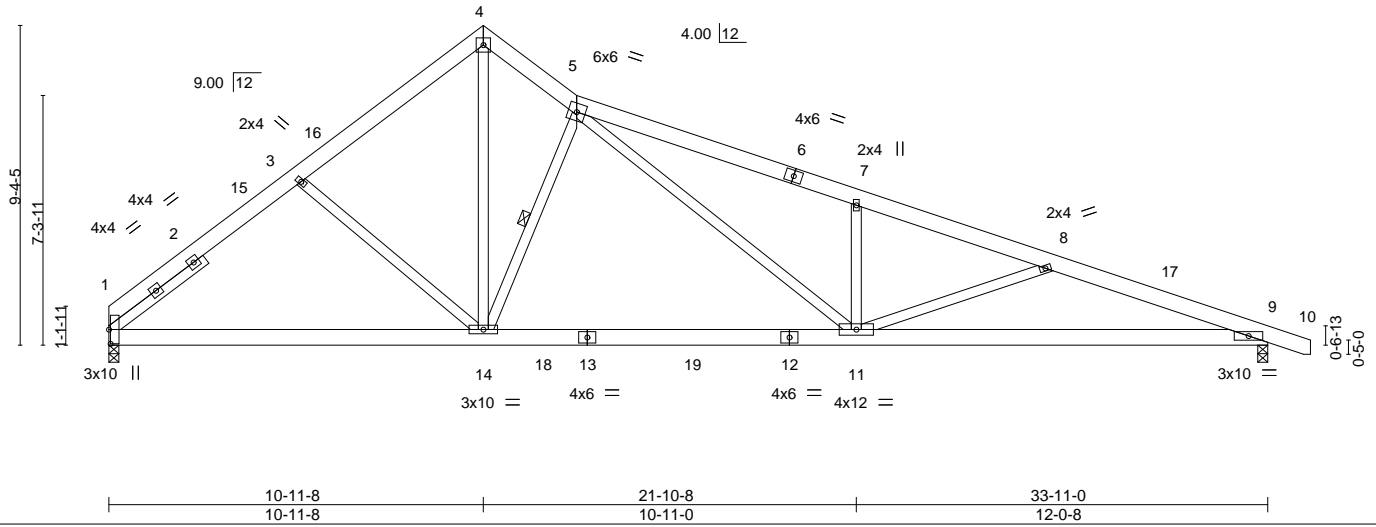


Plate Offsets (X,Y)-- [1:0-5-0,0-0-9]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.37	Vert(LL)	-0.24 11-14	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.72	Vert(CT)	-0.37 11-14	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.50	Horz(CT)	0.07 9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.09 11	>999	240	Weight: 241 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2  
 SLIDER Left 2x4 SP No.2 -H 3-6-1

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 3-10-11 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 5-14

**REACTIONS.** (size) 1=0-3-8, 9=0-3-8  
 Max Horz 1=-193(LC 8)  
 Max Uplift 9=-63(LC 9)  
 Max Grav 1=1523(LC 19), 9=1559(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-3=-1961/413, 3-4=-1749/402, 4-5=-1725/455, 5-7=-3242/658, 7-8=-3213/552, 8-9=-3554/683  
 BOT CHORD 1-14=-216/1548, 11-14=-183/1877, 9-11=-565/3315  
 WEBS 4-14=-365/1781, 5-14=-1318/378, 5-11=-255/1516, 7-11=-467/239, 8-11=-410/205

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 10-11-8, Exterior(2E) 10-11-8 to 13-8-5, Interior(1) 13-8-5 to 35-0-13 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 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.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 30, 2020

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818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 45 South Creek	E15040901
J1120-5305	C3	ROOF SPECIAL	2	1		

Comtech, Inc., Fayetteville, NC - 28314,

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5x5 =

Scale = 1:66.2

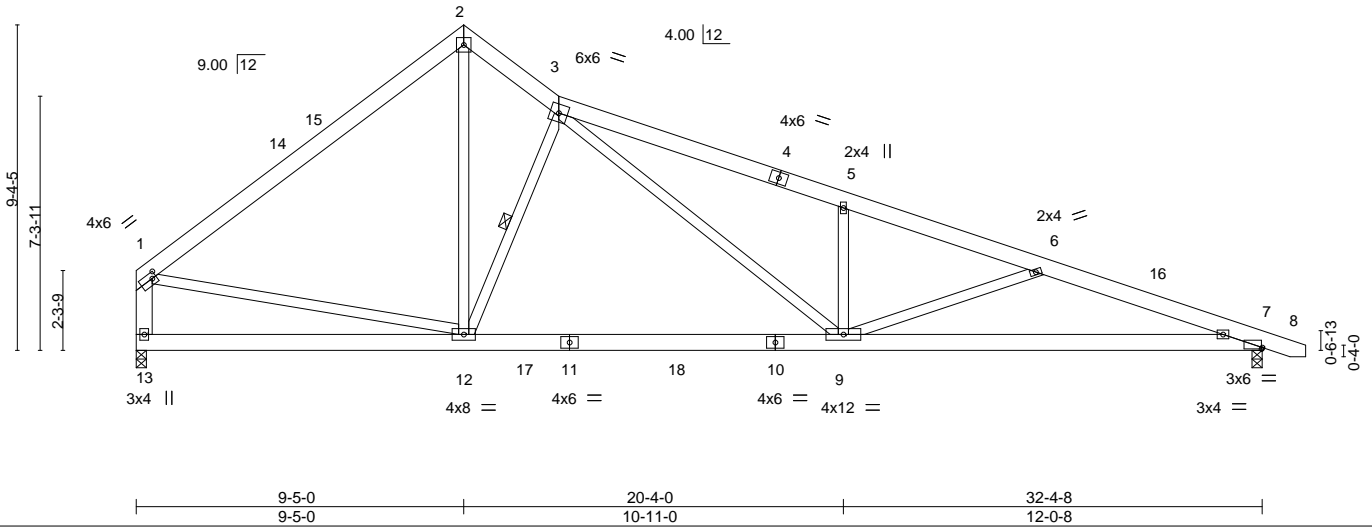


Plate Offsets (X,Y)-- [1:0-1-8,0-2-0], [7:0-0-4,0-0-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.42	Vert(LL) -0.22	9-12	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.70	Vert(CT) -0.35	9-12	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.50	Horz(CT) 0.05	7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.08	9	>999	240	Weight: 235 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-0-6 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* 1-13: 2x6 SP No.1	WEBS 1 Row at midpt 3-12

**REACTIONS.** (size) 13=0-3-8, 7=0-3-8  
 Max Horz 13=-191(LC 8)  
 Max Uplift 7=-61(LC 9)  
 Max Grav 13=1437(LC 19), 7=1473(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-1585/311, 2-3=-1456/396, 3-5=-3007/612, 5-6=-2978/505, 6-7=-3329/641, 1-13=-1310/292  
 BOT CHORD 12-13=-81/326, 9-12=-142/1635, 7-9=-528/3104  
 WEBS 2-12=-177/1399, 3-12=-1221/321, 3-9=-255/1533, 5-9=-467/240, 6-9=-420/207, 1-12=0/1009

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-2-12 to 4-7-9, Interior(1) 4-7-9 to 9-5-0, Exterior(2E) 9-5-0 to 12-1-13, Interior(1) 12-1-13 to 33-4-13 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 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) 7.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



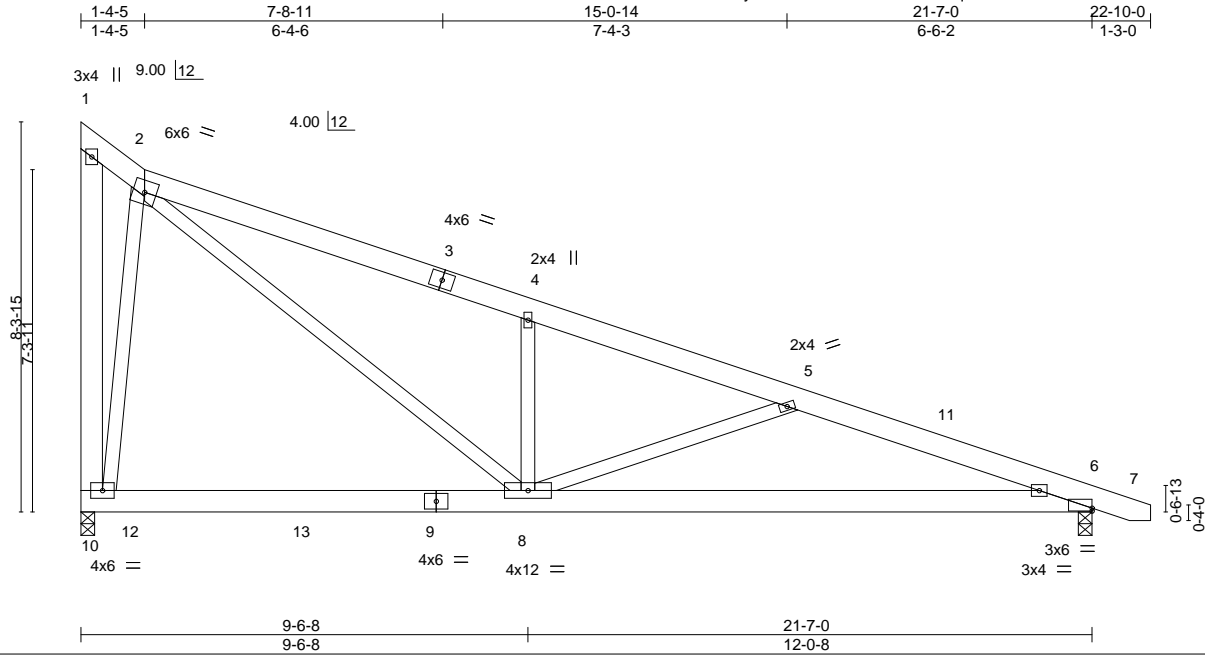
October 30, 2020

Job	Truss	Truss Type	Qty	Ply	Lot 45 South Creek	E15040902
J1120-5305	C4	ROOF SPECIAL	1	1		

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Scale = 1:49.2

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

LOADING (psf)	SPACING-	CS.I.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.27	Vert(LL) -0.12	6-8	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.54	Vert(CT) -0.27	6-8	>931	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.69	Horz(CT) 0.02	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.04	6-8	>999	240	Weight: 165 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-5-3 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 10=0-3-8, 6=0-3-8  
 Max Horz 10=-218(LC 13)  
 Max Uplift 10=-78(LC 13), 6=-44(LC 9)  
 Max Grav 10=996(LC 2), 6=975(LC 2)

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

TOP CHORD 2-4=-1485/188, 4-5=-1459/83, 5-6=-1872/239  
 BOT CHORD 8-10=-48/265, 6-8=-158/1735  
 WEBS 4-8=-459/235, 5-8=-479/231, 2-10=-869/283, 2-8=-258/1539

**NOTES-**

- 1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-2-12 to 1-4-7, Interior(1) 1-4-7 to 22-7-5 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 6.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 30,2020

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818 Soundside Road  
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Job	Truss	Truss Type	Qty	Ply	Lot 45 South Creek	E15040903
J1120-5305	D1GE	COMMON SUPPORTED GAB	1	1		

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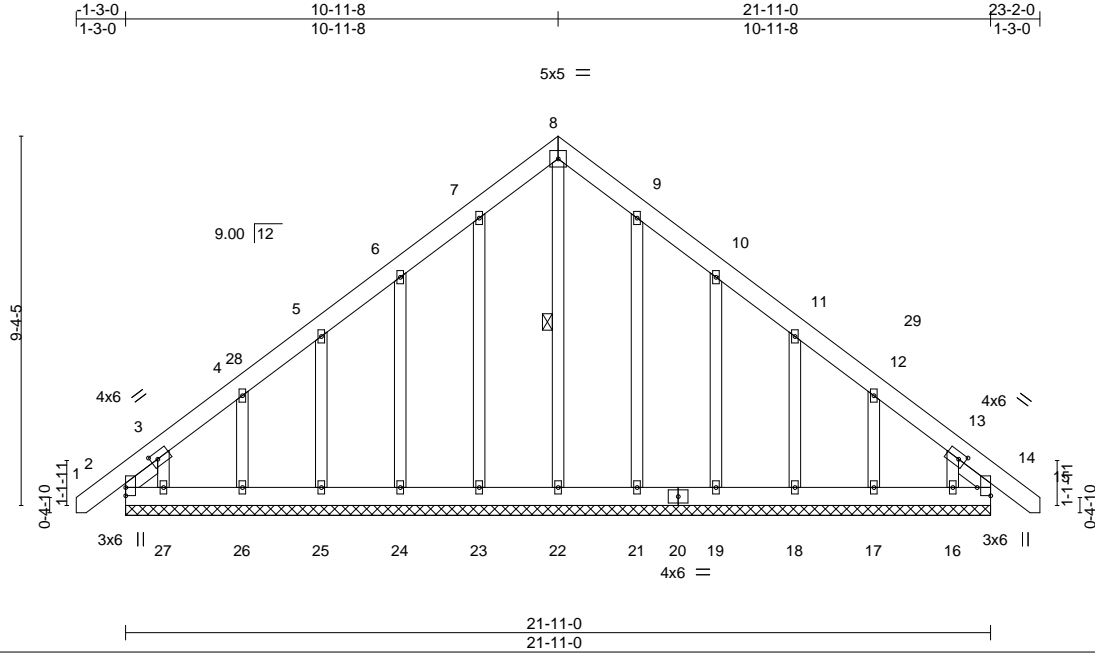


Plate Offsets (X,Y)-- [3:0-2-1,0-2-0], [13:0-2-1,0-2-0], [14:Edge,0-4-2]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.03	Vert(LL) -0.00	14	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.02	Vert(CT) -0.00	14	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.12	Horz(CT) 0.00	14	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S					Weight: 198 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.2	WEBS 1 Row at midpt 8-22
SLIDER Left 2x4 SP No.2 -H 1-0-15, Right 2x4 SP No.2 -H 1-0-15	

**REACTIONS.** All bearings 21-11-0.  
 (lb) - Max Horz 2=-231(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 23, 24, 25, 26, 21, 19, 18, 17, 14 except 2=-118(LC 8),  
 27=-174(LC 12), 16=-154(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 22, 23, 24, 25, 26, 27, 21, 19, 18, 17, 16, 14

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-318/207, 13-14=-261/123

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-1-8 to 3-3-5, Exterior(2N) 3-3-5 to 10-11-8, Corner(3R) 10-11-8 to 15-4-5, Exterior(2N) 15-4-5 to 23-0-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 23, 24, 25, 26, 21, 19, 18, 17, 14 except (jt=lb) 2=118, 27=174, 16=154.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



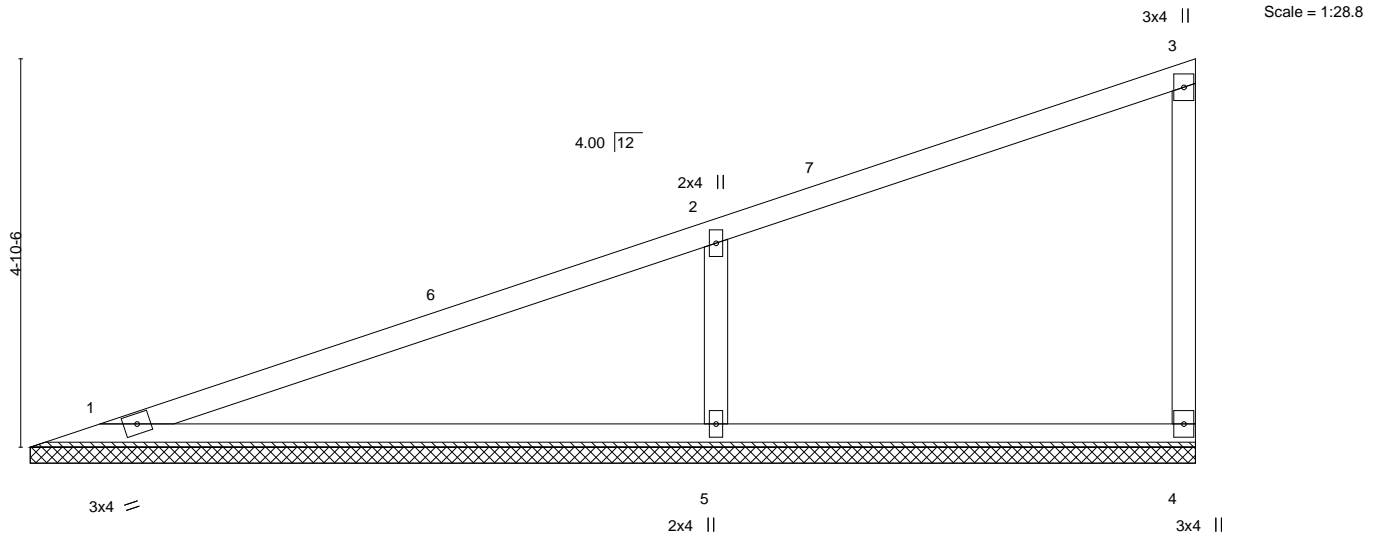
October 30,2020

Job	Truss	Truss Type	Qty	Ply	Lot 45 South Creek	E15040904
J1120-5305	VC1	GABLE	1	1	Job Reference (optional)	

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14-7-1  
14-7-1



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.58	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.37	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.08	Horz(CT)	0.00	4	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 53 lb	FT = 20%
	Code IRC2018/TPI2014							

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

(size) 1=14-7-1, 4=14-7-1, 5=14-7-1  
Max Horz 1=125(LC 8)  
Max Uplift 4=14(LC 8), 5=58(LC 8)  
Max Grav 1=249(LC 1), 4=157(LC 1), 5=678(LC 1)

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

WEBS 2-5=496/277

**NOTES-**

- 1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCCL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-10-13 to 5-3-9, Interior(1) 5-3-9 to 14-5-5 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 30, 2020

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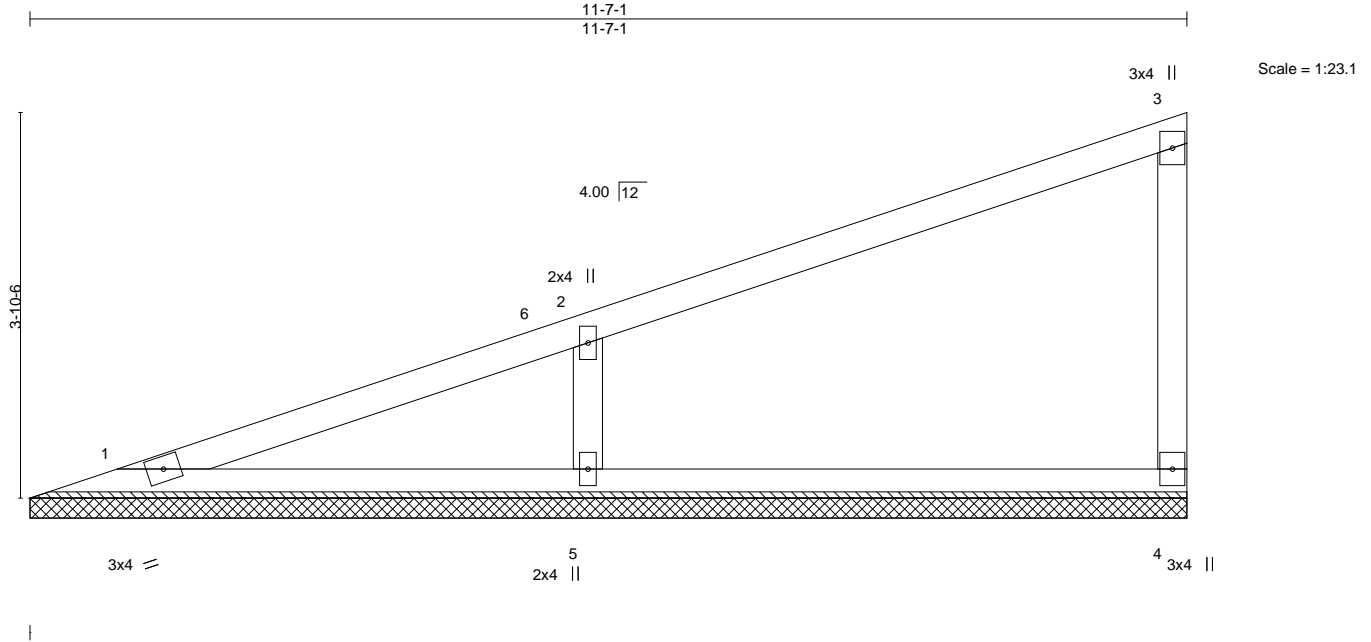
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Job	Truss	Truss Type	Qty	Ply	Lot 45 South Creek	E15040905
J1120-5305	VC2	GABLE	1	1	Job Reference (optional)	

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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.30	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.20	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.06	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 4 n/a n/a	Weight: 41 lb	FT = 20%
	Code IRC2018/TPI2014				

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

(size) 1=11-7-1, 4=11-7-1, 5=11-7-1  
 Max Horz 1=98(LC 8)  
 Max Uplift 4=-17(LC 8), 5=-43(LC 8)  
 Max Grav 1=139(LC 1), 4=195(LC 1), 5=510(LC 1)

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

WEBS 2-5=-379/319

**NOTES-**

- 1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-10-13 to 5-7-1, Interior(1) 5-7-1 to 11-5-5 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 30, 2020

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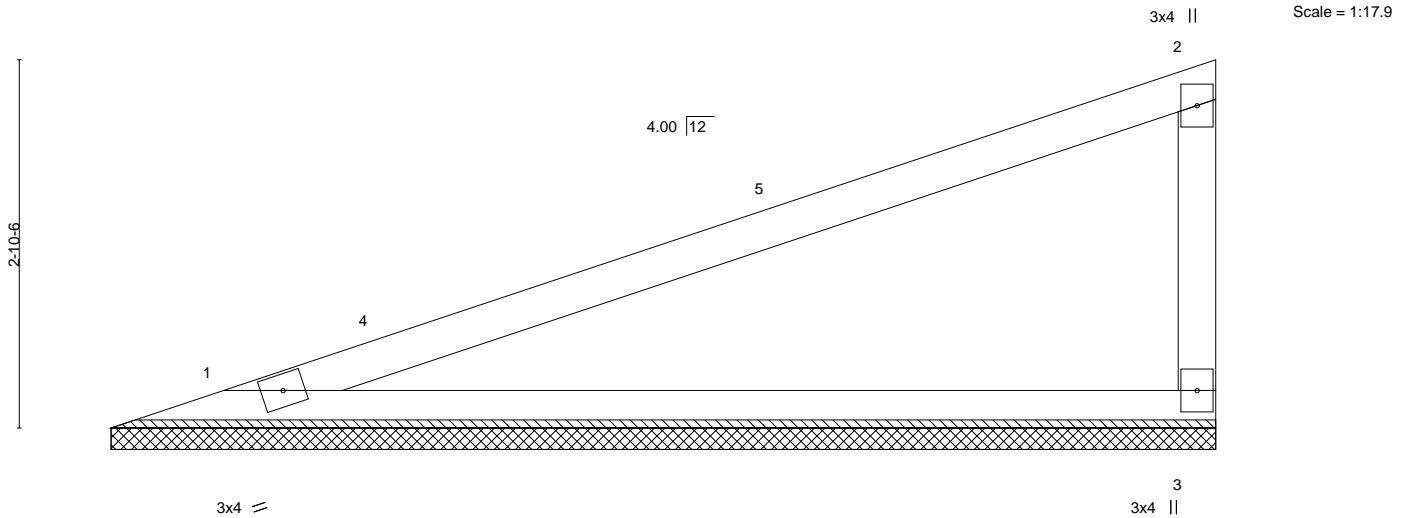
Job	Truss	Truss Type	Qty	Ply	Lot 45 South Creek	E15040906
J1120-5305	VC3	GABLE	1	1	Job Reference (optional)	

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8-7-1  
8-7-1



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.88	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.56	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 n/a n/a	Weight: 28 lb	FT = 20%
	Code IRC2018/TPI2014				

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

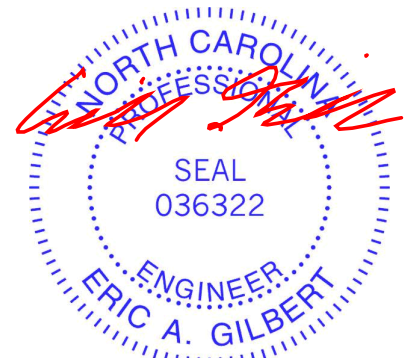
(size) 1=8-7-1, 3=8-7-1  
Max Horz 1=70(LC 8)  
Max Uplift 1=-3(LC 8), 3=-26(LC 8)  
Max Grav 1=302(LC 1), 3=302(LC 1)

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

TOP CHORD 2-3=-226/252

**NOTES-**

- 1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-10-13 to 5-3-9, Interior(1) 5-3-9 to 8-5-5 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 30, 2020

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

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



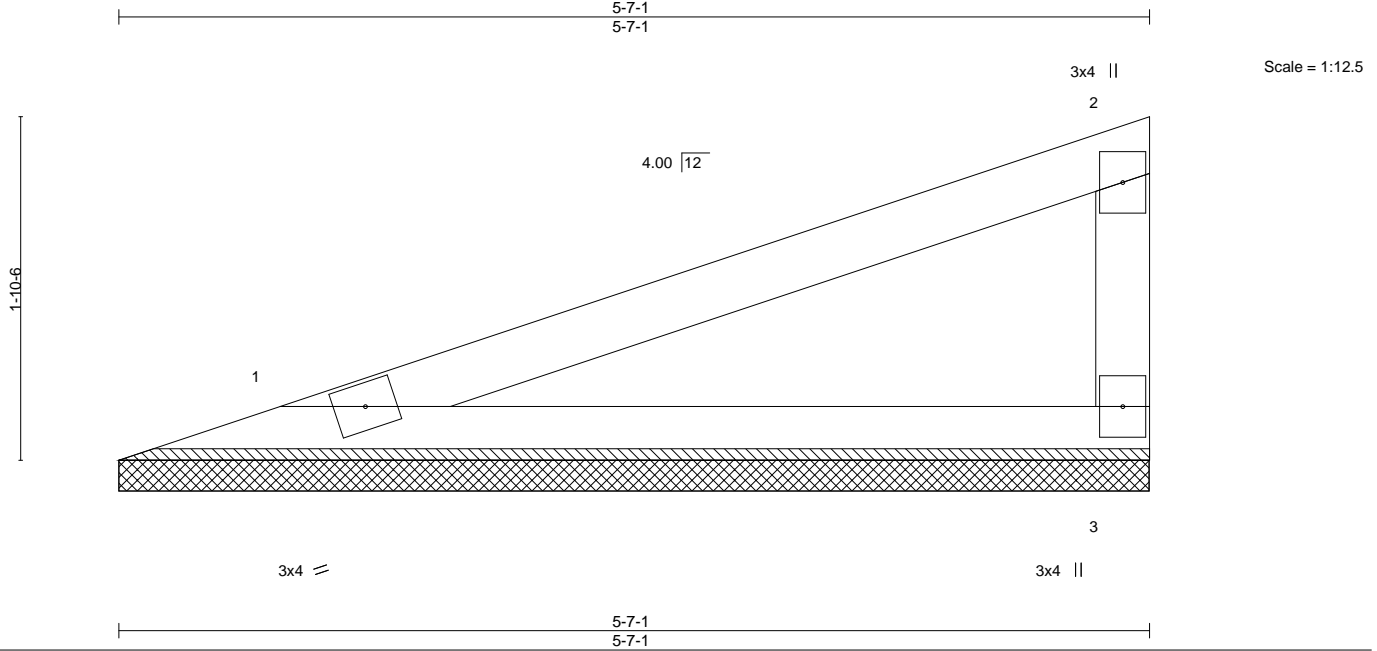
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 45 South Creek	E15040907
J1120-5305	VC4	VALLEY	1	1		

Comtech, Inc., Fayetteville, NC - 28314,

8,330 s Oct 7 2020 MiTek Industries, Inc. Fri Oct 30 13:16:58 2020 Page 1

ID:L1J54eQhkyo6whVlnXZxPFzEJO5-I566gj0JdEY\_02wMSnB?9ftkkkgBAC1FZl8n?yOD1Z



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)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.19	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00		n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 18 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-7-1 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

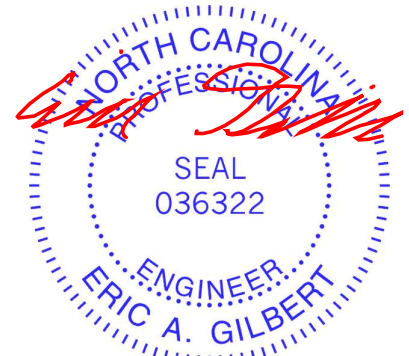
#### REACTIONS.

(size) 1=5-7-1, 3=5-7-1  
Max Horz 1=42(LC 8)  
Max Uplift 1=-2(LC 8), 3=-16(LC 8)  
Max Grav 1=182(LC 1), 3=182(LC 1)

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

#### NOTES-

- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- Non Standard bearing condition. Review required.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 30, 2020

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ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

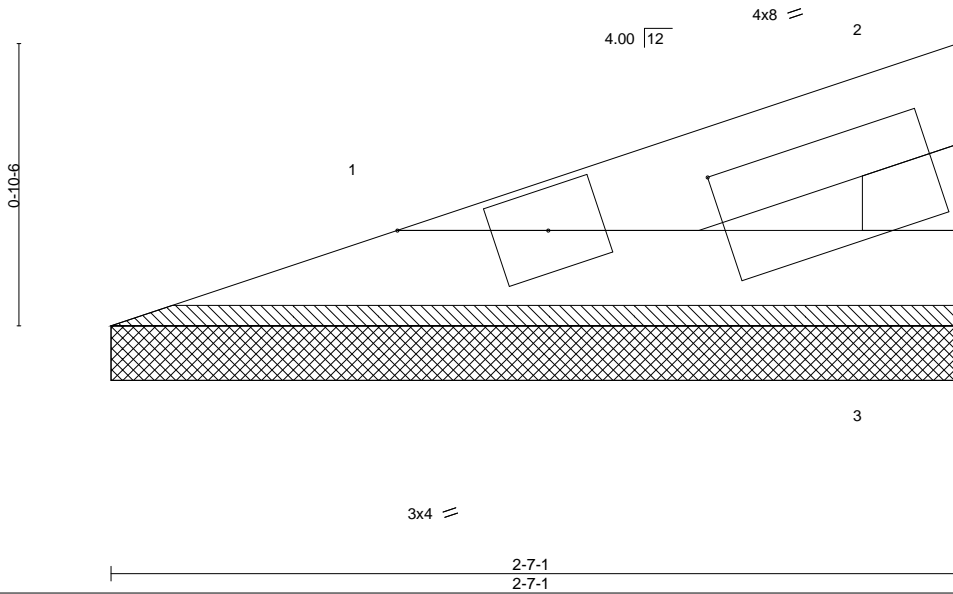
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 45 South Creek	E15040908
J1120-5305	VC5	VALLEY	1	1		

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Oct 30 13:16:59 2020 Page 1

ID:L1J54eQhkyo6whVInXZxPFzEJO5-EHgUt31w4xmpcAd6wAIQYNC6c722vfHOoPLHSyOD1Y  
2-7-1  
2-7-1



Scale = 1:7.0

Plate Offsets (X,Y)-- [2:0-1-14,0-0-0], [2:0-11-7,0-1-12], [3:0-1-11,0-0-9]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.03	Vert(LL) n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.02	Vert(CT) n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00		n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P					Weight: 7 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 2-7-1 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=2-7-1, 3=2-7-1  
Max Horz 1=14(LC 8)  
Max Uplift 1=-1(LC 8), 3=-5(LC 8)  
Max Grav 1=62(LC 1), 3=62(LC 1)

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

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
  - 5) Non Standard bearing condition. Review required.
  - 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 30,2020

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

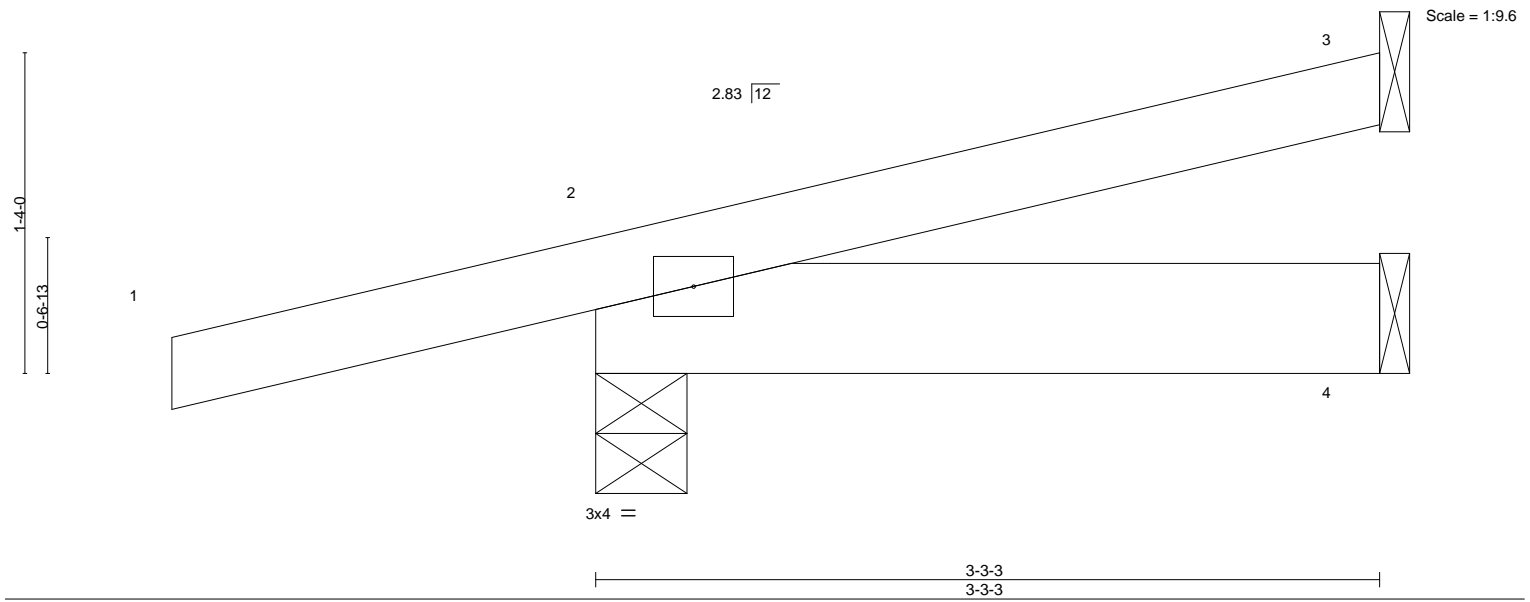
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 45 South Creek	E15040909
J1120-5305	Z1	DIAGONAL HIP GIRDER	2	1		

Comtech, Inc., Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Oct 30 13:16:59 2020 Page 1  
 ID:L1J54eQhkyo6whVlnXZxPFzEJO5-EHGUt31w4xmpcAd6wAIQYNC3g72MvH0oPILHSyOD1Y  
 -1-9-3 1-9-3 3-3-3 3-3-3 3-3-3



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.22	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.06	Vert(LL) -0.00 2-4 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.00 2-4 >999 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-P	Horz(CT) -0.00 3 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) 0.00 2-4 >999 240	Weight: 15 lb	FT = 20%

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

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

**REACTIONS.** (size) 3=Mechanical, 2=0-4-9, 4=Mechanical  
 Max Horz 2=36(LC 8)  
 Max Uplift 3=-21(LC 12), 2=-106(LC 8), 4=-11(LC 8)  
 Max Grav 3=52(LC 1), 2=276(LC 1), 4=60(LC 3)

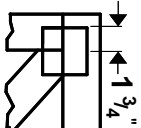
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Corner(3) zone; porch left and right 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 2=106.
  - 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

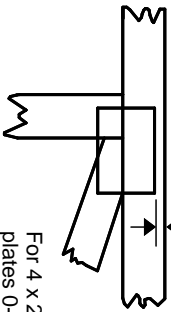


# Symbols

## 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



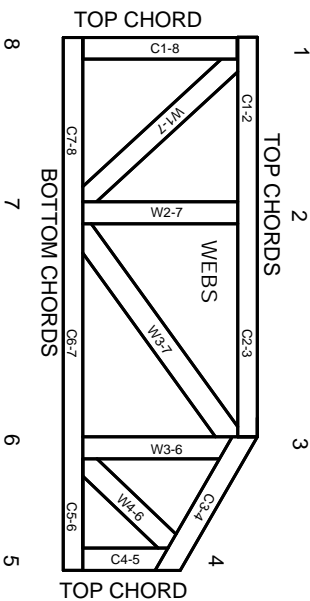
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-89: Design Standard for Bracing, Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System

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



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

Lumber design values are in accordance with ANSI/TP1 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/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.