

RE: J1020-4756  
 Lot 30 Forest Ridge

Trenco  
 818 Soundside Rd  
 Edenton, NC 27932

**Site Information:**

Customer: Project Name: J1020-4756  
 Lot/Block: Model:  
 Address: Subdivision:  
 City: State:

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

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

This package includes 23 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	E14970005	A1	1/7/2021	21	E14970025	V3	1/7/2021
2	E14970006	A1A	1/7/2021	22	E14970026	V4	1/7/2021
3	E14970007	A1GE	1/7/2021	23	E14970027	V5	1/7/2021
4	E14970008	A2	1/7/2021				
5	E14970009	A2A	1/7/2021				
6	E14970010	A2GE	1/7/2021				
7	E14970011	B1	1/7/2021				
8	E14970012	B1GE	1/7/2021				
9	E14970013	B2	1/7/2021				
10	E14970014	C1GE	1/7/2021				
11	E14970015	D1	1/7/2021				
12	E14970016	D1-GR	1/7/2021				
13	E14970017	D1SG	1/7/2021				
14	E14970018	H1	1/7/2021				
15	E14970019	H1GE	1/7/2021				
16	E14970020	M1	1/7/2021				
17	E14970021	M1GE	1/7/2021				
18	E14970022	M2	1/7/2021				
19	E14970023	V1	1/7/2021				
20	E14970024	V2	1/7/2021				

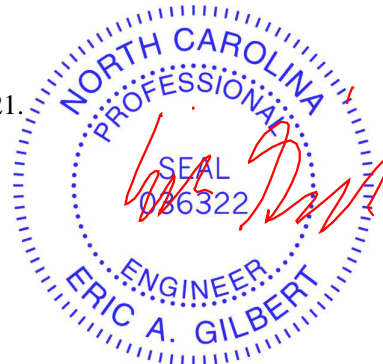
The truss drawing(s) referenced above have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville.

Truss Design Engineer's Name: Gilbert, Eric

My license renewal date for the state of North Carolina is December 31, 2021.

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.



January 07, 2021

Job	Truss	Truss Type	Qty	Ply	Lot 30 Forest Ridge	E14970005
J1020-4756	A1	COMMON	6	1		

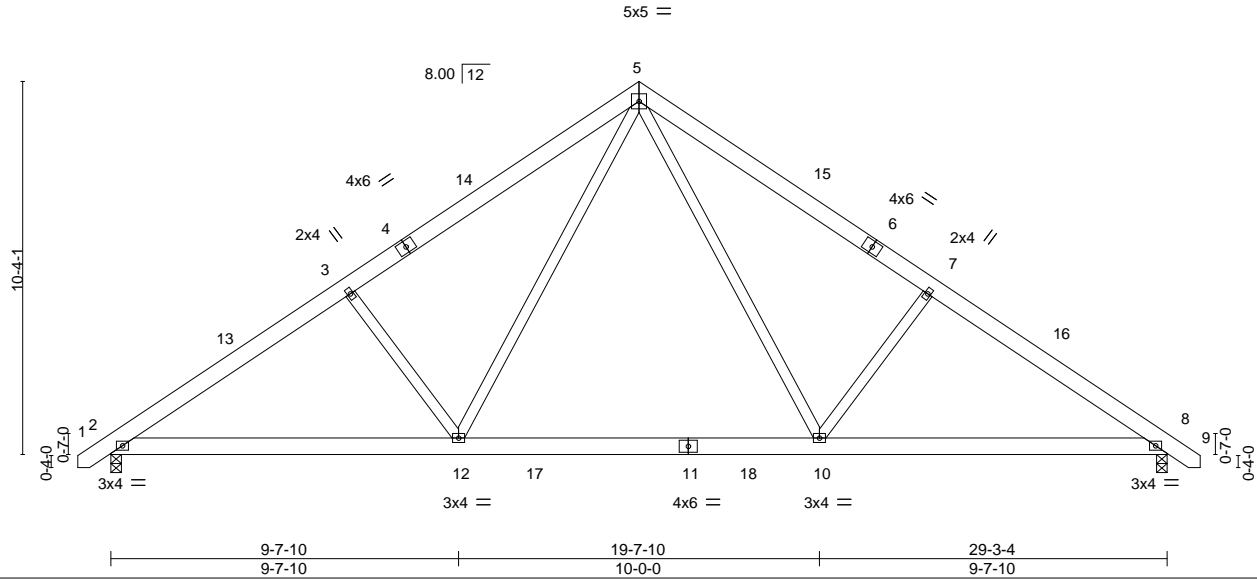
Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Oct 13 08:29:04 2020 Page 1

ID:Y\_aRO?Cxglt9gUrhHW7gHdzqoOe-UsjqJSXFqL\_XClzOLMdlPCzPZGgvWOi9NzbH76yTrT

-0-11-0 6-7-10 14-7-10 22-7-10 29-3-4 30-2-4  
 0-11-0 6-7-10 8-0-0 8-0-0 6-7-10 0-11-0

Scale: 3/16"=1'



<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 0.26	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.45	Vert(LL) -0.19 10-12 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.26	Vert(CT) -0.25 10-12 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.03 8 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.03 12 >999 240	Weight: 203 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-8-13 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	

**REACTIONS.** (size) 2=0-3-8, 8=0-3-8  
 Max Horz 2=-246(LC 10)  
 Max Uplift 2=-74(LC 12), 8=-74(LC 13)  
 Max Grav 2=1262(LC 19), 8=1262(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1835/370, 3-5=-1645/418, 5-7=-1645/418, 7-8=-1836/370  
 BOT CHORD 2-12=-185/1613, 10-12=0/1007, 8-10=-194/1429  
 WEBS 5-10=-125/799, 7-10=-482/287, 5-12=-125/798, 3-12=-482/287

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-1 to 3-7-12, Interior(1) 3-7-12 to 14-7-10, Exterior(2) 14-7-10 to 19-0-7, Interior(1) 19-0-7 to 30-0-5 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) 2, 8.

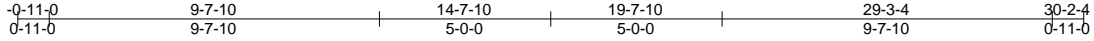


Job	Truss	Truss Type	Qty	Ply	Lot 30 Forest Ridge	E14970006
J1020-4756	A1A	COMMON	2	1		

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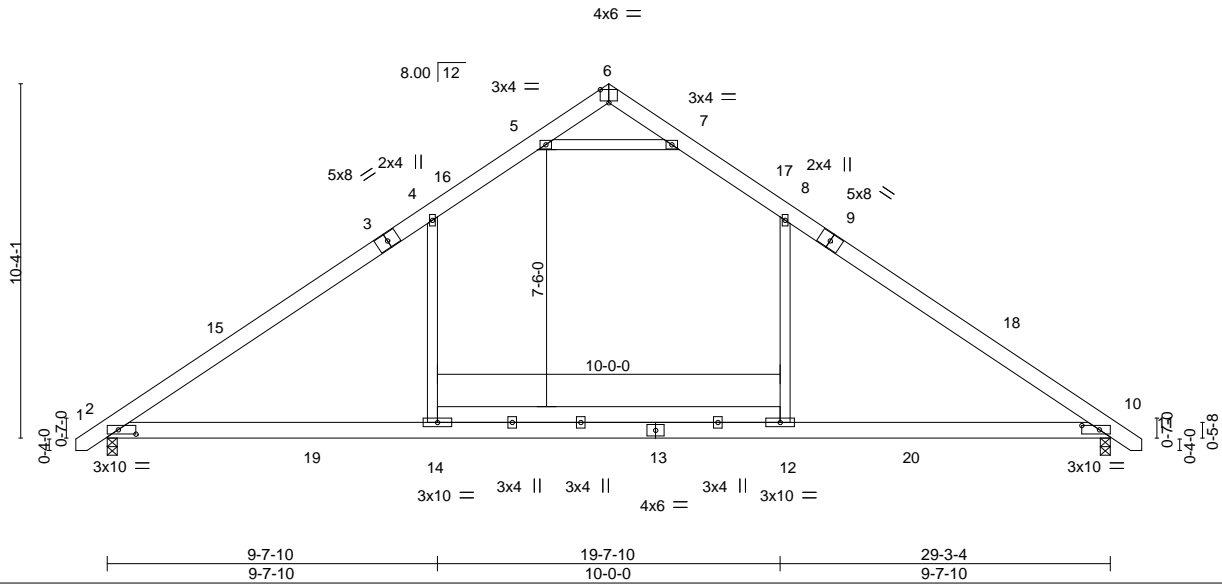


Plate Offsets (X,Y)-- [2:0-6-2,0-1-8], [6:0-3-0,Edge], [10:0-6-3,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 1.00	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.54	Vert(LL) -0.37 10-12 >939 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.64	Vert(CT) -0.57 10-12 >613 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.03 10 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.32 2-14 >999 240	Weight: 204 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.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8  
 Max Horz 2=246(LC 11)  
 Max Uplift 2=-74(LC 12), 10=-74(LC 13)  
 Max Grav 2=1290(LC 19), 10=1290(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-1683/286, 4-5=-1167/368, 5-6=-237/871, 6-7=-237/871, 7-8=-1167/368, 8-10=-1684/286  
 BOT CHORD 2-14=-54/1275, 12-14=-58/1276, 10-12=-54/1275  
 WEBS 4-14=0/456, 8-12=0/457, 5-7=-2350/707

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-1 to 3-7-12, Interior(1) 3-7-12 to 14-7-10, Exterior(2) 14-7-10 to 19-0-7, Interior(1) 19-0-7 to 30-0-5 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) 2, 10.



October 13, 2020

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818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 30 Forest Ridge	E14970007
J1020-4756	A1GE	COMMON SUPPORTED GAB	1	1		

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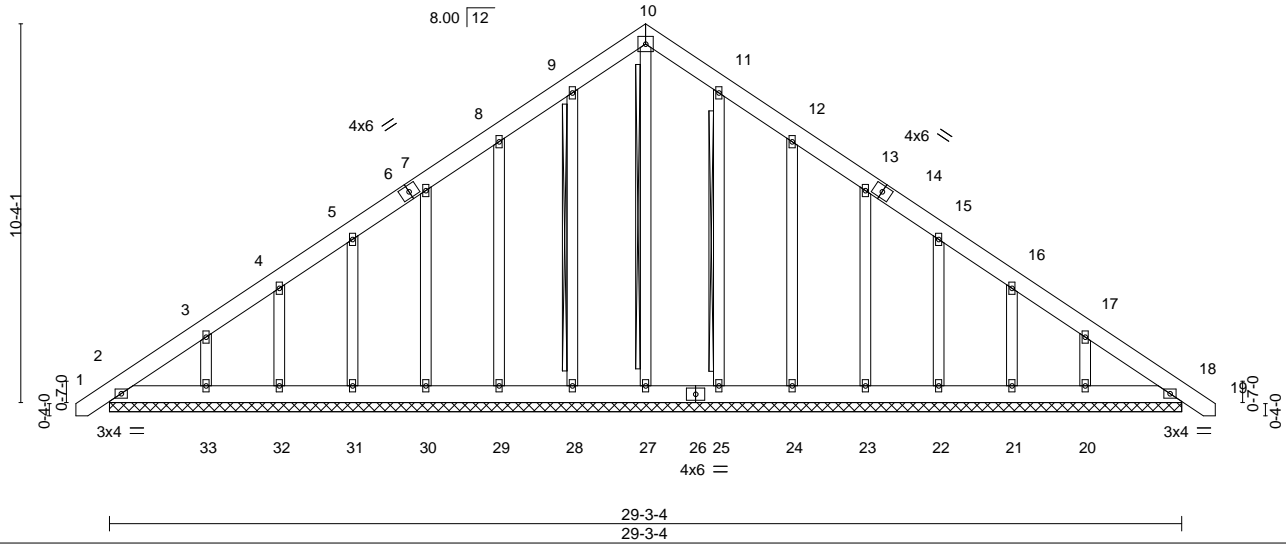
8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Oct 13 08:29:06 2020 Page 1

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0-11-0 14-7-10 29-3-4 30-2-4  
 0-11-0 14-7-10 14-7-10 0-11-0

5x5 =

Scale = 1:62.9



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.04	Vert(LL)	0.00	18	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	0.00	18	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.13	Horz(CT)	0.01	18	n/a	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S						Weight: 255 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 T-Brace: 2x4 SPF No.2 - 10-27, 9-28, 11-25  
 Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.  
 Brace must cover 90% of web length.

**REACTIONS.**

All bearings 29-3-4.  
 (lb) - Max Horz 2=307(LC 11)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 28, 29, 30, 31, 32, 25, 23, 22, 21, 18 except 33=120(LC 12),  
 24=101(LC 13), 20=118(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 27, 28, 29, 30, 31, 32, 33, 25, 24, 23, 22, 21, 20, 18

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

TOP CHORD 2-3=300/229, 9-10=233/262, 10-11=233/262

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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, 28, 29, 30, 31, 32, 25, 23, 22, 21, 18 except (jt=lb) 33=120, 24=101, 20=118.
- Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



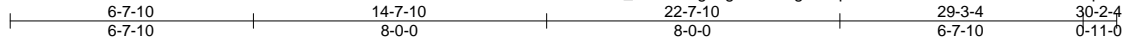
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 Edenton, NC 27932

Job J1020-4756	Truss A2	Truss Type COMMON	Qty 8	Ply 1	Lot 30 Forest Ridge Job Reference (optional)	E14970008
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5x5 =

Scale = 1:62.9

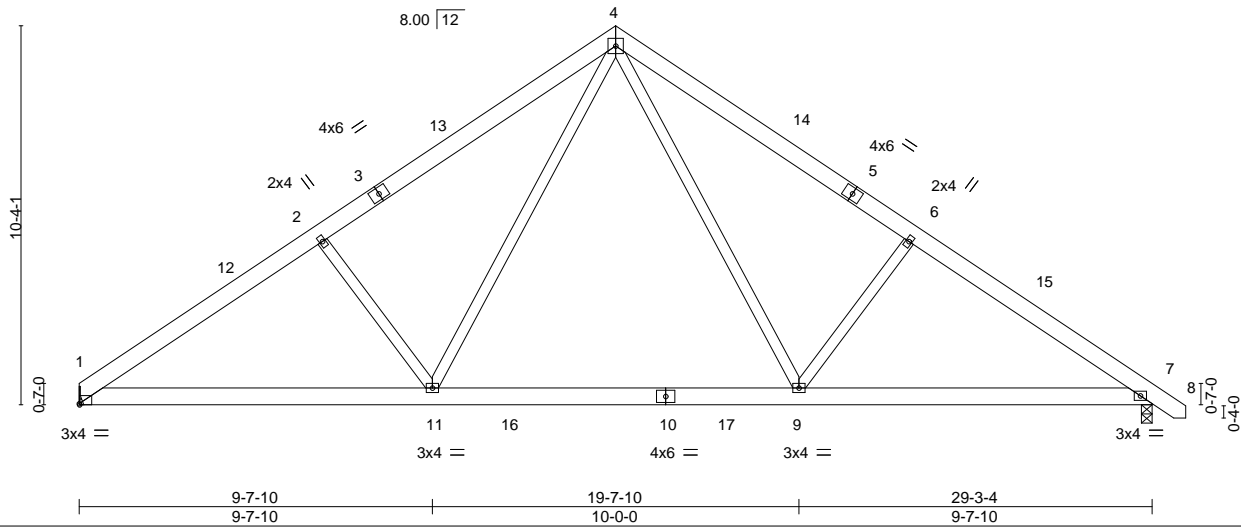


Plate Offsets (X,Y)-- [1:0-0-2,Edge]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	2-0-0	TC 0.26	Vert(LL) -0.19	9-11	>999	360		MT20	244/190
TCDL 10.0	Lumber DOL 1.15		BC 0.45	Vert(CT) -0.25	9-11	>999	240			
BCLL 0.0 *	Rep Stress Incr YES		WB 0.27	Horz(CT) 0.03	7	n/a	n/a			
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL) 0.03	11	>999	240			
									Weight: 201 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 5-8-8 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 1=Mechanical, 7=0-3-8  
 Max Horz 1=-243(LC 10)  
 Max Uplift 1=-62(LC 12), 7=-74(LC 13)  
 Max Grav 1=1214(LC 19), 7=1265(LC 20)

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

TOP CHORD 1-2=-1837/384, 2-4=-1662/431, 4-6=-1652/420, 6-7=-1842/372  
 BOT CHORD 1-11=-203/1637, 9-11=0/1013, 7-9=-198/1435  
 WEBS 4-9=-126/798, 6-9=-482/287, 4-11=-130/815, 2-11=-493/293

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCCL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-12 to 4-5-9, Interior(1) 4-5-9 to 14-7-10, Exterior(2) 14-7-10 to 19-0-7, Interior(1) 19-0-7 to 30-0-5 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 BCCL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7.



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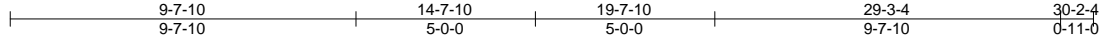
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 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 30 Forest Ridge	E14970009
J1020-4756	A2A	COMMON	3	1		

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4x6 =

Scale: 3/16"=1'

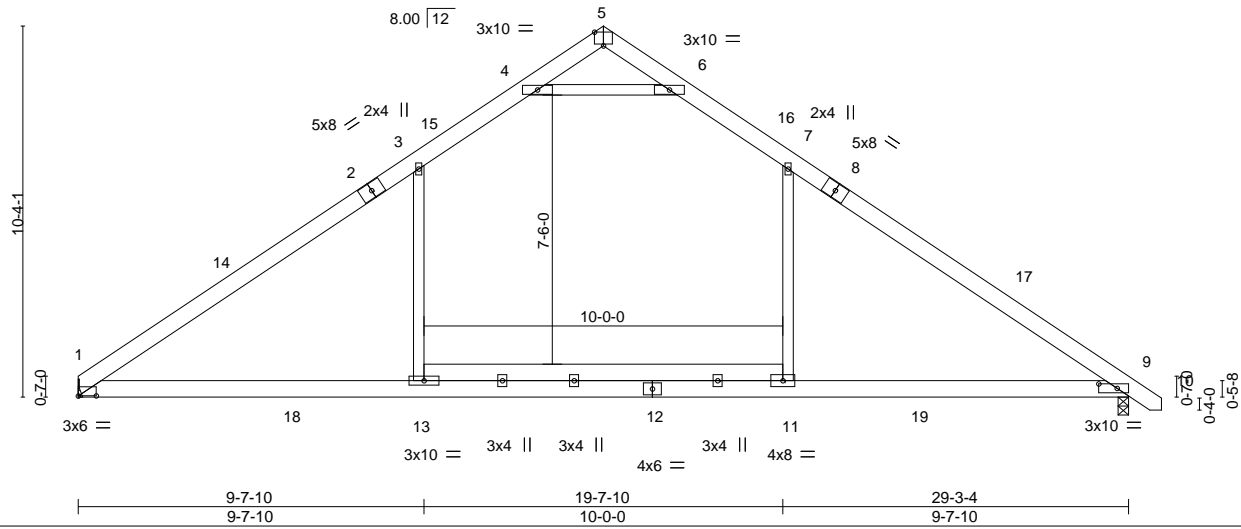


Plate Offsets (X,Y)-- [1:0-6-0,0-0-1], [5:0-3-0,Edge], [9:0-6-3,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.78	Vert(LL) -0.37	1-13	>955	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.53	Vert(CT) -0.55	1-13	>632	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.67	Horz(CT) 0.03	9	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.31	1-13	>999	240		
							Weight: 202 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP 2400F 2.0E \*Except\*  
1-2,8-10: 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x4 SP No.2

**BRACING-**

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

**REACTIONS.**

(size) 1=Mechanical, 9=0-3-8  
Max Horz 1=-243(LC 10)  
Max Uplift 1=-62(LC 12), 9=-74(LC 13)  
Max Grav 1=1243(LC 19), 9=1294(LC 20)

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

TOP CHORD 1-3=-1693/289, 3-4=-1185/379, 4-5=-265/940, 5-6=-276/944, 6-7=-1184/373,  
7-9=-1705/292  
BOT CHORD 1-13=-65/1296, 11-13=-69/1297, 9-11=-65/1296  
WEBS 3-13=0/446, 7-11=0/464, 4-6=-2459/763

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-12 to 4-5-9, Interior(1) 4-5-9 to 14-7-10, Exterior(2) 14-7-10 to 19-0-7, Interior(1) 19-0-7 to 30-0-5 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9.



October 13, 2020

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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

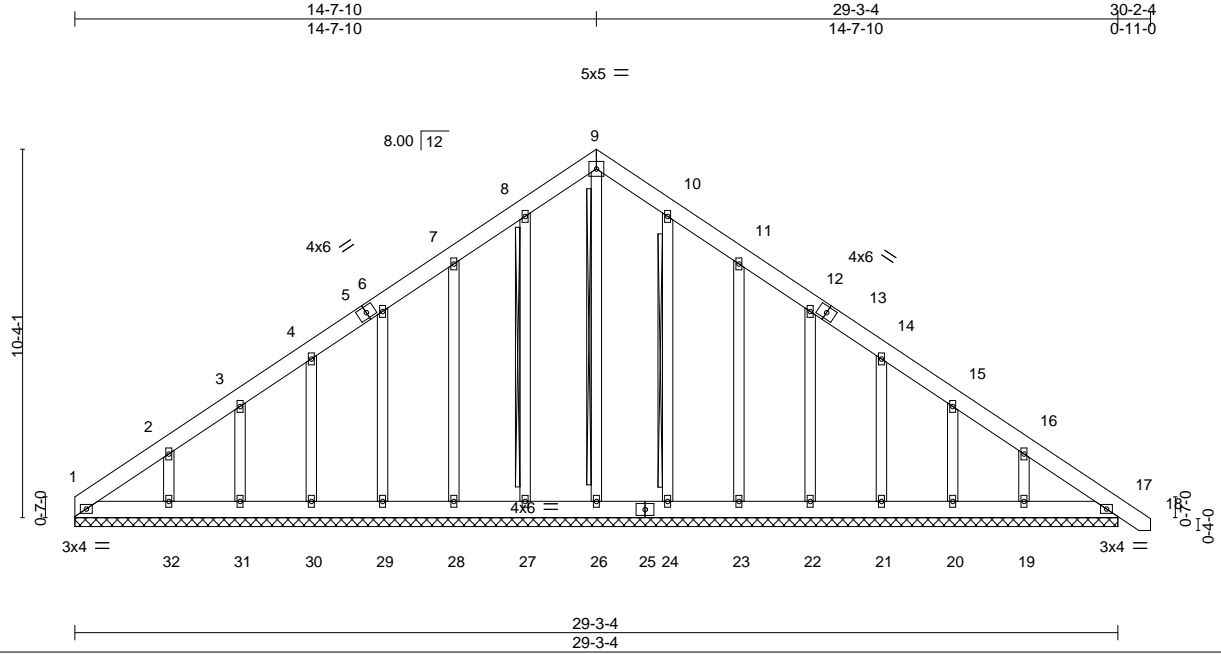


818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 30 Forest Ridge	E14970010
J1020-4756	A2GE	COMMON SUPPORTED GAB	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Oct 13 08:29:09 2020 Page 1  
 ID:Y\_aRO?Cxglt9gUrhHW7gHdzqoOe-rpXjMAbOfcql3rL8wDW6FgJcHumBh7uXEJ2oJyTtrO



<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 0.04	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.03	Vert(LL) 0.00 17 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.13	Vert(CT) 0.00 17 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 17 n/a n/a		
	Code IRC2015/TPI2014			Weight: 253 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.2	WEBS T-Brace: 2x4 SPF No.2 - 9-26, 8-27, 10-24
	Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.
	Brace must cover 90% of web length.

**REACTIONS.** All bearings 29-3-4.  
 (lb) - Max Horz 1=-303(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 27, 28, 29, 30, 31, 24, 22, 21, 20, 17 except 32=-127(LC 12),  
 23=-101(LC 13), 19=-118(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 26, 27, 28, 29, 30, 31, 32, 24, 23, 22, 21, 20, 19, 17

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-303/231, 8-9=-233/262, 9-10=-233/262

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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) 1, 27, 28, 29, 30, 31, 24, 22, 21, 20, 17 except (jt=lb) 32=127, 23=101, 19=118.
  - Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



Job J1020-4756	Truss B1	Truss Type ATTIC	Qty 4	Ply 1	Lot 30 Forest Ridge Job Reference (optional)	E14970011
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8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Oct 13 08:29:10 2020 Page 1

ID:Y\_aRO?CxglT9gUrIHW7gHdzqOe-J055aVc0QBkhwDQYidklfTDLKhf8w8E1lu2bKmyTtrN  
 0-11-0 6-2-12 9-2-4 11-11-8 14-8-12 17-8-4 23-11-0 24-10-0  
 0-11-0 6-2-12 2-11-8 2-9-4 2-9-4 2-11-8 6-2-12 0-11-0

Scale = 1:82.2

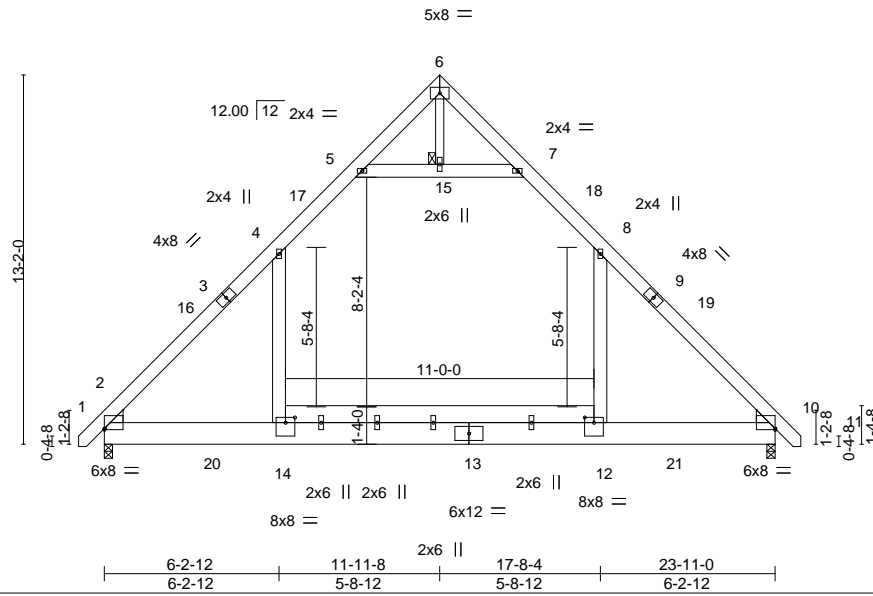


Plate Offsets (X,Y)-- [2:0-0-0,0-0-8], [10:Edge,0-0-8], [12:0-4-0,0-2-4], [14:0-4-0,0-2-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.62	Vert(LL) -0.25	12-14	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.72	Vert(CT) -0.43	12-14	>659	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.14	Horz(CT) 0.01	10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.10	12-14	>999	240		
							Weight: 263 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP 2400F 2.0E \*Except\*  
 1-3,9-11: 2x6 SP No.1  
 BOT CHORD 2x10 SP No.1 \*Except\*  
 12-14: 2x8 SP No.1  
 WEBS 2x6 SP No.1 \*Except\*  
 6-15: 2x4 SP No.2

**WEDGE**

Left: 2x6 SP No.2 , Right: 2x6 SP No.2

**REACTIONS.**

(size) 2=0-3-8, 10=0-3-8  
 Max Horz 2=-305(LC 10)  
 Max Grav 2=1650(LC 20), 10=1650(LC 21)

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

TOP CHORD 2-4=-2117/0, 4-5=-1140/151, 5-6=-55/251, 6-7=-55/251, 7-8=-1140/151, 8-10=-2117/0  
 BOT CHORD 2-14=0/1252, 12-14=0/1252, 10-12=0/1252  
 WEBS 8-12=0/1028, 4-14=0/1028, 5-15=-1512/225, 7-15=-1512/225

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-6 to 3-7-7, Interior(1) 3-7-7 to 11-11-8, Exterior(2) 11-11-8 to 16-4-5, Interior(1) 16-4-5 to 24-8-6 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Ceiling dead load (10.0 psf) on member(s). 4-5, 7-8, 5-15, 7-15; Wall dead load (5.0psf) on member(s).8-12, 4-14
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-14
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- Attic room checked for L/360 deflection.



October 13,2020

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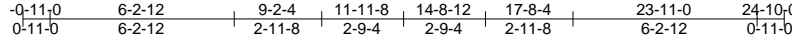


Job	Truss	Truss Type	Qty	Ply	Lot 30 Forest Ridge	E14970012
J1020-4756	B1GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

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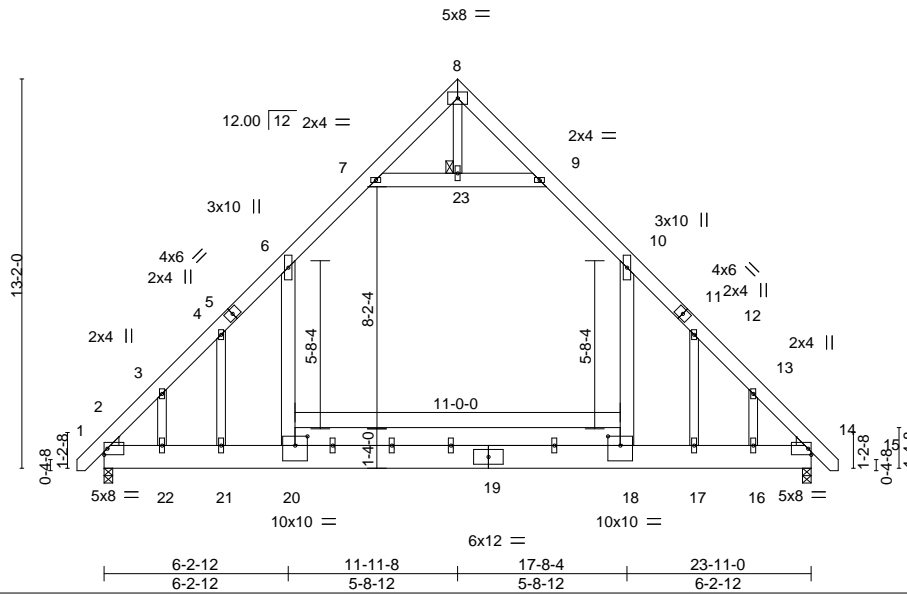


Plate Offsets (X,Y)-- [18:0-5-0,0-3-12], [20:0-5-0,0-3-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.97	Vert(LL) -0.22	18-20	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.67	Vert(CT) -0.39	18-20	>736	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.21	Horz(CT) 0.01	14	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.13	20	>999	240		
							Weight: 279 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x10 SP No.1 \*Except\*  
 18-20: 2x8 SP No.1  
 WEBS 2x6 SP No.1 \*Except\*  
 8-23: 2x4 SP No.2  
 OTHERS 2x4 SP No.2  
 WEDGE  
 Left: 2x4 SP No.3 , Right: 2x4 SP No.3

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 JOINTS 1 Brace at Jt(s): 23

**REACTIONS.** (size) 2=0-3-8, 14=0-3-8  
 Max Horz 2=382(LC 10)  
 Max Grav 2=1530(LC 20), 14=1530(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1993/0, 3-4=-1620/0, 4-6=-2062/75, 6-7=-1090/194, 9-10=-1090/194,  
 10-12=-2061/75, 12-13=-1620/0, 13-14=-1992/0  
 BOT CHORD 2-22=0/1204, 21-22=0/1206, 20-21=0/1203, 18-20=0/1203, 17-18=0/1203, 16-17=0/1205,  
 14-16=0/1203  
 WEBS 10-18=-21/1193, 6-20=-22/1193, 7-23=-1313/294, 9-23=-1313/294, 4-21=-740/164,  
 3-22=0/396, 12-17=-740/164, 13-16=0/396

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 2x6 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.
  - Ceiling dead load (10.0 psf) on member(s). 6-7, 9-10, 7-23, 9-23; Wall dead load (5.0psf) on member(s). 10-18, 6-20
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 18-20
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
  - Attic room checked for L/360 deflection.



October 13, 2020

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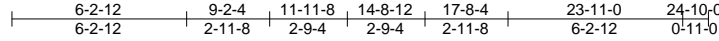
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 30 Forest Ridge	E14970013
J1020-4756	B2	ATTIC	6	1		

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Oct 13 08:29:12 2020 Page 1

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5x8 =

Scale = 1:82.2

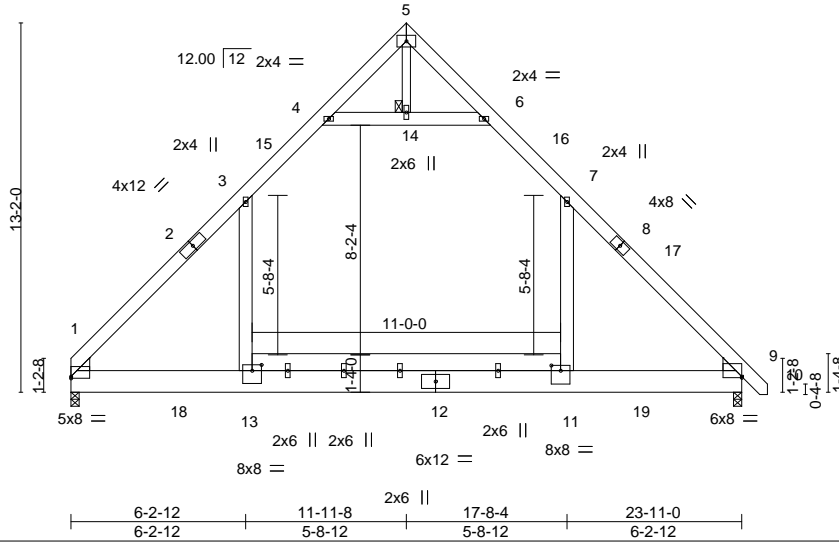


Plate Offsets (X,Y)-- [1:0-0-0,0-0-12], [9:Edge,0-0-8], [11:0-4-0,0-2-4], [13:0-4-0,0-2-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.63	Vert(LL) -0.26	11-13	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.73	Vert(CT) -0.44	11-13	>649	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.14	Horz(CT) 0.01	9	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.10	11-13	>999	240		
							Weight: 261 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP 2400F 2.0E \*Except\*  
1-2,8-10: 2x6 SP No.1  
BOT CHORD 2x10 SP No.1 \*Except\*  
11-13: 2x8 SP No.1  
WEBS 2x6 SP No.1 \*Except\*  
5-14: 2x4 SP No.2

**WEDGE**

Left: 2x6 SP No.2 , Right: 2x6 SP No.2

**REACTIONS.**

(size) 1=0-3-8, 9=0-3-8  
Max Horz 1=303(LC 8)  
Max Grav 1=1609(LC 21), 9=1650(LC 21)

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

TOP CHORD 1-3=-2093/0, 3-4=-1143/156, 4-5=-53/253, 5-6=-48/259, 6-7=-1137/149, 7-9=-2121/0  
BOT CHORD 1-13=0/1253, 11-13=0/1253, 9-11=0/1253  
WEBS 7-11=0/1035, 3-13=0/993, 4-14=-1522/238, 6-14=-1522/238

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 11-11-8, Exterior(2) 11-11-8 to 16-4-5, Interior(1) 16-4-5 to 24-8-6 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) Ceiling dead load (10.0 psf) on member(s). 3-4, 6-7, 4-14, 6-14; Wall dead load (5.0psf) on member(s).7-11, 3-13
- 6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 11-13
- 7) Attic room checked for L/360 deflection.



October 13, 2020

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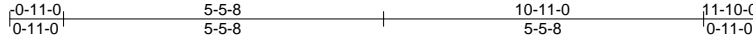
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 30 Forest Ridge	E14970014
J1020-4756	C1GE	COMMON SUPPORTED GAB	1	1		

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Oct 13 08:29:13 2020 Page 1

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5x5 =

Scale = 1:39.3

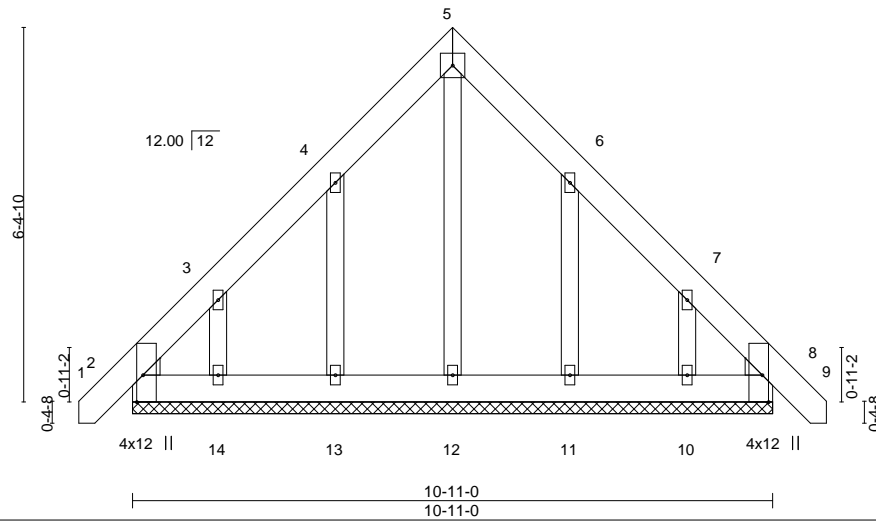


Plate Offsets (X,Y)-- [2:0-1-1,0-1-1], [2:0-2-2,0-4-7], [2:0-5-8,Edge], [8:0-1-1,0-1-1], [8:0-2-2,0-4-7], [8:0-5-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.03	Vert(LL) -0.00	8	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.02	Vert(CT) -0.00	8	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.05	Horz(CT) 0.00	8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 92 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 OTHERS 2x4 SP No.2  
 WEDGE  
 Left: 2x4 SP No.3 , Right: 2x4 SP No.3

**BRACING-**

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

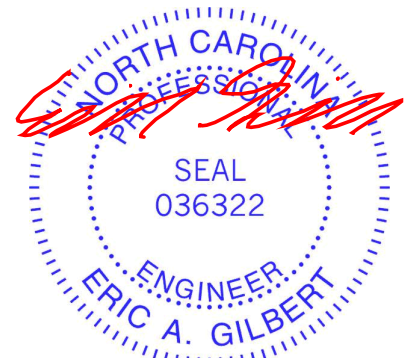
**REACTIONS.**

All bearings 10-11-0.  
 (lb) - Max Horz 2=187(LC 11)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 8 except 13=133(LC 12), 14=170(LC 12), 11=130(LC 13), 10=167(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2'-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3'-6-0 tall by 2'-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8 except (jt=lb) 13=133, 14=170, 11=130, 10=167.



October 13, 2020

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818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 30 Forest Ridge	E14970015
J1020-4756	D1	COMMON	2	1		

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ID:Y\_aRO?CxglT9gUrhHW7gHdzqoOe-BnKcPtfWUQE7PqJxTphpJO4pl7wsy8dgW0pTXyTrJ



5x8 ||

Scale = 1:58.4

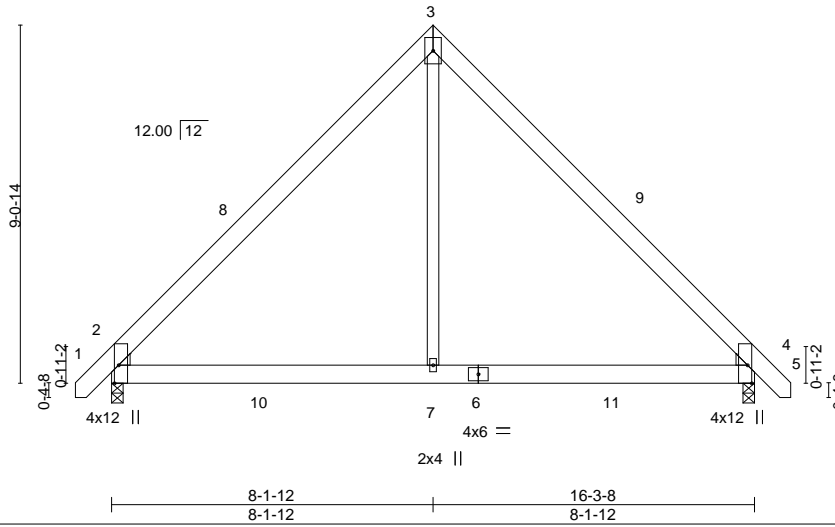


Plate Offsets (X,Y)-- [2:0-5-8,Edge], [2:0-2-2,0-4-7], [2:0-1-1,0-1-1], [4:0-1-1,0-1-1], [4:0-2-2,0-4-7], [4:0-5-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.33	Vert(LL) -0.05	2-7	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.35	Vert(CT) -0.08	2-7	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.15	Horz(CT) 0.01	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.03	2-7	>999	240		
							Weight: 112 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

(size) 4=0-3-8, 2=0-3-8  
Max Horz 2=214(LC 11)  
Max Uplift 4=-31(LC 13), 2=-31(LC 12)  
Max Grav 4=824(LC 20), 2=824(LC 19)

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

TOP CHORD 2-3=-856/187, 3-4=-856/188  
BOT CHORD 2-7=0/551, 4-7=0/551  
WEBS 3-7=0/654

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-6 to 3-7-7, Interior(1) 3-7-7 to 8-1-12, Exterior(2) 8-1-12 to 12-6-9, Interior(1) 12-6-9 to 17-0-14 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) 4, 2.



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818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 30 Forest Ridge	E14970016
J1020-4756	D1-GR	Common Girder	1	2	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

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5x8 ||

Scale = 1:55.4

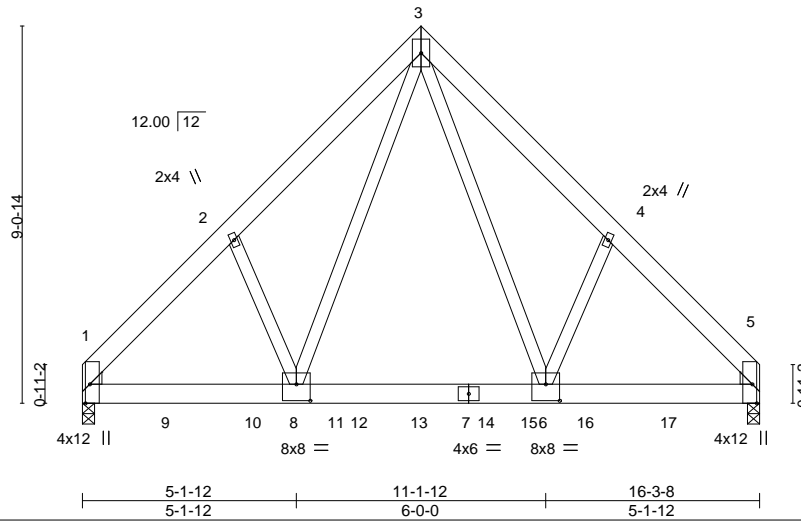


Plate Offsets (X,Y)-- [1:0-1-1,0-1-1], [1:0-2-2,0-4-7], [1:0-5-8,Edge], [5:0-5-8,Edge], [5:0-2-2,0-4-7], [5:0-1-1,0-1-1], [6:0-4-0,0-4-12], [8:0-4-0,0-4-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.15	Vert(LL) -0.07	6-8	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.88	Vert(CT) -0.14	6-8	>999	240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.43	Horz(CT) 0.02	5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.05	6-8	>999	240		
							Weight: 263 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

(size) 1=0-3-8, 5=0-3-8  
 Max Horz 1=-204(LC 25)  
 Max Uplift 1=-284(LC 9), 5=-279(LC 8)  
 Max Grav 1=4677(LC 1), 5=4594(LC 1)

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

TOP CHORD 1-2=-5218/357, 2-3=-4974/439, 3-4=-4958/438, 4-5=-5205/356  
 BOT CHORD 1-8=-272/3404, 6-8=-140/2316, 5-6=-188/3392  
 WEBS 3-6=-321/3507, 4-6=-190/402, 3-8=-323/3525, 2-8=-189/400

**NOTES-**

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 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) except (jt=lb) 1=284, 5=279.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1142 lb down and 82 lb up at 2-0-12, 1142 lb down and 82 lb up at 4-0-12, 1142 lb down and 82 lb up at 6-0-12, 1142 lb down and 82 lb up at 8-0-12, 1142 lb down and 82 lb up at 10-0-12, and 1158 lb down and 82 lb up at 12-0-12, and 1158 lb down and 82 lb up at 14-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

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



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Continued on page 2

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK 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 30 Forest Ridge	E14970016
J1020-4756	D1-GR	Common Girder	1	<b>2</b>	Job Reference (optional)	

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**LOAD CASE(S)** Standard

Uniform Loads (plf)

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

Concentrated Loads (lb)

Vert: 9=-1142(B) 10=-1142(B) 11=-1142(B) 13=-1142(B) 15=-1142(B) 16=-1142(B) 17=-1142(B)

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818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 30 Forest Ridge	E14970017
J1020-4756	D1SG	GABLE	1	1		
					Job Reference (optional)	

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8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Oct 13 08:29:16 2020 Page 1

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-0-11-0 8-1-12 16-3-8 17-2-8  
 0-11-0 8-1-12 8-1-12 0-11-0

5x5 =

Scale = 1:58.7

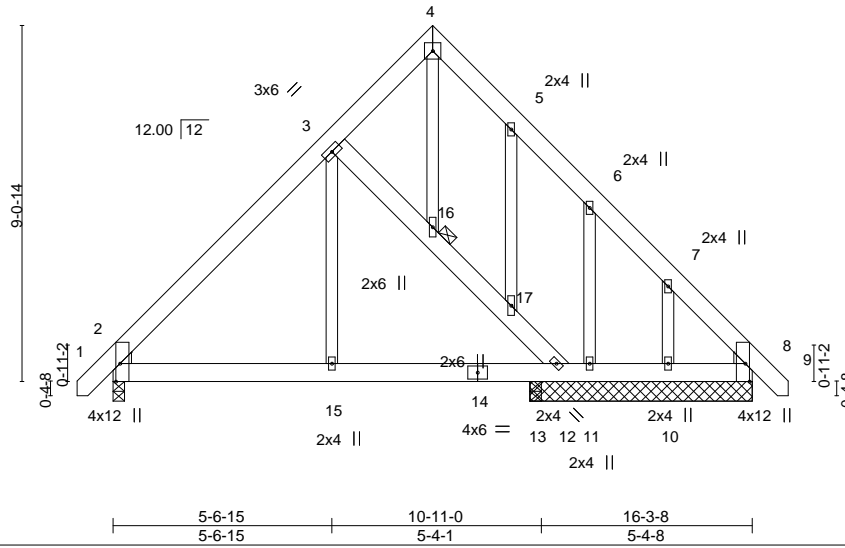


Plate Offsets (X,Y)-- [2:0-1-1,0-1-1], [2:0-2-2,0-4-7], [2:0-5-8,Edge], [8:0-1-1,0-1-1], [8:0-2-2,0-4-7], [8:0-5-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.13	Vert(LL) -0.01	2-15	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.09	Vert(CT) -0.01	2-15	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.08	Horz(CT) 0.00	8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.01	2-15	>999	240		
							Weight: 150 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x6 SP No.1 \*Except\*  
 3-15: 2x4 SP No.2  
 OTHERS 2x4 SP No.2  
 WEDGE  
 Left: 2x4 SP No.3 , Right: 2x4 SP No.3

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 JOINTS 1 Brace at Jt(s): 16

**REACTIONS.**

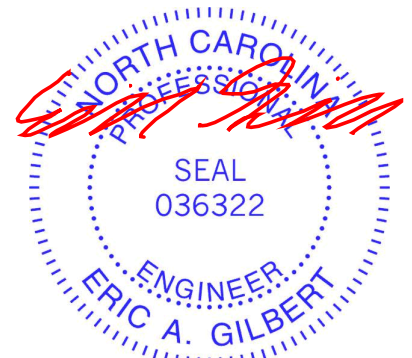
All bearings 5-8-0 except (jt=length) 2=0-3-8, 13=0-3-8.  
 (lb) - Max Horz 2=-267(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 2 except 12=-281(LC 12), 11=-163(LC 13), 10=-194(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 12, 10 except 2=537(LC 1), 8=272(LC 22), 11=255(LC 20), 13=257(LC 3)

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

TOP CHORD 2-3=-511/53, 7-8=-369/247  
 BOT CHORD 2-15=-98/380, 13-15=-98/380, 12-13=-98/380, 11-12=-209/311, 10-11=-208/310, 8-10=-207/309  
 WEBS 3-16=-438/274, 16-17=-383/246, 12-17=-467/285

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 12=281, 11=163, 10=194.



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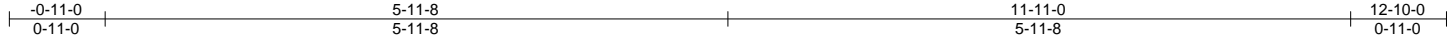
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 30 Forest Ridge	E14970018
J1020-4756	H1	Common	5	1		

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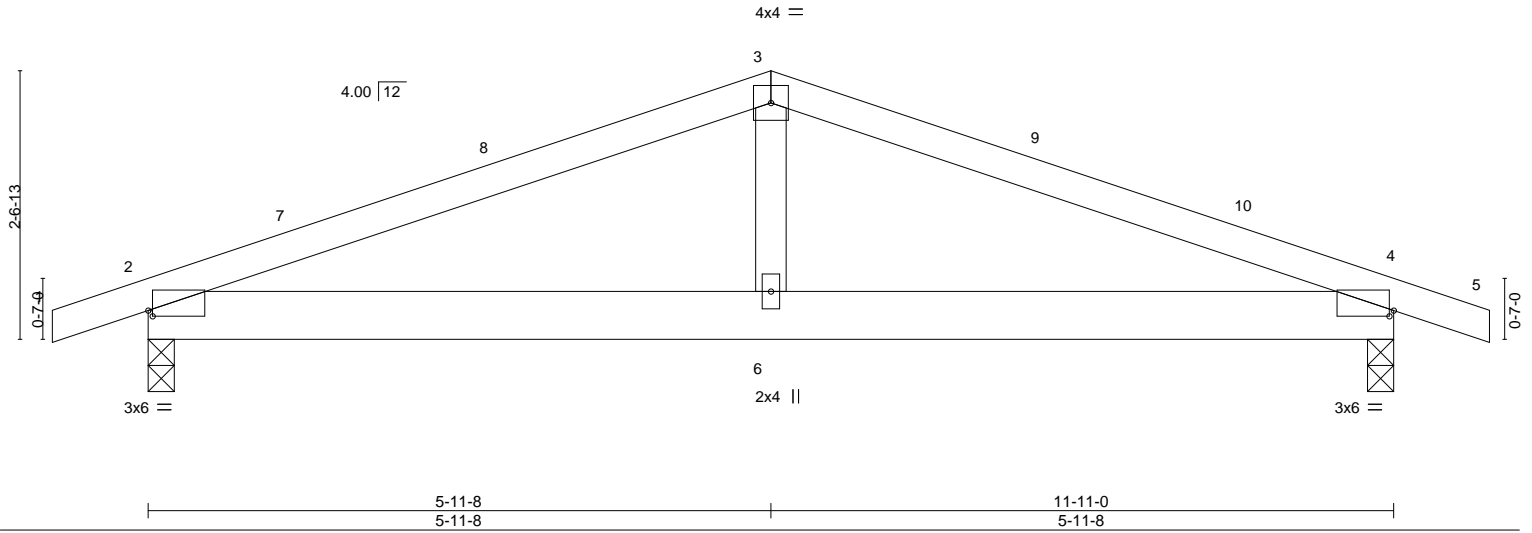


Plate Offsets (X,Y)--	[2:0-0-8,0-0-10], [4:0-0-8,0-0-10]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.29	Vert(LL) -0.01	6	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.18	Vert(CT) -0.03	2-6	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.07	Horz(CT) 0.01	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.04	2-6	>999	240	Weight: 52 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 8-9-15 oc bracing.
WEBS 2x4 SP No.2	

**REACTIONS.** (size) 2=0-3-0, 4=0-3-0  
 Max Horz 2=-27(LC 13)  
 Max Uplift 2=-205(LC 8), 4=-205(LC 9)  
 Max Grav 2=529(LC 1), 4=529(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-806/870, 3-4=-806/870  
 BOT CHORD 2-6=-734/695, 4-6=-734/695  
 WEBS 3-6=-379/290

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-11-0 to 3-5-13, Interior(1) 3-5-13 to 5-11-8, Exterior(2) 5-11-8 to 10-4-5, Interior(1) 10-4-5 to 12-10-0 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=205, 4=205.



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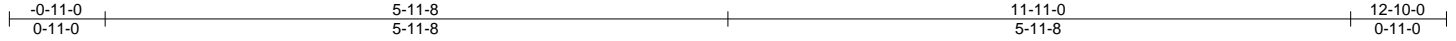


Job	Truss	Truss Type	Qty	Ply	Lot 30 Forest Ridge	E14970019
J1020-4756	H1GE	COMMON SUPPORTED GAB	1	1		

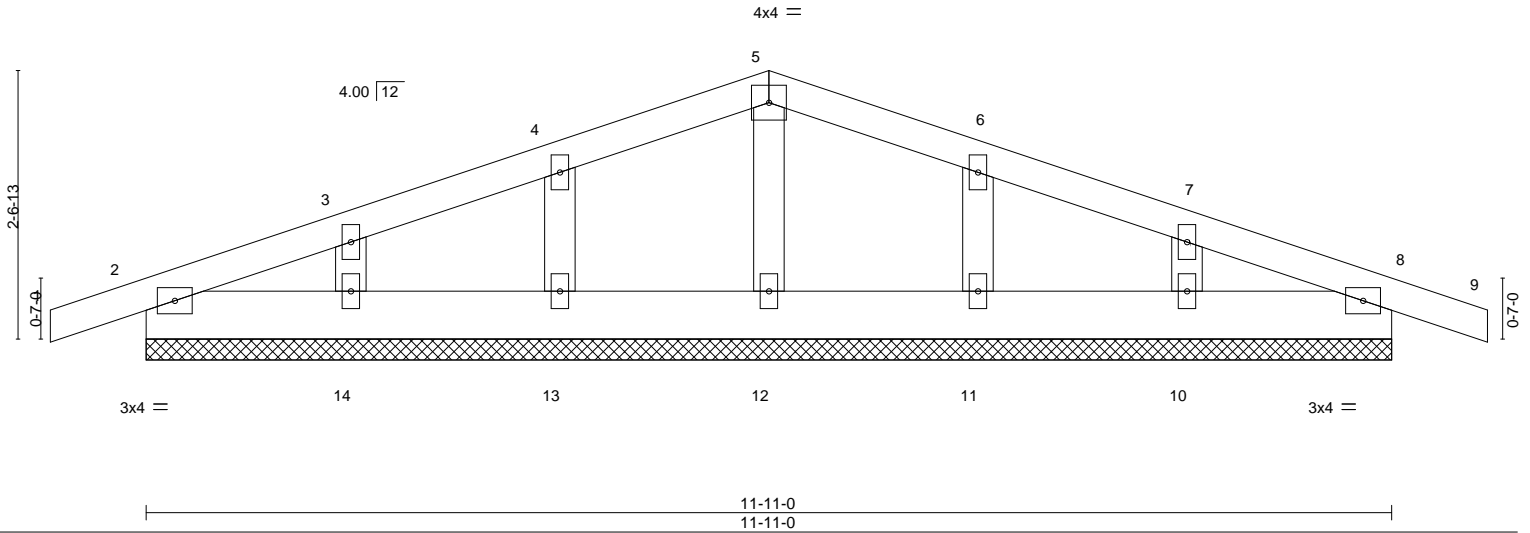
Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Oct 13 08:29:17 2020 Page 1

ID:Y\_aRO?CxglT9gUrlHW7gHdzqOe-cM0L2vhPmLdhGISucbMORx?gfWdu3Ku3MUFT4syTtrG



Scale = 1:22.0



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 0.04	Vert(LL)	-0.00	8	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.01	Vert(CT)	-0.00	8	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.00	8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						Weight: 57 lb	FT = 20%

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

**REACTIONS.** All bearings 11-11-0.  
 (lb) - Max Horz 2=-46(LC 13)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 13, 14, 11, 10  
 Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8, 13, 14, 11, 10.
  - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.



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Job	Truss	Truss Type	Qty	Ply	Lot 30 Forest Ridge	E14970020
J1020-4756	M1	MONOPITCH	5	1		

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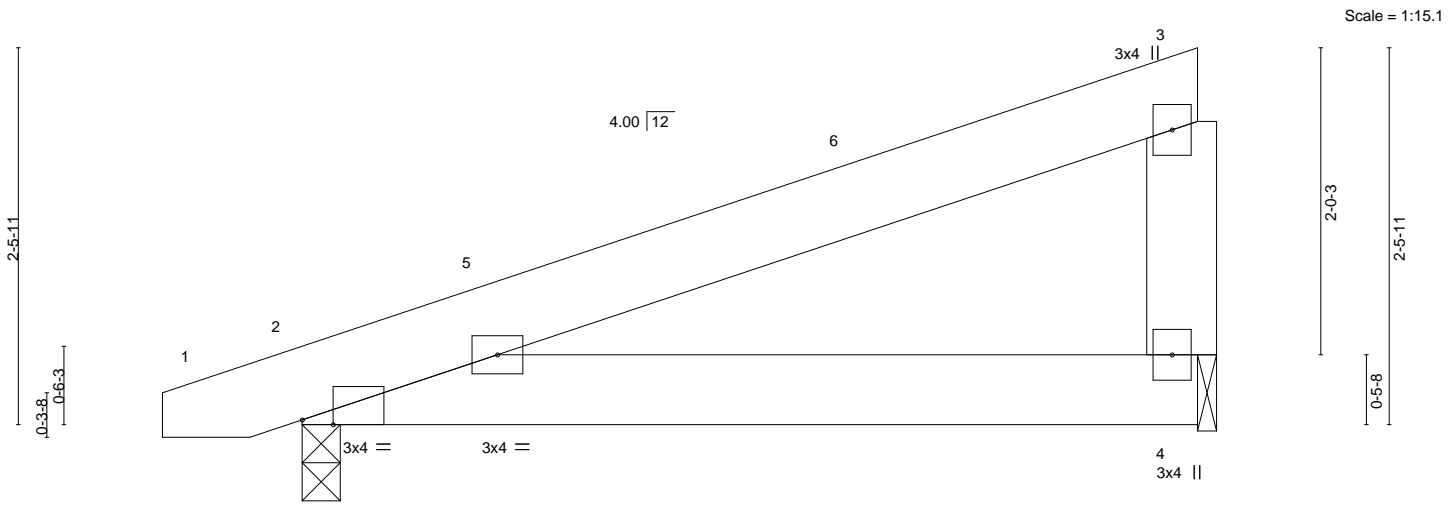


Plate Offsets (X,Y)-- [2:0-2-7,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.19	Vert(LL)	-0.01	2-4	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	-0.03	2-4	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00		n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-P	Wind(LL)	0.03	2-4	>999	Weight: 34 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

(size) 2=0-3-0, 4=0-1-8  
Max Horz 2=72(LC 8)  
Max Uplift 2=-105(LC 8), 4=-96(LC 8)  
Max Grav 2=274(LC 1), 4=223(LC 1)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-7-9 to 3-9-4, Interior(1) 3-9-4 to 5-9-4 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 2=105.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



October 13, 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 J1020-4756	Truss M1GE	Truss Type GABLE	Qty 1	Ply 1	Lot 30 Forest Ridge Job Reference (optional)	E14970021
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Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Oct 13 08:29:18 2020 Page 1

ID:Y\_aRO?CxglT9gUrlHW7gHdzqoDe-4Ya7FF1XelYtS14AJtdz9YqivYmon9Db8\_0clyTtrF  
6-0-0  
6-0-0

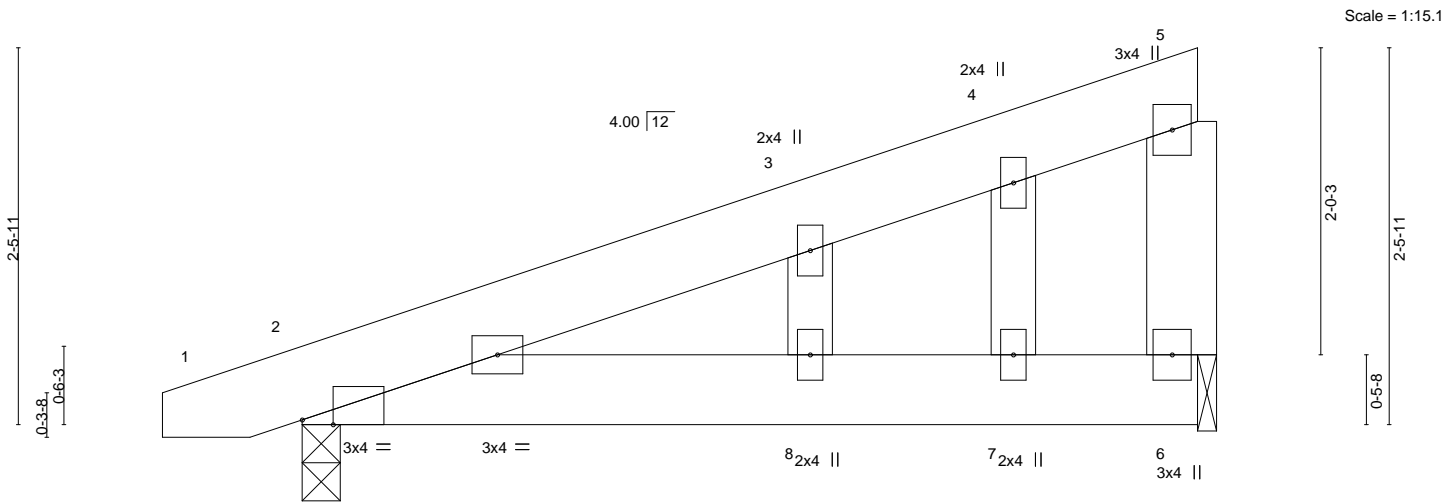


Plate Offsets (X,Y)-- [2:0-2-7,Edge]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	2-0-0	TC 0.08	Vert(LL) -0.01	8	>999	360		MT20	244/190
TCDL 10.0	Lumber DOL 1.15		BC 0.10	Vert(CT) -0.02	8	>999	240			
BCLL 0.0 *	Rep Stress Incr YES		WB 0.02	Horz(CT) 0.00	6	n/a	n/a			
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL) 0.01	8	>999	240		Weight: 37 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.

**REACTIONS.** (size) 2=0-3-0, 6=0-1-8  
Max Horz 2=102(LC 8)  
Max Uplift 2=-89(LC 8), 6=-79(LC 12)  
Max Grav 2=274(LC 1), 6=223(LC 1)

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

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 3) Gable studs spaced at 1-4-0 oc.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 6.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
  - 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



October 13, 2020

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818 Soundside Road  
Edenton, NC 27932

Job J1020-4756	Truss M2	Truss Type MONOPITCH	Qty 3	Ply 1	Lot 30 Forest Ridge Job Reference (optional)	E14970022
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Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Oct 13 08:29:19 2020 Page 1

ID:Y\_aRO?CxglT9gUrIHW7gHdzqOe-Yk7V?SajflytPVbcGj0OsWm5yYJtmXEgMqoka9kyTrE  
7-0-0  
7-0-0

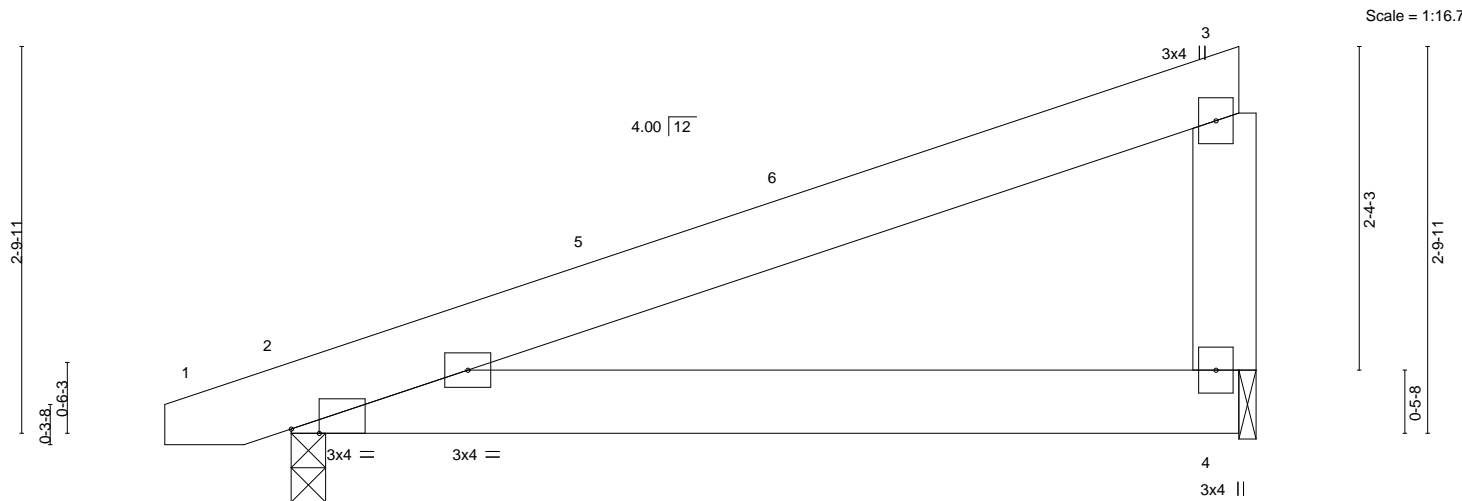


Plate Offsets (X,Y)-- [2:0-2-7,Edge]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	2-0-0	TC 0.27	Vert(LL) -0.03	2-4	>999	360		MT20	244/190
TCDL 10.0	Lumber DOL 1.15		BC 0.18	Vert(CT) -0.05	2-4	>999	240			
BCLL 0.0 *	Rep Stress Incr YES		WB 0.00	Horz(CT) 0.00		n/a	n/a			
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P	Wind(LL) 0.06	2-4	>999	240		Weight: 40 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

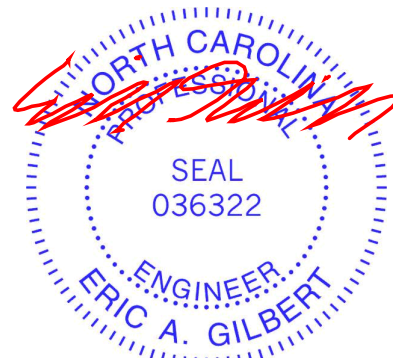
**REACTIONS.**

(size) 2=0-3-0, 4=0-1-8  
Max Horz 2=83(LC 8)  
Max Uplift 2=-119(LC 8), 4=-114(LC 8)  
Max Grav 2=314(LC 1), 4=263(LC 1)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-7-9 to 3-9-4, Interior(1) 3-9-4 to 6-9-4 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Bearing at joint(s) 4 considers parallel to grain value using ANSII/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=119, 4=114.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



October 13, 2020

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818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 30 Forest Ridge	E14970023
J1020-4756	V1	VALLEY	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Oct 13 08:29:20 2020 Page 1  
 ID:Y\_aRO?Cxglt9gUrhHW7gHdzqoOe-0xhtgwjH3G?G7IBTHjw53ad9CjD?Gg9V2ST7hByTrD

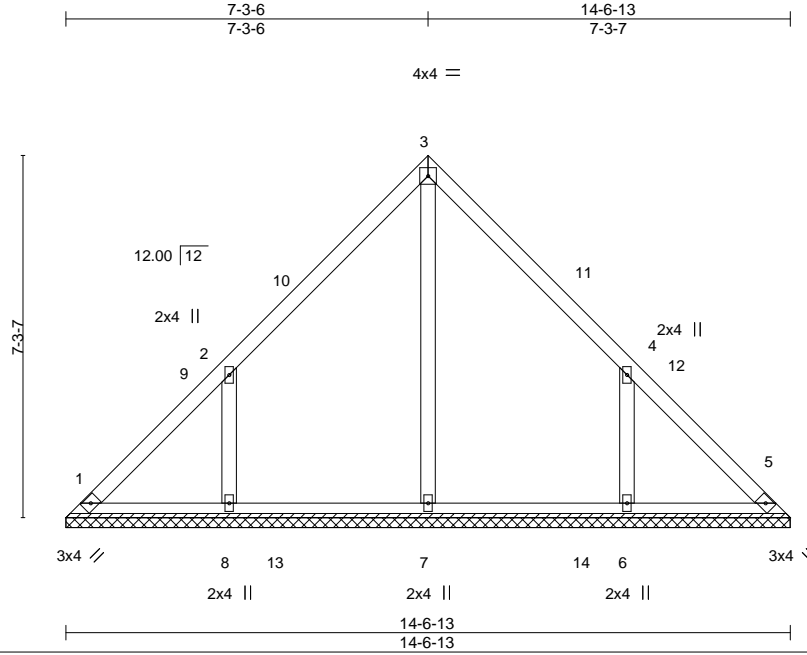


Plate Offsets (X,Y)-- [4:0-0-0,0-0-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.15	Vert(LL) n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.18	Vert(CT) n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.11	Horz(CT) 0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 69 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

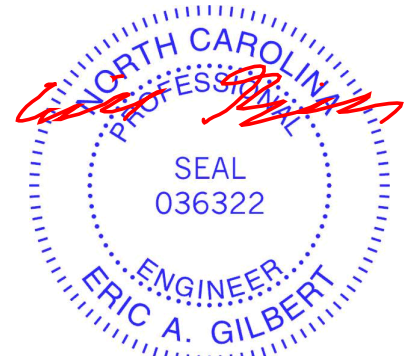
All bearings 14-6-13.  
 (lb) - Max Horz 1=166(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=175(LC 12), 6=175(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=407(LC 22), 8=427(LC 19), 6=427(LC 20)

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

WEBS 2-8=-380/298, 4-6=-380/298

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 7-3-6, Exterior(2) 7-3-6 to 11-8-3, Interior(1) 11-8-3 to 14-2-9 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) 1, 5 except (jt=lb) 8=175, 6=175.
- Non Standard bearing condition. Review required.



October 13, 2020

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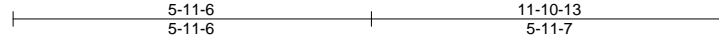
818 Soundside Road  
 Edenton, NC 27932

Job J1020-4756	Truss V2	Truss Type VALLEY	Qty 1	Ply 1	Lot 30 Forest Ridge Job Reference (optional)	E14970024
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Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Oct 13 08:29:20 2020 Page 1

ID:Y\_aRO?Cxglt9gUrhHW7gHdzqoOe-0xhtgwjH3G?G7IBTHjw53ad9LjELGmV2ST7hByTrD



4x4 =

Scale = 1:38.3

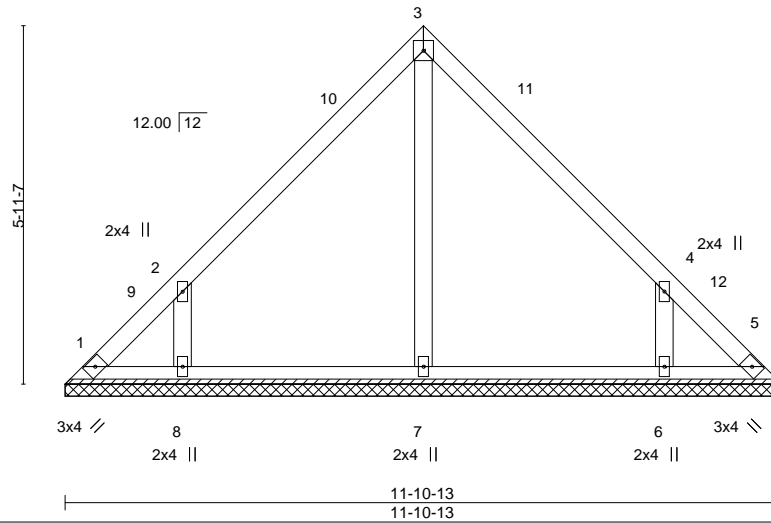


Plate Offsets (X,Y)-- [4:0-0-0,0-0-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.14	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S					Weight: 53 lb	FT = 20%

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

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

**REACTIONS.** All bearings 11-10-13.  
 (lb) - Max Horz 1=-134(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-160(LC 12), 6=-160(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=338(LC 19), 6=338(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 2-8=-357/297, 4-6=-357/297

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 5-11-6, Exterior(2) 5-11-6 to 10-4-3, Interior(1) 10-4-3 to 11-6-9 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, 5 except (jt=lb) 8=160, 6=160.
  - Non Standard bearing condition. Review required.



October 13, 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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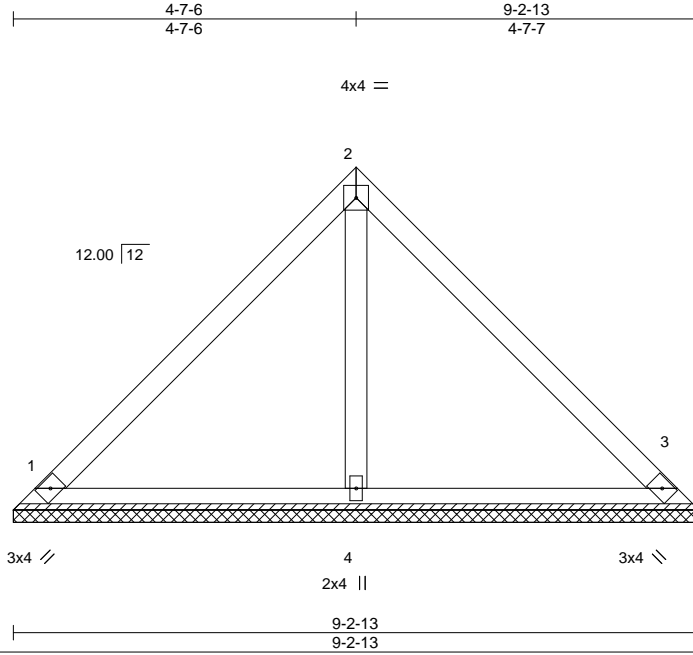


818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 30 Forest Ridge	E14970025
J1020-4756	V3	VALLEY	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Oct 13 08:29:21 2020 Page 1  
 ID:Y\_aro?CxglT9gUrIHW7gHdzqoOe-U7FFtGkvqZ77kvmfRRKbnAJ97Zt?8LfH6DhDdyTrC



Scale = 1:31.0

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						Weight: 38 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

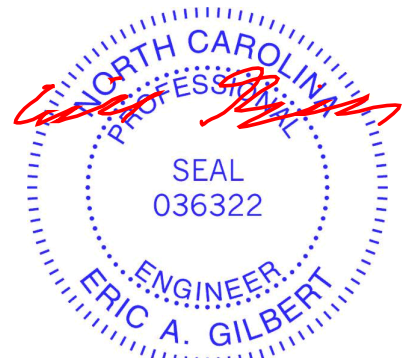
**REACTIONS.**

(size) 1=9-2-13, 3=9-2-13, 4=9-2-13  
 Max Horz 1=102(LC 9)  
 Max Uplift 1=-25(LC 13), 3=-25(LC 13)  
 Max Grav 1=193(LC 1), 3=193(LC 1), 4=296(LC 1)

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.



October 13, 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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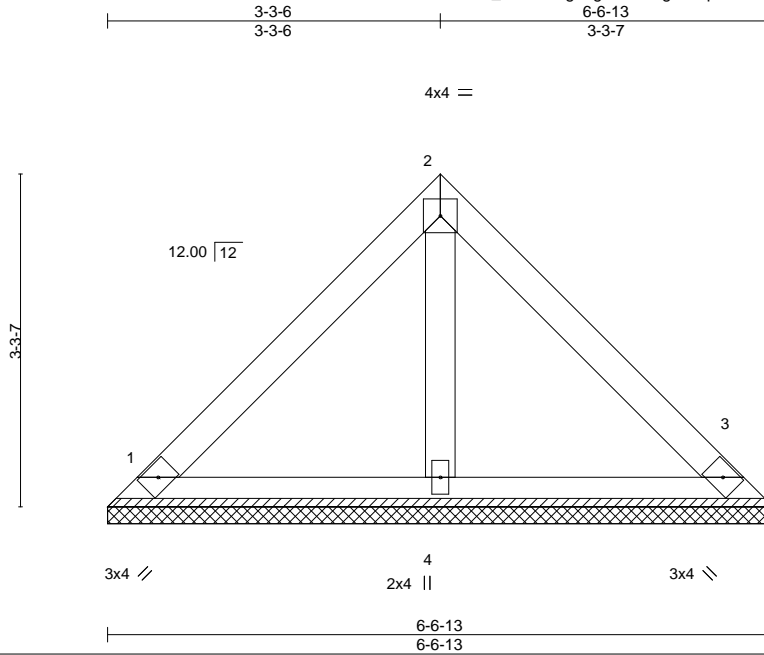


818 Soundside Road  
 Edenton, NC 27932

Job J1020-4756	Truss V4	Truss Type VALLEY	Qty 1	Ply 1	Lot 30 Forest Ridge Job Reference (optional)	E14970026
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Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Oct 13 08:29:22 2020 Page 1  
ID:Y\_aRO?Cxgt9gUrlHW7gHdzqoOe-zJpe5clXbtF\_M3LrP8yZ8?jVnXvDkb8oWmyEl3yTrB



Scale = 1:22.7

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P						Weight: 26 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

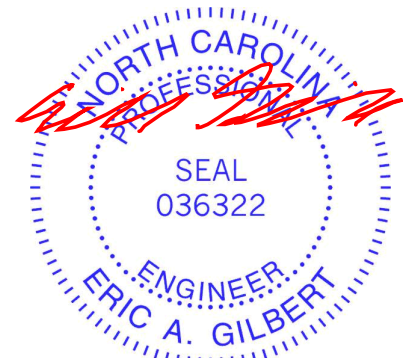
**REACTIONS.**

(size) 1=6-6-13, 3=6-6-13, 4=6-6-13  
Max Horz 1=70(LC 9)  
Max Uplift 1=-25(LC 13), 3=-25(LC 13)  
Max Grav 1=143(LC 1), 3=143(LC 1), 4=183(LC 1)

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.



October 13, 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



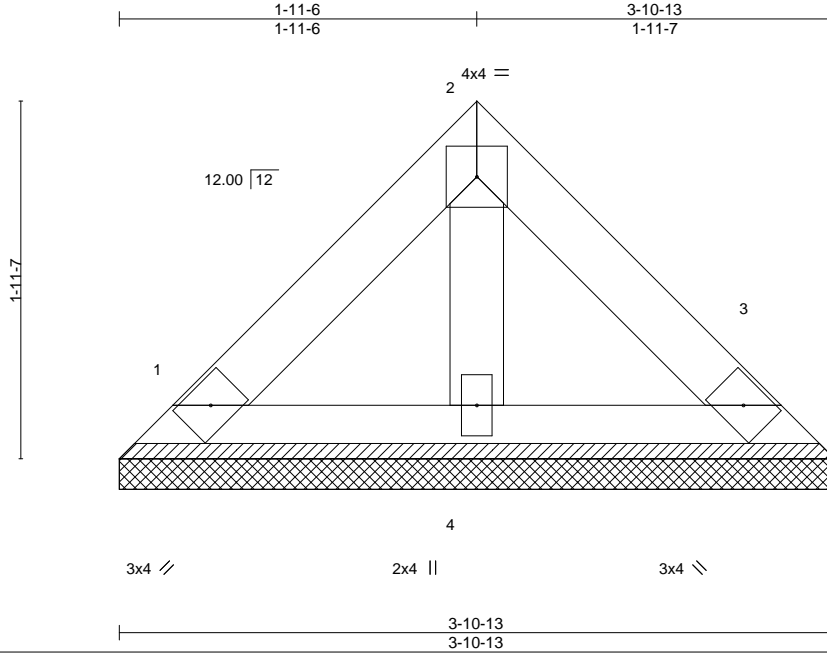
818 Soundside Road  
Edenton, NC 27932



Job J1020-4756	Truss V5	Truss Type VALLEY	Qty 1	Ply 1	Lot 30 Forest Ridge Job Reference (optional)	E14970027
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Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Oct 13 08:29:22 2020 Page 1  
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Scale = 1:12.6

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.04	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.02	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.01	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 15 lb	FT = 20%
	Code IRC2015/TPI2014							

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 3-10-13 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

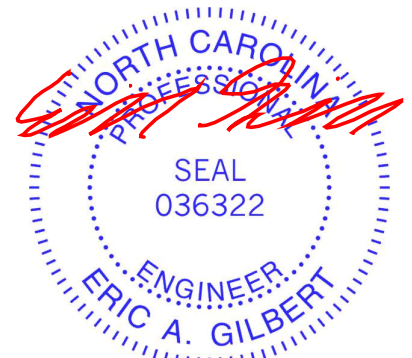
**REACTIONS.**

(size) 1=3-10-13, 3=3-10-13, 4=3-10-13  
Max Horz 1=-38(LC 8)  
Max Uplift 1=-14(LC 13), 3=-14(LC 13)  
Max Grav 1=78(LC 1), 3=78(LC 1), 4=100(LC 1)

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.



October 13, 2020

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# Symbols

## PLATE LOCATION AND ORIENTATION



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



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



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

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

## PLATE SIZE

4 X 4

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

## LATERAL BRACING LOCATION



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

## BEARING



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

### Industry Standards:

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

# Numbering System

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



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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