ENGINEERING BY TRENCO
A MiTek Affiliate

RE: J0923-5110
Weaver/Lot 9 West Preserve/Harnett

Trenco
818 Soundside Rd
Edenton, NC 27932

Site Information:

Customer: Project Name: J0923-5110
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 8.4
Wind Code: ASCE 7-10 Wind Speed: 130 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 21 individual, dated Truss Design Drawings and 0 Additional Drawings.

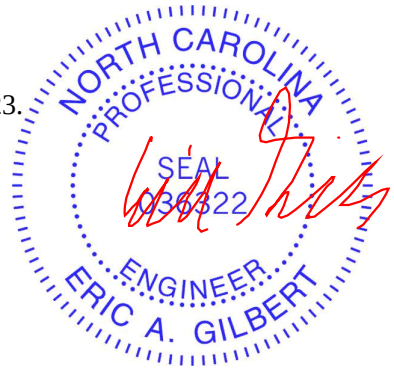
No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I56316675	A1	1/26/2023	21	I56316695	PBGE	1/26/2023
2	I56316676	A1SE	1/26/2023				
3	I56316677	A2	1/26/2023				
4	I56316678	A3	1/26/2023				
5	I56316679	A4	1/26/2023				
6	I56316680	A5	1/26/2023				
7	I56316681	A6	1/26/2023				
8	I56316682	A7	1/26/2023				
9	I56316683	A8	1/26/2023				
10	I56316684	A9	1/26/2023				
11	I56316685	A9GE	1/26/2023				
12	I56316686	B1	1/26/2023				
13	I56316687	B1GE	1/26/2023				
14	I56316688	C1	1/26/2023				
15	I56316689	C2	1/26/2023				
16	I56316690	C3	1/26/2023				
17	I56316691	G1	1/26/2023				
18	I56316692	G1GE	1/26/2023				
19	I56316693	G2	1/26/2023				
20	I56316694	PB	1/26/2023				

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, 2023.

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 26, 2023

Gilbert, Eric

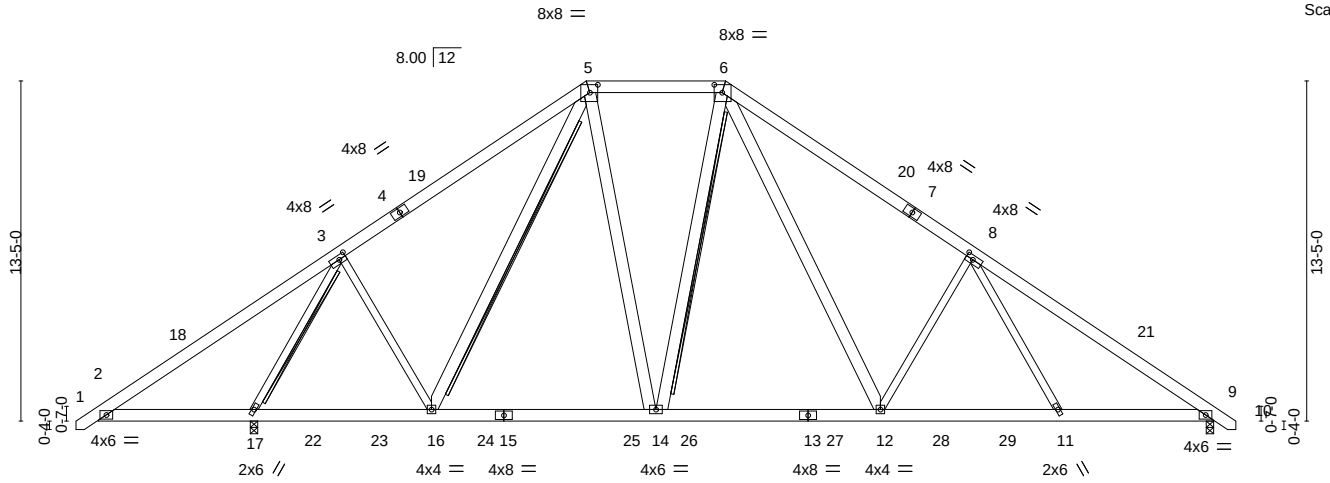
Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 9 West Preserve/Harnett
J0923-5110	A1	PIGGYBACK BASE	1	1	I56316675
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Jan 25 09:48:23 2023 Page 1

ID:FKRF2G2VvSGFSXRUG_ubJqzaK1d-Bci_guyx7QQiLqdBC_tD5Moz1PF5ohN06r6irlzrrqs

-0-10-8	9-7-8	19-3-0	24-9-0	34-4-8	44-0-0	44-10-8
0-10-8	9-7-8	9-7-8	5-5-15	9-7-8	9-7-8	0-10-8

Scale = 1:90.9



6-1-12	13-1-12	22-0-0	30-10-4	37-10-4	44-0-0
6-1-12	7-0-0	8-10-4	8-10-4	7-0-0	6-1-12

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

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	0.48	Vert(LL)	-0.10	12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.17	12-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.68	Horz(CT)	0.05	9	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.04	12	>999	240	Weight: 395 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x6 SP No.1 *Except*
3-17,3-16,8-12,8-11: 2x4 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-7-3 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 2-17.
WEBS T-Brace: 2x4 SPF No.2 - 3-17
2x6 SPF No.2 - 5-16, 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) 17=0-3-8, 9=0-3-8
Max Horz 17=-320(LC 10)
Max Uplift 17=-108(LC 12), 9=-94(LC 13)
Max Grav 17=2255(LC 2), 9=1725(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-405/688, 3-5=-1444/385, 5-6=-1256/435, 6-8=-2202/565, 8-9=-2628/426
BOT CHORD 2-17=-458/455, 16-17=-181/968, 14-16=-6/1238, 12-14=0/1314, 11-12=-218/1927, 9-11=-190/2042
WEBS 3-17=-2295/704, 3-16=-19/655, 8-12=-744/366, 8-11=0/310, 5-16=-278/131, 6-14=-283/186, 5-14=-75/684, 6-12=-236/1034

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-9 to 3-8-4, Interior(1) 3-8-4 to 19-3-14, Exterior(2) 19-3-14 to 30-10-13, Interior(1) 30-10-13 to 44-8-9 zone; cantilever left 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) 9 except (jt=lb) 17=108.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
8) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

January 26,2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

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

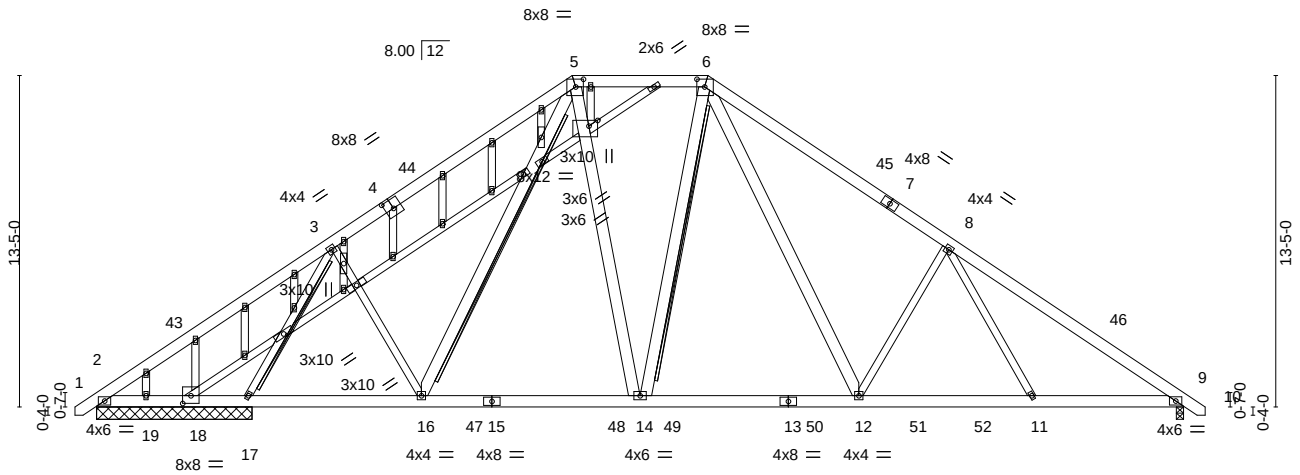
Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 9 West Preserve/Harnett
J0923-5110	A1SE	GABLE	1	1	I56316676
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Jan 25 09:48:25 2023 Page 1

ID:FKRF2G2VvSGFSXRUG_ubJqzaK1d-7?pl5Z_Bf1gQa7naJOwhAntKcCxOGbhIa9bowezrrqq

-0-10-8	9-7-8	19-3-0	24-9-0	34-4-8	44-0-0	44-10-8
0-10-8	9-7-8	9-7-8	5-5-15	9-7-8	9-7-8	0-10-8

Scale = 1:93.3



6-1-12	13-1-12	22-0-0	30-10-4	37-10-4	44-0-0
6-1-12	7-0-0	8-10-4	8-10-4	7-0-0	6-1-12

Plate Offsets (X,Y)-- [4:0-4-0,0-4-8], [5:0-3-12,0-3-12], [6:0-3-12,0-3-12], [18:0-4-0,0-3-12], [21:0-4-4,0-2-12]

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	0.42	Vert(LL)	-0.10	12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.17	12-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.05	9	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.05	12	>999	240	Weight: 455 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x4 SP No.2 *Except* 6-14,5-14,5-16,6-12: 2x6 SP No.1
OTHERS	2x4 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-6-15 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	T-Brace: 2x4 SPF No.2 - 3-17 2x6 SPF No.2 - 6-14, 5-16 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 6-3-8 except (jt=length) 9=0-3-8.

(lb) - Max Horz 2=-400(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 2 except 17=-365(LC 12), 9=-324(LC 13), 18=-120(LC 1), 19=-200(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 2, 18 except 17=1945(LC 19), 9=1735(LC 20), 19=350(LC 19)

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

TOP CHORD	2-3=-170/365, 3-5=-1480/491, 5-6=-1288/476, 6-8=-2209/608, 8-9=-2635/468
BOT CHORD	2-19=-272/297, 18-19=-272/297, 17-18=-272/297, 16-17=-226/1062, 14-16=-76/1251, 12-14=0/1309, 11-12=-266/1937, 9-11=-238/2046
WEBS	3-17=-2059/467, 3-16=-25/580, 8-12=-743/486, 8-11=0/309, 6-14=-272/221, 5-16=-258/131, 5-14=-110/687, 6-12=-350/1055

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-8-9 to 3-8-4, Interior(1) 3-8-4 to 19-3-14, Exterior(2) 19-3-14 to 30-10-13, Interior(1) 30-10-13 to 44-8-9 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 17=365, 9=324, 18=120, 19=200.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

January 26,2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 9 West Preserve/Harnett
J0923-5110	A2	PIGGYBACK BASE	5	1	I56316677
					Job Reference (optional)

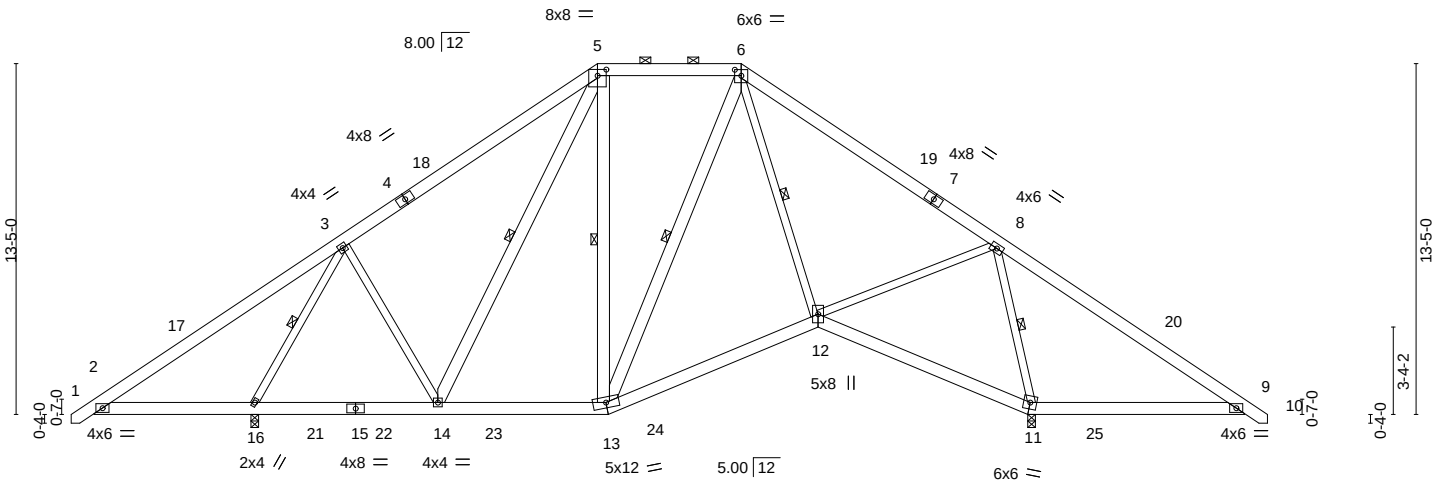
Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Jan 25 09:48:27 2023 Page 1

ID:FKRF2G2VvSGFSXRUG_ubJqzaK1d-4OxVWF?RAfw8qRxzRpy9GCyff0htkYZb1S4v_Xzrrqo

-0-10-8 9-7-8 19-3-0 24-9-0 34-4-8 44-0-0 44-10-8

0-10-8 9-7-8 9-7-8 5-5-15 9-7-8 9-7-8 0-10-8

Scale = 1:88.1



6-0-0 6-1-12 13-1-12 19-3-0 19-8-0 27-8-4 35-8-8 35-10-4 44-0-0

6-0-0 0-1-12 7-0-0 6-1-4 0-5-0 8-0-4 8-0-4 0-1-12 8-1-12

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

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	0.51	Vert(LL)	-0.04	13-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	-0.09	12-13	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.41	Horz(CT)	0.03	11	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.02	13-14	>999	240	Weight: 381 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
5-13,5-14,6-13: 2x6 SP No.1

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 3-16, 5-13, 6-12, 8-11, 5-14, 6-13

REACTIONS. (size) 11=0-3-8, 16=0-3-8
Max Horz 16=-320(LC 10)
Max Uplift 11=-118(LC 13), 16=-112(LC 12)
Max Grav 11=1938(LC 1), 16=1673(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-408/688, 3-5=-889/255, 5-6=-703/289, 6-8=-853/102, 8-9=-484/769
BOT CHORD 2-16=-459/457, 14-16=-211/657, 13-14=-60/673, 12-13=-29/726, 11-12=-306/483, 9-11=-511/519
WEBS 3-16=-1650/574, 8-12=-6/825, 6-12=-53/432, 3-14=-37/358, 8-11=-1687/540

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-9 to 3-8-4, Interior(1) 3-8-4 to 19-3-0, Exterior(2) 19-3-0 to 30-11-10, Interior(1) 30-11-10 to 44-8-9 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) except (jt=lb) 11=118, 16=112.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

January 26,2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

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

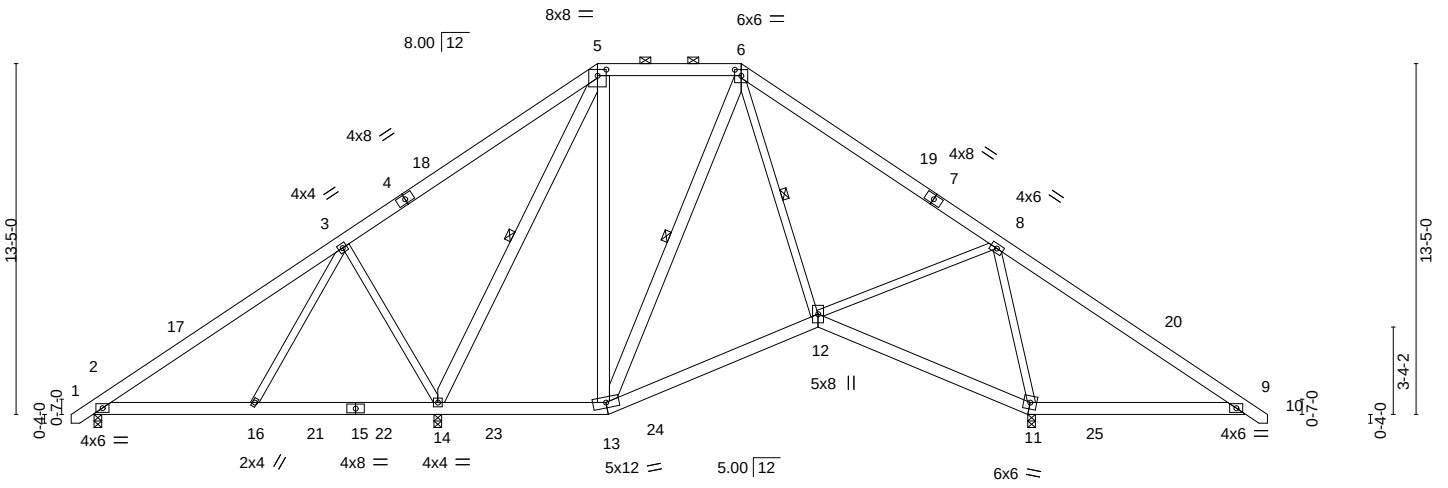
Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 9 West Preserve/Harnett
J0923-5110	A3	PIGGYBACK BASE	2	1	I56316678
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Jan 25 09:48:29 2023 Page 1

ID:FKRF2G2VvSGFSXRUG_ubJqzaK1d-0m3Gxx1iiGAs3l5LYE_dLd2_7pMOCJ5uVmZ03Pzrrqm

-0-10-8	9-7-8	19-3-0	24-9-0	34-4-8	44-0-0	44-10-8
0-10-8	9-7-8	9-7-8	5-5-15	9-7-8	9-7-8	0-10-8

Scale = 1:88.1



6-1-12	13-0-0	13-1-12	19-3-0	19-8-0	27-8-4	35-8-8	35-10-4	44-0-0
6-1-12	6-10-4	0-1-12	6-1-4	0-5-0	8-0-4	8-0-4	0-1-12	8-1-12

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

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	0.51	Vert(LL)	-0.04	12-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.08	12-13	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.99	Horz(CT)	0.01	11	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.02	2-16	>999	240	Weight: 381 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x4 SP No.2 *Except* 5-13,5-14,6-13: 2x6 SP No.1

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 6-12, 5-14, 6-13

REACTIONS. (size) 2=0-3-8, 11=0-3-8, 14=0-3-8
Max Horz 14=-320(LC 10)
Max Uplift 2=-56(LC 9), 11=-121(LC 13), 14=-141(LC 9)
Max Grav 2=483(LC 23), 11=1674(LC 1), 14=1546(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-455/240, 3-5=-59/369, 5-6=-384/210, 6-8=-493/69, 8-9=-484/769
BOT CHORD 2-16=-71/274, 13-14=-121/314, 12-13=-125/434, 11-12=-361/496, 9-11=-511/519
WEBS 3-16=-292/330, 8-12=0/547, 5-13=-30/367, 6-12=-87/438, 3-14=-745/533, 8-11=-1400/466, 5-14=-859/143, 6-13=-255/25

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-9 to 3-8-4, Interior(1) 3-8-4 to 19-3-0, Exterior(2) 19-3-0 to 30-11-10, Interior(1) 30-11-10 to 44-8-9 zone; cantilever right exposed ; porch left 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) 2 except (jt=lb) 11=121, 14=141.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

January 26,2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 9 West Preserve/Harnett
J0923-5110	A4	ROOF SPECIAL	2	1	I56316679
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Jan 25 09:48:30 2023 Page 1
ID:FKRF2G2VvSGFSXRUG_ubJqzaK1d-Uzde8H2KTaIjhufY6yVstraCNDd5xuh2jQIZbszrrql

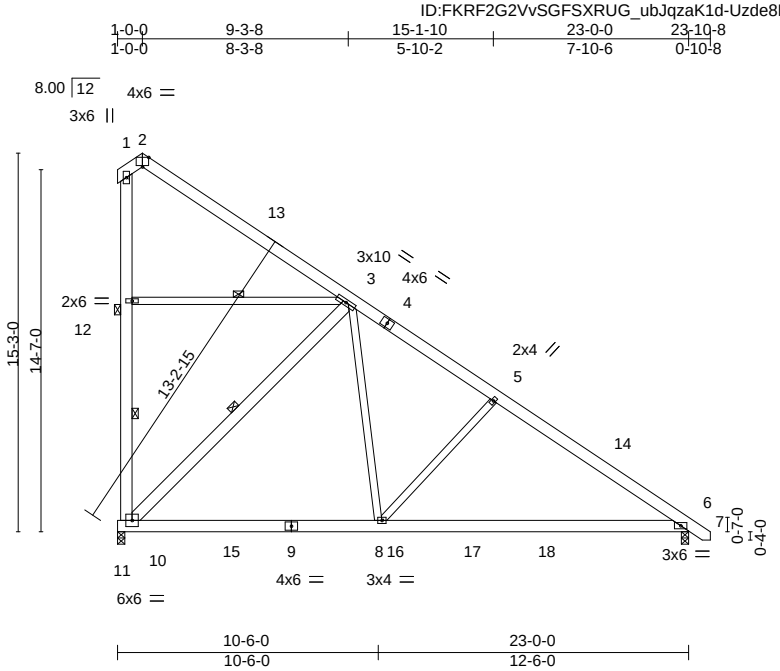


Plate Offsets (X,Y)-- [2:0-3-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.13	6-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.28	6-8	>970	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.45	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.03	6-8	>999	240	Weight: 219 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 10-12, 3-10, 3-12
JOINTS 1 Brace at Jt(s): 12

REACTIONS. (size) 10=0-3-8, 6=0-3-8
Max Horz 10=-482(LC 13)
Max Uplift 10=-236(LC 13)
Max Grav 10=1177(LC 20), 6=1071(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-5=-1052/0, 5-6=-1298/0, 10-12=-259/166, 1-12=-259/166
BOT CHORD 8-10=0/743, 6-8=0/987
WEBS 5-8=-424/234, 3-10=-1116/335, 3-8=-26/850

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 5-4-13, Interior(1) 5-4-13 to 23-8-9 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) except (jt=lb) 10=236.

January 26,2023

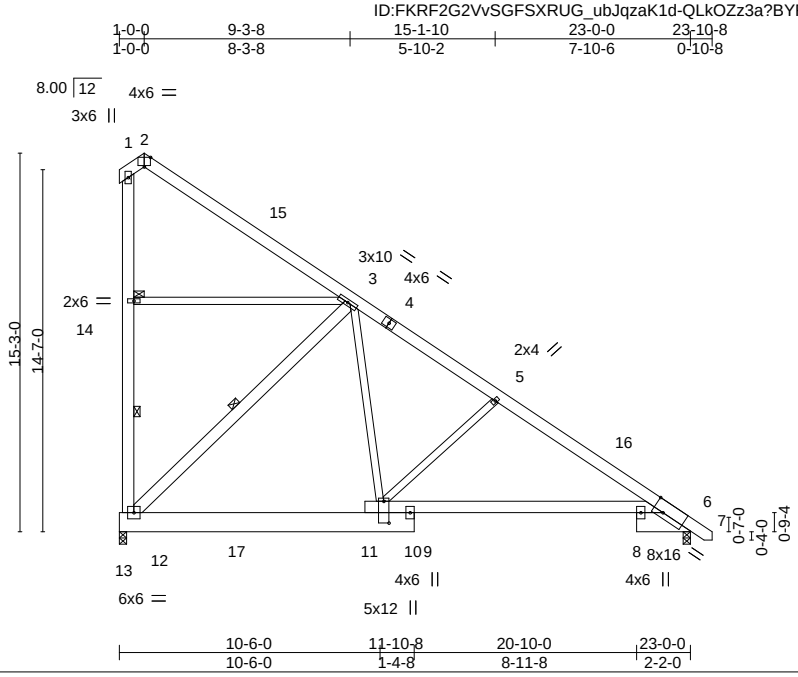
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 9 West Preserve/Harnett
J0923-5110	A5	ROOF SPECIAL	1	1	I56316680
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Jan 25 09:48:32 2023 Page 1

ID:FKRF2G2VvSGFSXRUG_ubJqzaK1d-QLkOZz3a?BYRwCpwENYKzGgXX1KZPoEKBknggkzrrqj



Scale = 1:92.8

Plate Offsets (X,Y)-- [2:0-3-0,Edge], [6:0-5-0,Edge], [10:0-10-8,0-2-8]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.12	6-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.30	6-10	>887	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.45	Horz(CT)	0.08	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.05	6-10	>999	240	Weight: 245 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.1
BOT CHORD	2x10 SP No.1 *Except* 6-11: 2x6 SP No.1
WEBS	2x4 SP No.2 *Except* 1-12,3-12: 2x6 SP No.1

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 5-11-14 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 12-14, 3-12
JOINTS	1 Brace at Jt(s): 14

REACTIONS. (size) 6=0-3-8, 12=0-3-8
Max Horz 12=-481(LC 13)
Max Uplift 12=-233(LC 13)
Max Grav 6=979(LC 20), 12=1127(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-5=-1079/0, 5-6=-1350/0, 12-14=-256/166, 1-14=-257/166
BOT CHORD 10-12=0/827, 6-10=0/1044
WEBS 5-10=-432/206, 3-12=-1146/302, 3-10=0/874

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 5-4-13, Interior(1) 5-4-13 to 23-8-9 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) except (jt=lb) 12=233.

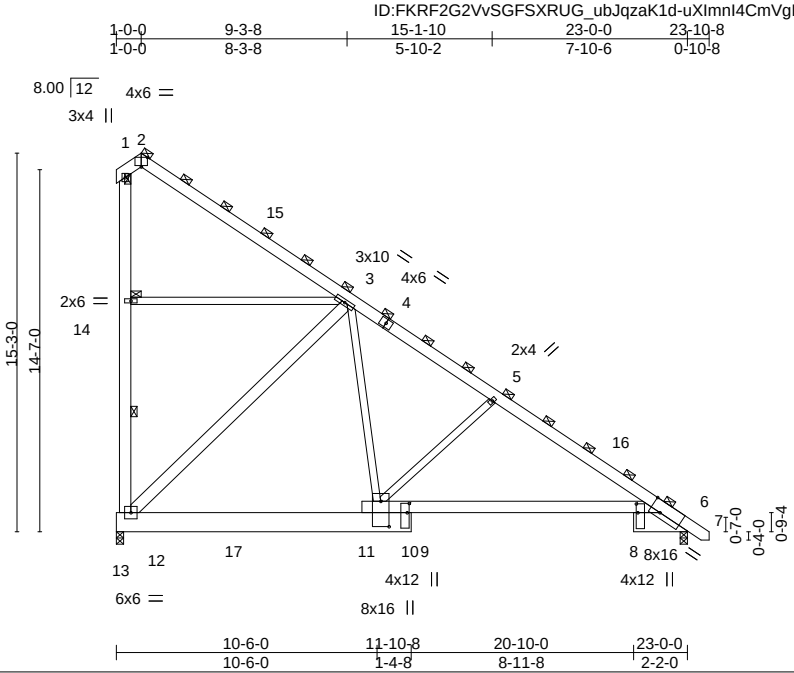
January 26,2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 9 West Preserve/Harnett
J0923-5110	A6	ROOF SPECIAL	1	2	I56316681 Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Jan 25 09:48:33 2023 Page 1
ID:FKRF2G2VvSGFSXRUG_ubJqzaK1d-uXImnI4CmVgIYMO6n43ZVTCiERg48COUPOXDCAzrrqi



Scale = 1:92.8

Plate Offsets (X,Y)-- [2:0-3-0,Edge], [6:0-5-0,Edge], [8:0-4-4,0-0-12], [9:0-4-8,0-1-0], [10:1-0-4,0-4-0]

LOADING (psf)		SPACING- 3-6-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES GRIP
TCLL 20.0		Plate Grip DOL 1.15	TC 0.37	Vert(LL) -0.11 6-10 >999 360	MT20 244/190
TCDL 10.0		Lumber DOL 1.15	BC 0.47	Vert(CT) -0.27 6-10 >999 240	
BCLL 0.0	*	Rep Stress Incr NO	WB 0.65	Horz(CT) 0.07 6 n/a n/a	
BCDL 10.0		Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.05 6-10 >999 240	Weight: 490 lb FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x10 SP No.1 *Except*
6-11: 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
1-12,3-12: 2x6 SP No.1

BRACING-
TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals
(Switched from sheeted: Spacing > 2-8-0).
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 12-14
JOINTS 1 Brace at Jt(s): 2, 1, 14

REACTIONS. (size) 6=0-3-8, 12=0-3-8
Max Horz 12=-842(LC 13)
Max Uplift 12=-407(LC 13)
Max Grav 6=1713(LC 20), 12=1971(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-333/223, 2-3=-379/107, 3-5=-1889/0, 5-6=-2362/0, 12-14=-448/290, 1-14=-449/291
BOT CHORD 10-12=0/1448, 6-10=0/1827
WEBS 5-10=-757/361, 3-12=-2006/528, 3-10=0/1529

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
2) 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.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 5-4-13, Interior(1) 5-4-13 to 23-8-9 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=407.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

January 26,2023

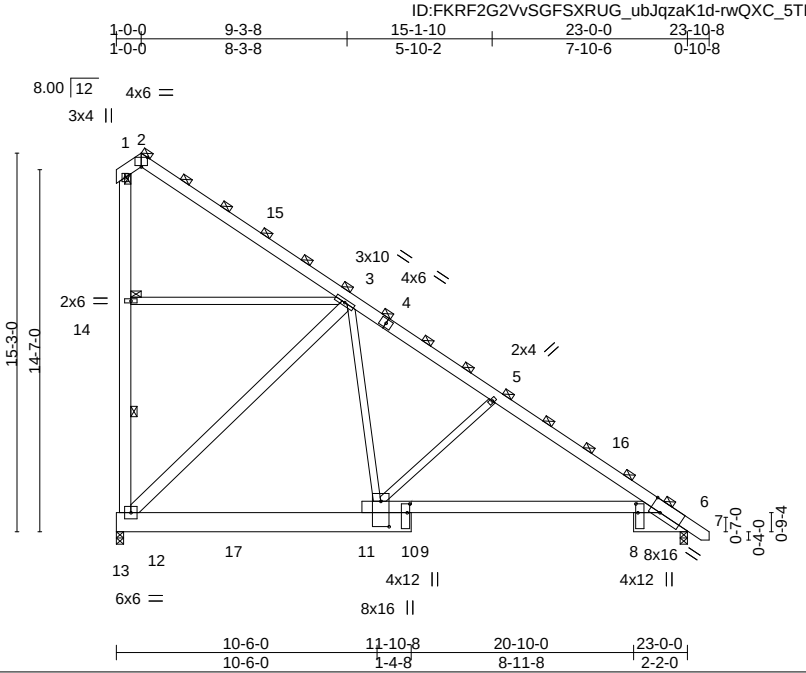
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 9 West Preserve/Harnett
J0923-5110	A7	ROOF SPECIAL	1	2	I56316682
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Jan 25 09:48:35 2023 Page 1

ID:FKRF2G2VvSGFSXRUG_ubJqzaK1d-rwQXC_5TI6x?ngYVvV51aul2kELYc6unti0KG3zrrqg



Scale = 1:92.8

Plate Offsets (X,Y)-- [2:0-3-0,Edge], [6:0-5-0,Edge], [8:0-4-4,0-1-0], [9:0-4-4,0-1-4], [10:1-0-4,0-4-0]

LOADING (psf)		SPACING- 3-6-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.11	6-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.27	6-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.65	Horz(CT)	0.07	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.05	6-10	>999	240	Weight: 490 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.1
BOT CHORD	2x10 SP No.1 *Except* 6-11: 2x6 SP No.1
WEBS	2x4 SP No.2 *Except* 1-12,3-12: 2x6 SP No.1

BRACING-

TOP CHORD	2-0-0 oc purlins (6-0-0 max.), except end verticals (Switched from sheeted: Spacing > 2-8-0).
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 12-14
JOINTS	1 Brace at Jt(s): 2, 1, 14

REACTIONS. (size) 6=0-3-8, 12=0-3-8
Max Horz 12=-842(LC 13)
Max Uplift 12=-407(LC 13)
Max Grav 6=1713(LC 20), 12=1971(LC 20)

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

TOP CHORD	1-2=-333/223, 2-3=-379/107, 3-5=-1889/0, 5-6=-2362/0, 12-14=-448/290, 1-14=-449/291
BOT CHORD	10-12=0/1448, 6-10=0/1827
WEBS	5-10=-757/361, 3-12=-2006/528, 3-10=0/1529

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
   Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
   Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
   Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
2) 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.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 5-4-13, Interior(1) 5-4-13 to 23-8-9 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=407.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

January 26,2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 9 West Preserve/Harnett
J0923-5110	A8	ROOF TRUSS	1	2	I56316683
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Jan 25 09:48:36 2023 Page 1

ID:FKRF2G2VvSGFSXRUG_ubJqzaK1d-J6_vPK653Q3sPp7hTCcG76q7tej5Lcmw6MlupVzrrqf

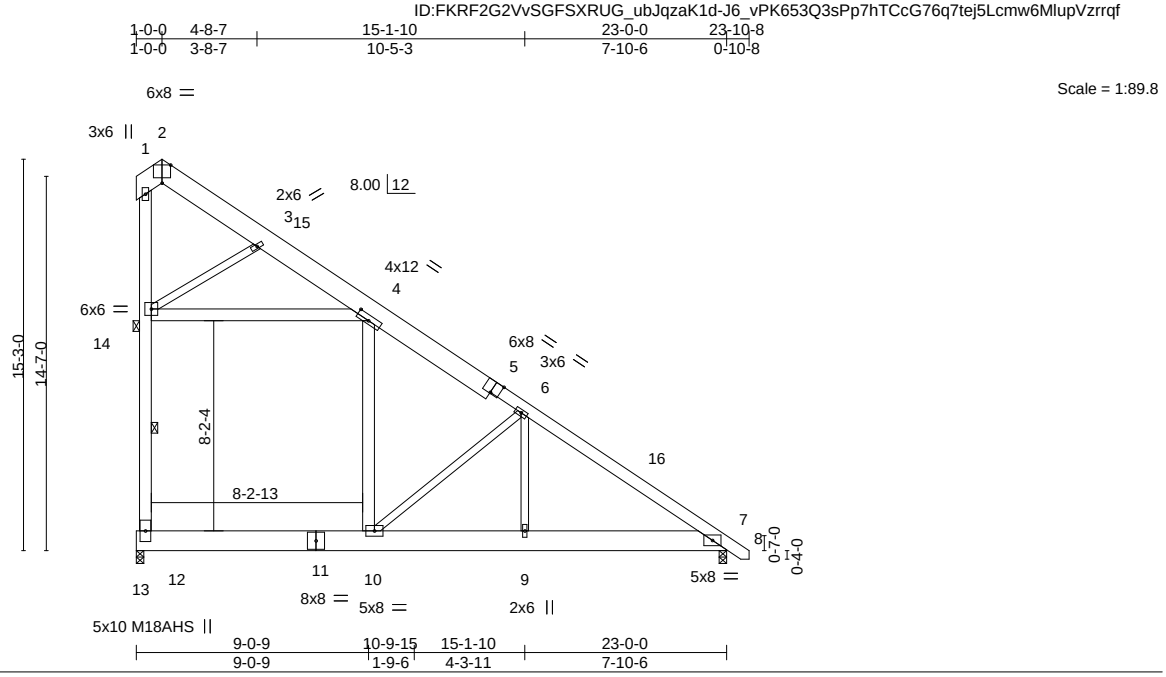


Plate Offsets (X,Y)-- [2:0-4-0,Edge], [4:0-6-0,0-2-8], [5:0-4-0,Edge]

LOADING (psf)		SPACING-	2-8-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.21	10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.46	10	>587	240	M18AHS	186/179
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.48	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.17	10	>999	240	Weight: 563 lb	FT = 20%

LUMBER-

TOP CHORD	2x10 SP No.1 *Except* 5-8: 2x6 SP No.1
BOT CHORD	2x10 SP 2400F 2.0E
WEBS	2x6 SP No.1 *Except* 6-9,6-10,3-14: 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 12-14
JOINTS	1 Brace at Jt(s): 14

REACTIONS. (size) 12=0-3-8, 7=0-3-8
Max Horz 12=-633(LC 13)
Max Uplift 12=-7(LC 13)
Max Grav 12=2288(LC 21), 7=1482(LC 21)

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

TOP CHORD	3-4=-808/104, 4-6=-829/128, 6-7=-2233/92, 12-14=-1091/133
BOT CHORD	10-12=-119/629, 9-10=0/1720, 7-9=0/1720
WEBS	4-14=-184/957, 6-9=0/1086, 4-10=0/833, 6-10=-2198/295, 3-14=-1790/225

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
   Top chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
   Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc.
   Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
2) 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.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 5-4-13, Interior(1) 5-4-13 to 23-8-9 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Ceiling dead load (10.0 psf) on member(s). 4-14; Wall dead load (5.0psf) on member(s).4-10
9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 10-12
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12.
11) Attic room checked for L/360 deflection.

January 26,2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 9 West Preserve/Harnett
J0923-5110	A9	ROOF TRUSS	3	1	I56316684
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Jan 25 09:48:38 2023 Page 1

ID:FKRF2G2VvSGFSXRUG_ubJqzaK1d-FV6fq08Lb1Jae7H4adfkCXwQuSOipUPDZgE_tOzrrqd

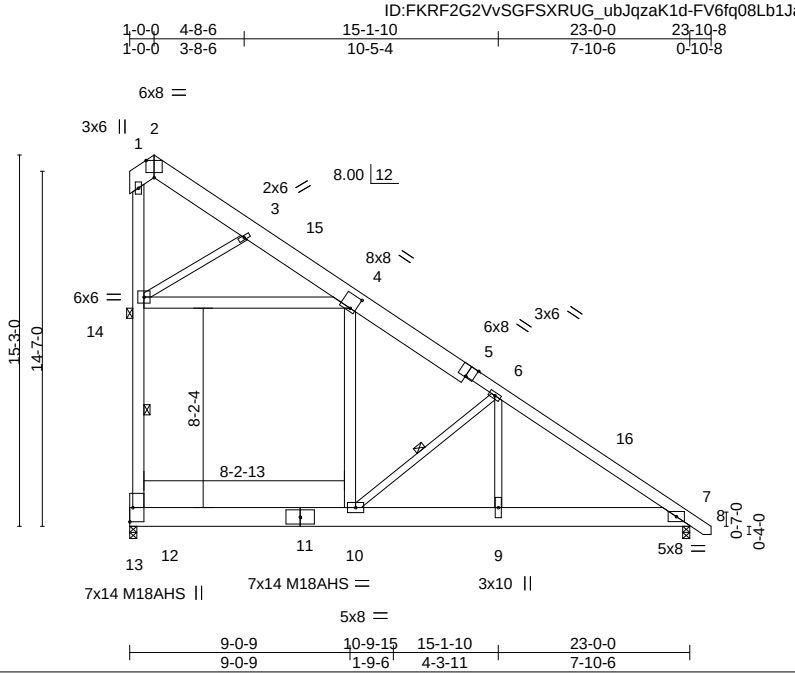


Plate Offsets (X,Y)-- [2:0-4-0,Edge], [4:0-2-12,0-6-8], [5:0-4-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.96	Vert(LL)	-0.32	10	>844	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.69	10	>392	240	M18AHS	186/179
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.26	10	>999	240	Weight: 282 lb	FT = 20%

LUMBER-

TOP CHORD	2x10 SP No.1 *Except*
	5-8: 2x6 SP No.1
BOT CHORD	2x10 SP 2400F 2.0E
WEBS	2x6 SP No.1 *Except*
	6-9,6-10,3-14: 2x4 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 8-6-0 oc bracing.
WEBS	1 Row at midpt 12-14, 6-10
JOINTS	1 Brace at Jt(s): 14

REACTIONS. (size) 12=0-3-8, 7=0-3-8
Max Horz 12=-475(LC 13)
Max Uplift 12=-5(LC 13)
Max Grav 12=1716(LC 21), 7=1111(LC 21)

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

TOP CHORD	3-4=-606/78, 4-6=-622/96, 6-7=-1675/69, 12-14=-818/100
BOT CHORD	10-12=-89/471, 9-10=0/1290, 7-9=0/1290
WEBS	4-14=-138/718, 6-9=0/815, 4-10=0/624, 6-10=-1648/221, 3-14=-1342/169

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 5-4-13, Interior(1) 5-4-13 to 23-8-9 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates 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.
6) Ceiling dead load (10.0 psf) on member(s). 4-14; Wall dead load (5.0psf) on member(s).4-10
7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 10-12
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12.
9) Attic room checked for L/360 deflection.

January 26,2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 9 West Preserve/Harnett
J0923-5110	A9GE	COMMON SUPPORTED GAB	1	1	I56316685
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Jan 25 09:48:40 2023 Page 1

ID:FKRF2G2VvSGFSXRUG_ubJqzaK1d-BuDQFi9b7eZIuRQTi2hCHy?_LFAAHVmW0_j5yGzrrqb

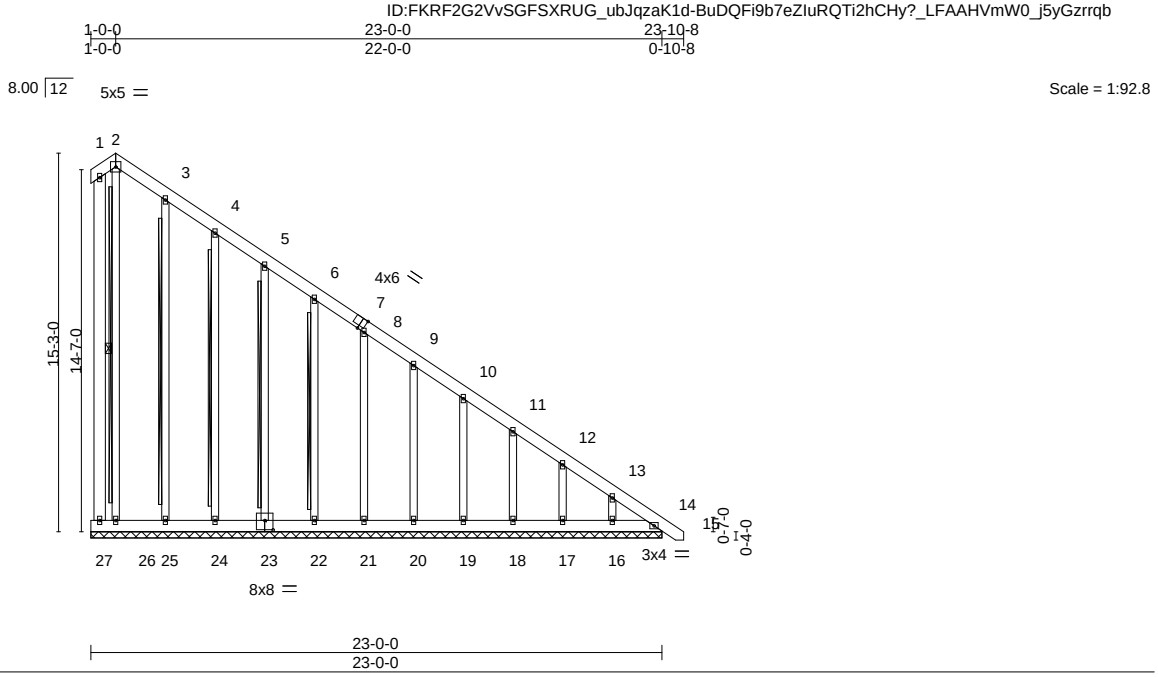


Plate Offsets (X,Y)-- [7:0-2-9,Edge], [23:0-4-0,0-4-8]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	0.00	14	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	0.00	14	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.01	14	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 280 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 1-27 T-Brace: 2x4 SPF No.2 - 3-25, 4-24, 5-23, 6-22 2x6 SPF No.2 - 2-26 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 23-0-0.

(lb) - Max Horz 27=-695(LC 13)

Max Uplift All uplift 100 lb or less at joint(s) 27, 26, 25, 24, 23, 22, 21, 20, 19, 18, 17 except 16=-116(LC 13), 14=-100(LC 11)

Max Grav All reactions 250 lb or less at joint(s) 27, 26, 25, 24, 23, 22, 21, 20, 19, 18, 17, 16 except 14=414(LC 13)

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

TOP CHORD 5-6=-254/197, 6-8=-329/256, 8-9=-404/314, 9-10=-479/373, 10-11=-554/432, 11-12=-629/491, 12-13=-705/550, 13-14=-794/626

BOT CHORD 26-27=-536/694, 25-26=-536/694, 24-25=-536/694, 23-24=-536/694, 22-23=-536/694, 21-22=-536/694, 20-21=-536/694, 19-20=-536/694, 18-19=-536/694, 17-18=-536/694, 16-17=-536/694, 14-16=-536/694

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-4-4 to 5-4-13, Exterior(2) 5-4-13 to 23-8-9 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 27, 26, 25, 24, 23, 22, 21, 20, 19, 18, 17 except (jt=lb) 16=116, 14=100.
10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

January 26,2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

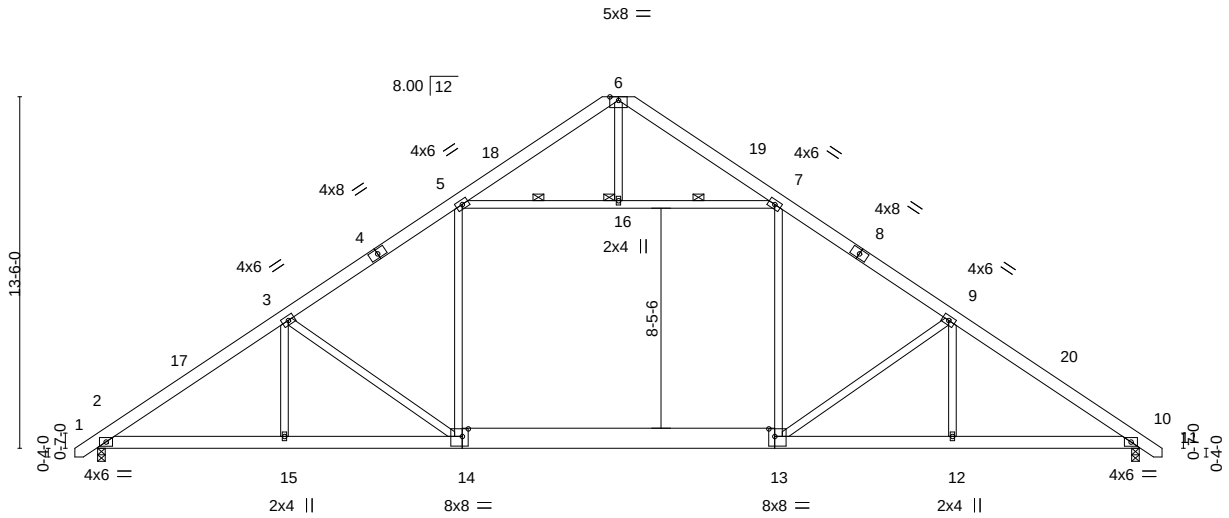
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 9 West Preserve/Harnett
J0923-5110	B1	COMMON SUPPORTED GAB	5	1	I56316686
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Jan 25 09:48:42 2023 Page 1
ID:FKRF2G2VvSGFSXRUG_ubJqzaK1d-7GLAgNBseGp07karpTjgNN4Hw3eDlGBpUICC09zrrqZ

-0-10-8 7-2-2 14-0-0 20-0-0 26-0-0 32-9-15 40-0-0 40-10-8
0-10-8 7-2-2 6-9-15 6-0-0 6-0-0 6-9-15 7-2-1 0-10-8

Scale = 1:88.5



7-2-2 14-0-0 26-0-0 32-9-15 40-0-0
7-2-2 6-9-15 12-0-0 6-9-15 7-2-1

Plate Offsets (X,Y)-- [8:0-0-0,0-0-0], [13:0-2-12,0-3-8], [14:0-2-12,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	-0.38	14-15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.44	12-13	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.06	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.33	14-15	>999	240	Weight: 316 lb	FT = 20%

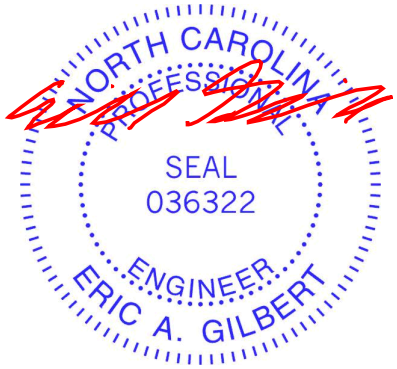
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1 *Except*
13-14: 2x10 SP No.1
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-7-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-16, 7-16
JOINTS 1 Brace at Jt(s): 16

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=331(LC 11)
Max Uplift 2=-96(LC 12), 10=-96(LC 13)
Max Grav 2=1796(LC 19), 10=1796(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2750/460, 3-5=-2355/477, 5-6=-484/192, 6-7=-484/192, 7-9=-2357/477, 9-10=-2751/460
BOT CHORD 2-15=-245/2414, 14-15=-245/2414, 13-14=-82/1966, 12-13=-247/2167, 10-12=-247/2167
WEBS 5-14=-6/763, 7-13=-6/764, 5-16=-1571/395, 7-16=-1571/395, 3-15=-43/260, 3-14=-642/238, 9-12=-48/260, 9-13=-642/240

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-9 to 3-8-4, Interior(1) 3-8-4 to 20-0-0, Exterior(2) 20-0-0 to 24-4-13, Interior(1) 24-4-13 to 40-8-9 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, 10.



January 26,2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 9 West Preserve/Harnett
J0923-5110	B1GE	COMMON SUPPORTED GAB	1	1	I56316687 Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Jan 25 09:48:44 2023 Page 1
ID:FKRF2G2VvSGFSXRUG_ubJqzaK1d-4fTw43C6At3kM2kExul8So9fLsXbDII5xchJ52zrrqX

-0-10-8 20-0-0 40-0-0 40-10-8
0-10-8 20-0-0 20-0-0 0-10-8

Scale = 1:88.5

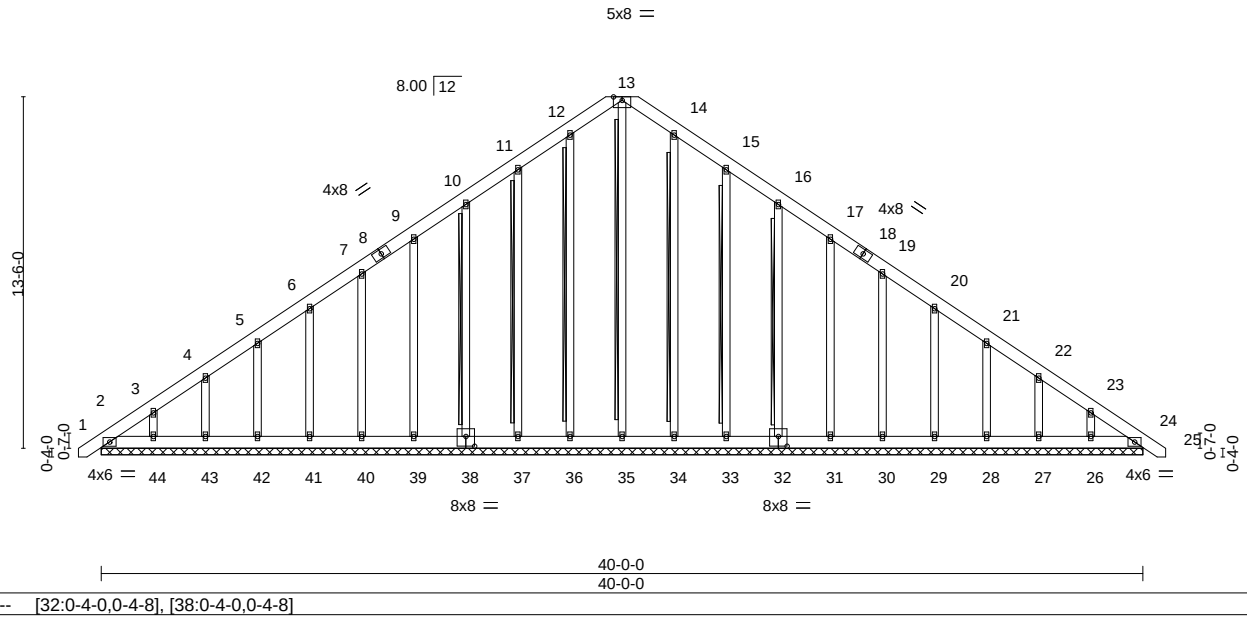


Plate Offsets (X,Y)-- [32:0-4-0,0-4-8], [38:0-4-0,0-4-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	0.00	24	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	0.00	24	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.01	24	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 399 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 - 13-35, 12-36, 11-37, 10-38 , 14-34, 15-33, 16-32
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 40-0-0.
(lb) - Max Horz 2=414(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 35, 36, 38, 39, 40, 41, 42, 43, 34, 32, 31, 30, 29, 28, 27, 24 except 2=-110(LC 8), 37=-102(LC 12), 44=-105(LC 12), 33=-106(LC 13), 26=-102(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 36, 37, 38, 39, 40, 41, 42, 43, 44, 34, 33, 32, 31, 30, 29, 28, 27, 26, 24 except 35=277(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-441/318, 3-4=-357/284, 4-5=-292/257, 10-11=-216/283, 11-12=-284/333, 12-13=-310/354, 13-14=-310/354, 14-15=-284/319, 22-23=-263/167, 23-24=-346/238
BOT CHORD 2-44=-212/326, 43-44=-212/326, 42-43=-212/326, 41-42=-212/326, 40-41=-212/326, 39-40=-212/326, 38-39=-212/326, 37-38=-212/326, 36-37=-212/326, 35-36=-212/326, 34-35=-212/326, 33-34=-212/326, 32-33=-212/326, 31-32=-212/326, 30-31=-212/326, 29-30=-212/326, 28-29=-212/326, 27-28=-212/326, 26-27=-212/326, 24-26=-212/326
WEBS 13-35=-256/167

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-8-9 to 3-8-4, Exterior(2) 3-8-4 to 20-0-0, Corner(3) 20-0-0 to 24-4-13, Exterior(2) 24-4-13 to 40-8-9 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 35, 36, 38, 39, 40, 41, 42, 43, 34, 32, 31, 30, 29, 28, 27, 24 except (jt=lb) 2=110, 37=102, 44=105, 33=106, 26=102.
10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

January 26,2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 9 West Preserve/Harnett
J0923-5110	C1	ATTIC	1	1	I56316688
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Jan 25 09:48:46 2023 Page 1

ID:FKRF2G2VvSGFSXRUG_ubJqzaK1d-02bhVlEMiUJScMuc2JocXDFweg5XhAvOPwAQ9wzrrqV

-0-11-0 5-4-12 8-2-13 11-1-8 14-0-3 16-10-4 22-3-0 23-2-0

0-11-0 5-4-12 2-10-1 2-10-11 2-10-11 2-10-1 5-4-12 0-11-0

Scale = 1:77.9

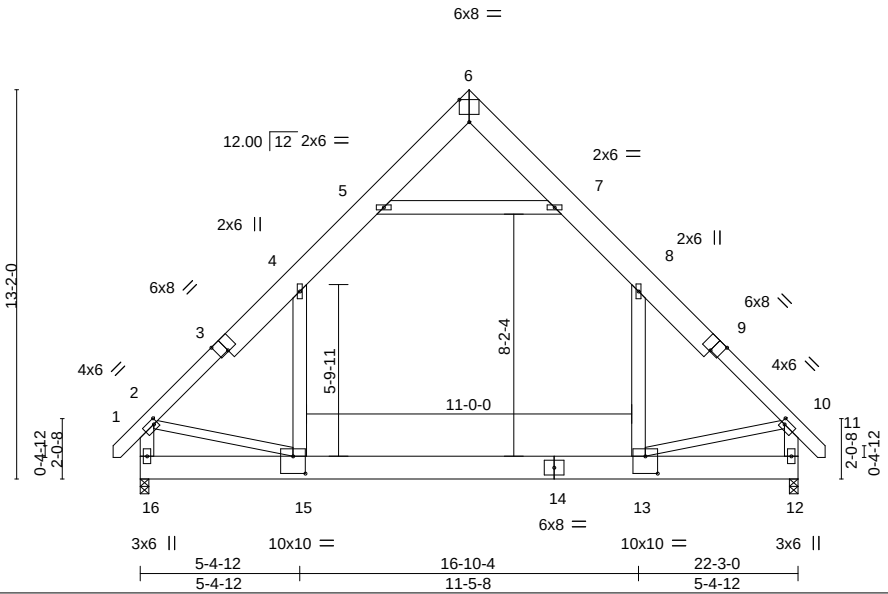


Plate Offsets (X,Y)-- [2:0-1-8,0-2-0], [3:0-4-0,Edge], [6:0-4-0,Edge], [9:0-4-0,Edge], [10:0-1-8,0-2-0], [13:0-5-0,0-7-0], [15:0-5-0,0-7-0]

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	0.33	Vert(LL)	-0.12	13-15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.19	13-15	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.01	12	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.05	15	>999	240	Weight: 268 lb	FT = 20%

LUMBER-

TOP CHORD 2x10 SP No.1 *Except* 1-3,9-11: 2x6 SP No.1

BOT CHORD 2x10 SP No.1

WEBS 2x6 SP No.1 *Except* 2-15,10-13: 2x4 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-9-8 oc purlins, except end verticals.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 16=0-3-8, 12=0-3-8

Max Horz 16=-419(LC 10)

Max Grav 16=1469(LC 21), 12=1469(LC 20)

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

TOP CHORD 2-4=-1675/22, 4-5=-1045/187, 7-8=-1045/187, 8-10=-1675/21, 2-16=-1615/65, 10-12=-1616/65

BOT CHORD 15-16=-425/555, 13-15=0/1123

WEBS 5-7=-1194/265, 4-15=0/744, 8-13=0/744, 2-15=-1/1037, 10-13=-10/1044

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-9-0 to 3-7-13, Exterior(2) 3-7-13 to 11-2-0, Corner(3) 11-2-0 to 15-6-13, Exterior(2) 15-6-13 to 23-1-0 zone; end vertical 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.
5) Ceiling dead load (10.0 psf) on member(s). 4-5, 7-8, 5-7; Wall dead load (5.0psf) on member(s).4-15, 8-13
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 13-15
7) Attic room checked for L/360 deflection.

January 26,2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 9 West Preserve/Harnett
J0923-5110	C2	ATTIC	8	1	I56316689
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Jan 25 09:48:48 2023 Page 1

ID:FKRF2G2VvSGFSXRUG_ubJqzaK1d-yQiRwRFcE6Z9rf1?Akq4ceKGxUlz94JhsEfWEpzrrqT

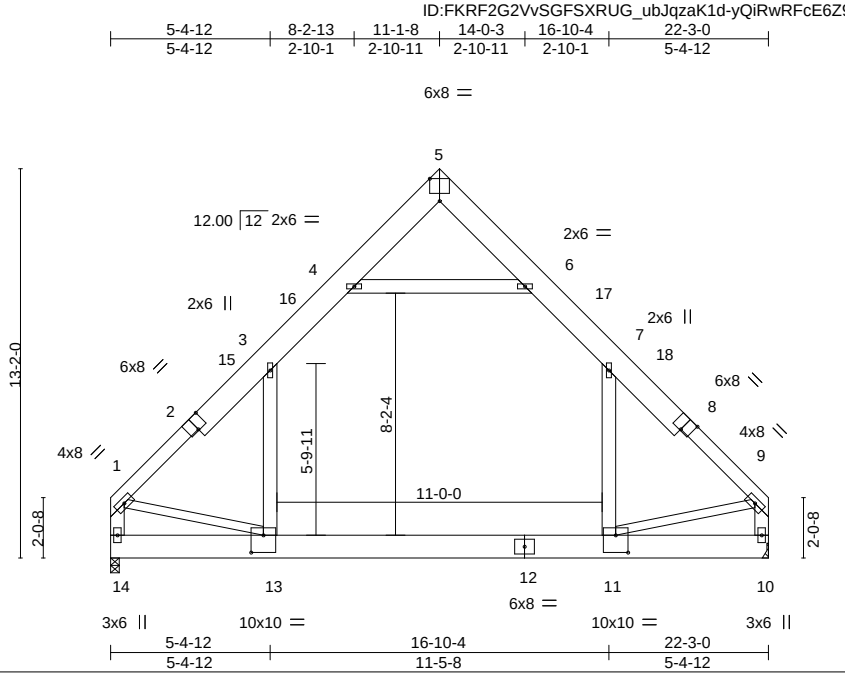


Plate Offsets (X,Y)-- [2:0-4-0,Edge], [5:0-4-0,Edge], [8:0-4-0,Edge], [11:0-5-0,0-7-0], [13:0-5-0,0-7-0]

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	0.34	Vert(LL)	-0.12	11-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.20	11-13	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.01	10	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.04	13	>999	240	Weight: 262 lb	FT = 20%

LUMBER-

TOP CHORD 2x10 SP No.1 *Except* 1-2,8-9: 2x6 SP No.1
BOT CHORD 2x10 SP No.1
WEBS 2x6 SP No.1 *Except* 1-13,9-11: 2x4 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-8-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 14=0-3-8, 10=Mechanical
Max Horz 14=-256(LC 8)
Max Grav 14=1434(LC 21), 10=1434(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1657/0, 3-4=-1042/150, 6-7=-1042/150, 7-9=-1657/0, 1-14=-1567/0, 9-10=-1568/0
BOT CHORD 13-14=-284/368, 11-13=0/1079
WEBS 4-6=-1225/195, 3-13=0/728, 7-11=0/728, 1-13=0/1036, 9-11=0/1039

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-3-4 to 4-8-1, Interior(1) 4-8-1 to 11-2-0, Exterior(2) 11-2-0 to 15-6-13, Interior(1) 15-6-13 to 22-0-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Ceiling dead load (10.0 psf) on member(s). 3-4, 6-7, 4-6; Wall dead load (5.0psf) on member(s).3-13, 7-11
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 11-13
7) Refer to girder(s) for truss to truss connections.
8) Attic room checked for L/360 deflection.

January 26,2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 9 West Preserve/Harnett
J0923-5110	C3	ATTIC	1	2	I56316690
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Jan 25 09:48:52 2023 Page 1

ID:FKRF2G2VvSGFSXRUG_ubJqzaK1d-rByymoJ7IK4bKHLmPZv0nUVxP5525vVHnrdkNazrrqP

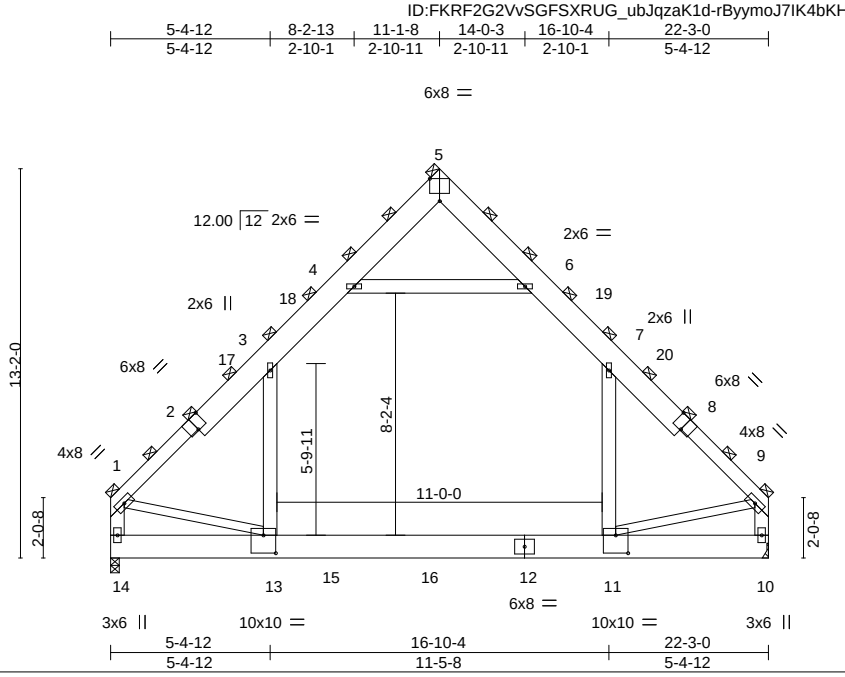


Plate Offsets (X,Y)-- [2:0-4-0,Edge], [5:0-4-0,Edge], [8:0-4-0,Edge], [11:0-5-0,0-7-4], [13:0-5-0,0-7-4]

LOADING (psf)		SPACING-	3-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	-0.14	11-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.22	11-13	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.24	Horz(CT)	0.01	10	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.04	11-13	>999	240	Weight: 525 lb	FT = 20%

LUMBER-

TOP CHORD 2x10 SP No.1 *Except*
1-2,8-9: 2x6 SP No.1
BOT CHORD 2x10 SP No.1
WEBS 2x6 SP No.1 *Except*
1-13,9-11: 2x4 SP No.2

BRACING-

TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals
(Switched from sheeted: Spacing > 2-8-0).
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 14=0-3-8, 10=Mechanical
Max Horz 14=-384(LC 8)
Max Grav 14=2783(LC 21), 10=2577(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-3251/46, 3-4=-1860/268, 4-5=-57/484, 5-6=-61/417, 6-7=-1926/277, 7-9=-3167/41, 1-14=-3094/67, 9-10=-3003/54
BOT CHORD 13-14=-426/576, 11-13=0/2085
WEBS 4-6=-2511/389, 3-13=0/1662, 7-11=0/1480, 1-13=0/1970, 9-11=0/2076

NOTES-

1) 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, 2x10 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
2) 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.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-3-4 to 4-8-1, Interior(1) 4-8-1 to 11-2-0, Exterior(2) 11-2-0 to 15-6-13, Interior(1) 15-6-13 to 22-0-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Ceiling dead load (10.0 psf) on member(s). 3-4, 6-7, 4-6; Wall dead load (5.0psf) on member(s).3-13, 7-11
8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 11-13
9) Refer to girder(s) for truss to truss connections.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 529 lb down and 76 lb up at 7-4-8, and 529 lb down and 76 lb up at 10-8-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
12) Attic room checked for L/360 deflection.

January 26,2023

LOAD CASE(S) Standard

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

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

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 13-14=-30, 11-13=-60, 10-11=-30, 1-3=-90, 3-4=-120, 4-5=-90, 5-6=-90, 6-7=-120, 7-9=-90, 4-6=-30
   Drag: 3-13=-15, 7-11=-15
   Concentrated Loads (lb)
   Vert: 15=-300(B) 16=-300(B)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

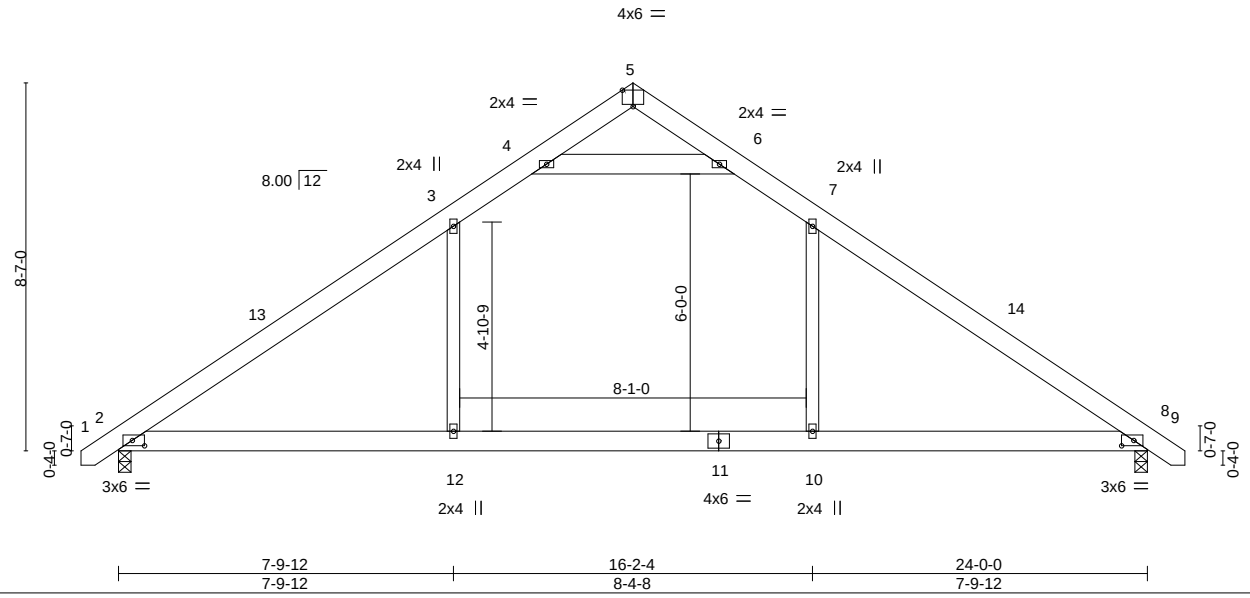
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 9 West Preserve/Harnett
J0923-5110	G1	FINK	6	1	I56316691
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Jan 25 09:48:53 2023 Page 1
ID:FKRF2G2VvSGFSXRUG_ubJqzaK1d-JOWKz8Jl3eCSxRwyyHQFJh13uVWiqLqQ0VNHv0zrrqO

-0-10-8	7-9-12	12-0-0	16-2-4	24-0-0	24-10-8
0-10-8	7-9-12	4-2-4	4-2-4	7-9-12	0-10-8

Scale = 1:53.7



7-9-12	16-2-4	24-0-0
7-9-12	8-4-8	7-9-12

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.59	Vert(LL)	-0.17	10-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.24	10-12	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.02	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.15	2-12	>999	240	Weight: 155 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
4-6: 2x6 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-8-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=-203(LC 10)
Max Uplift 2=-62(LC 12), 8=-62(LC 13)
Max Grav 2=1118(LC 19), 8=1118(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1548/251, 3-4=-1077/310, 4-5=-98/433, 5-6=-98/433, 6-7=-1077/310, 7-8=-1548/251
BOT CHORD 2-12=-54/1187, 10-12=-54/1187, 8-10=-54/1187
WEBS 3-12=0/469, 7-10=0/469, 4-6=-1618/472

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-9 to 3-8-4, Interior(1) 3-8-4 to 12-0-0, Exterior(2) 12-0-0 to 16-2-4, Interior(1) 16-2-4 to 24-8-9 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.

January 26,2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

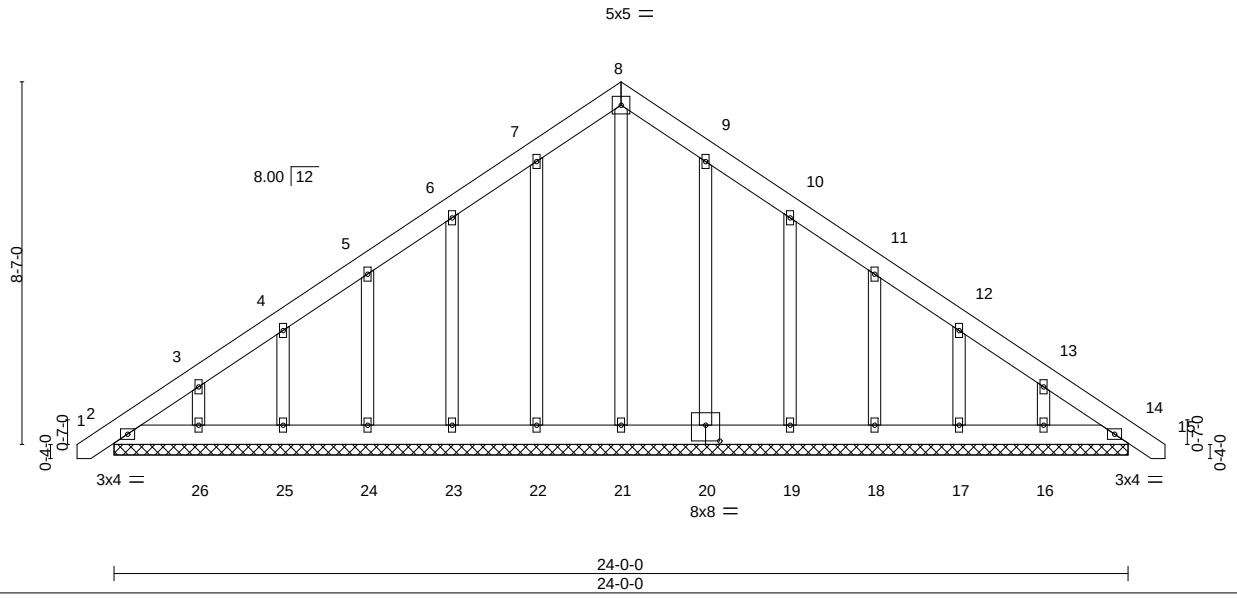
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 9 West Preserve/Harnett
J0923-5110	G1GE	GABLE	1	1	I56316692
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Jan 25 09:48:55 2023 Page 1
ID:FKRF2G2VvSGFSXRUG_ubJqzaK1d-Fmd5OqL?aFSABk4L4iSjO67Y_IHKIHXjTpsO_vzrrqM

-0-10-8 12-0-0 24-0-0 24-10-8
0-10-8 12-0-0 12-0-0 0-10-8

Scale = 1:54.5



24-0-0
24-0-0

Plate Offsets (X,Y)-- [20:0-4-0,0-4-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.03	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	0.16	Horz(CT)	0.00	14	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 195 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.

REACTIONS. All bearings 24-0-0.
(lb) - Max Horz 2=-254(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 14, 22, 23, 24, 25, 26, 20, 19, 18, 17, 16
Max Grav All reactions 250 lb or less at joint(s) 2, 14, 21, 22, 23, 24, 25, 26, 20, 19, 18, 17, 16

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-8-9 to 3-8-4, Exterior(2) 3-8-4 to 12-0-0, Corner(3) 12-0-0 to 16-4-13, Exterior(2) 16-4-13 to 24-8-9 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 14, 22, 23, 24, 25, 26, 20, 19, 18, 17, 16.

January 26,2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

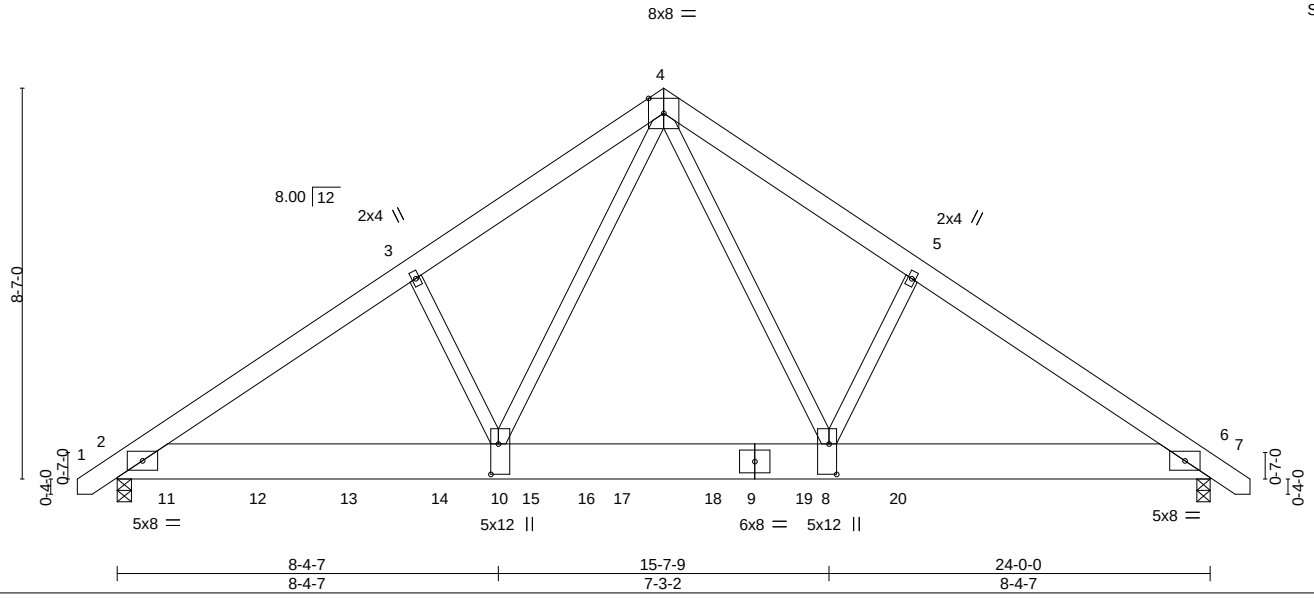
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 9 West Preserve/Harnett
J0923-5110	G2	FINK	1	2	I56316693
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Jan 25 09:48:57 2023 Page 1
ID:FKRF2G2VvSGFSXRUG_ubJqzaK1d-B9lrpWMG6tiuQ2EkB7UBTXCo76rnm0r0x7LV2nzrrqK

-0-10-8 6-6-10 12-0-0 17-5-5 24-0-0 24-10-8
0-10-8 6-6-10 5-5-5 5-5-5 6-6-11 0-10-8

Scale = 1:50.6



8-4-7 15-7-9 24-0-0
8-4-7 7-3-2 8-4-7

Plate Offsets (X,Y)-- [8:0-8-0,0-2-0], [10:0-8-0,0-2-0]

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	0.44	Vert(LL)	-0.12	8-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.24	8-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.87	Horz(CT)	0.04	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	-0.01	10	>999	240	Weight: 407 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x10 SP 2400F 2.0E
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-6-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-12, 6=0-3-8
Max Horz 2=-203(LC 25)
Max Grav 2=9019(LC 2), 6=6408(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-11364/0, 3-4=-11231/0, 4-5=-10548/0, 5-6=-10714/0
BOT CHORD 2-10=0/9409, 8-10=0/6355, 6-8=0/8815
WEBS 3-10=-342/199, 4-10=0/7095, 4-8=0/5752, 5-8=-315/247

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-3-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) 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.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph 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
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1382 lb down at 1-0-12, 1381 lb down at 3-0-12, 1381 lb down at 5-0-12, 1381 lb down at 7-0-12, 1381 lb down at 9-0-12, 1381 lb down at 11-0-12, 1381 lb down at 13-0-12, and 1381 lb down at 15-0-12, and 2464 lb down at 17-1-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 2-6=-20, 1-4=-60, 4-7=-60
Concentrated Loads (lb)
Vert: 11=-1147(F) 12=-1146(F) 13=-1146(F) 14=-1146(F) 15=-1146(F) 17=-1146(F) 18=-1146(F) 19=-1146(F) 20=-1961(F)

NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT

January 26,2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 9 West Preserve/Harnett
J0923-5110	PB	PIGGYBACK	8	1	I56316694
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Jan 25 09:48:58 2023 Page 1
ID:FKRF2G2VvSGFSXRUG_ubJqzaK1d-fLJD1sNutAql2Cowlq0Q0ll3?WH6Vgh99n42aEzrrqJ

2-9-0 5-5-15
2-9-0 2-8-15

Scale = 1:13.1

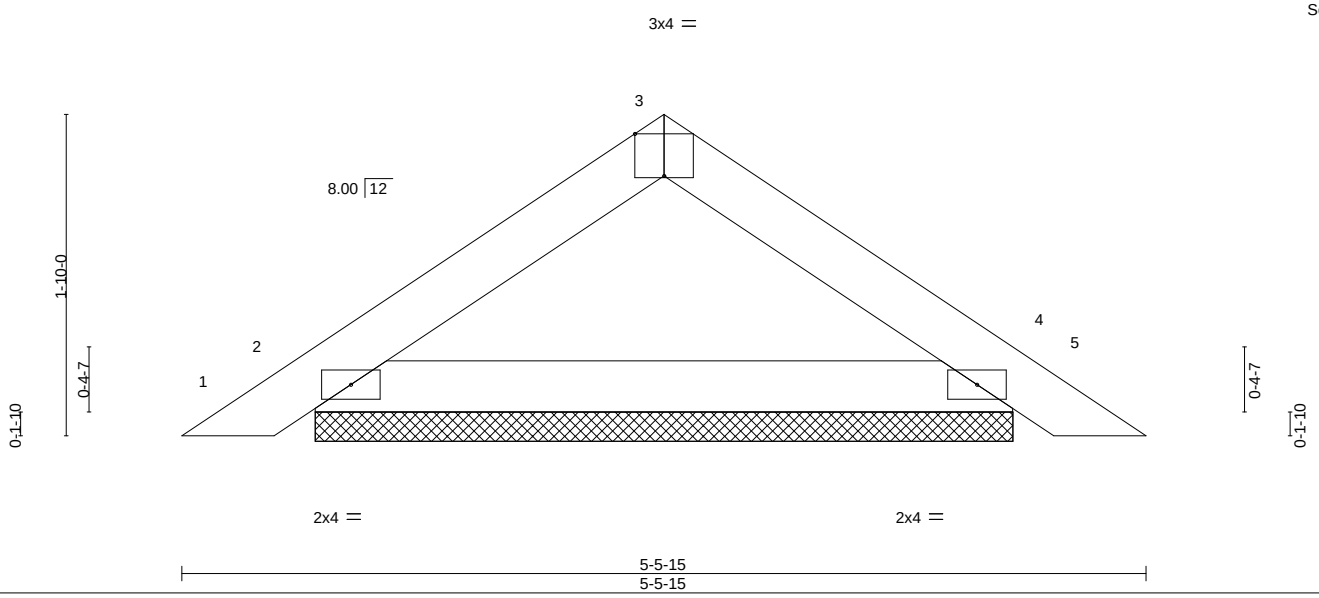


Plate Offsets (X,Y)-- [3:0-2-0,Edge]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	0.00	4	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	0.00	5	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 16 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-5-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=3-11-11, 4=3-11-11
Max Horz 2=-40(LC 10)
Max Uplift 2=-16(LC 12), 4=-16(LC 13)
Max Grav 2=189(LC 1), 4=189(LC 1)

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

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

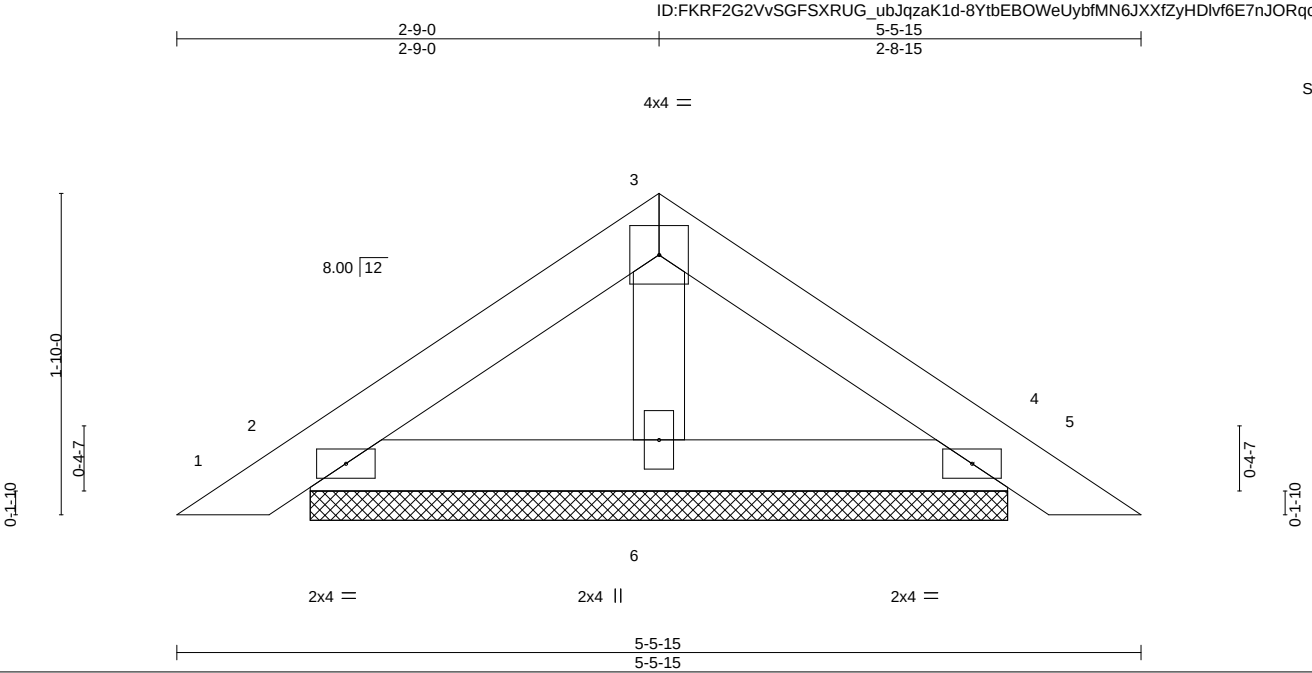
January 26,2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 9 West Preserve/Harnett
J0923-5110	PBGE	GABLE	1	1	I56316695
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Jan 25 09:48:59 2023 Page 1
ID:FKRF2G2VvSGFSXRUG_ubJqzaK1d-8YtbEBOWeUybfMN6JXXfZyHDlvf6E7nJORqc7gzrrqI



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	0.00	4	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	0.00	5	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 17 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-5-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=3-11-11, 4=3-11-11, 6=3-11-11
Max Horz 2=50(LC 11)
Max Uplift 2=-45(LC 12), 4=-52(LC 13)
Max Grav 2=119(LC 1), 4=119(LC 1), 6=139(LC 1)

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

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

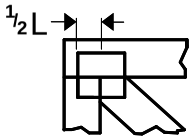
January 26,2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

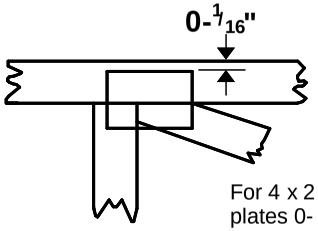
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

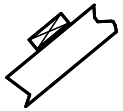
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

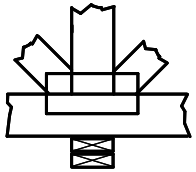
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

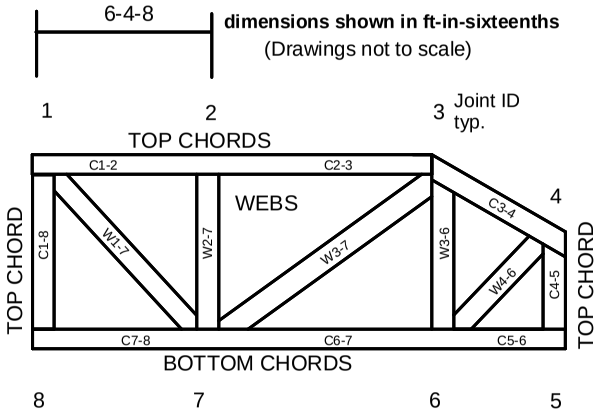


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

ESR-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

Design General Notes

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

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

© 2023 MiTek® All Rights Reserved

MiTek®

ENGINEERING BY TRENCO
A MiTek Affiliate

MiTek Engineering Reference Sheet: MII-7473 rev. 1/2/2023

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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