

RE: J0920-4174
 Lot 55 Sierra Villas

Trenco
 818 Soundside Rd
 Edenton, NC 27932

Site Information:

Customer: Project Name: J0920-4174
 Lot/Block: Model:
 Address: Subdivision:
 City: State:

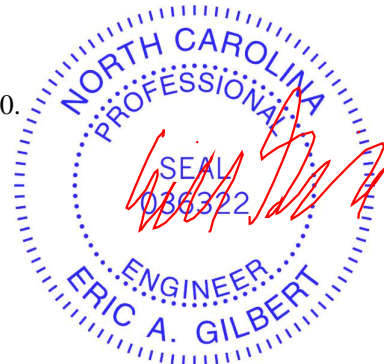
General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: IRC2015/TPI2014 Design Program: MiTek 20/20 8.1
 Wind Code: ASCE 7-10 Wind Speed: 130 mph
 Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 18 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date
1	E14133274	A1	9/18/2020
2	E14133275	A1GE	9/18/2020
3	E14133276	A2	9/18/2020
4	E14133277	A3	9/18/2020
5	E14133278	A3A	9/18/2020
6	E14133279	A3GE	9/18/2020
7	E14133280	B1	9/18/2020
8	E14133281	B1-GR	9/18/2020
9	E14133282	B1GE	9/18/2020
10	E14133283	C1	9/18/2020
11	E14133284	C1-GR	9/18/2020
12	E14133285	C1GE	9/18/2020
13	E14133286	M1	9/18/2020
14	E14133287	M1GE	9/18/2020
15	E14133288	V1	9/18/2020
16	E14133289	V2	9/18/2020
17	E14133290	V3	9/18/2020
18	E14133291	V4	9/18/2020

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



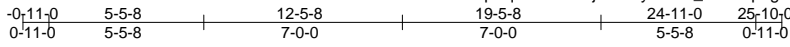
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which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

September 18, 2020

Job	Truss	Truss Type	Qty	Ply	Lot 55 Sierra Villas	E14133274
J0920-4174	A1	COMMON	5	1		

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Feb 13 2020 MiTek Industries, Inc. Tue Mar 3 06:21:02 2020 Page 1
 ID:52Teu6pVqhXamGD1jN0kr4yxDe9-_wF6rrrp8gZZG0Rbaems9L4mty2O_hpmHF_5FMzej7F



5x5 =

Scale = 1:81.2

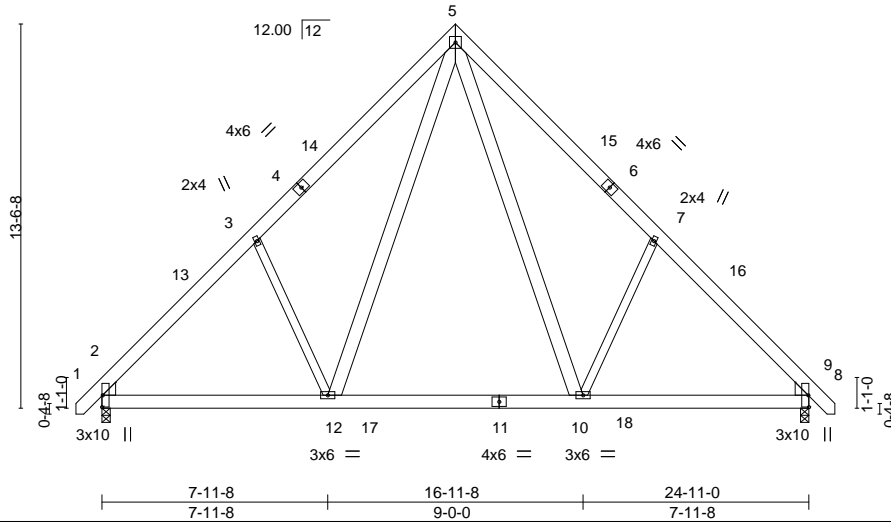


Plate Offsets (X,Y)-- [2:0-0-2,0-0-2], [2:0-0-4,0-3-15], [8:0-0-2,0-0-2], [8:0-0-4,0-3-15]

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 0.20	Vert(LL)	-0.08 10-12	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.26	Vert(CT)	-0.11 10-12	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.39	Horz(CT)	0.01 8	n/a	n/a		
BCDL 10.0	Code IRC2015/TP12014		Matrix-S	Wind(LL)	0.02 12	>999	240		
								Weight: 230 lb	FT = 20%

LUMBER-
 TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1
 WEBS 2x6 SP No.1 *Except*
 7-10,3-12: 2x4 SP No.2

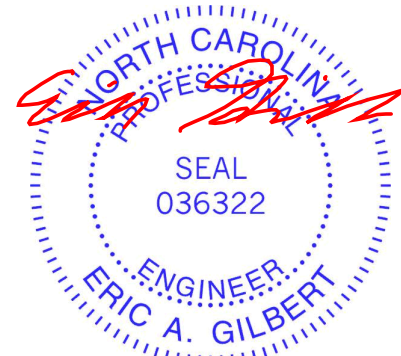
WEDGE
 Left: 2x6 SP No.1 , Right: 2x6 SP No.1

REACTIONS. (size) 2=0-3-8, 8=0-3-8
 Max Horz 2=-317(LC 10)
 Max Uplift 2=-41(LC 12), 8=-41(LC 13)
 Max Grav 2=1052(LC 19), 8=1052(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1246/274, 3-5=-1148/453, 5-7=-1148/453, 7-8=-1246/274
 BOT CHORD 2-12=-123/951, 10-12=-9/614, 8-10=-52/795
 WEBS 5-10=-214/639, 7-10=-444/338, 5-12=-214/639, 3-12=-444/338

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-6 to 3-7-7, Interior(1) 3-7-7 to 12-5-8, Exterior(2) 12-5-8 to 16-10-5, Interior(1) 16-10-5 to 25-8-6 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.

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.



March 3, 2020

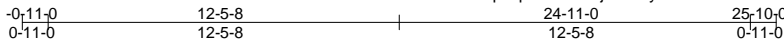
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road
 Edenton, NC 27932

Job J0920-4174	Truss A1GE	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	Lot 55 Sierra Villas	E14133275
Comtech, Inc., Fayetteville, NC - 28314,					8.330 s Feb 13 2020 MiTek Industries, Inc. Tue Mar 3 06:21:04 2020 Page 1	
					ID:52Teu6pVqhXamGD1jN0kr4yxDe9-xJNtGXt3fHpGVJb_h3oKEmA9gmoKSeF3lZTCKEzej7D	
					Job Reference (optional)	



5x5 =

Scale = 1:81.8

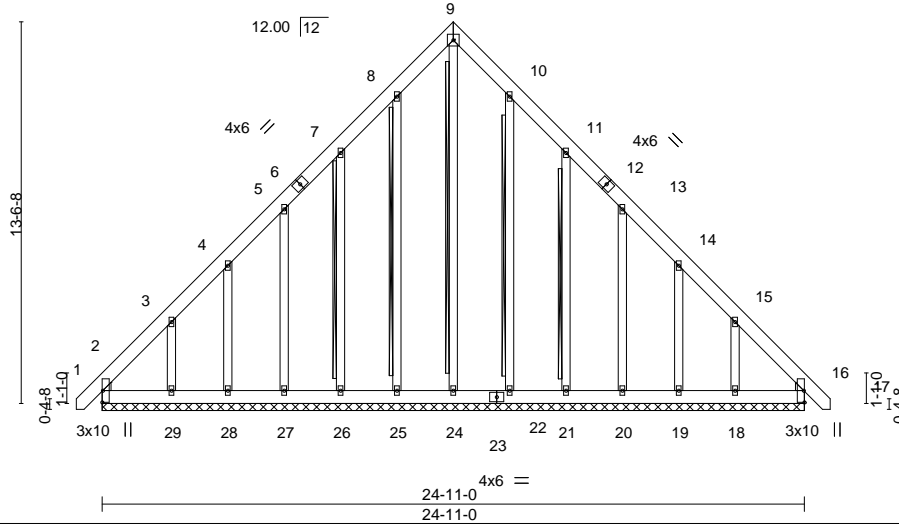


Plate Offsets (X,Y)-- [2:0-0-2,0-0-2], [2:0-0-4,0-2-10], [16:0-0-2,0-0-2], [16:0-0-4,0-2-10]

LOADING (psf)	SPACING-	2-0-0	CSL	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.06	Vert(LL)	0.00	16	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	0.00	16	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.24	Horz(CT)	0.01	16	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S							
									Weight: 265 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1
 OTHERS 2x4 SP No.2
 WEDGE
 Left: 2x4 SP No.2, Right: 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 - 9-24, 8-25, 7-26, 10-22, 11-21
 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 24-11-0.
 (lb) - Max Horz 2=-317(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 25, 26, 27, 28, 22, 21, 20, 19, 16 except 2=-122(LC 10), 29=-164(LC 12), 18=-159(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 24, 25, 26, 27, 28, 29, 22, 21, 20, 19, 18, 16 except 2=279(LC 9)

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

TOP CHORD 2-3=-411/332, 8-9=-249/270, 9-10=-249/270, 15-16=-412/335
 BOT CHORD 2-29=-258/337, 28-29=-259/338, 27-28=-260/339, 26-27=-260/339, 25-26=-261/340, 24-25=-261/340, 22-24=-261/340, 21-22=-261/340, 20-21=-260/339, 19-20=-260/339, 18-19=-259/338, 16-18=-258/337
 WEBS 9-24=-261/185, 3-29=-273/239, 15-18=-273/239

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Corner(3) 0-9-6 to 3-7-7, Exterior(2) 3-7-7 to 12-5-8, Corner(3) 12-5-8 to 16-10-5, Exterior(2) 16-10-5 to 25-8-6 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 25, 26, 27, 28, 22, 21, 20, 19, 16 except (jt=lb) 2=122, 29=164, 18=159.
- Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



March 3, 2020

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

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

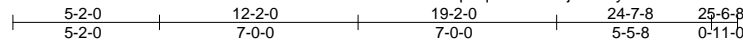


818 Soundside Road
 Edenton, NC 27932

Job J0920-4174	Truss A2	Truss Type COMMON	Qty 6	Ply 1	Lot 55 Sierra Villas	E14133276
-------------------	-------------	----------------------	----------	----------	----------------------	-----------

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Feb 13 2020 MiTek Industries, Inc. Tue Mar 3 06:21:05 2020 Page 1
ID:52Teu6pVqhXamGD1jN0kr4yxDe9-PVxFTttiQbx77TAAFnKZn_iHh942B2ZC_CDIsgezj7C



5x5 =

Scale = 1:81.2

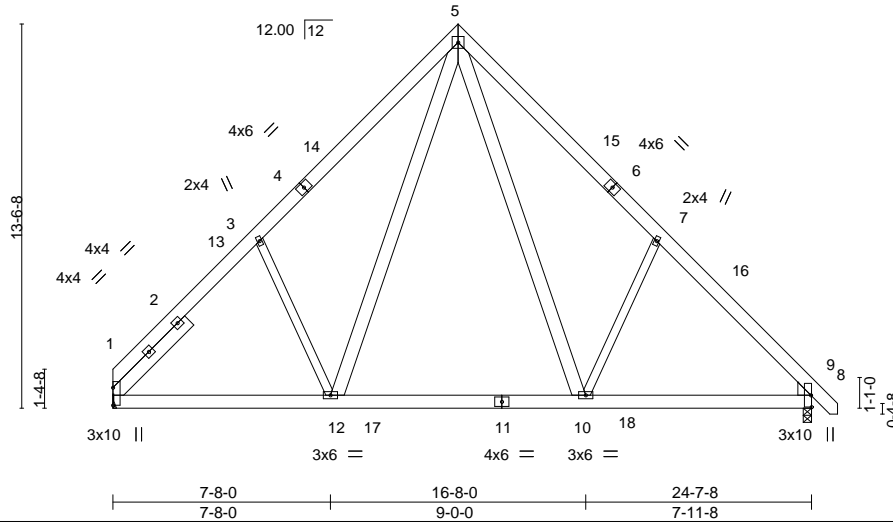


Plate Offsets (X,Y)-- [1:Edge,0-0-0], [8:0-0-2,0-0-2], [8:0-0-4,0-3-15]

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 0.23	Vert(LL)	-0.08	10-12	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.27	Vert(CT)	-0.12	10-12	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.39	Horz(CT)	0.01	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.01	12	>999		
								Weight: 233 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x6 SP No.1 *Except*
3-12,7-10: 2x4 SP No.2

WEDGE
Right: 2x6 SP No.1
SLIDER Left 2x6 SP No.1 -H 3-9-3

REACTIONS. (size) 1=Mechanical, 8=0-3-8
Max Horz 1=-315(LC 8)
Max Uplift 1=-37(LC 13), 8=-41(LC 13)
Max Grav 1=1009(LC 20), 8=1047(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1219/283, 3-5=-1112/456, 5-7=-1142/452, 7-8=-1240/273
BOT CHORD 1-12=-129/923, 10-12=-10/610, 8-10=-54/790
WEBS 3-12=-417/334, 5-12=-208/599, 5-10=-214/641, 7-10=-442/338

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 12-2-0, Exterior(2) 12-2-0 to 16-6-13, Interior(1) 16-6-13 to 25-4-14 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 8.



March 3, 2020

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

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

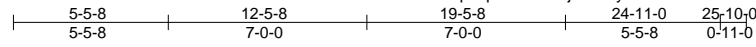


818 Soundside Road
Edenton, NC 27932

Job J0920-4174	Truss A3	Truss Type COMMON	Qty 5	Ply 1	Lot 55 Sierra Villas	E14133277
-------------------	-------------	----------------------	----------	----------	----------------------	-----------

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Feb 13 2020 MiTek Industries, Inc. Tue Mar 3 06:21:06 2020 Page 1
ID:52Teu6pVqhXamGD1jN0kr4yxDe9-thVdhDuKBu4_kdlmpUroJBFSqZPKwVdMCsyJO7zej7B



5x5 =

Scale = 1:81.2

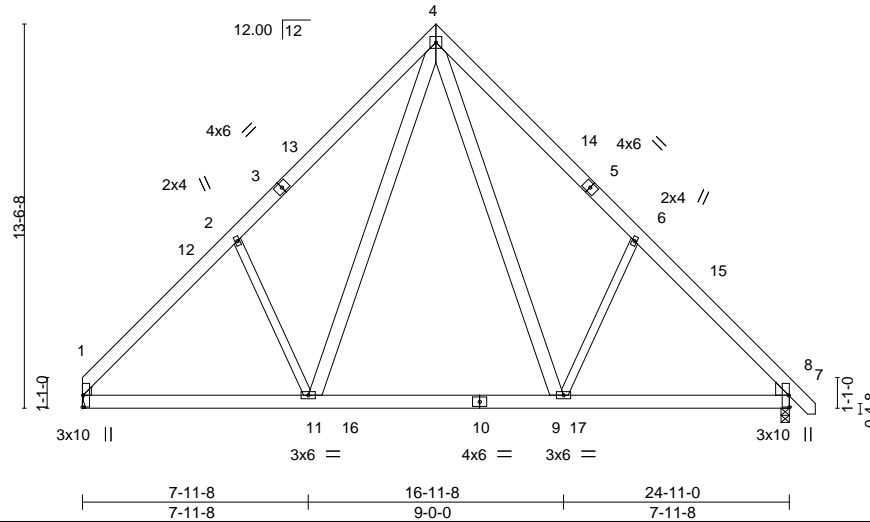


Plate Offsets (X,Y)-- [1:0-0-2,0-0-2], [1:0-0-4,0-2-10], [7:0-0-2,0-0-2], [7:0-0-4,0-3-15]

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 0.21	Vert(LL)	-0.08	9-11	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.26	Vert(CT)	-0.11	9-11	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.40	Horz(CT)	0.01	7	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.02	11	>999		
								Weight: 227 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x6 SP No.1 *Except*
6-9,2-11: 2x4 SP No.2
WEDGE
Left: 2x4 SP No.2 , Right: 2x6 SP No.1

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

REACTIONS. (size) 1=Mechanical, 7=0-3-8
Max Horz 1=-315(LC 8)
Max Uplift 1=-35(LC 13), 7=-41(LC 13)
Max Grav 1=1014(LC 20), 7=1056(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1236/281, 2-4=-1158/467, 4-6=-1153/455, 6-7=-1252/275
BOT CHORD 1-11=-123/967, 9-11=-9/618, 7-9=-56/798
WEBS 4-9=-215/639, 6-9=-444/338, 4-11=-220/655, 2-11=-454/344

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-12 to 4-5-9, Interior(1) 4-5-9 to 12-5-8, Exterior(2) 12-5-8 to 16-10-5, Interior(1) 16-10-5 to 25-8-6 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
 - 5) Refer to girder(s) for truss to truss connections.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7.



March 3, 2020

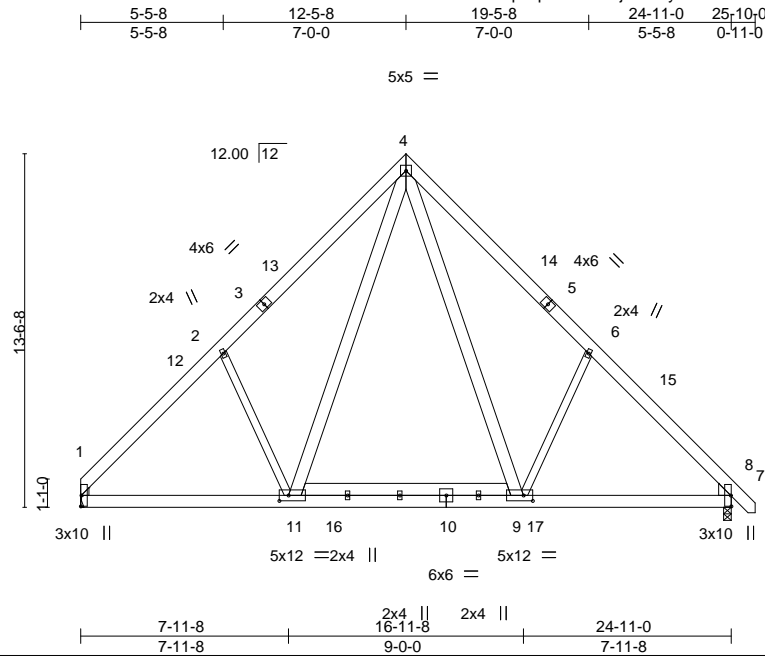
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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

Job J0920-4174	Truss A3A	Truss Type COMMON	Qty 5	Ply 1	Lot 55 Sierra Villas	E14133278
-------------------	--------------	----------------------	----------	----------	----------------------	-----------

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Feb 13 2020 MiTek Industries, Inc. Tue Mar 3 06:21:06 2020 Page 1
ID:52Teu6pVqhXamGD1jN0kr4yxDe9-thVdhDuKBu4_kdlMpUroJBFSqZPLwVdMCsyJO7zej7B



Scale = 1:88.3

Plate Offsets (X,Y)-- [1:0-0-2,0-0-2], [1:0-0-4,0-2-10], [7:0-0-4,0-3-15], [7:0-0-2,0-0-2], [9:0-4-4,0-2-8], [11:0-4-4,0-2-8]

LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.21	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.26	Vert(LL) -0.08 9-11 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.40	Vert(CT) -0.11 9-11 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 7 n/a n/a		
	Code IRC2015/TP12014		Wind(LL) 0.02 11 >999 240	Weight: 245 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1
 WEBS 2x6 SP No.1 *Except*
 6-9,2-11: 2x4 SP No.2

WEDGE

Left: 2x4 SP No.2 , Right: 2x6 SP No.1

REACTIONS.

(size) 1=Mechanical, 7=0-3-8
 Max Horz 1=-315(LC 8)
 Max Uplift 1=-35(LC 13), 7=-41(LC 13)
 Max Grav 1=1009(LC 20), 7=1052(LC 20)

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

TOP CHORD 1-2=-1229/281, 2-4=-1158/467, 4-6=-1153/455, 6-7=-1245/275
 BOT CHORD 1-11=-123/962, 9-11=-9/615, 7-9=-56/794
 WEBS 4-9=-215/634, 6-9=-444/338, 4-11=-220/650, 2-11=-454/344

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-12 to 4-5-9, Interior(1) 4-5-9 to 12-5-8, Exterior(2) 12-5-8 to 16-10-5, Interior(1) 16-10-5 to 25-8-6 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7.



March 3, 2020

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

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



818 Soundside Road
 Edenton, NC 27932

Job J0920-4174	Truss A3GE	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	Lot 55 Sierra Villas	E14133279
Comtech, Inc., Fayetteville, NC - 28314,					Job Reference (optional)	

8.330 s Feb 13 2020 MiTek Industries, Inc. Tue Mar 3 06:21:07 2020 Page 1
 ID:52Teu6pVqhXamGD1jN0kr4yxDe9-Lu2?uZvvyCCrMnKZMCM1sPoguzpxf?NVRWiswZzej7A

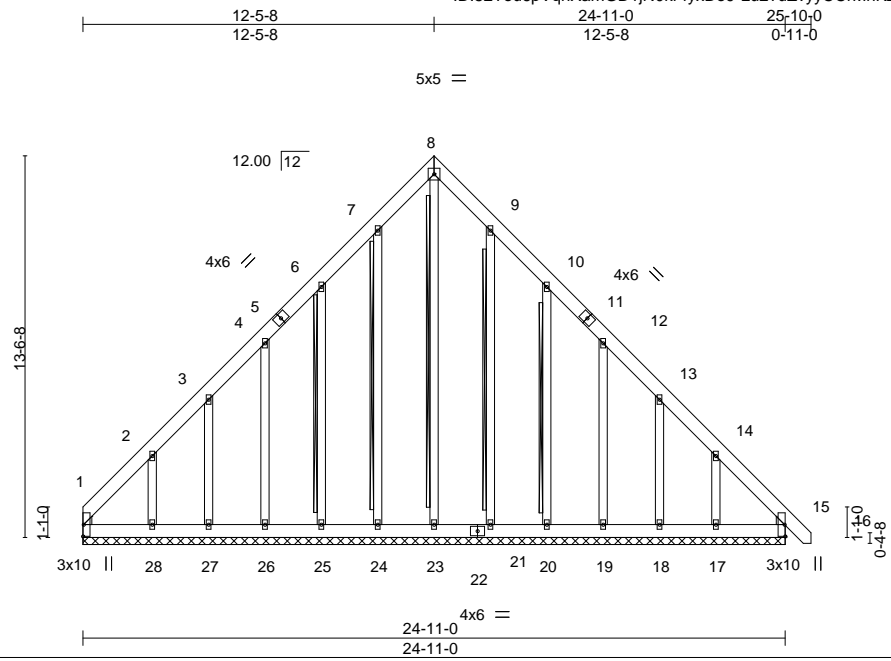


Plate Offsets (X,Y)-- [1:0-0-2,0-0-2], [1:0-0-4,0-2-10], [15:0-0-2,0-0-2], [15:0-0-4,0-2-10]

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	15	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	0.00	15	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.24	Horz(CT)	0.01	15	n/a		
BCDL 10.0	Code IRC2015/TP12014		Matrix-S						
								Weight: 262 lb	FT = 20%

LUMBER-
 TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1
 OTHERS 2x4 SP No.2
 WEDGE
 Left: 2x4 SP No.2, Right: 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 - 8-23, 7-24, 6-25, 9-21, 10-20
 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 24-11-0.
 (lb) - Max Horz 1=-394(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 24, 21, 15 except 1=-190(LC 10), 25=-157(LC 12), 26=-140(LC 12), 27=-127(LC 12), 28=-268(LC 12), 20=-160(LC 13), 19=-141(LC 13), 18=-128(LC 13), 17=-255(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 27, 21, 18 except 1=412(LC 12), 23=272(LC 13), 24=253(LC 19), 25=252(LC 19), 26=256(LC 19), 28=273(LC 19), 20=255(LC 20), 19=256(LC 20), 17=253(LC 20), 15=340(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-563/338, 2-3=-333/235, 7-8=-249/270, 8-9=-249/270, 13-14=-280/161, 14-15=-497/335
 BOT CHORD 1-28=-258/391, 27-28=-259/392, 26-27=-260/392, 25-26=-260/392, 24-25=-261/392, 23-24=-261/392, 21-23=-261/392, 20-21=-261/392, 19-20=-260/392, 18-19=-260/391, 17-18=-259/391, 15-17=-258/389
 WEBS 8-23=-262/185, 2-28=-278/280, 14-17=-273/262

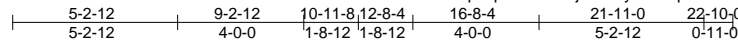
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TP1.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 24, 21, 15 except (jt=lb) 1=190, 25=157, 26=140, 27=127, 28=268, 20=160, 19=141, 18=128, 17=255.
 - Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



Job J0920-4174	Truss B1	Truss Type ATTIC	Qty 6	Ply 1	Lot 55 Sierra Villas	E14133280
-------------------	-------------	---------------------	----------	----------	----------------------	-----------

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Feb 13 2020 MiTek Industries, Inc. Tue Mar 3 06:21:08 2020 Page 1
ID:52Teu6pVqhXamGD1jN0kr4yxDe9-p4cN6uwajWKL_xvlwvtGPcKgmN?0OTGegARPT?zej79



6x8 =

Scale = 1:73.1

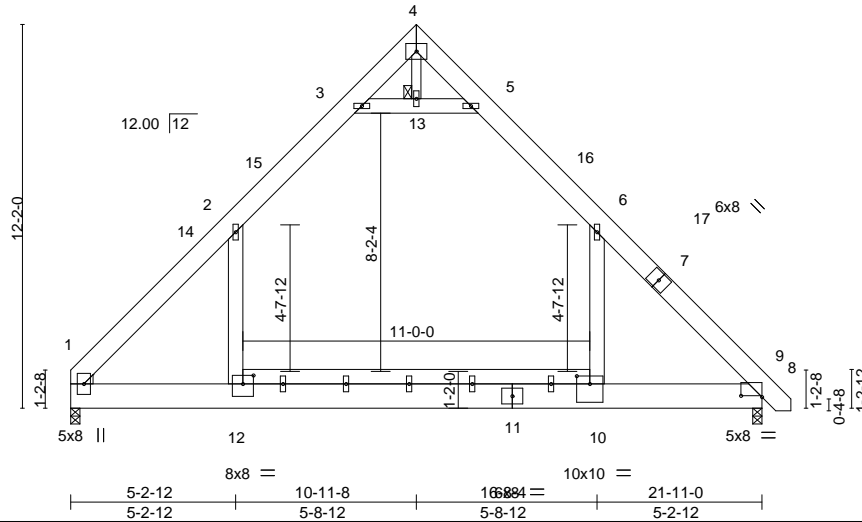


Plate Offsets (X,Y)-- [1:0-0-0,0-2-8], [1:0-0-0,0-7-5], [8:0-8-0,0-0-8], [10:0-5-0,0-3-0], [12:0-4-0,0-3-4]

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 0.75	Vert(LL)	-0.21	10-12	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.70	Vert(CT)	-0.37	10-12	>702		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.13	Horz(CT)	0.01	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.08	10-12	>999		
								Weight: 248 lb	FT = 20%

LUMBER-

TOP CHORD 2x8 SP No.1
 BOT CHORD 2x10 SP No.1 *Except*
 10-12: 2x6 SP No.1
 WEBS 2x6 SP No.1 *Except*
 4-13: 2x4 SP No.2

WEDGE
 Left: 2x4 SP No.2

REACTIONS.

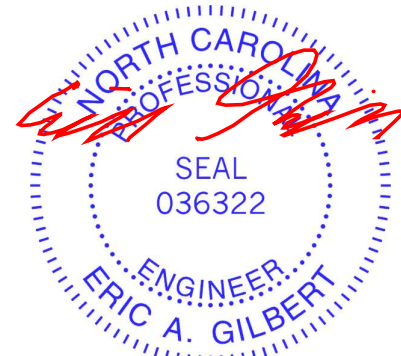
(size) 1=0-3-8, 8=0-3-8
 Max Horz 1=-277(LC 10)
 Max Grav 1=1411(LC 21), 8=1457(LC 21)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-1864/0, 2-3=-1036/152, 3-4=-39/465, 4-5=-44/476, 5-6=-1026/148, 6-8=-1920/0
 BOT CHORD 1-12=0/1084, 10-12=0/1084, 8-10=0/1084
 WEBS 6-10=0/966, 2-12=0/889, 3-13=-1662/249, 5-13=-1662/249

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-6 to 4-5-3, Interior(1) 4-5-3 to 10-11-8, Exterior(2) 10-11-8 to 15-4-5, Interior(1) 15-4-5 to 22-7-2 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 2x6 MT20 unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- Ceiling dead load (10.0 psf) on member(s). 2-3, 5-6, 3-13, 5-13; Wall dead load (5.0psf) on member(s). 6-10, 2-12
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 10-12
- Attic room checked for L/360 deflection.



March 3, 2020

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

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

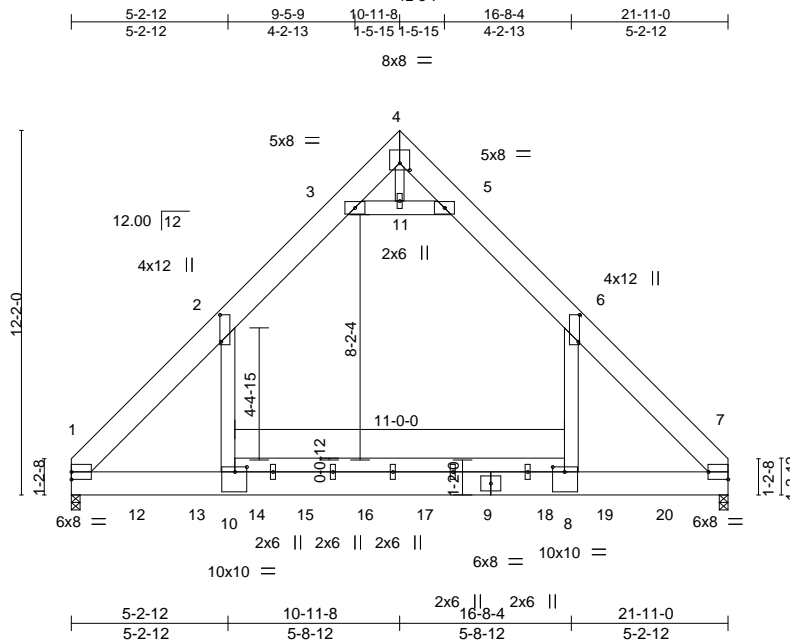


818 Soundside Road
 Edenton, NC 27932

Job J0920-4174	Truss B1-GR	Truss Type ATTIC	Qty 1	Ply 3	Lot 55 Sierra Villas	E14133281
-------------------	----------------	---------------------	----------	----------	----------------------	-----------

Comtech, Inc., Fayetteville, NC 28309

ID:52Teu6pVqHXamGD1jN0kr4yxDe9-hTAAaG?2UJMUXUNzAnaONAMh68CyW1R2bXS56zehgj
8.330 s Feb 13 2020 MiTek Industries, Inc. Tue Mar 3 08:59:44 2020 Page 1



Scale = 1:76.9

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

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 2-0-0	TC 0.67	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.32	Vert(LL) -0.30 8-10 >877 360		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.39	Vert(CT) -0.40 8-10 >648 240		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Horz(CT) 0.02 7 n/a n/a		
			Wind(LL) 0.01 8-10 >999 240	Weight: 805 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x10 SP 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x10 SP 2400F 2.0E *Except* 8-10: 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x6 SP No.1 *Except* 4-11: 2x4 SP No.2	

REACTIONS. (lb/size) 1=3308/0-3-8 (min. 0-2-12), 7=3306/0-3-8 (min. 0-2-12)
Max Horz 1=-269(LC 4)
Max Grav 1=10019(LC 14), 7=10002(LC 14)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-10536/0, 2-3=-4389/33, 3-4=-15/4021, 4-5=-15/4015, 5-6=-4395/33, 6-7=-10529/0
BOT CHORD 1-12=0/5913, 12-13=0/5913, 10-13=0/5913, 10-14=0/5980, 14-15=0/5980, 15-16=0/5980, 16-17=0/5980, 9-17=0/5980, 9-18=0/5980, 8-18=0/5980, 8-19=0/5913, 19-20=0/5913, 7-20=0/5913
WEBS 6-8=0/8529, 2-10=0/8548, 3-11=-12139/0, 5-11=-12139/0, 4-11=0/938

- NOTES-**
- 3-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.
Bottom chords connected as follows: 2x10 - 5 rows staggered at 0-4-0 oc.
Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
 - Concentrated loads from layout are not present in Load Case(s): #3 Dead + Uninhabitable Attic Without Storage; #4 Dead + 0.6 MWFRS Wind (Pos. Internal) Left; #5 Dead + 0.6 MWFRS Wind (Pos. Internal) Right; #6 Dead + 0.6 MWFRS Wind (Neg. Internal) Left; #7 Dead + 0.6 MWFRS Wind (Neg. Internal) Right; #8 Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel; #9 Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel; #10 Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel; #11 Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel; #12 Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel; #13 Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel; #20 Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left); #21 Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right); #22 Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel); #23 Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel).
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

Continued on page 2



March 3, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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

Job	Truss	Truss Type	Qty	Ply	Lot 55 Sierra Villas	E14133281
J0920-4174	B1-GR	ATTIC	1	3	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309

8.330 s Feb 13 2020 MiTek Industries, Inc. Tue Mar 3 08:59:44 2020 Page 2
 ID:52Teu6pVqhXamGD1jN0kr4yxDe9-hTAAaG?2UJMUXUNzAnaONAMh68CyW1R2bXS56zehg

NOTES-

- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6'-0" between the bottom chord and any other members.
- 8) Ceiling dead load (10.0 psf) on member(s). 2-3, 5-6, 3-11, 5-11; Wall dead load (5.0psf) on member(s).6-8, 2-10
- 9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 8-10
- 10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1853 lb down at 2-1-12, 1853 lb down at 4-1-12, 4072 lb down at 5-3-12, 353 lb down and 67 lb up at 6-1-12, 353 lb down and 67 lb up at 7-9-4, 353 lb down and 67 lb up at 9-9-4, 353 lb down and 67 lb up at 11-9-4, 353 lb down and 67 lb up at 13-9-4, 353 lb down and 67 lb up at 15-9-4, 4072 lb down at 16-7-4, and 1853 lb down at 17-9-4, and 1853 lb down at 19-9-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 12) Attic room checked for L/360 deflection.

LOAD CASE(S)

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-2=-60, 2-3=-80, 3-4=-60, 4-5=-60, 5-6=-80, 6-7=-60, 1-10=-20, 8-10=-40, 7-8=-20, 3-5=-20
 Drag: 6-8=-10, 2-10=-10
 Concentrated Loads (lb)
 Vert: 9=-49(B) 8=-1096(B) 10=-1096(B) 12=-458(B) 13=-458(B) 14=-49(B) 15=-49(B) 16=-49(B) 17=-49(B) 18=-49(B) 19=-458(B) 20=-458(B)
- 2) Dead + 0.75 Roof Live (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-2=-50, 2-3=-70, 3-4=-50, 4-5=-50, 5-6=-70, 6-7=-50, 1-10=-20, 8-10=-100, 7-8=-20, 3-5=-20
 Drag: 6-8=-10, 2-10=-10
 Concentrated Loads (lb)
 Vert: 9=-277(B) 8=-3328(B) 10=-3328(B) 12=-1504(B) 13=-1504(B) 14=-277(B) 15=-277(B) 16=-277(B) 17=-277(B) 18=-277(B) 19=-1504(B) 20=-1504(B)
- 3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
 Uniform Loads (plf)
 Vert: 1-2=-20, 2-3=-40, 3-4=-20, 4-5=-20, 5-6=-40, 6-7=-20, 1-7=-40, 3-5=-20
 Drag: 6-8=-10, 2-10=-10
- 4) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=-13, 2-3=-25, 3-4=-13, 4-5=11, 5-6=-1, 6-7=11, 1-10=-12, 8-10=-24, 7-8=-12, 3-5=-12
 Horz: 1-4=1, 4-7=23
 Drag: 6-8=-10, 2-10=-10
- 5) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=11, 2-3=-1, 3-4=11, 4-5=-13, 5-6=-25, 6-7=-13, 1-10=-12, 8-10=-24, 7-8=-12, 3-5=-12
 Horz: 1-4=-23, 4-7=-1
 Drag: 6-8=-10, 2-10=-10
- 6) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=-35, 2-3=-55, 3-4=-35, 4-5=-11, 5-6=-31, 6-7=-11, 1-10=-20, 8-10=-40, 7-8=-20, 3-5=-20
 Horz: 1-4=15, 4-7=9
 Drag: 6-8=-10, 2-10=-10
- 7) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=-11, 2-3=-31, 3-4=-11, 4-5=-35, 5-6=-55, 6-7=-35, 1-10=-20, 8-10=-40, 7-8=-20, 3-5=-20
 Horz: 1-4=-9, 4-7=-15
 Drag: 6-8=-10, 2-10=-10
- 8) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=21, 2-3=9, 3-4=21, 4-5=9, 5-6=-3, 6-7=9, 1-10=-12, 8-10=-24, 7-8=-12, 3-5=-12
 Horz: 1-4=-33, 4-7=21
 Drag: 6-8=-10, 2-10=-10
- 9) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=9, 2-3=-3, 3-4=9, 4-5=21, 5-6=9, 6-7=21, 1-10=-12, 8-10=-24, 7-8=-12, 3-5=-12
 Horz: 1-4=-21, 4-7=33
 Drag: 6-8=-10, 2-10=-10
- 10) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=21, 2-3=9, 3-4=21, 4-5=9, 5-6=-3, 6-7=9, 1-10=-12, 8-10=-24, 7-8=-12, 3-5=-12
 Horz: 1-4=-33, 4-7=21
 Drag: 6-8=-10, 2-10=-10
- 11) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=9, 2-3=-3, 3-4=9, 4-5=21, 5-6=9, 6-7=21, 1-10=-12, 8-10=-24, 7-8=-12, 3-5=-12
 Horz: 1-4=-21, 4-7=33
 Drag: 6-8=-10, 2-10=-10
- 12) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=-1, 2-3=-21, 3-4=-1, 4-5=-13, 5-6=-33, 6-7=-13, 1-10=-20, 8-10=-40, 7-8=-20, 3-5=-20
 Horz: 1-4=-19, 4-7=7
 Drag: 6-8=-10, 2-10=-10
- 13) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Continued on page 3

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

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



818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 55 Sierra Villas	E14133281
J0920-4174	B1-GR	ATTIC	1	3	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309

8.330 s Feb 13 2020 MiTek Industries, Inc. Tue Mar 3 08:59:44 2020 Page 3
 ID:52Teu6pVqhXamGD1jN0kr4yxDe9-hTAAaG?2UJMUXUNAnaONAMh68CyW11R2bXS56zehjg

LOAD CASE(S)

- Uniform Loads (plf)
 - Vert: 1-2=-13, 2-3=-33, 3-4=-13, 4-5=-1, 5-6=-21, 6-7=-1, 1-10=-20, 8-10=-40, 7-8=-20, 3-5=-20
 - Horz: 1-4=-7, 4-7=19
 - Drag: 6-8=-10, 2-10=-10
- 14) Dead + Attic Floor: Lumber Increase=1.00, Plate Increase=1.00
 - Uniform Loads (plf)
 - Vert: 1-2=-20, 2-3=-40, 3-4=-20, 4-5=-20, 5-6=-40, 6-7=-20, 1-10=-20, 8-10=-120, 7-8=-20, 3-5=-20
 - Drag: 6-8=-10, 2-10=-10
 - Concentrated Loads (lb)
 - Vert: 9=-353(B) 8=-4072(B) 10=-4072(B) 12=-1853(B) 13=-1853(B) 14=-353(B) 15=-353(B) 16=-353(B) 17=-353(B) 18=-353(B) 19=-1853(B) 20=-1853(B)
- 15) Dead: Lumber Increase=1.00, Plate Increase=1.00
 - Uniform Loads (plf)
 - Vert: 1-2=-20, 2-3=-40, 3-4=-20, 4-5=-20, 5-6=-40, 6-7=-20, 1-10=-20, 8-10=-120, 7-8=-20, 3-5=-20
 - Drag: 6-8=-10, 2-10=-10
 - Concentrated Loads (lb)
 - Vert: 9=-353(B) 8=-4072(B) 10=-4072(B) 12=-1853(B) 13=-1853(B) 14=-353(B) 15=-353(B) 16=-353(B) 17=-353(B) 18=-353(B) 19=-1853(B) 20=-1853(B)
- 16) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
 - Uniform Loads (plf)
 - Vert: 1-2=-61, 2-3=-81, 3-4=-61, 4-5=-43, 5-6=-63, 6-7=-43, 1-10=-20, 8-10=-100, 7-8=-20, 3-5=-20
 - Horz: 1-4=11, 4-7=7
 - Drag: 6-8=-10, 2-10=-10
- 17) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
 - Uniform Loads (plf)
 - Vert: 1-2=-43, 2-3=-63, 3-4=-43, 4-5=-61, 5-6=-81, 6-7=-61, 1-10=-20, 8-10=-100, 7-8=-20, 3-5=-20
 - Horz: 1-4=-7, 4-7=-11
 - Drag: 6-8=-10, 2-10=-10
- 18) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
 - Uniform Loads (plf)
 - Vert: 1-2=-36, 2-3=-56, 3-4=-36, 4-5=-45, 5-6=-65, 6-7=-45, 1-10=-20, 8-10=-100, 7-8=-20, 3-5=-20
 - Horz: 1-4=-14, 4-7=5
 - Drag: 6-8=-10, 2-10=-10
- 19) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
 - Uniform Loads (plf)
 - Vert: 1-2=-45, 2-3=-65, 3-4=-45, 4-5=-36, 5-6=-56, 6-7=-36, 1-10=-20, 8-10=-100, 7-8=-20, 3-5=-20
 - Horz: 1-4=-5, 4-7=14
 - Drag: 6-8=-10, 2-10=-10
- 20) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-2=-60, 2-3=-80, 3-4=-60, 4-5=-20, 5-6=-40, 6-7=-20, 1-10=-20, 8-10=-40, 7-8=-20, 3-5=-20
 - Drag: 6-8=-10, 2-10=-10
 - Concentrated Loads (lb)
 - Vert: 9=-49(B) 8=-1096(B) 10=-1096(B) 12=-458(B) 13=-458(B) 14=-49(B) 15=-49(B) 16=-49(B) 17=-49(B) 18=-49(B) 19=-458(B) 20=-458(B)
- 21) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-2=-20, 2-3=-40, 3-4=-20, 4-5=-60, 5-6=-80, 6-7=-60, 1-10=-20, 8-10=-40, 7-8=-20, 3-5=-20
 - Drag: 6-8=-10, 2-10=-10
 - Concentrated Loads (lb)
 - Vert: 9=-49(B) 8=-1096(B) 10=-1096(B) 12=-458(B) 13=-458(B) 14=-49(B) 15=-49(B) 16=-49(B) 17=-49(B) 18=-49(B) 19=-458(B) 20=-458(B)
- 22) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-2=-50, 2-3=-70, 3-4=-50, 4-5=-20, 5-6=-40, 6-7=-20, 1-10=-20, 8-10=-100, 7-8=-20, 3-5=-20
 - Drag: 6-8=-10, 2-10=-10
 - Concentrated Loads (lb)
 - Vert: 9=-277(B) 8=-3328(B) 10=-3328(B) 12=-1504(B) 13=-1504(B) 14=-277(B) 15=-277(B) 16=-277(B) 17=-277(B) 18=-277(B) 19=-1504(B) 20=-1504(B)
- 23) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-2=-20, 2-3=-40, 3-4=-20, 4-5=-50, 5-6=-70, 6-7=-50, 1-10=-20, 8-10=-100, 7-8=-20, 3-5=-20
 - Drag: 6-8=-10, 2-10=-10
 - Concentrated Loads (lb)
 - Vert: 9=-277(B) 8=-3328(B) 10=-3328(B) 12=-1504(B) 13=-1504(B) 14=-277(B) 15=-277(B) 16=-277(B) 17=-277(B) 18=-277(B) 19=-1504(B) 20=-1504(B)
- 24) Reversal: Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-2=-60, 2-3=-80, 3-4=-60, 4-5=-60, 5-6=-80, 6-7=-60, 1-10=-20, 8-10=-40, 7-8=-20, 3-5=-20
 - Drag: 6-8=-10, 2-10=-10
 - Concentrated Loads (lb)
 - Vert: 9=-49(B) 8=-1096(B) 10=-1096(B) 12=-458(B) 13=-458(B) 14=-49(B) 15=-49(B) 16=-49(B) 17=-49(B) 18=-49(B) 19=-458(B) 20=-458(B)
- 25) Reversal: Dead + 0.75 Roof Live (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-2=-50, 2-3=-70, 3-4=-50, 4-5=-50, 5-6=-70, 6-7=-50, 1-10=-20, 8-10=-100, 7-8=-20, 3-5=-20
 - Drag: 6-8=-10, 2-10=-10
 - Concentrated Loads (lb)
 - Vert: 9=38(B) 8=-1096(B) 10=-1096(B) 12=-458(B) 13=-458(B) 14=38(B) 15=38(B) 16=38(B) 17=38(B) 18=38(B) 19=-458(B) 20=-458(B)

Continued on page 4

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

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



818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 55 Sierra Villas	E14133281
J0920-4174	B1-GR	ATTIC	1	3	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309

8.330 s Feb 13 2020 MiTek Industries, Inc. Tue Mar 3 08:59:44 2020 Page 4
 ID:52Teu6pVqhXamGD1jN0kr4yxDe9-hTAAaG?2UJMUXUNzAnaONAMh68CyW11R2bXS56zehgj

LOAD CASE(S)

- 26) Reversal: Dead + Attic Floor: Lumber Increase=1.00, Plate Increase=1.00
 - Uniform Loads (plf)
 - Vert: 1-2=-20, 2-3=-40, 3-4=-20, 4-5=-20, 5-6=-40, 6-7=-20, 1-10=-20, 8-10=-120, 7-8=-20, 3-5=-20
 - Drag: 6-8=-10, 2-10=-10
 - Concentrated Loads (lb)
 - Vert: 9=67(B) 8=-1096(B) 10=-1096(B) 12=-458(B) 13=-458(B) 14=67(B) 15=67(B) 16=67(B) 17=67(B) 18=67(B) 19=-458(B) 20=-458(B)
- 27) Reversal: Dead: Lumber Increase=1.00, Plate Increase=1.00
 - Uniform Loads (plf)
 - Vert: 1-2=-20, 2-3=-40, 3-4=-20, 4-5=-20, 5-6=-40, 6-7=-20, 1-10=-20, 8-10=-120, 7-8=-20, 3-5=-20
 - Drag: 6-8=-10, 2-10=-10
 - Concentrated Loads (lb)
 - Vert: 9=67(B) 8=-1096(B) 10=-1096(B) 12=-458(B) 13=-458(B) 14=67(B) 15=67(B) 16=67(B) 17=67(B) 18=67(B) 19=-458(B) 20=-458(B)
- 28) Reversal: 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-2=-60, 2-3=-80, 3-4=-60, 4-5=-20, 5-6=-40, 6-7=-20, 1-10=-20, 8-10=-40, 7-8=-20, 3-5=-20
 - Drag: 6-8=-10, 2-10=-10
 - Concentrated Loads (lb)
 - Vert: 9=-49(B) 8=-1096(B) 10=-1096(B) 12=-458(B) 13=-458(B) 14=-49(B) 15=-49(B) 16=-49(B) 17=-49(B) 18=-49(B) 19=-458(B) 20=-458(B)
- 29) Reversal: 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-2=-20, 2-3=-40, 3-4=-20, 4-5=-60, 5-6=-80, 6-7=-60, 1-10=-20, 8-10=-40, 7-8=-20, 3-5=-20
 - Drag: 6-8=-10, 2-10=-10
 - Concentrated Loads (lb)
 - Vert: 9=-49(B) 8=-1096(B) 10=-1096(B) 12=-458(B) 13=-458(B) 14=-49(B) 15=-49(B) 16=-49(B) 17=-49(B) 18=-49(B) 19=-458(B) 20=-458(B)
- 30) Reversal: 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-2=-50, 2-3=-70, 3-4=-50, 4-5=-20, 5-6=-40, 6-7=-20, 1-10=-20, 8-10=-100, 7-8=-20, 3-5=-20
 - Drag: 6-8=-10, 2-10=-10
 - Concentrated Loads (lb)
 - Vert: 9=38(B) 8=-1096(B) 10=-1096(B) 12=-458(B) 13=-458(B) 14=38(B) 15=38(B) 16=38(B) 17=38(B) 18=38(B) 19=-458(B) 20=-458(B)
- 31) Reversal: 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-2=-20, 2-3=-40, 3-4=-20, 4-5=-50, 5-6=-70, 6-7=-50, 1-10=-20, 8-10=-100, 7-8=-20, 3-5=-20
 - Drag: 6-8=-10, 2-10=-10
 - Concentrated Loads (lb)
 - Vert: 9=38(B) 8=-1096(B) 10=-1096(B) 12=-458(B) 13=-458(B) 14=38(B) 15=38(B) 16=38(B) 17=38(B) 18=38(B) 19=-458(B) 20=-458(B)

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

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



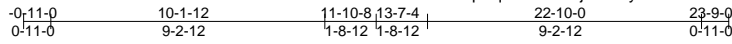
818 Soundside Road
 Edenton, NC 27932

Job J0920-4174	Truss B1GE	Truss Type GABLE	Qty 1	Ply 1	Lot 55 Sierra Villas	E14133282
-------------------	---------------	---------------------	----------	----------	----------------------	-----------

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Feb 13 2020 MiTek Industries, Inc. Tue Mar 3 06:21:09 2020 Page 1

ID:52Teu6pVqhXamGD1jN0kr4yxDe9-HGAIJEwClUpSZb5UxUcOVxqt0OnTE7xuouqBz?Szej78



6x8 =

Scale = 1:77.6

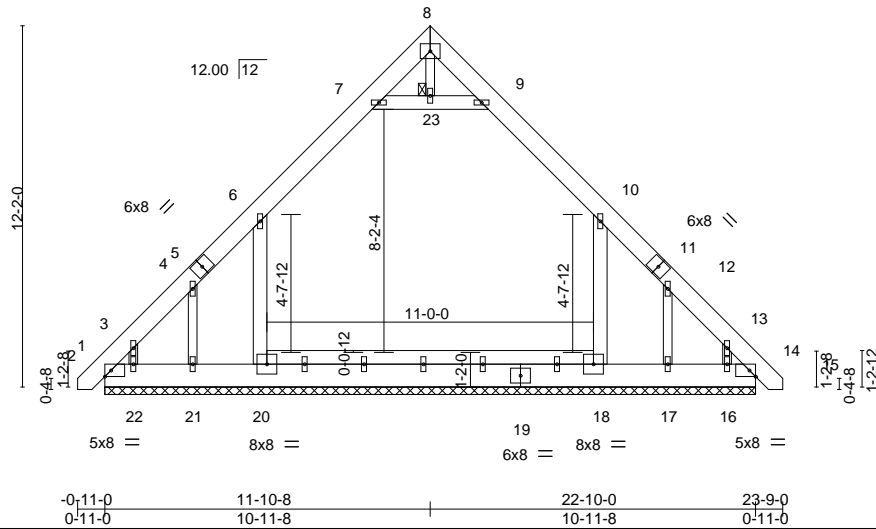


Plate Offsets (X,Y)-- [14:0-2-8,Edge]

LOADING (psf)	SPACING-	CSL	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 0.19	Vert(CT) 0.00	14	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.11	Horz(CT) 0.00	14	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S						
							Weight: 262 lb	FT = 20%

LUMBER-

TOP CHORD 2x8 SP No.1
 BOT CHORD 2x10 SP No.1 *Except*
 18-20: 2x6 SP No.1
 WEBS 2x6 SP No.1 *Except*
 8-23: 2x4 SP No.2
 OTHERS 2x4 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 JOINTS 1 Brace at Jt(s): 23

REACTIONS.

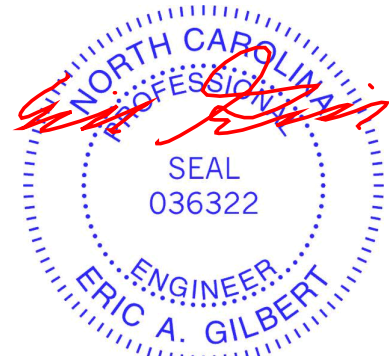
All bearings 21-11-0.
 (lb) - Max Horz 2=-349(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 18, 20, 14 except 21=-379(LC 18),
 22=-189(LC 12), 17=-379(LC 18), 16=-186(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 22, 16 except 2=524(LC 21),
 18=1008(LC 21), 20=1017(LC 20), 14=518(LC 20)

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

TOP CHORD 2-3=-634/67, 3-4=-557/57, 4-6=-520/85, 6-7=-534/151, 9-10=-534/151, 10-12=-510/71,
 12-13=-550/48, 13-14=-629/58
 BOT CHORD 2-22=-43/411, 21-22=-36/411, 20-21=-35/411, 18-20=-35/411, 17-18=-35/411,
 16-17=-35/410, 14-16=-33/406
 WEBS 10-18=-424/210, 6-20=-433/218, 7-23=-350/228, 9-23=-350/228

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x6 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
- Ceiling dead load (10.0 psf) on member(s). 6-7, 9-10, 7-23, 9-23; Wall dead load (5.0psf) on member(s).10-18, 6-20
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 18, 20, 14 except (jt=lb) 21=379, 22=189, 17=379, 16=186.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- Attic room checked for L/360 deflection.



March 3, 2020

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

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

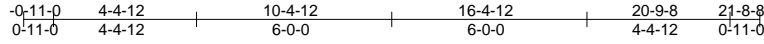


818 Soundside Road
 Edenton, NC 27932

Job J0920-4174	Truss C1	Truss Type COMMON	Qty 2	Ply 1	Lot 55 Sierra Villas	E14133283
-------------------	-------------	----------------------	----------	----------	----------------------	-----------

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Feb 13 2020 MiTek Industries, Inc. Tue Mar 3 06:21:11 2020 Page 1
 ID:52Teu6pVqhXamGD1jN0kr4yxDe9-EfIWkwyS0RiHrOdKb1Qz0FyKUa6PbnR5M8g44Kzej76



5x5 =

Scale = 1:70.8

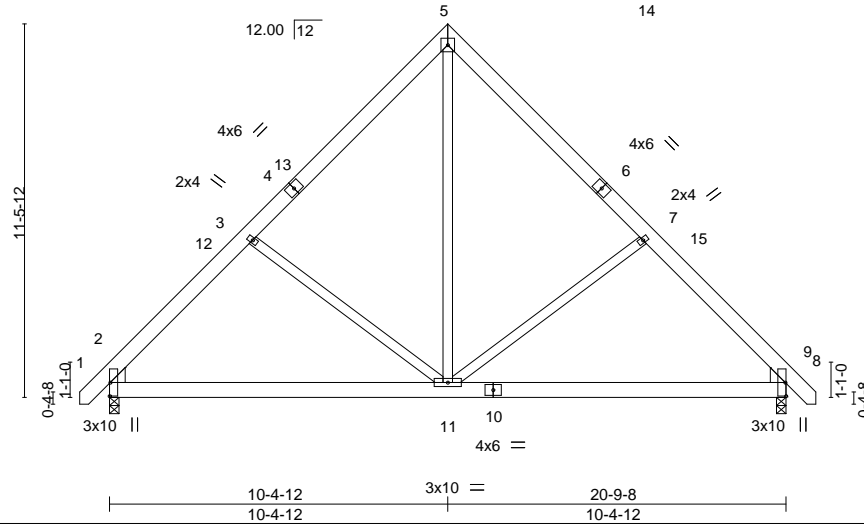


Plate Offsets (X,Y)-- [2:0-0-4,0-3-15], [2:0-0-2,0-0-2], [8:0-0-2,0-0-2], [8:0-0-4,0-3-15]

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 0.15	Vert(LL)	-0.05	2-11	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.33	Vert(CT)	-0.11	2-11	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.36	Horz(CT)	0.01	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.01	11	>999		
								Weight: 164 lb	FT = 20%

LUMBER-

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

Left: 2x6 SP No.1 , Right: 2x6 SP No.1

REACTIONS.

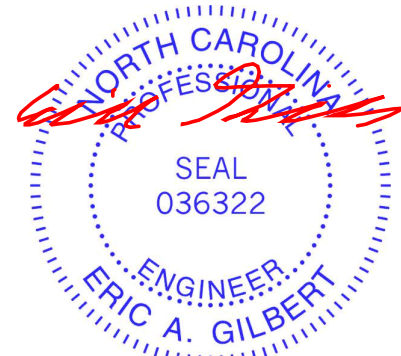
(size) 8=0-3-8, 2=0-3-8
 Max Horz 2=-268(LC 10)
 Max Uplift 8=-36(LC 13), 2=-36(LC 12)
 Max Grav 8=876(LC 1), 2=876(LC 1)

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

TOP CHORD 2-3=-908/254, 3-5=-752/282, 5-7=-752/282, 7-8=-908/254
 BOT CHORD 2-11=-122/675, 8-11=-60/568
 WEBS 5-11=-179/668, 7-11=-354/267, 3-11=-354/267

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-6 to 3-7-7, Interior(1) 3-7-7 to 10-4-12, Exterior(2) 10-4-12 to 14-9-9, Interior(1) 14-9-9 to 21-6-14 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 2.



March 3,2020

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

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

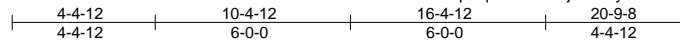


818 Soundside Road
 Edenton, NC 27932

Job J0920-4174	Truss C1-GR	Truss Type Common Girder	Qty 1	Ply 2	Lot 55 Sierra Villas	E14133284
-------------------	----------------	-----------------------------	----------	----------	----------------------	-----------

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Feb 13 2020 MiTek Industries, Inc. Tue Mar 3 06:21:14 2020 Page 1
ID:52Teu6pVqhXamGD1jN0kr4yxDe9-eEzeMy_LJM4sisMvGA_getajjo5Qo2ZX26ukgfzej73



5x8 ||

Scale = 1:70.8

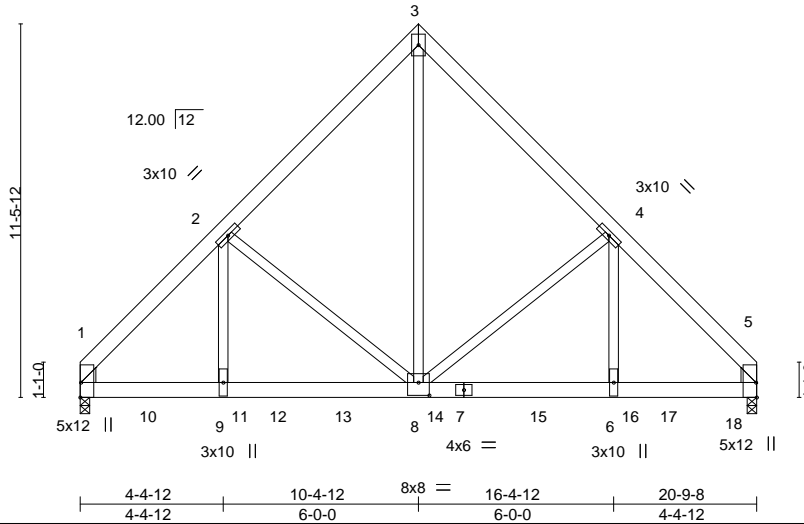


Plate Offsets (X,Y)-- [1:0-0-2,0-0-2], [1:0-0-4,0-3-15], [1:Edge,0-0-4], [5:Edge,0-0-4], [5:0-0-4,0-3-15], [5:0-0-2,0-0-2], [8:0-4-0,0-4-12]

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 0.66	Vert(LL)	-0.07	8-9	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.51	Vert(CT)	-0.14	8-9	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.66	Horz(CT)	0.03	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.05	8-9	>999		
								Weight: 344 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP 2400F 2.0E
 WEBS 2x4 SP No.2
 WEDGE
 Left: 2x6 SP No.1 , Right: 2x6 SP No.1

BRACING-

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

REACTIONS.

(size) 1=0-3-8, 5=0-3-8
 Max Horz 1=-262(LC 25)
 Max Uplift 1=-253(LC 9), 5=-280(LC 8)
 Max Grav 1=5355(LC 1), 5=5963(LC 1)

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

TOP CHORD 1-2=-6430/344, 2-3=-4163/337, 3-4=-4190/337, 4-5=-6409/342
 BOT CHORD 1-9=-278/4164, 8-9=-278/4173, 6-8=-168/4165, 5-6=-168/4157
 WEBS 3-8=-332/5361, 4-8=-1673/259, 4-6=-65/2655, 2-8=-1683/259, 2-9=-66/2684

NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 1=253, 5=280.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 967 lb down and 55 lb up at 2-0-12, 967 lb down and 55 lb up at 4-0-12, 967 lb down and 55 lb up at 6-0-12, 967 lb down and 55 lb up at 8-0-12, 967 lb down and 55 lb up at 10-0-12, 967 lb down and 55 lb up at 12-0-12, 967 lb down and 55 lb up at 14-0-12, 967 lb down and 55 lb up at 16-0-12, and 967 lb down and 55 lb up at 18-0-12, and 971 lb down and 51 lb up at 20-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard



March 3, 2020

Continued on page 2

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

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



818 Soundside Road
 Edenton, NC 27932

Job J0920-4174	Truss C1-GR	Truss Type Common Girder	Qty 1	Ply 2	Lot 55 Sierra Villas Job Reference (optional)	E14133284
-------------------	----------------	-----------------------------	----------	-----------------	--	-----------

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Feb 13 2020 MiTek Industries, Inc. Tue Mar 3 06:21:14 2020 Page 2
ID:52Teu6pVqhXamGD1jN0kr4yxDe9-eEzeMy_LJM4sisMvGA_getajjo5Qo2ZX26ukgfzej73

LOAD CASE(S) Standard

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

Uniform Loads (plf)

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

Concentrated Loads (lb)

Vert: 7=-967(B) 10=-967(B) 11=-967(B) 12=-967(B) 13=-967(B) 14=-967(B) 15=-967(B) 16=-967(B) 17=-967(B) 18=-971(B)

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

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

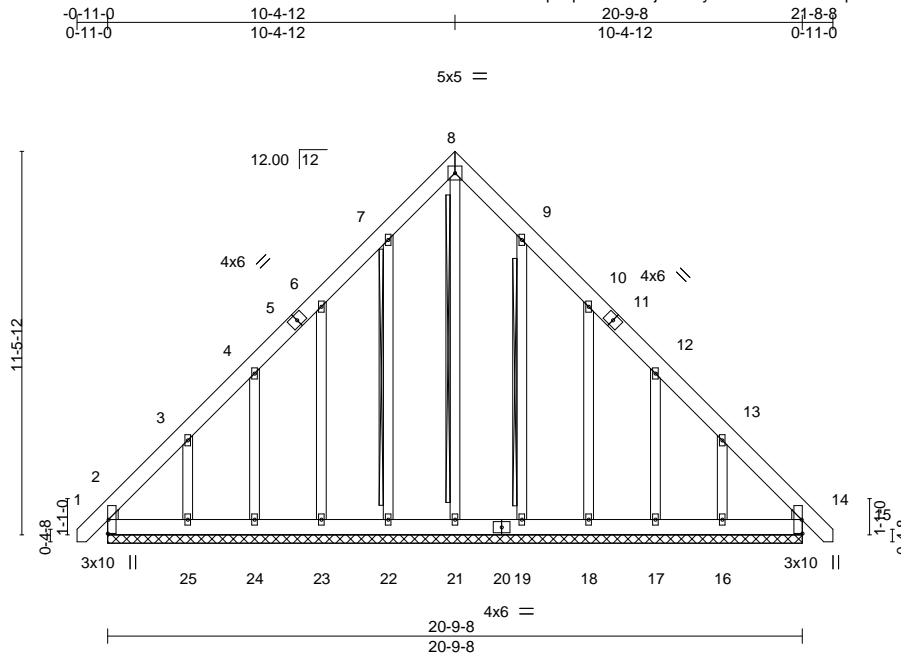
ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job J0920-4174	Truss C1GE	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	Lot 55 Sierra Villas	E14133285
-------------------	---------------	------------------------------------	----------	----------	----------------------	-----------

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Feb 13 2020 MiTek Industries, Inc. Tue Mar 3 06:21:12 2020 Page 1
ID:52Teu6pVqhXamGD1jN0kr4yxDe9-irsuxGz5nkq8TYCW9lyCZSVXo_WDKHuEboPdcnzej75



Scale = 1:69.0

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

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.05	Vert(LL) 0.00	14	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.04	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: 207 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
OTHERS 2x4 SP No.2
WEDGE
Left: 2x4 SP No.2, Right: 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 - 8-21, 7-22, 9-19
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 20-9-8.
(lb) - Max Horz 2=-335(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 19, 14 except 2=-118(LC 10), 22=-103(LC 12), 23=-155(LC 12), 24=-129(LC 12), 25=-246(LC 12), 18=-158(LC 13), 17=-128(LC 13), 16=-239(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 21, 24, 19, 17, 16 except 2=304(LC 12), 22=251(LC 19), 23=259(LC 19), 25=252(LC 19), 18=262(LC 20), 14=268(LC 22)

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

TOP CHORD 2-3=-450/274, 13-14=-400/265
BOT CHORD 2-25=-211/327, 24-25=-213/328, 23-24=-213/328, 22-23=-214/328, 21-22=-214/328, 19-21=-214/328, 18-19=-214/328, 17-18=-213/327, 16-17=-213/327, 14-16=-211/326
WEBS 3-25=-261/253, 13-16=-261/247

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19, 14 except (jt=lb) 2=118, 22=103, 23=155, 24=129, 25=246, 18=158, 17=128, 16=239.
- Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



March 3, 2020

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

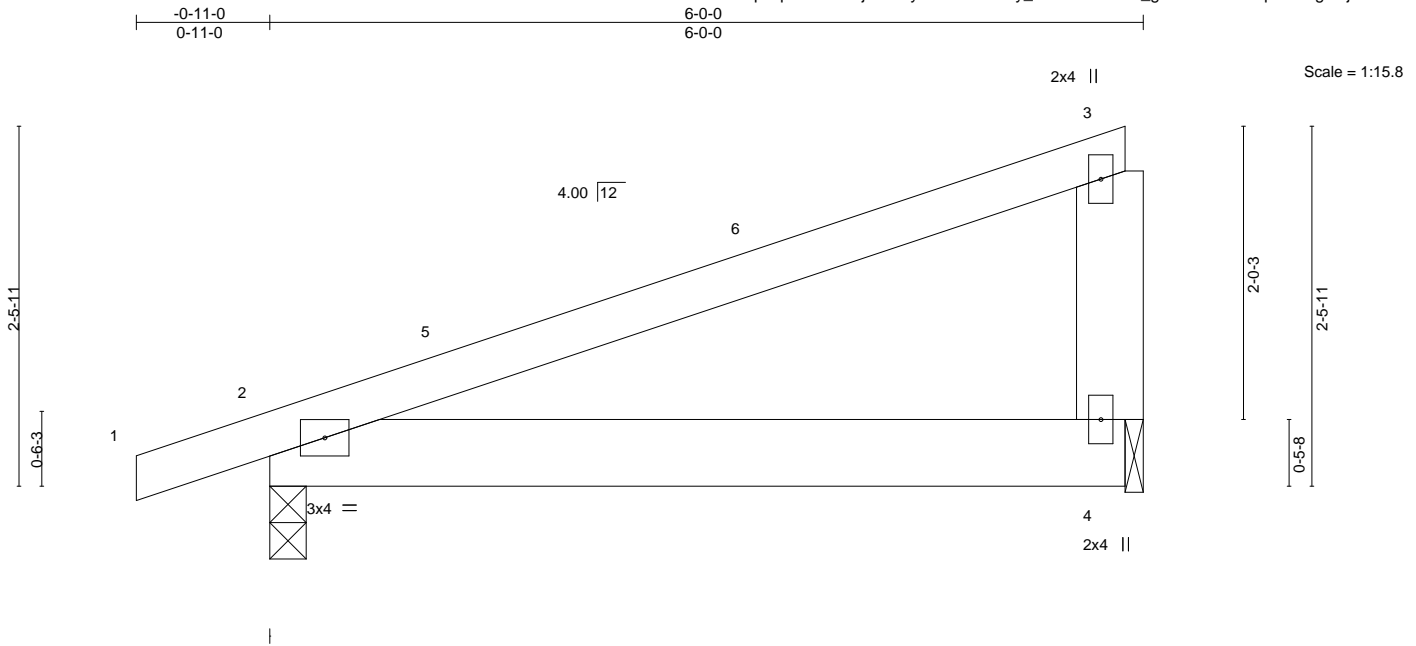
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



818 Soundside Road
Edenton, NC 27932

Job J0920-4174	Truss M1	Truss Type MONOPITCH	Qty 10	Ply 1	Lot 55 Sierra Villas	E14133286
Comtech, Inc., Fayetteville, NC - 28314,					Job Reference (optional)	

8.330 s Feb 13 2020 MiTek Industries, Inc. Tue Mar 3 06:21:14 2020 Page 1
ID:52Teu6pVqhXamGD1jN0kr4yxDe9-eEzeMy_LJM4sisMvGA_getanBoBooCqX26ukgfzej73



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.44	Vert(LL) -0.01	2-4	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.12	Vert(CT) -0.03	2-4	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Horz(CT) 0.00		n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Wind(LL) 0.03	2-4	>999	240	Weight: 29 lb	FT = 20%
	Code IRC2015/TPI2014							

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

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

REACTIONS. (size) 2=0-3-0, 4=0-1-8
Max Horz 2=75(LC 8)
Max Uplift 2=-116(LC 8), 4=-96(LC 8)
Max Grav 2=294(LC 1), 4=220(LC 1)

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

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-11-0 to 3-5-13, Interior(1) 3-5-13 to 5-9-4 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
 - 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=bl) 2=116.

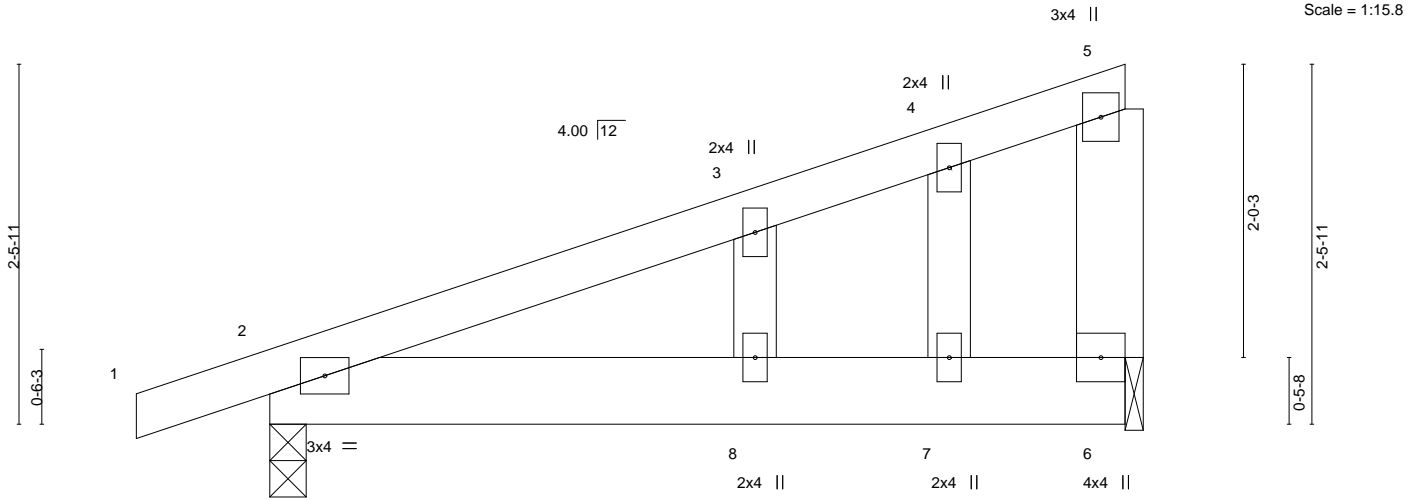


March 3, 2020

Job J0920-4174	Truss M1GE	Truss Type GABLE	Qty 1	Ply 1	Lot 55 Sierra Villas	E14133287
Comtech, Inc., Fayetteville, NC - 28314,					Job Reference (optional)	

8.330 s Feb 13 2020 MiTek Industries, Inc. Tue Mar 3 06:21:15 2020 Page 1

ID:52Teu6pVqhXamGD1jN0kr4yxDe9-6QX1al?z4fCIk0x5qtVvB571oBWJXflgHmeHD5zej72



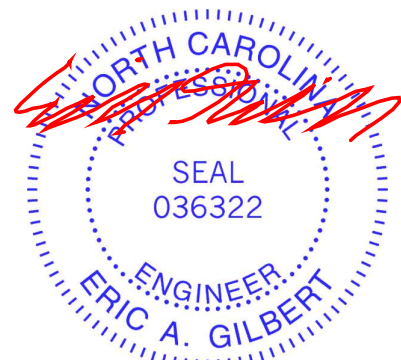
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.13	Vert(LL)	0.03	2-8	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	-0.02	2-8	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	-0.00	6	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S					Weight: 32 lb	FT = 20%

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

REACTIONS. (size) 2=0-3-0, 6=0-1-8
 Max Horz 2=107(LC 8)
 Max Uplift 2=167(LC 8), 6=140(LC 8)
 Max Grav 2=294(LC 1), 6=220(LC 1)

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

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 3) Gable studs spaced at 1-4-0 oc.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
 - 6) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 6.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=167, 6=140.

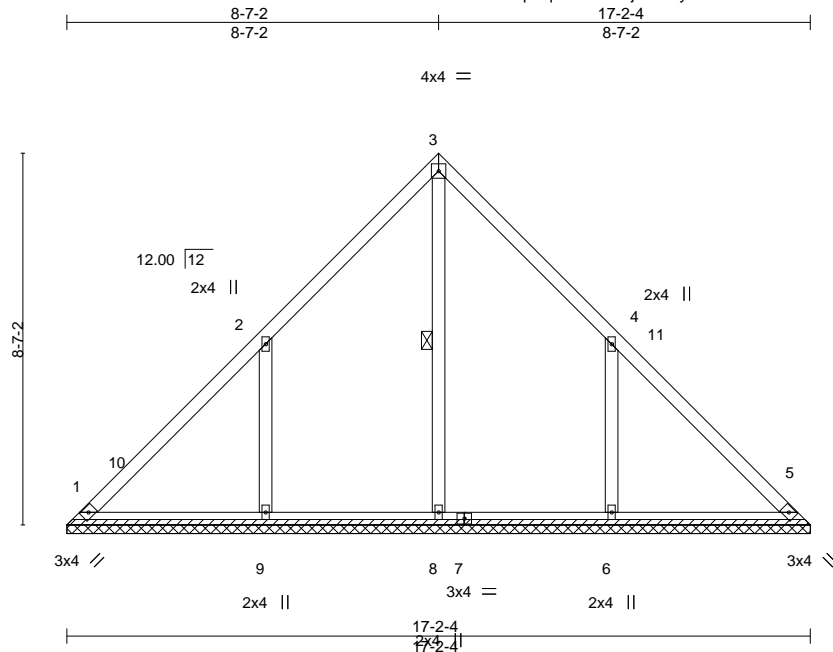


March 3, 2020

Job J0920-4174	Truss V1	Truss Type VALLEY	Qty 1	Ply 1	Lot 55 Sierra Villas	E14133288
-------------------	-------------	----------------------	----------	----------	----------------------	-----------

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Feb 13 2020 MiTek Industries, Inc. Tue Mar 3 06:21:15 2020 Page 1
ID:52Teu6pVqhXamGD1jN0kr4yxDe9-6QX1al?z4fCiK0x5qtVvB57?dBWVXd_gHmeHD5zej72



Scale = 1:53.3

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.20	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.13	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.13	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 84 lb	FT = 20%
	Code IRC2015/TPI2014							

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-8

REACTIONS. All bearings 17-2-4.
(lb) - Max Horz 1=198(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 9=207(LC 12), 6=207(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 8=347(LC 22), 9=510(LC 19), 6=509(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-9=-445/331, 4-6=-445/331

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-7-2, Interior(1) 4-7-2 to 8-7-2, Exterior(2) 8-7-2 to 12-11-15, Interior(1) 12-11-15 to 16-10-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 9=207, 6=207.



March 3, 2020

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

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

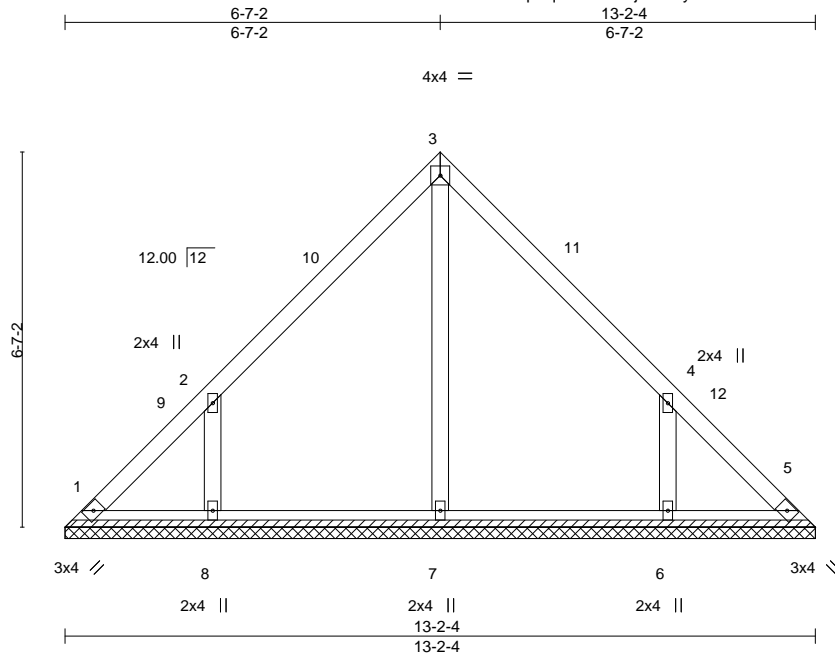
ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job J0920-4174	Truss V2	Truss Type VALLEY	Qty 1	Ply 1	Lot 55 Sierra Villas	E14133289
-------------------	-------------	----------------------	----------	----------	----------------------	-----------

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Feb 13 2020 MiTek Industries, Inc. Tue Mar 3 06:21:16 2020 Page 1
ID:52Teu6pVqhXamGD1jN0kr4yxDe9-ac5Pnd0brzKZx9WHOa08jlgBLbtQG5uqWQNqlyzej71



Scale = 1:40.5

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.14	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.09	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.09	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S						
	Code IRC2015/TPI2014						Weight: 61 lb	FT = 20%

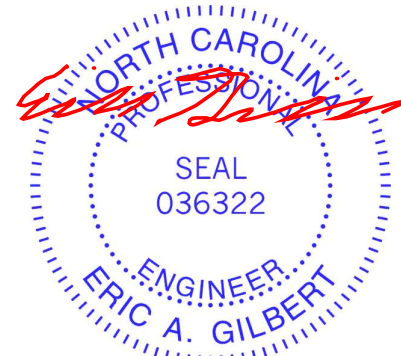
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

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

REACTIONS. All bearings 13-2-4.
(lb) - Max Horz 1=150(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=164(LC 12), 6=163(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=349(LC 19), 6=348(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-359/290, 4-6=-359/290

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 6-7-2, Exterior(2) 6-7-2 to 10-11-15, Interior(1) 10-11-15 to 12-10-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=164, 6=163.



March 3, 2020

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

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

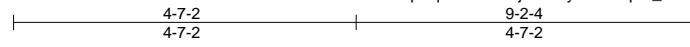
ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job J0920-4174	Truss V3	Truss Type VALLEY	Qty 1	Ply 1	Lot 55 Sierra Villas	E14133290
-------------------	-------------	----------------------	----------	----------	----------------------	-----------

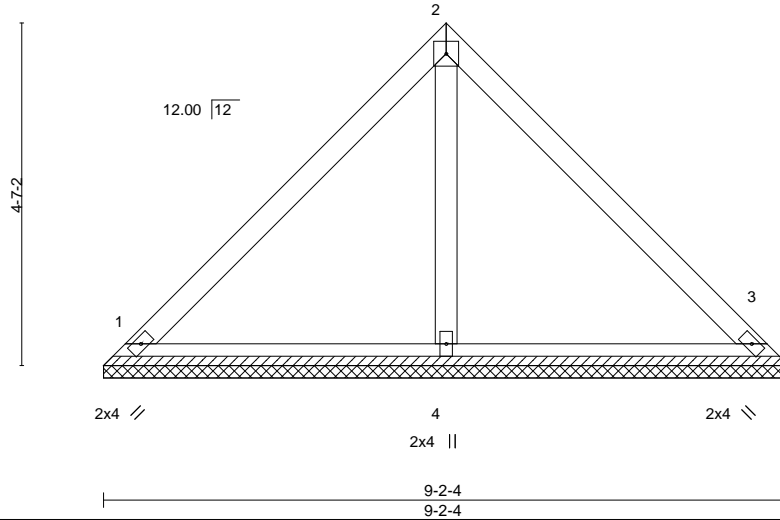
Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Feb 13 2020 MiTek Industries, Inc. Tue Mar 3 06:21:17 2020 Page 1
ID:52Teu6pVqhXamGD1jN0kr4yxDe9-2pfn_z1DbHSQZJ5UylXNGWCLC?Cx?Zmk47OH_zej70



4x4 =

Scale = 1:30.9



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.20	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.13	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S					Weight: 38 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=9-2-4, 3=9-2-4, 4=9-2-4
Max Horz 1=102(LC 8)
Max Uplift 1=-25(LC 13), 3=-25(LC 13)
Max Grav 1=192(LC 1), 3=192(LC 1), 4=294(LC 1)

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

NOTES-

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



March 3, 2020

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

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

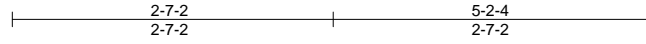
ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

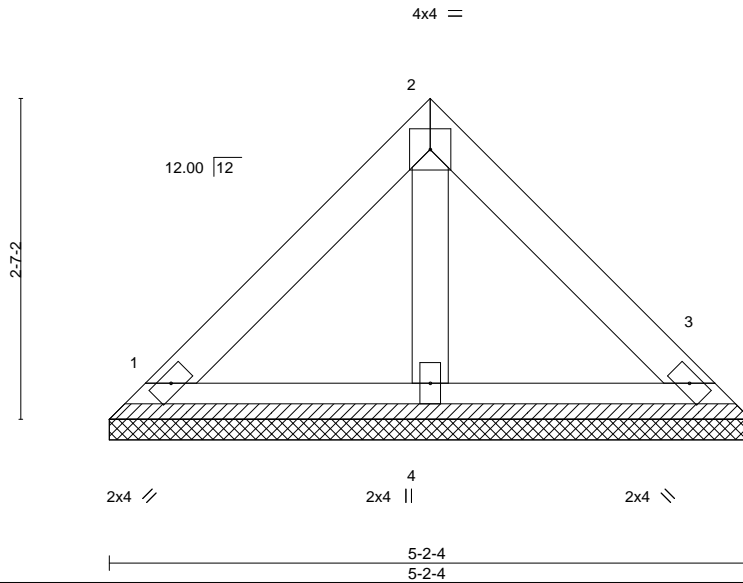
Job J0920-4174	Truss V4	Truss Type VALLEY	Qty 1	Ply 1	Lot 55 Sierra Villas	E14133291
-------------------	-------------	----------------------	----------	----------	----------------------	-----------

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Feb 13 2020 MiTek Industries, Inc. Tue Mar 3 06:21:17 2020 Page 1
ID:52Teu6pVqhXamGD1jN0kr4yxDe9-2pfn_z1DbHSQZJ5UylXNGWCN??ES?ZPzk47OH_zej70



Scale = 1:18.6



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 0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.01	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-P						Weight: 20 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 5-2-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

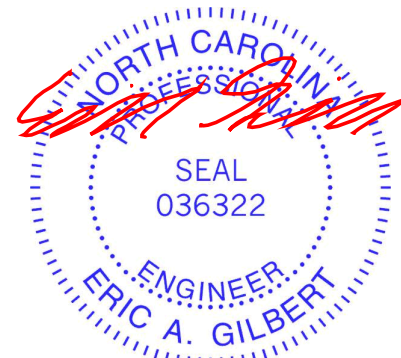
REACTIONS.

(size) 1=5-2-4, 3=5-2-4, 4=5-2-4
Max Horz 1=54(LC 9)
Max Uplift 1=-19(LC 13), 3=-19(LC 13)
Max Grav 1=109(LC 1), 3=109(LC 1), 4=140(LC 1)

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

NOTES-

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



March 3, 2020

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

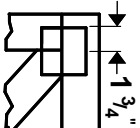
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



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



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



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

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

PLATE SIZE

4 X 4

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

LATERAL BRACING LOCATION



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

BEARING



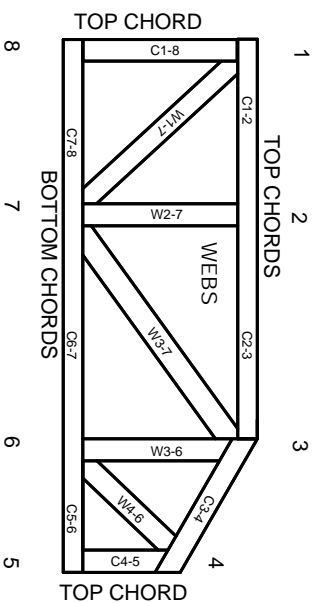
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System

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



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

© 2012 MITteK® All Rights Reserved



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



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative T or I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/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.