

Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: J0423-1890  
Wellco/Lot 1 Overhills Creek/Harnett

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

Pages or sheets covered by this seal: I58266734 thru I58266770

My license renewal date for the state of North Carolina is December 31, 2023.

North Carolina COA: C-0844



May 10, 2023

Gilbert, Eric

**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 MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or 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.

Job J0423-1890	Truss A1	Truss Type PIGGYBACK BASE	Qty 6	Ply 1	Wellco/Lot 1 Overhills Creek/Harnett Job Reference (optional)	I58266734
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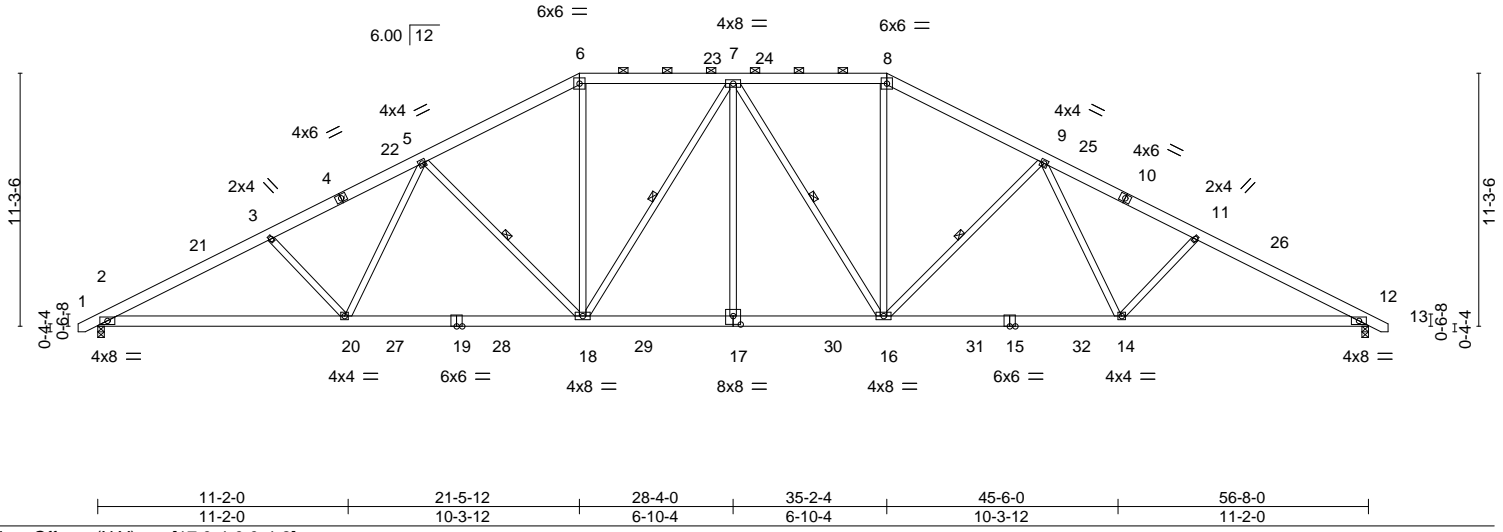
Comtech, Inc. Fayetteville, NC - 28314,

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ID:8XVK7MoEEgDYV6B4ZyI0r5yy8ZO-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

0-10-8	7-8-12	14-7-4	21-5-12	28-4-0	35-2-4	42-0-12	48-11-4	56-8-0	57-6-8
0-10-8	7-8-12	6-10-8	6-10-8	6-10-4	6-10-4	6-10-8	6-10-8	7-8-12	0-10-8

Scale = 1:102.7



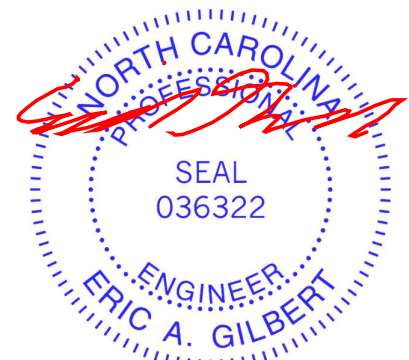
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.20	Vert(LL)	-0.27	18-20	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.37	Vert(CT)	-0.45	18-20	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.40	Horz(CT)	0.15	12	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.13	17	>999		
								Weight: 430 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied or 4-7-4 oc purlins, except 2-0-0 oc purlins (5-9-6 max.): 6-8.
BOT CHORD 2x6 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	WEBS 1 Row at midpt 5-18, 7-18, 7-16, 9-16

**REACTIONS.** (size) 2=0-3-8, 12=0-3-8  
 Max Horz 2=-145(LC 10)  
 Max Uplift 2=-111(LC 12), 12=-111(LC 13)  
 Max Grav 2=2420(LC 2), 12=2420(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-4696/1021, 3-5=-4470/1004, 5-6=-3587/927, 6-7=-3150/900, 7-8=-3150/900, 8-9=-3587/927, 9-11=-4470/1004, 11-12=-4696/1021  
 BOT CHORD 2-20=-818/4117, 18-20=-673/3663, 17-18=-473/3348, 16-17=-473/3348, 14-16=-666/3663, 12-14=-810/4117  
 WEBS 3-20=-368/249, 5-20=-53/654, 5-18=-790/334, 6-18=-197/1227, 7-18=-529/142, 7-17=0/378, 7-16=-529/142, 8-16=-197/1227, 9-16=-790/334, 9-14=-52/654, 11-14=-368/249

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-10 to 4-11-6, Interior(1) 4-11-6 to 21-5-12, Exterior(2) 21-5-12 to 29-5-15, Interior(1) 29-5-15 to 35-2-4, Exterior(2) 35-2-4 to 43-2-7, Interior(1) 43-2-7 to 57-4-10 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=111, 12=111.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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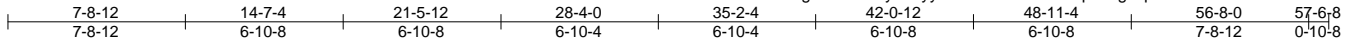
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss 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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p>ENGINEERING BY  <b>TRENCO</b>  <small>A MITEK Affiliate</small></p> <p>818 Soundside Road        Edenton, NC 27932</p>
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Job J0423-1890	Truss A1A	Truss Type PIGGYBACK BASE	Qty 1	Ply 1	Wellco/Lot 1 Overhills Creek/Harnett Job Reference (optional)	158266735
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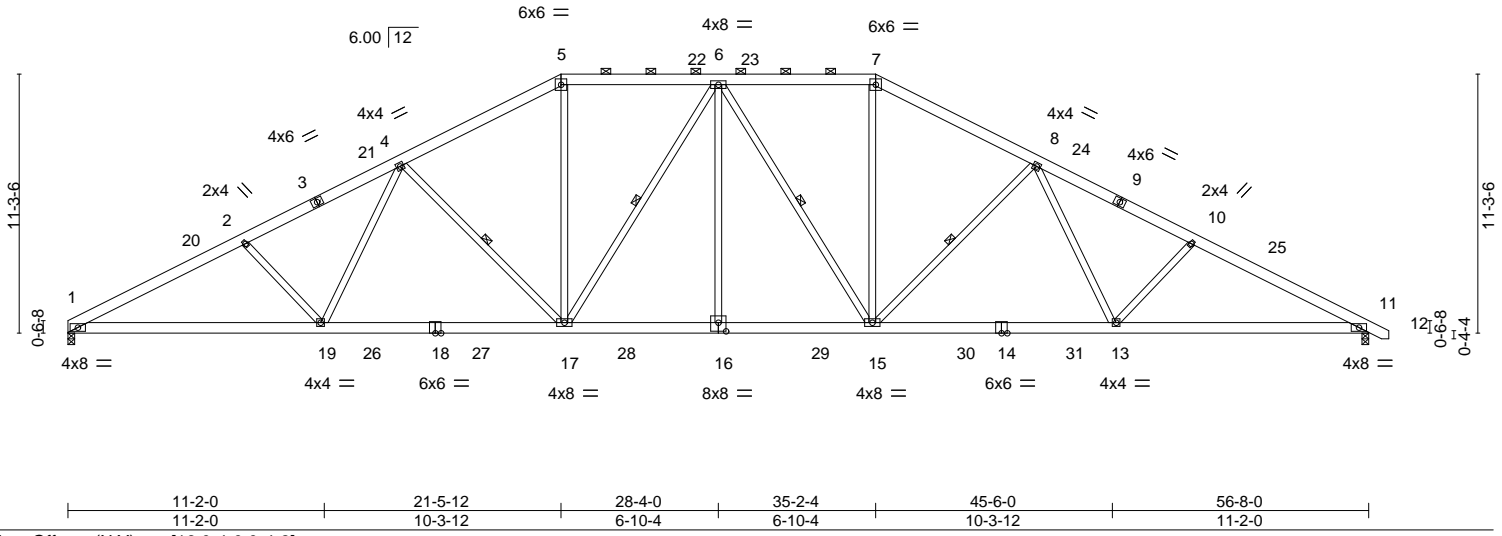


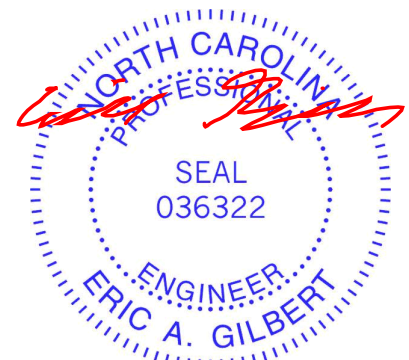
Plate Offsets (X,Y)--	[16:0-4-0-0-4-8]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.22	Vert(LL) -0.27 17-19 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.37	Vert(CT) -0.46 17-19 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.40	Horz(CT) 0.15 11 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.13 16 >999 240	Weight: 428 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied or 4-7-0 oc purlins, except 2-0-0 oc purlins (5-9-6 max.): 5-7.
BOT CHORD 2x6 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	WEBS 1 Row at midpt 4-17, 6-17, 6-15, 8-15

**REACTIONS.** (size) 1=0-3-8, 11=0-3-8  
 Max Horz 1=-146(LC 8)  
 Max Uplift 1=-99(LC 12), 11=-111(LC 13)  
 Max Grav 1=2377(LC 2), 11=2420(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-4701/1044, 2-4=-4473/1009, 4-5=-3588/928, 5-6=-3151/901, 6-7=-3150/904, 7-8=-3587/932, 8-10=-4470/1008, 10-11=-4697/1026  
 BOT CHORD 1-19=-822/4122, 17-19=-673/3665, 16-17=-473/3348, 15-16=-473/3348, 13-15=-670/3664, 11-13=-814/4117  
 WEBS 2-19=-372/271, 4-19=-68/656, 4-17=-790/333, 5-17=-200/1227, 6-17=-529/139, 6-16=0/378, 6-15=-529/142, 7-15=-197/1227, 8-15=-790/334, 8-13=-52/654, 10-13=-368/249

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 5-9-12, Interior(1) 5-9-12 to 21-5-12, Exterior(2) 21-5-12 to 29-5-15, Interior(1) 29-5-15 to 35-2-4, Exterior(2) 35-2-4 to 43-2-7, Interior(1) 43-2-7 to 57-4-10 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 11=111.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b>          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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p>ENGINEERING BY  <b>TRENCO</b>          A MITEK Affiliate</p> <p>818 Soundside Road          Edenton, NC 27932</p>
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Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 1 Overhills Creek/Harnett	158266736
J0423-1890	A1GE	GABLE	1	1	Job Reference (optional)	

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ID:8XVK7MoEgDYV6B4ZyI0r5yy8ZO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

-0-10-8	21-5-12	35-2-4	56-8-0	57-6-8
0-10-8	21-5-12	13-8-8	21-5-12	0-10-8

Scale = 1:102.7

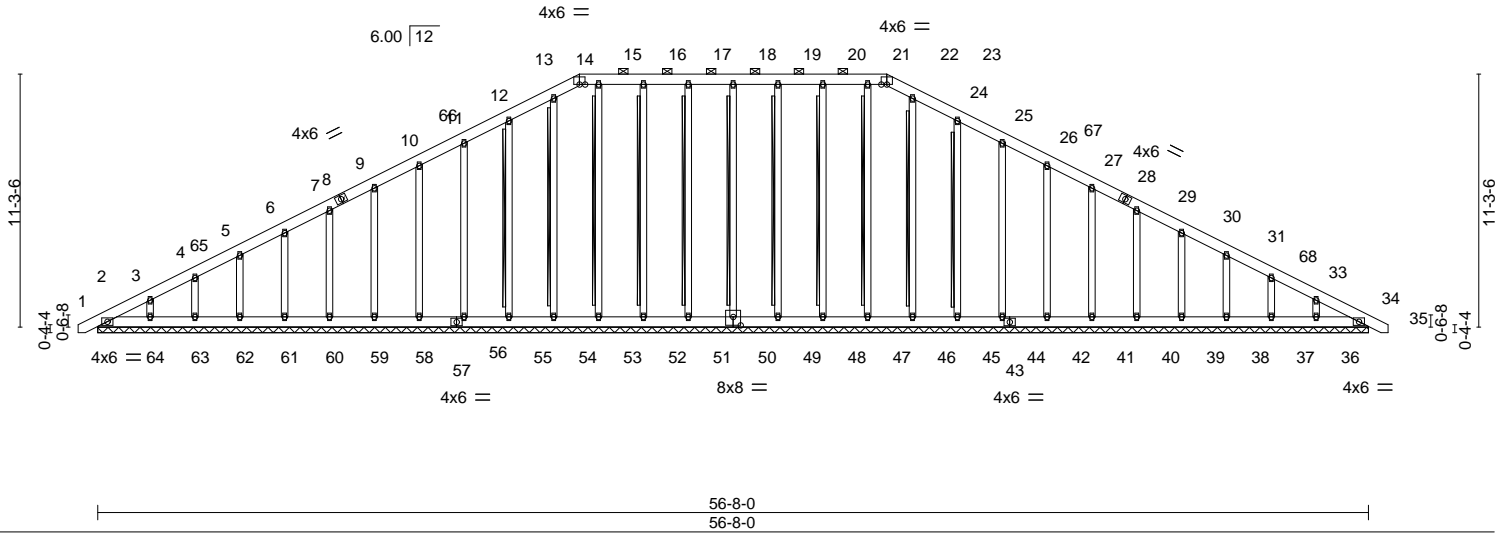


Plate Offsets (X,Y)--	[50:0-4-0-0-4-8]								
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	0.00	34	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	0.00	34	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.14	Horz(CT)	0.01	34	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 548 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>	
TOP CHORD 2x6 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 14-22.
BOT CHORD 2x6 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.2	WEBS	T-Brace: 2x4 SPF No.2 - 18-50, 17-51, 16-52, 15-53, 13-54, 12-55, 19-49, 20-48, 21-47, 23-46, 24-45
		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 56-8-0.  
 (lb) - Max Horz 2--225(LC 13)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 50, 51, 52, 53, 54, 55, 56, 58, 59, 60, 61, 62, 63, 64, 49, 48, 45, 44, 42, 41, 40, 39, 38, 37, 36  
 Max Grav All reactions 250 lb or less at joint(s) 2, 34, 50, 51, 52, 53, 54, 55, 56, 58, 59, 60, 61, 62, 63, 64, 49, 48, 47, 46, 45, 44, 42, 41, 40, 39, 38, 37, 36

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3--310/105, 10-11--94/291, 11-12--115/351, 12-13--137/413, 13-14--142/420, 14-15--132/418, 15-16--132/418, 16-17--132/418, 17-18--132/418, 18-19--132/418, 19-20--132/418, 20-21--132/418, 21-22--132/418, 22-23--142/422, 23-24--137/415, 24-25--115/353, 25-26--94/294

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-8-10 to 4-11-6, Exterior(2) 4-11-6 to 21-5-12, Corner(3) 21-5-12 to 27-1-12, Exterior(2) 27-1-12 to 35-2-4, Corner(3) 35-2-4 to 40-10-4, Exterior(2) 40-10-4 to 57-4-10 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 4) Provide adequate drainage to prevent water ponding.
  - 5) All plates are 2x4 MT20 unless otherwise indicated.
  - 6) Gable requires continuous bottom chord bearing.
  - 7) Gable studs spaced at 2-0-0 oc.
  - 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 9) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 50, 51, 52, 53, 54, 55, 56, 58, 59, 60, 61, 62, 63, 64, 49, 48, 45, 44, 42, 41, 40, 39, 38, 37, 36.



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

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

Job J0423-1890	Truss A1GE	Truss Type GABLE	Qty 1	Ply 1	Wellco/Lot 1 Overhills Creek/Harnett I58266736 Job Reference (optional)
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 10 08:28:54 2023 Page 2  
ID:8XVK7MoEEgDYV6B4ZyI0r5yy8ZO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

**NOTES-**

12) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

**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



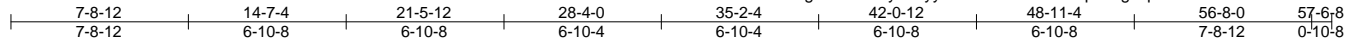
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 1 Overhills Creek/Harnett	158266737
J0423-1890	A2	PIGGYBACK BASE	2	1	Job Reference (optional)	

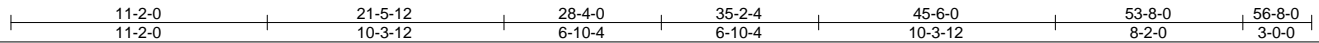
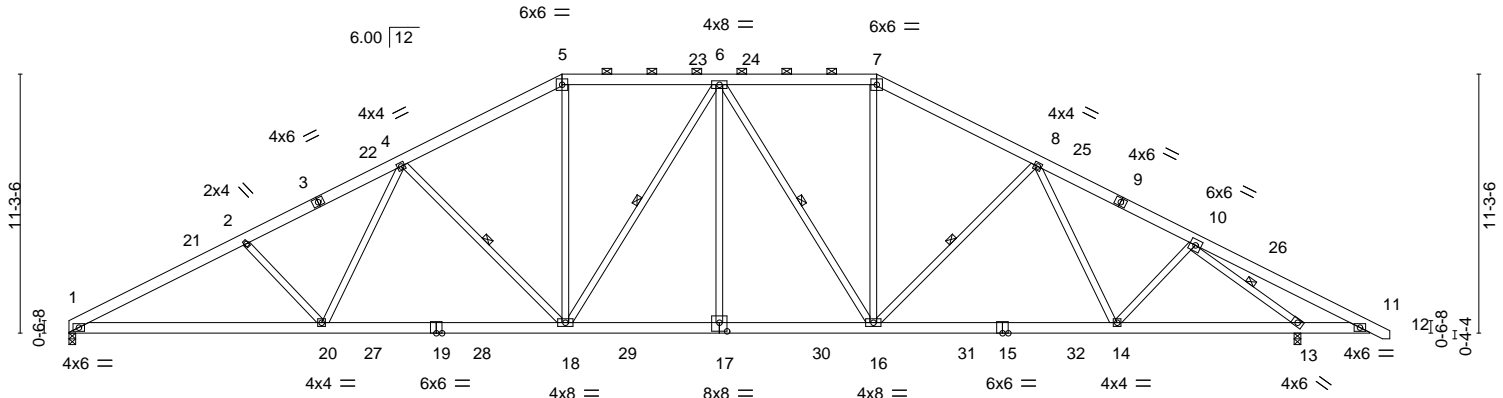
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 10 08:28:55 2023 Page 1

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Scale = 1:100.4



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 0.40	Vert(LL)	-0.26	18-20	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.36	Vert(CT)	-0.44	18-20	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.67	Horz(CT)	0.12	13	n/a		
BCDL 10.0	Code IRC2015/TP12014		Matrix-S	Wind(LL)	0.11	18	>999		
								Weight: 437 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 3-4-9 oc purlins, except 2-0-0 oc purlins (4-5-15 max.): 5-7.
BOT CHORD 2x6 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 11-13.
WEBS 2x4 SP No.2	WEBS 1 Row at midpt 4-18, 6-18, 6-16, 8-16, 10-13

<b>REACTIONS.</b>	(size) 1=0-3-8, 13=0-3-8
	Max Horz 1=146(LC 8)
	Max Uplift 1=101(LC 12), 13=116(LC 13)
	Max Grav 1=2252(LC 2), 13=2547(LC 2)

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-4432/981, 2-4=-4204/946, 4-5=-3313/854, 5-6=-2903/834, 6-7=-2751/810, 7-8=-3145/827, 8-10=-3322/746, 10-11=-346/328
BOT CHORD	1-20=-758/3884, 18-20=-608/3422, 17-18=-396/3027, 14-16=-502/2938, 13-14=-449/2568, 11-13=-205/412
WEBS	2-20=-373/272, 4-20=-69/660, 4-18=-795/335, 5-18=-172/1112, 6-18=-395/139, 6-17=0/375, 6-16=-644/182, 7-16=-146/1037, 8-16=-355/229, 10-14=0/517, 10-13=-3540/987

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 5-9-12, Interior(1) 5-9-12 to 21-5-12, Exterior(2) 21-5-12 to 29-5-15, Interior(1) 29-5-15 to 35-2-4, Exterior(2) 35-2-4 to 43-2-7, Interior(1) 43-2-7 to 57-4-10 zone; cantilever right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=101, 13=116.
  - 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 10, 2023

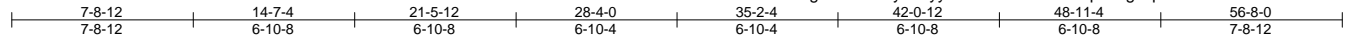
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss 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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p>818 Soundside Road Edenton, NC 27932</p>
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Job J0423-1890	Truss A3	Truss Type ROOF TRUSS	Qty 4	Ply 1	Wellco/Lot 1 Overhills Creek/Harnett 158266738
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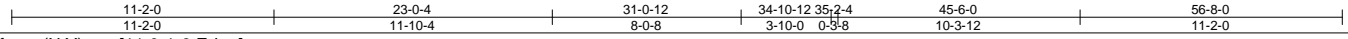
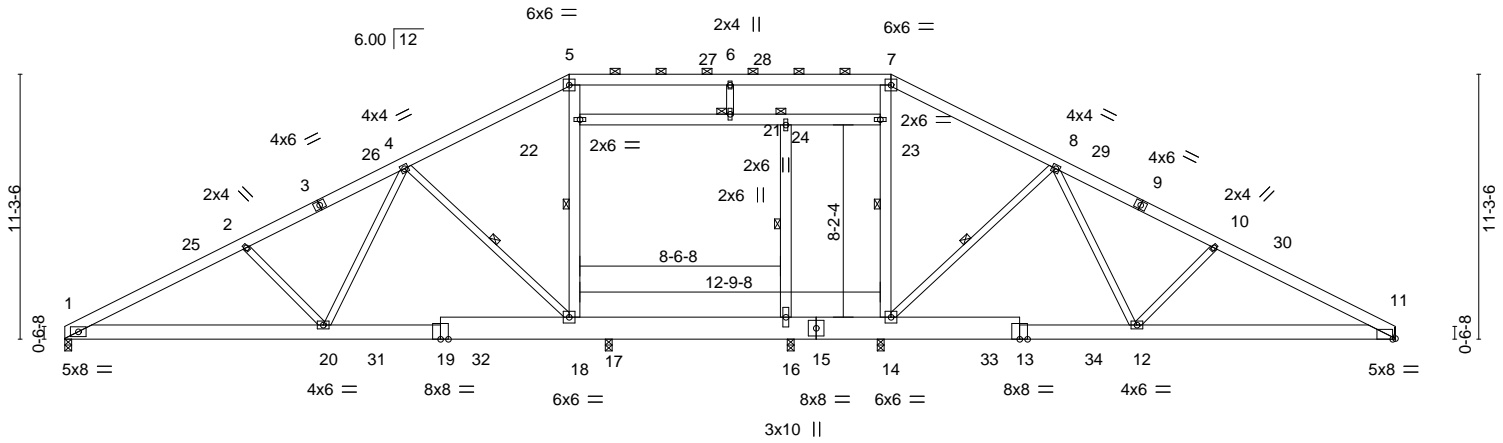
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 10 08:28:56 2023 Page 1

ID:8XVK7MoEEgDYV6B4ZyI0r5yy8ZO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:98.1



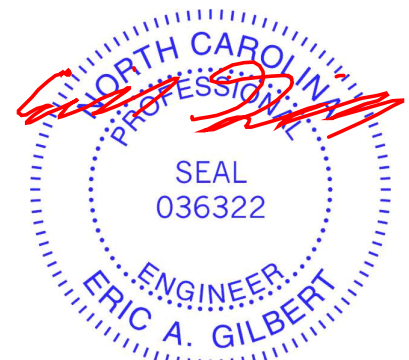
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	-0.07 18-20 >999 360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.12 18-20 >999 240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.01 11 n/a n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.03 18-20 >999 240		
								Weight: 523 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x6 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (10-0-0 max.): 5-7.
BOT CHORD	2x8 SP No.1 *Except* 13-15,15-19: 2x12 SP No.1	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	2x4 SP No.2 *Except* 5-18,7-14,22-23,16-24: 2x6 SP No.1	WEBS	1 Row at midpt 18-22, 7-14, 8-14, 16-24, 4-18
		JOINTS	1 Brace at Jt(s): 21, 24

**REACTIONS.** All bearings 0-3-8 except (jt=length) 11=Mechanical.  
 (lb) - Max Horz 1=140(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 11 except 14=102(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) except 1=763(LC 24), 14=1531(LC 2), 11=707(LC 25), 16=764(LC 27), 17=2238(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-1183/234, 2-4=-866/194, 4-5=-4/501, 5-6=0/442, 6-7=0/442, 7-8=-5/502, 8-10=-716/176, 10-11=-1018/218  
 BOT CHORD 1-20=-139/976, 18-20=-37/389, 17-18=-379/356, 16-17=-379/356, 14-16=-379/356, 12-14=0/299, 11-12=-86/850  
 WEBS 18-22=-812/213, 5-22=-607/225, 6-21=-400/226, 14-23=-516/166, 7-23=-612/227, 8-14=-798/341, 8-12=-83/680, 10-12=-436/286, 16-24=-715/48, 4-18=-874/358, 4-20=-101/788, 2-20=-423/284

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 5-9-12, Interior(1) 5-9-12 to 21-5-12, Exterior(2) 21-5-12 to 29-5-15, Interior(1) 29-5-15 to 35-2-4, Exterior(2) 35-2-4 to 43-2-7, Interior(1) 43-2-7 to 56-7-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Ceiling dead load (10.0 psf) on member(s). 21-22, 21-24, 23-24; Wall dead load (5.0psf) on member(s).18-22, 16-24
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 17-18, 16-17
  - 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, 11 except (jt=lb) 14=102.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Attic room checked for L/360 deflection.



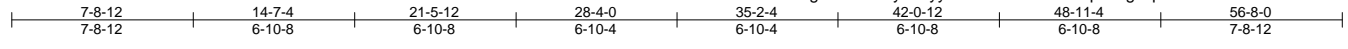
May 10, 2023

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

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

Job J0423-1890	Truss A3X	Truss Type ROOF TRUSS	Qty 0	Ply 1	Wellco/Lot 1 Overhills Creek/Harnett 158266739
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Comtech, Inc. Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 10 08:28:58 2023 Page 1  
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Scale = 1:98.1

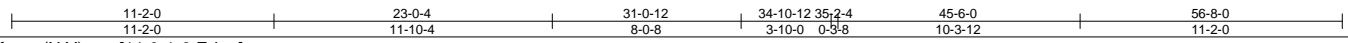
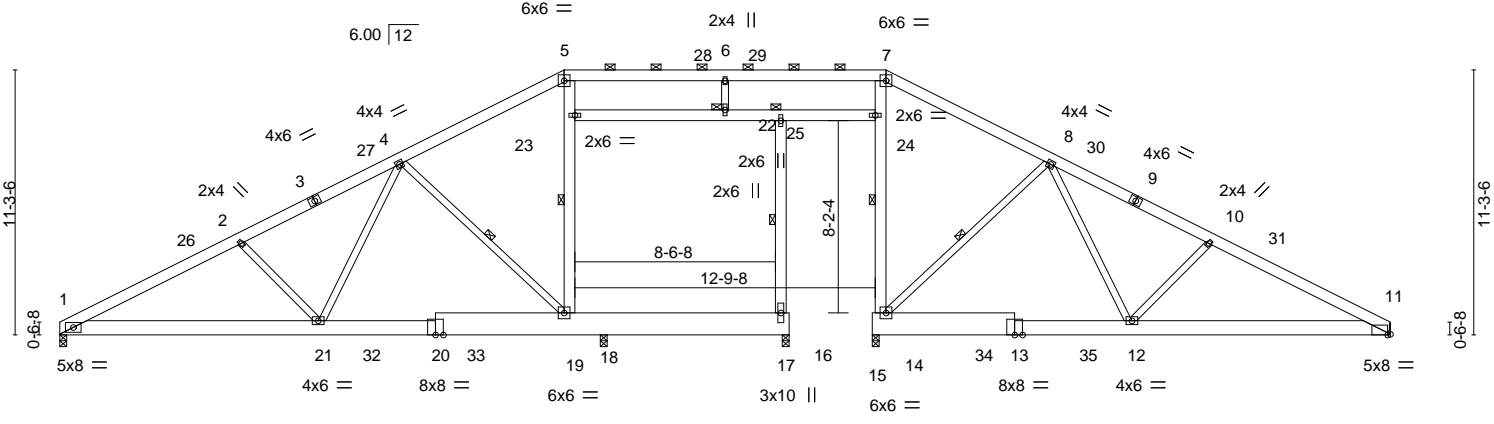


Plate Offsets (X,Y)--	[11:0-1-6,Edge]
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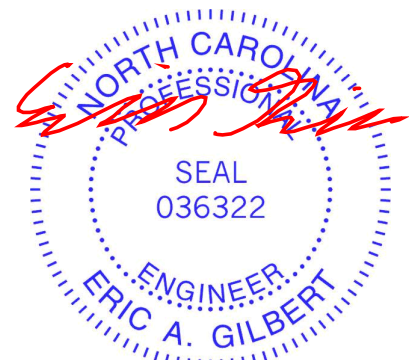
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.22	Vert(LL) -0.07 19-21 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.40	Vert(CT) -0.12 19-21 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.52	Horz(CT) 0.03 14 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.03 19-21 >999 240	Weight: 506 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (10-0-0 max.): 5-7.
BOT CHORD 2x8 SP No.1 *Except* 13-15,16-20: 2x12 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 5-19,7-14,23-24,17-25: 2x6 SP No.1	WEBS 1 Row at midpt 19-23, 7-14, 8-14, 17-25, 4-19
	JOINTS 1 Brace at Jt(s): 22, 25

**REACTIONS.** All bearings 0-3-8 except (jt=length) 11=Mechanical.  
 (lb) - Max Horz 1=140(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 14 except 1=-117(LC 12), 11=-178(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) except 1=877(LC 24), 14=1014(LC 2), 11=854(LC 25), 17=825(LC 27), 18=2035(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-1428/604, 2-4=-1113/564, 4-5=-213/453, 5-6=-159/436, 6-7=-159/436, 7-8=-212/434, 8-10=-1129/533, 10-11=-1400/574  
 BOT CHORD 1-21=-412/1197, 19-21=-245/624, 12-14=-235/611, 11-12=-404/1181  
 WEBS 19-23=-632/48, 5-23=-427/69, 6-22=-397/222, 14-24=-338/0, 7-24=-432/52, 8-14=-844/329, 8-12=-65/750, 10-12=-433/285, 17-25=-711/43, 4-19=-863/342, 4-21=-77/771, 2-21=-420/281

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 5-9-12, Interior(1) 5-9-12 to 21-5-12, Exterior(2) 21-5-12 to 29-5-15, Interior(1) 29-5-15 to 35-2-4, Exterior(2) 35-2-4 to 43-2-7, Interior(1) 43-2-7 to 56-7-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Ceiling dead load (10.0 psf) on member(s). 22-23, 22-25, 24-25; Wall dead load (5.0psf) on member(s).19-23, 17-25
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 18-19, 17-18
  - 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) 14 except (jt=lb) 1=117, 11=178.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Attic room checked for L/360 deflection.



May 10, 2023

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 Edenton, NC 27932

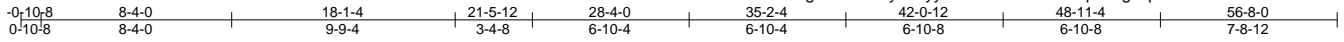


Job J0423-1890	Truss A4	Truss Type ROOF TRUSS	Qty 1	Ply 1	Wellco/Lot 1 Overhills Creek/Harnett Job Reference (optional)	158266740
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 10 08:28:59 2023 Page 1

ID:8XVK7MoEEgDYV6B4Zyl0r5yy8ZO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKwRCDoi7J4zJC?f



Scale = 1:100.7

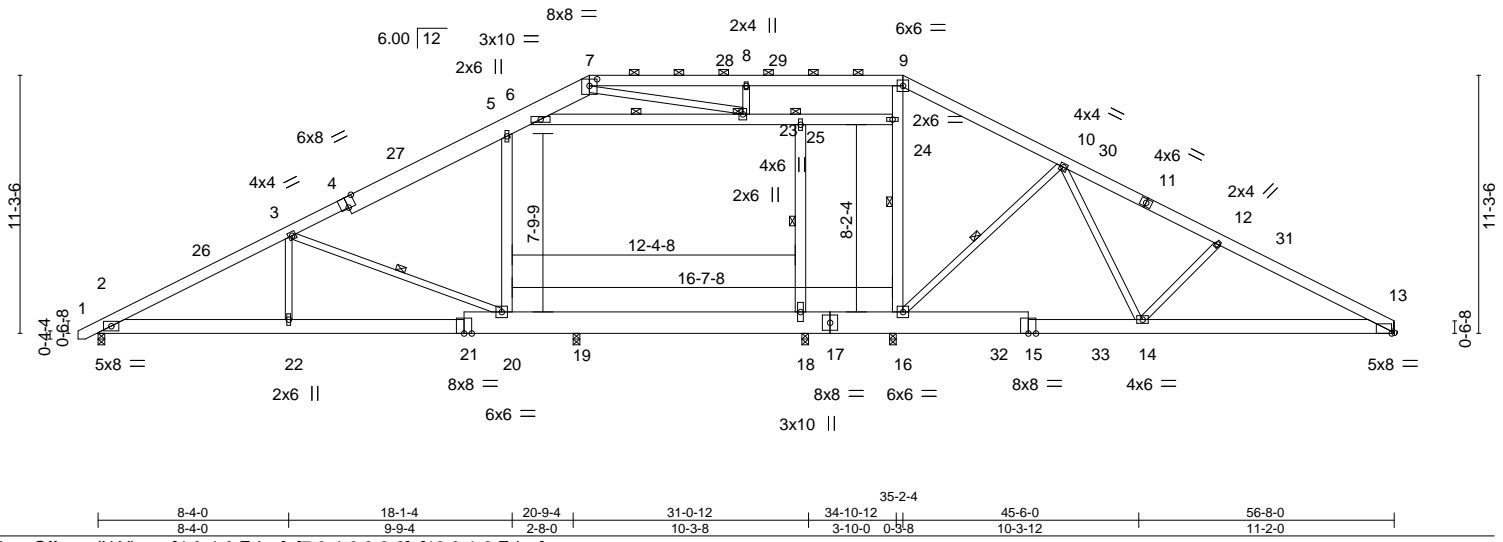


Plate Offsets (X, Y)--	[4:0-4-0,Edge], [7:0-4-0,0-3-8], [13:0-1-6,Edge]
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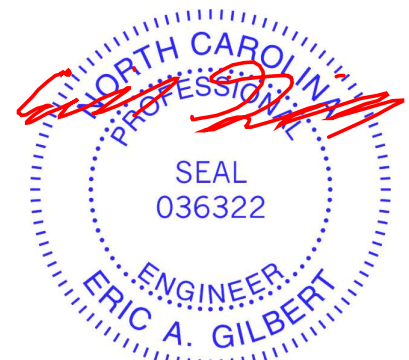
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.24	Vert(LL)	-0.10 20-22	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.67	Vert(CT)	-0.23 20-22	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.74	Horz(CT)	0.03 13	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.09 20-22	>999	240	Weight: 545 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1 *Except* 4-7: 2x10 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-6-5 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 7-9.
BOT CHORD 2x8 SP No.1 *Except* 15-17,17-21: 2x12 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 7-8-13 oc bracing: 19-20 6-8-13 oc bracing: 18-19.
WEBS 2x4 SP No.2 *Except* 5-20,9-16,6-24,18-25: 2x6 SP No.1	WEBS 1 Row at midpt 3-20, 9-16, 10-16, 6-23, 18-25
	JOINTS 1 Brace at Jt(s): 23, 25

**REACTIONS.** All bearings 0-3-8 except (jt=length) 13=Mechanical.  
 (lb) - Max Horz 2=146(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 13 except 16=149(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) except 2=1065(LC 24), 16=1169(LC 21), 13=1051(LC 1), 18=1075(LC 27), 19=2065(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1803/260, 3-5=-730/132, 5-6=-753/254, 6-7=-618/266, 7-8=-541/259,  
 8-9=-542/259, 9-10=-636/262, 10-12=-1469/369, 12-13=-1770/410  
 BOT CHORD 2-22=-135/1514, 20-22=-135/1514, 19-20=0/548, 18-19=0/548, 16-18=0/548,  
 14-16=-39/987, 13-14=-258/1522  
 WEBS 3-20=-1059/315, 5-20=-743/245, 8-23=-394/243, 9-24=-266/148, 10-16=-781/336,  
 10-14=-73/662, 12-14=-434/285, 3-22=0/511, 18-25=-827/49

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-8-10 to 4-11-6, Interior(1) 4-11-6 to 21-5-12, Exterior(2) 21-5-12 to 29-5-15, Interior(1) 29-5-15 to 35-2-4, Exterior(2) 35-2-4 to 43-2-7, Interior(1) 43-2-7 to 56-7-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Ceiling dead load (10.0 psf) on member(s): 5-6, 6-23, 23-25, 24-25; Wall dead load (5.0psf) on member(s): 5-20, 18-25
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room: 19-20, 18-19
  - 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) 2, 13 except (jt=lb) 16=149.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Attic room checked for L/360 deflection.



May 10, 2023

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**ENGINEERING BY**  
**TRENCO**  
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818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 1 Overhills Creek/Harnett	158266741
J0423-1890	A4X	ROOF TRUSS	0	1	Job Reference (optional)	

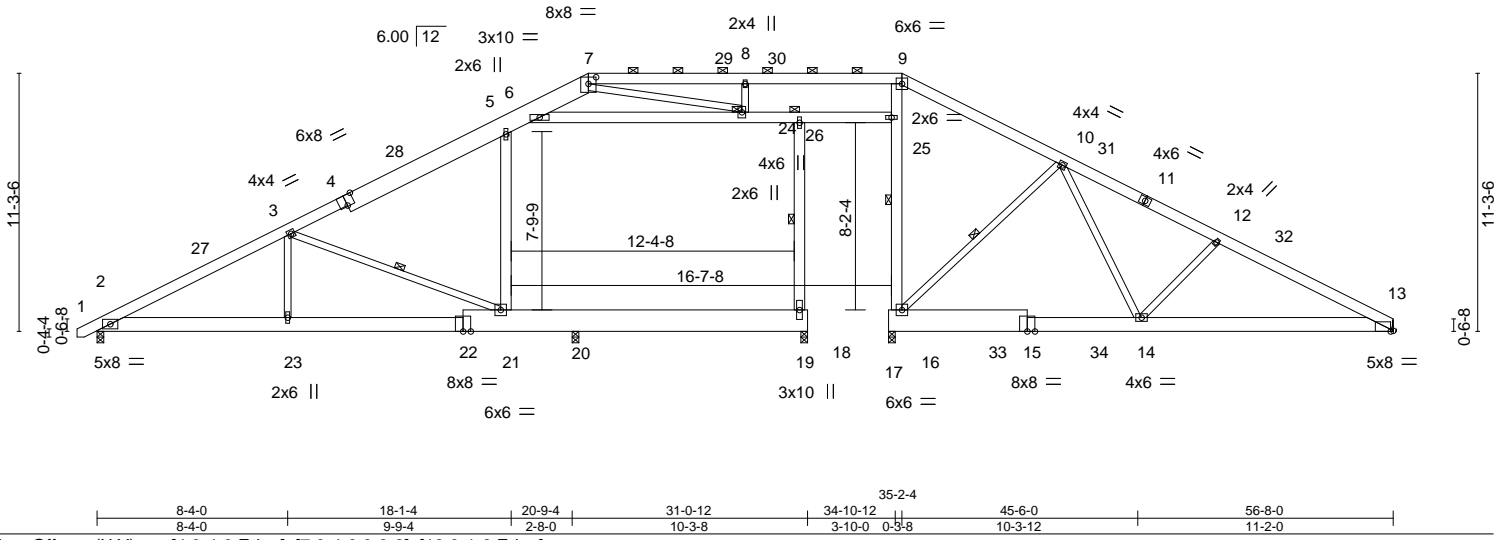
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 10 08:29:01 2023 Page 1

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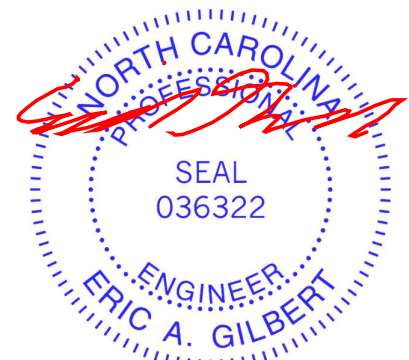
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.23	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.68	Vert(LL) -0.13 21-23 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.85	Vert(CT) -0.27 21-23 >907 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.08 13 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.10 21-23 >999 240	Weight: 528 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1 *Except* 4-7: 2x10 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (10-0-0 max.): 7-9.
BOT CHORD 2x8 SP No.1 *Except* 15-17,18-22: 2x12 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-6-12 oc bracing: 20-21 5-8-15 oc bracing: 19-20.
WEBS 2x4 SP No.2 *Except* 5-21,9-16,6-25,19-26: 2x6 SP No.1	WEBS 1 Row at midpt 3-21, 9-16, 10-16, 19-26
	JOINTS 1 Brace at Jt(s): 24, 26

**REACTIONS.** All bearings 0-3-8 except (jt=length) 13=Mechanical.  
 (lb) - Max Horz 2=146(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 16 except 13=177(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) except 2=812(LC 24), 16=956(LC 21), 13=856(LC 25), 19=1086(LC 27), 20=2184(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1273/468, 3-5=-170/358, 5-6=-306/435, 6-7=-450/332, 7-8=-169/431,  
 8-9=-169/430, 9-10=-212/433, 10-12=-1130/532, 12-13=-1401/574  
 BOT CHORD 2-23=-280/1041, 21-23=-280/1041, 14-16=-235/610, 13-14=-404/1182  
 WEBS 3-21=-1129/304, 5-21=-886/192, 8-24=-395/243, 16-25=-273/0, 9-25=-440/47,  
 10-16=-839/330, 10-14=-65/751, 12-14=-435/285, 3-23=0/540, 6-24=0/377, 7-24=-402/0,  
 19-26=-934/15

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-8-10 to 4-11-6, Interior(1) 4-11-6 to 21-5-12, Exterior(2) 21-5-12 to 29-5-15, Interior(1) 29-5-15 to 35-2-4, Exterior(2) 35-2-4 to 43-2-7, Interior(1) 43-2-7 to 56-7-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Ceiling dead load (10.0 psf) on member(s) 5-6, 6-24, 24-26, 25-26; Wall dead load (5.0psf) on member(s) 5-21, 19-26
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 20-21, 19-20
  - 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) 2, 16 except (jt=lb) 13=177.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Attic room checked for L/360 deflection.



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

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

Job J0423-1890	Truss A5	Truss Type ROOF TRUSS	Qty 2	Ply 1	Wellco/Lot 1 Overhills Creek/Harnett Job Reference (optional)	158266742
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 10 08:29:02 2023 Page 1

ID:8XVK7MoEEgDYV6B4Zyl0r5yy8ZO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKwRCDoi7J4zJC?f



Scale = 1:100.7

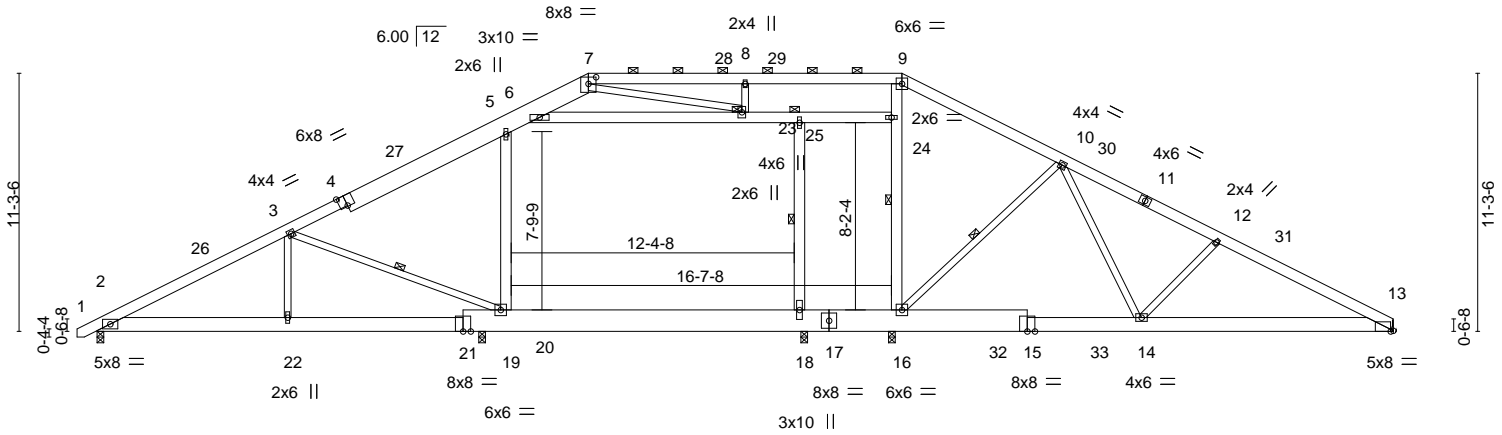


Plate Offsets (X,Y)--	[4:0-4-0,Edge], [7:0-4-0-0-3-8], [13:0-1-6,Edge]
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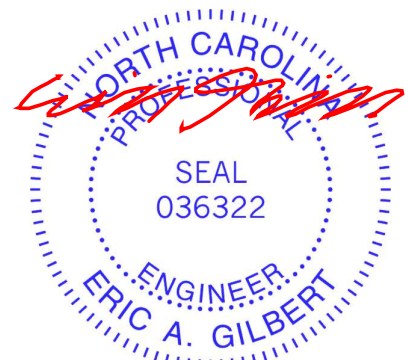
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.24	Vert(LL)	-0.10	18-19	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.55	Vert(CT)	-0.17	18-19	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.74	Horz(CT)	0.02	13	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.03	2-22	>999	240		
									Weight: 545 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1 *Except* 4-7: 2x10 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 7-9.
BOT CHORD 2x8 SP No.1 *Except* 15-17,17-21: 2x12 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 18-19,16-18.
WEBS 2x4 SP No.2 *Except* 5-19,9-16,6-24,18-25: 2x6 SP No.1	WEBS 1 Row at midpt 3-19, 9-16, 10-16, 18-25
	JOINTS 1 Brace at Jt(s): 23, 25

**REACTIONS.** All bearings 0-3-8 except (jt=length) 13=Mechanical.  
 (lb) - Max Horz 2=146(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 13 except 16=219(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) except 2=771(LC 24), 16=786(LC 25), 13=919(LC 25), 18=2049(LC 2), 20=1711(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1022/165, 3-5=-343/111, 5-6=-441/179, 6-7=-466/236, 9-10=-271/159,  
 10-12=-1194/271, 12-13=-1487/313  
 BOT CHORD 2-22=-82/820, 20-22=-82/842, 19-20=-82/820, 18-19=-64/291, 16-18=-64/291,  
 14-16=0/718, 13-14=-171/1269  
 WEBS 3-19=-661/292, 5-19=-917/295, 8-23=-386/241, 9-24=-391/178, 10-16=-806/337,  
 10-14=-77/700, 12-14=-434/286, 3-22=-1/270, 18-25=-848/52

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-10 to 4-11-6, Interior(1) 4-11-6 to 21-5-12, Exterior(2) 21-5-12 to 29-5-15, Interior(1) 29-5-15 to 35-2-4, Exterior(2) 35-2-4 to 43-2-7, Interior(1) 43-2-7 to 56-7-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Ceiling dead load (10.0 psf) on member(s) 5-6, 6-23, 23-25, 24-25; Wall dead load (5.0psf) on member(s) 5-19, 18-25
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 18-19
  - 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) 2, 13 except (jt=lb) 16=219.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Attic room checked for L/360 deflection.



May 10, 2023

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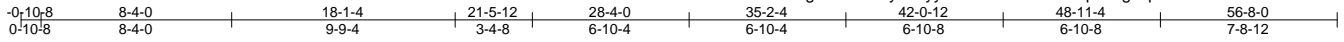
**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 1 Overhills Creek/Harnett	158266743
J0423-1890	A5X	ROOF TRUSS	0	1	Job Reference (optional)	

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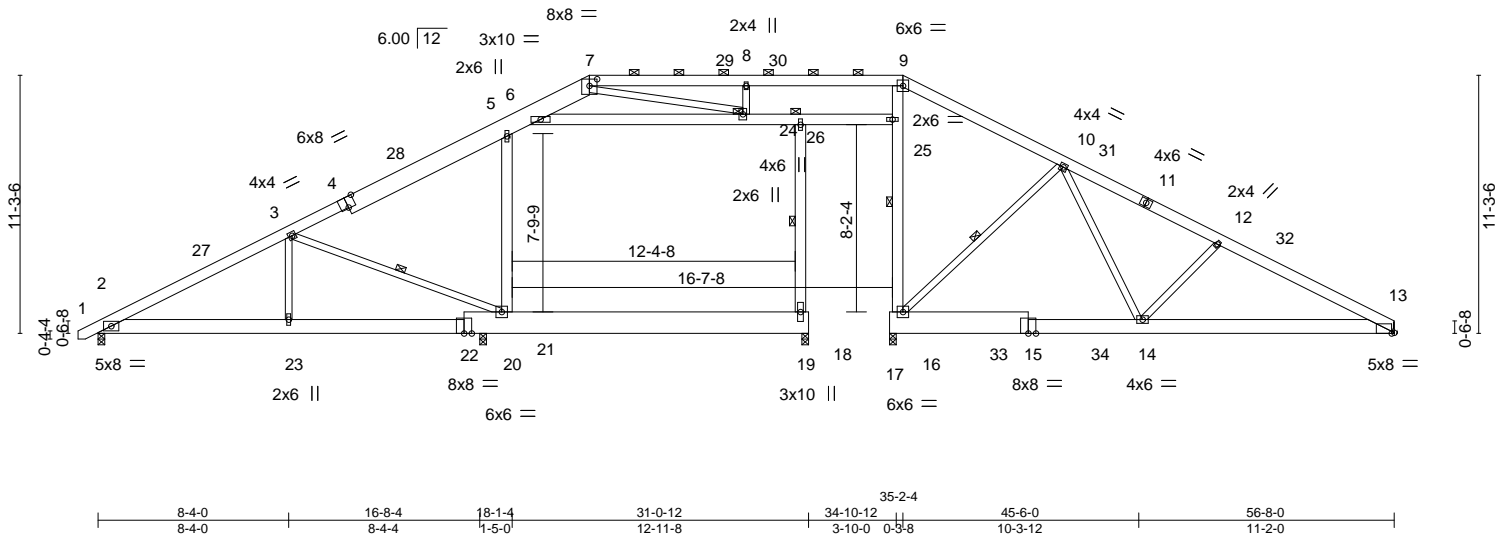


Plate Offsets (X, Y)--	[4:0-4-0,Edge], [7:0-4-0,0-3-8], [13:0-1-6,Edge]
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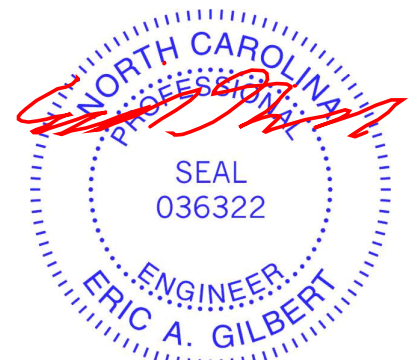
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.25	Vert(LL)	-0.17	19-20	>975	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.77	Vert(CT)	-0.28	19-20	>597	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.77	Horz(CT)	0.05	13	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.03	13-14	>999	240		
									Weight: 528 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1 *Except* 4-7: 2x10 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 7-9.
BOT CHORD 2x8 SP No.1 *Except* 15-17,18-22: 2x12 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 5-2-13 oc bracing: 19-20.
WEBS 2x4 SP No.2 *Except* 5-20,9-16,6-25,19-26: 2x6 SP No.1	WEBS 1 Row at midpt 3-20, 9-16, 10-16, 19-26
	JOINTS 1 Brace at Jt(s): 24, 26

**REACTIONS.** All bearings 0-3-8 except (jt=length) 13=Mechanical.  
 (lb) - Max Horz 2=146(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 16 except 2=107(LC 12), 13=177(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) except 2=653(LC 1), 16=964(LC 21), 13=858(LC 25), 19=1462(LC 26), 21=1924(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-751/471, 3-5=-161/356, 5-6=-316/437, 6-7=-401/321, 7-8=-199/437, 8-9=-199/437, 9-10=-218/435, 10-12=-1133/534, 12-13=-1405/576  
 BOT CHORD 2-23=-276/579, 21-23=-276/611, 20-21=-276/579, 14-16=-236/613, 13-14=-406/1185  
 WEBS 3-20=-627/299, 5-20=-947/209, 8-24=-386/241, 16-25=-284/0, 9-25=-435/46, 10-16=-839/331, 10-14=-65/750, 12-14=-434/285, 6-24=0/342, 7-24=-341/0, 19-26=-877/0

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-8-10 to 4-11-6, Interior(1) 4-11-6 to 21-5-12, Exterior(2) 21-5-12 to 29-5-15, Interior(1) 29-5-15 to 35-2-4, Exterior(2) 35-2-4 to 43-2-7, Interior(1) 43-2-7 to 56-7-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Ceiling dead load (10.0 psf) on member(s). 5-6, 6-24, 24-26, 25-26; Wall dead load (5.0psf) on member(s).5-20, 19-26
  - 7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 19-20
  - 8) Refer to girder(s) for truss to truss connections.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16 except (jt=lb) 2=107, 13=177.
  - 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 11) Attic room checked for L/360 deflection.



May 10, 2023

**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

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

Job J0423-1890	Truss A6	Truss Type ROOF TRUSS	Qty 3	Ply 1	Wellco/Lot 1 Overhills Creek/Harnett 158266744
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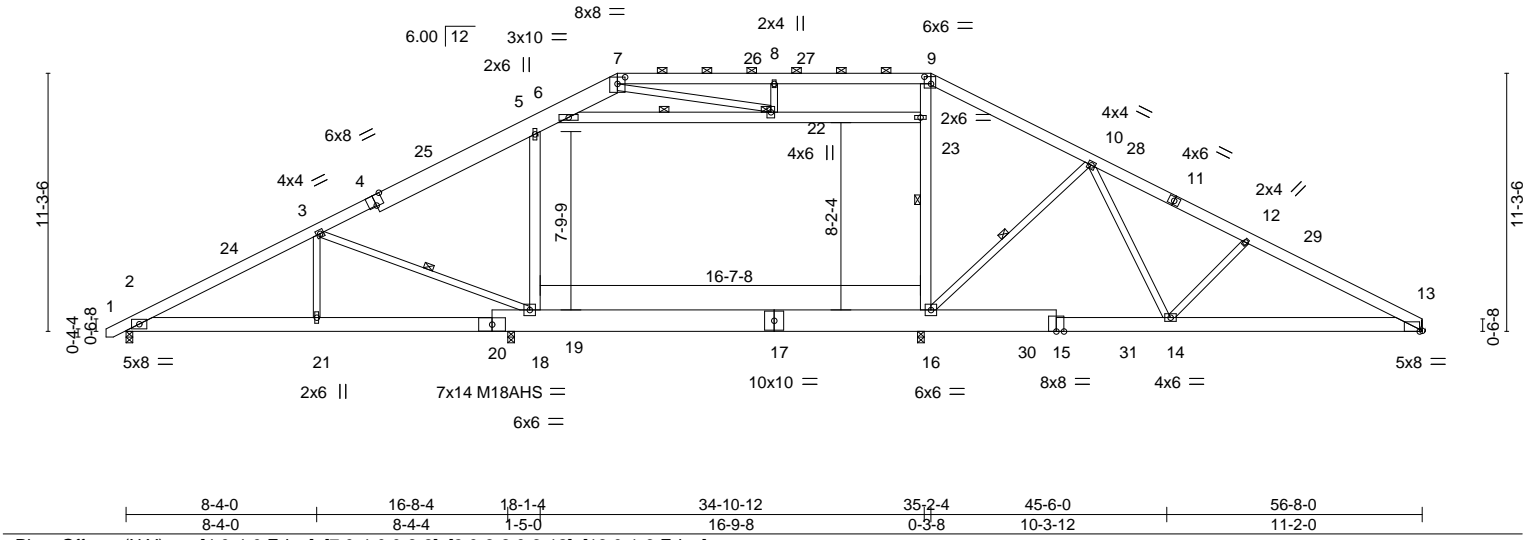
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 10 08:29:05 2023 Page 1

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Scale = 1:100.7



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 0.58	Vert(LL)	-0.30	16-18	>730	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.97	Vert(CT)	-0.47	16-18	>461	240	M18AHS	186/179
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.59	Horz(CT)	0.06	13	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.03	13-14	>999	240		Weight: 525 lb FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1 *Except* 4-7: 2x10 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-8-10 oc purlins, except 2-0-0 oc purlins (5-2-11 max.): 7-9.
BOT CHORD 2x8 SP No.1 *Except* 15-17,17-20: 2x12 SP No.1	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 5-18,9-16,6-23: 2x6 SP No.1	WEBS 1 Row at midpt 3-18, 16-23, 10-16, 6-22
	JOINTS 1 Brace at Jt(s): 22


**REACTIONS.** All bearings 0-3-8 except (jt=length) 13=Mechanical.  
 (lb) - Max Horz 2=146(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 13  
 Max Grav All reactions 250 lb or less at joint(s) except 2=1180(LC 24), 16=2051(LC 21), 13=1351(LC 25), 19=1906(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1869/333, 3-5=-1375/215, 5-6=-1451/340, 6-7=-849/291, 7-8=-1396/365,  
 8-9=-1396/364, 9-10=-1349/328, 10-12=-2108/485, 12-13=-2412/527  
 BOT CHORD 2-21=-151/1570, 19-21=-151/1587, 18-19=-151/1570, 16-18=-24/1172, 14-16=-149/1602,  
 13-14=-362/2097  
 WEBS 3-18=-431/292, 5-18=-869/303, 16-23=-280/129, 10-16=-640/362, 10-14=-126/533,  
 12-14=-446/285, 6-22=-597/131, 7-22=-163/845

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-8-10 to 4-11-6, Interior(1) 4-11-6 to 21-5-12, Exterior(2) 21-5-12 to 29-5-15, Interior(1) 29-5-15 to 35-2-4, Exterior(2) 35-2-4 to 43-2-7, Interior(1) 43-2-7 to 56-7-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - All plates are MT20 plates 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Ceiling dead load (10.0 psf) on member(s). 5-6, 6-22, 22-23; Wall dead load (5.0psf) on member(s). 5-18, 16-23
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 16-18
  - 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) 2, 13.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Attic room checked for L/360 deflection.



May 10, 2023

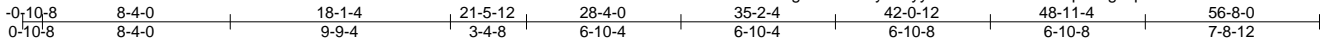
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss 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 <b>ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	 <p>818 Soundside Road Edenton, NC 27932</p>
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Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 1 Overhills Creek/Harnett	158266745
J0423-1890	A6GE	GABLE	1	1	Job Reference (optional)	

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8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 10 08:29:08 2023 Page 1

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Scale = 1:102.2

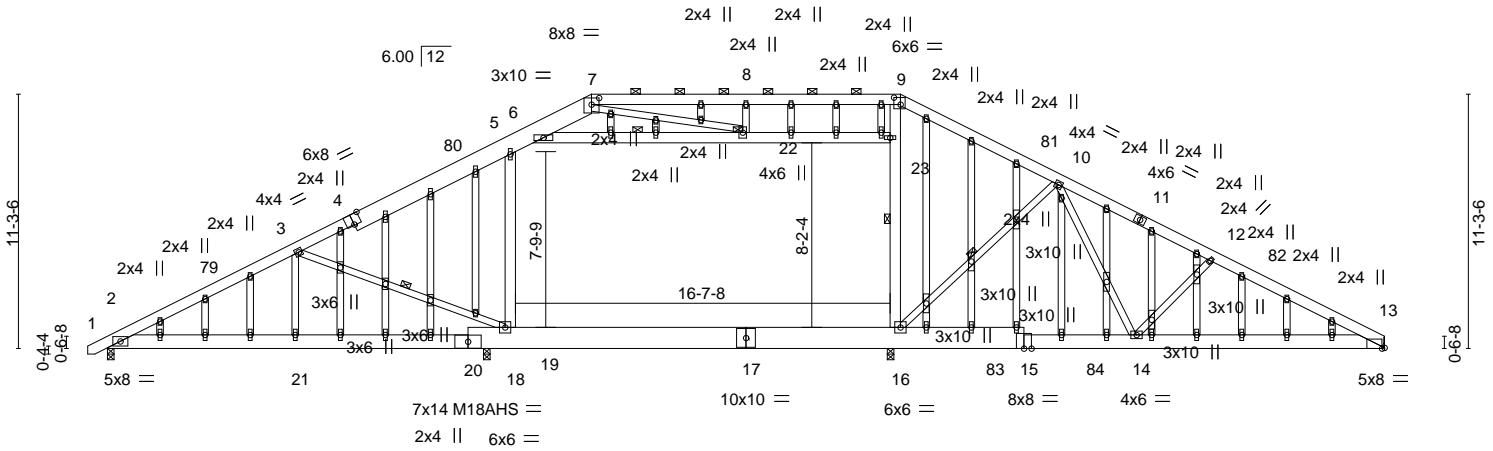


Plate Offsets (X, Y)--	[4:0-4-0,Edge], [7:0-4-0,0-3-8], [9:0-3-8,0-3-12], [13:0-1-6,Edge]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.58	Vert(LL)	-0.30	16-18	>730	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.97	Vert(CT)	-0.47	16-18	>461	M18AHS	186/179
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.59	Horz(CT)	0.06	13	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.05	13-14	>999		
								Weight: 648 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1 *Except* 4-7: 2x10 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-8-10 oc purlins, except 2-0-0 oc purlins (5-2-11 max.): 7-9.
BOT CHORD 2x8 SP No.1 *Except* 15-17,17-20: 2x12 SP No.1	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 5-18,9-16,6-23: 2x6 SP No.1	WEBS 1 Row at midpt 3-18, 16-23, 10-16, 6-22
OTHERS 2x4 SP No.2	JOINTS 1 Brace at Jt(s): 22

**REACTIONS.** All bearings 0-3-8 except (jt=length) 13=Mechanical.  
 (lb) - Max Horz 2=232(LC 16)  
 Max Uplift All uplift 100 lb or less at joint(s) 16 except 2=-135(LC 9), 13=-171(LC 8), 19=-137(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) except 2=1180(LC 24), 16=2029(LC 21), 13=1351(LC 25), 19=1882(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1869/455, 3-5=-1375/338, 5-6=-1451/412, 6-7=-849/367, 7-8=-1396/453, 8-9=-1396/453, 9-10=-1348/397, 10-12=-2108/739, 12-13=-2412/830  
 BOT CHORD 2-21=-331/1570, 19-21=-331/1587, 18-19=-331/1570, 16-18=-204/1172, 14-16=-187/1602, 13-14=-581/2097  
 WEBS 3-18=-431/524, 5-18=-869/526, 16-23=-280/267, 9-23=-45/269, 10-16=-640/564, 10-14=-270/533, 12-14=-446/466, 6-22=-597/131, 7-22=-187/845

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-8-10 to 4-11-6, Exterior(2) 4-11-6 to 21-5-12, Corner(3) 21-5-12 to 27-1-12, Exterior(2) 27-1-12 to 35-2-4, Corner(3) 35-2-4 to 40-10-4, Exterior(2) 40-10-4 to 56-7-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 4) Provide adequate drainage to prevent water ponding.
  - 5) All plates are MT20 plates unless otherwise indicated.
  - 6) All plates are 2x6 MT20 unless otherwise indicated.
  - 7) Gable studs spaced at 2-0-0 oc.
  - 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 9) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 10) Ceiling dead load (10.0 psf) on member(s). 5-6, 6-22, 22-23; Wall dead load (5.0psf) on member(s) 5-18, 16-23
  - 11) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 16-18



May 10, 2023

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

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

Job J0423-1890	Truss A6GE	Truss Type GABLE	Qty 1	Ply 1	Wellco/Lot 1 Overhills Creek/Harnett I58266745 Job Reference (optional)
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Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 10 08:29:09 2023 Page 2  
ID:8XVK7MoEEgDYV6B4ZyI0r5yy8ZO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

**NOTES-**

- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16 except (jt=lb) 2=135, 13=171, 19=137.
- 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 15) Attic room checked for L/360 deflection.

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

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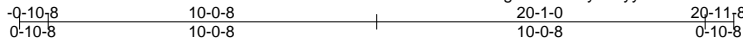
818 Soundside Road  
Edenton, NC 27932

Job J0423-1890	Truss B1GE	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	Wellco/Lot 1 Overhills Creek/Harnett 158266746
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 10 08:29:10 2023 Page 1

ID:8XVK7MoEEgDYV6B4Zyl0r5yy8ZO-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



5x5 =

Scale = 1:70.4

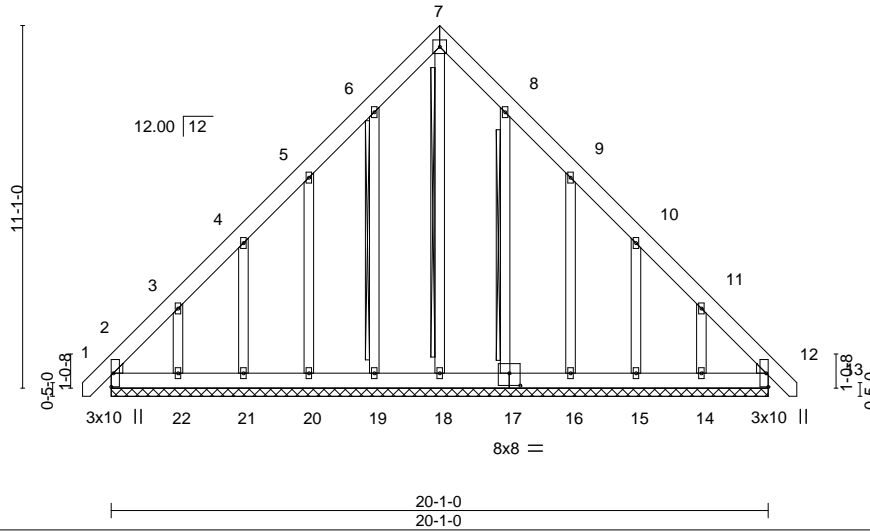


Plate Offsets (X,Y)--	[17:0-4-0-0-4-8]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.04	Vert(LL) 0.00 12 n/r 120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.04	Vert(CT) 0.00 12 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.14	Horz(CT) 0.01 12 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S			
				Weight: 197 lb	FT = 20%

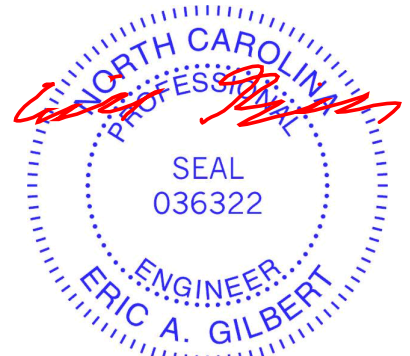
**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 OTHERS 2x4 SP No.2  
 WEDGE  
 Left: 2x4 SP No.2 , Right: 2x4 SP No.2

**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 - 7-18, 6-19, 8-17  
 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 20-1-0.  
 (lb) - Max Horz 2=324(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 17, 12 except 2=125(LC 10), 19=106(LC 12), 20=154(LC 12), 21=135(LC 12), 22=228(LC 12), 16=159(LC 13), 15=134(LC 13), 14=222(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 18, 19, 20, 21, 22, 17, 16, 15, 14 except 2=306(LC 12), 12=270(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=444/267, 11-12=398/264  
 BOT CHORD 2-22=202/315, 21-22=204/315, 20-21=205/316, 19-20=205/316, 18-19=205/316, 17-18=205/316, 16-17=207/317, 15-16=207/317, 14-15=206/316, 12-14=205/315

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-9-2 to 3-7-11, Exterior(2) 3-7-11 to 10-0-8, Corner(3) 10-0-8 to 14-5-5, Exterior(2) 14-5-5 to 20-10-2 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 4) All plates are 2x4 MT20 unless otherwise indicated.
  - 5) Gable requires continuous bottom chord bearing.
  - 6) Gable studs spaced at 2-0-0 oc.
  - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 8) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17, 12 except (it=lb) 2=125, 19=106, 20=154, 21=135, 22=228, 16=159, 15=134, 14=222.
  - 10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



May 10, 2023

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

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818 Soundside Road  
 Edenton, NC 27932



Job J0423-1890	Truss B2GDR	Truss Type FINK	Qty 1	Ply 2	Wellco/Lot 1 Overhills Creek/Harnett 158266747
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 10 08:29:11 2023 Page 1

ID:8XVK7MoEEgDYV6B4Zyl0r5yy8ZO-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



5x8 ||

Scale = 1:70.4

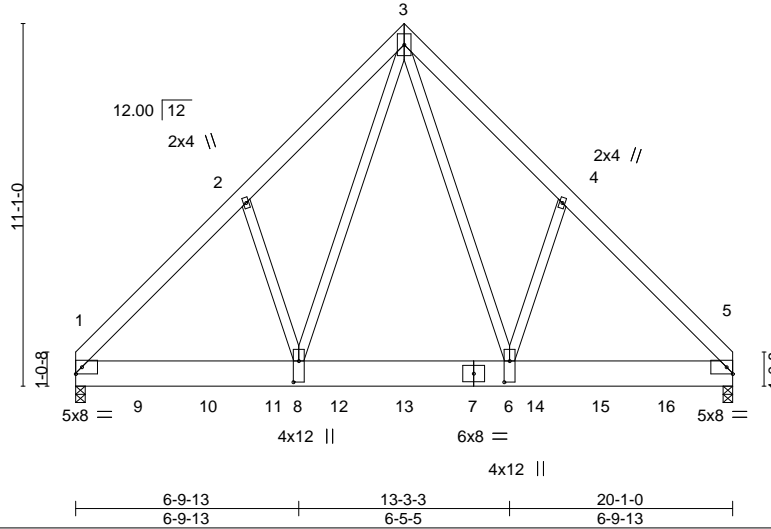


Plate Offsets (X,Y)--	[6:0-7-12,0-2-0], [8:0-7-12,0-2-0]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.19	Vert(LL)	-0.05	1-8	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.30	Vert(CT)	-0.10	1-8	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.53	Horz(CT)	0.01	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.04	1-8	>999		
								Weight: 386 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x10 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	

**REACTIONS.** (size) 1=0-3-8, 5=0-3-8  
 Max Horz 1=249(LC 24)  
 Max Uplift 1=-227(LC 9), 5=-280(LC 8)  
 Max Grav 1=5840(LC 1), 5=4627(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-5772/308, 2-3=-5525/418, 3-4=-4981/448, 4-5=-5199/337  
 BOT CHORD 1-8=-228/3845, 6-8=-120/2579, 5-6=-160/3449  
 WEBS 2-8=-265/376, 3-8=-287/4330, 3-6=-358/2980, 4-6=-267/370

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-7-0 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 Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=227, 5=280.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1331 lb down and 44 lb up at 1-11-4, 1331 lb down and 44 lb up at 3-11-4, 1331 lb down and 44 lb up at 5-11-4, 899 lb down and 56 lb up at 7-11-4, 899 lb down and 56 lb up at 9-11-4, 1031 lb down and 49 lb up at 11-11-4, 687 lb down and 76 lb up at 13-11-4, and 687 lb down and 76 lb up at 15-11-4, and 687 lb down and 76 lb up at 17-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard  
 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-5=-20, 1-3=-60, 3-5=-60



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Continued on page 2

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b>          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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	 818 Soundside Road Edenton, NC 27932
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Job J0423-1890	Truss B2GDR	Truss Type FINK	Qty 1	Ply <b>2</b>	Wellco/Lot 1 Overhills Creek/Harnett I58266747 Job Reference (optional)
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8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 10 08:29:11 2023 Page 2  
ID:8XVK7MoEEgDYV6B4Zyl0r5yy8ZO-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

**LOAD CASE(S)** Standard

Concentrated Loads (lb)

Vert: 7=-1031(B) 9=-1331(B) 10=-1331(B) 11=-1331(B) 12=-899(B) 13=-899(B) 14=-687(B) 15=-687(B) 16=-687(B)

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

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818 Soundside Road  
Edenton, NC 27932

Job J0423-1890	Truss P1	Truss Type COMMON	Qty 4	Ply 1	Wellco/Lot 1 Overhills Creek/Harnett Job Reference (optional)	158266748
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8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 10 08:29:12 2023 Page 1

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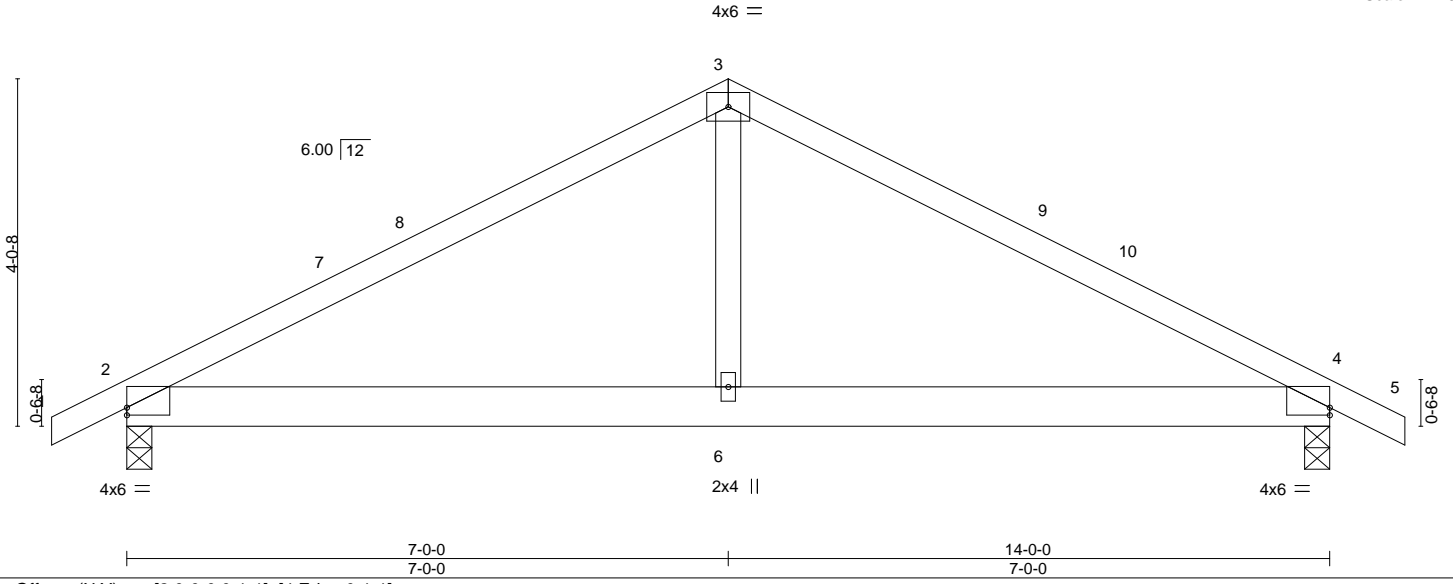


Plate Offsets (X, Y)--	[2:0-0-0,0-1-1], [4:Edge,0-1-1]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.41	Vert(LL) -0.02 4-6 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.22	Vert(CT) -0.05 4-6 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.10	Horz(CT) 0.01 4 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.05 4-6 >999 240	Weight: 64 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 9-11-12 oc bracing.
WEBS 2x4 SP No.2	

**REACTIONS.** (size) 2=0-3-8, 4=0-3-8  
 Max Horz 2=-51(LC 10)  
 Max Uplift 2=-125(LC 9), 4=-125(LC 8)  
 Max Grav 2=610(LC 1), 4=610(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-772/772, 3-4=-772/772  
 BOT CHORD 2-6=-552/592, 4-6=-552/592  
 WEBS 3-6=-462/352

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 7-0-0, Exterior(2) 7-0-0 to 11-4-13, Interior(1) 11-4-13 to 14-10-8 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=125, 4=125.



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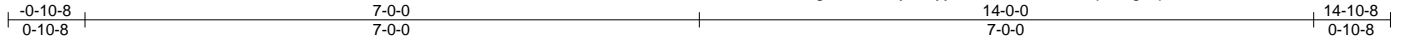
Job J0423-1890	Truss P1GE	Truss Type GABLE	Qty 1	Ply 1	Wellco/Lot 1 Overhills Creek/Harnett 158266749
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 10 08:29:13 2023 Page 1

ID:8XVK7MoEEgDYV6B4ZyI0r5yy8ZO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Job Reference (optional)



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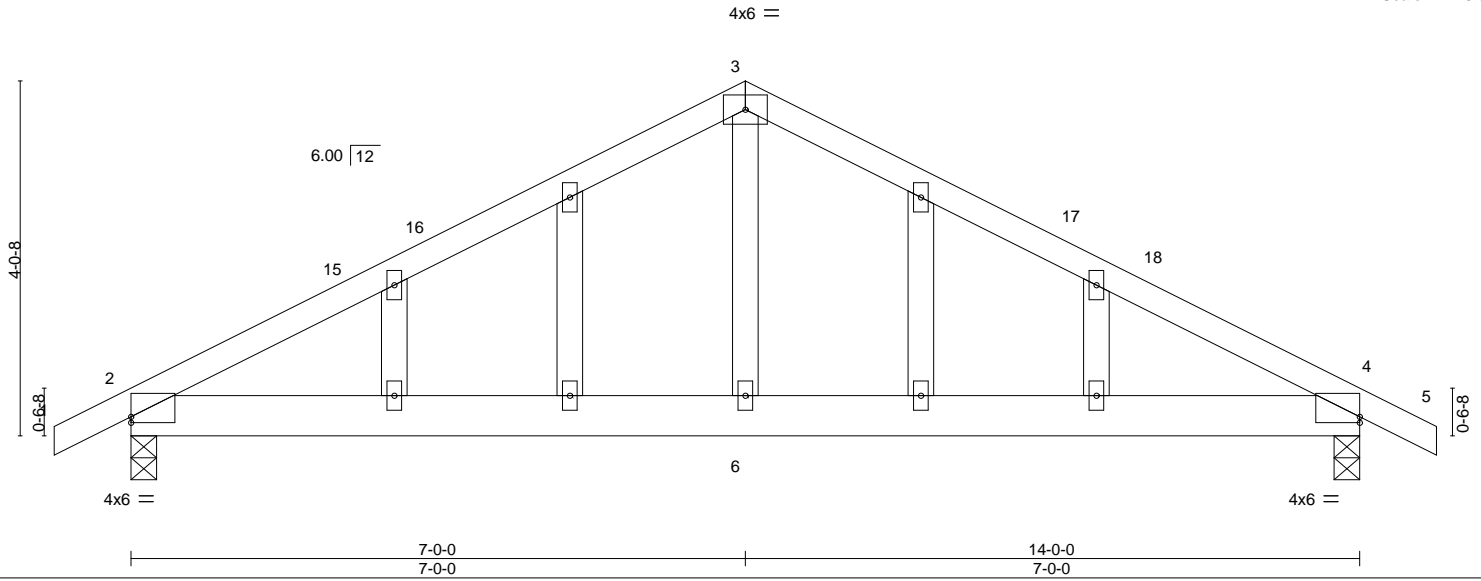


Plate Offsets (X, Y)--	[2:0-0-0,0-0-13], [4:Edge,0-0-13]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.45	Vert(LL) -0.02 4-6 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.22	Vert(CT) -0.05 4-6 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.08	Horz(CT) 0.01 4 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.03 2-6 >999 240	Weight: 75 lb	FT = 20%

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

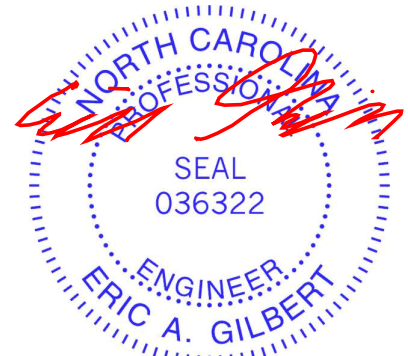
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 4=0-3-8  
Max Horz 2=80(LC 16)  
Max Uplift 2=-141(LC 12), 4=-141(LC 13)  
Max Grav 2=610(LC 1), 4=610(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-772/461, 3-4=-772/461  
BOT CHORD 2-6=-211/592, 4-6=-211/592  
WEBS 3-6=-11/352

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 3-6-5, Exterior(2) 3-6-5 to 7-0-0, Corner(3) 7-0-0 to 11-4-13, Exterior(2) 11-4-13 to 14-10-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=141, 4=141.



May 10, 2023

**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



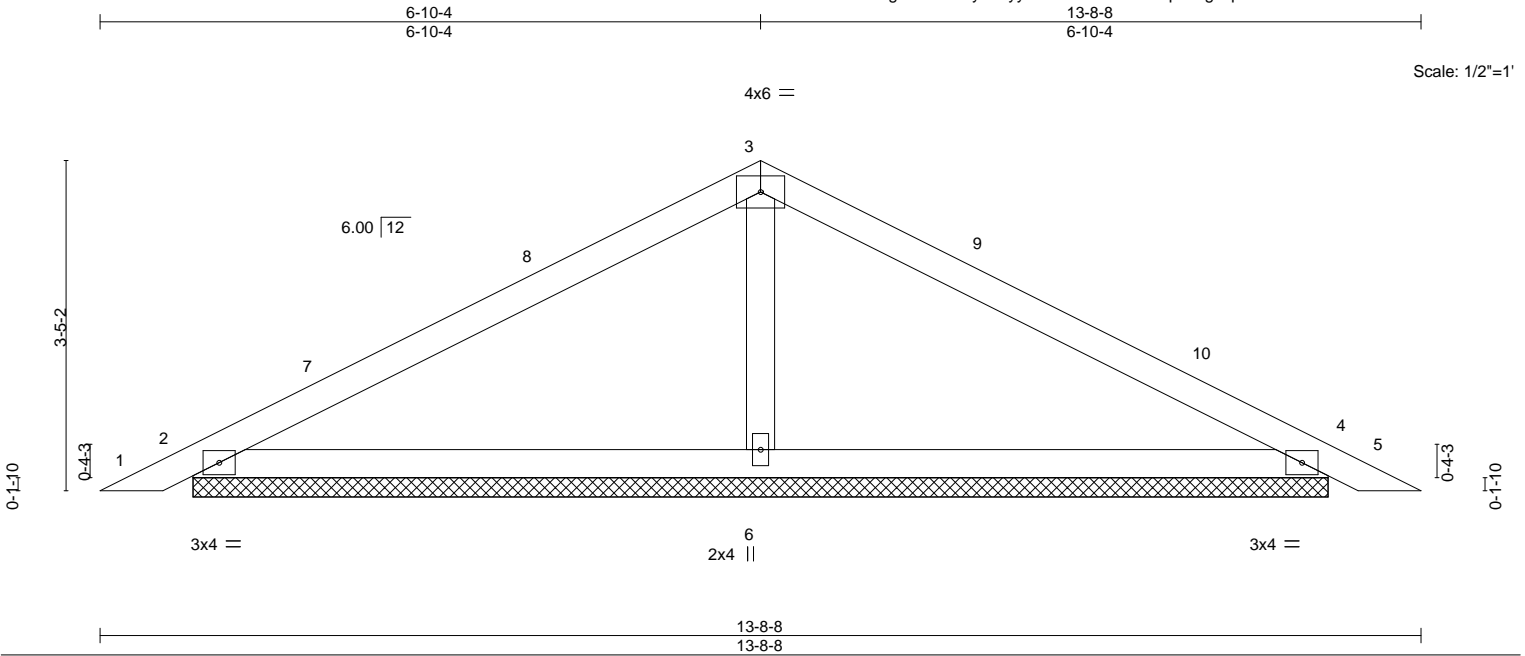
818 Soundside Road  
Edenton, NC 27932

Job J0423-1890	Truss PB1	Truss Type PIGGYBACK	Qty 19	Ply 1	Wellco/Lot 1 Overhills Creek/Harnett 158266750
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 10 08:29:14 2023 Page 1

ID:8XVK7MoEEgDYV6B4ZyI0r5yy8ZO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



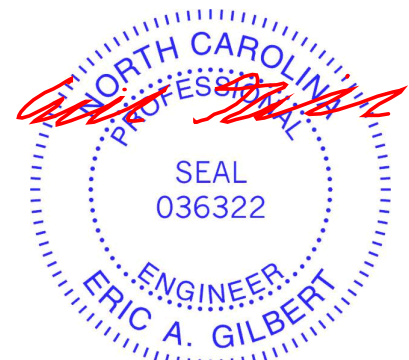
LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.35	Vert(LL)	0.02	5	n/r	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.25	Vert(CT)	0.03	5	n/r		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.06	Horz(CT)	0.00	4	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 44 lb	FT = 20%
	Code IRC2015/TPI2014							

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

**REACTIONS.** (size) 2=11-9-6, 4=11-9-6, 6=11-9-6  
 Max Horz 2=43(LC 11)  
 Max Uplift 2=-38(LC 12), 4=-46(LC 13)  
 Max Grav 2=258(LC 23), 4=258(LC 24), 6=508(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 3-6=-328/176

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-3-15 to 4-8-11, Interior(1) 4-8-11 to 6-10-4, Exterior(2) 6-10-4 to 11-3-1, Interior(1) 11-3-1 to 13-4-9 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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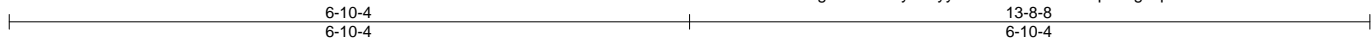
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss 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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p>ENGINEERING BY</p> <p><b>TRENCO</b></p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 1 Overhills Creek/Harnett	158266751
J0423-1890	PB1GE	GABLE	2	1	Job Reference (optional)	

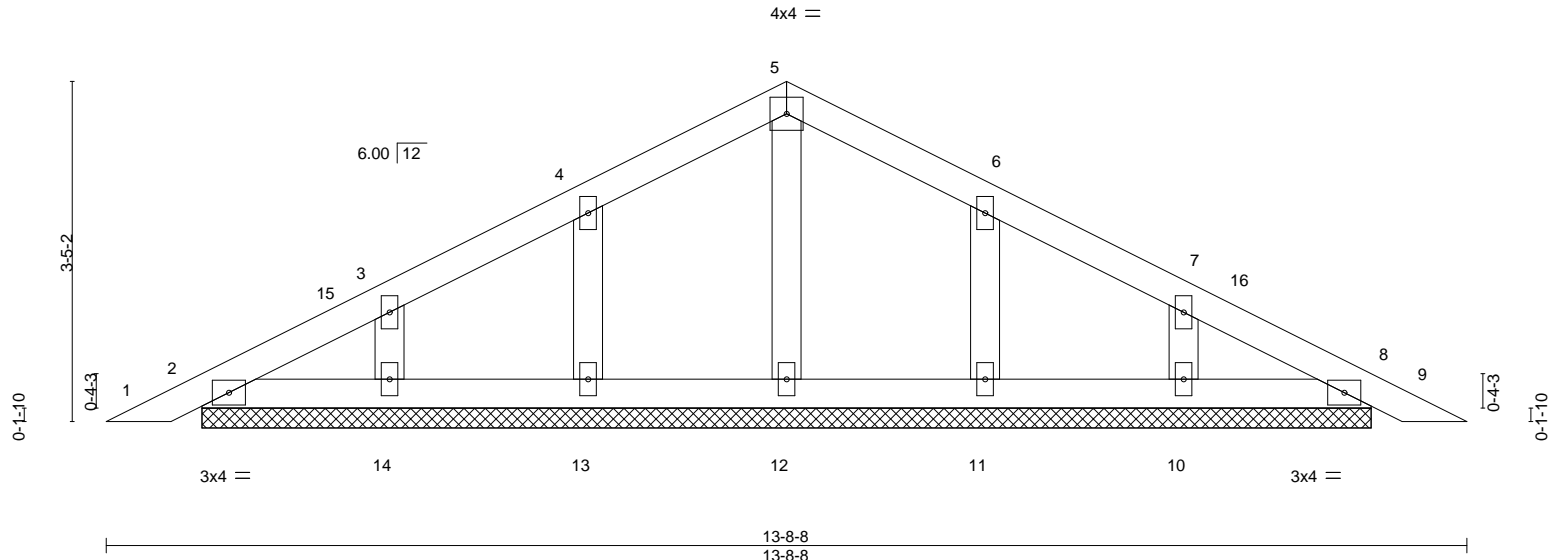
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 10 08:29:15 2023 Page 1

ID:8XVK7MoEgDYV6B4ZyI0r5yy8ZO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:23.2



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.03	Vert(LL)	0.00	8	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	0.00	8	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.00	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 52 lb	FT = 20%

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

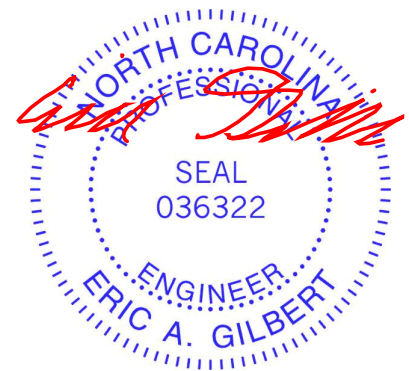
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 11-9-6.  
 (lb) - Max Horz 2=66(LC 16)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 13, 14, 11, 10  
 Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph 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) 0-3-15 to 4-10-4, Interior(1) 4-10-4 to 6-10-4, Exterior(2) 6-10-4 to 11-3-1, Interior(1) 11-3-1 to 13-4-9 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8, 13, 14, 11, 10.
- 10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



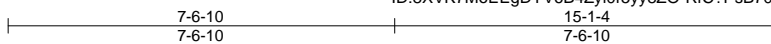
May 10, 2023

Job J0423-1890	Truss VA1	Truss Type GABLE	Qty 1	Ply 1	Wellco/Lot 1 Overhills Creek/Harnett 158266752
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8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 10 08:29:16 2023 Page 1

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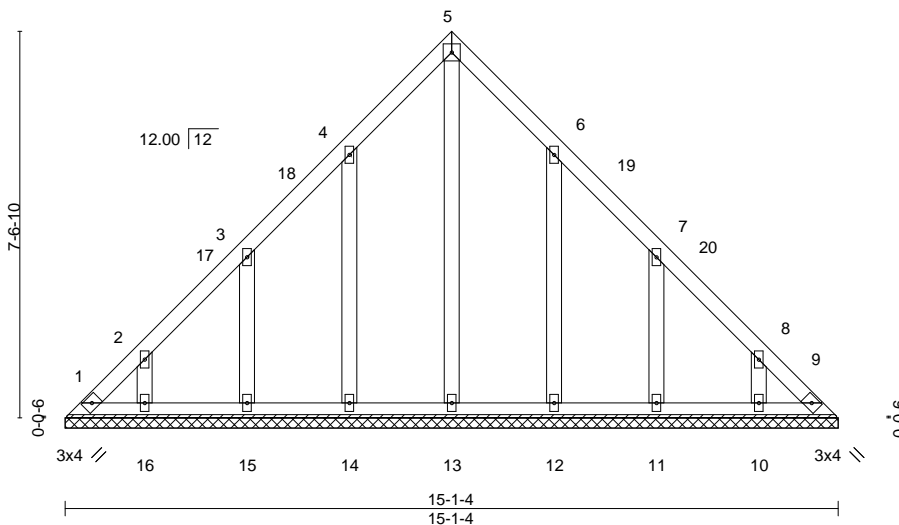


Plate Offsets (X, Y)--	[6:0-0-0,0-0-0], [7:0-0-0,0-0-0], [8:0-0-0,0-0-0]
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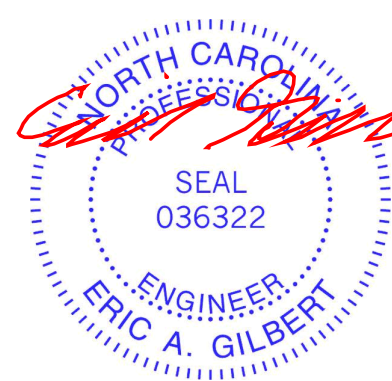
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.05	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.03	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.14	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 9 n/a n/a		
	Code IRC2015/TPI2014			Weight: 90 lb	FT = 20%

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

**REACTIONS.** All bearings 15-1-4.  
 (lb) - Max Horz 1=-216(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 9 except 14=-142(LC 12), 15=-144(LC 12), 16=-124(LC 12), 12=-140(LC 13), 11=-145(LC 13), 10=-124(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 9, 13, 14, 15, 16, 12, 11, 10

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-289/179, 8-9=-255/169

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph 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) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 7-6-10, Exterior(2) 7-6-10 to 11-11-7, Interior(1) 11-11-7 to 14-9-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) All plates are 2x4 MT20 unless otherwise indicated.
  - 4) Gable requires continuous bottom chord bearing.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9 except (jt=lb) 14=142, 15=144, 16=124, 12=140, 11=145, 10=124.



May 10, 2023

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Job J0423-1890	Truss VA2	Truss Type VALLEY	Qty 1	Ply 1	Wellco/Lot 1 Overhills Creek/Harnett Job Reference (optional)	158266753
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 10 08:29:17 2023 Page 1

ID:8XVK7MoEEgDYV6B4ZyI0r5yy8ZO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



4x4 =

Scale = 1:42.5

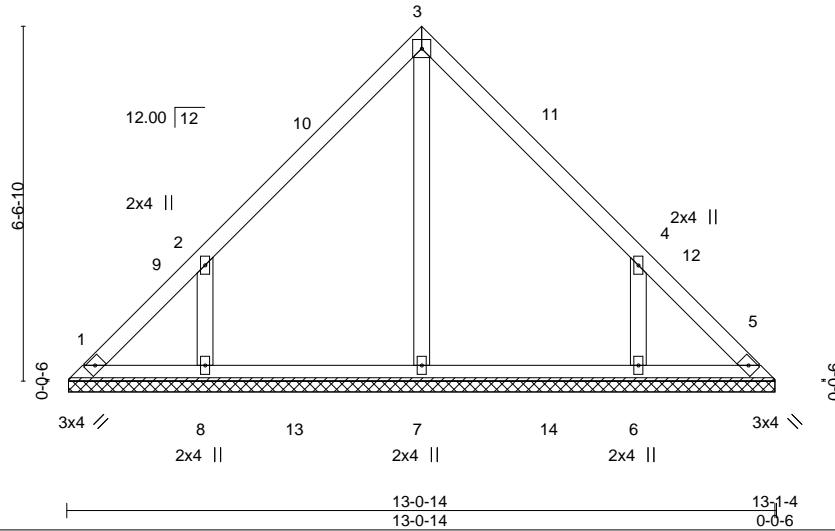


Plate Offsets (X,Y)--	[4:0-0-0,0-0-0]								
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.14	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.15	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.09	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 60 lb	FT = 20%

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

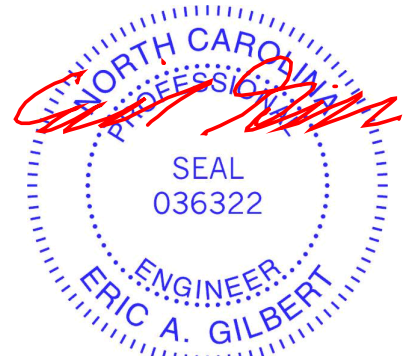
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 13-0-8.  
(lb) - Max Horz 1=149(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=163(LC 12), 6=163(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=386(LC 19), 8=376(LC 19), 6=376(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 2-8=-358/290, 4-6=-358/290

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 6-6-10, Exterior(2) 6-6-10 to 10-11-7, Interior(1) 10-11-7 to 12-9-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) 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=163, 6=163.



May 10, 2023

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

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



818 Soundside Road  
Edenton, NC 27932

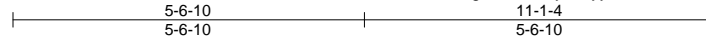


Job J0423-1890	Truss VA3	Truss Type VALLEY	Qty 1	Ply 1	Wellco/Lot 1 Overhills Creek/Harnett Job Reference (optional)	158266754
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 10 08:29:19 2023 Page 1

ID:8XVK7MoEEgDYV6B4ZyI0r5yy8ZO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



4x4 =

Scale = 1:36.4

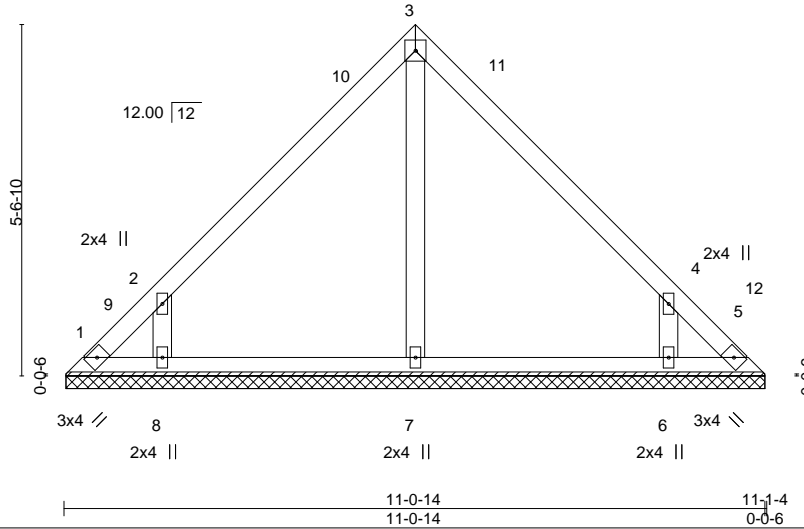


Plate Offsets (X,Y)--	[4:0-0-0,0-0-0]								
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.15	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 49 lb	FT = 20%

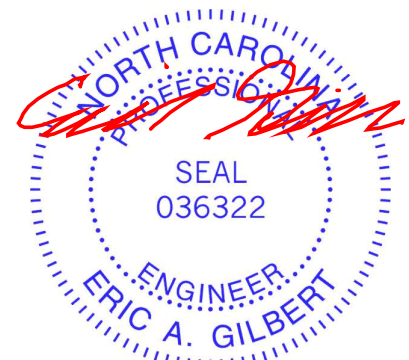
**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
OTHERS 2x4 SP No.2

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

**REACTIONS.** All bearings 11-0-8.  
(lb) - Max Horz 1=125(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=166(LC 12), 6=166(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=347(LC 19), 6=347(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 2-8=-373/317, 4-6=-374/318

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 5-6-10, Exterior(2) 5-6-10 to 9-11-7, Interior(1) 9-11-7 to 10-9-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Gable requires continuous bottom chord bearing.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=166, 6=166.



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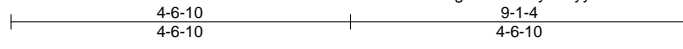
818 Soundside Road  
Edenton, NC 27932

Job J0423-1890	Truss VA4	Truss Type VALLEY	Qty 1	Ply 1	Wellco/Lot 1 Overhills Creek/Harnett 158266755
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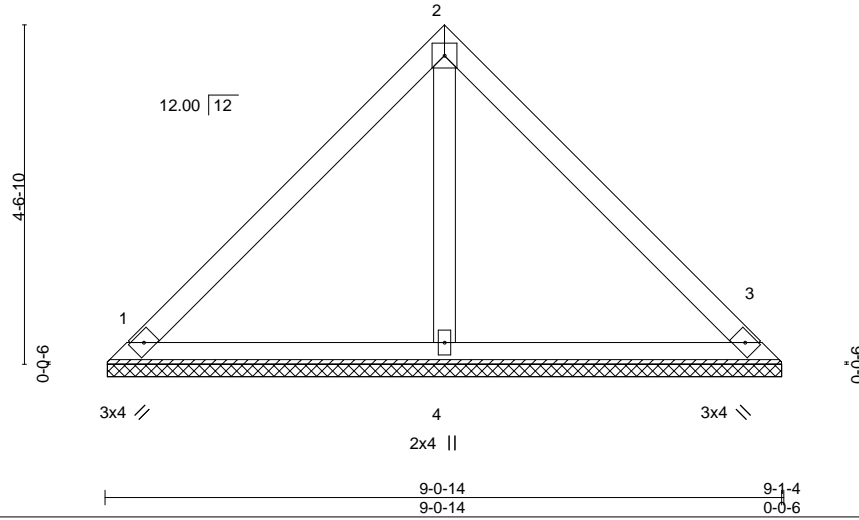
8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 10 08:29:19 2023 Page 1

ID:8XVK7MoEEgDYV6B4ZyI0r5yy8ZO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



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 0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
BCDL 10.0	Lumber DOL	1.15	BC 0.13	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						Weight: 37 lb	FT = 20%

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

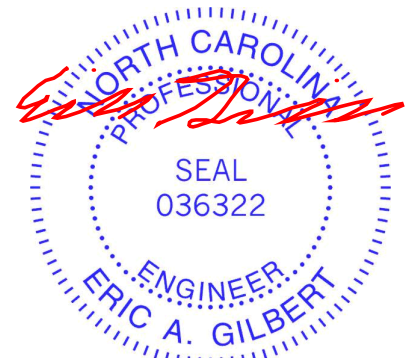
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=9-0-8, 3=9-0-8, 4=9-0-8  
 Max Horz 1=101(LC 9)  
 Max Uplift 1=25(LC 13), 3=25(LC 13)  
 Max Grav 1=191(LC 1), 3=190(LC 1), 4=291(LC 1)

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; 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
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



May 10, 2023

**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 J0423-1890	Truss VA5	Truss Type VALLEY	Qty 1	Ply 1	Wellco/Lot 1 Overhills Creek/Harnett 158266756
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Comtech, Inc. Fayetteville, NC - 28314,

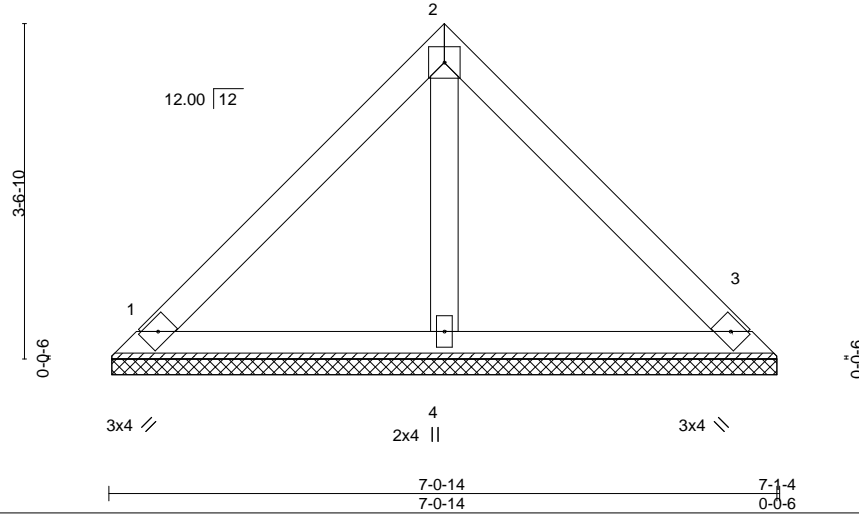
8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 10 08:29:20 2023 Page 1

ID:8XVK7MoEEgDYV6B4ZyI0r5yy8ZO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



4x4 =

Scale = 1:24.4



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 0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
BCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P						Weight: 28 lb	FT = 20%

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

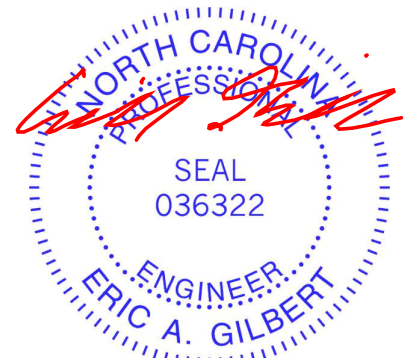
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=7-0-8, 3=7-0-8, 4=7-0-8  
 Max Horz 1=77(LC 9)  
 Max Uplift 1=28(LC 13), 3=28(LC 13)  
 Max Grav 1=156(LC 1), 3=156(LC 1), 4=200(LC 1)

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; 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
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



May 10, 2023

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

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**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



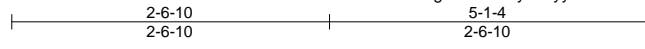
818 Soundside Road  
 Edenton, NC 27932

Job J0423-1890	Truss VA6	Truss Type VALLEY	Qty 1	Ply 1	Wellco/Lot 1 Overhills Creek/Harnett 158266757
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Comtech, Inc. Fayetteville, NC - 28314,

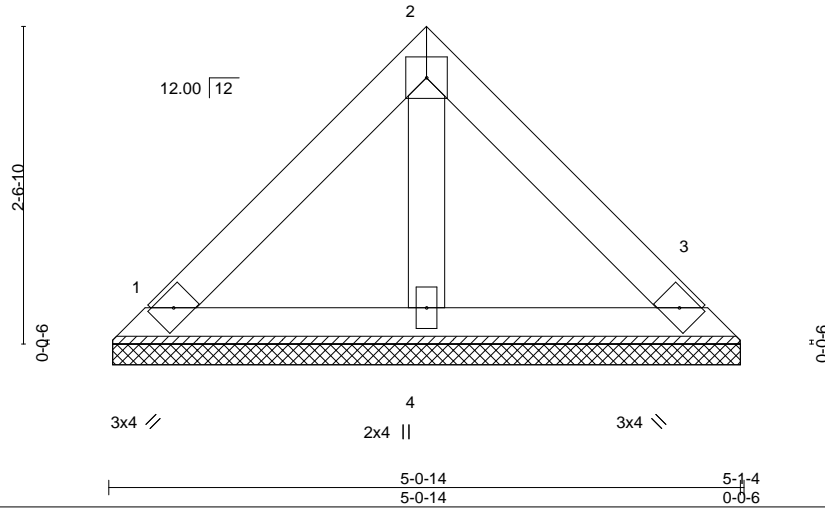
8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 10 08:29:21 2023 Page 1

ID:8XVK7MoEgDYV6B4Zyl0r5yy8ZO-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



4x4 =

Scale = 1:18.5



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	MT20	244/190
BCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.01	Horz(CT)	0.00	3	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

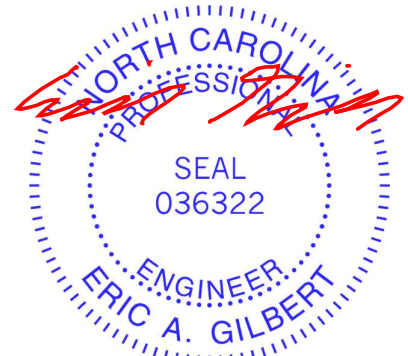
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-1-4 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=5-0-8, 3=5-0-8, 4=5-0-8  
 Max Horz 1=53(LC 11)  
 Max Uplift 1=-19(LC 13), 3=-19(LC 13)  
 Max Grav 1=107(LC 1), 3=107(LC 1), 4=138(LC 1)

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; 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
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



May 10, 2023

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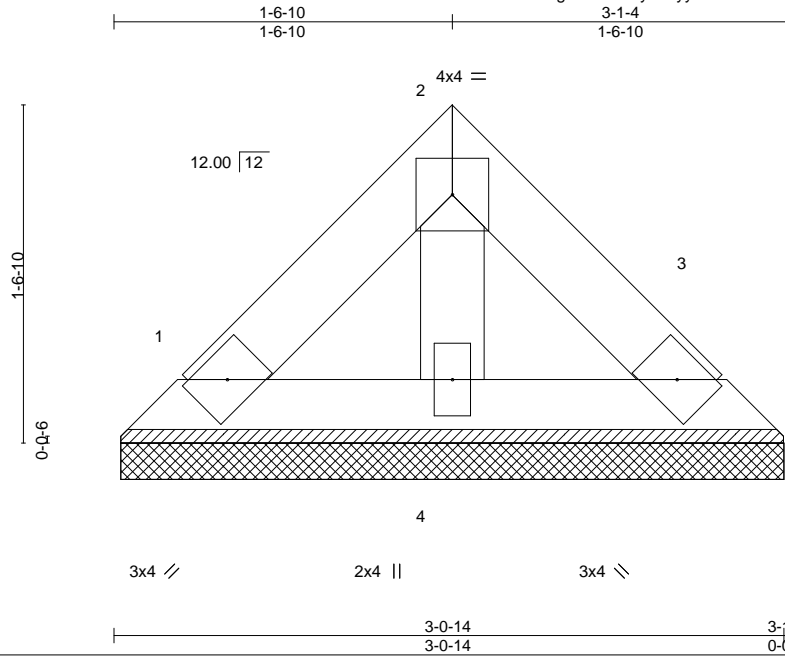


818 Soundside Road  
 Edenton, NC 27932

Job J0423-1890	Truss VA7	Truss Type VALLEY	Qty 1	Ply 1	Wellco/Lot 1 Overhills Creek/Harnett 158266758
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 10 08:29:22 2023 Page 1  
 ID:8XVK7MoEEgDYV6B4Zyl0r5yy8ZO-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:10.6

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 0.02	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.01	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: 11 lb	FT = 20%

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

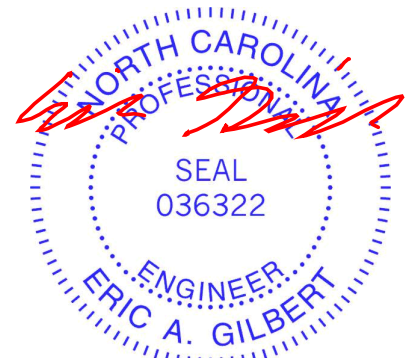
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 3-1-4 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=3-0-8, 3=3-0-8, 4=3-0-8  
 Max Horz 1=29(LC 9)  
 Max Uplift 1=-10(LC 13), 3=-10(LC 13)  
 Max Grav 1=58(LC 1), 3=58(LC 1), 4=75(LC 1)

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; 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
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



May 10, 2023

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

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**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



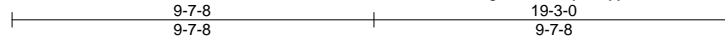
818 Soundside Road  
 Edenton, NC 27932

Job J0423-1890	Truss VB1	Truss Type GABLE	Qty 1	Ply 1	Wellco/Lot 1 Overhills Creek/Harnett 158266759
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Comtech, Inc. Fayetteville, NC - 28314,

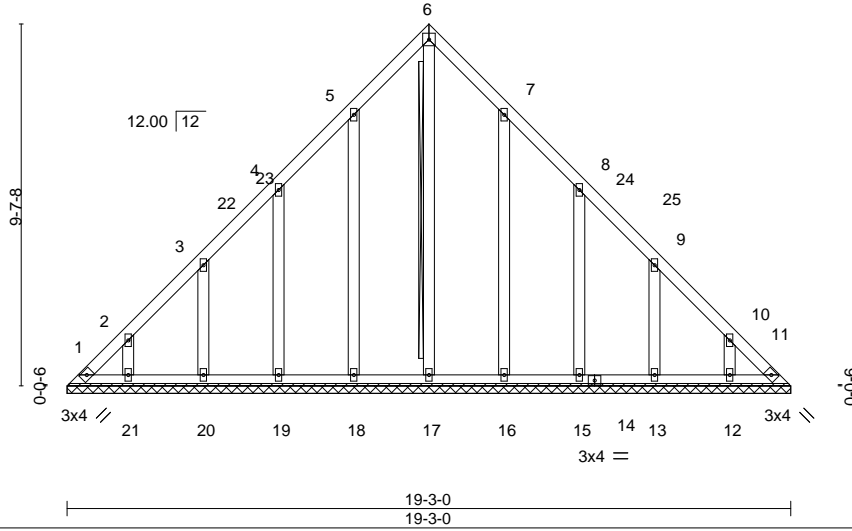
8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 10 08:29:24 2023 Page 1

ID:8XVK7MoEEgDYV6B4Zyl0r5yy8ZO-RIC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



4x4 =

Scale = 1:61.3



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.05	Vert(LL)	n/a	-	n/a	MT20	244/190
BCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.17	Horz(CT)	0.01	11	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 129 lb	FT = 20%

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

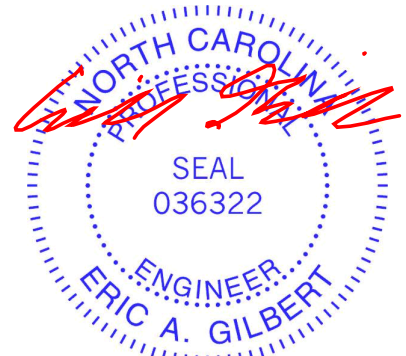
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS T-Brace: 2x4 SPF No.2 - 6-17  
 Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.  
 Brace must cover 90% of web length.

**REACTIONS.** All bearings 19-3-0.  
 (lb) - Max Horz 1=278(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 11 except 1=133(LC 10), 18=138(LC 12), 19=142(LC 12), 20=141(LC 12), 21=127(LC 12), 16=135(LC 13), 15=144(LC 13), 13=141(LC 13), 12=127(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 11, 17, 18, 19, 20, 21, 16, 15, 13, 12 except 1=262(LC 12)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=384/233, 2-3=271/194, 10-11=340/229  
 BOT CHORD 1-21=170/259, 20-21=170/259, 19-20=170/259, 18-19=170/259, 17-18=170/259, 16-17=170/259, 15-16=170/259, 13-15=170/259, 12-13=170/259, 11-12=170/259

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph 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) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 9-7-8, Exterior(2) 9-7-8 to 14-0-5, Interior(1) 14-0-5 to 18-10-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11 except (jt=lb) 1=133, 18=138, 19=142, 20=141, 21=127, 16=135, 15=144, 13=141, 12=127.
- 8) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



May 10, 2023

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

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818 Soundside Road  
 Edenton, NC 27932

Job J0423-1890	Truss VB2	Truss Type VALLEY	Qty 1	Ply 1	Wellco/Lot 1 Overhills Creek/Harnett 158266760
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 10 08:29:25 2023 Page 1

ID:8XVK7MoEEgDYV6B4ZyI0r5yy8ZO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



4x4 =

Scale = 1:55.4

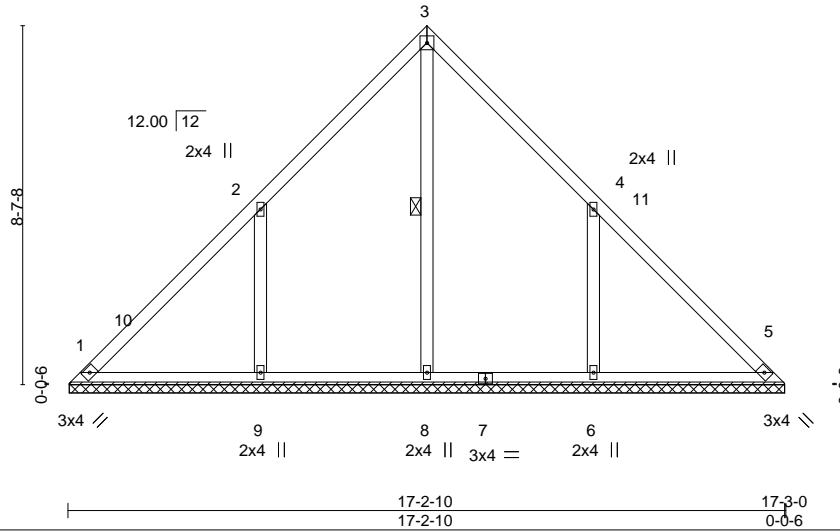


Plate Offsets (X,Y)--	[4:0-0-0,0-0-0]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.20	Vert(LL) n/a - n/a 999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.18	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.14	Horz(CT) 0.00 5 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S		Weight: 84 lb	FT = 20%

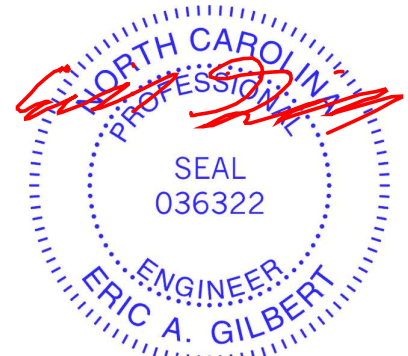
**LUMBER-**  
 TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP No.1  
 OTHERS 2x4 SP No.2

**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.  
 WEBS 1 Row at midpt 3-8

**REACTIONS.** All bearings 17-2-4.  
 (lb) - Max Horz 1=-198(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 1 except 9=-208(LC 12), 6=-208(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 8=415(LC 22), 9=539(LC 19), 6=539(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 2-9=-447/332, 4-6=-447/332

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-7-8, Interior(1) 4-7-8 to 8-7-8, Exterior(2) 8-7-8 to 13-0-5, Interior(1) 13-0-5 to 16-10-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Gable requires continuous bottom chord bearing.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 9=208, 6=208.



May 10, 2023

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

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**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



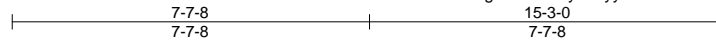
818 Soundside Road  
 Edenton, NC 27932

Job J0423-1890	Truss VB3	Truss Type VALLEY	Qty 1	Ply 1	Wellco/Lot 1 Overhills Creek/Harnett 158266761
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 10 08:29:26 2023 Page 1

ID:8XVK7MoEEgDYV6B4ZyI0r5yy8ZO-RIC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



4x4 =

Scale = 1:49.2

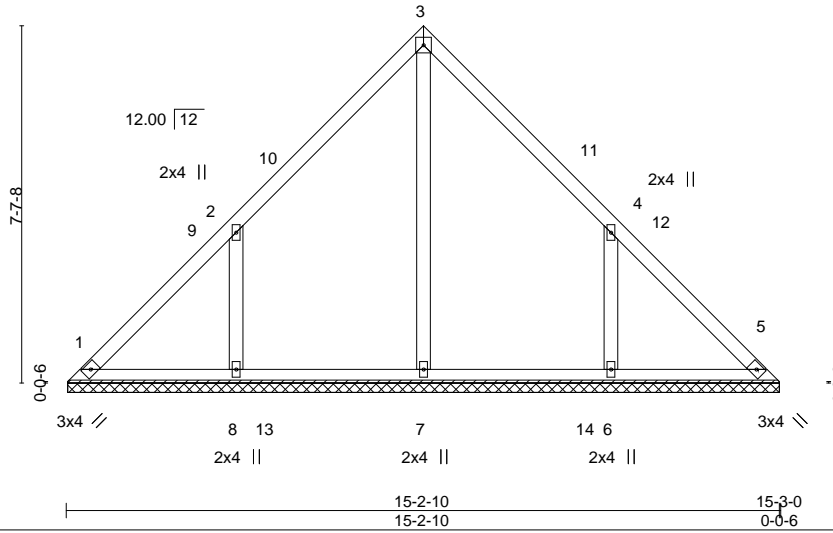


Plate Offsets (X,Y)-- [4:0-0-0,0-0-0]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.16	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.18	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.12	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 73 lb	FT = 20%

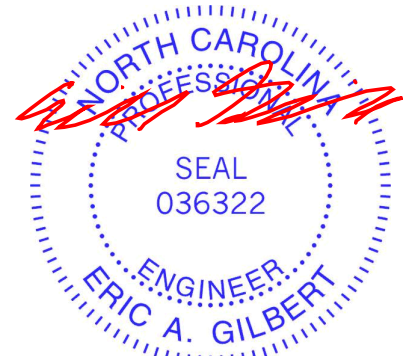
**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
OTHERS 2x4 SP No.2

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

**REACTIONS.** All bearings 15-2-4.  
(lb) - Max Horz 1=174(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=182(LC 12), 6=182(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=414(LC 22), 8=457(LC 19), 6=456(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 2-8=-395/305, 4-6=-395/305

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 7-7-8, Exterior(2) 7-7-8 to 12-0-5, Interior(1) 12-0-5 to 14-10-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Gable requires continuous bottom chord bearing.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) 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=182, 6=182.



May 10, 2023

**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 J0423-1890	Truss VB4	Truss Type VALLEY	Qty 1	Ply 1	Wellco/Lot 1 Overhills Creek/Harnett 158266762
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 10 08:29:27 2023 Page 1

ID:8XVK7MoEEgDYV6B4ZyI0r5yy8ZO-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



4x4 =

Scale = 1:43.0

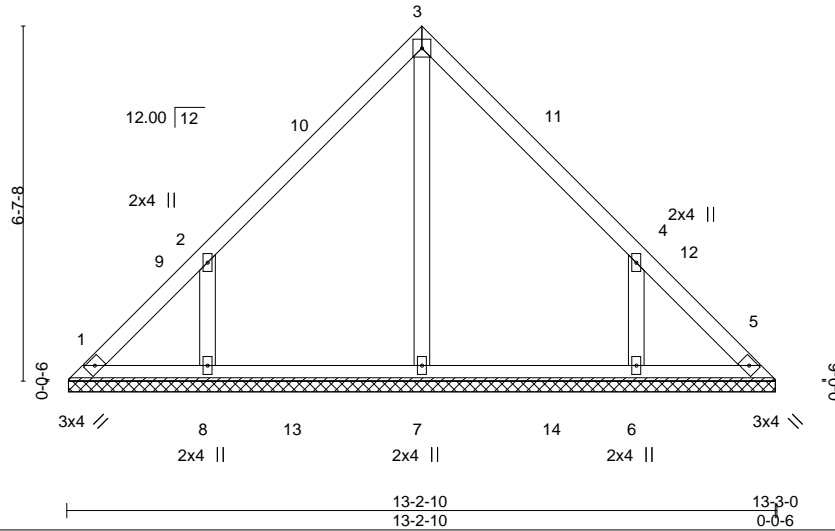


Plate Offsets (X,Y)--	[4:0-0-0,0-0-0]
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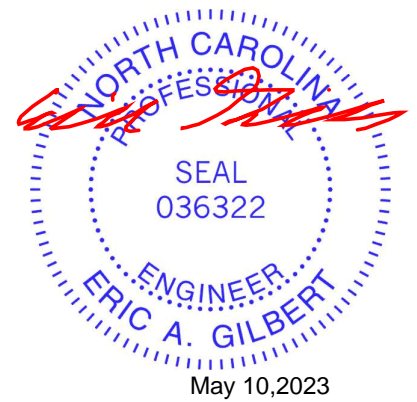
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.14	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.15	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.09	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 61 lb	FT = 20%

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

**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=164(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=389(LC 19), 8=380(LC 19), 6=380(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 2-8=-360/290, 4-6=-360/291

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 6-7-8, Exterior(2) 6-7-8 to 11-0-5, Interior(1) 11-0-5 to 12-10-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Gable requires continuous bottom chord bearing.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) 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=164.



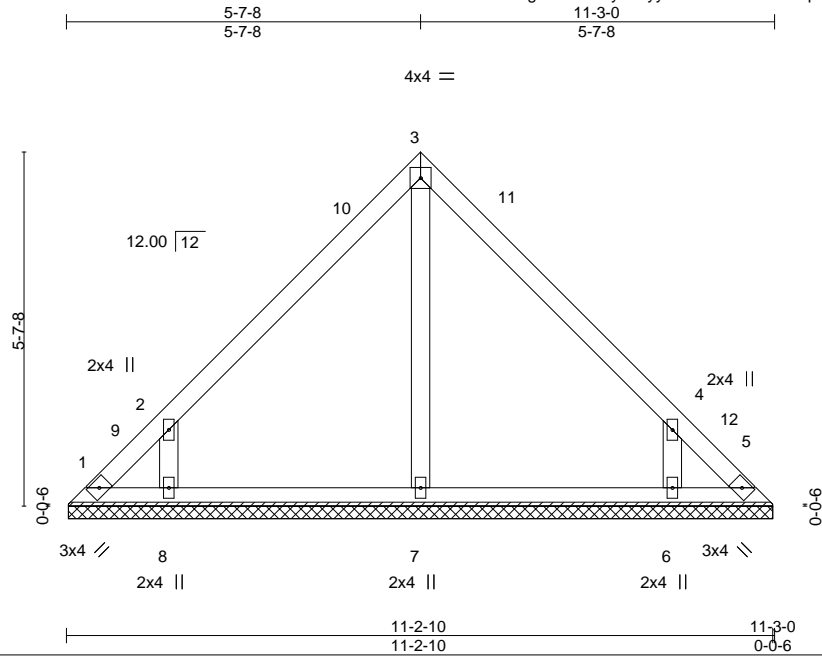
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss 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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p><b>ENGINEERING BY</b>  <b>TRENCO</b>  <small>A MiTek Affiliate</small></p> <p>818 Soundside Road        Edenton, NC 27932</p>
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Job J0423-1890	Truss VB5	Truss Type VALLEY	Qty 1	Ply 1	Wellco/Lot 1 Overhills Creek/Harnett Job Reference (optional)	158266763
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8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 10 08:29:28 2023 Page 1

ID:8XVK7MoEEgDYV6B4ZyI0r5yy8ZO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:36.6

Plate Offsets (X,Y)--	[4:0-0-0,0-0-0]								
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.15	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 49 lb	FT = 20%

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

**REACTIONS.** All bearings 11-2-4.  
 (lb) - Max Horz 1=126(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=164(LC 12), 6=164(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=344(LC 19), 6=344(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 2-8=-369/312, 4-6=-369/312

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 5-7-8, Exterior(2) 5-7-8 to 10-0-5, Interior(1) 10-0-5 to 10-10-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Gable requires continuous bottom chord bearing.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=164, 6=164.



May 10, 2023

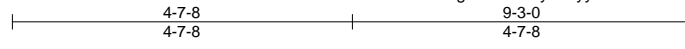
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss 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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p>ENGINEERING BY</p> <p><b>TRENCO</b></p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job J0423-1890	Truss VB6	Truss Type VALLEY	Qty 1	Ply 1	Wellco/Lot 1 Overhills Creek/Harnett 158266764
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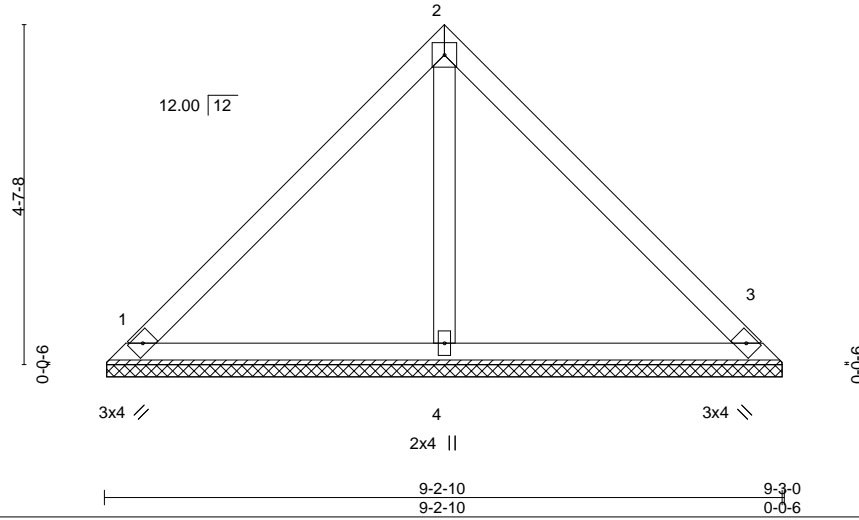
8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 10 08:29:29 2023 Page 1

ID:8XVK7MoEEgDYV6B4ZyI0r5yy8ZO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



4x4 =

Scale = 1:31.3



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	999	MT20	244/190
BCDL 10.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						Weight: 38 lb	FT = 20%

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

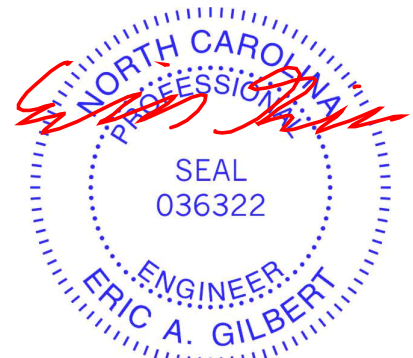
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=9-2-4, 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=194(LC 1), 3=194(LC 1), 4=296(LC 1)

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; 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
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



May 10, 2023

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

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



818 Soundside Road  
 Edenton, NC 27932

Job J0423-1890	Truss VB7	Truss Type VALLEY	Qty 1	Ply 1	Wellco/Lot 1 Overhills Creek/Harnett 158266765
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Comtech, Inc. Fayetteville, NC - 28314,

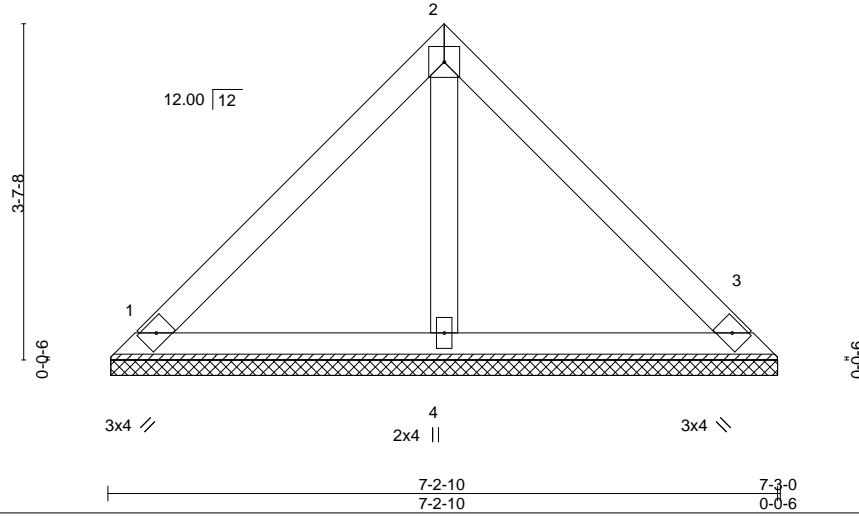
8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 10 08:29:30 2023 Page 1

ID:8XVK7MoEEgDYV6B4Zyl0r5yy8ZO-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



4x4 =

Scale = 1:24.8



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.18	Vert(LL)	n/a	-	n/a	999	MT20	244/190
BCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-P						Weight: 29 lb	FT = 20%

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

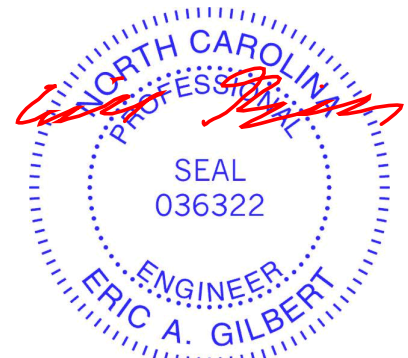
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=7-2-4, 3=7-2-4, 4=7-2-4  
Max Horz 1=78(LC 9)  
Max Uplift 1=28(LC 13), 3=28(LC 13)  
Max Grav 1=159(LC 1), 3=159(LC 1), 4=205(LC 1)

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; 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
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



May 10, 2023

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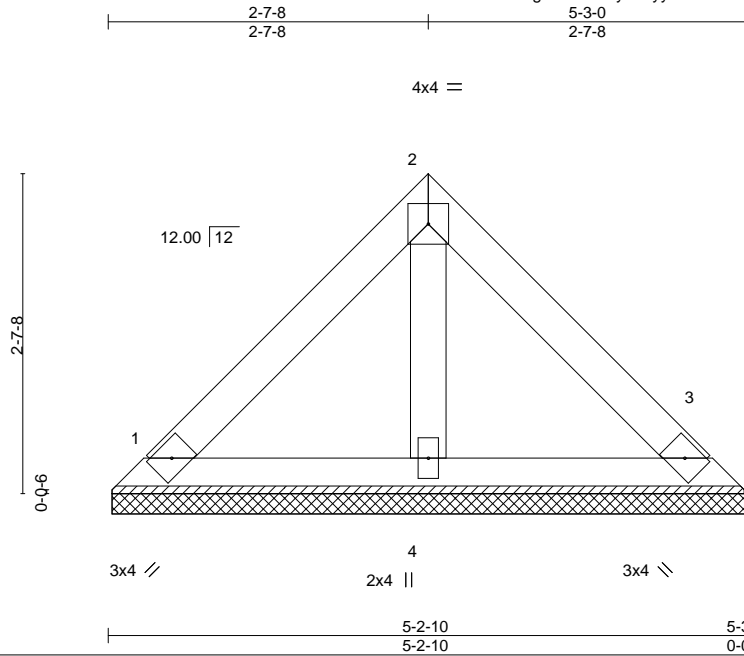


818 Soundside Road  
Edenton, NC 27932

Job J0423-1890	Truss VB8	Truss Type VALLEY	Qty 1	Ply 1	Wellco/Lot 1 Overhills Creek/Harnett 158266766
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 10 08:29:30 2023 Page 1  
 ID:8XVK7MoEEgDYV6B4Zyl0r5yy8ZO-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWRCDoi7J4zJC?f



Scale = 1:18.9

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 0.08	Vert(LL)	n/a	-	n/a	MT20	244/190
BCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.01	Horz(CT)	0.00	3	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

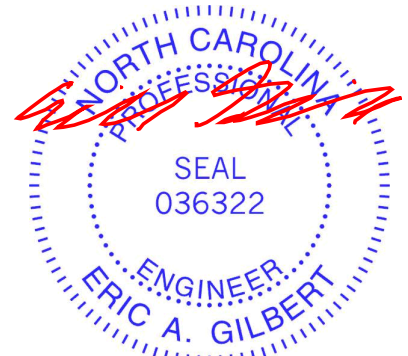
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-3-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=5-2-4, 3=5-2-4, 4=5-2-4  
 Max Horz 1=54(LC 9)  
 Max Uplift 1=20(LC 13), 3=20(LC 13)  
 Max Grav 1=111(LC 1), 3=111(LC 1), 4=142(LC 1)

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; 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
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



May 10, 2023

**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

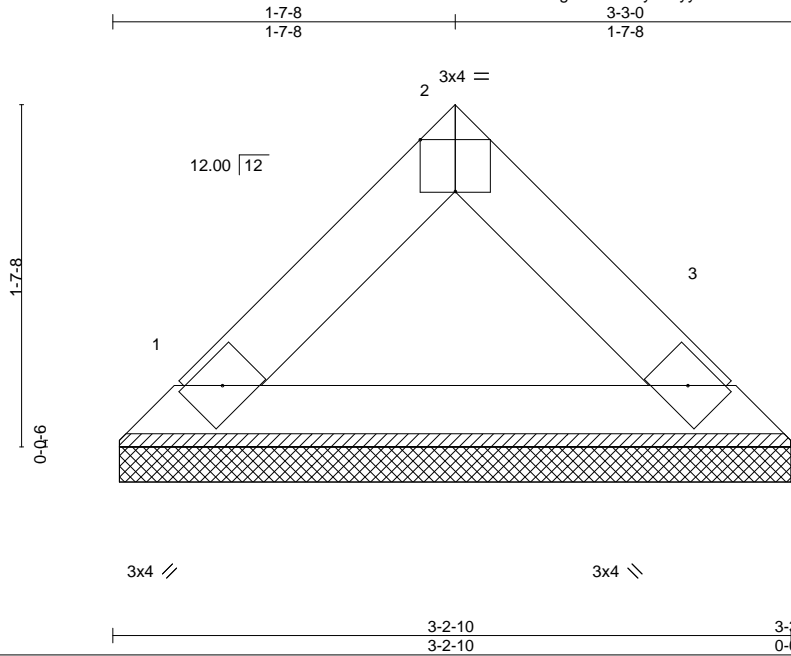


818 Soundside Road  
 Edenton, NC 27932

Job J0423-1890	Truss VB9	Truss Type VALLEY	Qty 1	Ply 1	Wellco/Lot 1 Overhills Creek/Harnett 158266767
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 10 08:29:31 2023 Page 1  
ID:8XVK7MoEEgDYV6B4ZyI0r5yy8ZO-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:10.9

Plate Offsets (X,Y)--	[2:0-2-0,Edge]								
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15		TC 0.03	Vert(LL) n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15		BC 0.05	Vert(CT) n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr YES		WB 0.00	Horz(CT) 0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P					Weight: 10 lb	FT = 20%

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

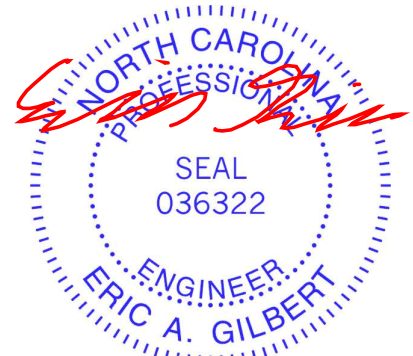
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 3-3-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=3-2-4, 3=3-2-4  
Max Horz 1=31(LC 8)  
Max Uplift 1=3(LC 12), 3=3(LC 12)  
Max Grav 1=102(LC 1), 3=102(LC 1)

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; 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
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



May 10, 2023

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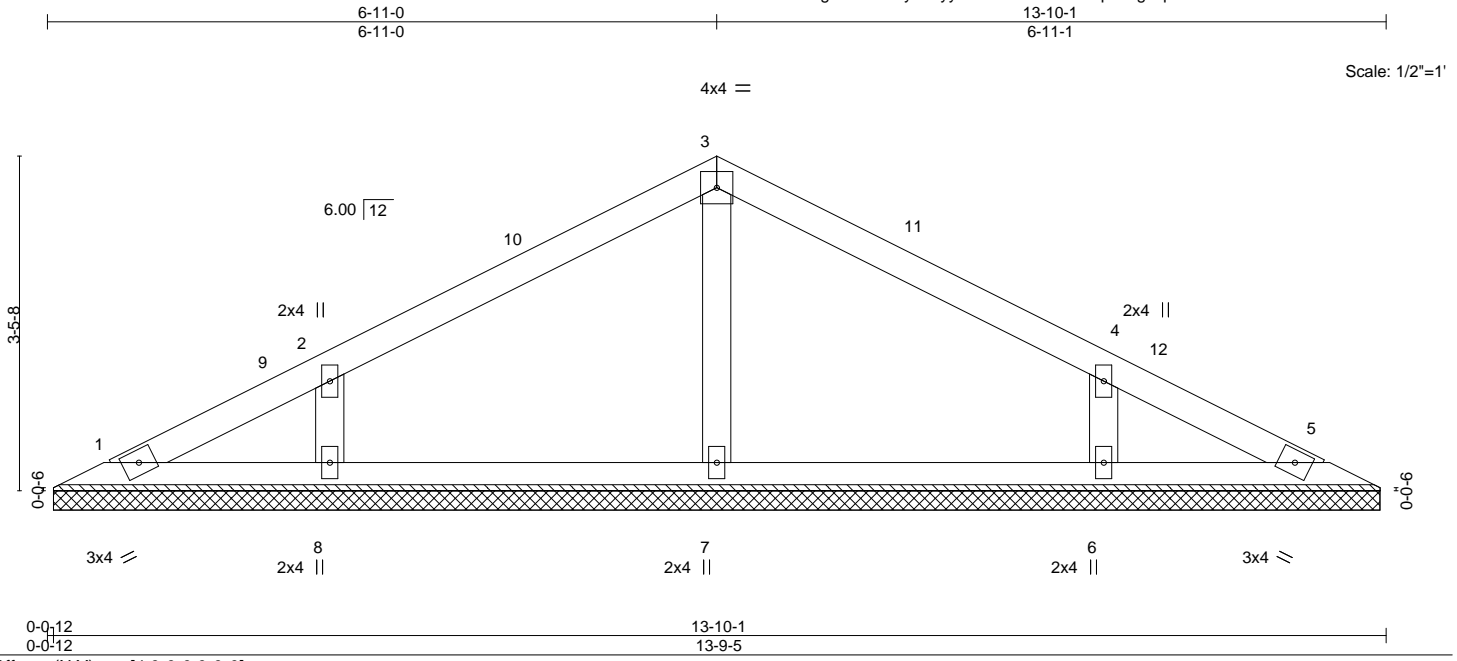
818 Soundside Road  
Edenton, NC 27932

Job J0423-1890	Truss VP1	Truss Type VALLEY	Qty 1	Ply 1	Wellco/Lot 1 Overhills Creek/Harnett 158266768
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 10 08:29:32 2023 Page 1  
ID:8XVK7MoEgDYV6B4ZyI0r5yy8ZO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Job Reference (optional)



0-0-12 0-0-12	13-10-1 13-9-5
Plate Offsets (X,Y)--	[4:0-0-0,0-0-0]

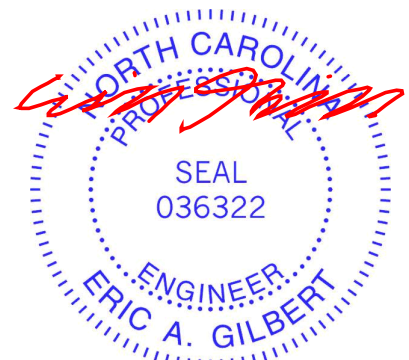
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.13	Vert(LL) n/a - n/a 999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.09	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.04	Horz(CT) 0.00 5 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S		Weight: 48 lb	FT = 20%

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

**REACTIONS.** All bearings 13-8-9.  
 (lb) - Max Horz 1=-41(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 8, 6  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=284(LC 1), 8=305(LC 23), 6=305(LC 24)

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

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-7-13 to 5-0-10, Interior(1) 5-0-10 to 6-11-0, Exterior(2) 6-11-0 to 11-3-13, Interior(1) 11-3-13 to 13-2-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 8, 6.
  - 6) N/A



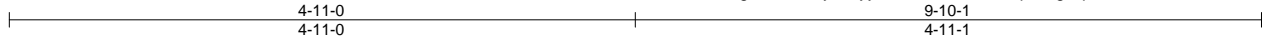
May 10, 2023

Job J0423-1890	Truss VP2	Truss Type VALLEY	Qty 1	Ply 1	Wellco/Lot 1 Overhills Creek/Harnett 158266769
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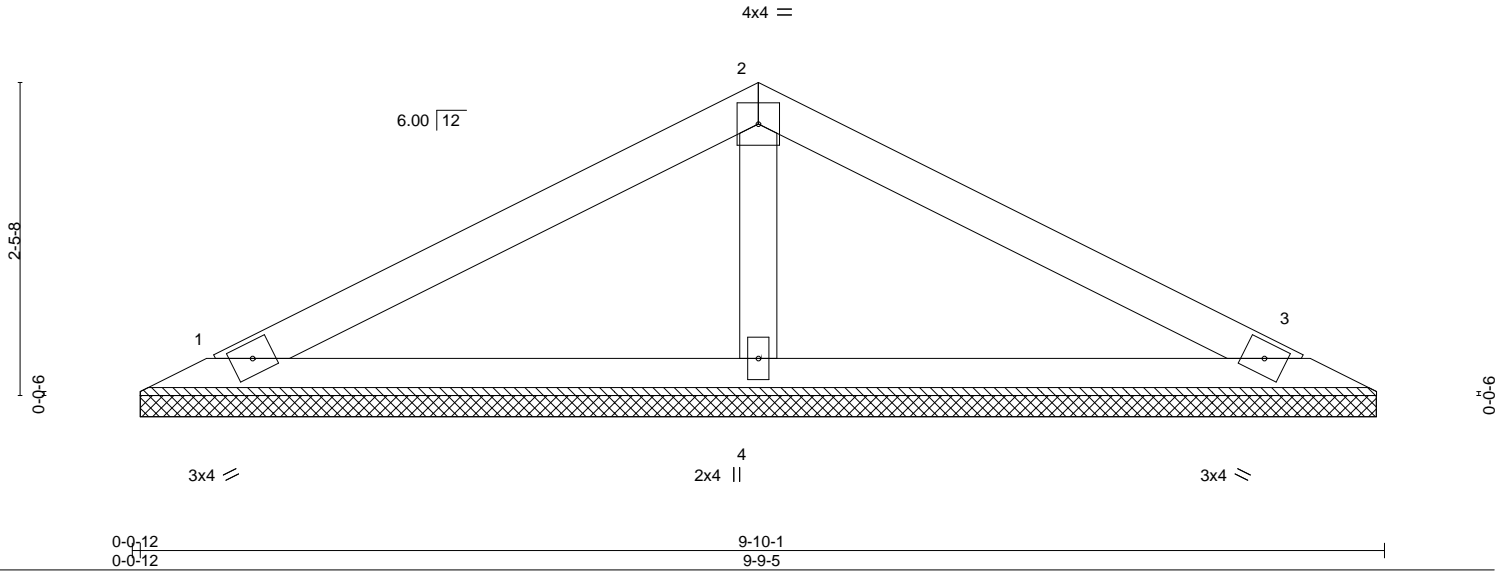
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 10 08:29:33 2023 Page 1

ID:8XVK7MoEEgDYV6B4ZyI0r5yy8ZO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:18.1



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.13	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S						Weight: 31 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=9-8-9, 3=9-8-9, 4=9-8-9  
Max Horz 1=28(LC 10)  
Max Uplift 1=21(LC 12), 3=26(LC 13)  
Max Grav 1=158(LC 23), 3=158(LC 24), 4=370(LC 1)

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; 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
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 6) N/A



May 10, 2023



Job J0423-1890	Truss VP3	Truss Type VALLEY	Qty 1	Ply 1	Wellco/Lot 1 Overhills Creek/Harnett Job Reference (optional)	158266770
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Comtech, Inc. Fayetteville, NC - 28314,

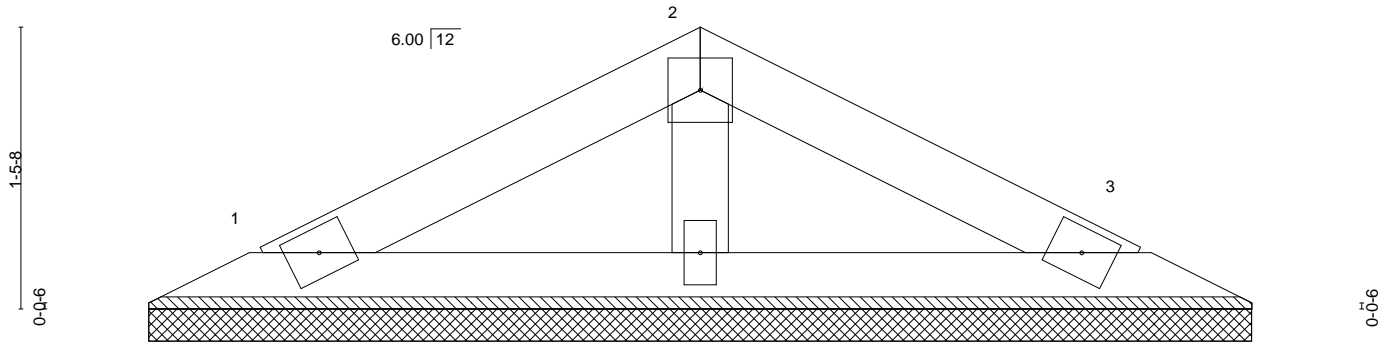
8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 10 08:29:34 2023 Page 1

ID:8XVK7MoEEgDYV6B4ZyI0r5yy8ZO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



4x4 =

Scale: 1"=1'



3x4 =

2x4 ||

3x4 =

0-0-12  
0-0-12

5-10-1  
5-9-5

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 0.07	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-P					Weight: 17 lb	FT = 20%

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

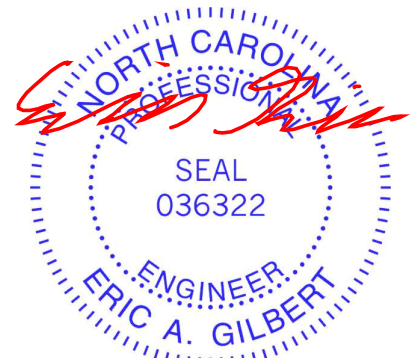
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-10-1 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=5-8-9, 3=5-8-9, 4=5-8-9  
Max Horz 1=15(LC 9)  
Max Uplift 1=15(LC 12), 3=17(LC 13)  
Max Grav 1=92(LC 1), 3=93(LC 1), 4=178(LC 1)

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

**NOTES-**

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



May 10, 2023

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

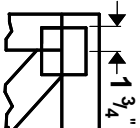
**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



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

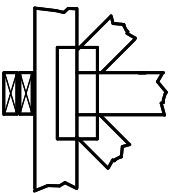
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

# Numbering System

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



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

Lumber design values are in accordance with ANSI/TP1 section 6.3 These truss designs rely on lumber values established by others.

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



# General Safety Notes

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

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.