

Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: J0822-4264  
Wellco / 114 Hidden Lakes / Johnston

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: I54280508 thru I54280544

My license renewal date for the state of North Carolina is December 31, 2022.

North Carolina COA: C-0844



September 20, 2022

Johnson, Andrew

**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	Truss	Truss Type	Qty	Ply	Wellco / 114 Hidden Lakes / Johnston	I54280508
J0822-4264	A1	COMMON	8	1		

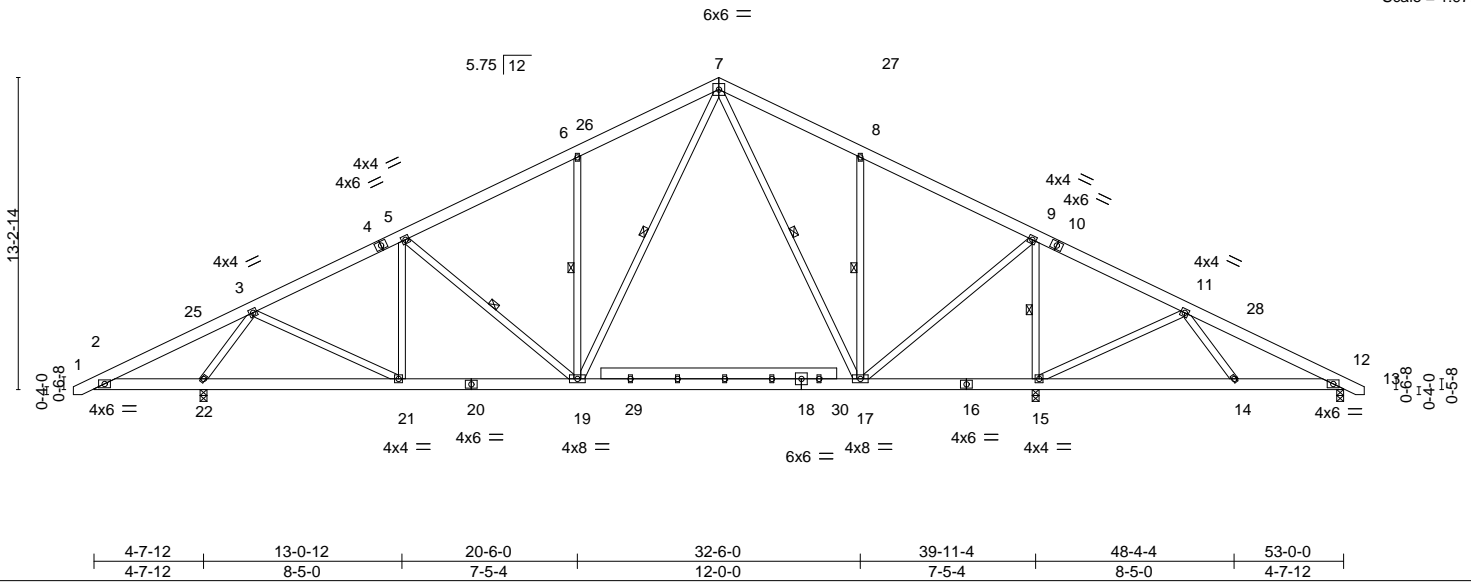
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Sep 19 16:16:28 2022 Page 1

ID:tuSuYlo1EfqYp??D9p1B5czDgot-vQrls3guT9\_V6NpbnGGTFnoHWS7heNCurc8cdWyc0LH

-0-10-8	6-8-15	13-0-12	20-6-0	26-6-0	32-6-0	39-11-4	46-3-1	53-0-0	53-10-8
0-10-8	6-8-15	6-3-13	7-5-4	6-0-0	6-0-0	7-5-4	6-3-13	6-8-15	0-10-8

Scale = 1:97.7



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 0.22	Vert(LL)	-0.31 17-19	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.64	Vert(CT)	-0.45 17-19	>956	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.51	Horz(CT)	0.03 12	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.05 14-15	>999	240		
								Weight: 434 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-11-13 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:  
 6-0-0 oc bracing: 2-22,15-17.  
 WEBS 1 Row at midpt 5-19, 7-19, 7-17, 9-15, 6-19, 8-17

**REACTIONS.** (size) 22=0-3-8, 15=0-3-8, 12=0-3-8  
 Max Horz 22=-156(LC 13)  
 Max Uplift 22=-146(LC 12), 15=-130(LC 13), 12=-105(LC 8)  
 Max Grav 22=1796(LC 1), 15=2222(LC 2), 12=448(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-506/563, 3-5=-1684/254, 5-6=-1572/318, 6-7=-1563/473, 7-8=-1026/349,  
 8-9=-1037/218, 9-11=-150/327, 11-12=-560/419  
 BOT CHORD 2-22=-421/539, 21-22=-159/872, 19-21=-116/1548, 17-19=0/985, 15-17=-224/327,  
 14-15=-83/312, 12-14=-256/428  
 WEBS 3-22=-1919/685, 3-21=-121/806, 7-19=-247/1024, 7-17=-281/59, 9-17=-200/1409,  
 9-15=-1784/431, 11-15=-562/461, 11-14=-305/373, 6-19=-433/288, 8-17=-429/286

- 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) -0-8-5 to 4-7-5, Interior(1) 4-7-5 to 26-6-0, Exterior(2) 26-6-0 to 31-9-10, Interior(1) 31-9-10 to 53-8-5 zone; cantilever left exposed ; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) All plates are 2x4 MT20 unless otherwise indicated.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 22=146, 15=130, 12=105.



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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



818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellco / 114 Hidden Lakes / Johnston	I54280509
J0822-4264	A2	COMMON	2	1		

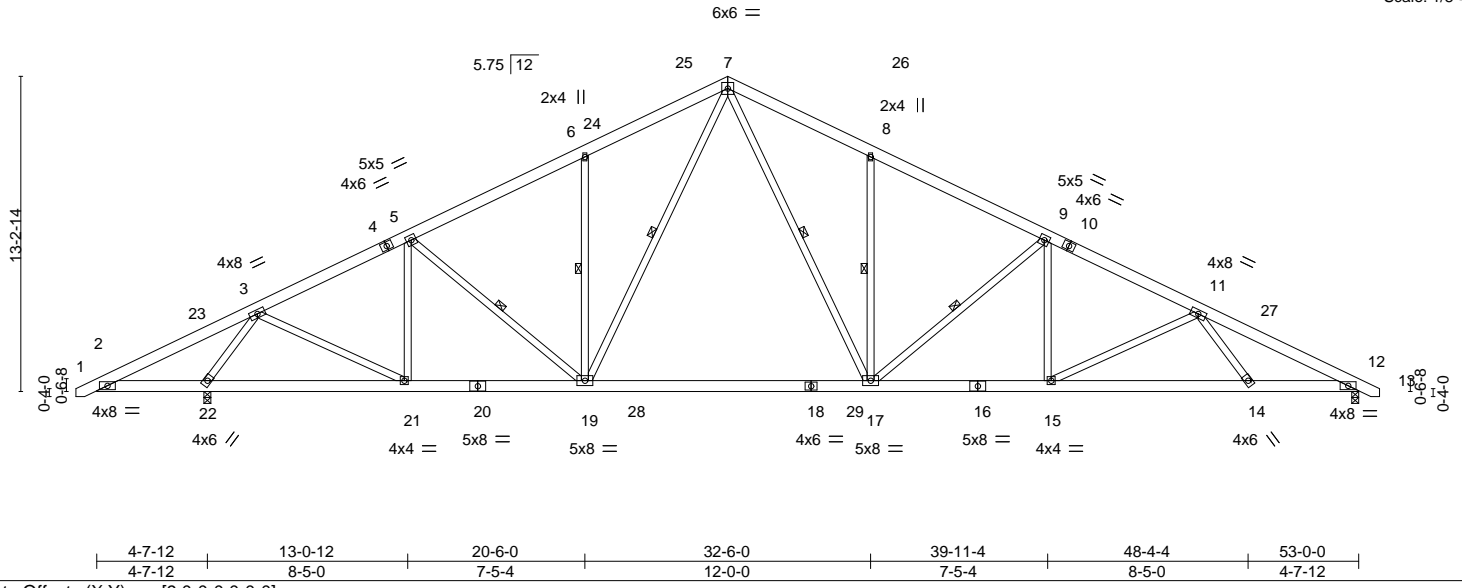
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8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Sep 19 16:16:30 2022 Page 1

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0-10-8	6-8-15	13-0-12	20-6-0	26-6-0	32-6-0	39-11-4	46-3-1	53-0-0	53-10-8
0-10-8	6-8-15	6-3-13	7-5-4	6-0-0	6-0-0	7-5-4	6-3-13	6-8-15	0-10-8

Scale: 1/8"=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 0.44	Vert(LL)	-0.34	17-19	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.62	Vert(CT)	-0.57	17-19	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.84	Horz(CT)	0.12	12	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.12	17	>999		
								Weight: 411 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 3-5-15 oc purlins.
BOT CHORD 2x6 SP No.1 *Except* 16-18,18-20: 2x6 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.2	WEBS 1 Row at midpt 5-19, 7-19, 7-17, 9-17, 6-19, 8-17

**REACTIONS.** (size) 22=0-3-8, 12=0-3-8  
 Max Horz 22=-156(LC 17)  
 Max Uplift 22=-206(LC 12), 12=-163(LC 13)  
 Max Grav 22=2858(LC 1), 12=2193(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-504/556, 3-5=-3267/717, 5-6=-3391/802, 6-7=-3379/964, 7-8=-3339/932,  
 8-9=-3357/803, 9-11=-3957/862, 11-12=-4456/866  
 BOT CHORD 2-22=-418/538, 21-22=-200/1578, 19-21=-440/2969, 17-19=-233/2371, 15-17=-531/3514,  
 14-15=-711/3834, 12-14=-656/3924  
 WEBS 3-22=-3188/1043, 3-21=-358/1620, 5-21=-603/270, 7-19=-390/1377, 7-17=-327/1415,  
 9-17=-790/233, 9-15=-7/427, 11-15=-453/203, 11-14=0/340, 6-19=-875/441,  
 8-17=-413/281

- 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) -0-8-5 to 4-7-5, Interior(1) 4-7-5 to 26-6-0, Exterior(2) 26-6-0 to 31-9-10, Interior(1) 31-9-10 to 53-8-5 zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 22=206, 12=163.
  - 6) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard  
 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-5=-60, 5-25=-120(F=-60), 7-25=-60, 7-13=-60, 2-12=-20

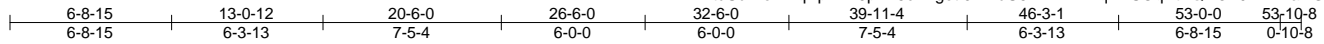


Job	Truss	Truss Type	Qty	Ply	Wellco / 114 Hidden Lakes / Johnston	154280510
J0822-4264	A3	COMMON	1	1	Job Reference (optional)	

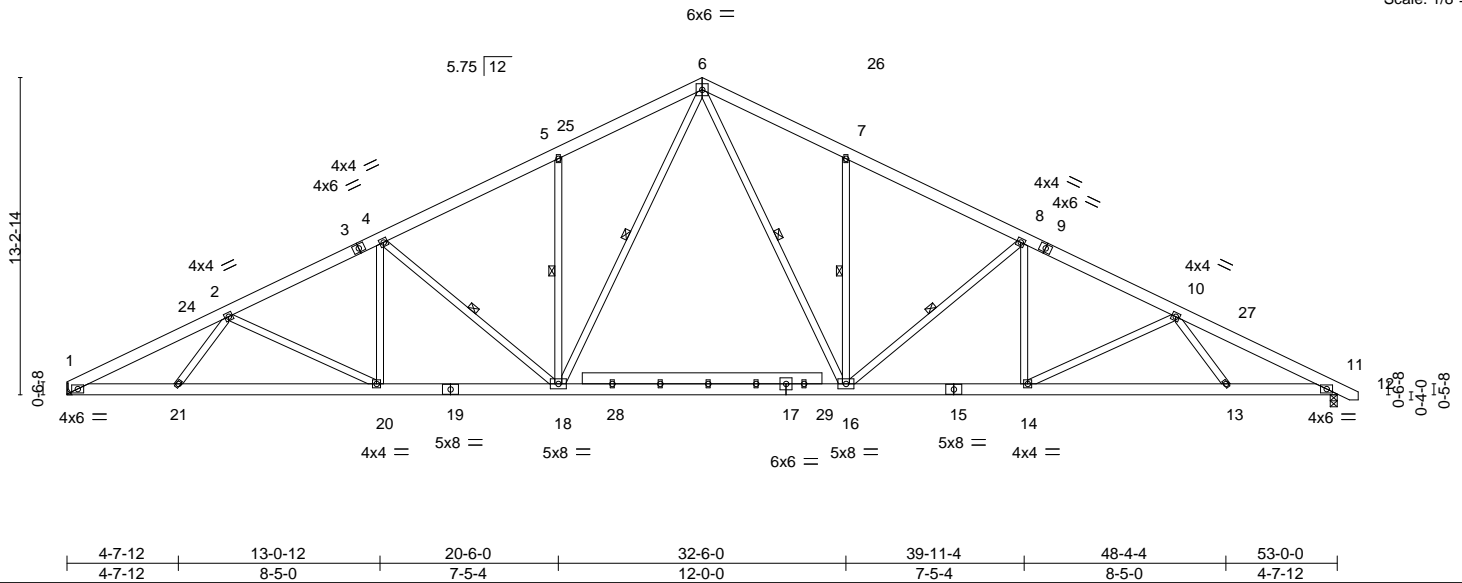
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Scale: 1/8"=1'



<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 0.32	Vert(LL)	-0.38 16-18	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.40	Vert(CT)	-0.64 16-18	>985	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.42	Horz(CT)	-0.13 1	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.13 16	>999	240	Weight: 432 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 3-5-9 oc purlins.
BOT CHORD 2x6 SP 2400F 2.0E *Except*	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
22-23: 2x6 SP No.1	WEBS 1 Row at midpt 4-18, 6-18, 6-16, 8-16, 5-18, 7-16
WEBS 2x4 SP No.2	

**REACTIONS.** (size) 1=Mechanical, 11=0-3-8  
 Max Horz 11=-160(LC 17)  
 Max Uplift 1=-129(LC 12), 11=-141(LC 13)  
 Max Grav 1=2149(LC 2), 11=2192(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-4457/825, 2-4=-3965/807, 4-5=-3357/738, 5-6=-3342/869, 6-7=-3339/866,  
 7-8=-3355/731, 8-10=-3954/791, 10-11=-4452/798  
 BOT CHORD 1-21=-644/3945, 20-21=-701/3859, 18-20=-496/3520, 16-18=-188/2354, 14-16=-493/3511,  
 13-14=-666/3832, 11-13=-612/3920  
 WEBS 2-21=0/337, 2-20=-480/231, 4-20=-21/433, 4-18=-797/242, 6-18=-331/1416,  
 6-16=-330/1411, 8-16=-790/234, 8-14=-8/427, 10-14=-461/205, 10-13=0/337,  
 5-18=-422/284, 7-16=-421/284

- 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) 0-1-4 to 5-4-14, Interior(1) 5-4-14 to 26-6-0, Exterior(2) 26-6-0 to 31-9-10, Interior(1) 31-9-10 to 53-8-5 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) 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) Refer to girder(s) for truss to truss connections.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=129, 11=141.



September 20, 2022

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

**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate

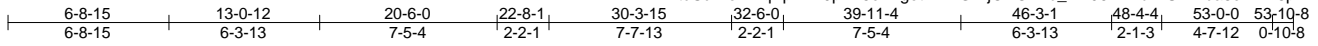
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellco / 114 Hidden Lakes / Johnston	I54280511
J0822-4264	A4	HIP	1	1		

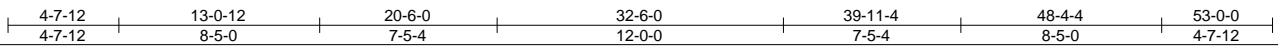
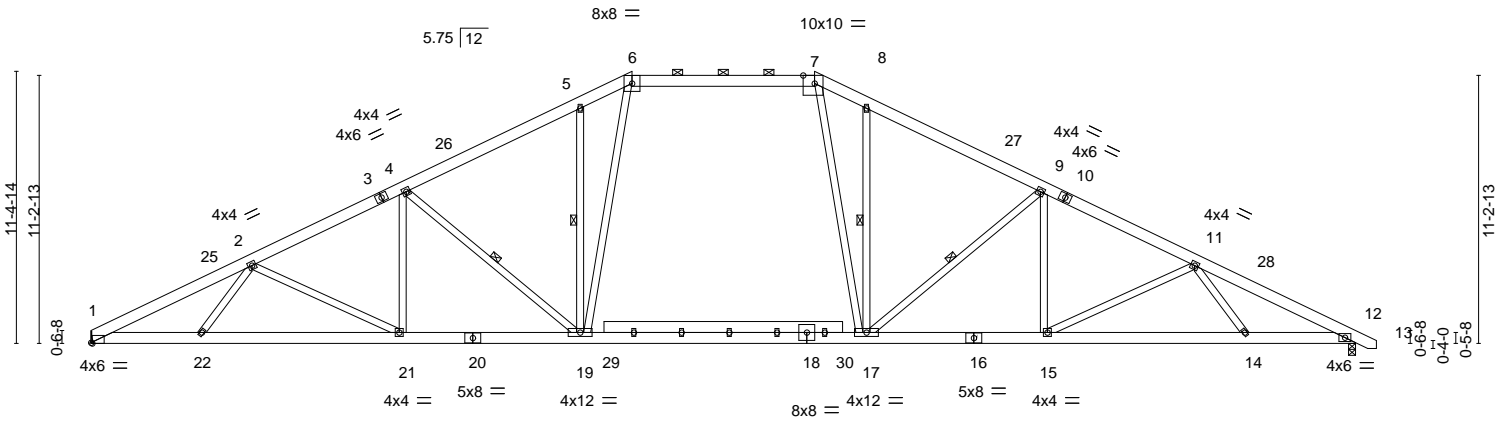
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8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Sep 19 16:16:32 2022 Page 1

ID:tuSuYlo1EfqYp??D9p1B5czDgot-nB4GiRjOXOVxb\_7M06LPdzvUTWba8eTmE6pmHyc0LD



Scale: 1/8"=1'



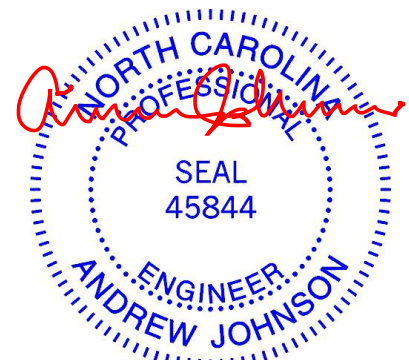
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.48	Vert(LL)	-0.47	19-21	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.51	Vert(CT)	-0.67	17-19	>943		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.67	Horz(CT)	0.14	12	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.25	19-21	>999	Weight: 421 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 3-4-13 oc purlins, except
BOT CHORD 2x6 SP 2400F 2.0E *Except* 23-24: 2x6 SP No.1	2-0-0 oc purlins (4-4-8 max.): 6-7.
WEBS 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
	WEBS 1 Row at midpt 5-19, 4-19, 8-17, 9-17

**REACTIONS.** (size) 1=Mechanical, 12=0-3-8  
 Max Horz 1=-137(LC 17)  
 Max Uplift 1=-110(LC 12), 12=-121(LC 13)  
 Max Grav 1=2200(LC 2), 12=2243(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-4589/939, 2-4=-4088/930, 4-5=-3479/858, 5-6=-3363/984, 6-7=-2839/829,  
 7-8=-3356/986, 8-9=-3476/854, 9-11=-4069/929, 11-12=-4566/908  
 BOT CHORD 1-22=-725/4068, 21-22=-787/3980, 19-21=-649/3632, 17-19=-371/2839, 15-17=-644/3616,  
 14-15=-774/3932, 12-14=-711/4022  
 WEBS 2-22=0/338, 11-14=0/337, 11-15=-437/203, 4-21=-11/461, 2-21=-473/233, 9-15=-9/443,  
 5-19=-427/294, 4-19=-886/282, 6-19=-323/1244, 8-17=-420/289, 9-17=-871/277,  
 7-17=-318/1230

- 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) 0-0-12 to 5-4-6, Interior(1) 5-4-6 to 22-8-1, Exterior(2) 22-8-1 to 37-9-14, Interior(1) 37-9-14 to 53-8-5 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) All plates are 2x4 MT20 unless otherwise indicated.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 7) Refer to girder(s) for truss to truss connections.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=110, 12=121.
  - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 20, 2022

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**TRENCO**  
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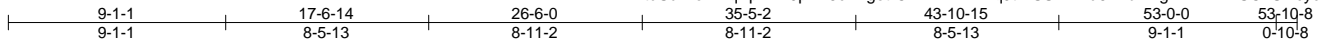


Job	Truss	Truss Type	Qty	Ply	Wellco / 114 Hidden Lakes / Johnston	I54280513
J0822-4264	A6	HIP	1	1		

Comtech, Inc. Fayetteville, NC - 28314,

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Scale: 1/8"=1'

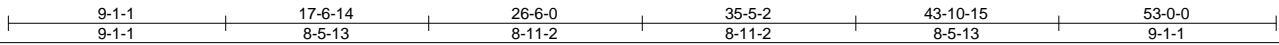
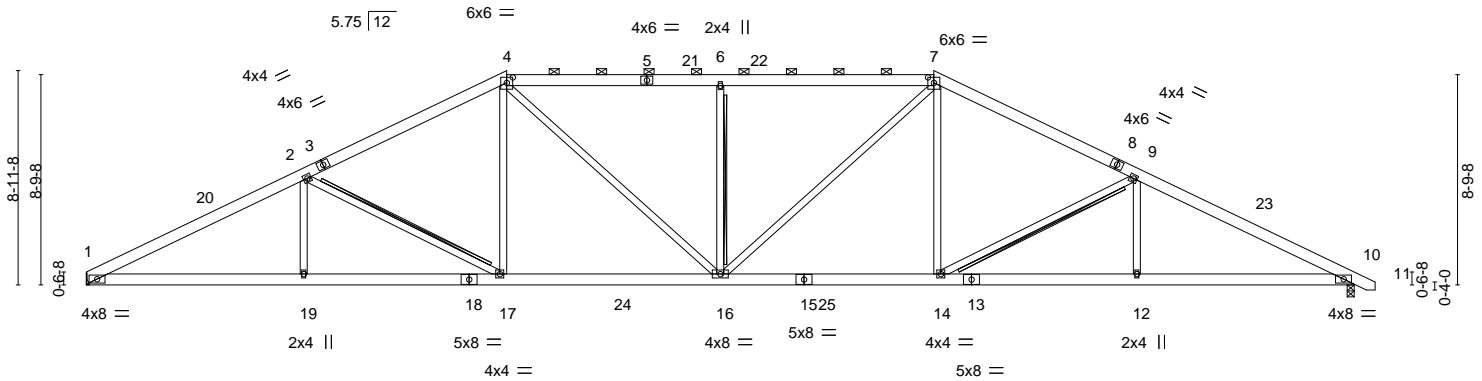


Plate Offsets (X,Y)-- [4:0-3-0,0-2-12], [7:0-3-0,0-2-12]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.57	Vert(LL)	-0.25 16-17	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.59	Vert(CT)	-0.48 16-17	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.49	Horz(CT)	0.17 10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.16 16	>999	240	Weight: 369 lb	FT = 20%

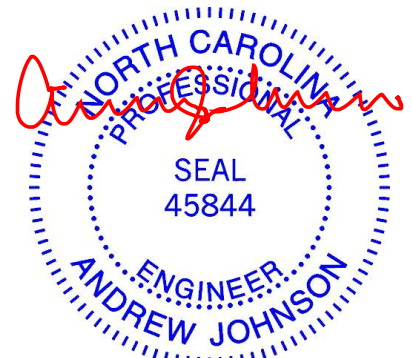
**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 3-1-14 oc purlins, except 2-0-0 oc purlins (3-10-1 max.): 4-7.  
 Rigid ceiling directly applied or 8-8-3 oc bracing.  
 T-Brace: 2x4 SPF No.2 - 2-17, 9-14, 6-16  
 Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.  
 Brace must cover 90% of web length.

**REACTIONS.** (size) 1=Mechanical, 10=0-3-8  
 Max Horz 1=-108(LC 17)  
 Max Uplift 1=-77(LC 12), 10=-88(LC 13)  
 Max Grav 1=2111(LC 1), 10=2162(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-4194/1014, 2-4=-3501/920, 4-6=-3521/994, 6-7=-3523/995, 7-9=-3491/921, 9-10=-4191/1013  
 BOT CHORD 1-19=-819/3697, 17-19=-819/3697, 16-17=-543/3066, 14-16=-537/3057, 12-14=-807/3666, 10-12=-807/3666  
 WEBS 2-19=0/371, 2-17=-812/311, 4-17=-48/663, 4-16=-183/780, 7-16=-188/791, 7-14=-44/653, 9-14=-788/305, 9-12=0/366, 6-16=-661/324

- 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) 0-0-12 to 5-4-6, Interior(1) 5-4-6 to 17-6-14, Exterior(2) 17-6-14 to 25-0-13, Interior(1) 25-0-13 to 35-5-2, Exterior(2) 35-5-2 to 42-11-1, Interior(1) 42-11-1 to 53-8-5 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.
  - 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, 10.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



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

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



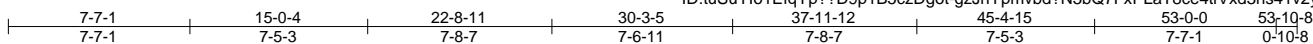
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellco / 114 Hidden Lakes / Johnston	I54280514
J0822-4264	A7	HIP	1	1		

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8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Sep 19 16:16:36 2022 Page 1

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Scale: 1/8"=1'

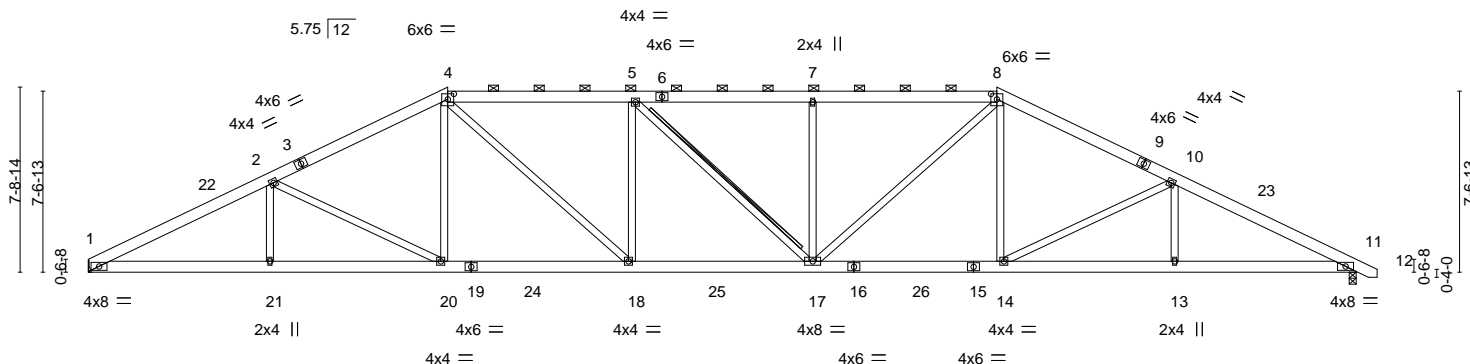


Plate Offsets (X,Y)--	[4:0-3-0,0-2-12], [8:0-3-0,0-2-12]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.41	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.57	Vert(LL) -0.26 17-18 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.73	Vert(CT) -0.51 17-18 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.17 11 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.18 17-18 >999 240	Weight: 376 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 3-4-10 oc purlins, except  
 2-0-0 oc purlins (3-8-5 max.): 4-8.  
 Rigid ceiling directly applied or 8-6-0 oc bracing.  
 BOT CHORD T-Brace: 2x4 SPF No.2 - 5-17  
 WEBS Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.  
 Brace must cover 90% of web length.

**REACTIONS.** (size) 1=Mechanical, 11=0-3-8  
 Max Horz 1=93(LC 13)  
 Max Uplift 1=-68(LC 9), 11=-72(LC 8)  
 Max Grav 1=2111(LC 1), 11=2162(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-4261/1044, 2-4=-3735/958, 4-5=-4046/1079, 5-7=-3997/1072, 7-8=-3999/1074,  
 8-10=-3695/959, 10-11=-4246/1040  
 BOT CHORD 1-21=-858/3771, 20-21=-858/3771, 18-20=-614/3294, 17-18=-755/4044, 14-17=-610/3259,  
 13-14=-846/3724, 11-13=-846/3724  
 WEBS 2-21=0/305, 2-20=-645/272, 4-20=-38/538, 4-18=-258/1124, 5-18=-595/270,  
 7-17=-515/271, 8-17=-260/1107, 8-14=-35/531, 10-14=-613/264, 10-13=0/300

- 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) 0-0-12 to 5-4-6, Interior(1) 5-4-6 to 15-0-4, Exterior(2) 15-0-4 to 22-8-11, Interior(1) 22-8-11 to 37-11-12, Exterior(2) 37-11-12 to 45-4-15, Interior(1) 45-4-15 to 53-8-5 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.
  - 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.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



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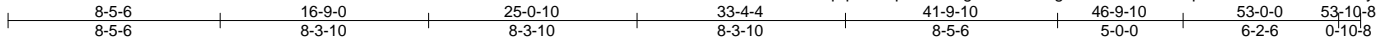


Job	Truss	Truss Type	Qty	Ply	Wellco / 114 Hidden Lakes / Johnston	154280515
J0822-4264	A8	ROOF SPECIAL GIRDER	1	2	Job Reference (optional)	

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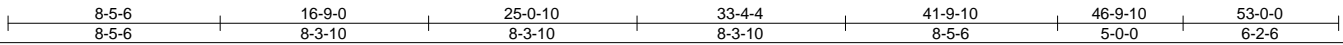
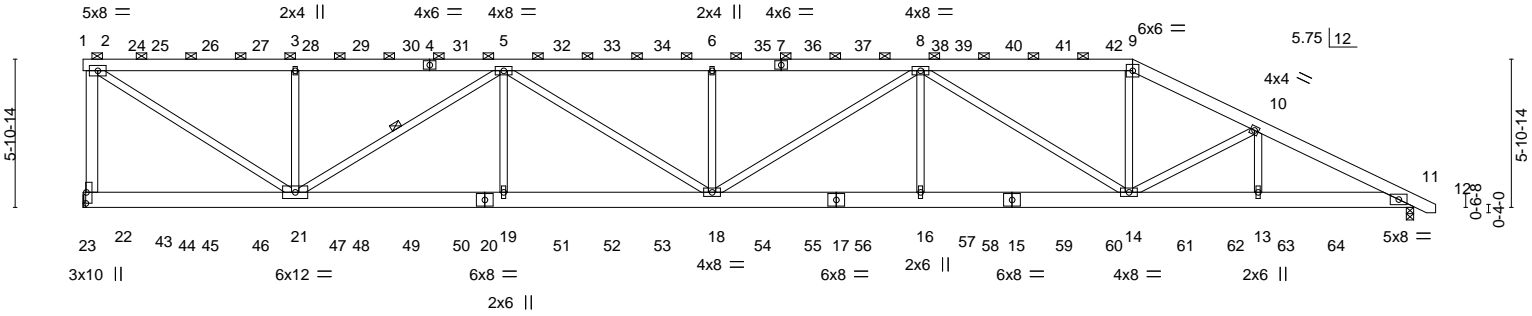


Plate Offsets (X,Y)-- [22:0-5-4,0-0-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.35	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.52	Vert(LL) -0.28 16-18 >999 360		
BCLL 0.0 *	Rep Stress Incr NO	WB 1.00	Vert(CT) -0.57 16-18 >999 240		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Horz(CT) 0.12 11 n/a n/a		
			Wind(LL) 0.40 16-18 >999 240	Weight: 842 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-11-2 oc purlins, except end verticals, and 2-0-0 oc purlins (5-3-5 max.): 1-9.
BOT CHORD 2x8 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 2-22: 2x6 SP No.1	WEBS 1 Row at midpt 5-21

**REACTIONS.** (size) 22=Mechanical, 11=0-3-8  
 Max Horz 22=-184(LC 9)  
 Max Uplift 22=-1568(LC 4), 11=-1223(LC 4)  
 Max Grav 22=3783(LC 1), 11=3788(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-22=-3596/1625, 2-3=-4862/2001, 3-5=-4862/2001, 5-6=-9201/3747, 6-8=-9201/3747, 8-9=-6336/2453, 9-10=-6988/2665, 10-11=-7670/2673  
 BOT CHORD 21-22=-42/257, 19-21=-3143/7953, 18-19=-3143/7953, 16-18=-3379/8701, 14-16=-3379/8701, 13-14=-2344/6831, 11-13=-2344/6831  
 WEBS 2-21=-2331/5696, 3-21=-889/696, 5-21=-3682/1509, 5-19=0/594, 5-18=-570/1486, 6-18=-843/647, 8-18=-304/653, 8-16=0/587, 8-14=-2877/1287, 9-14=-653/2309, 10-14=-643/135, 10-13=-29/392

- 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: 2x8 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
  - 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.
  - 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) except (jt=lb) 22=1568, 11=1223.
  - 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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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></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	Truss	Truss Type	Qty	Ply	Wellco / 114 Hidden Lakes / Johnston	I54280515
J0822-4264	A8	ROOF SPECIAL GIRDER	1	2	Job Reference (optional)	

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**NOTES-**

10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 151 lb down and 152 lb up at 0-10-12, 149 lb down and 154 lb up at 2-10-12, 149 lb down and 154 lb up at 4-10-12, 149 lb down and 154 lb up at 6-10-12, 149 lb down and 154 lb up at 8-10-12, 149 lb down and 154 lb up at 10-10-12, 149 lb down and 154 lb up at 12-10-12, 149 lb down and 154 lb up at 14-10-12, 149 lb down and 154 lb up at 16-10-12, 149 lb down and 154 lb up at 18-10-12, 149 lb down and 154 lb up at 20-10-12, 149 lb down and 154 lb up at 22-10-12, 149 lb down and 154 lb up at 24-10-12, 149 lb down and 154 lb up at 26-10-12, 149 lb down and 154 lb up at 28-10-12, 149 lb down and 154 lb up at 30-10-12, 149 lb down and 154 lb up at 32-10-12, 149 lb down and 154 lb up at 34-10-12, 149 lb down and 154 lb up at 36-10-12, 149 lb down and 154 lb up at 38-10-12, and 149 lb down and 154 lb up at 40-10-12, and 145 lb down and 154 lb up at 41-9-10 on top chord, and 65 lb down at 0-10-12, 63 lb down at 2-10-12, 63 lb down at 4-10-12, 63 lb down at 6-10-12, 63 lb down at 8-10-12, 63 lb down at 10-10-12, 63 lb down at 12-10-12, 63 lb down at 14-10-12, 63 lb down at 16-10-12, 63 lb down at 18-10-12, 63 lb down at 20-10-12, 63 lb down at 22-10-12, 63 lb down at 24-10-12, 63 lb down at 26-10-12, 63 lb down at 28-10-12, 63 lb down at 30-10-12, 63 lb down at 32-10-12, 63 lb down at 34-10-12, 63 lb down at 36-10-12, 63 lb down at 38-10-12, 63 lb down at 40-10-12, 63 lb down at 41-8-14, 153 lb down and 86 lb up at 43-8-14, 121 lb down and 49 lb up at 45-8-14, and 90 lb down and 21 lb up at 47-8-14, and 241 lb down and 74 lb up at 49-8-14 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: 1-2=-60, 2-9=-60, 9-12=-60, 11-23=-20

Concentrated Loads (lb)

Vert: 9=-90(F) 5=-90(F) 19=-32(F) 18=-32(F) 6=-90(F) 14=-32(F) 15=-32(F) 24=-93(F) 25=-90(F) 26=-90(F) 27=-90(F) 28=-90(F) 29=-90(F) 30=-90(F) 31=-90(F) 32=-90(F) 33=-90(F) 34=-90(F) 35=-90(F) 36=-90(F) 37=-90(F) 38=-90(F) 39=-90(F) 40=-90(F) 41=-90(F) 42=-90(F) 43=-33(F) 44=-32(F) 45=-32(F) 46=-32(F) 47=-32(F) 48=-32(F) 49=-32(F) 50=-32(F) 51=-32(F) 52=-32(F) 53=-32(F) 54=-32(F) 55=-32(F) 56=-32(F) 57=-32(F) 58=-32(F) 59=-32(F) 60=-32(F) 61=-153(F) 62=-121(F) 63=-90(F) 64=-241(F)

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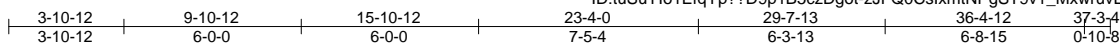
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellco / 114 Hidden Lakes / Johnston	154280516
J0822-4264	B1	COMMON	5	1		

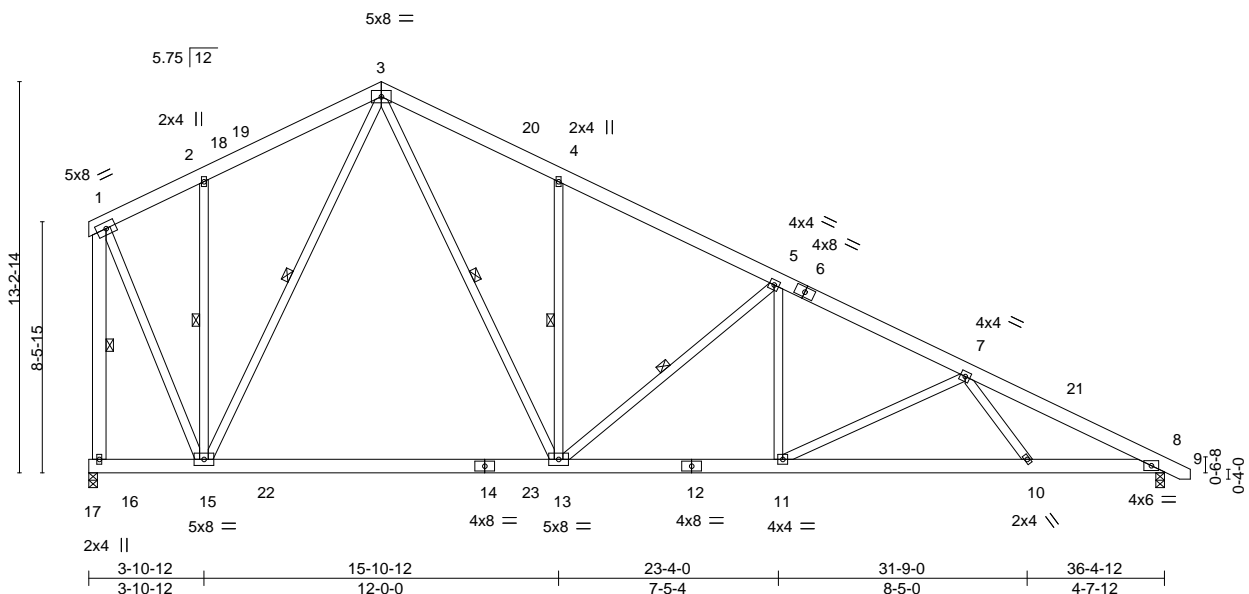
Comtech, Inc. Fayetteville, NC - 28314,

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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 0.21	Vert(LL)	-0.30	13-15	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.63	Vert(CT)	-0.45	13-15	>962		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.59	Horz(CT)	0.05	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.06	11	>999		
								Weight: 320 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x4 SP No.2 \*Except\*  
1-16: 2x6 SP No.1

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-5-1 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 15-16.  
WEBS 1 Row at midpt 2-15, 3-15, 3-13, 4-13, 5-13, 1-16

**REACTIONS.** (size) 16=0-3-8, 8=0-3-8  
Max Horz 16=-329(LC 13)  
Max Uplift 16=-97(LC 13), 8=-104(LC 13)  
Max Grav 16=1582(LC 2), 8=1487(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-684/164, 2-3=-722/293, 3-4=-1702/499, 4-5=-1714/356, 5-7=-2329/414, 7-8=-2882/421, 1-16=-1713/350  
BOT CHORD 15-16=-147/327, 13-15=0/898, 11-13=-163/2044, 10-11=-324/2412, 8-10=-268/2516  
WEBS 2-15=-335/228, 3-15=-671/152, 3-13=-318/1428, 4-13=-426/269, 5-13=-800/232, 5-11=-6/442, 7-11=-495/203, 1-15=-250/1488, 7-10=0/358

- 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) 0-4-4 to 4-9-1, Interior(1) 4-9-1 to 9-10-12, Exterior(2) 9-10-12 to 14-3-9, Interior(1) 14-3-9 to 37-1-1 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16 except (jt=lb) 8=104.



September 20, 2022

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

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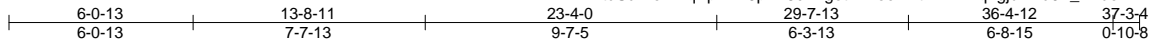
818 Soundside Road  
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Job	Truss	Truss Type	Qty	Ply	Wellco / 114 Hidden Lakes / Johnston	154280517
J0822-4264	B2	HIP	1	1		

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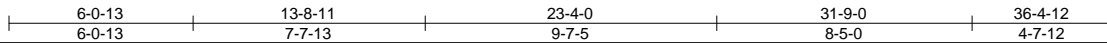
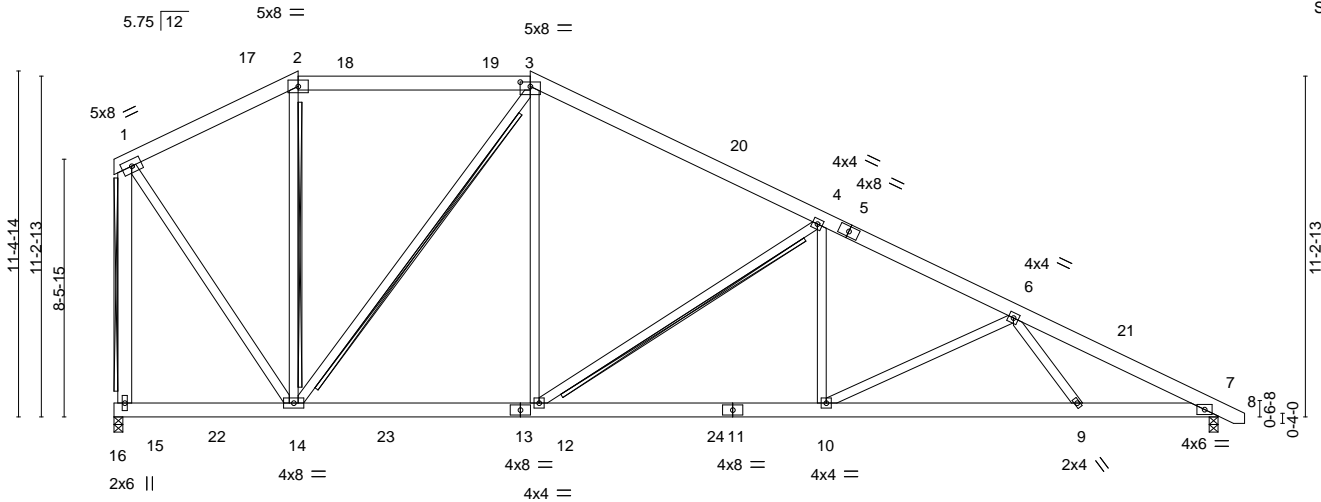


Plate Offsets (X,Y)--	[3:0-4-0,0-1-12]								
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.35	Vert(LL)	-0.11	10-12	>999	360	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.42	Vert(CT)	-0.21	10-12	>999	240	
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.93	Horz(CT)	0.06	7	n/a	n/a	
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.06	10	>999	240	
									Weight: 303 lb FT = 20%

**LUMBER-**  
TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x4 SP No.2 \*Except\*  
1-15: 2x6 SP No.1

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-4-15 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 2-3.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS T-Brace: 2x4 SPF No.2 - 1-15, 4-12, 2-14, 3-14  
Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.  
Brace must cover 90% of web length.

**REACTIONS.** (size) 15=0-3-8, 7=0-3-8  
Max Horz 15=-306(LC 13)  
Max Uplift 15=-58(LC 13), 7=-97(LC 13)  
Max Grav 15=1612(LC 2), 7=1487(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-834/275, 2-3=-707/302, 3-4=-1502/409, 4-6=-2355/498, 6-7=-2839/474,  
1-15=-1479/456  
BOT CHORD 14-15=-141/316, 12-14=-4/1248, 10-12=-264/2077, 9-10=-387/2394, 7-9=-340/2476  
WEBS 6-10=441/183, 6-9=0/325, 4-10=0/516, 1-14=-294/1233, 4-12=-984/312, 3-12=-67/922,  
3-14=-949/262

- 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) 0-4-4 to 4-9-1, Interior(1) 4-9-1 to 6-0-13, Exterior(2) 6-0-13 to 12-3-8, Interior(1) 12-3-8 to 13-8-11, Exterior(2) 13-8-11 to 19-11-5, Interior(1) 19-11-5 to 37-1-1 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) 15, 7.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



September 20, 2022

**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



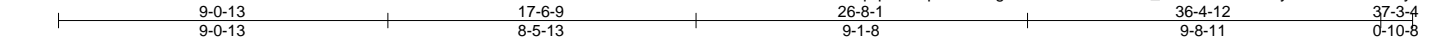
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellco / 114 Hidden Lakes / Johnston	154280518
J0822-4264	B3	HALF HIP	1	1		

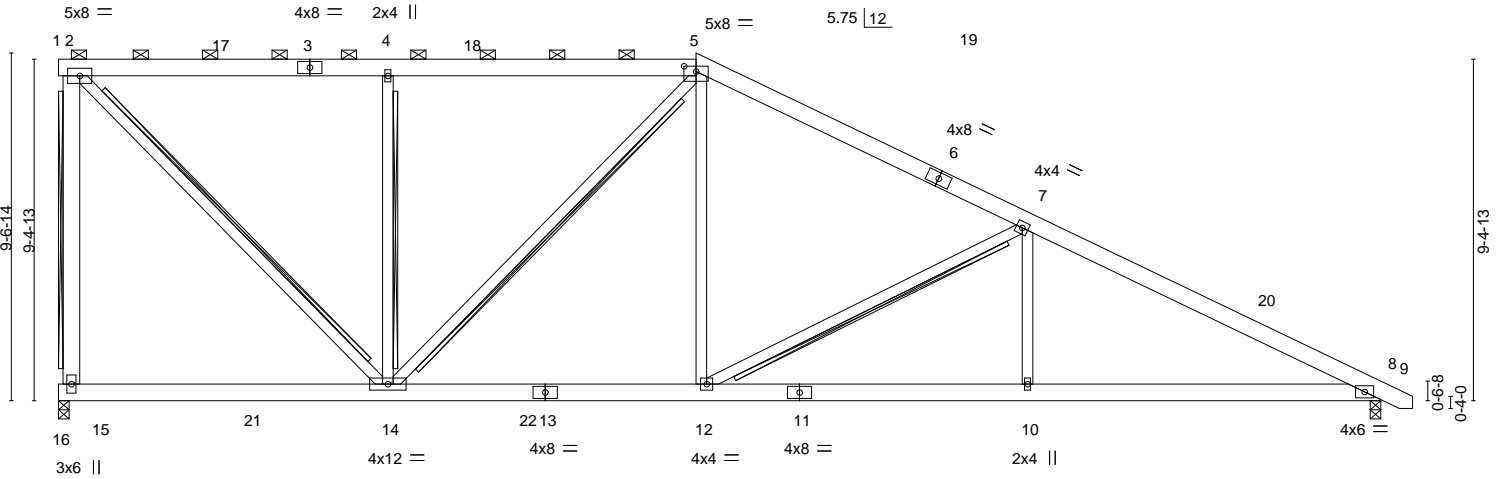
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Sep 19 16:16:45 2022 Page 1

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Scale: 3/16"=1'



9-0-13	17-6-9	26-8-1	36-4-12
9-0-13	8-5-13	9-1-8	9-8-11

Plate Offsets (X,Y)--	[5:0-4-0,0-1-12]								
<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 0.40	Vert(LL) -0.10	12-14	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15		BC 0.45	Vert(CT) -0.18	8-10	>999	240		
BCLL 0.0 *	Rep Stress Incr YES		WB 0.52	Horz(CT) 0.05	8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL) 0.06	8-10	>999	240	Weight: 279 lb	FT = 20%

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x6 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 4-3-11 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-5.
BOT CHORD	2x6 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.2 *Except* 2-15: 2x6 SP No.1	WEBS	T-Brace: 2x4 SPF No.2 - 2-15, 2-14, 5-14, 7-12, 4-14
			Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.

**REACTIONS.** (size) 15=0-3-8, 8=0-3-8  
 Max Horz 15=-299(LC 13)  
 Max Uplift 15=-145(LC 8), 8=-80(LC 13)  
 Max Grav 15=1614(LC 2), 8=1487(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-15=-1378/448, 2-4=-1170/306, 4-5=-1173/308, 5-7=-1785/408, 7-8=-2648/498  
 BOT CHORD 14-15=-145/372, 12-14=-63/1503, 10-12=-339/2278, 8-10=-339/2278  
 WEBS 2-14=-428/1629, 5-14=-498/199, 5-12=-45/691, 7-12=-916/311, 7-10=0/409, 4-14=-600/301

- 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) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 17-6-9, Exterior(2) 17-6-9 to 23-9-4, Interior(1) 23-9-4 to 37-1-1 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) 8 except (jt=lb) 15=145.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



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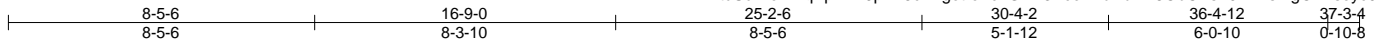


Job	Truss	Truss Type	Qty	Ply	Wellco / 114 Hidden Lakes / Johnston	I54280520
J0822-4264	B5	HALF HIP GIRDER	1	<b>2</b>	Job Reference (optional)	

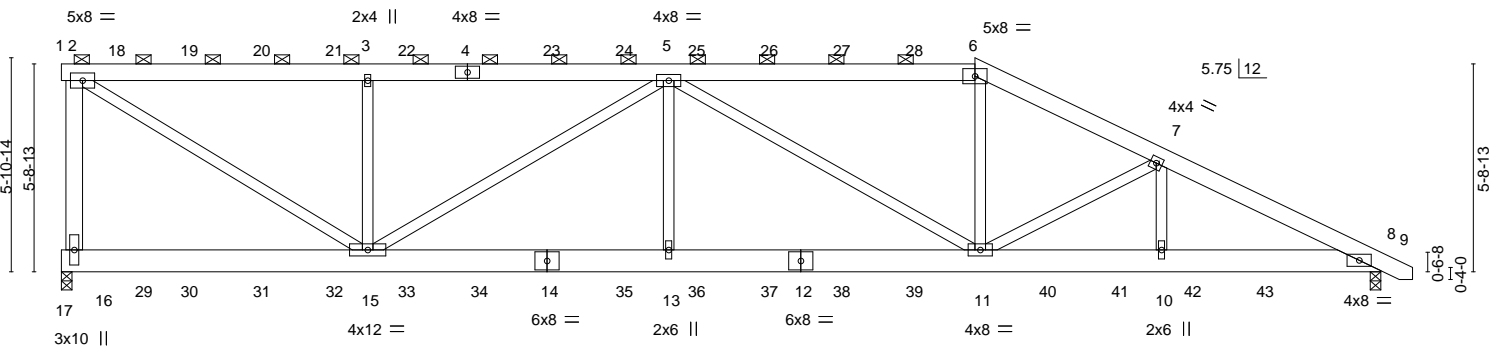
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Sep 19 16:16:49 2022 Page 1

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Scale: 3/16"=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 0.29	Vert(LL) -0.09	13	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15		BC 0.36	Vert(CT) -0.18	11-13	>999	240		
BCLL 0.0 *	Rep Stress Incr NO		WB 0.54	Horz(CT) 0.04	8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL) 0.12	13	>999	240		
								Weight: 575 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x8 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 2-16: 2x6 SP No.1

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-6.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 16=0-3-8, 8=0-3-8  
 Max Horz 16=-179(LC 9)  
 Max Uplift 16=-1030(LC 4), 8=-744(LC 9)  
 Max Grav 16=2569(LC 1), 8=2573(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-16=-2403/1087, 2-3=-3200/1274, 3-5=-3200/1274, 5-6=-3819/1388, 6-7=-4290/1502, 7-8=-5005/1548  
 BOT CHORD 13-15=-1639/4521, 11-13=-1639/4521, 10-11=-1325/4427, 8-10=-1325/4427  
 WEBS 2-15=-1448/3676, 3-15=-883/687, 5-15=-1559/583, 5-13=0/598, 5-11=-946/485, 6-11=-201/1173, 7-11=-669/156, 7-10=-53/419

- 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: 2x8 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=1030, 8=744.
  - 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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Continued on page 2

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Job	Truss	Truss Type	Qty	Ply	Wellco / 114 Hidden Lakes / Johnston	I54280520
J0822-4264	B5	HALF HIP GIRDER	1	<b>2</b>	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Sep 19 16:16:50 2022 Page 2  
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**NOTES-**

10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 149 lb down and 154 lb up at 1-5-8, 149 lb down and 154 lb up at 3-5-8, 149 lb down and 154 lb up at 5-5-8, 149 lb down and 154 lb up at 7-5-8, 149 lb down and 154 lb up at 9-5-8, 149 lb down and 154 lb up at 11-5-8, 149 lb down and 154 lb up at 13-5-8, 149 lb down and 154 lb up at 15-5-8, 149 lb down and 154 lb up at 17-5-8, 149 lb down and 154 lb up at 19-5-8, 149 lb down and 154 lb up at 21-5-8, and 149 lb down and 154 lb up at 23-5-8, and 145 lb down and 154 lb up at 25-2-6 on top chord, and 63 lb down at 1-5-8, 63 lb down at 3-5-8, 63 lb down at 5-5-8, 63 lb down at 7-5-8, 63 lb down at 9-5-8, 63 lb down at 11-5-8, 63 lb down at 13-5-8, 63 lb down at 15-5-8, 63 lb down at 17-5-8, 63 lb down at 19-5-8, 63 lb down at 21-5-8, 63 lb down at 23-5-8, 63 lb down at 25-1-10, 153 lb down and 86 lb up at 27-1-10, 121 lb down and 49 lb up at 29-1-10, and 90 lb down and 21 lb up at 31-1-10, and 241 lb down and 74 lb up at 33-1-10 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: 1-2=-60, 2-6=-60, 6-9=-60, 8-17=-20

Concentrated Loads (lb)

Vert: 4=-90(B) 14=-32(B) 11=-32(B) 6=-90(B) 18=-90(B) 19=-90(B) 20=-90(B) 21=-90(B) 22=-90(B) 23=-90(B) 24=-90(B) 25=-90(B) 26=-90(B) 27=-90(B) 28=-90(B) 29=-32(B) 30=-32(B) 31=-32(B) 32=-32(B) 33=-32(B) 34=-32(B) 35=-32(B) 36=-32(B) 37=-32(B) 38=-32(B) 39=-32(B) 40=-153(B) 41=-121(B) 42=-90(B) 43=-241(B)

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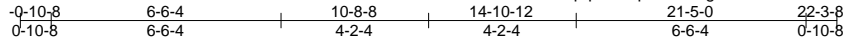


Job	Truss	Truss Type	Qty	Ply	Wellco / 114 Hidden Lakes / Johnston	I54280521
J0822-4264	C1	COMMON	1	1		

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Sep 19 16:16:50 2022 Page 1

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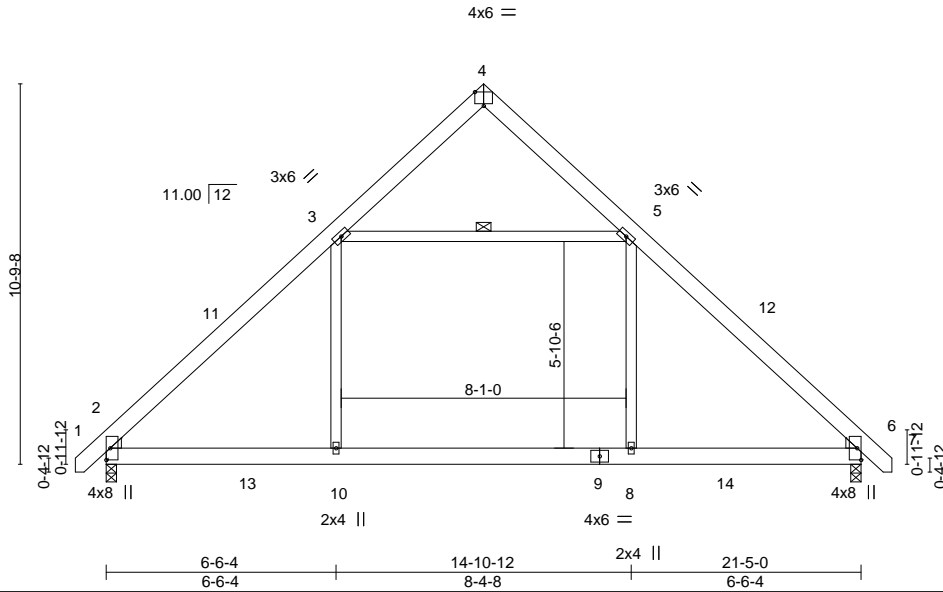


Plate Offsets (X,Y)-- [4:0-3-0,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.24	Vert(LL)	-0.10	6-8	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.41	Vert(CT)	-0.12	8-10	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.26	Horz(CT)	0.02	6	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.12	2-10	>999		
								Weight: 156 lb	FT = 20%

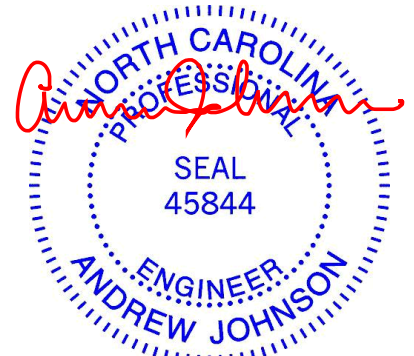
**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2  
 WEDGE  
 Left: 2x4 SP No.2, Right: 2x4 SP No.2

**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 1 Row at midpt 3-5

**REACTIONS.** (size) 2=0-3-8, 6=0-3-8  
 Max Horz 2=-252(LC 10)  
 Max Uplift 2=-42(LC 12), 6=-42(LC 13)  
 Max Grav 2=1118(LC 19), 6=1118(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1430/225, 5-6=-1429/225  
 BOT CHORD 2-10=-3/968, 8-10=-3/968, 6-8=-3/967  
 WEBS 3-10=0/585, 5-8=0/585, 3-5=-806/318

- 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) -0-9-0 to 3-7-12, Interior(1) 3-7-12 to 10-8-8, Exterior(2) 10-8-8 to 14-10-14, Interior(1) 14-10-14 to 22-2-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.



September 20, 2022

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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	Truss	Truss Type	Qty	Ply	Wellco / 114 Hidden Lakes / Johnston	154280522
J0822-4264	C1GE	GABLE	1	1	Job Reference (optional)	

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8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Sep 19 16:16:52 2022 Page 1

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0-10-8 10-8-8 21-5-0 22-3-8  
 0-10-8 10-8-8 10-8-8 0-10-8

4x6 =

Scale: 3/16"=1'

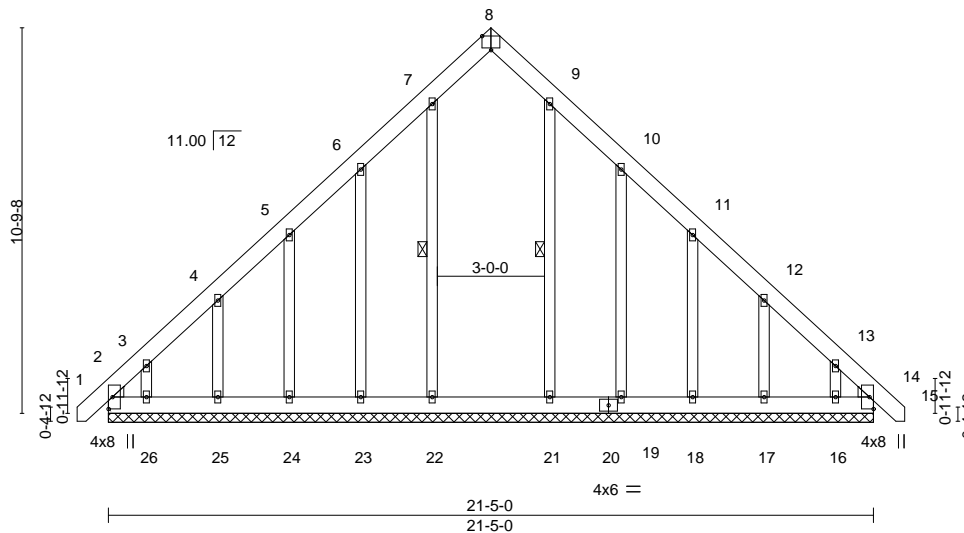


Plate Offsets (X,Y)--	[8:0-3-0,Edge]									
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.05	Vert(LL)	0.00	14	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	-0.00	14	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.15	Horz(CT)	0.01	14	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						Weight: 195 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 OTHERS 2x4 SP No.2  
 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 1 Row at midt 7-22, 9-21

**REACTIONS.**

All bearings 21-5-0.  
 (lb) - Max Horz 2=-315(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 22, 21 except 2=-151(LC 10),  
 14=-119(LC 11), 23=-152(LC 12), 24=-122(LC 12), 25=-134(LC 12), 26=-232(LC  
 12), 19=-157(LC 13), 18=-122(LC 13), 17=-133(LC 13), 16=-226(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 23, 24, 25, 26, 19, 18, 17, 16  
 except 2=414(LC 12), 14=392(LC 13), 22=298(LC 19), 21=275(LC 20)

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

TOP CHORD 2-3=-549/352, 3-4=-373/225, 12-13=-350/225, 13-14=-523/354  
 BOT CHORD 2-26=-241/366, 25-26=-243/366, 24-25=-243/366, 23-24=-243/367, 22-23=-244/367,  
 21-22=-244/367, 19-21=-244/367, 18-19=-243/366, 17-18=-243/366, 16-17=-243/366,  
 14-16=-241/364

**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) gable end zone and C-C Corner(3) -0-9-0 to 3-7-12, Exterior(2) 3-7-12 to 10-8-8, Corner(3) 10-8-8 to 15-1-5, Exterior(2) 15-1-5 to 22-2-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 22, 21 except (jt=lb) 2=151, 14=119, 23=152, 24=122, 25=134, 26=232, 19=157, 18=122, 17=133, 16=226.



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

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



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 Edenton, NC 27932

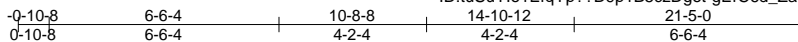
Job	Truss	Truss Type	Qty	Ply	Wellco / 114 Hidden Lakes / Johnston	I54280523
J0822-4264	C2	COMMON	9	1		

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Sep 19 16:16:53 2022 Page 1

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Job Reference (optional)



4x6 =

Scale = 1:65.4

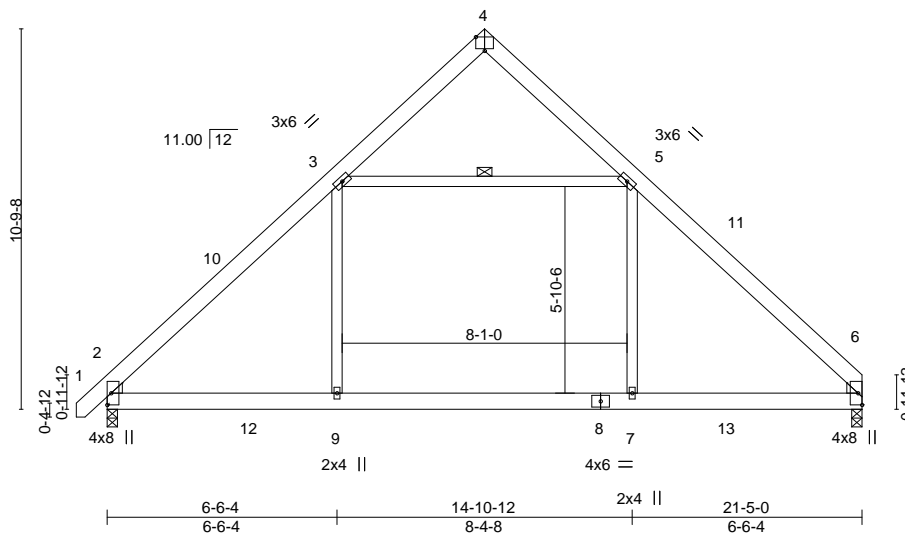


Plate Offsets (X,Y)-- [4:0-3-0,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.24	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.41	Vert(LL) -0.10 6-7 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.26	Vert(CT) -0.12 7-9 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.02 6 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.12 2-9 >999 240	Weight: 153 lb	FT = 20%

**LUMBER-**

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

Left: 2x4 SP No.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 1 Row at midt 3-5

**REACTIONS.**

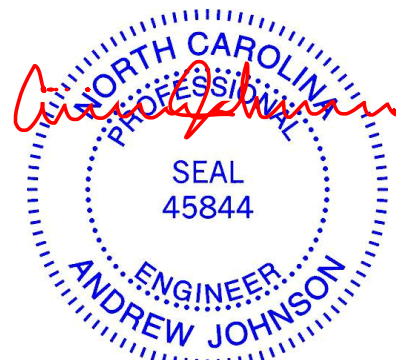
(size) 2=0-3-8, 6=0-3-8  
 Max Horz 2=250(LC 9)  
 Max Uplift 2=-42(LC 12), 6=-29(LC 13)  
 Max Grav 2=1119(LC 19), 6=1067(LC 20)

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

TOP CHORD 2-3=-1433/226, 5-6=-1429/223  
 BOT CHORD 2-9=-10/966, 7-9=-10/967, 6-7=-10/966  
 WEBS 3-9=0/586, 5-7=0/584, 3-5=-811/330

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCCL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-0 to 3-7-12, Interior(1) 3-7-12 to 10-8-8, Exterior(2) 10-8-8 to 14-10-14, Interior(1) 14-10-14 to 21-3-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCCL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.



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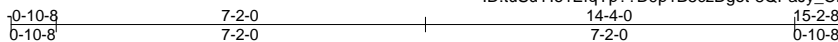
818 Soundside Road  
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Job	Truss	Truss Type	Qty	Ply	Wellco / 114 Hidden Lakes / Johnston	I54280524
J0822-4264	D1	COMMON	2	1		

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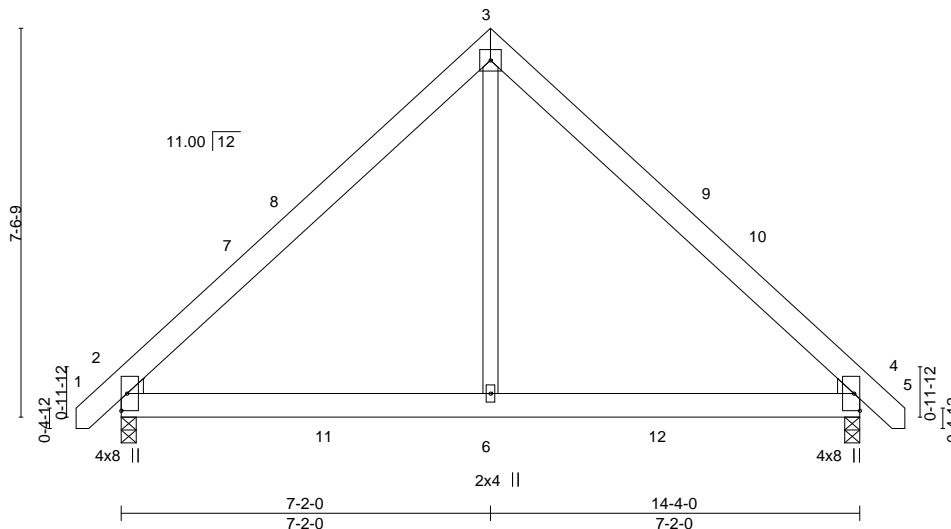
8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Sep 19 16:16:54 2022 Page 1

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5x5 =

Scale = 1:44.7



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 0.24	Vert(LL)	-0.02	4-6	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.24	Vert(CT)	-0.04	4-6	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.12	Horz(CT)	0.01	4	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.02	2-6	>999		
								Weight: 96 lb	FT = 20%

**LUMBER-**

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

**REACTIONS.**

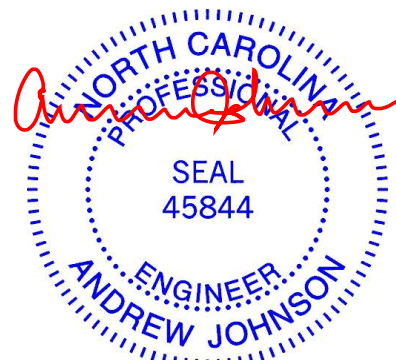
(size) 2=0-3-8, 4=0-3-8  
 Max Horz 2=-174(LC 10)  
 Max Uplift 2=-31(LC 12), 4=-31(LC 13)  
 Max Grav 2=702(LC 19), 4=702(LC 20)

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

TOP CHORD 2-3=-758/170, 3-4=-758/170  
 BOT CHORD 2-6=0/485, 4-6=0/485  
 WEBS 3-6=0/521

**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) -0-9-0 to 3-7-12, Interior(1) 3-7-12 to 7-2-0, Exterior(2) 7-2-0 to 11-6-13, Interior(1) 11-6-13 to 15-1-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.



September 20, 2022

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

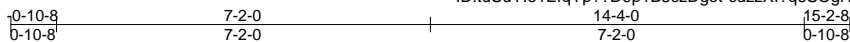


818 Soundside Road  
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Job	Truss	Truss Type	Qty	Ply	Wellco / 114 Hidden Lakes / Johnston	I54280525
J0822-4264	D1GE	GABLE	1	1		

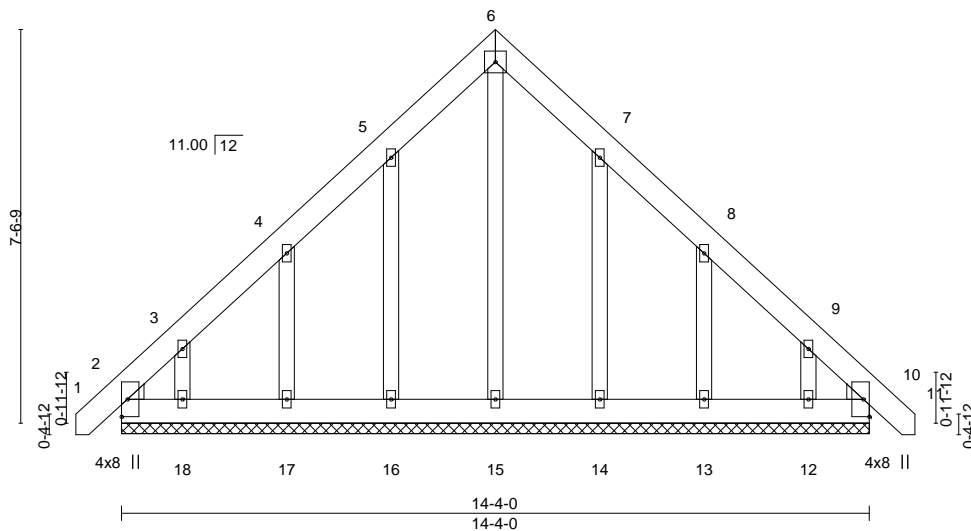
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Sep 19 16:16:55 2022 Page 1  
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5x5 =

Scale = 1:44.2



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	10	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	10	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.10	Horz(CT)	0.00	10	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 122 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.

**REACTIONS.**

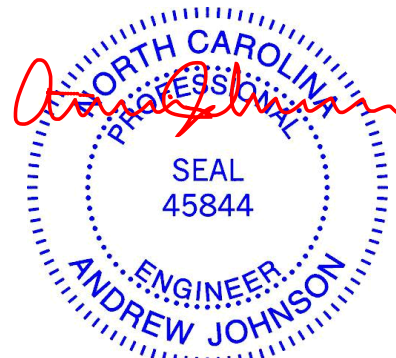
All bearings 14-4-0.  
 (lb) - Max Horz 2=-218(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 10 except 16=-108(LC 12), 17=-139(LC 12), 18=-168(LC 12), 14=-104(LC 13), 13=-140(LC 13), 12=-160(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 10, 15, 16, 17, 18, 14, 13, 12

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

TOP CHORD 2-3=-283/177

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCCL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-9-0 to 3-7-12, Exterior(2) 3-7-12 to 7-2-0, Corner(3) 7-2-0 to 11-6-13, Exterior(2) 11-6-13 to 15-1-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10 except (jt=lb) 16=108, 17=139, 18=168, 14=104, 13=140, 12=160.



September 20, 2022

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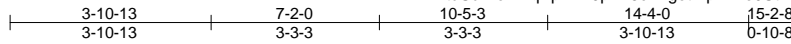


818 Soundside Road  
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Job	Truss	Truss Type	Qty	Ply	Wellco / 114 Hidden Lakes / Johnston	I54280526
J0822-4264	D2	QUEENPOST	1	2	Job Reference (optional)	

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8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Sep 19 16:16:56 2022 Page 1  
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5x8 ||

Scale = 1:44.7

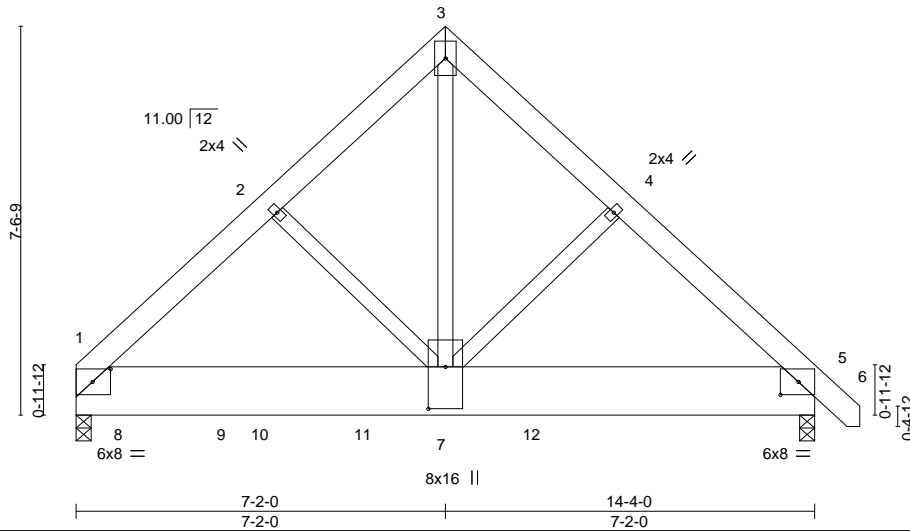


Plate Offsets (X,Y)--	[1:0-4-3,0-3-0], [5:0-4-3,0-3-0], [7:0-9-12,0-4-0]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.25	Vert(LL) -0.06 1-7 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.49	Vert(CT) -0.13 1-7 >999 240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.78	Horz(CT) 0.01 5 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.05 1-7 >999 240	Weight: 280 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x12 SP 2400F 2.0E  
 WEBS 2x4 SP No.2 \*Except\*  
 3-7: 2x4 SP No.1

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-11-6 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=0-3-8 (req. 0-3-15), 5=0-3-8  
 Max Horz 1=-170(LC 25)  
 Max Uplift 1=-1034(LC 8), 5=-1144(LC 9)  
 Max Grav 1=9570(LC 1), 5=5828(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-7432/1232, 2-3=-7286/1263, 3-4=-7274/1266, 4-5=-7429/1235  
 BOT CHORD 1-7=-863/5222, 5-7=-823/5138  
 WEBS 2-7=-213/353, 3-7=-1614/9432, 4-7=-178/441

**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: 2x12 - 2 rows staggered at 0-3-0 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=0.25; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- WARNING: Required bearing size at joint(s) 1 greater than input bearing size.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=1034, 5=1144.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2132 lb down and 147 lb up at 0-10-12, 2180 lb down and 130 lb up at 2-10-12, 2099 lb down and 123 lb up at 3-6-12, 2091 lb down and 97 lb up at 5-6-12, and 2091 lb down and 88 lb up at 6-10-12, and 3763 lb down and 1588 lb up at 8-10-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

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



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Continued on page 2

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Job J0822-4264	Truss D2	Truss Type QUEENPOST	Qty 1	Ply <b>2</b>	Wellco / 114 Hidden Lakes / Johnston I54280526 Job Reference (optional)
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8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Sep 19 16:16:56 2022 Page 2  
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**LOAD CASE(S)** Standard

Uniform Loads (plf)

Vert: 1-5=-20, 1-3=-60, 3-6=-60

Concentrated Loads (lb)

Vert: 7=-2091(B) 8=-2092(B) 9=-2091(B) 10=-2091(B) 11=-2091(B) 12=-3763(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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**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road  
Edenton, NC 27932

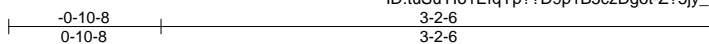
Job	Truss	Truss Type	Qty	Ply	Wellco / 114 Hidden Lakes / Johnston	I54280527
J0822-4264	J03	JACK-OPEN	6	1		

Comtech, Inc. Fayetteville, NC - 28314,

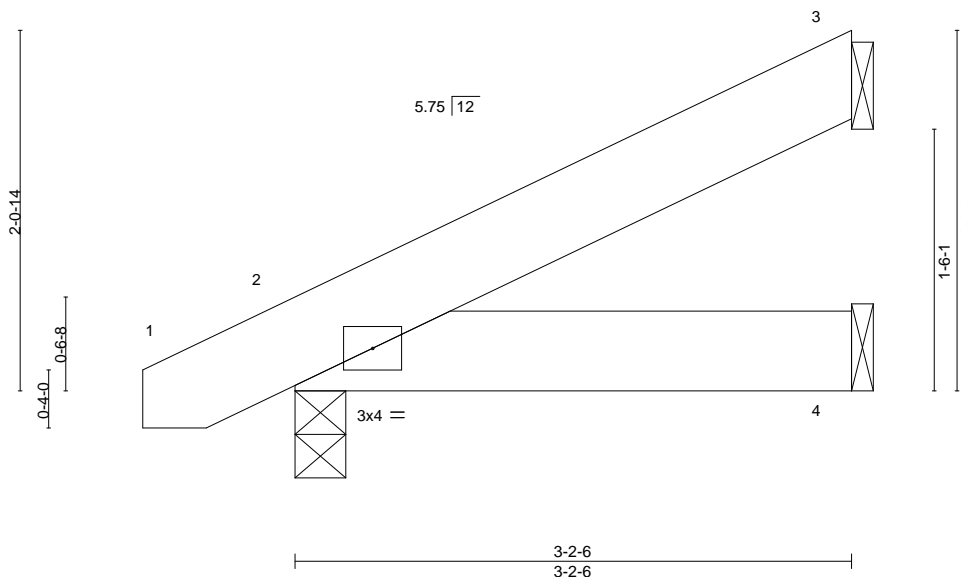
8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Sep 19 16:16:57 2022 Page 1

ID:tuSuYlo1EfqYp??D9p1B5czDgot-Z?5jy\_14e4eO4qXAzsHGwuVI2Y9wwcG9Wdge8Kyc0Kq

Job Reference (optional)



Scale = 1:13.2



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.04	Vert(LL)	-0.00	2-4	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.03	Vert(CT)	-0.00	2-4	>999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Wind(LL)	0.00	2	****		
	Code IRC2015/TPI2014						Weight: 18 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

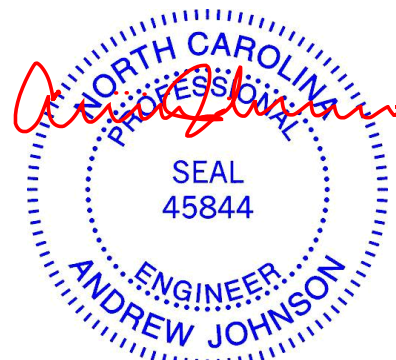
TOP CHORD Structural wood sheathing directly applied or 3-2-6 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
Max Horz 2=58(LC 12)  
Max Uplift 3=-42(LC 12), 2=-13(LC 12)  
Max Grav 3=83(LC 1), 2=177(LC 1), 4=60(LC 3)

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

**NOTES-**

- 1) Wind: ASCE 7-10; 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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.



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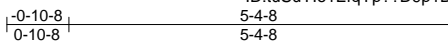
Job	Truss	Truss Type	Qty	Ply	Wellco / 114 Hidden Lakes / Johnston	154280528
J0822-4264	J06A	JACK-OPEN	35	1		

Comtech, Inc. Fayetteville, NC - 28314,

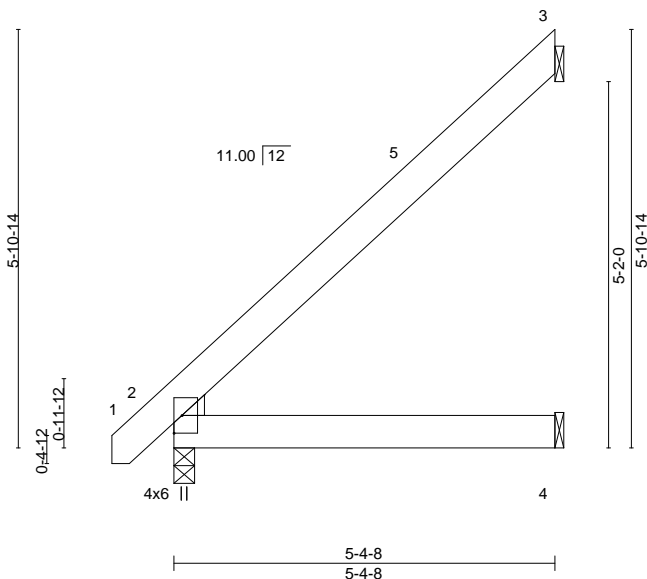
8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Sep 19 16:16:57 2022 Page 1

ID:tuSuYlo1EfQYp??D9p1B5czDgot-Z75jy\_14e4eO4qXAzsHGwuVFEY8pwcG9Wdge8Kyc0Kq

Job Reference (optional)



Scale = 1:32.5



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 0.22	Vert(LL)	-0.01 2-4	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	-0.02 2-4	>999	240		
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	Wind(LL)	0.00 2	****	240		
								Weight: 33 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEDGE  
 Left: 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-4-8 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

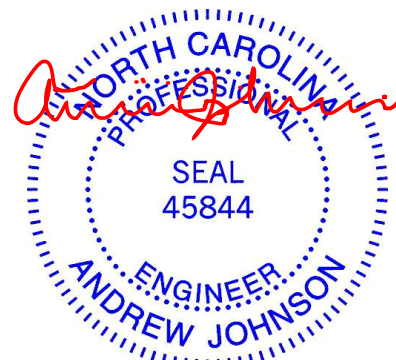
**REACTIONS.**

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
 Max Horz 2=179(LC 12)  
 Max Uplift 3=141(LC 12)  
 Max Grav 3=183(LC 19), 2=265(LC 1), 4=103(LC 3)

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

**NOTES-**

- 1) 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) -0-9-0 to 3-7-12, Interior(1) 3-7-12 to 5-3-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 3=141.



September 20, 2022

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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



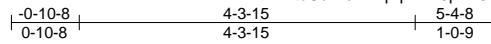
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellco / 114 Hidden Lakes / Johnston	154280529
J0822-4264	J06B	HALF HIP	2	1	Job Reference (optional)	

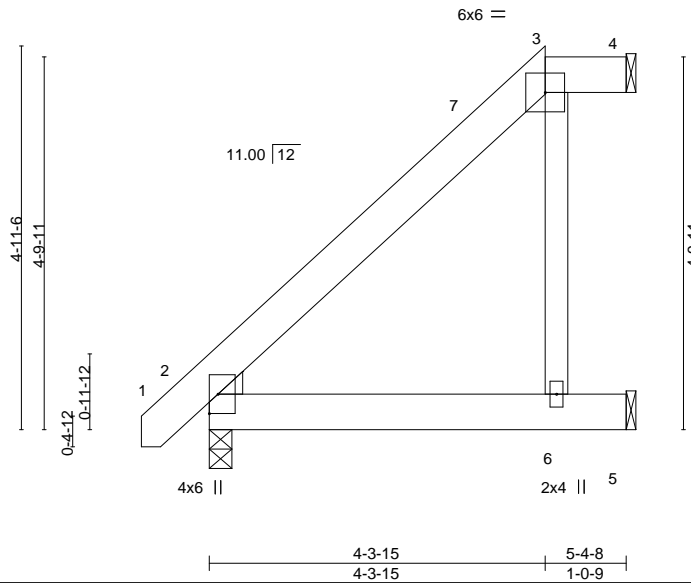
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Sep 19 16:16:58 2022 Page 1

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Scale = 1:29.7



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 0.15	Vert(LL)	-0.01	2-6	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	-0.02	2-6	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.01	4	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P	Wind(LL)	0.01	2-6	>999		
								Weight: 38 lb	FT = 20%

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

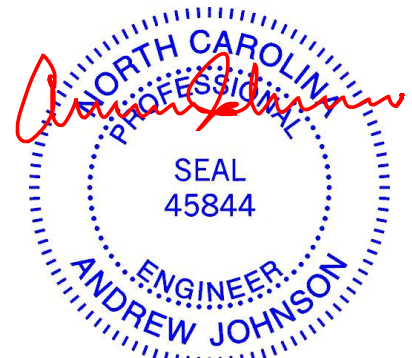
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-4-8 oc purlins, except 2-0-0 oc purlins: 3-4.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 5=Mechanical, 4=Mechanical  
 Max Horz 2=149(LC 12)  
 Max Uplift 5=66(LC 12), 4=-10(LC 8)  
 Max Grav 2=265(LC 1), 5=185(LC 19), 4=29(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; BC DL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-0 to 3-7-12, Interior(1) 3-7-12 to 4-3-15, Exterior(2) 4-3-15 to 5-3-12 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.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 4.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 20, 2022

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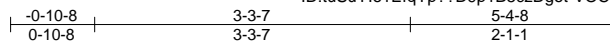
818 Soundside Road  
 Edenton, NC 27932

Job J0822-4264	Truss J06C	Truss Type HALF HIP	Qty 2	Ply 1	Wellco / 114 Hidden Lakes / Johnston I54280530
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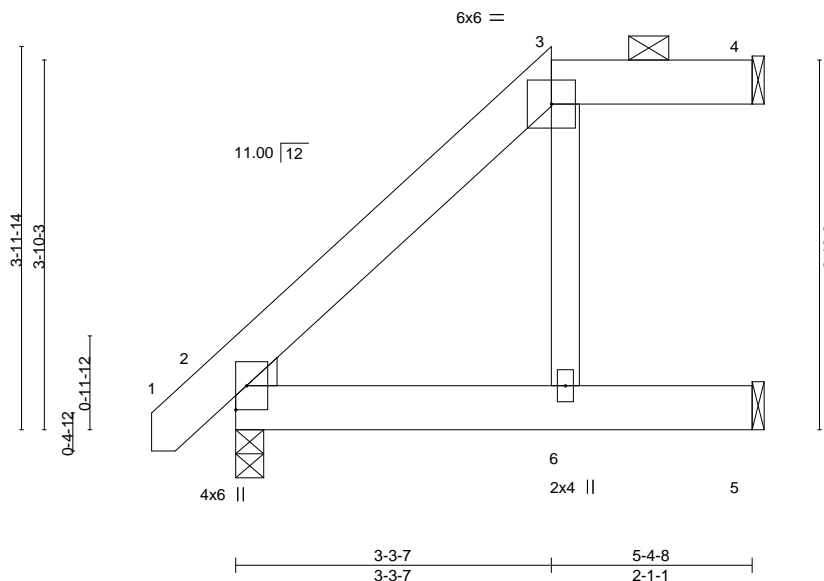
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Sep 19 16:16:59 2022 Page 1

ID:tuSuYlo1EfqYp??D9p1B5czDgot-VOCTNg2KAhu6K8hY5GKK?JbcvLp5OWBSzx9lCDyc0Ko



Scale: 1/2"=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 0.08	Vert(LL)	-0.01	6 >999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.18	Vert(CT)	-0.03	2-6 >999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.03	4 n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P	Wind(LL)	0.02	2-6 >999		
							Weight: 36 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-4-8 oc purlins, except 2-0-0 oc purlins: 3-4.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 5=Mechanical, 4=Mechanical  
 Max Horz 2=117(LC 12)  
 Max Uplift 5=29(LC 12), 4=21(LC 8)  
 Max Grav 2=265(LC 1), 5=141(LC 1), 4=61(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) 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.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 4.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 20, 2022

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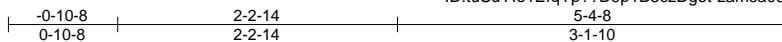
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellco / 114 Hidden Lakes / Johnston	I54280531
J0822-4264	J06D	HALF HIP	2	1		
Job Reference (optional)						

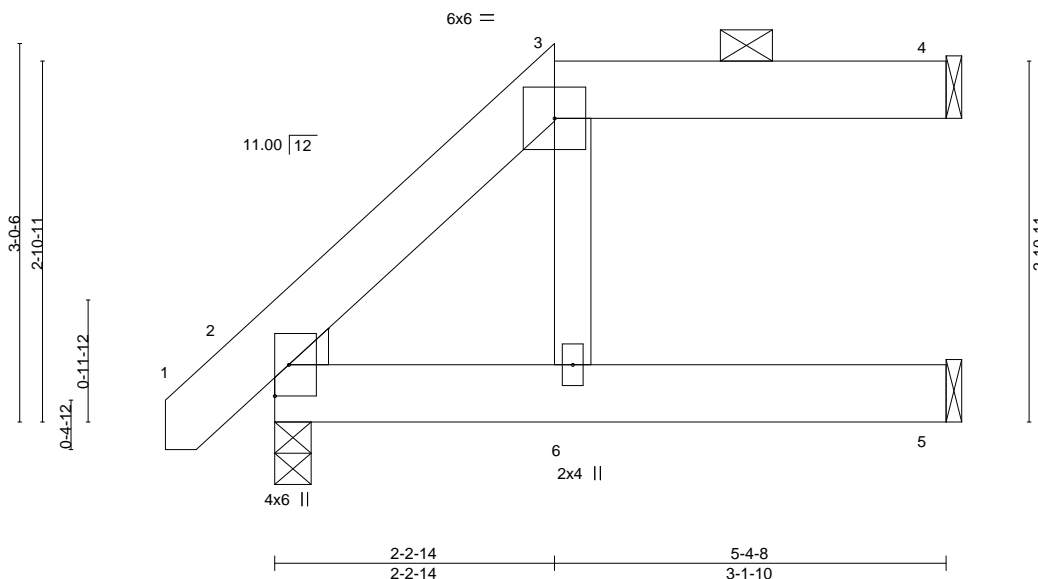
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Sep 19 16:17:00 2022 Page 1

ID:tuSuYIo1EfQYp??D9p1B5czDgot-zamsa03yx?0zyHGle\_rzYX7o5i9K7zVbCbullfyc0K9n



Scale = 1:18.4



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 0.05	Vert(LL)	-0.01	6	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.18	Vert(CT)	-0.03	6	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.03	4	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P	Wind(LL)	0.02	6	>999	Weight: 34 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-4-8 oc purlins, except 2-0-0 oc purlins: 3-4.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 5=Mechanical, 4=Mechanical  
 Max Horz 2=86(LC 12)  
 Max Uplift 2=-6(LC 12), 5=-1(LC 12), 4=-32(LC 8)  
 Max Grav 2=265(LC 1), 5=123(LC 3), 4=92(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) 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.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 5, 4.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 20, 2022

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

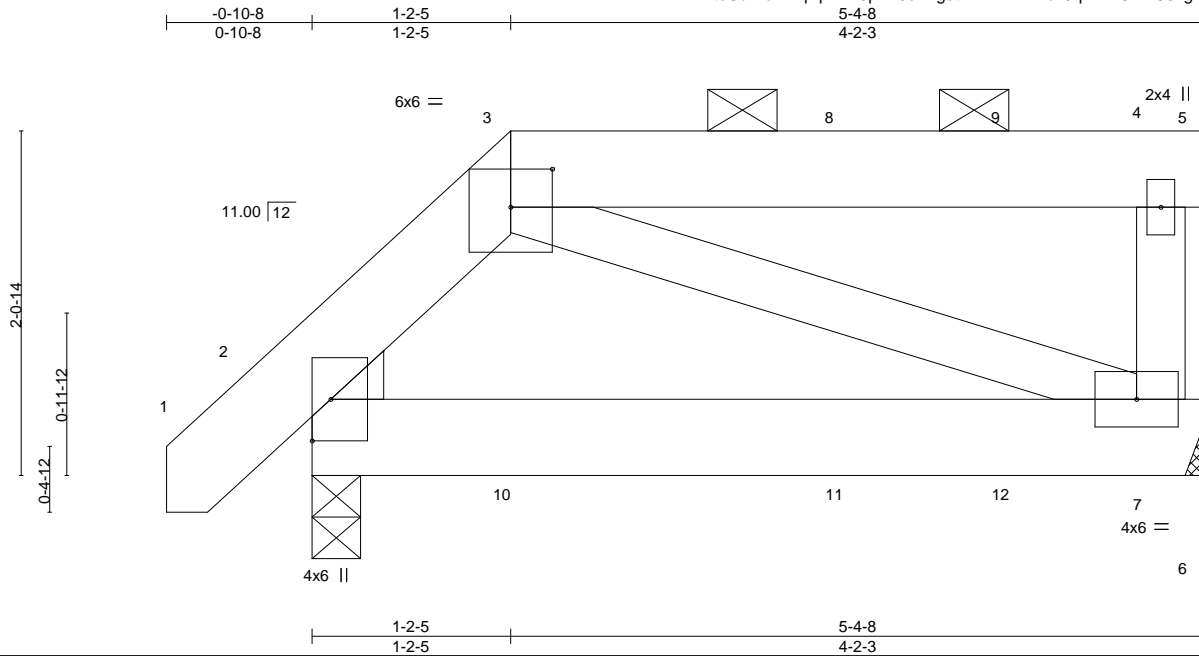
**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



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Job J0822-4264	Truss J06E	Truss Type HALF HIP GIRDER	Qty 2	Ply 1	Wellco / 114 Hidden Lakes / Johnston I54280532
Comtech, Inc. Fayetteville, NC - 28314,					Job Reference (optional)

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Sep 19 16:17:01 2022 Page 1  
ID:tuSuYlo1EFqYp??D9p1B5czDgot-RmKEnM4bil9qZRrxChMC5kgxe9VCsQpkrFesH5yc0Km



Scale = 1:13.9

Plate Offsets (X,Y)--	[3:0-3,0,0-2-12]									
<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) -0.01	2-7	>999	360		MT20	244/190
TCDL 10.0	Lumber DOL 1.15		BC 0.14	Vert(CT) -0.02	2-7	>999	240			
BCLL 0.0 *	Rep Stress Incr NO		WB 0.03	Horz(CT) 0.00	7	n/a	n/a			
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P	Wind(LL) 0.00	2	****	240		Weight: 38 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-4-8 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-5.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 7=Mechanical, 2=0-3-8  
Max Horz 2=59(LC 23)  
Max Uplift 7=54(LC 5), 2=41(LC 8)  
Max Grav 7=261(LC 1), 2=301(LC 1)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 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) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 2.
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 35 lb down and 55 lb up at 1-2-5, and 35 lb down and 51 lb up at 3-3-1, and 35 lb down and 51 lb up at 4-3-1 on top chord, and 20 lb down at 1-3-1, and 20 lb down at 3-3-1, and 20 lb down at 4-3-1 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-60, 3-4=-60, 4-5=-20, 2-6=-20  
Concentrated Loads (lb)  
Vert: 3=-23(B) 8=-23(B) 9=-26(B) 10=-10(B) 11=-10(B) 12=-10(B)



September 20, 2022

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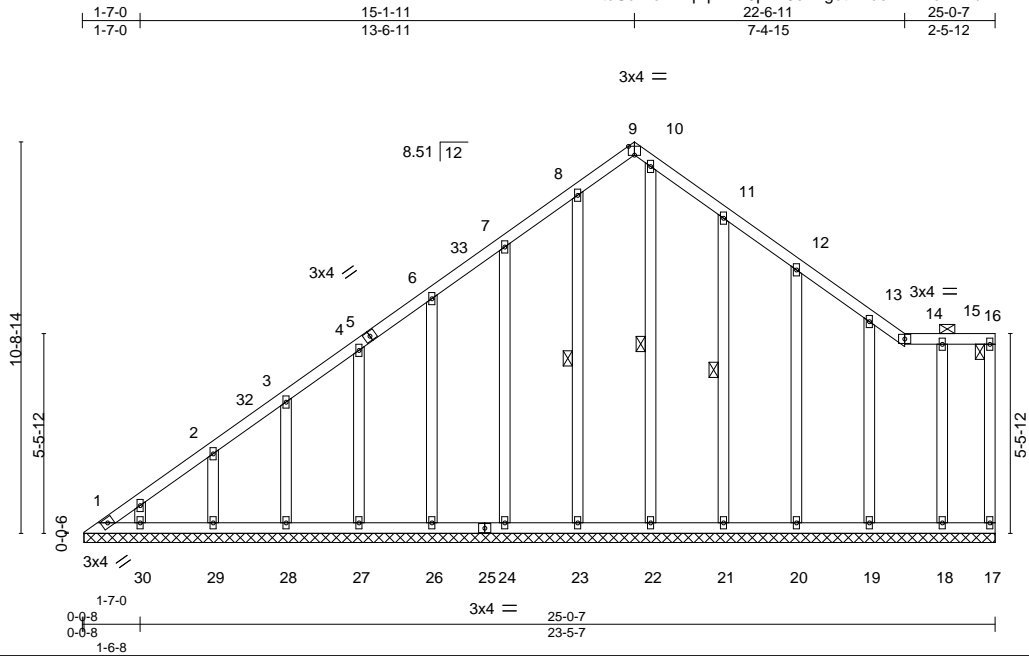
**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

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



818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellco / 114 Hidden Lakes / Johnston	I54280533
J0822-4264	LG	GABLE	1	1		
Comtech, Inc. Fayetteville, NC - 28314,						8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Sep 19 16:17:02 2022 Page 1
						ID:tuSuYlo1EfqYp??D9p1B5czDgot-vzuc?i4DTcHhBbP7mPtRdyD7xZs0brfufvNPpYyc0KI
						Job Reference (optional)



Scale = 1:63.2

Plate Offsets (X,Y)-- [9:0-2-0,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 0.10	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 0.18	Horz(CT)	0.00	17	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 192 lb	FT = 20%

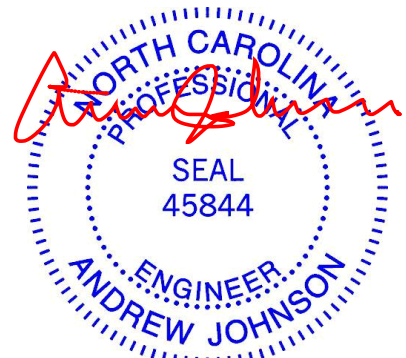
**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
WEBS 2x4 SP No.2  
OTHERS 2x4 SP No.2

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6'-0-0 oc purlins, except end verticals, and 2'-0-0 oc purlins (6'-0-0 max.): 14-16.  
BOT CHORD Rigid ceiling directly applied or 10'-0-0 oc bracing.  
WEBS 1 Row at midpt 10-22, 8-23, 11-21

**REACTIONS.** All bearings 24-11-15.  
(lb) - Max Horz 1=244(LC 9)  
Max Uplift All uplift 100 lb or less at joint(s) 17, 1, 23, 24, 26, 27, 28, 29, 21, 20, 19, 18  
Max Grav All reactions 250 lb or less at joint(s) 17, 1, 22, 23, 24, 26, 27, 28, 29, 21, 20, 19, 18, 30

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-279/246

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCCL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-9 to 4-10-6, Interior(1) 4-10-6 to 15-1-11, Exterior(2) 15-1-11 to 19-7-0, Interior(1) 19-7-0 to 24-10-11 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 2x4 MT20 unless otherwise indicated.
  - 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) 17, 1, 23, 24, 26, 27, 28, 29, 21, 20, 19, 18.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



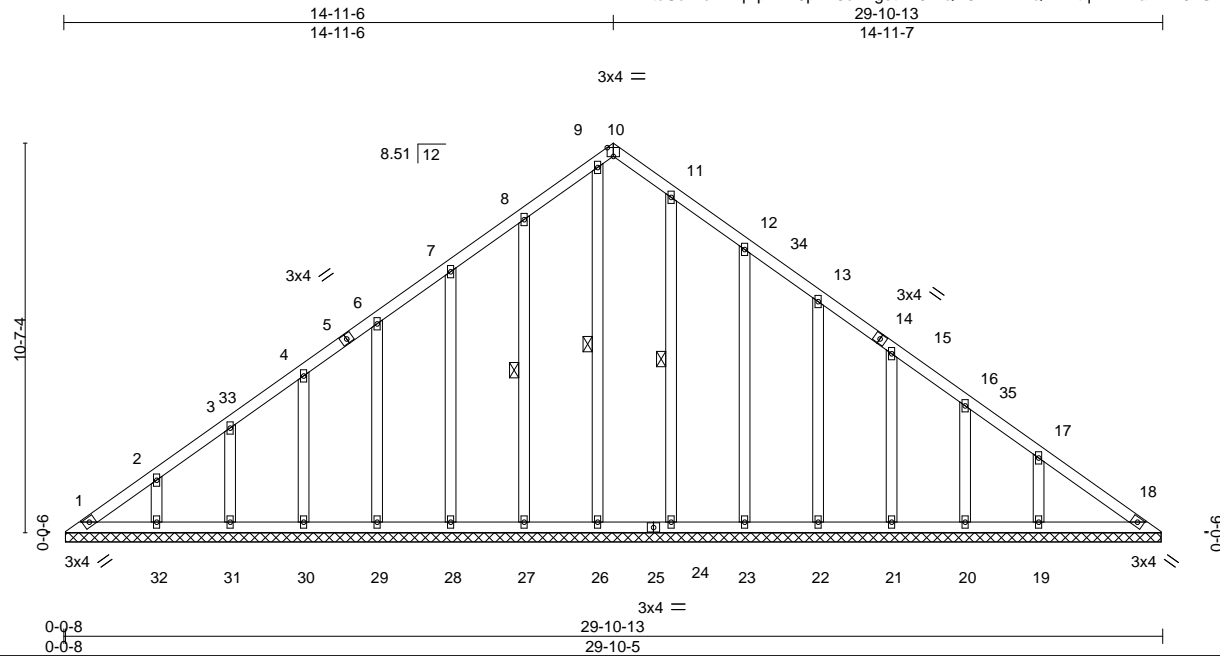
September 20,2022

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

Job J0822-4264	Truss LGA	Truss Type GABLE	Qty 1	Ply 1	Wellco / 114 Hidden Lakes / Johnston I54280534
Comtech, Inc. Fayetteville, NC - 28314,					Job Reference (optional)

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Sep 19 16:17:04 2022 Page 1  
ID:tuSuYlo1EfQYp??D9p1B5czDgot-rL0MQN6T?DXPQvZWtqvviNITaMYL3kGB7DsWuQyc0Kj



Scale = 1:62.7

Plate Offsets (X,Y)--	[10:0-2-0,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>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	n/a	-	n/a	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	n/a	-	n/a	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.18	Horz(CT)	0.01	18	n/a	
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					
								Weight: 203 lb FT = 20%

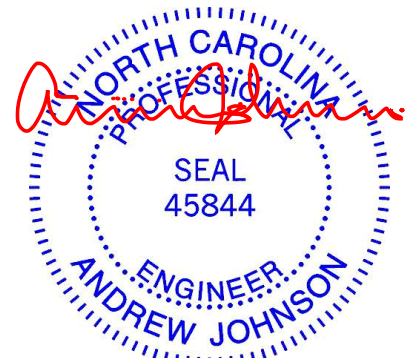
**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
OTHERS 2x4 SP No.2

**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 9-26, 8-27, 11-24

**REACTIONS.** All bearings 29-9-12.  
(lb) - Max Horz 1=246(LC 10)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 27, 28, 29, 30, 31, 32, 23, 22, 21, 20, 19  
Max Grav All reactions 250 lb or less at joint(s) 1, 26, 27, 28, 29, 30, 31, 32, 24, 23, 22, 21, 20, 18  
except 19=260(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-251/209

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCCL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-9 to 4-10-6, Interior(1) 4-10-6 to 14-11-6, Exterior(2) 14-11-6 to 19-4-3, Interior(1) 19-4-3 to 29-5-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - All plates are 2x4 MT20 unless otherwise indicated.
  - 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) 1, 27, 28, 29, 30, 31, 32, 23, 22, 21, 20, 19.



September 20, 2022

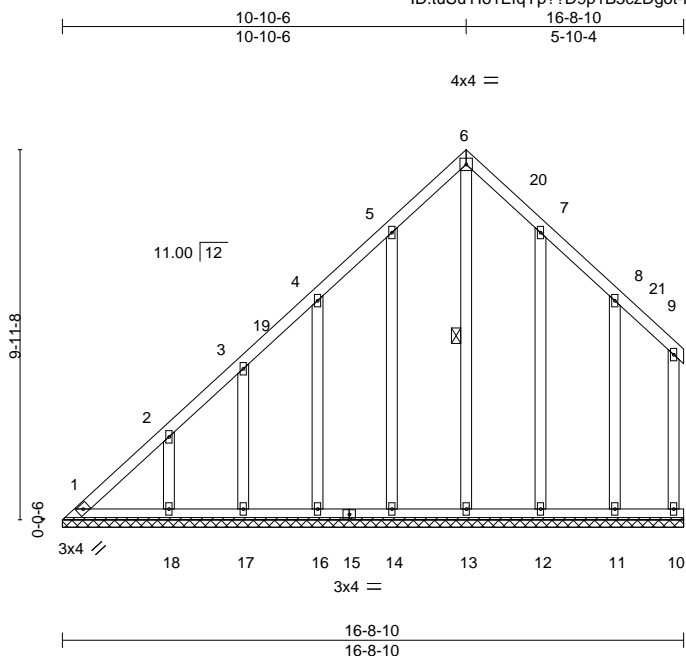
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
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ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate  
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellco / 114 Hidden Lakes / Johnston	154280535
J0822-4264	V1	GABLE	1	1		

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Sep 19 16:17:05 2022 Page 1  
 ID:tuSuYlo1EfQYp??D9p1B5czDgot-KYakj75lXF238iR XR8FareZmuloBSKMtc3Qtyc0Ki



Scale = 1:62.0

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.18	Horz(CT)	0.00	10	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 127 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

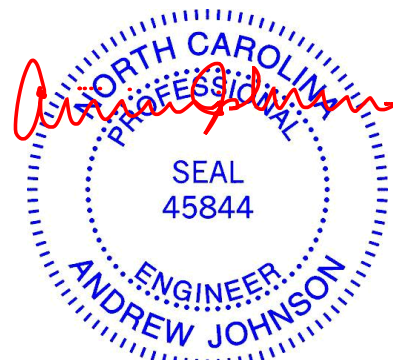
All bearings 16-8-10.  
 (lb) - Max Horz 1=314(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 10, 13 except 1=137(LC 10), 14=122(LC 12), 16=131(LC 12), 17=112(LC 12), 18=164(LC 12), 12=114(LC 13), 11=136(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 10, 14, 16, 17, 18, 12, 11 except 13=333(LC 13)

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

TOP CHORD 1-2=-370/305, 2-3=-259/245, 5-6=-222/290, 6-7=-222/270  
 WEBS 6-13=-309/165

**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) gable end zone and C-C Exterior(2) 0-4-8 to 4-10-6, Interior(1) 4-10-6 to 10-10-6, Exterior(2) 10-10-6 to 15-3-3, Interior(1) 15-3-3 to 16-5-6 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 2x4 MT20 unless otherwise indicated.
- 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) 10, 13 except (jt=lb) 1=137, 14=122, 16=131, 17=112, 18=164, 12=114, 11=136.



September 20, 2022

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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



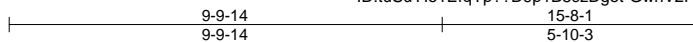
818 Soundside Road  
 Edenton, NC 27932



Job J0822-4264	Truss V2	Truss Type VALLEY	Qty 1	Ply 1	Wellco / 114 Hidden Lakes / Johnston I54280536
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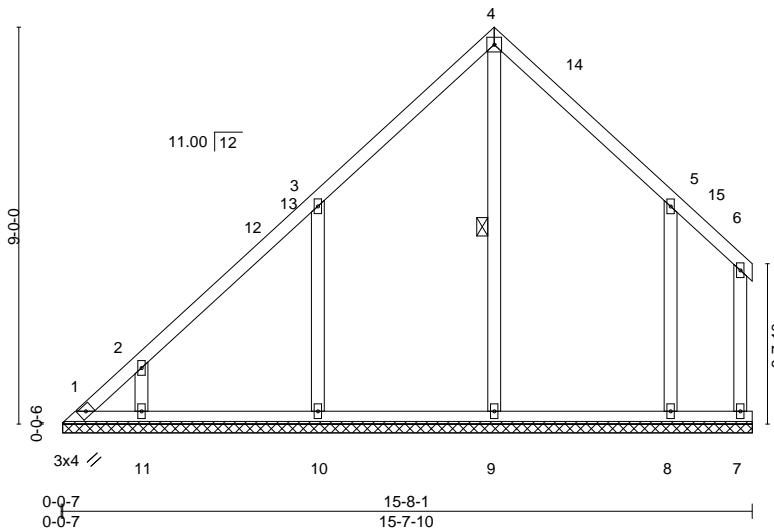
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Sep 19 16:17:07 2022 Page 1  
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4x4 =

Scale = 1:52.3



<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 0.16	Horz(CT)	0.00	7	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 88 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
WEBS 1 Row at midpt 4-9

**REACTIONS.** All bearings 15-7-11.  
(lb) - Max Horz 1=204(LC 9)  
Max Uplift All uplift 100 lb or less at joint(s) 7 except 1=154(LC 10), 10=162(LC 12), 11=115(LC 12), 8=145(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 9=540(LC 19), 10=482(LC 19), 11=274(LC 19), 8=443(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=272/251  
WEBS 4-9=258/38, 3-10=382/282, 2-11=290/239, 5-8=325/257

- 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) 0-4-8 to 4-9-5, Interior(1) 4-9-5 to 9-9-14, Exterior(2) 9-9-14 to 14-2-10, Interior(1) 14-2-10 to 15-4-13 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - All plates are 2x4 MT20 unless otherwise indicated.
  - 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, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 1=154, 10=162, 11=115, 8=145.



September 20, 2022

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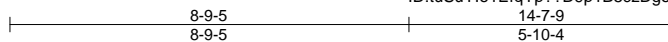
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellco / 114 Hidden Lakes / Johnston	154280537
J0822-4264	V3	VALLEY	1	1		

Comtech, Inc. Fayetteville, NC - 28314,

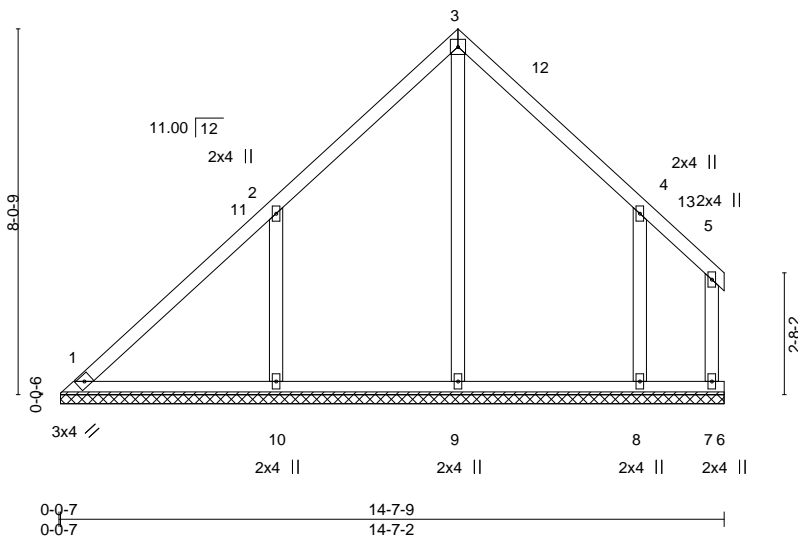
8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Sep 19 16:17:08 2022 Page 1

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4x4 =

Scale = 1:50.7



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)	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 0.25	Horz(CT)	0.00	7	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 77 lb	FT = 20%

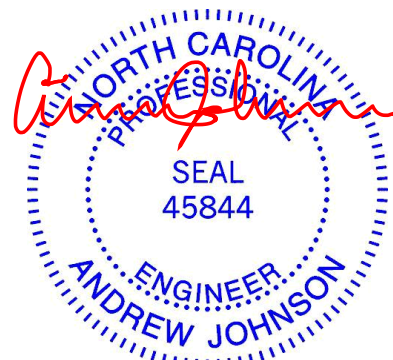
**LUMBER-**  
 TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP No.1  
 WEBS 2x4 SP No.2  
 OTHERS 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except: 10-0-0 oc bracing: 6-7.

**REACTIONS.** All bearings 14-7-2.  
 (lb) - Max Horz 1=182(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 10=185(LC 12), 8=151(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 9=523(LC 19), 10=537(LC 19), 8=448(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 2-10=429/311, 4-8=332/266

- 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) 0-4-8 to 4-9-5, Interior(1) 4-9-5 to 8-9-5, Exterior(2) 8-9-5 to 13-2-2, Interior(1) 13-2-2 to 14-4-5 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7 except (jt=lb) 10=185, 8=151.
  - 6) Non Standard bearing condition. Review required.



September 20, 2022

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818 Soundside Road  
 Edenton, NC 27932

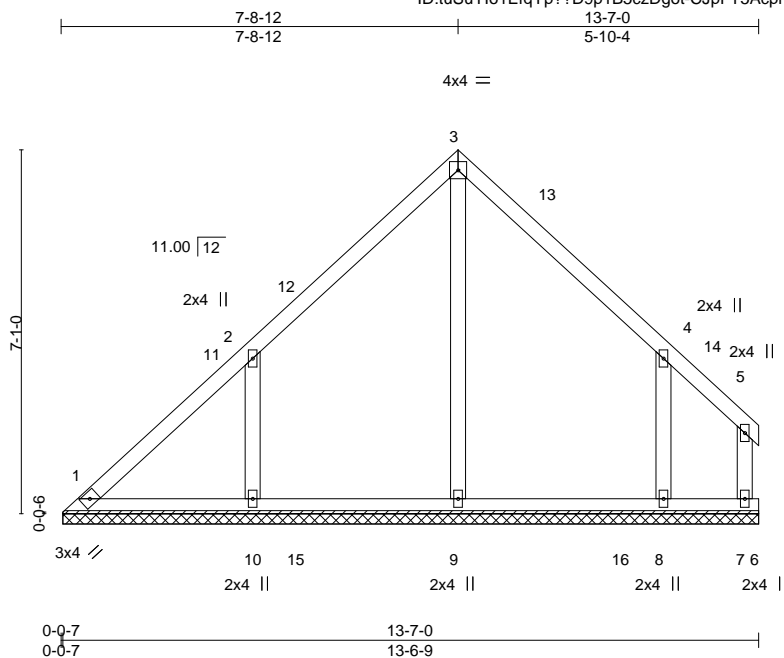
Job	Truss	Truss Type	Qty	Ply	Wellco / 114 Hidden Lakes / Johnston	I54280538
J0822-4264	V4	VALLEY	1	1		

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Sep 19 16:17:09 2022 Page 1

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Job Reference (optional)



Scale = 1:44.9

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.15	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.17	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.19	Horz(CT)	0.00	7	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S						
	Code IRC2015/TPI2014						Weight: 67 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 6-7.

**REACTIONS.** All bearings 13-6-9.  
 (lb) - Max Horz 1=160(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 10=161(LC 12), 8=159(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 9=520(LC 19), 10=442(LC 19), 8=408(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 2-10=376/282, 4-8=334/271

- 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) 0-4-8 to 4-9-5, Interior(1) 4-9-5 to 7-8-12, Exterior(2) 7-8-12 to 12-1-9, Interior(1) 12-1-9 to 13-3-12 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, 7 except (jt=lb) 10=161, 8=159.



September 20, 2022

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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

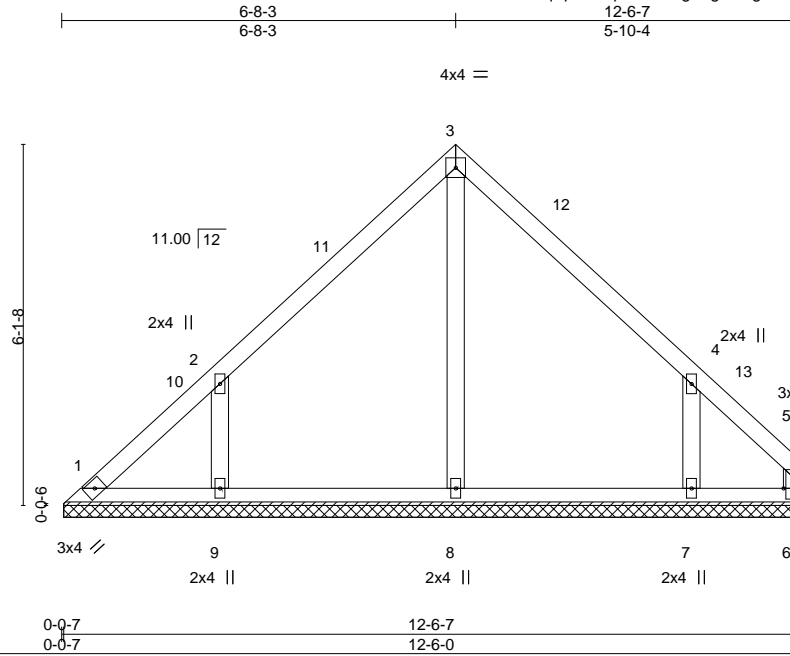
Job	Truss	Truss Type	Qty	Ply	Wellco / 114 Hidden Lakes / Johnston	I54280539
J0822-4264	V5	VALLEY	1	1		

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8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Sep 19 16:17:10 2022 Page 1

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Job Reference (optional)



Scale = 1:39.1

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.13	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.09	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.10	Vert(CT) n/a - n/a 999		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Horz(CT) 0.00 6 n/a n/a	Weight: 58 lb	FT = 20%

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

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

**REACTIONS.** All bearings 12-6-1.  
 (lb) - Max Horz 1=138(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 6 except 9=144(LC 12), 7=162(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 6 except 8=269(LC 19), 9=343(LC 19), 7=334(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 2-9=339/266, 4-7=337/275

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCCL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-8 to 4-9-5, Interior(1) 4-9-5 to 6-8-3, Exterior(2) 6-8-3 to 11-1-0, Interior(1) 11-1-0 to 12-4-11 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" tall by 2'-0" wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 6 except (jt=lb) 9=144, 7=162.



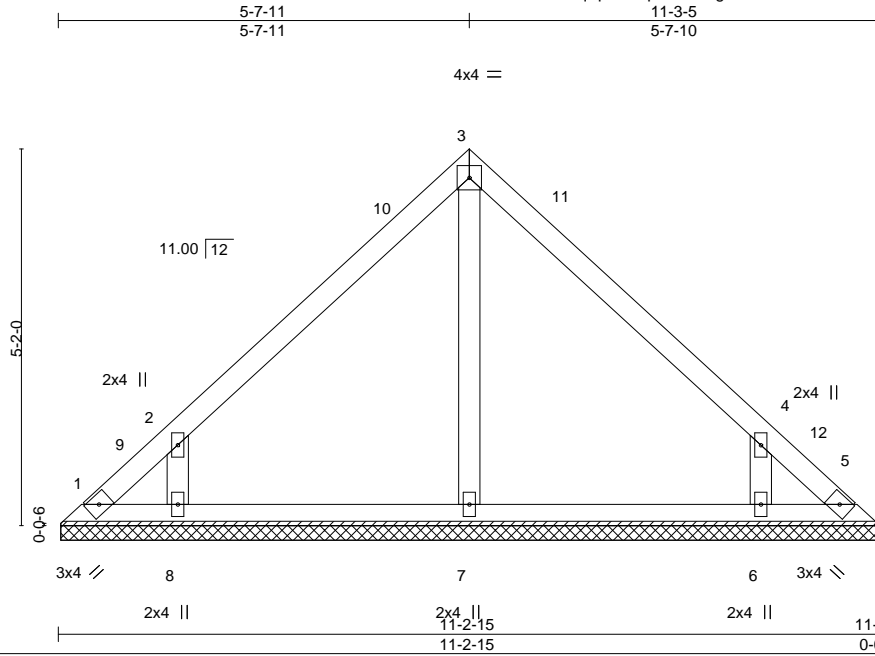
September 20, 2022

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

Job	Truss	Truss Type	Qty	Ply	Wellco / 114 Hidden Lakes / Johnston	I54280540
J0822-4264	V6	VALLEY	1	1		
Comtech, Inc. Fayetteville, NC - 28314,						Job Reference (optional)

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Sep 19 16:17:11 2022 Page 1  
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Scale = 1:31.6

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 0.14	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 0.06	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 11-2-8.  
 (lb) - Max Horz 1=-116(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-145(LC 12), 6=-145(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=337(LC 19), 6=337(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 2-8=-346/284, 4-6=-346/285

- 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) 0-4-8 to 4-9-5, Interior(1) 4-9-5 to 5-7-11, Exterior(2) 5-7-11 to 10-0-7, Interior(1) 10-0-7 to 10-10-13 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=145, 6=145.



September 20, 2022

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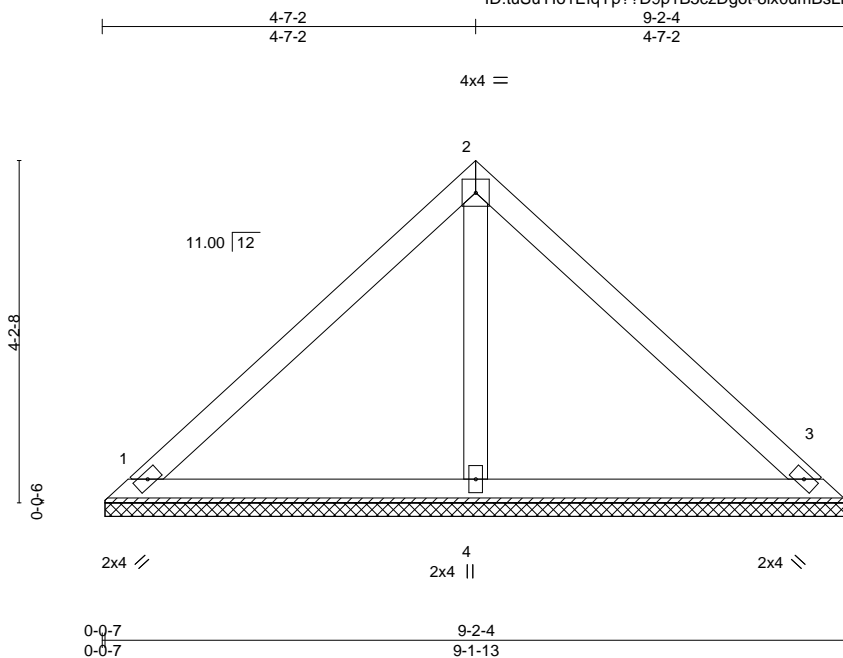
Job	Truss	Truss Type	Qty	Ply	Wellco / 114 Hidden Lakes / Johnston	I54280541
J0822-4264	V7	VALLEY	1	1		

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8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Sep 19 16:17:11 2022 Page 1

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Job Reference (optional)



Scale = 1:28.3

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.18	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.13	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.05	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 36 lb	FT = 20%
	Code IRC2015/TPI2014							

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

(size) 1=9-1-7, 3=9-1-7, 4=9-1-7  
 Max Horz 1=93(LC 9)  
 Max Uplift 1=23(LC 13), 3=27(LC 13)  
 Max Grav 1=186(LC 1), 3=186(LC 1), 4=303(LC 1)

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

**NOTES-**

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



September 20, 2022

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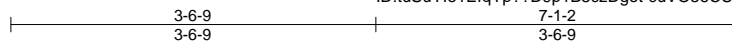
Job J0822-4264	Truss V8	Truss Type VALLEY	Qty 1	Ply 1	Wellco / 114 Hidden Lakes / Johnston I54280542
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8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Sep 19 16:17:12 2022 Page 1

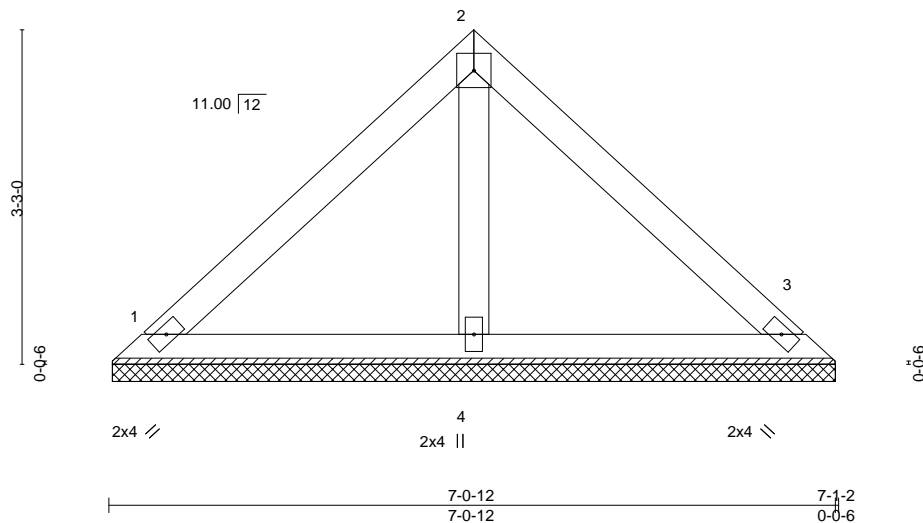
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Job Reference (optional)



4x4 =

Scale = 1:22.4



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 0.16	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.08	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: 27 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.

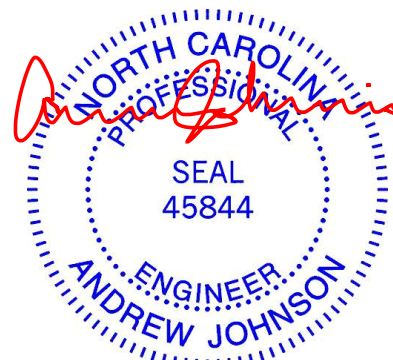
**REACTIONS.**

(size) 1=7-0-5, 3=7-0-5, 4=7-0-5  
 Max Horz 1=-70(LC 10)  
 Max Uplift 1=-25(LC 13), 3=-28(LC 13)  
 Max Grav 1=151(LC 1), 3=151(LC 1), 4=206(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; BC DL=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.



September 20, 2022

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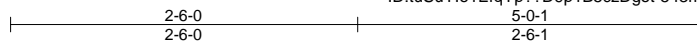
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellco / 114 Hidden Lakes / Johnston	I54280543
J0822-4264	V9	VALLEY	1	1		

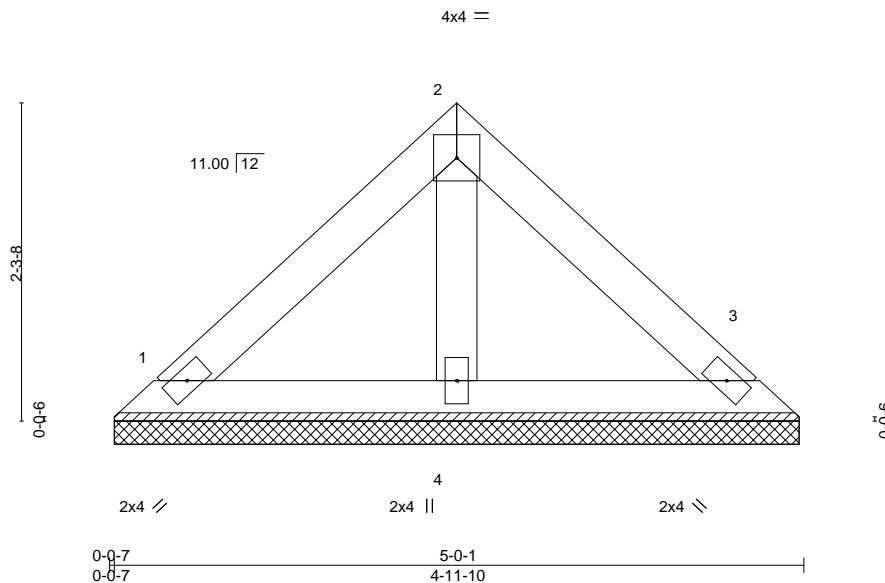
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8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Sep 19 16:17:13 2022 Page 1

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Scale = 1:16.6



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 0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	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: 18 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 5-0-1 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 1=4-11-4, 3=4-11-4, 4=4-11-4  
 Max Horz 1=47(LC 9)  
 Max Uplift 1=17(LC 13), 3=19(LC 13)  
 Max Grav 1=101(LC 1), 3=101(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; TCCL=6.0psf; BCCL=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.



September 20, 2022

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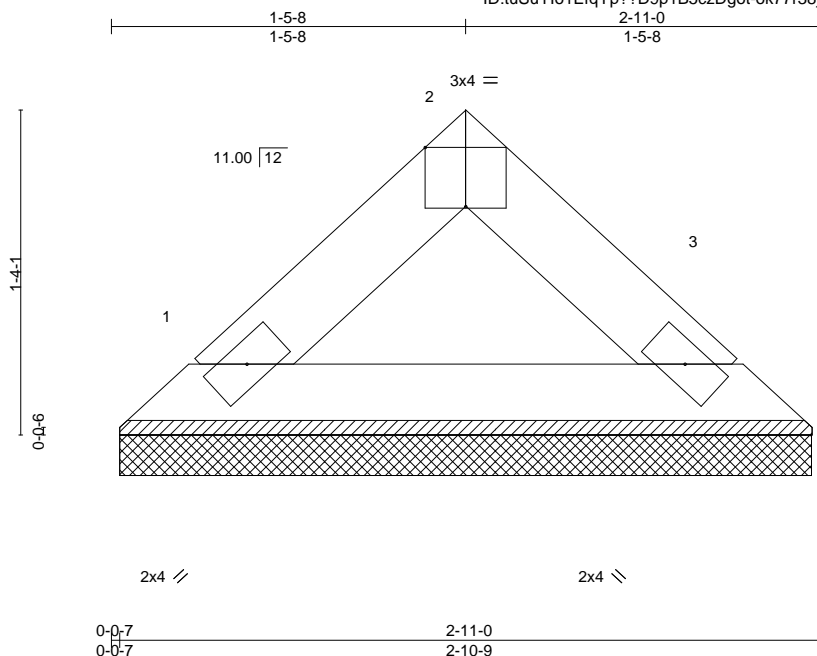
818 Soundside Road  
 Edenton, NC 27932



Job J0822-4264	Truss V10	Truss Type VALLEY	Qty 1	Ply 1	Wellco / 114 Hidden Lakes / Johnston I54280544
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Sep 19 16:17:06 2022 Page 1  
ID:tuSuYlo1EfqYp??D9p1B5czDgot-ok77r38jWrm6gCju?FyNooNqAAEwXgVTaXLdyJyc0Kh



Scale = 1:9.5

Plate Offsets (X,Y)--	[2:0-2-0,Edge]	0-0-7 0-0-7	2-11-0 2-10-9						
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.02	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 0.00	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P					Weight: 9 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 2-11-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=2-10-2, 3=2-10-2  
Max Horz 1=24(LC 9)  
Max Uplift 1=3(LC 12), 3=3(LC 13)  
Max Grav 1=87(LC 1), 3=87(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) 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) Non Standard bearing condition. Review required.



September 20, 2022

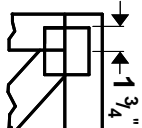
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before 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



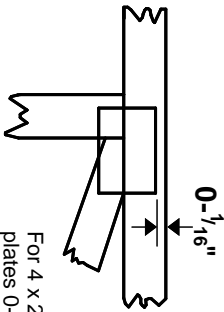
818 Soundside Road  
Edenton, NC 27932

# Symbols

## PLATE LOCATION AND ORIENTATION



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



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



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

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

## PLATE SIZE

**4 X 4**

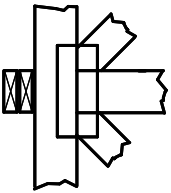
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



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

## BEARING



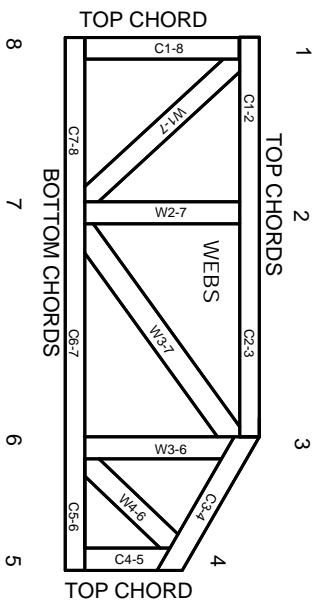
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

### Industry Standards:

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

# Numbering System

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



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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