ENGINEERING BY TRENCO
A MiTek Affiliate

RE: J0820-3845
Weaver / 34 Lilly Farm / Johnston

Trenco
818 Soundside Rd
Edenton, NC 27932

Site Information:
Customer: Project Name: J0820-3845
Lot/Block: Model:
Address: Subdivision:
City: State:

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

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

This package includes 26 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	E14496517	A1	9/9/2020	21	E14496537	VC1	9/9/2020
2	E14496518	A1GE	9/9/2020	22	E14496538	VC2	9/9/2020
3	E14496519	A2	9/9/2020	23	E14496539	VC3	9/9/2020
4	E14496520	A3	9/9/2020	24	E14496540	VC4	9/9/2020
5	E14496521	A4	9/9/2020	25	E14496541	VC5	9/9/2020
6	E14496522	A5	9/9/2020	26	E14496542	VC6	9/9/2020
7	E14496523	A6	9/9/2020				
8	E14496524	A7	9/9/2020				
9	E14496525	A7GE	9/9/2020				
10	E14496526	B1	9/9/2020				
11	E14496527	B1GE	9/9/2020				
12	E14496528	B2	9/9/2020				
13	E14496529	B3	9/9/2020				
14	E14496530	B4	9/9/2020				
15	E14496531	C1	9/9/2020				
16	E14496532	C1GE	9/9/2020				
17	E14496533	C2	9/9/2020				
18	E14496534	C3	9/9/2020				
19	E14496535	VB1	9/9/2020				
20	E14496536	VB2	9/9/2020				

The truss drawing(s) referenced above have been prepared by
Truss Engineering Co. under my direct supervision
based on the parameters provided by Comtech, Inc - Fayetteville.
Truss Design Engineer's Name: Gilbert, Eric
My license renewal date for the state of North Carolina is December 31, 2020.
North Carolina COA: C-0844
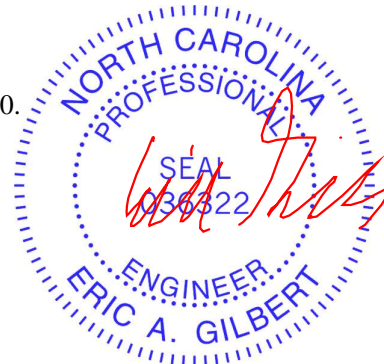
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to TRENCO. Any project specific information included is for TRENCO customers file reference purpose only, and was not taken into account in the preparation of these designs. TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

North Carolina Professional Seal 036322 — Eric A. Gilbert

September 09, 2020

1 of 1

Gilbert, Eric

Job	Truss	Truss Type	Qty	Ply	Weaver / 34 Lilly Farm / Johnston	
J0820-3845	A1	ROOF SPECIAL	6	1		E14496517
					Job Reference (optional)	

Comtech, Inc,   Fayetteville, NC - 28314,

8.330 s May 6 2020 MiTek Industries, Inc. Wed Jun 10 13:09:16 2020 Page 1
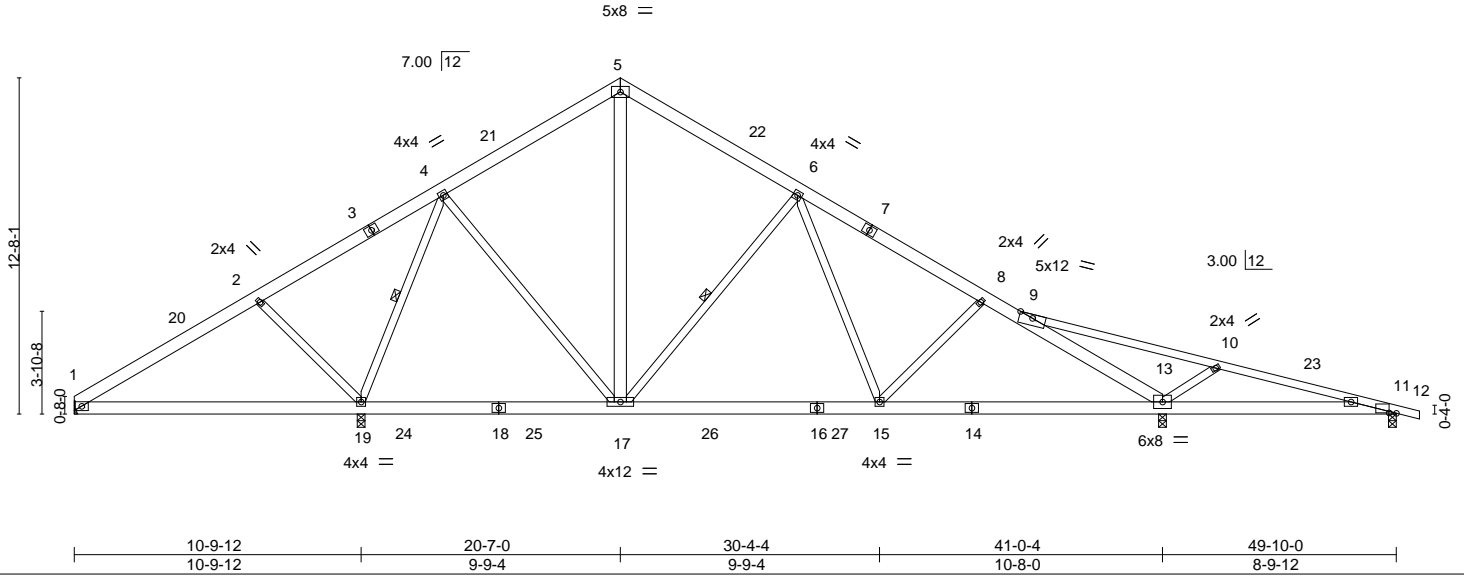ID:nGEYJn1QAngpJfECepmG8Mz?may-_K56gjbQS2pppcO_UugdJp6pbxil2wIaoRLtjoz7gen

Scale = 1:86.9

Plate Offsets (X,Y)--   [11:0-3-4,0-0-3]

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.11	15-17	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.17	15-17	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.02	13	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.03	15-17	>999	240	Weight: 354 lb	FT = 20%

LUMBER-
TOP CHORD   2x6 SP No.1 *Except*
                        9-12: 2x4 SP No.1
BOT CHORD   2x6 SP No.1
WEBS   2x4 SP No.2 *Except*
                        5-17: 2x6 SP No.1

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS   1 Row at midpt   4-19, 6-17

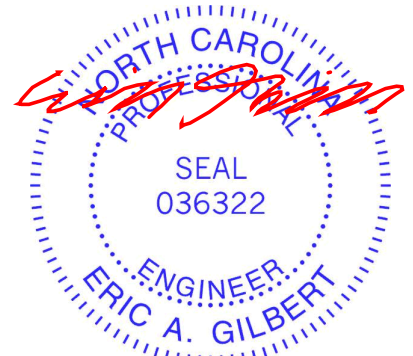**REACTIONS.**   All bearings 0-3-8 except (jt=length) 1=Mechanical.
        (lb) -   Max Horz 1=-297(LC 6)
                Max Uplift   All uplift 100 lb or less at joint(s) 1, 11 except 13=-189(LC 11), 19=-186(LC 10)
                Max Grav   All reactions 250 lb or less at joint(s) except 13=1672(LC 1), 1=329(LC 21), 19=2060(LC 17), 11=279(LC 22)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-4=-53/432, 4-5=-879/341, 5-6=-851/342, 6-8=-1514/361, 8-9=-1585/359, 9-13=-2019/488, 9-10=-136/537
BOT CHORD   17-19=0/367, 15-17=-27/1101, 13-15=-157/1388
WEBS   2-19=-484/260, 4-19=-1463/351, 4-17=0/659, 5-17=-133/470, 6-17=-753/272, 10-13=-608/280, 6-15=-23/481

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-12 to 4-5-9, Interior(1) 4-5-9 to 16-2-3, Exterior(2) 16-2-3 to 24-11-13, Interior(1) 24-11-13 to 46-3-11, Exterior(2) 46-3-11 to 50-8-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 4x6 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) 1, 11 except (jt=lb) 13=189, 19=186.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

June 10,2020

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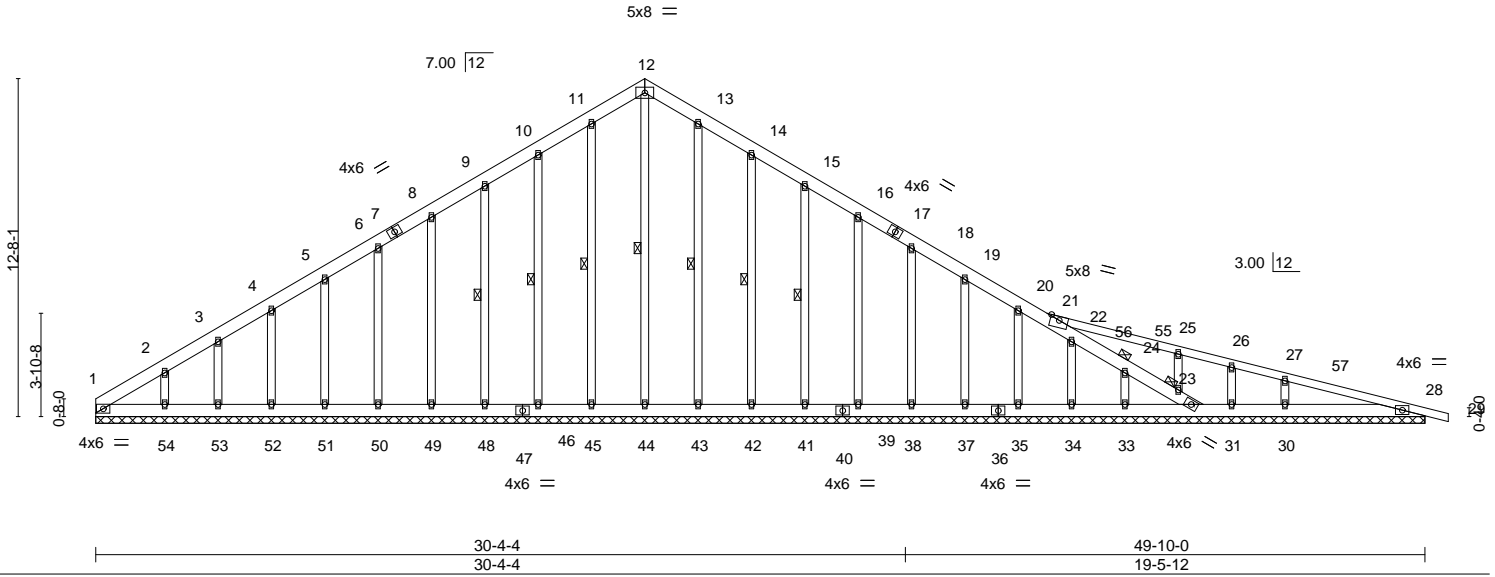| Job	Truss	Truss Type	Qty	Ply	Weaver / 34 Lilly Farm / Johnston	
J0820-3845	A1GE	GABLE	1	1		E14496518
					Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s May 6 2020 MiTek Industries, Inc. Wed Jun 10 13:09:18 2020 Page 1
ID:nGEYJn1QAngpJfECepmG8Mz?may-wjDs5Pdh_f4X2vYMbJj5PEBJTlSCWvStGlqzohz7gel

Scale = 1:86.4

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	0.01	29	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	0.01	29	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.01	28	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 434 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1 *Except*
  21-29: 2x4 SP No.1
BOT CHORD 2x6 SP No.1
OTHERS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except:
  10-0-0 oc bracing: 32-33,31-32,30-31,28-30.
WEBS 1 Row at midpt 12-44, 11-45, 10-46, 9-48, 13-43, 14-42,
  15-41
JOINTS 1 Brace at Jt(s): 24, 23

REACTIONS. All bearings 49-10-0.
  (lb) - Max Horz 1=-384(LC 6)
    Max Uplift All uplift 100 lb or less at joint(s) 45, 46, 48, 49, 50, 51, 52, 53, 43,
      42, 41, 39, 38, 37, 34, 33 except 1=-106(LC 8), 28=-126(LC 7), 54=-133(LC
      10), 35=-128(LC 11), 30=-183(LC 11)
    Max Grav All reactions 250 lb or less at joint(s) 32, 1, 45, 46, 48, 49, 50, 51, 52,
      53, 54, 43, 42, 41, 39, 38, 37, 35, 34, 33 except 28=281(LC 1), 44=263(LC
      20), 31=297(LC 3), 30=354(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-379/319, 2-3=-283/273, 3-4=-223/253, 9-10=-148/262, 10-11=-203/304,
  11-12=-233/336, 12-13=-233/336, 13-14=-203/302, 22-24=-273/273, 23-24=-296/343,
  23-32=-257/242
BOT CHORD 1-54=-154/288, 53-54=-154/288, 52-53=-154/288, 51-52=-154/288, 50-51=-154/288,
  49-50=-154/288, 48-49=-154/288, 46-48=-154/288, 45-46=-154/288, 44-45=-154/288,
  43-44=-154/288, 42-43=-154/288, 41-42=-154/288, 39-41=-154/288, 38-39=-154/288,
  37-38=-154/288, 35-37=-154/288, 34-35=-154/288, 33-34=-154/288, 32-33=-288/154
WEBS 27-30=-275/252

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed;
   MWFRS (envelope) gable end zone and C-C Corner(3) 0-0-0 to 4-7-0, Exterior(2) 4-7-0 to 16-2-3, Corner(3) 16-2-3 to 24-11-13,
   Exterior(2) 24-11-13 to 46-3-11, Corner(3) 46-3-11 to 50-8-8 zone;C-C for members and forces & MWFRS for reactions shown;
   Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry
   Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
   will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 45, 46, 48, 49, 50,
   51, 52, 53, 43, 42, 41, 39, 38, 37, 34, 33 except (jt=lb) 1=106, 28=126, 54=133, 35=128, 30=183.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

June 10,2020
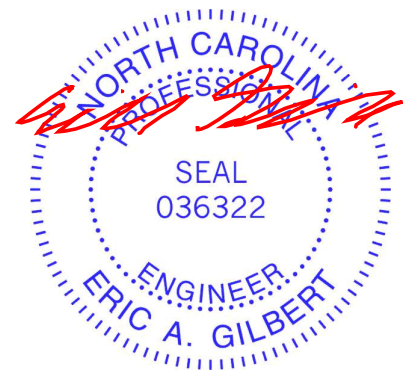
⚠ **WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

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Job	Truss	Truss Type	Qty	Ply	Weaver / 34 Lilly Farm / Johnston	
J0820-3845	A2	ROOF SPECIAL	1	1		E14496519
					Job Reference (optional)	

Comtech, Inc,   Fayetteville, NC - 28314,

8.330 s May 6 2020 MiTek Industries, Inc. Wed Jun 10 13:09:19 2020 Page 1
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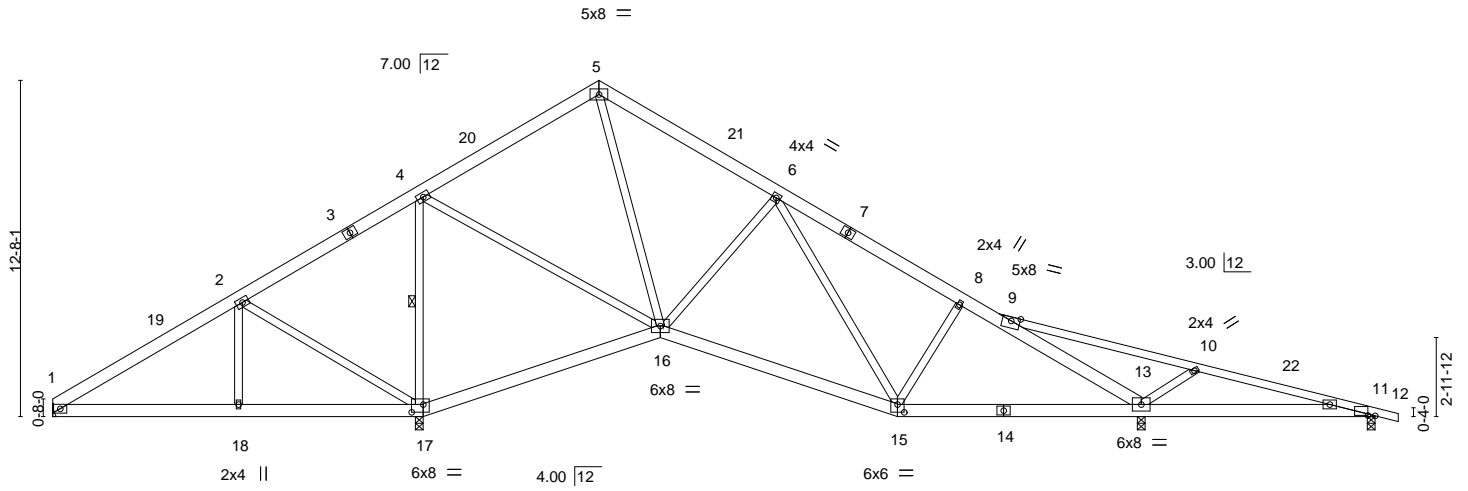
Scale = 1:86.8

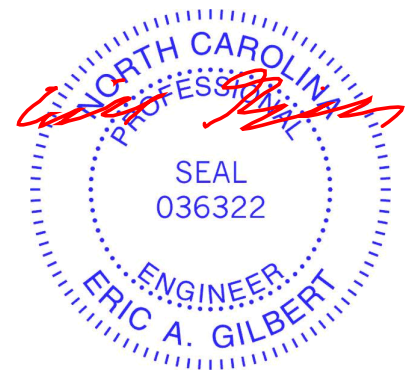Plate Offsets (X,Y)--   [11:0-3-4,0-0-3], [15:0-3-0,0-3-8], [17:0-5-4,0-3-8]

LOADING (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC	0.56	Vert(LL)	-0.06	15-16	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.13	15-16	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.03	11	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.07	11-13	>999	240	Weight: 345 lb	FT = 20%

LUMBER-
TOP CHORD   2x6 SP No.1 *Except*
                        9-12: 2x4 SP No.1
BOT CHORD   2x6 SP No.1
WEBS   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 6-0-0 oc bracing.
WEBS   1 Row at midpt   4-17

REACTIONS.   All bearings 0-3-8 except (jt=length) 1=Mechanical.
         (lb) - Max Horz 1=-297(LC 6)
                   Max Uplift All uplift 100 lb or less at joint(s) 1 except 17=-170(LC 10), 13=-187(LC 11), 11=-150(LC 7)
                   Max Grav   All reactions 250 lb or less at joint(s) except 1=384(LC 21), 17=1990(LC 1), 13=1457(LC 1),
                        11=289(LC 22)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   1-2=-377/150, 2-4=-27/568, 4-5=-607/237, 5-6=-662/249, 6-8=-1036/307,
                   8-9=-1075/265, 9-13=-1609/353, 9-10=-106/495
BOT CHORD   1-18=-120/281, 17-18=-120/281, 16-17=-581/276, 15-16=0/828, 13-15=-74/924
WEBS   2-18=0/308, 2-17=-671/221, 4-17=-1384/288, 4-16=-17/969, 5-16=-43/264,
                   6-16=-575/291, 8-15=-253/167, 10-13=-608/296

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed;
   MWFRS (envelope) and C-C Exterior(2) 0-0-12 to 4-5-9, Interior(1) 4-5-9 to 16-2-3, Exterior(2) 16-2-3 to 24-11-13, Interior(1)
   24-11-13 to 46-3-11, Exterior(2) 46-3-11 to 50-8-8 zone; 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 4x6 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.
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) 1 except (jt=lb)
   17=170, 13=187, 11=150.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

SEAL
036322
ERIC A. GILBERT

June 10,2020

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver / 34 Lilly Farm / Johnston	
J0820-3845	A3	SPECIAL TRUSS	3	1		E14496520
					Job Reference (optional)	

Comtech, Inc,   Fayetteville, NC - 28314,
8.330 s May 6 2020 MiTek Industries, Inc. Wed Jun 10 13:09:20 2020 Page 1
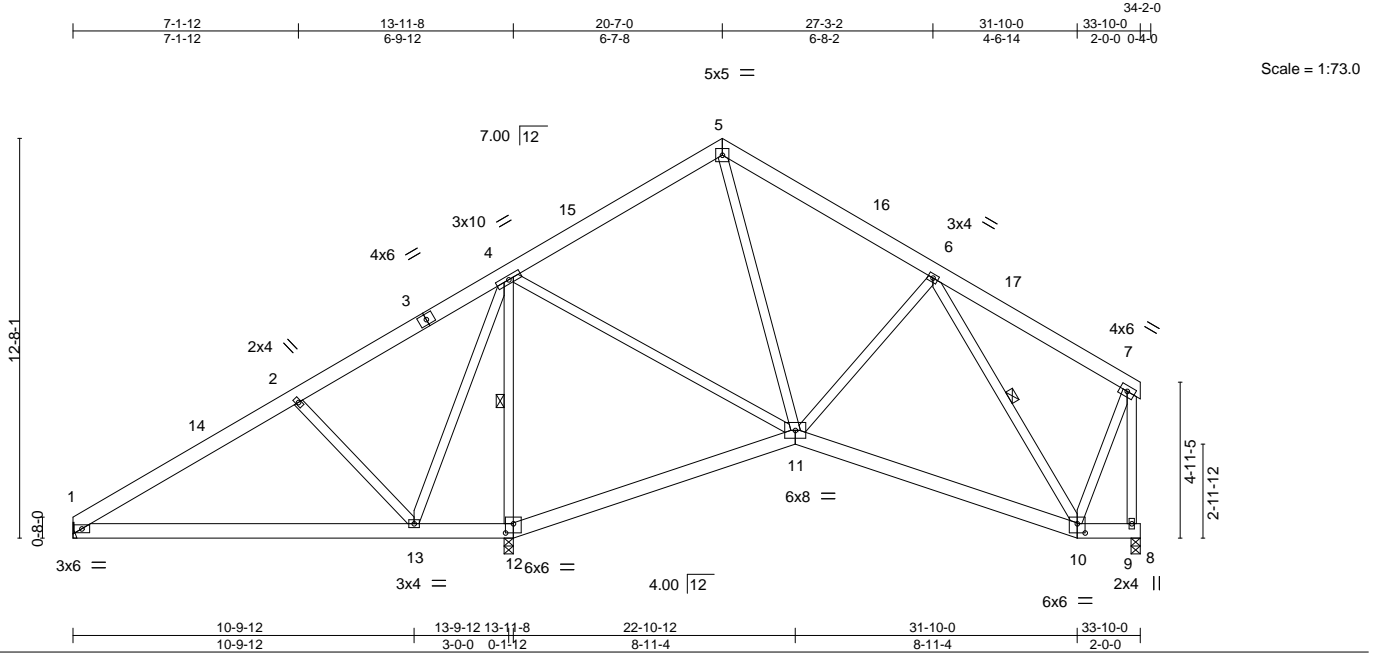ID:nGEYJn1QAngpJfECepmG8Mz?may-t6LdV4exVGKFHDiljkIZUfGfqZ6G_IbAj3J4sZz7gej

Scale = 1:73.0

Plate Offsets (X,Y)--   [10:0-3-0,0-3-8], [12:0-3-0,0-3-8]

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	-0.09	1-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.19	1-13	>871	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.02	9	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.02	1-13	>999	240	Weight: 271 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 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   6-10, 4-12

REACTIONS.   (size)   1=Mechanical, 12=0-3-8, 9=0-3-8
             Max Horz 1=287(LC 7)
             Max Uplift 1=-1(LC 10), 12=-193(LC 10), 9=-56(LC 11)
             Max Grav 1=486(LC 21), 12=1508(LC 1), 9=720(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   1-2=-502/61, 4-5=-536/236, 5-6=-578/249, 6-7=-272/114, 7-9=-725/148
BOT CHORD   1-13=-167/427, 10-11=-104/506
WEBS   6-10=-552/147, 4-12=-1368/396, 4-11=-49/580, 7-10=-23/497, 4-13=-100/561,
             2-13=-462/253

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed;
   MWFRS (envelope) and C-C Exterior(2) 0-0-12 to 4-5-9, Interior(1) 4-5-9 to 16-2-3, Exterior(2) 16-2-3 to 24-11-13, Interior(1)
   24-11-13 to 29-1-15, Exterior(2) 29-1-15 to 33-6-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber
   DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
   will fit between the bottom chord and any other members.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9 except (jt=lb)
   12=193.

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Scale = 1:73.0

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

LOADING (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	-0.08	1-13	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.16	1-13	>788	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB	0.35	Horz(CT)	0.02	9	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.01	11	>999	240	Weight: 271 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 6-0-0 oc purlins, except end verticals.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 1-13.
WEBS   1 Row at midpt   6-10, 4-13

REACTIONS.   (size) 1=Mechanical, 9=0-3-8, 13=0-3-8
Max Horz 1=287(LC 7)
Max Uplift 9=-65(LC 11), 13=-200(LC 10)
Max Grav 1=350(LC 21), 9=863(LC 1), 13=1503(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   1-2=-257/96, 2-4=-95/316, 4-5=-704/280, 5-6=-803/308, 6-7=-323/128, 7-9=-865/185
BOT CHORD   11-12=-80/290, 10-11=-141/646
WEBS   6-10=-737/196, 4-11=0/365, 5-11=-87/381, 7-10=-55/617, 4-13=-1035/300, 2-13=-474/256

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-12 to 4-5-9, Interior(1) 4-5-9 to 16-2-3, Exterior(2) 16-2-3 to 24-11-13, Interior(1) 24-11-13 to 29-1-15, Exterior(2) 29-1-15 to 33-6-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) 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) 9 except (jt=lb) 13=200.

June 10,2020

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

Job	Truss	Truss Type	Qty	Ply	Weaver / 34 Lilly Farm / Johnston	
J0820-3845	A5	SPECIAL TRUSS	3	1	Job Reference (optional)	E14496522

Comtech, Inc,   Fayetteville, NC - 28314,

8.330 s May 6 2020 MiTek Industries, Inc. Wed Jun 10 13:09:21 2020 Page 1
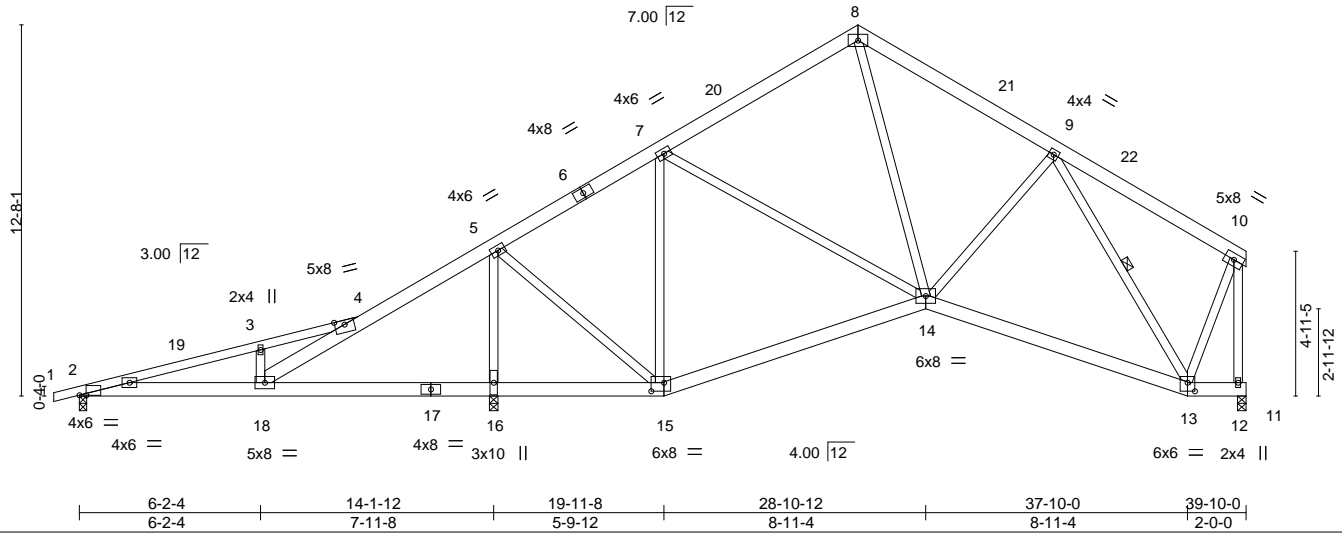ID:nGEYJn1QAngpJfECepmG8Mz?may-Llv?jQfZGaS6vNHxGSGo0spo7yTdj4MJyj2eO?z7gei

Scale = 1:78.7

Plate Offsets (X,Y)--   [2:0-2-12,0-0-1], [13:0-3-0,0-3-8], [15:0-5-4,0-3-8]

LOADING (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.06	14-15	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.13	14-15	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.02	12	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.07	16-18	>999	240	Weight: 298 lb	FT = 20%

LUMBER-
TOP CHORD   2x6 SP No.1 *Except*
                     1-4: 2x4 SP No.1
BOT CHORD   2x6 SP No.1
WEBS   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   9-13

REACTIONS.   (size)   12=0-3-8, 16=0-3-8, 2=0-3-0
                     Max Horz 2=292(LC 7)
                     Max Uplift 12=-67(LC 11), 16=-265(LC 10), 2=-143(LC 6)
                     Max Grav 12=818(LC 18), 16=2152(LC 1), 2=255(LC 21)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   4-18=-833/1004, 4-5=-860/1234, 5-7=-362/98, 7-8=-712/162, 8-9=-831/152,
                     9-10=-330/92, 10-12=-836/86
BOT CHORD   16-18=-950/676, 15-16=-950/676, 14-15=-32/454, 13-14=-48/610
WEBS   5-15=-566/1367, 7-15=-793/393, 7-14=-161/450, 8-14=-48/397, 9-13=-691/75,
                     10-13=0/590, 3-18=-347/178, 5-16=-1957/909

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed;
   MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 22-2-3, Exterior(2) 22-2-3 to 30-11-13, Interior(1)
   30-11-13 to 35-1-15, Exterior(2) 35-1-15 to 39-6-12 zone; porch 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.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12 except (jt=lb)
   16=265, 2=143.
6) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

June 10,2020

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

Job	Truss	Truss Type	Qty	Ply	Weaver / 34 Lilly Farm / Johnston	
J0820-3845	A6	SPECIAL TRUSS	1	1		E14496523
					Job Reference (optional)	

Comtech, Inc,   Fayetteville, NC - 28314,
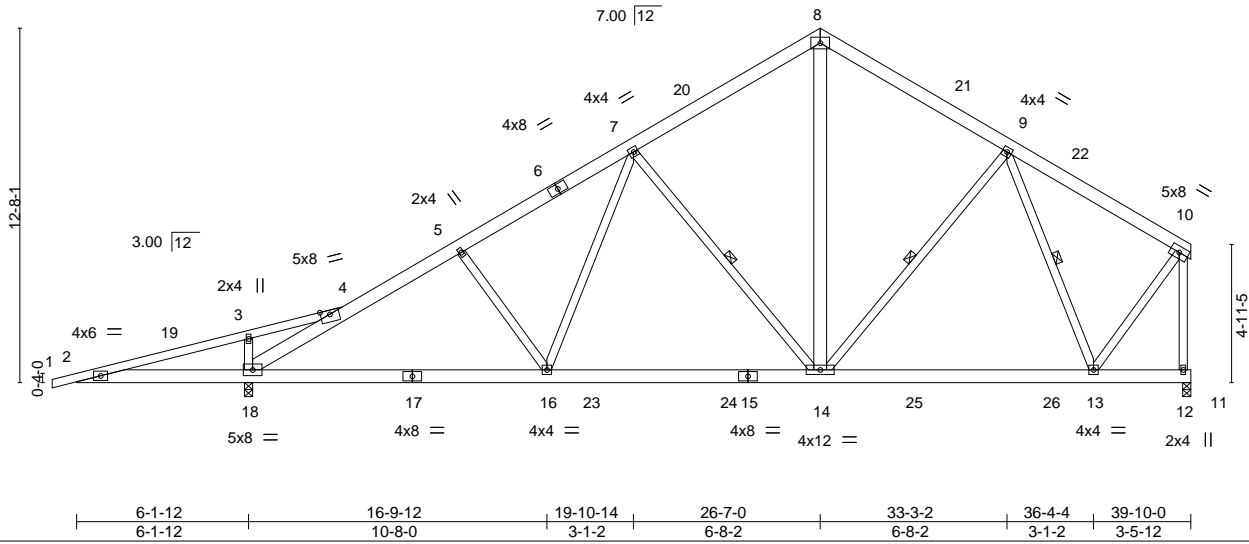8.330 s May 6 2020 MiTek Industries, Inc. Wed Jun 10 13:09:22 2020 Page 1
ID:nGEYJn1QAngpJfECepmG8Mz?may-pUTNwmgB1uazXXs8q9n1Z4MvuMkISgtTBNoBxSz7geh

Top dimensions:
-0-10-8 | 6-1-12 | 9-6-0 | 13-9-0 | 19-10-14 | 26-7-0 | 33-3-2 | 39-10-0
0-10-8 | 6-1-12 | 3-4-4 | 4-3-0 | 6-1-14 | 6-8-2 | 6-8-2 | 6-6-14

Scale = 1:82.4

Bottom dimensions:
6-1-12 | 16-9-12 | 19-10-14 | 26-7-0 | 33-3-2 | 36-4-4 | 39-10-0
6-1-12 | 10-8-0 | 3-1-2 | 6-8-2 | 6-8-2 | 3-1-2 | 3-5-12

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.62	Vert(LL)	-0.13	14-16	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.20	14-16	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.37	Horz(CT)	0.03	12	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	-0.05	16-18	>999	240	Weight: 307 lb	FT = 20%

LUMBER-
TOP CHORD   2x6 SP No.1 *Except*
    1-4: 2x4 SP No.1
BOT CHORD   2x6 SP No.1
WEBS   2x4 SP No.2 *Except*
    8-14: 2x6 SP No.1

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 5-3-4 oc purlins, except end verticals.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
    6-0-0 oc bracing: 2-18.
WEBS   1 Row at midpt   7-14, 9-14, 9-13

REACTIONS.   (size)   12=0-3-8, 18=0-3-8
    Max Horz   18=292(LC 7)
    Max Uplift   12=-84(LC 11), 18=-199(LC 10)
    Max Grav   12=1444(LC 17), 18=1936(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-982/991, 3-4=-924/958, 4-18=-2613/1034, 4-5=-2011/179, 5-7=-1879/219,
    7-8=-1233/368, 8-9=-1263/366, 9-10=-837/187, 10-12=-1490/264
BOT CHORD   2-18=-920/1004, 16-18=-261/1814, 14-16=-174/1529, 13-14=-150/935
WEBS   7-14=-755/209, 8-14=-169/852, 10-13=-124/1195, 7-16=-16/504, 9-13=-698/207,
    3-18=-344/175

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed;
   MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 22-2-3, Exterior(2) 22-2-3 to 30-11-13, Interior(1)
   30-11-13 to 35-1-15, Exterior(2) 35-1-15 to 39-6-12 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) 12 except (jt=lb)
   18=199.
6) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

June 10,2020

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

Job	Truss	Truss Type	Qty	Ply	Weaver / 34 Lilly Farm / Johnston	
J0820-3845	A7®	SPECIAL TRUSS	5	1		E14496524
					Job Reference (optional)	

Comtech, Inc,   Fayetteville, NC - 28314,

8.330 s May 6 2020 MiTek Industries, Inc. Wed Jun 10 13:09:23 2020 Page 1
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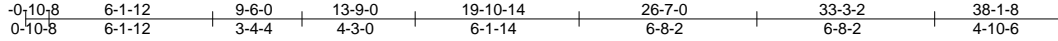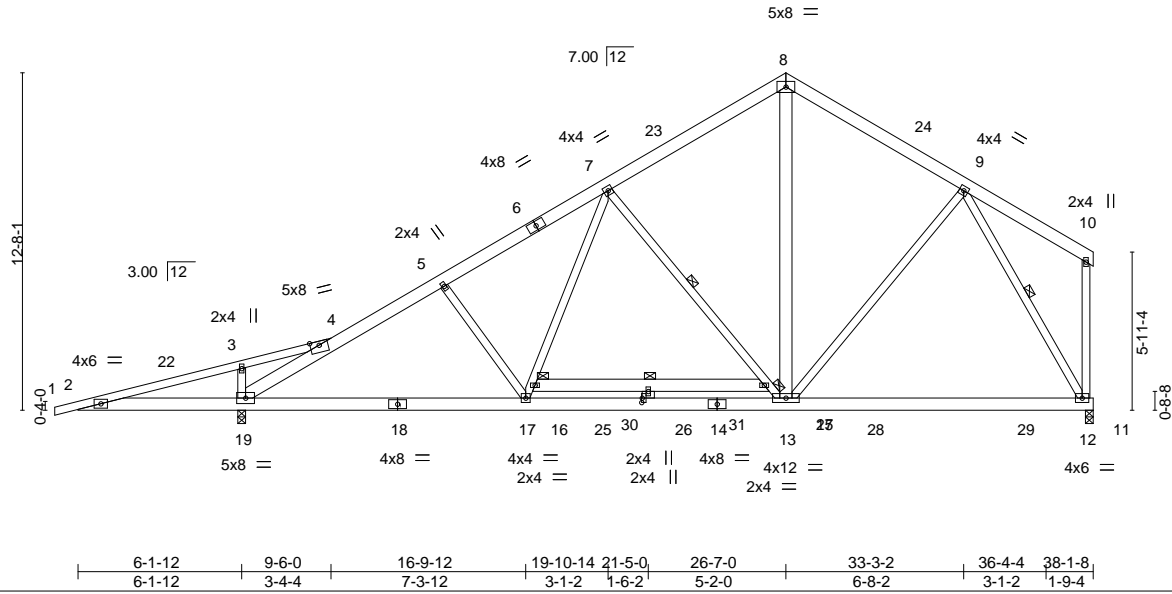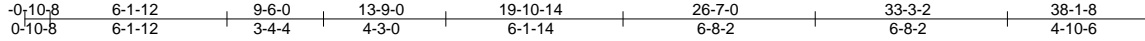
Scale = 1:86.5

Plate Offsets (X,Y)--   [20:0-2-0,0-0-4]

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	0.65	Vert(LL)	-0.25	12-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.37	12-13	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.58	Horz(CT)	0.04	12	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	-0.05	17-19	>999	240	Weight: 314 lb	FT = 20%

LUMBER-
TOP CHORD   2x6 SP No.1 *Except*
    1-4: 2x4 SP No.1
BOT CHORD   2x6 SP No.1
WEBS   2x4 SP No.2 *Except*
    8-13,20-21: 2x6 SP No.1

REACTIONS.   (size)   12=0-3-8, 19=0-3-8
    Max Horz 19=291(LC 7)
    Max Uplift 12=-40(LC 10), 19=-145(LC 10)
    Max Grav 12=1591(LC 17), 19=1965(LC 2)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-989/988, 3-4=-931/955, 4-19=-2783/922, 4-5=-2188/61, 5-7=-2056/100,
    7-8=-1270/284, 8-9=-1297/280
BOT CHORD   2-19=-916/1010, 17-19=-196/1959, 13-17=-97/1754, 12-13=-109/739
WEBS   7-15=-848/184, 13-15=-1063/135, 8-13=-78/880, 9-13=-9/545, 16-17=-26/430,
    7-16=0/661, 9-12=-1462/232, 3-19=-343/175

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 5-0-4 oc purlins,
    except end verticals.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
    6-0-0 oc bracing: 2-19.
    6-0-0 oc bracing: 15-16
WEBS   1 Row at midpt   7-15, 9-12

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed;
   MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 22-2-3, Exterior(2) 22-2-3 to 30-11-13, Interior(1)
   30-11-13 to 33-3-2, Exterior(2) 33-3-2 to 37-10-4 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) 12 except (jt=lb)
   19=145.
6) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

June 10,2020

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

Job	Truss	Truss Type	Qty	Ply	Weaver / 34 Lilly Farm / Johnston	
J0820-3845	A7GE	GABLE	1	1		E14496525
					Job Reference (optional)	

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.14	Horz(CT)	-0.00	24	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 362 lb	FT = 20%

LUMBER-
TOP CHORD   2x6 SP No.1 *Except*
            1-7: 2x4 SP No.1
BOT CHORD   2x6 SP No.1
WEBS   2x4 SP No.2
OTHERS   2x4 SP No.2

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD   Rigid ceiling directly applied or 6-0-0 oc bracing,   Except:
            10-0-0 oc bracing: 2-43,41-43.
WEBS   1 Row at midpt   17-30, 16-31, 15-33, 14-34, 18-29, 19-28, 20-27
JOINTS   1 Brace at Jt(s): 5

REACTIONS.   All bearings 38-1-8.
        (lb) - Max Horz 2=406(LC 10)
        Max Uplift   All uplift 100 lb or less at joint(s) 24, 30, 31, 33, 34, 35, 36, 37, 38, 40, 43, 29, 28, 27, 26, 25
                     except 2=-137(LC 6), 42=-113(LC 6)
        Max Grav   All reactions 250 lb or less at joint(s) 2, 24, 41, 30, 31, 33, 34, 35, 36, 37, 38, 40, 42, 29, 28,
                   27, 26, 25 except 43=398(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-257/190, 7-8=-327/280, 8-9=-301/283, 9-10=-264/256, 14-15=-182/272,
               15-16=-221/313, 16-17=-250/325, 17-18=-250/312, 18-19=-221/274

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed;
   MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 3-6-5, Exterior(2) 3-6-5 to 22-2-3, Corner(3) 22-2-3 to 30-11-13,
   Exterior(2) 30-11-13 to 33-5-7, Corner(3) 33-5-7 to 37-10-4 zone;C-C for members and forces & MWFRS for reactions shown;
   Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry
   Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
   will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 24, 30, 31, 33, 34,
   35, 36, 37, 38, 40, 43, 29, 28, 27, 26, 25 except (jt=lb) 2=137, 42=113.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

NORTH CAROLINA
PROFESSIONAL
SEAL
036322
ENGINEER
ERIC A. GILBERT

June 10,2020

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

Job	Truss	Truss Type	Qty	Ply	Weaver / 34 Lilly Farm / Johnston	
J0820-3845	B1	COMMON	1	1	Job Reference (optional)	E14496526

Comtech, Inc,   Fayetteville, NC - 28314,
8.330 s May 6 2020 MiTek Industries, Inc. Wed Jun 10 13:09:26 2020 Page 1
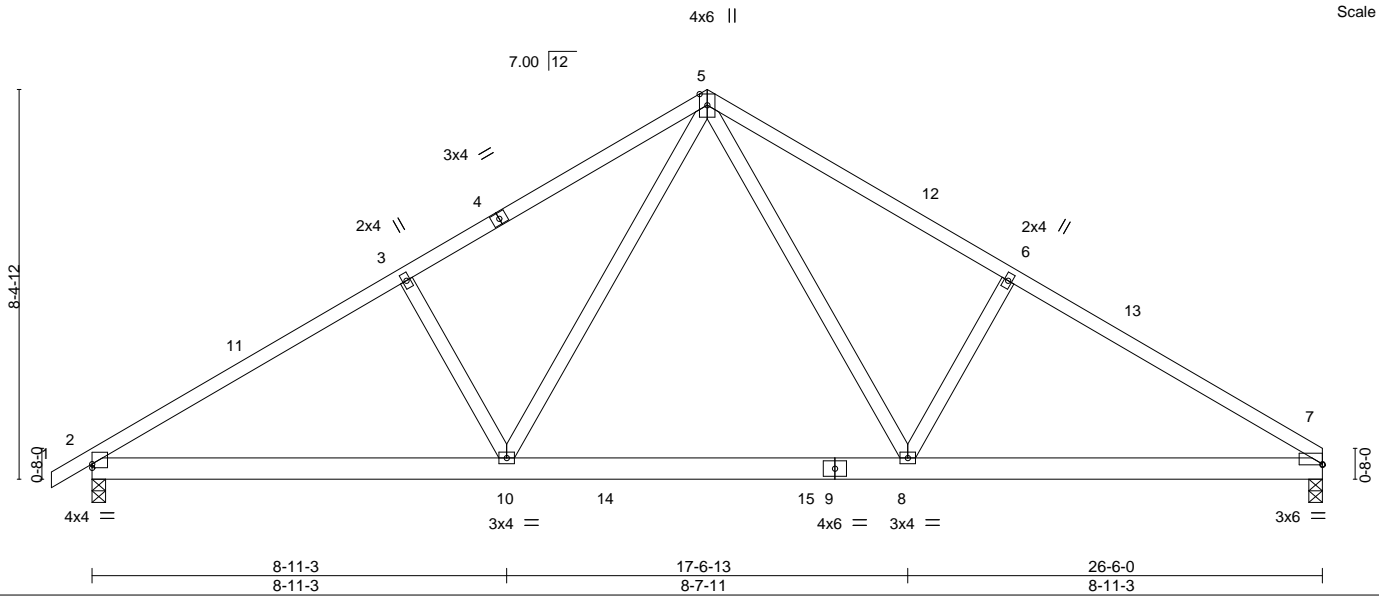ID:nGEYJn1QAngpJfECepmG8Mz?may-hFium8ji564O089v3?szjwWbQz8VOVA26?mO4Dz7ged

-0-10-8   6-9-4   13-3-0   19-8-12   26-6-0
0-10-8   6-9-4   6-5-12   6-5-12   6-9-4

Scale = 1:49.6

4x6 ‖

7.00 ⌐12

8-11-3   17-6-13   26-6-0
8-11-3   8-7-11   8-11-3

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

LOADING (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.11	8-10	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.16	8-10	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB	0.23	Horz(CT)	0.03	7	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.04	2-10	>999	240	Weight: 149 lb	FT = 20%

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

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 4-4-7 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.   (size)   7=0-3-8, 2=0-3-8
     Max Horz   2=196(LC 7)
     Max Uplift   7=-85(LC 11), 2=-99(LC 10)
     Max Grav   7=1077(LC 18), 2=1136(LC 17)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-1667/409, 3-5=-1510/462, 5-6=-1514/469, 6-7=-1670/415
BOT CHORD   2-10=-238/1462, 8-10=-55/963, 7-8=-250/1326
WEBS   5-8=-158/711, 6-8=-392/256, 5-10=-147/706, 3-10=-383/240

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed;
MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 8-10-3, Exterior(2) 8-10-3 to 17-7-13, Interior(1) 17-7-13
to 21-11-7, Exterior(2) 21-11-7 to 26-4-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate
grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 2.

North Carolina Professional Engineer Seal — SEAL 036322 — Eric A. Gilbert

June 10,2020

Job	Truss	Truss Type	Qty	Ply	Weaver / 34 Lilly Farm / Johnston	
J0820-3845	B1GE	GABLE	1	1		E14496527
					Job Reference (optional)	

Comtech, Inc,   Fayetteville, NC - 28314,
8.330 s May 6 2020 MiTek Industries, Inc. Wed Jun 10 13:09:28 2020 Page 1
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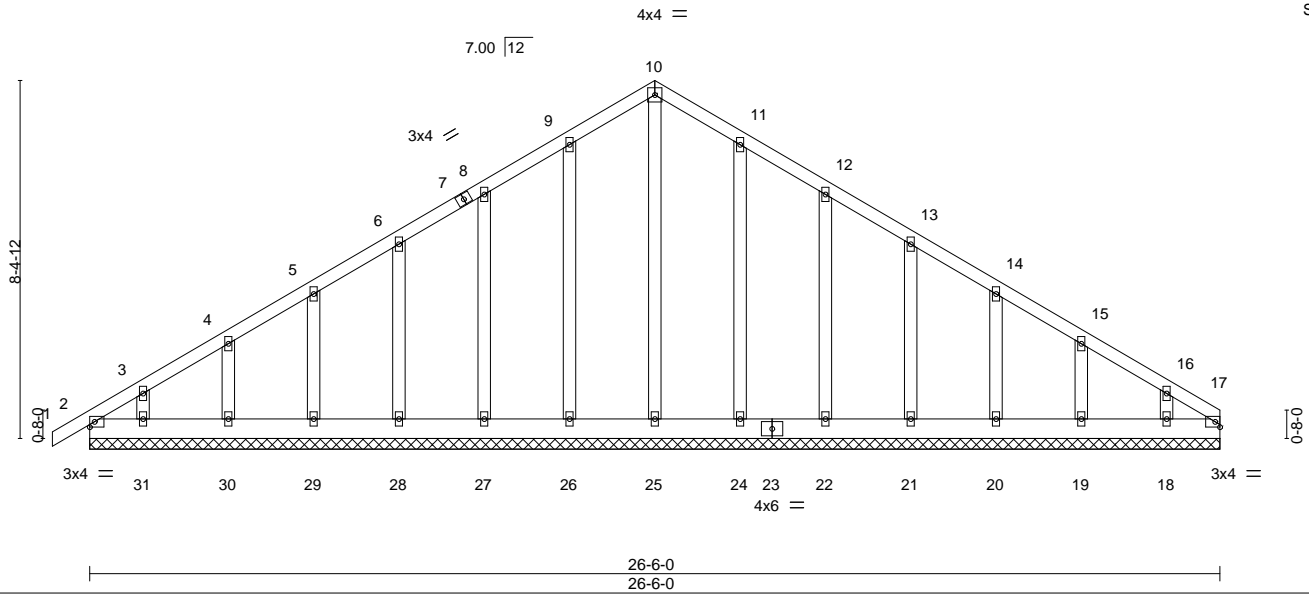
LOADING (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	1	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.00	17	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 185 lb	FT = 20%

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

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

REACTIONS.   All bearings 26-6-0.
(lb) - Max Horz 2=244(LC 7)
Max Uplift   All uplift 100 lb or less at joint(s) 17, 2, 26, 27, 28, 29, 30, 24, 22, 21, 20, 19 except
31=-108(LC 10), 18=-113(LC 11)
Max Grav   All reactions 250 lb or less at joint(s) 17, 2, 25, 26, 27, 28, 29, 30, 31, 24, 22, 21, 20, 19, 18

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-263/188

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed;
MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 3-3-0, Exterior(2) 3-3-0 to 8-10-3, Corner(3) 8-10-3 to 17-7-13,
Exterior(2) 17-7-13 to 22-1-3, Corner(3) 22-1-3 to 26-6-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber
DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry
Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17, 2, 26, 27, 28,
29, 30, 24, 22, 21, 20, 19 except (jt=lb) 31=108, 18=113.

June 10,2020

ENGINEERING BY
TRENCO
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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver / 34 Lilly Farm / Johnston	
J0820-3845	B2	ROOF SPECIAL	2	1		E14496528
					Job Reference (optional)	

Comtech, Inc,   Fayetteville, NC - 28314,

8.330 s May 6 2020 MiTek Industries, Inc. Wed Jun 10 13:09:29 2020 Page 1
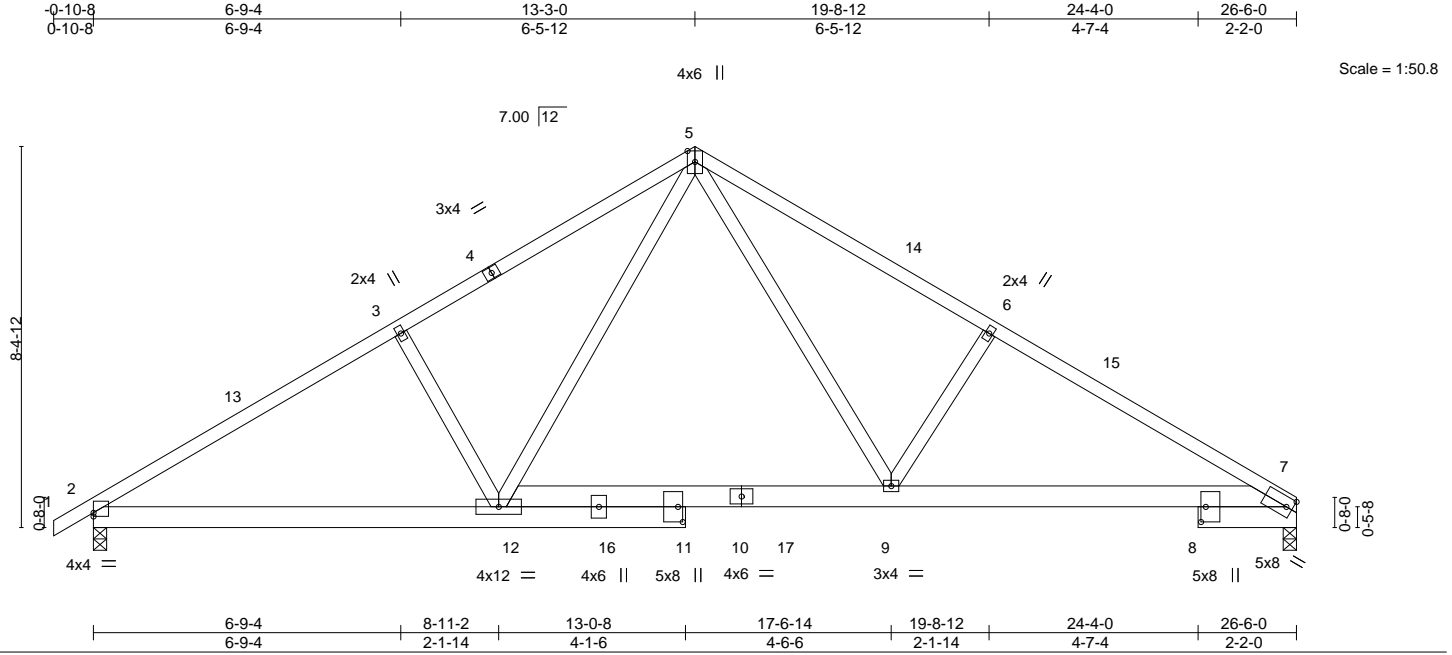ID:nGEYJn1QAngpJfECepmG8Mz?may-6qO1O9laO1SztcuUk7PgLY86mB39bsjVoz_3hYz7gea
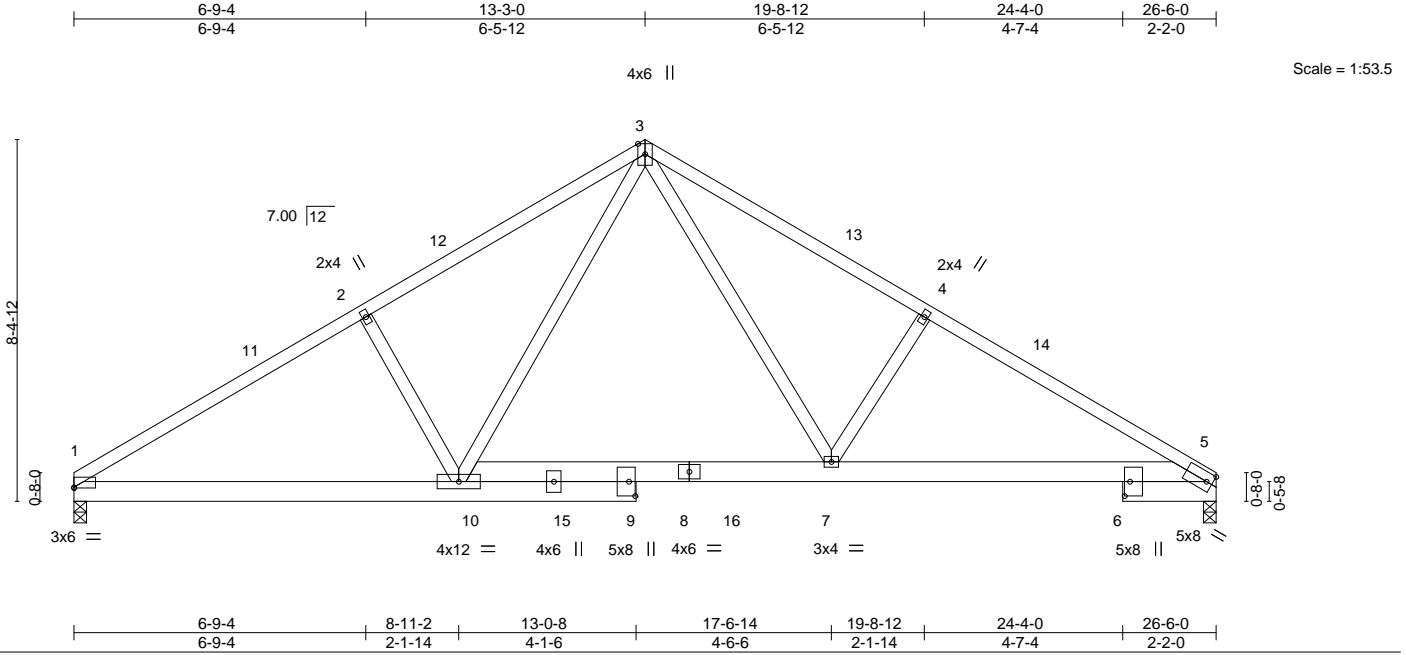
-0-10-8 | 6-9-4 | 13-3-0 | 19-8-12 | 24-4-0 | 26-6-0
0-10-8 | 6-9-4 | 6-5-12 | 6-5-12 | 4-7-4 | 2-2-0

4x6 ||

Scale = 1:50.8

7.00 |12

8-4-12

0-8-0

0-8-0
0-5-8

4x4 =

4x12 =   4x6 || 5x8 || 4x6 =   3x4 =

5x8 || 5x8 //

	6-9-4	8-11-2	13-0-8	17-6-14	19-8-12	24-4-0	26-6-0
	6-9-4	2-1-14	4-1-6	4-6-6	2-1-14	4-7-4	2-2-0

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

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	0.52	Vert(LL)	-0.10	9-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.22	7-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.06	7	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.07	7-9	>999	240	Weight: 161 lb	FT = 20%

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

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 4-1-9 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.   (size) 7=0-3-8, 2=0-3-8
Max Horz   2=196(LC 7)
Max Uplift 7=-85(LC 11), 2=-99(LC 10)
Max Grav   7=1068(LC 18), 2=1126(LC 17)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-1709/420, 3-5=-1526/454, 5-6=-1647/490, 6-7=-1821/449
BOT CHORD   2-12=-248/1502, 9-12=-60/1006, 7-9=-284/1455
WEBS   5-12=-131/665, 3-12=-381/240, 5-9=-182/838, 6-9=-387/253

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed;
   MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 8-10-3, Exterior(2) 8-10-3 to 17-7-13, Interior(1) 17-7-13
   to 21-11-7, Exterior(2) 21-11-7 to 26-4-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate
   grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
   will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 2.

NORTH CAROLINA
PROFESSIONAL
SEAL
036322
ENGINEER
ERIC A. GILBERT

June 10,2020

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TRENCO
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818 Soundside Road
Edenton, NC 27932

6-9-4	13-3-0	19-8-12	24-4-0	26-6-0
6-9-4	6-5-12	6-5-12	4-7-4	2-2-0

4x6 ∥

Scale = 1:53.5

7.00 ⎡12

6-9-4	8-11-2	13-0-8	17-6-14	19-8-12	24-4-0	26-6-0
6-9-4	2-1-14	4-1-6	4-6-6	2-1-14	4-7-4	2-2-0

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

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	0.50	Vert(LL)	-0.10	7-10	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.22	5-7	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.06	5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.07	5-7	>999	240	Weight: 160 lb	FT = 20%

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

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 4-1-8 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.   (size)   1=0-3-8, 5=0-3-8
Max Horz 1=192(LC 7)
Max Uplift 1=-85(LC 10), 5=-85(LC 11)
Max Grav 1=1068(LC 17), 5=1069(LC 18)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   1-2=-1714/432, 2-3=-1531/466, 3-4=-1649/496, 4-5=-1823/455
BOT CHORD   1-10=-266/1511, 7-10=-64/1007, 5-7=-289/1456
WEBS   3-10=-142/670, 2-10=-390/256, 3-7=-184/839, 4-7=-387/254

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed;
   MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 8-10-3, Exterior(2) 8-10-3 to 17-7-13, Interior(1) 17-7-13
   to 21-11-7, Exterior(2) 21-11-7 to 26-4-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate
   grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
   will fit between the bottom chord and any other members, 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, 5.

SEAL
036322
NORTH CAROLINA
PROFESSIONAL
ENGINEER
ERIC A. GILBERT

June 10,2020

TRENCO
ENGINEERING BY
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver / 34 Lilly Farm / Johnston	
J0820-3845	B4	COMMON	1	1		E14496530
					Job Reference (optional)	

Comtech, Inc,   Fayetteville, NC - 28314,

8.330 s May 6 2020 MiTek Industries, Inc. Wed Jun 10 13:09:31 2020 Page 1
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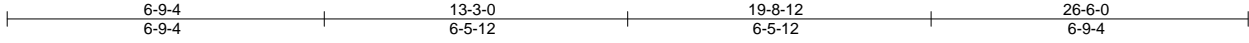
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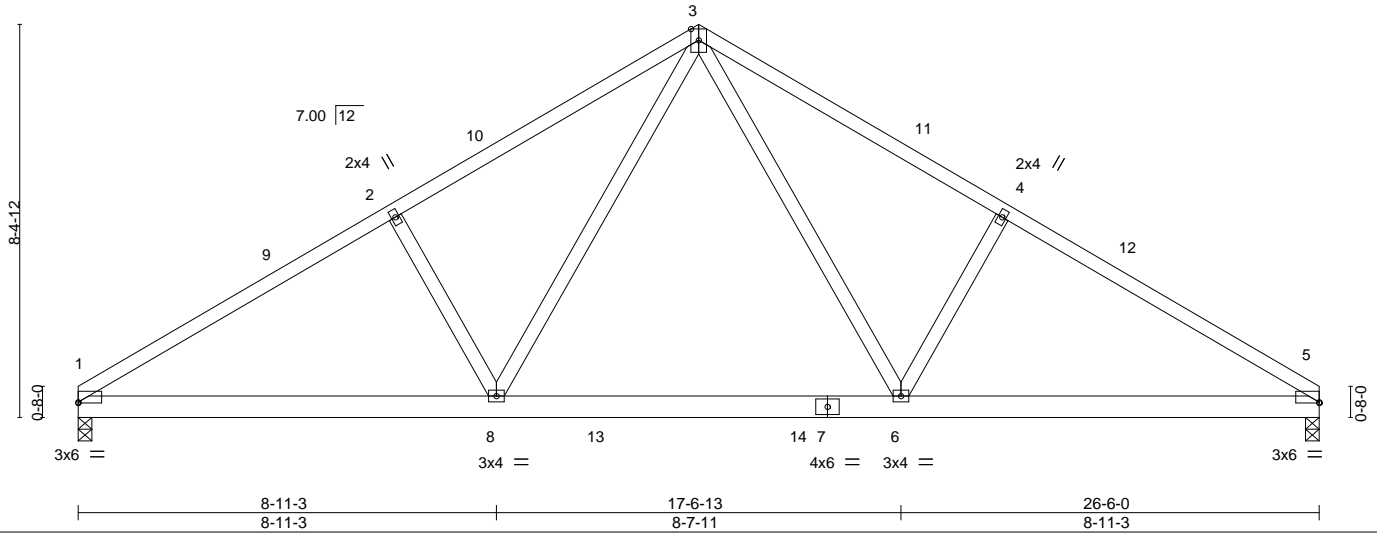
Plate Offsets (X,Y)--   [1:0-0-0,0-0-3], [5:0-0-0,0-0-3]

LOADING (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC	0.50	Vert(LL)	-0.11	6-8	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.16	6-8	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB	0.23	Horz(CT)	0.03	5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.03	1-8	>999	240	Weight: 147 lb	FT = 20%

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

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

REACTIONS.   (size) 1=0-3-8, 5=0-3-8
Max Horz 1=192(LC 7)
Max Uplift 1=-85(LC 10), 5=-85(LC 11)
Max Grav 1=1077(LC 17), 5=1077(LC 18)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   1-2=-1672/420, 2-3=-1516/474, 3-4=-1516/474, 4-5=-1672/420
BOT CHORD   1-8=-254/1471, 6-8=-58/964, 5-6=-254/1327
WEBS   3-6=-159/712, 4-6=-393/256, 3-8=-159/712, 2-8=-393/256

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed;
   MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 8-10-3, Exterior(2) 8-10-3 to 17-7-13, Interior(1) 17-7-13
   to 21-11-7, Exterior(2) 21-11-7 to 26-4-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate
   grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
   will fit between the bottom chord and any other members, 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, 5.

North Carolina Professional Engineer Seal — Eric A. Gilbert, SEAL 036322

June 10,2020

ENGINEERING BY
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Comtech, Inc,   Fayetteville, NC - 28314,

8.330 s May 6 2020 MiTek Industries, Inc. Wed Jun 10 13:09:32 2020 Page 1
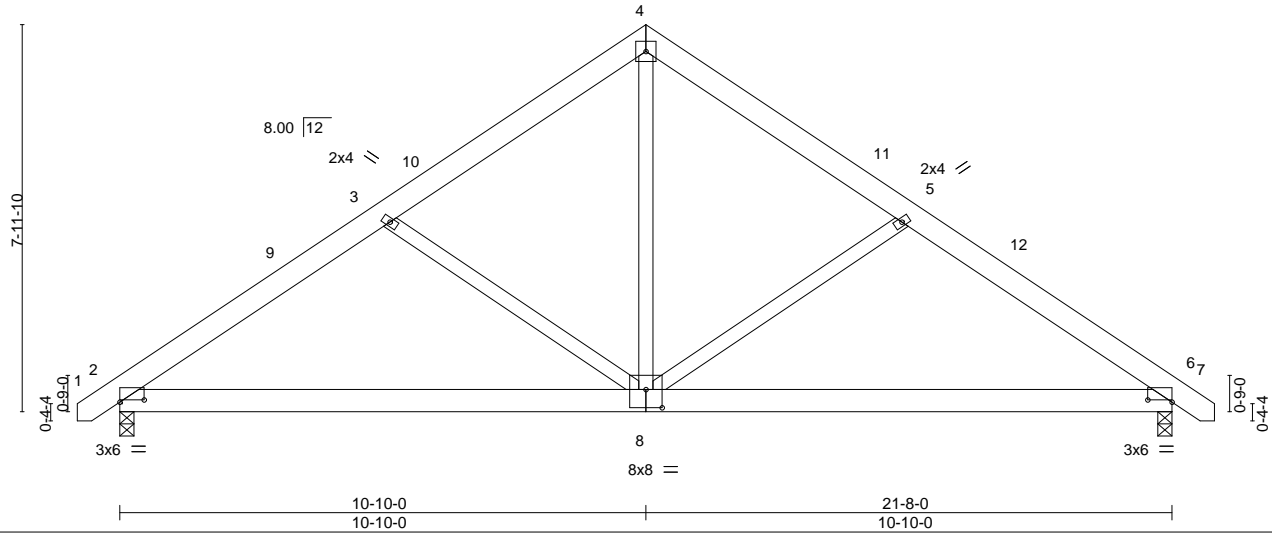ID:nGEYJn1QAngpJfECepmG8Mz?may-WP391BnThyqYk3d3QFzNzBmk4OAzoC3xUxDjHtz7geX
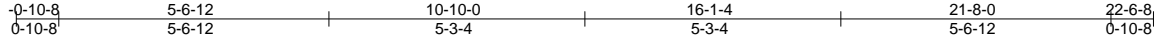
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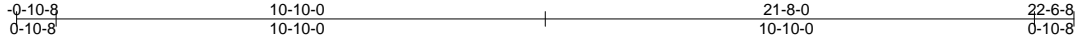Plate Offsets (X,Y)--   [2:0-6-0,0-0-9], [6:0-6-0,0-0-9], [8:0-4-0,0-4-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	-0.07	6-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.38	Vert(CT)	-0.14	6-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.02	2-8	>999	240	Weight: 146 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 6-0-0 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.   (size) 2=0-3-8, 6=0-3-8
Max Horz 2=185(LC 9)
Max Uplift 2=-78(LC 10), 6=-78(LC 11)
Max Grav 2=907(LC 1), 6=907(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-1148/339, 3-4=-890/295, 4-5=-890/295, 5-6=-1148/339
BOT CHORD   2-8=-164/920, 6-8=-164/884
WEBS   4-8=-148/673, 5-8=-364/232, 3-8=-364/232

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed;
 MWFRS (envelope) and C-C Exterior(2) -0-8-12 to 3-8-1, Interior(1) 3-8-1 to 6-5-3, Exterior(2) 6-5-3 to 15-2-13, Interior(1) 15-2-13 to
 17-11-15, Exterior(2) 17-11-15 to 22-4-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60
 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
 will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
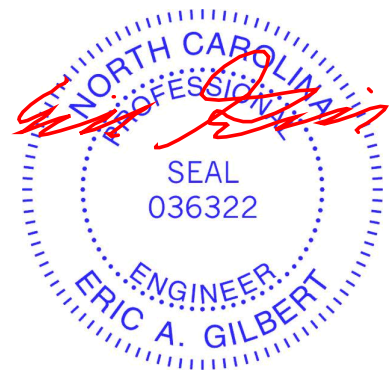
June 10,2020

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Comtech, Inc,   Fayetteville, NC - 28314,
8.330 s May 6 2020 MiTek Industries, Inc. Wed Jun 10 13:09:35 2020 Page 1
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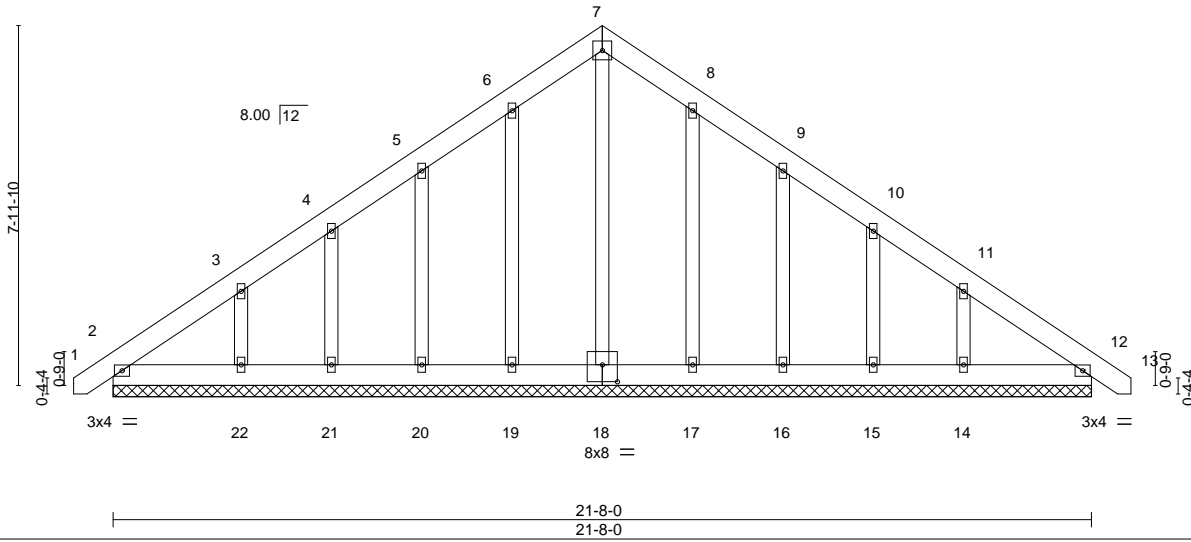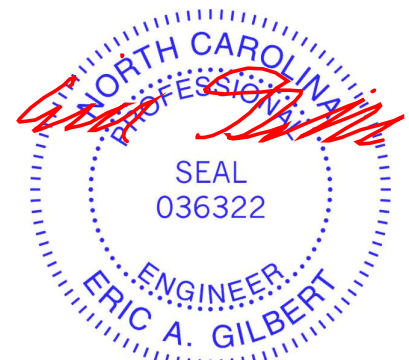Plate Offsets (X,Y)--   [18:0-4-0,0-4-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	0.00	12	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	12	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.00	12	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 172 lb	FT = 20%

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

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

REACTIONS.   All bearings 21-8-0.
(lb) - Max Horz 2=231(LC 9)
Max Uplift   All uplift 100 lb or less at joint(s) 2, 19, 21, 17, 15 except 20=-101(LC 10), 22=-146(LC 10),
           16=-103(LC 11), 14=-143(LC 11)
Max Grav   All reactions 250 lb or less at joint(s) 2, 12, 18, 19, 20, 21, 17, 16, 15 except 22=255(LC 17),
           14=251(LC 18)

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 (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed;
   MWFRS (envelope) gable end zone and C-C Corner(3) -0-8-12 to 3-8-1, Exterior(2) 3-8-1 to 6-5-3, Corner(3) 6-5-3 to 15-2-13,
   Exterior(2) 15-2-13 to 17-11-15, Corner(3) 17-11-15 to 22-4-12 zone;C-C for members and forces & MWFRS for reactions shown;
   Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry
   Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
   will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 19, 21, 17, 15
   except (jt=lb) 20=101, 22=146, 16=103, 14=143.

June 10,2020

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TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Scale = 1:46.7

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

LOADING (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	-0.07	6-7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.15	6-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.02	2-7	>999	240	Weight: 144 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 6-0-0 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.   (size) 6=0-3-8, 2=0-3-8
Max Horz 2=183(LC 9)
Max Uplift 6=-65(LC 11), 2=-78(LC 10)
Max Grav 6=854(LC 1), 2=908(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-1150/344, 3-4=-890/300, 4-5=-889/301, 5-6=-1151/350
BOT CHORD   2-7=-180/918, 6-7=-191/888
WEBS   4-7=-156/672, 5-7=-362/247, 3-7=-364/232

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed;
   MWFRS (envelope) and C-C Exterior(2) -0-8-12 to 3-8-1, Interior(1) 3-8-1 to 6-5-3, Exterior(2) 6-5-3 to 15-2-13, Interior(1) 15-2-13 to
   17-1-7, Exterior(2) 17-1-7 to 21-6-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip
   DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
   will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2.
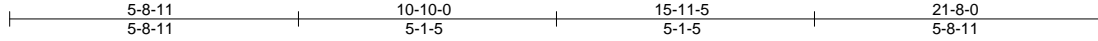
June 10,2020

Job	Truss	Truss Type	Qty	Ply	Weaver / 34 Lilly Farm / Johnston	
J0820-3845	C3	COMMON	1	2	Job Reference (optional)	E14496534

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s May 6 2020 MiTek Industries, Inc. Wed Jun 10 13:09:38 2020 Page 1
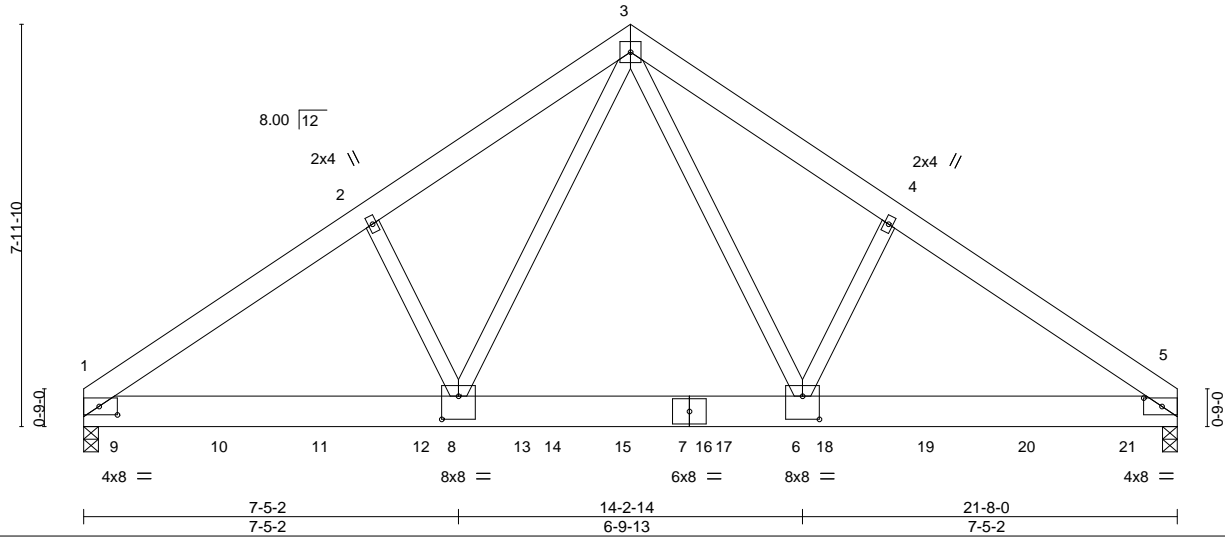ID:nGEYJn1QAngpJfECepmG8Mz?may-LZQQHEsDGobhS_4CmW4nDS0lCpC_Cwdpssg1VWz7geR

Scale = 1:45.6

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

LOADING (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	-0.05	1-8	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.09	1-8	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB	0.26	Horz(CT)	0.02	5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.03	1-8	>999	240	Weight: 326 lb	FT = 20%

LUMBER-
TOP CHORD   2x6 SP No.1
BOT CHORD   2x8 SP No.1
WEBS   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=0-3-8, 5=0-3-8
Max Horz 1=-177(LC 23)
Max Uplift 1=-58(LC 8), 5=-142(LC 9)
Max Grav 1=3000(LC 1), 5=2665(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   1-2=-3667/201, 2-3=-3529/266, 3-4=-3283/271, 4-5=-3421/206
BOT CHORD   1-8=-178/2943, 6-8=-41/1981, 5-6=-103/2738
WEBS   2-8=-296/207, 3-8=-152/2114, 3-6=-161/1625, 4-6=-295/209

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
   Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
   Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc.
   Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 5=142.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 334 lb down at 0-8-12, 466 lb down and 21 lb up at 2-8-12, 466 lb down and 21 lb up at 4-8-12, 466 lb down and 21 lb up at 6-8-12, 364 lb down and 41 lb up at 8-8-12, 309 lb down and 24 lb up at 10-8-12, 309 lb down and 24 lb up at 12-8-12, 309 lb down and 24 lb up at 14-8-12, 309 lb down and 24 lb up at 16-8-12, and 309 lb down and 24 lb up at 18-8-12, and 311 lb down and 22 lb up at 20-8-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

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

June 10,2020

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

Job	Truss	Truss Type	Qty	Ply	Weaver / 34 Lilly Farm / Johnston	
J0820-3845	C3	COMMON	1	**2**	Job Reference (optional)	E14496534

Comtech, Inc,   Fayetteville, NC - 28314,

LOAD CASE(S) Standard
  Concentrated Loads (lb)
    Vert: 9=-334(F) 10=-466(F) 11=-466(F) 12=-466(F) 13=-364(F) 15=-309(F) 17=-309(F) 18=-309(F) 19=-309(F) 20=-309(F) 21=-311(F)

ENGINEERING BY
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A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver / 34 Lilly Farm / Johnston	
J0820-3845	VB1	VALLEY	1	1		E14496535
					Job Reference (optional)	

Comtech, Inc,   Fayetteville, NC - 28314,

8.330 s May 6 2020 MiTek Industries, Inc. Wed Jun 10 13:09:39 2020 Page 1
ID:nGEYJn1QAngpJfECepmG8Mz?may-pl_pVats16jY38fPKEb0lfZvmDeFxRaz5WPa1zz7geQ

3-11-10 / 3-11-10
3-11-10 / 3-11-10

7-11-4
3-11-10

Scale = 1:16.2

4x4

7.00 [12]

2-3-13

2x4   2x4 || 2x4

7-11-4
7-11-4

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	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	0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 26 lb	FT = 20%

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

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

REACTIONS.   (size)   1=7-11-4, 3=7-11-4, 4=7-11-4
Max Horz 1=-48(LC 6)
Max Uplift 1=-26(LC 10), 3=-30(LC 11)
Max Grav 1=144(LC 1), 3=144(LC 1), 4=260(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 (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; 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.

June 10,2020

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver / 34 Lilly Farm / Johnston	
J0820-3845	VB2	VALLEY	1	1		E14496536
					Job Reference (optional)	

Comtech, Inc,   Fayetteville, NC - 28314,

8.330 s May 6 2020 MiTek Industries, Inc. Wed Jun 10 13:09:40 2020 Page 1
ID:nGEYJn1QAngpJfECepmG8Mz?may-HyYBiwuUoQrPhIEbux6FIt56fd_kgu96KA98ZPz7geP

1-11-10
1-11-10
3-11-4
1-11-10

Scale = 1:8.4

3x4 =

7.00 ⌐12

1-1-13

2x4 //

2x4 \\

3-11-4
3-11-4

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.02	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 11 lb	FT = 20%

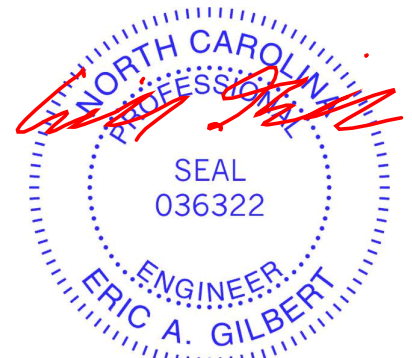LUMBER-
TOP CHORD   2x4 SP No.1
BOT CHORD   2x4 SP No.1

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 3-11-4 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.   (size)   1=3-11-4, 3=3-11-4
               Max Horz 1=20(LC 7)
               Max Uplift 1=-9(LC 10), 3=-9(LC 11)
               Max Grav 1=114(LC 1), 3=114(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 (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; 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.

June 10,2020

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver / 34 Lilly Farm / Johnston	E14496537
J0820-3845	VC1	VALLEY	1	1		
					Job Reference (optional)	

Comtech, Inc,   Fayetteville, NC - 28314,   8.330 s May 6 2020 MiTek Industries, Inc.   Wed Jun 10 13:09:41 2020   Page 1
ID:nGEYJn1QAngpJfECepmG8Mz?may-l86ZwGu6ZjzGJSpnRedUq4eFM0IAPJIGYquh6rz7geO
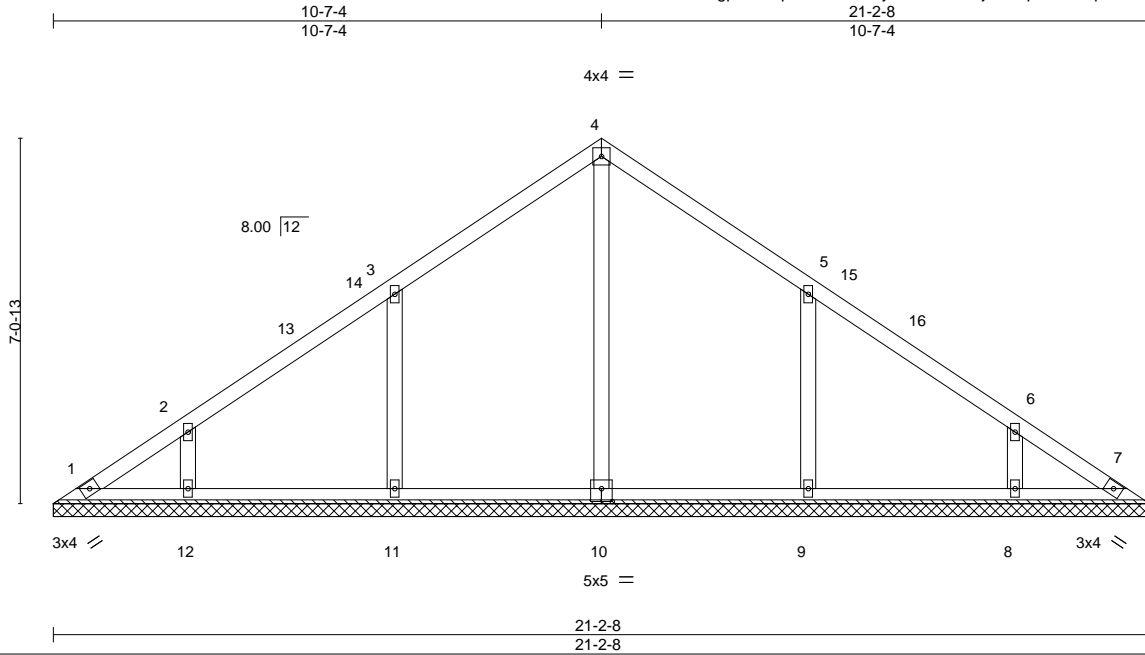
Scale = 1:44.6

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

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	0.16	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.00	7	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 92 lb	FT = 20%

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

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

REACTIONS.   All bearings 21-2-8.
       (lb) -   Max Horz   1=-162(LC 6)
                 Max Uplift   All uplift 100 lb or less at joint(s) 1, 7, 12, 8 except 11=-113(LC 10), 9=-113(LC 11)
                 Max Grav   All reactions 250 lb or less at joint(s) 1, 7 except 10=446(LC 17), 11=461(LC 17), 12=277(LC 17),
                               9=461(LC 18), 8=277(LC 18)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS   3-11=-318/213, 5-9=-318/213

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed;
    MWFRS (envelope) and C-C Exterior(2) 0-5-12 to 4-10-9, Interior(1) 4-10-9 to 6-2-7, Exterior(2) 6-2-7 to 15-0-1, Interior(1) 15-0-1 to
    16-3-15, Exterior(2) 16-3-15 to 20-8-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate
    grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
4) 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, 12, 8 except
    (jt=lb) 11=113, 9=113.
7) Non Standard bearing condition. Review required.

June 10,2020

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver / 34 Lilly Farm / Johnston	
J0820-3845	VC2	VALLEY	1	1		E14496538
					Job Reference (optional)	

Comtech, Inc,   Fayetteville, NC - 28314,

8.330 s May 6 2020 MiTek Industries, Inc. Wed Jun 10 13:09:42 2020 Page 1
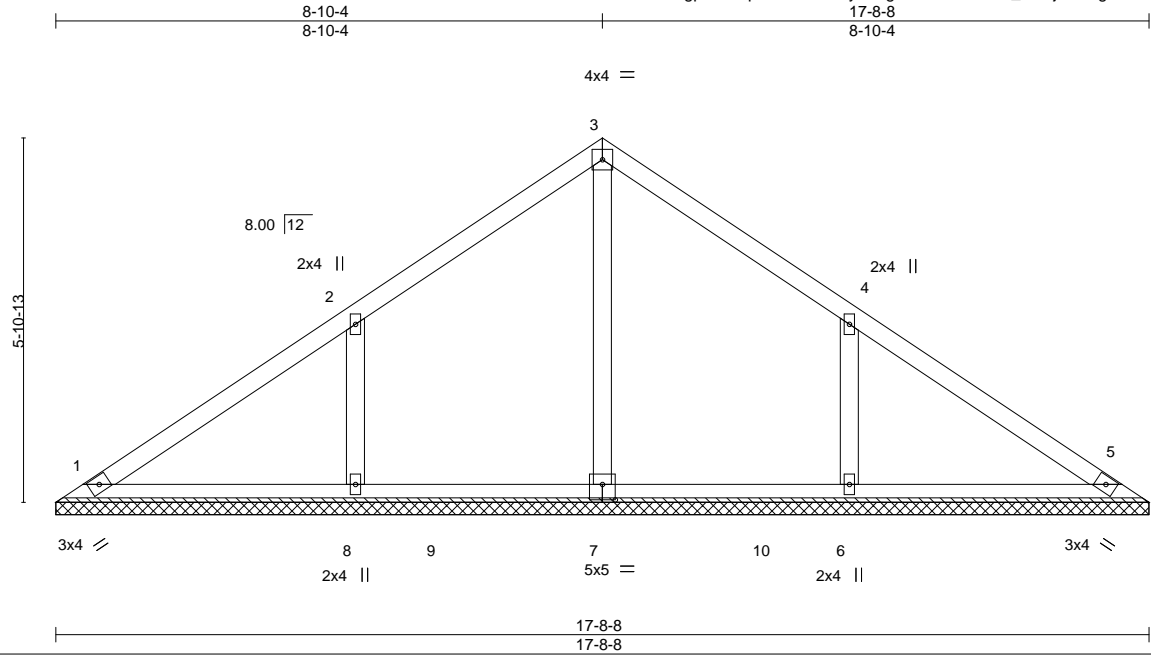ID:nGEYJn1QAngpJfECepmG8Mz?may-DKgx7cvkK157wbO_?M8jNIBQgQew8nKPnUeFeHz7geN

Scale = 1:37.3

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

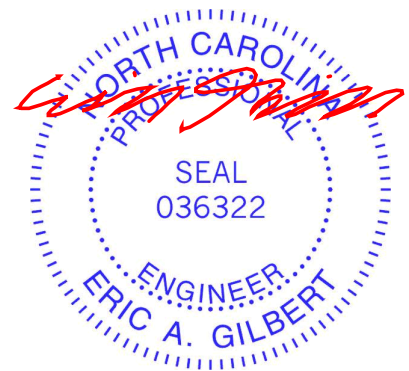| LOADING (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 72 lb	FT = 20%

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

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

REACTIONS.   All bearings 17-8-8.
 (lb) - Max Horz 1=-134(LC 6)
        Max Uplift   All uplift 100 lb or less at joint(s) 1 except 8=-130(LC 10), 6=-129(LC 11)
        Max Grav   All reactions 250 lb or less at joint(s) 1, 5 except 7=402(LC 17), 8=462(LC 17), 6=462(LC 18)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS   2-8=-357/249, 4-6=-357/249

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; 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, 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 except (jt=lb)
   8=130, 6=129.
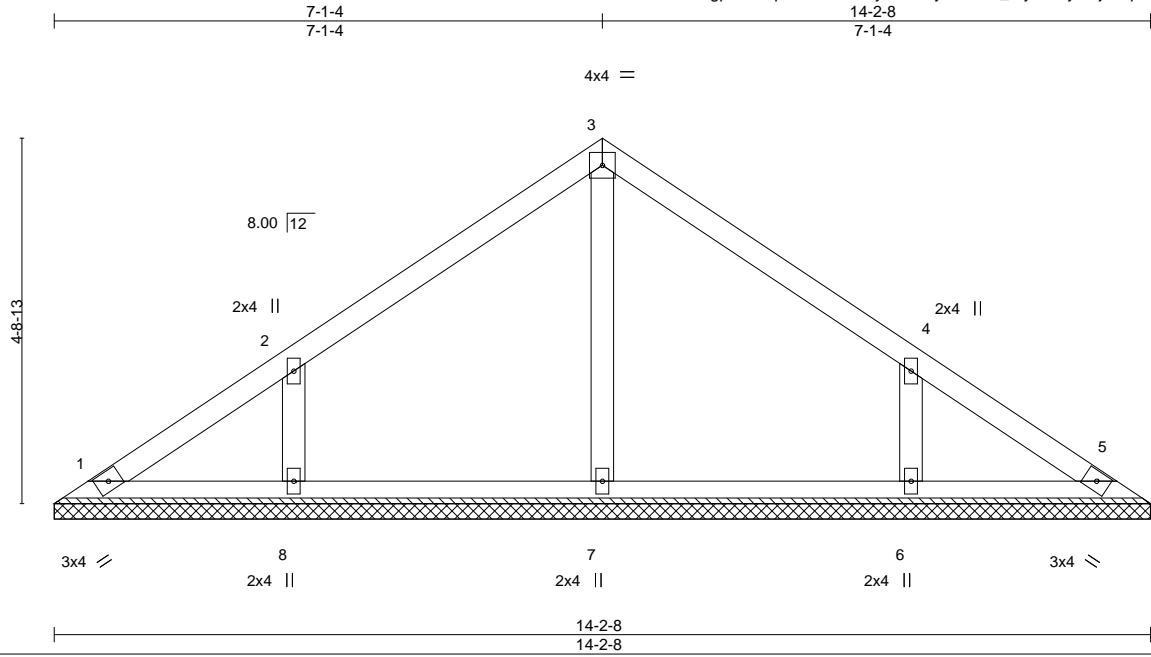6) Non Standard bearing condition. Review required.

June 10,2020

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver / 34 Lilly Farm / Johnston	
J0820-3845	VC3	VALLEY	1	1		E14496539
					Job Reference (optional)	

Comtech, Inc,   Fayetteville, NC - 28314,
8.330 s May 6 2020 MiTek Industries, Inc. Wed Jun 10 13:09:43 2020 Page 1
ID:nGEYJn1QAngpJfECepmG8Mz?may-iXEJKywM5LD_YlyAZ3fywVjbHq?CtFzY08NoAkz7geM

7-1-4
14-2-8
7-1-4   7-1-4

4x4 ═

Scale = 1:29.9

8.00 ⌐12

4-8-13

2x4 ‖   2x4 ‖

3x4 ∕∕   3x4 ∖∖
8   7   6
2x4 ‖   2x4 ‖   2x4 ‖

14-2-8
14-2-8

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

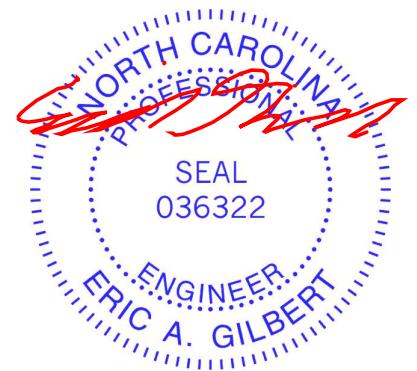| LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 56 lb	FT = 20%

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

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

REACTIONS.   All bearings 14-2-8.
(lb) -   Max Horz 1=106(LC 9)
Max Uplift   All uplift 100 lb or less at joint(s) 1 except 8=-104(LC 10), 6=-104(LC 11)
Max Grav   All reactions 250 lb or less at joint(s) 1, 5 except 7=260(LC 1), 8=337(LC 17), 6=337(LC 18)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS   2-8=-289/209, 4-6=-289/209

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; 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 except (jt=lb) 8=104, 6=104.
6) Non Standard bearing condition. Review required.

June 10,2020

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

Job	Truss	Truss Type	Qty	Ply	Weaver / 34 Lilly Farm / Johnston	
J0820-3845	VC4	VALLEY	1	1		E14496540
					Job Reference (optional)	

Comtech, Inc,   Fayetteville, NC - 28314,

8.330 s May 6 2020 MiTek Industries, Inc. Wed Jun 10 13:09:43 2020 Page 1
ID:nGEYJn1QAngpJfECepmG8Mz?may-iXEJKywM5LD_YlyAZ3fywVjaOq_qtF7Y08NoAkz7geM

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 38 lb	FT = 20%

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

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.
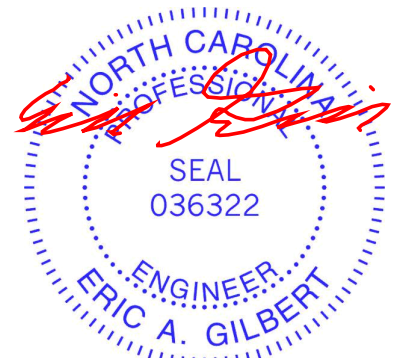
REACTIONS. (size)   1=10-8-8, 3=10-8-8, 4=10-8-8
            Max Horz 1=-78(LC 8)
            Max Uplift 1=-28(LC 10), 3=-35(LC 11), 4=-5(LC 10)
            Max Grav 1=193(LC 1), 3=193(LC 1), 4=393(LC 1)

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 (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; 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, 4.
6) Non Standard bearing condition. Review required.

June 10,2020

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver / 34 Lilly Farm / Johnston	
J0820-3845	VC5	VALLEY	1	1		E14496541
					Job Reference (optional)	

Comtech, Inc,   Fayetteville, NC - 28314,

8.330 s May 6 2020 MiTek Industries, Inc. Wed Jun 10 13:09:44 2020 Page 1
ID:nGEYJn1QAngpJfECepmG8Mz?may-AjoiYIx_seLrAvXM7nBBSjGmyELfcisiFo7LiAz7geL

3-7-4
3-7-4
7-2-8
3-7-4

4x4 ═

Scale = 1:16.7

8.00 ⌐12

2-4-13

2x4 ⫽   2x4 ‖   2x4 ⬂

7-2-8
7-2-8

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 25 lb	FT = 20%

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

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

REACTIONS. (size)   1=7-2-8, 3=7-2-8, 4=7-2-8
Max Horz 1=-50(LC 6)
Max Uplift 1=-24(LC 10), 3=-29(LC 11)
Max Grav 1=136(LC 1), 3=136(LC 1), 4=228(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 (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; 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.

NORTH CAROLINA
PROFESSIONAL
SEAL
036322
ENGINEER
ERIC A. GILBERT

June 10,2020

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver / 34 Lilly Farm / Johnston	E14496542
J0820-3845	VC6	VALLEY	1	1		
					Job Reference (optional)	

Comtech, Inc,   Fayetteville, NC - 28314,

8.330 s May 6 2020 MiTek Industries, Inc. Wed Jun 10 13:09:45 2020 Page 1
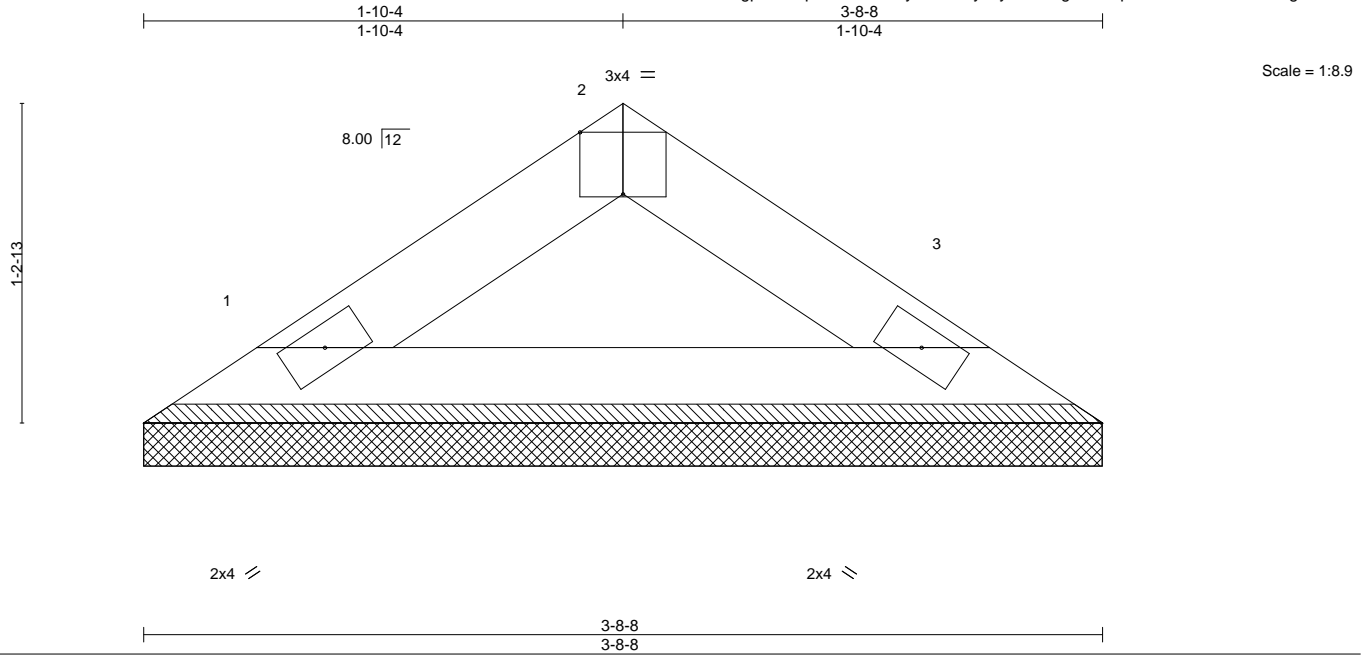ID:nGEYJn1QAngpJfECepmG8Mz?may-evM4leycdyTin36YgUiQ?wpzQeh?L8PrTSsvFcz7geK

1-10-4
1-10-4
3-8-8
1-10-4

Scale = 1:8.9

3x4

8.00 12

1-2-13

2x4

2x4

3-8-8
3-8-8

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.02	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 11 lb	FT = 20%

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

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 3-8-8 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.   (size)   1=3-8-8, 3=3-8-8
                Max Horz 1=22(LC 9)
                Max Uplift 1=-9(LC 10), 3=-9(LC 11)
                Max Grav 1=110(LC 1), 3=110(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 (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; 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.

June 10,2020

ENGINEERING BY
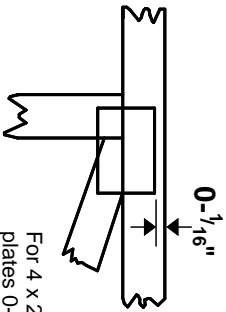**TRENCO**
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Symbols

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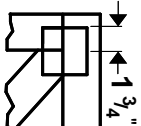
Center plate on joint unless x, y offsets are indicated.
Dimensions are in ft-in-sixteenths.
Apply plates to both sides of truss and fully embed teeth.

1 3/4"

0-1/16"

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.
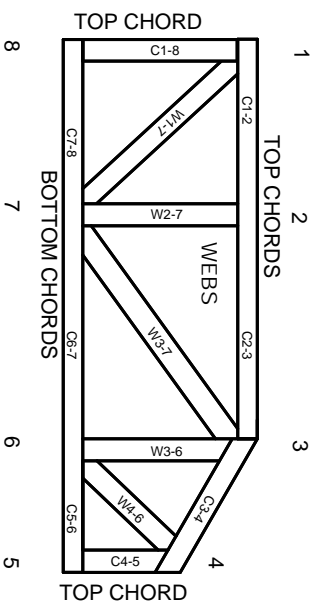
BEARING

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/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.

DSB-89: Design Standard for Bracing.

BCSI: 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)

TOP CHORD

BOTTOM CHORDS

TOP CHORDS

WEBS

TOP CHORD

C1-8, C1-2, W1-7, W2-7, C2-3, W3-7, C3-4, W4-6, W3-6, C4-5, C5-6, C6-7, C7-8

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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⚠ General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.

2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative T or I bracing should be considered.

3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.

4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.

5. Cut members to bear tightly against each other.

6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.

7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.

8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.

9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.

10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.

11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.

12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.

13. Top chords must be sheathed or purlins provided at spacing indicated on design.

14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.

15. Connections not shown are the responsibility of others.

16. Do not cut or alter truss member or plate without prior approval of an engineer.

17. Install and load vertically unless indicated otherwise.

18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.

19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.

20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.

21. The design does not take into account any dynamic or other loads other than those expressly stated.