ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J0619-2695
   Procraft / Erwin Job / Harnett

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

Pages or sheets covered by this seal: E13150390 thru E13150403

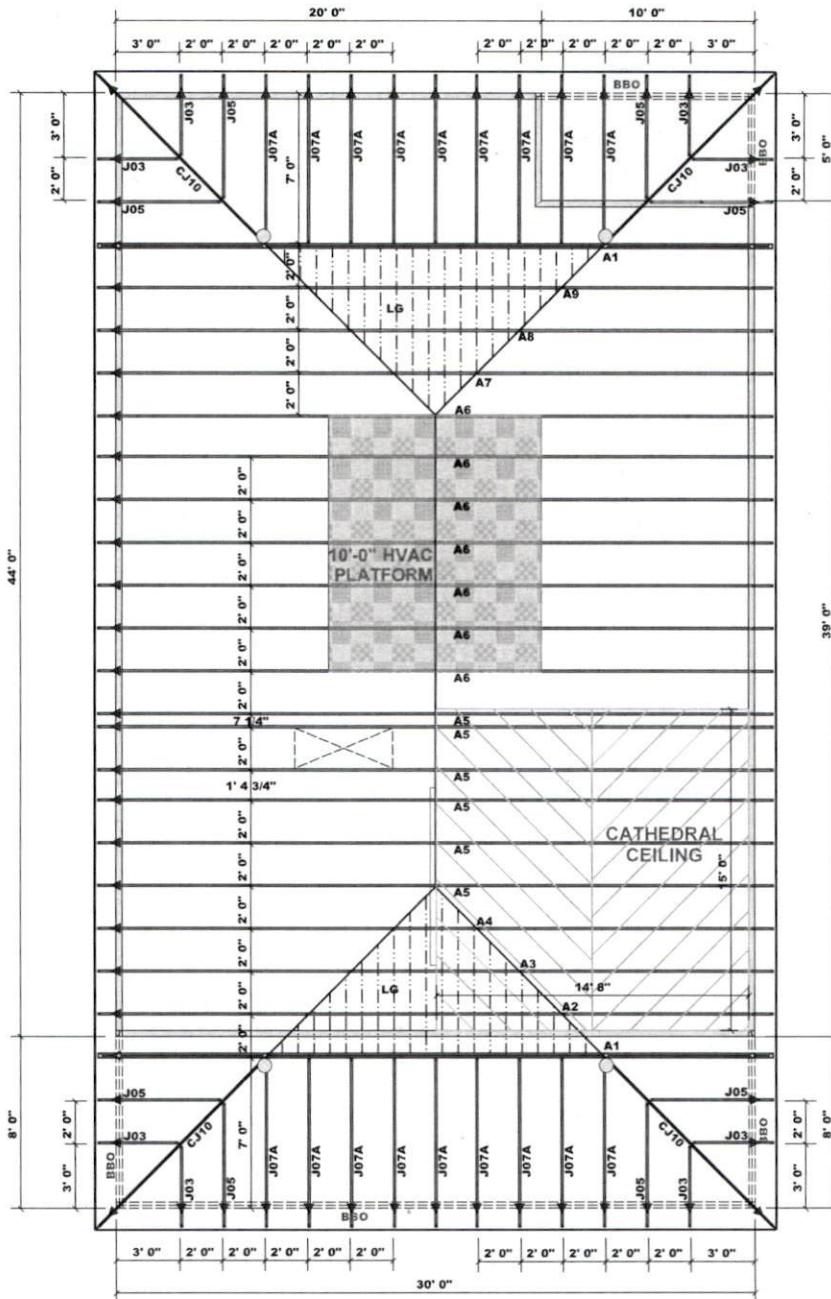My license renewal date for the state of North Carolina is December 31, 2019.

North Carolina COA: C-0844

(Seal: NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT)

June 11,2019

Gilbert, Eric

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

Truss Placement Plan
SCALE: 1/4" = 1'-0"

20' 0"   10' 0"
3' 0" 2' 0" 2' 0" 2' 0" 2' 0"   2' 0" 2' 0" 2' 0" 2' 0" 2' 0" 3' 0"

BBO

J03 J05 J07A J07A J07A J07A J07A J07A J07A J07A J05 J03

CJ10   CJ10

J03   J05   7' 0"   J03   J05

A1
A9
LG
A8
A7
A6

A6
A6
A6
10'-0" HVAC PLATFORM
A6
A6
A6

7' 4"   A5
1' 4 3/4"   A5
A5
A5
A5   **CATHEDRAL CEILING**
A5
A4
A3   14' 8"
LG   A2
A1

44' 0"   39' 0"

8' 0"
J05   J05
BBO
J03   CJ10   J03
BBO

3' 0" 2' 0" 2' 0" 2' 0" 2' 0" 2' 0" 2' 0" 2' 0" 2' 0" 2' 0" 3' 0"

J03 J05 7' 0" J07A J07A J07A J07A J07A J07A J07A J07A J05 J03

BBO

30' 0"

○ = USP (HJC26) Qty. (4)

▲ = Denotes Left End of Truss
(Reference Engineered Truss Drawing)

All Truss Reactions are Less
than 3,000 lbs. Unless Noted Otherwise.

○ -- Denotes Reaction Greater than 3,000 lbs.
Reaction / # of Studs

Estimation

Name	Selection	Formula	Calculation
Roof Area	1st Floor	Roof Area	1931.96
Roof Decking	1st Floor	Roof Decking	66 sheets

BUILDER	Pro Craft Homes, Inc.	CITY / CO.	Erwin / Harnett
JOB NAME	Erwin Job	ADDRESS	408 West Jay St.
PLAN	CHARLESTON	MODEL	ROOF
SEAL DATE	Seal Date	DATE REV.	/ /
QUOTE #	Quote #	DRAWN BY	Lenny Norris
JOB #	J0619-2695	SALES REP.	Lenny Norris

COMTECH
ROOF & FLOOR TRUSSES & BEAMS
Reilly Road Industrial Park
Fayetteville, N.C. 28309
Phone: (910) 864-8787
Fax: (910) 864-4444

LOAD CHART FOR JACK STUDS

Job	Truss	Truss Type	Qty	Ply	Procraft / Erwin Job / Harnett	
J0619-2695	A1	HIP GIRDER	2	**2**		E13150390
					Job Reference (optional)	

Comtech, Inc.,   Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Tue Jun 11 09:35:06 2019 Page 1
ID:QGGF7WH2_NBmUqfard_h0Nz7PfJ-xrssDOCtHjPCW6w4GTyOwmK6?OESxIdVbPqSWjz7OhZ

Scale = 1:54.3

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	0.37	Vert(LL)	-0.11	10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.23	10	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.43	Horz(CT)	0.05	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.11	10	>999	240	Weight: 419 lb	FT = 20%

LUMBER-
TOP CHORD   2x6 SP No.1
BOT CHORD   2x8 SP No.1
WEBS   2x4 SP No.3

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 6-0-0 oc purlins, except
                       2-0-0 oc purlins (6-0-0 max.): 3-5.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size)   2=2522/0-3-8, 6=2522/0-3-8
Max Horz 2=49(LC 7)
Max Uplift 2=-437(LC 8), 6=-437(LC 9)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-5118/940, 3-4=-6282/1221, 4-5=-6282/1221, 5-6=-5118/940
BOT CHORD   2-11=-823/4502, 10-11=-824/4469, 8-10=-783/4469, 6-8=-782/4502
WEBS   3-11=0/889, 4-10=-1254/577, 5-8=0/889, 5-10=-450/2060, 3-10=-449/2060

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=6.0psf; h=15ft; Cat. II; Exp C; enclosed;
   MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0
   between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 437 lb uplift at joint 2 and 437 lb uplift at
   joint 6.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 158 lb down and 113 lb up at
   7-0-0, 139 lb down and 113 lb up at 9-0-12, 139 lb down and 113 lb up at 11-0-12, 139 lb down and 113 lb up at 13-0-12, 139 lb
   down and 113 lb up at 15-0-0, 139 lb down and 113 lb up at 16-11-4, 139 lb down and 113 lb up at 18-11-4, and 139 lb down and
   113 lb up at 20-11-4, and 158 lb down and 113 lb up at 23-0-0 on top chord, and 489 lb down and 118 lb up at 7-0-0, 96 lb down
   at 9-0-12, 96 lb down at 11-0-12, 96 lb down at 13-0-12, 96 lb down at 15-0-0, 96 lb down at 16-11-4, 96 lb down at 18-11-4,
   and 96 lb down at 20-11-4, and 489 lb down and 118 lb up at 22-11-4 on bottom chord. The design/selection of such connection
   device(s) is the responsibility of others.

LOAD CASE(S) Standard

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Job	Truss	Truss Type	Qty	Ply	Procraft / Erwin Job / Harnett	
J0619-2695	A1	HIP GIRDER	2	**2**		E13150390
					Job Reference (optional)	

Comtech, Inc.,   Fayetteville, NC 28309   8.130 s Mar 11 2018 MiTek Industries, Inc.   Tue Jun 11 09:35:07 2019   Page 2

ID:QGGF7WH2_NBmUqfard_h0Nz7PfJ-P2QEQkCV21X38GVGqATdT_sHloahglteq3a?2Az7OhY

LOAD CASE(S) Standard

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

   Uniform Loads (plf)

      Vert: 1-3=-60, 3-5=-60, 5-7=-60, 2-6=-20

   Concentrated Loads (lb)

      Vert: 3=-139(B) 5=-139(B) 11=-489(B) 4=-139(B) 10=-48(B) 8=-489(B) 12=-139(B) 13=-139(B) 14=-139(B) 15=-139(B) 16=-139(B) 17=-139(B) 18=-48(B)

      19=-48(B) 20=-48(B) 21=-48(B) 22=-48(B) 23=-48(B)

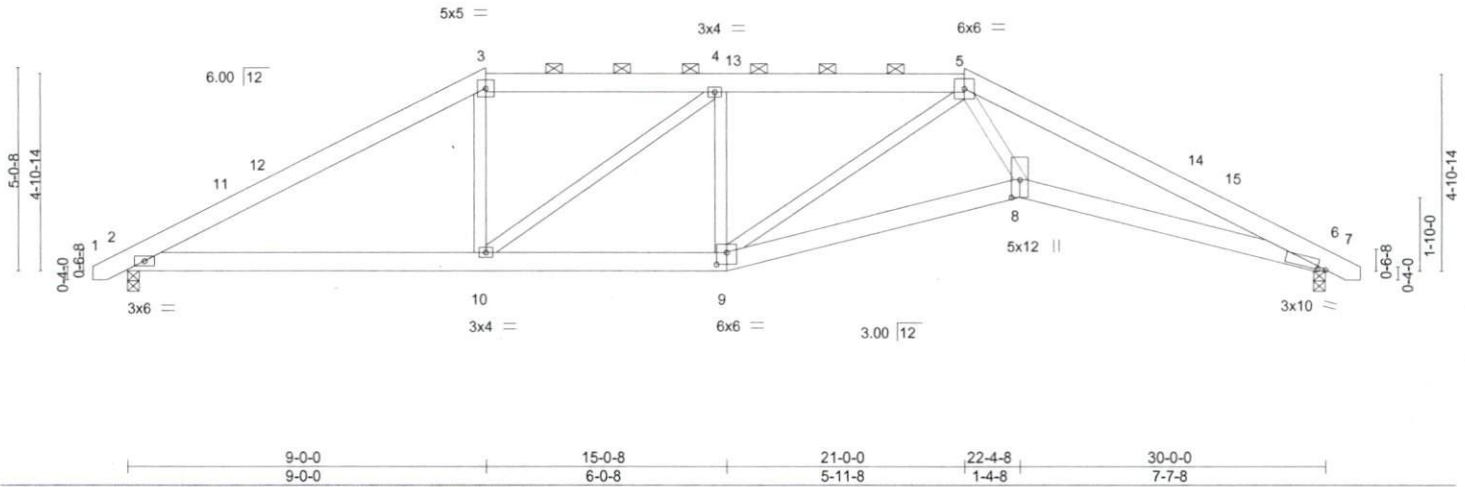| Job	Truss	Truss Type	Qty	Ply	Procraft / Erwin Job / Harnett	E13150391
J0619-2695	A2	HIP	1	1	Job Reference (optional)	

Comtech, Inc.,   Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Tue Jun 11 09:35:07 2019 Page 1
ID:QGGF7WH2_NBmUqfard_h0Nz7PfJ-P2QEQkCV21X38GVGqATdT_sD7oXsggteq3a?2Az7OhY

-0-10-8	9-0-0	15-0-8	21-0-0	30-0-0	30-10-8
0-10-8	9-0-0	6-0-8	5-11-8	9-0-0	0-10-8

Scale = 1:55.3

	9-0-0	15-0-8	21-0-0	22-4-8	30-0-0
	9-0-0	6-0-8	5-11-8	1-4-8	7-7-8

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

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	0.60	Vert(LL)	-0.14	8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.30	8-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.15	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.10	8	>999	240	Weight: 189 lb	FT = 20%

LUMBER-
TOP CHORD   2x6 SP No.1
BOT CHORD   2x6 SP No.1
WEBS   2x4 SP No.3

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 3-2-8 oc purlins, except
             2-0-0 oc purlins (5-5-3 max.): 3-5.
BOT CHORD   Rigid ceiling directly applied or 9-4-10 oc bracing.

REACTIONS.   (lb/size)   2=1239/0-3-8, 6=1239/0-3-8
              Max Horz 2=63(LC 11)
              Max Uplift 2=-48(LC 12), 6=-48(LC 13)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-2047/525, 3-4=-1707/558, 4-5=-2021/612, 5-6=-3827/859
BOT CHORD   2-10=-343/1719, 9-10=-401/2024, 8-9=-547/2563, 6-8=-669/3419
WEBS   3-10=0/512, 4-10=-530/123, 5-8=-246/1803, 5-9=-588/162

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=6.0psf; h=15ft; Cat. II; Exp C; enclosed;
   MWFRS (envelope) and C-C Exterior(2) -0-8-6 to 3-8-7, Interior(1) 3-8-7 to 9-0-0, Exterior(2) 9-0-0 to 27-2-11, Interior(1) 27-2-11 to
   30-8-6 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0
   between the bottom chord and any other members.
6) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify
   capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 48 lb uplift at joint 2 and 48 lb uplift at
   joint 6.
8) 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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Job	Truss	Truss Type	Qty	Ply	Procraft / Erwin Job / Harnett	
J0619-2695	A3	HIP	1	1		E13150392
					Job Reference (optional)	

Comtech, Inc.,   Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Tue Jun 11 09:35:08 2019 Page 1
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Scale = 1:55.3

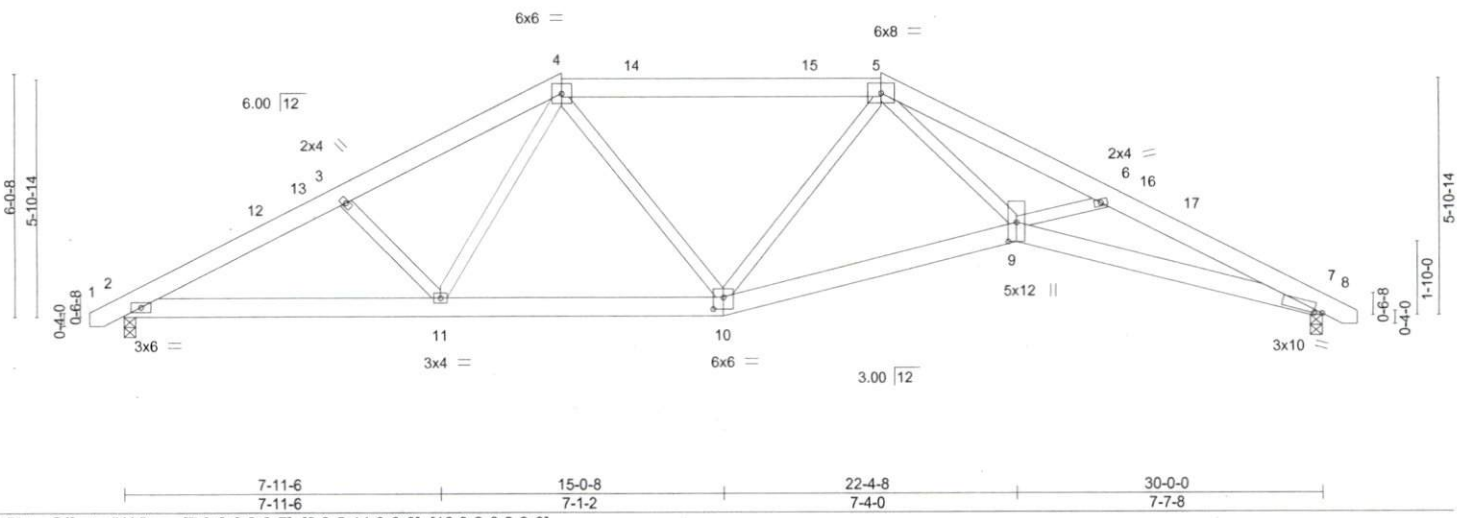Plate Offsets (X,Y)--   [7:0-2-6,0-0-7], [9:0-5-11,0-2-8], [10:0-3-0,0-3-8]

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	0.33	Vert(LL)	-0.14	9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.29	9-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.15	7	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.11	9	>999	240	Weight: 196 lb	FT = 20%

LUMBER-
TOP CHORD   2x6 SP No.1
BOT CHORD   2x6 SP No.1
WEBS   2x4 SP No.3

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 3-9-7 oc purlins, except
2-0-0 oc purlins (5-8-7 max.): 4-5.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing,   Except:
8-4-1 oc bracing: 7-9.

REACTIONS. (lb/size)   2=1239/0-3-8, 7=1239/0-3-8
Max Horz 2=76(LC 11)
Max Uplift 2=-62(LC 12), 7=-62(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-2159/611, 3-4=-1959/579, 4-5=-1558/500, 5-6=-3591/910, 6-7=-3861/1057
BOT CHORD   2-11=-476/1867, 10-11=-290/1506, 9-10=-375/1892, 7-9=-901/3455
WEBS   5-9=-397/2008, 6-9=-182/254, 4-11=-71/431, 5-10=-502/190, 3-11=-256/223

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=6.0psf; h=15ft; Cat. II; Exp C; enclosed;
MWFRS (envelope) and C-C Exterior(2) -0-8-6 to 3-8-7, Interior(1) 3-8-7 to 11-0-0, Exterior(2) 11-0-0 to 25-2-11, Interior(1) 25-2-11
to 30-8-6 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0
between the bottom chord and any other members.
6) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify
capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 62 lb uplift at joint 2 and 62 lb uplift at
joint 7.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

SEAL
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Edenton, NC 27932

Job	Truss	Truss Type		Qty	Ply	Procraft / Erwin Job / Harnett	
J0619-2695	A4	HIP		1	1		E13150393
						Job Reference (optional)	

Comtech, Inc.,   Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Tue Jun 11 09:35:09 2019 Page 1
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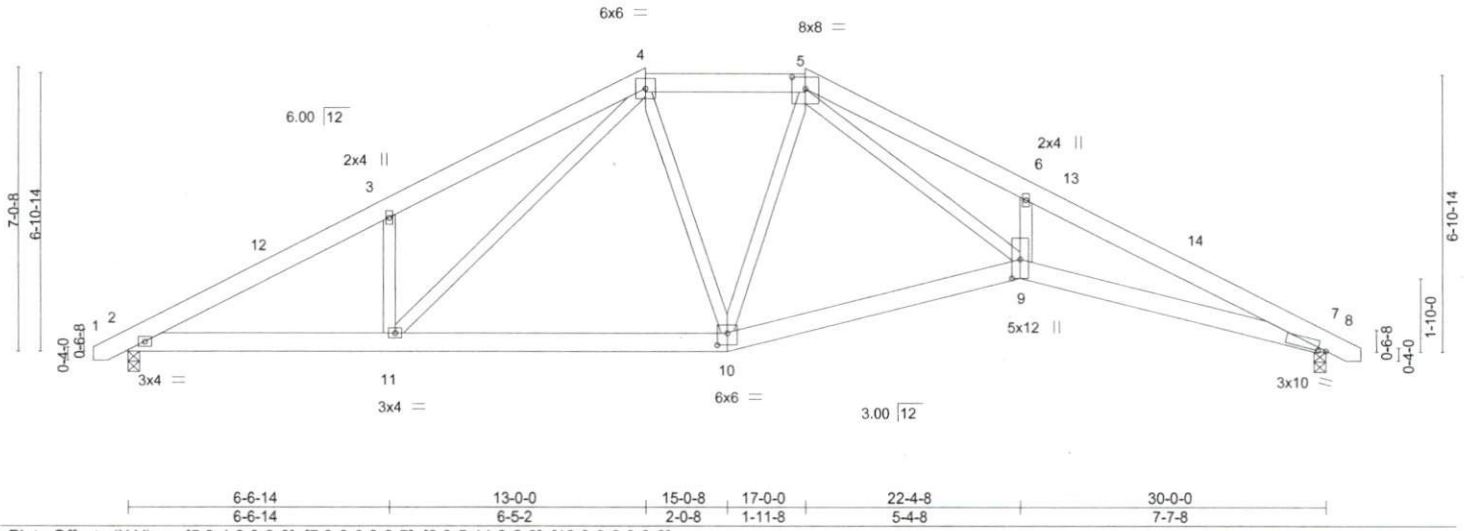
Plate Offsets (X,Y)--   [5:0-4-0,0-3-8], [7:0-2-6,0-0-7], [9:0-5-11,0-2-8], [10:0-3-0,0-3-8]

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	0.38	Vert(LL)	-0.17	9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.34	9-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.98	Horz(CT)	0.16	7	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.13	9	>999	240	Weight: 203 lb	FT = 20%

LUMBER-
TOP CHORD   2x6 SP No.1
BOT CHORD   2x6 SP No.1
WEBS   2x4 SP No.3

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 3-6-13 oc purlins, except
2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD   Rigid ceiling directly applied or 9-2-11 oc bracing.

REACTIONS.   (lb/size)   2=1239/0-3-8, 7=1239/0-3-8
Max Horz 2=-89(LC 10)
Max Uplift 2=-74(LC 12), 7=-74(LC 13)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-2177/534, 3-4=-2164/701, 4-5=-1375/473, 5-6=-3701/1035, 6-7=-3801/890
BOT CHORD   2-11=-400/1860, 10-11=-211/1339, 9-10=-237/1508, 7-9=-727/3392
WEBS   3-11=-373/296, 6-9=-254/262, 5-9=-619/2377, 5-10=-354/145, 4-11=-269/756

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=6.0psf; h=15ft; Cat. II; Exp C; enclosed;
MWFRS (envelope) and C-C Exterior(2) -0-8-6 to 3-8-7, Interior(1) 3-8-7 to 13-0-0, Exterior(2) 13-0-0 to 17-0-0, Interior(1) 23-2-11 to
30-8-6 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0
between the bottom chord and any other members.
6) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify
capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 74 lb uplift at joint 2 and 74 lb uplift at
joint 7.
8) 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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