ENGINEERING BY TRENCO
A MiTek Affiliate

RE: J0520-2116
Weaver / 2 Adcock Farm / Harnett

Trenco
818 Soundside Rd
Edenton, NC 27932

Site Information:
Customer: Project Name: J0520-2116
Lot/Block: Model:
Address: Subdivision:
City: State:

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

Design Code: IRC2009/TPI2007   Design Program: MiTek 20/20 8.3
Wind Code: ASCE 7-05   Wind Speed: 100 mph
Roof Load: 40.0 psf   Floor Load: N/A psf

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

No.	Seal#	Truss Name	Date
1	E14365401	A1	5/25/2020
2	E14365402	A1SE	5/25/2020
3	E14365403	A2	5/25/2020
4	E14365404	A3	5/25/2020
5	E14365405	A4	5/25/2020
6	E14365406	A5	5/25/2020
7	E14365407	A6	5/25/2020
8	E14365408	A7	5/25/2020
9	E14365409	A8	5/25/2020
10	E14365410	A9	5/25/2020
11	E14365411	A9GE	5/25/2020
12	E14365412	B1	5/25/2020
13	E14365413	B1GE	5/25/2020
14	E14365414	C1	5/25/2020
15	E14365415	C2	5/25/2020
16	E14365416	C3	5/25/2020
17	E14365417	PB	5/25/2020
18	E14365418	PBGE	5/25/2020

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: Strzyzewski, Marvin
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.

May 25, 2020

1 of 1   Strzyzewski, Marvin

Job	Truss	Truss Type	Qty	Ply	Weaver / 2 Adcock Farm / Harnett	
J0520-2116	A1	PIGGYBACK BASE	1	1		E14365401
					Job Reference (optional)	

Comtech, Inc,   Fayetteville, NC - 28314,   8.330 s Mar 23 2020 MiTek Industries, Inc. Mon May 4 11:43:02 2020 Page 1
ID:FKRF2G2VvSGFSXRUG_ubJqzaK1d-g7LrWiHYqQrdnqWBy88sRD1JnmZR8Gc10TgU_3zJuNd

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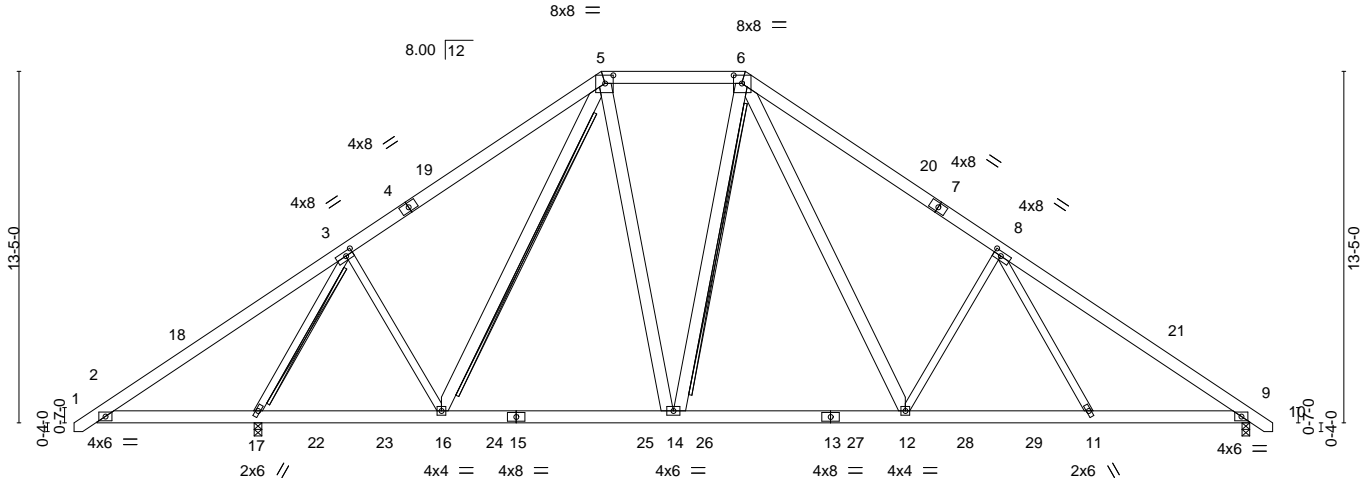
Plate Offsets (X,Y)--   [3:0-3-6,0-2-1], [5:0-3-12,0-3-12], [6:0-3-12,0-3-12], [8:0-3-6,0-2-0]

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	0.48	Vert(LL)	-0.10	12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.17	12-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.68	Horz(CT)	0.05	9	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.04	12	>999	240	Weight: 395 lb	FT = 20%

LUMBER-
TOP CHORD   2x6 SP No.1
BOT CHORD   2x6 SP No.1
WEBS   2x6 SP No.1 *Except*
    3-17,3-16,8-12,8-11: 2x4 SP No.2

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 4-7-3 oc purlins, except
    2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
    6-0-0 oc bracing: 2-17.
WEBS   T-Brace: 2x4 SPF No.2 - 3-17
                           2x6 SPF No.2 - 5-16, 6-14
    Fasten (2X) T and I braces to narrow edge of web with 10d
    (0.131"x3") nails, 6in o.c.,with 3in minimum end distance.
    Brace must cover 90% of web length.

REACTIONS.   (size)   17=0-3-8, 9=0-3-8
               Max Horz 17=-320(LC 10)
               Max Uplift 17=-108(LC 12), 9=-94(LC 13)
               Max Grav 17=2255(LC 2), 9=1725(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-405/688, 3-5=-1444/385, 5-6=-1256/435, 6-8=-2202/565, 8-9=-2628/426
BOT CHORD   2-17=-458/455, 16-17=-181/968, 14-16=-6/1238, 12-14=0/1314, 11-12=-218/1927,
    9-11=-190/2042
WEBS   3-17=-2295/704, 3-16=-19/655, 8-12=-744/366, 8-11=0/310, 5-16=-278/131,
    6-14=-283/186, 5-14=-75/684, 6-12=-236/1034

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) -0-8-9 to 3-8-4, Interior(1) 3-8-4 to 19-3-14, Exterior(2) 19-3-14 to 30-10-13, Interior(1)
    30-10-13 to 44-8-9 zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60
    plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
    will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9 except (jt=lb)
    17=108.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
8) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

North Carolina Professional Engineer SEAL 16673 Marvin A. Strzyzewski

May 4, 2020

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver / 2 Adcock Farm / Harnett	
J0520-2116	A1SE	GABLE	1	1		E14365402
					Job Reference (optional)	

Comtech, Inc,   Fayetteville, NC - 28314,

8.330 s Mar 23 2020 MiTek Industries, Inc. Mon May 4 11:43:04 2020 Page 1
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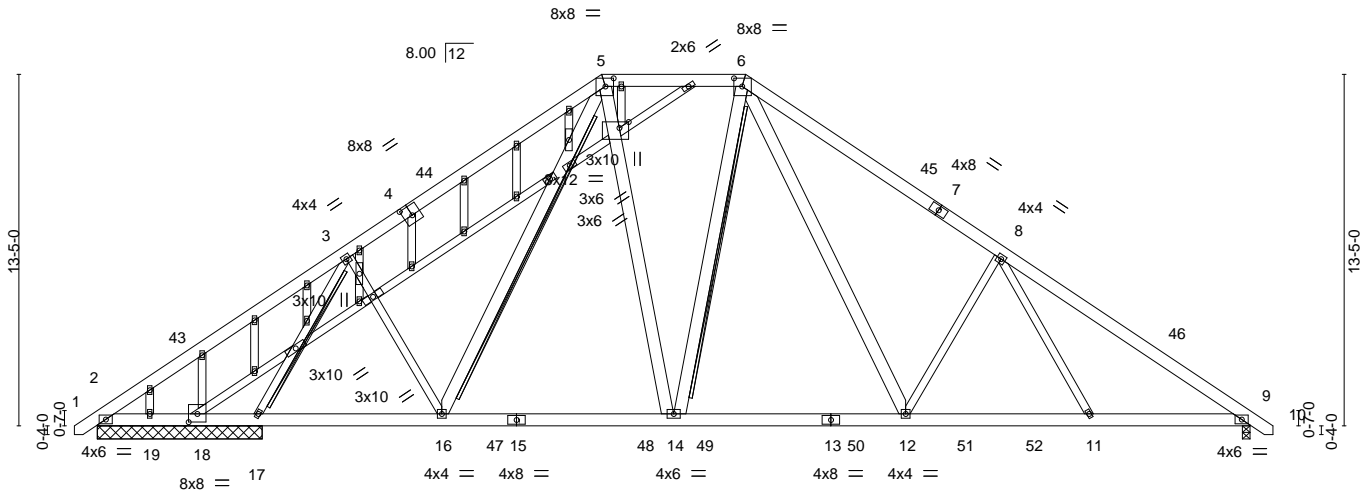
Plate Offsets (X,Y)--   [4:0-4-0,0-4-8], [5:0-3-12,0-3-12], [6:0-3-12,0-3-12], [18:0-4-0,0-3-12], [21:0-4-4,0-2-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.42	Vert(LL)	-0.10	12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.17	12-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.05	9	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.05	12	>999	240	Weight: 455 lb	FT = 20%

LUMBER-
TOP CHORD   2x6 SP No.1
BOT CHORD   2x6 SP No.1
WEBS   2x4 SP No.2 *Except*
   6-14,5-14,5-16,6-12: 2x6 SP No.1
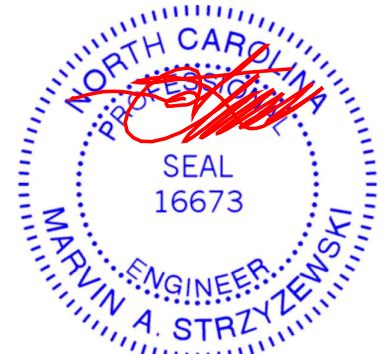OTHERS   2x4 SP No.2

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 4-6-15 oc purlins, except
   2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD   Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS   T-Brace: 2x4 SPF No.2 - 3-17
            2x6 SPF No.2 - 6-14, 5-16
   Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c.,with 3in minimum end distance. Brace must cover 90% of web length.

REACTIONS.   All bearings 6-3-8 except (jt=length) 9=0-3-8.
    (lb) - Max Horz   2=-400(LC 10)
        Max Uplift   All uplift 100 lb or less at joint(s) 2 except 17=-365(LC 12), 9=-324(LC 13), 18=-120(LC 1), 19=-200(LC 12)
        Max Grav   All reactions 250 lb or less at joint(s) 2, 18 except 17=1945(LC 19), 9=1735(LC 20), 19=350(LC 19)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-170/365, 3-5=-1480/491, 5-6=-1288/476, 6-8=-2209/608, 8-9=-2635/468
BOT CHORD   2-19=-272/297, 18-19=-272/297, 17-18=-272/297, 16-17=-226/1062, 14-16=-76/1251, 12-14=0/1309, 11-12=-266/1937, 9-11=-238/2046
WEBS   3-17=-2059/467, 3-16=-25/580, 8-12=-743/486, 8-11=0/309, 6-14=-272/221, 5-16=-258/131, 5-14=-110/687, 6-12=-350/1055

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) gable end zone and C-C Exterior(2) -0-8-9 to 3-8-4, Interior(1) 3-8-4 to 19-3-14, Exterior(2) 19-3-14 to 30-10-13, Interior(1) 30-10-13 to 44-8-9 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
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, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 17=365, 9=324, 18=120, 19=200.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

May 4,2020

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TRENCO
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver / 2 Adcock Farm / Harnett	
J0520-2116	A2	PIGGYBACK BASE	5	1		E14365403
					Job Reference (optional)	

Comtech, Inc,   Fayetteville, NC - 28314,

8.330 s Mar 23 2020 MiTek Industries, Inc. Mon May 4 11:43:05 2020 Page 1
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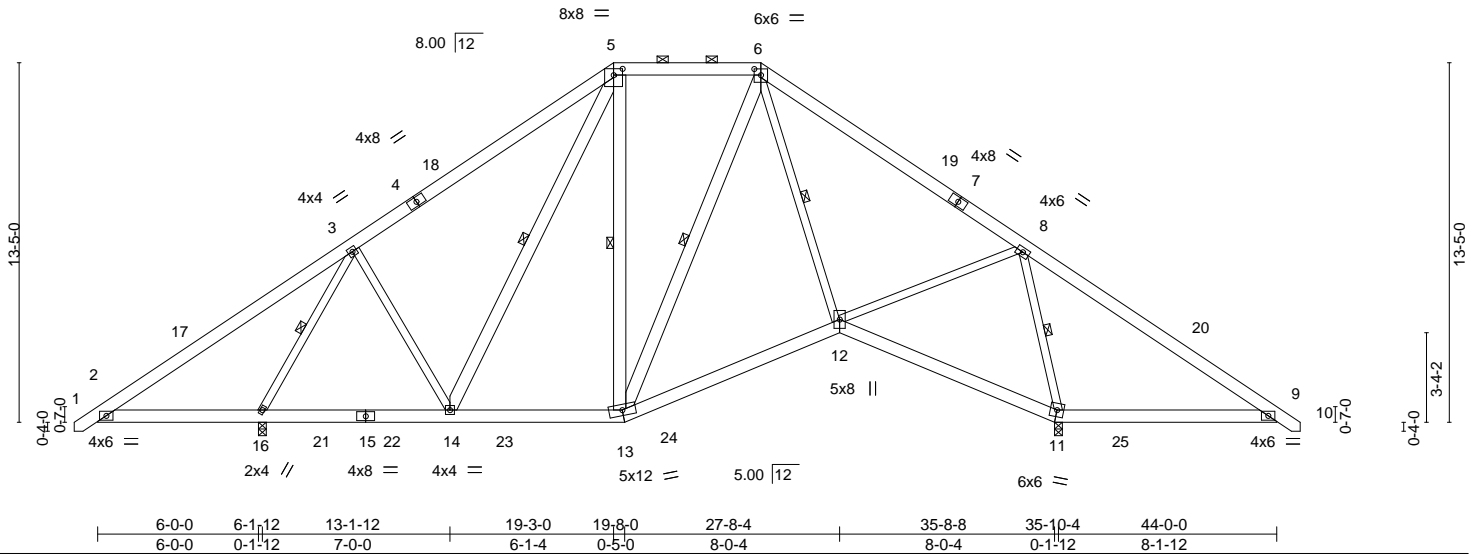
Plate Offsets (X,Y)-- [5:0-4-0,0-2-13], [6:0-3-0,0-2-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.51	Vert(LL)	-0.04	13-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	-0.09	12-13	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.41	Horz(CT)	0.03	11	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.02	13-14	>999	240	Weight: 381 lb	FT = 20%

LUMBER-
TOP CHORD   2x6 SP No.1
BOT CHORD   2x6 SP No.1
WEBS   2x4 SP No.2 *Except*
5-13,5-14,6-13: 2x6 SP No.1

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 6-0-0 oc purlins, except
2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD   Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS   1 Row at midpt   3-16, 5-13, 6-12, 8-11, 5-14, 6-13

REACTIONS.   (size)   11=0-3-8, 16=0-3-8
Max Horz   16=-320(LC 10)
Max Uplift   11=-118(LC 13), 16=-112(LC 12)
Max Grav   11=1938(LC 1), 16=1673(LC 2)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-408/688, 3-5=-889/255, 5-6=-703/289, 6-8=-853/102, 8-9=-484/769
BOT CHORD   2-16=-459/457, 14-16=-211/657, 13-14=-60/673, 12-13=-29/726, 11-12=-306/483,
9-11=-511/519
WEBS   3-16=-1650/574, 8-12=-6/825, 6-12=-53/432, 3-14=-37/358, 8-11=-1687/540

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) -0-8-9 to 3-8-4, Interior(1) 3-8-4 to 19-3-0, Exterior(2) 19-3-0 to 30-11-10, Interior(1)
30-11-10 to 44-8-9 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber
DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
11=118, 16=112.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
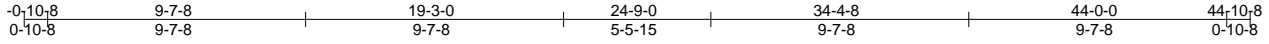
May 4,2020

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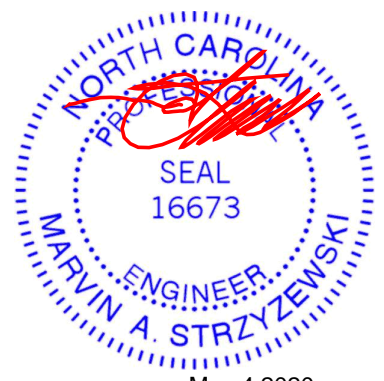
Job	Truss	Truss Type	Qty	Ply	Weaver / 2 Adcock Farm / Harnett	
J0520-2116	A3	PIGGYBACK BASE	2	1		E14365404
					Job Reference (optional)	

Comtech, Inc,   Fayetteville, NC - 28314,
8.330 s Mar 23 2020 MiTek Industries, Inc. Mon May 4 11:43:07 2020 Page 1
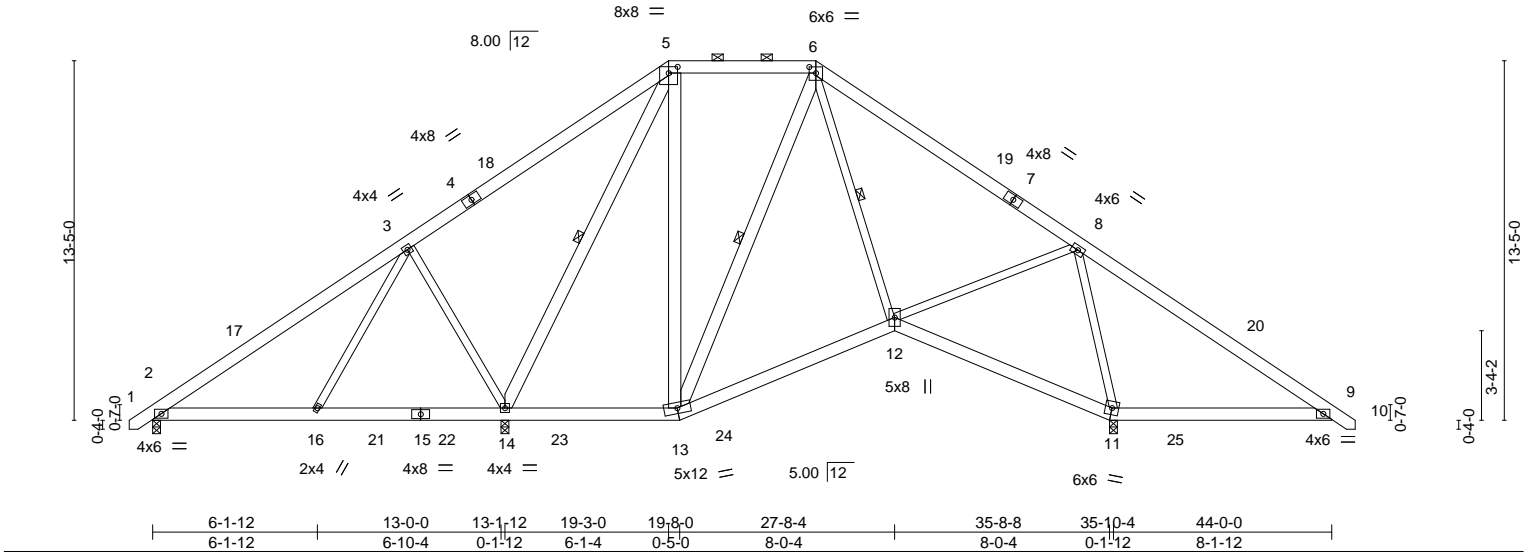ID:FKRF2G2VvSGFSXRUG_ubJqzaK1d-149kaQLgfyTvucP9lik18HkA8nKVpS4m9lNFfHzJuNY

Scale = 1:86.0

Plate Offsets (X,Y)--   [5:0-4-0,0-2-13], [6:0-3-0,0-2-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.51	Vert(LL)	-0.04	12-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.08	12-13	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.99	Horz(CT)	0.01	11	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.02	2-16	>999	240	Weight: 381 lb	FT = 20%

LUMBER-
TOP CHORD   2x6 SP No.1
BOT CHORD   2x6 SP No.1
WEBS   2x4 SP No.2 *Except*
5-13,5-14,6-13: 2x6 SP No.1

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 6-0-0 oc purlins, except
2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD   Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS   1 Row at midpt   6-12, 5-14, 6-13

REACTIONS.   (size)   2=0-3-8, 11=0-3-8, 14=0-3-8
Max Horz   14=-320(LC 10)
Max Uplift 2=-56(LC 9), 11=-121(LC 13), 14=-141(LC 9)
Max Grav   2=483(LC 23), 11=1674(LC 1), 14=1546(LC 2)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-455/240, 3-5=-59/369, 5-6=-384/210, 6-8=-493/69, 8-9=-484/769
BOT CHORD   2-16=-71/274, 13-14=-121/314, 12-13=-125/434, 11-12=-361/496, 9-11=-511/519
WEBS   3-16=-292/330, 8-12=0/547, 5-13=-30/367, 6-12=-87/438, 3-14=-745/533,
8-11=-1400/466, 5-14=-859/143, 6-13=-255/25

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) -0-8-9 to 3-8-4, Interior(1) 3-8-4 to 19-3-0, Exterior(2) 19-3-0 to 30-11-10, Interior(1)
30-11-10 to 44-8-9 zone; cantilever right exposed ; porch left exposed;C-C for members and forces & MWFRS for reactions shown;
Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb)
11=121, 14=141.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 4,2020

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TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver / 2 Adcock Farm / Harnett	E14365405
J0520-2116	A4	ROOF SPECIAL	2	1	Job Reference (optional)	
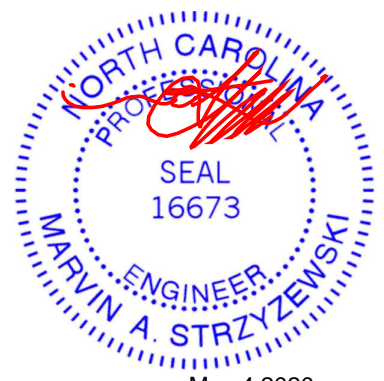
Comtech, Inc,   Fayetteville, NC - 28314,
8.330 s Mar 23 2020 MiTek Industries, Inc. Mon May 4 11:43:08 2020 Page 1
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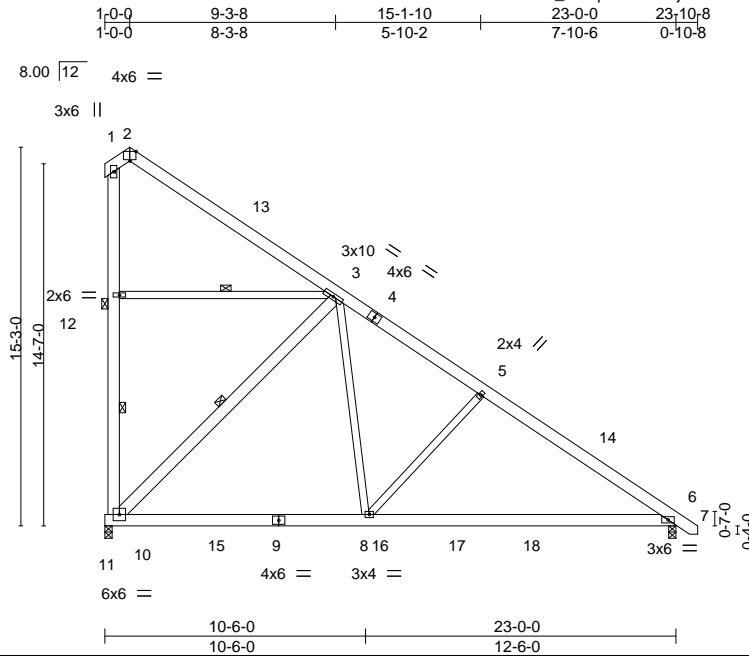
Plate Offsets (X,Y)--   [2:0-3-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.13	6-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.28	6-8	>970	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.45	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.03	6-8	>999	240	Weight: 219 lb	FT = 20%

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

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 6-0-0 oc purlins,
            except end verticals.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS   1 Row at midpt   10-12, 3-10, 3-12
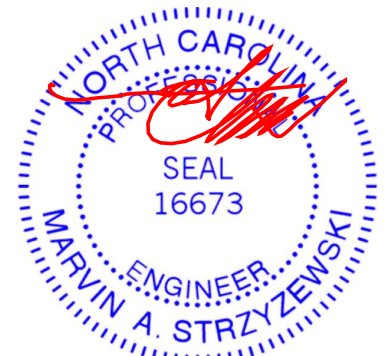JOINTS   1 Brace at Jt(s): 12

REACTIONS.   (size)   10=0-3-8, 6=0-3-8
              Max Horz   10=-482(LC 13)
              Max Uplift 10=-236(LC 13)
              Max Grav 10=1177(LC 20), 6=1071(LC 20)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   3-5=-1052/0, 5-6=-1298/0, 10-12=-259/166, 1-12=-259/166
BOT CHORD   8-10=0/743, 6-8=0/987
WEBS   5-8=-424/234, 3-10=-1116/335, 3-8=-26/850

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) 0-4-4 to 5-4-13, Interior(1) 5-4-13 to 23-8-9 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) except (jt=lb)
   10=236.

May 4,2020

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

Job	Truss	Truss Type	Qty	Ply	Weaver / 2 Adcock Farm / Harnett	
J0520-2116	A5	ROOF SPECIAL	1	1		E14365406
					Job Reference (optional)	

Comtech, Inc,   Fayetteville, NC - 28314,

8.330 s Mar 23 2020 MiTek Industries, Inc. Mon May 4 11:43:09 2020 Page 1
ID:FKRF2G2VvSGFSXRUG_ubJqzaK1d-zTGU_5MxAZjd7vZXs6mVDiqYnbyRHU_2d3sLk9zJuNW
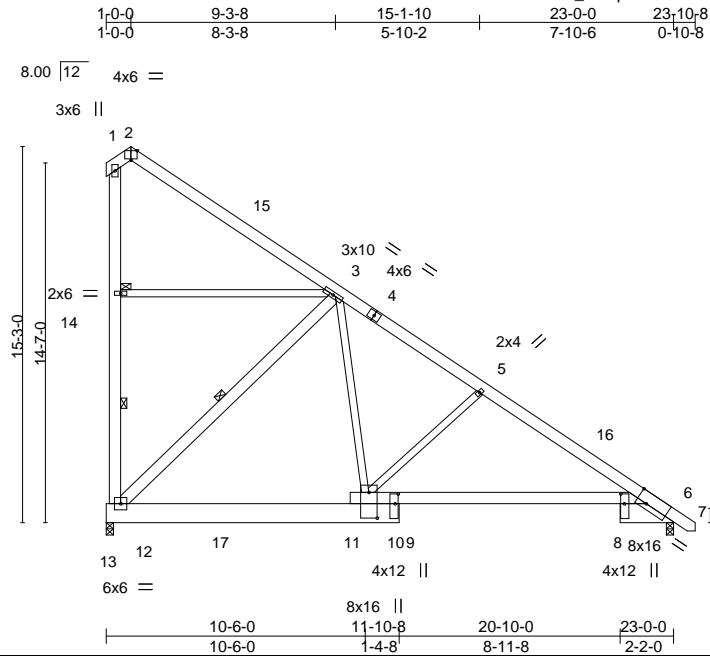
Scale = 1:93.4

Plate Offsets (X,Y)--   [2:0-3-0,Edge], [6:0-5-0,Edge], [8:0-4-12,0-1-12], [9:0-4-12,0-1-8], [10:1-0-8,0-4-0]

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	0.37	Vert(LL)	-0.12	6-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.30	6-10	>887	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.45	Horz(CT)	0.08	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.05	6-10	>999	240	Weight: 245 lb	FT = 20%

LUMBER-
TOP CHORD   2x6 SP No.1
BOT CHORD   2x10 SP No.1 *Except*
   6-11: 2x6 SP No.1
WEBS   2x4 SP No.2 *Except*
   1-12,3-12: 2x6 SP No.1

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 5-11-14 oc purlins,
             except end verticals.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS   1 Row at midpt   12-14, 3-12
JOINTS   1 Brace at Jt(s): 14

REACTIONS.   (size)   6=0-3-8, 12=0-3-8
   Max Horz 12=-481(LC 13)
   Max Uplift 12=-233(LC 13)
   Max Grav 6=979(LC 20), 12=1127(LC 20)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   3-5=-1079/0, 5-6=-1350/0, 12-14=-256/166, 1-14=-257/166
BOT CHORD   10-12=0/827, 6-10=0/1044
WEBS   5-10=-432/206, 3-12=-1146/302, 3-10=0/874

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) 0-4-4 to 5-4-13, Interior(1) 5-4-13 to 23-8-9 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) except (jt=lb)
   12=233.

May 4,2020

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

Job	Truss	Truss Type	Qty	Ply	Weaver / 2 Adcock Farm / Harnett	E14365407
J0520-2116	A6	ROOF SPECIAL	1	**2**	Job Reference (optional)	

Comtech, Inc,   Fayetteville, NC - 28314,   8.330 s Mar 23 2020 MiTek Industries, Inc. Mon May 4 11:43:10 2020 Page 1
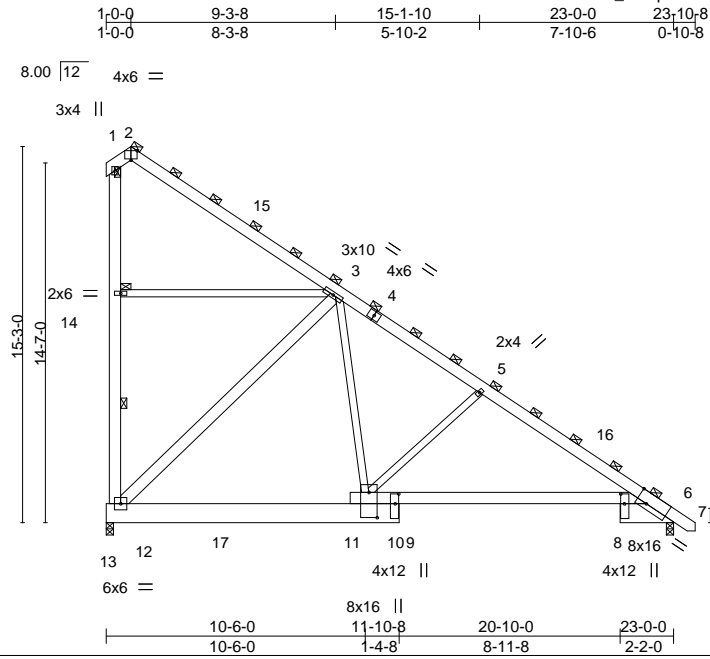ID:FKRF2G2VvSGFSXRUG_ubJqzaK1d-RfqsCRNZxtrUl37kQqHklvMjU?Iy0u8CsjcvGczJuNV

Dimensions (top): 1-0-0 | 9-3-8 | 15-1-10 | 23-0-0 | 23-10-8
1-0-0 | 8-3-8 | 5-10-2 | 7-10-6 | 0-10-8

8.00 [12]   4x6 =

Scale = 1:93.4

Truss member labels: 3x4, 4x6, 3x10, 2x6, 2x4, 6x6, 8x16, 4x12

Bottom dimensions: 10-6-0 | 11-10-8 | 20-10-0 | 23-0-0
10-6-0 | 1-4-8 | 8-11-8 | 2-2-0

Plate Offsets (X,Y)--   [2:0-3-0,Edge], [6:0-5-0,Edge], [8:0-4-12,0-1-12], [9:0-4-12,0-1-12], [10:1-0-4,0-4-0]

LOADING (psf)		SPACING-	3-6-0	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	6-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.27	6-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.65	Horz(CT)	0.07	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.05	6-10	>999	240	Weight: 490 lb	FT = 20%

LUMBER-
TOP CHORD   2x6 SP No.1
BOT CHORD   2x10 SP No.1 *Except*
6-11: 2x6 SP No.1
WEBS   2x4 SP No.2 *Except*
1-12,3-12: 2x6 SP No.1

BRACING-
TOP CHORD   2-0-0 oc purlins (6-0-0 max.), except end verticals
(Switched from sheeted: Spacing > 2-8-0).
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS   1 Row at midpt   12-14
JOINTS   1 Brace at Jt(s): 2, 1, 14
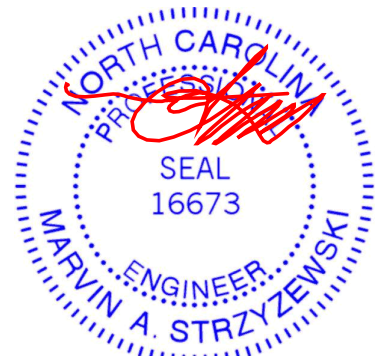
REACTIONS.   (size)   6=0-3-8, 12=0-3-8
Max Horz 12=-842(LC 13)
Max Uplift 12=-407(LC 13)
Max Grav 6=1713(LC 20), 12=1971(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   1-2=-333/223, 2-3=-379/107, 3-5=-1889/0, 5-6=-2362/0, 12-14=-448/290,
1-14=-449/291
BOT CHORD   10-12=0/1448, 6-10=0/1827
WEBS   5-10=-757/361, 3-12=-2006/528, 3-10=0/1529

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: 2x10 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered 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) and C-C Exterior(2) 0-4-4 to 5-4-13, Interior(1) 5-4-13 to 23-8-9 zone;C-C for members and forces & MWFRS for reactions shown; 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) except (jt=lb) 12=407.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

NORTH CAROLINA PROFESSIONAL ENGINEER
SEAL
16673
MARVIN A. STRZYZEWSKI

May 4,2020

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

Scale = 1:93.4

Plate Offsets (X,Y)--   [2:0-3-0,Edge], [6:0-5-0,Edge], [8:0-4-12,0-1-12], [9:0-4-12,0-1-12], [10:1-0-0,0-4-0]

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d		PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	-0.13	6-10	>999	360		MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.32	6-10	>835	240			
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.79	Horz(CT)	0.09	6	n/a	n/a			
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.06	6-10	>999	240		Weight: 490 lb	FT = 20%

LUMBER-
TOP CHORD   2x6 SP No.1
BOT CHORD   2x10 SP No.1 *Except*
6-11: 2x6 SP No.1
WEBS   2x4 SP No.2 *Except*
1-12,3-12: 2x6 SP No.1

BRACING-
TOP CHORD   2-0-0 oc purlins (6-0-0 max.), except end verticals
(Switched from sheeted: Spacing > 2-8-0).
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS   1 Row at midpt   12-14
JOINTS   1 Brace at Jt(s): 2, 1, 14

REACTIONS.   (size)   6=0-3-8, 12=0-3-8
Max Horz   12=-1022(LC 13)
Max Uplift   12=-495(LC 13)
Max Grav   6=2081(LC 20), 12=2394(LC 20)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   1-2=-404/270, 2-3=-460/130, 3-5=-2294/0, 5-6=-2868/0, 12-14=-544/352,
1-14=-545/353
BOT CHORD   10-12=0/1758, 6-10=0/2219
WEBS   5-10=-919/438, 3-12=-2436/641, 3-10=0/1857

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: 2x10 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
   Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered 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) and C-C Exterior(2) 0-4-4 to 5-4-13, Interior(1) 5-4-13 to 23-8-9 zone;C-C for members and forces & MWFRS for reactions shown; 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) except (jt=lb) 12=495.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

SEAL 16673
NORTH CAROLINA
MARVIN A. STRZYZEWSKI
ENGINEER

May 4,2020

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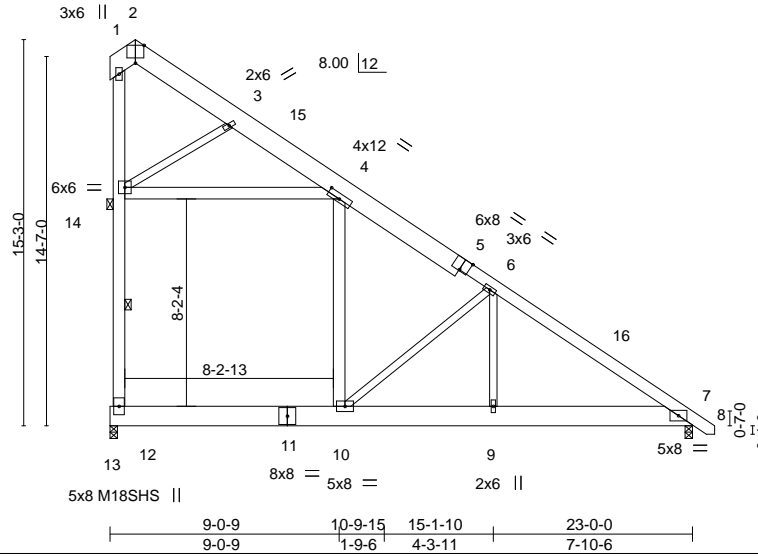818 Soundside Road
Edenton, NC 27932

Scale = 1:91.0

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

LOADING (psf)	SPACING-	2-8-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.21	10	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.46	10	>587	240	M18SHS	244/190
BCLL 0.0 *	Rep Stress Incr	NO	WB	0.48	Horz(CT)	0.01	7	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.17	10	>999	240	Weight: 563 lb	FT = 20%

LUMBER-
TOP CHORD   2x10 SP No.1 *Except*
5-8: 2x6 SP No.1
BOT CHORD   2x10 SP 2400F 2.0E
WEBS   2x6 SP No.1 *Except*
6-9,6-10,3-14: 2x4 SP No.2

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 6-0-0 oc purlins,
except end verticals.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS   1 Row at midpt   12-14
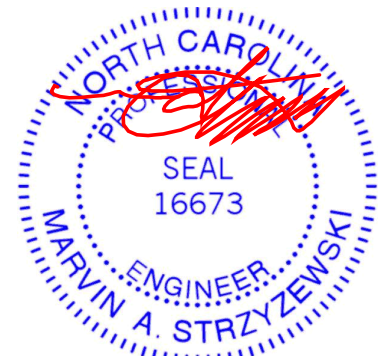JOINTS   1 Brace at Jt(s): 14

REACTIONS.   (size)   12=0-3-8, 7=0-3-8
Max Horz   12=-633(LC 13)
Max Uplift 12=-7(LC 13)
Max Grav   12=2288(LC 21), 7=1482(LC 21)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   3-4=-808/104, 4-6=-829/128, 6-7=-2233/92, 12-14=-1091/133
BOT CHORD   10-12=-119/629, 9-10=0/1720, 7-9=0/1720
WEBS   4-14=-184/957, 6-9=0/1086, 4-10=0/833, 6-10=-2198/295, 3-14=-1790/225

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
   Top chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
   Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc.
   Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 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) and C-C Exterior(2) 0-4-4 to 5-4-13, Interior(1) 5-4-13 to 23-8-9 zone;C-C for members and forces & MWFRS for
   reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
   will fit between the bottom chord and any other members.
8) Ceiling dead load (10.0 psf) on member(s). 4-14; Wall dead load (5.0psf) on member(s).4-10
9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 10-12
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12.
11) Attic room checked for L/360 deflection.

May 4,2020

Job	Truss	Truss Type	Qty	Ply	Weaver / 2 Adcock Farm / Harnett	
J0520-2116	A9	ROOF TRUSS	3	1		E14365410
					Job Reference (optional)	

Comtech, Inc,   Fayetteville, NC - 28314,   8.330 s Mar 23 2020 MiTek Industries, Inc. Mon May 4 11:43:12 2020 Page 1
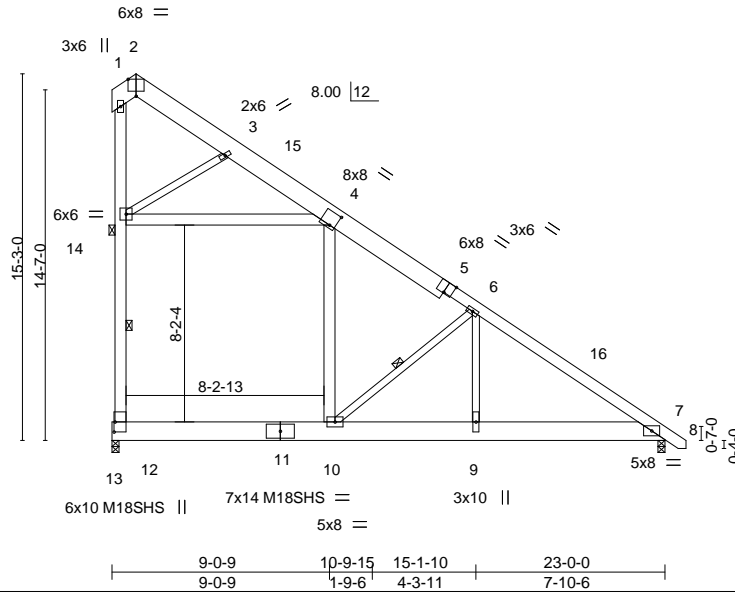ID:FKRF2G2VvSGFSXRUG_ubJqzaK1d-N2ycd7OpTU5C_NH6YFKCrKRwvo_tUoPVJ15?KUzJuNT
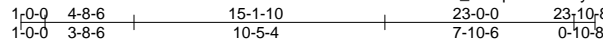
Scale: 1/8"=1'

Plate Offsets (X,Y)-- [2:0-4-0,Edge], [4:0-2-12,0-6-8], [5:0-4-0,Edge], [12:0-5-0,0-0-8]

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	0.96	Vert(LL)	-0.32	10	>844	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.69	10	>392	240	M18SHS	244/190
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.26	10	>999	240	Weight: 282 lb	FT = 20%

LUMBER-
TOP CHORD   2x10 SP No.1 *Except*
     5-8: 2x6 SP No.1
BOT CHORD   2x10 SP 2400F 2.0E
WEBS   2x6 SP No.1 *Except*
     6-9,6-10,3-14: 2x4 SP No.2

BRACING-
TOP CHORD   Structural wood sheathing directly applied, except end verticals.
BOT CHORD   Rigid ceiling directly applied or 8-6-0 oc bracing.
WEBS   1 Row at midpt   12-14, 6-10
JOINTS   1 Brace at Jt(s): 14

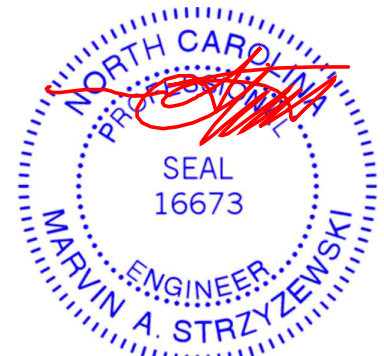**REACTIONS.**   (size)   12=0-3-8, 7=0-3-8
           Max Horz   12=-475(LC 13)
           Max Uplift   12=-5(LC 13)
           Max Grav   12=1716(LC 21), 7=1111(LC 21)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   3-4=-606/78, 4-6=-622/96, 6-7=-1675/69, 12-14=-818/100
BOT CHORD   10-12=-89/471, 9-10=0/1290, 7-9=0/1290
WEBS   4-14=-138/718, 6-9=0/815, 4-10=0/624, 6-10=-1648/221, 3-14=-1342/169

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) 0-4-4 to 5-4-13, Interior(1) 5-4-13 to 23-8-9 zone;C-C for members and forces & MWFRS for
   reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates 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) Ceiling dead load (10.0 psf) on member(s). 4-14; Wall dead load (5.0psf) on member(s).4-10
7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 10-12
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12.
9) Attic room checked for L/360 deflection.

May 4,2020

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

Job	Truss	Truss Type	Qty	Ply	Weaver / 2 Adcock Farm / Harnett	
J0520-2116	A9GE	COMMON SUPPORTED GAB	1	1		E14365411
					Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Mar 23 2020 MiTek Industries, Inc. Mon May 4 11:43:14 2020 Page 1
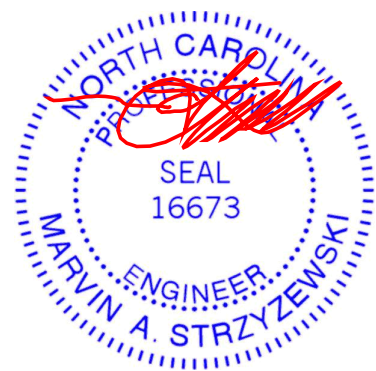ID:FKRF2G2VvSGFSXRUG_ubJqzaK1d-KQ4N2pQ3?6LwEgRVfgMgwlXUMcmKypmonLa6PNzJuNR
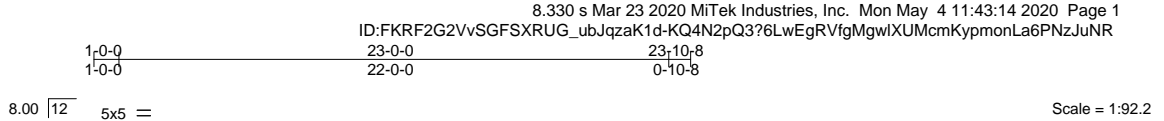
8.00 [12]   5x5 =   Scale = 1:92.2

Plate Offsets (X,Y)--   [7:0-2-9,Edge], [23:0-4-0,0-4-8]

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	0.06	Vert(LL)	0.00	14	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	0.00	14	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.01	14	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 280 lb	FT = 20%

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

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 6-0-0 oc purlins,
             except end verticals.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS   1 Row at midpt   1-27
             T-Brace: 2x4 SPF No.2 - 3-25, 4-24, 5-23, 6-22
                                     2x6 SPF No.2 - 2-26
             Fasten (2X) T and I braces to narrow edge of web with 10d
             (0.131"x3") nails, 6in o.c.,with 3in minimum end distance.
             Brace must cover 90% of web length.

REACTIONS.   All bearings 23-0-0.
    (lb) - Max Horz 27=-695(LC 13)
            Max Uplift All uplift 100 lb or less at joint(s) 27, 26, 25, 24, 23, 22, 21, 20, 19,
                        18, 17 except 16=-116(LC 13), 14=-100(LC 11)
            Max Grav All reactions 250 lb or less at joint(s) 27, 26, 25, 24, 23, 22, 21, 20,
                      19, 18, 17, 16 except 14=414(LC 13)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   5-6=-254/197, 6-8=-329/256, 8-9=-404/314, 9-10=-479/373, 10-11=-554/432,
              11-12=-629/491, 12-13=-705/550, 13-14=-794/626
BOT CHORD   26-27=-536/694, 25-26=-536/694, 24-25=-536/694, 23-24=-536/694, 22-23=-536/694,
              21-22=-536/694, 20-21=-536/694, 19-20=-536/694, 18-19=-536/694, 17-18=-536/694,
              16-17=-536/694, 14-16=-536/694

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) gable end zone and C-C Corner(3) 0-4-4 to 5-4-13, Exterior(2) 5-4-13 to 23-8-9 zone;C-C for members and
   forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry
   Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
   will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 27, 26, 25, 24, 23,
   22, 21, 20, 19, 18, 17 except (jt=lb) 16=116, 14=100.
10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

[Seal: NORTH CAROLINA PROFESSIONAL ENGINEER, SEAL 16673, MARVIN A. STRZYZEWSKI]

May 4,2020

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver / 2 Adcock Farm / Harnett	
J0520-2116	B1	COMMON SUPPORTED GAB	5	1	Job Reference (optional)	E14365412

Comtech, Inc,   Fayetteville, NC - 28314,

8.330 s Mar 23 2020 MiTek Industries, Inc. Mon May 4 11:43:15 2020 Page 1
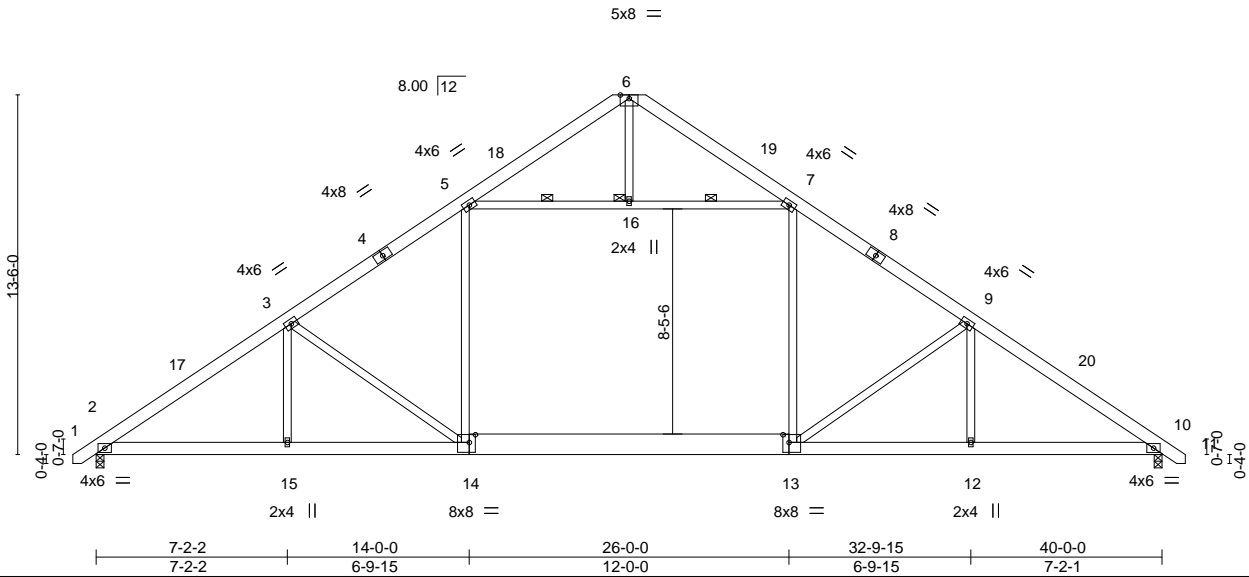ID:FKRF2G2VvSGFSXRUG_ubJqzaK1d-odelF9RhmPTnrq0hDNtvSz3cB0v8h7xx??JgxpzJuNQ
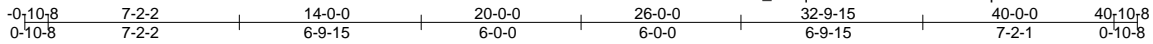
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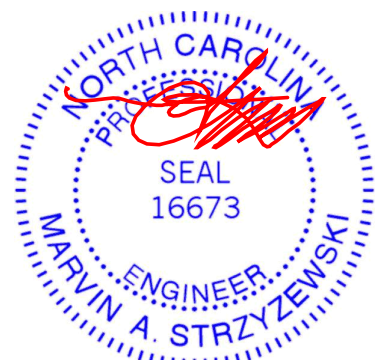| Plate Offsets (X,Y)--	[13:0-2-12,0-3-8], [14:0-2-12,0-3-8]

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	0.25	Vert(LL)	-0.38	12-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.44	12-13	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.06	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.33	14-15	>999	240	Weight: 316 lb	FT = 20%

LUMBER-
TOP CHORD   2x6 SP No.1
BOT CHORD   2x6 SP No.1 *Except*
          13-14: 2x10 SP No.1
WEBS   2x4 SP No.2

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 4-7-8 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS   1 Row at midpt   5-16, 7-16
JOINTS   1 Brace at Jt(s): 16

REACTIONS.   (size)   2=0-3-8, 10=0-3-8
             Max Horz 2=-331(LC 10)
             Max Uplift 2=-96(LC 12), 10=-96(LC 13)
             Max Grav 2=1796(LC 19), 10=1796(LC 20)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-2750/460, 3-5=-2355/477, 5-6=-484/192, 6-7=-484/192, 7-9=-2357/477,
                9-10=-2751/460
BOT CHORD   2-15=-245/2414, 14-15=-245/2414, 13-14=-82/1966, 12-13=-247/2167, 10-12=-247/2167
WEBS   5-14=-6/763, 7-13=-6/764, 5-16=-1571/395, 7-16=-1571/395, 3-15=-43/260,
                3-14=-642/238, 9-12=-48/260, 9-13=-642/240

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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed;
   MWFRS (envelope) and C-C Exterior(2) -0-8-9 to 3-8-4, Interior(1) 3-8-4 to 20-0-0, Exterior(2) 20-0-0 to 24-4-13, Interior(1) 24-4-13
   to 40-8-9 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
   will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10.

May 4,2020

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Job	Truss	Truss Type	Qty	Ply	Weaver / 2 Adcock Farm / Harnett	
J0520-2116	B1GE	COMMON SUPPORTED GAB	1	1		E14365413
					Job Reference (optional)	

Comtech, Inc,   Fayetteville, NC - 28314,

8.330 s Mar 23 2020 MiTek Industries, Inc. Mon May 4 11:43:17 2020 Page 1
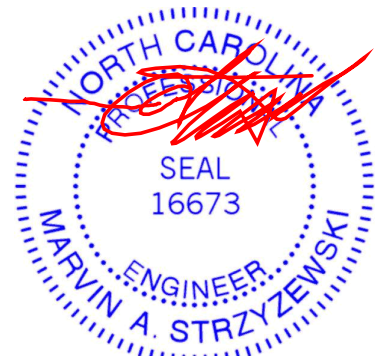ID:FKRF2G2VvSGFSXRUG_ubJqzaK1d-k?lVgqSyl1kV58A4KovNYO9_cpoW993ETJom0izJuNO

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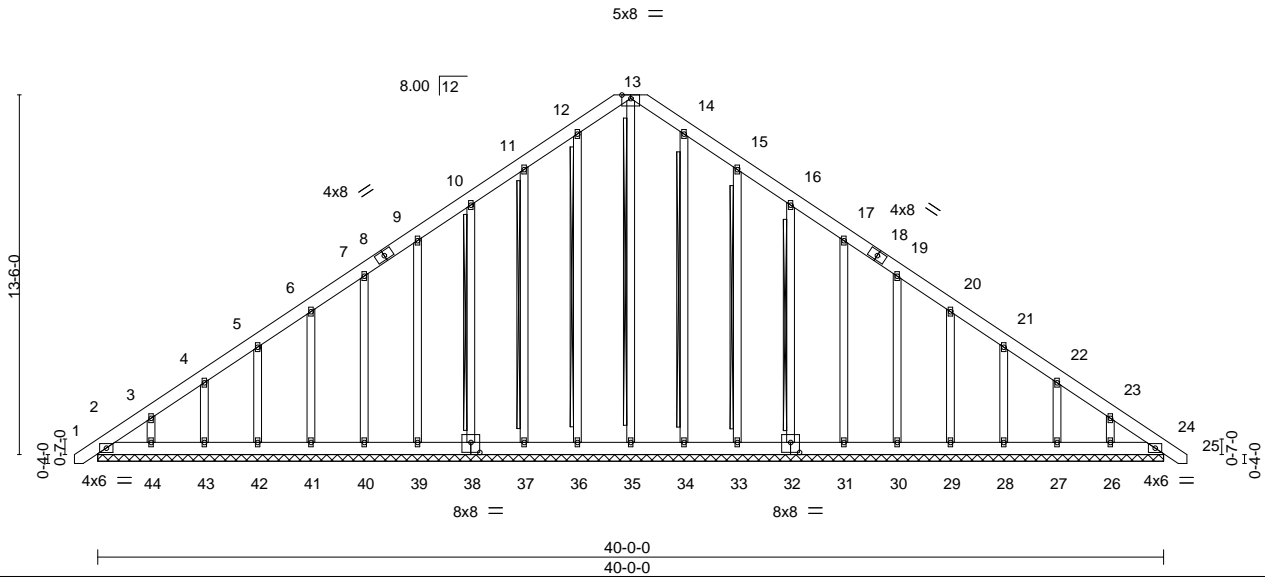
Plate Offsets (X,Y)--   [32:0-4-0,0-4-8], [38:0-4-0,0-4-8]

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	0.06	Vert(LL)	0.00	24	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	0.00	24	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.01	24	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 399 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.
WEBS   T-Brace: 2x4 SPF No.2 - 13-35, 12-36, 11-37, 10-38
             , 14-34, 15-33, 16-32
             Fasten (2X) T and I braces to narrow edge of web with 10d
             (0.131"x3") nails, 6in o.c.,with 3in minimum end distance.
             Brace must cover 90% of web length.

REACTIONS.   All bearings 40-0-0.
      (lb) - Max Horz 2=414(LC 11)
              Max Uplift   All uplift 100 lb or less at joint(s) 35, 36, 38, 39, 40, 41, 42, 43, 34,
                        32, 31, 30, 29, 28, 27, 24 except 2=-110(LC 8), 37=-102(LC 12), 44=-105(LC
                        12), 33=-106(LC 13), 26=-102(LC 13)
              Max Grav   All reactions 250 lb or less at joint(s) 2, 36, 37, 38, 39, 40, 41, 42, 43,
                        44, 34, 33, 32, 31, 30, 29, 28, 27, 26, 24 except 35=277(LC 13)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-441/318, 3-4=-357/284, 4-5=-292/257, 10-11=-216/283, 11-12=-284/333,
             12-13=-310/354, 13-14=-310/354, 14-15=-284/319, 22-23=-263/167, 23-24=-346/238
BOT CHORD   2-44=-212/326, 43-44=-212/326, 42-43=-212/326, 41-42=-212/326, 40-41=-212/326,
             39-40=-212/326, 38-39=-212/326, 37-38=-212/326, 36-37=-212/326, 35-36=-212/326,
             34-35=-212/326, 33-34=-212/326, 32-33=-212/326, 31-32=-212/326, 30-31=-212/326,
             29-30=-212/326, 28-29=-212/326, 27-28=-212/326, 26-27=-212/326, 24-26=-212/326
WEBS   13-35=-256/167

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) gable end zone and C-C Corner(3) -0-8-9 to 3-8-4, Exterior(2) 3-8-4 to 20-0-0, Corner(3) 20-0-0 to 24-4-13,
   Exterior(2) 24-4-13 to 40-8-9 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip
   DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry
   Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
   will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 35, 36, 38, 39, 40,
   41, 42, 43, 34, 32, 31, 30, 29, 28, 27, 24 except (jt=lb) 2=110, 37=102, 44=105, 33=106, 26=102.
10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

May 4,2020

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ID:FKRF2G2VvSGFSXRUG_ubJqzaK1d-CCJutATa3KsMiIlGuVRc4bh49D0EubPNhzYKY8zJuNN

-0-11-0 5-4-12 8-2-13 11-1-8 14-0-3 16-10-4 22-3-0 23-2-0
0-11-0 5-4-12 2-10-1 2-10-11 2-10-11 2-10-1 5-4-12 0-11-0
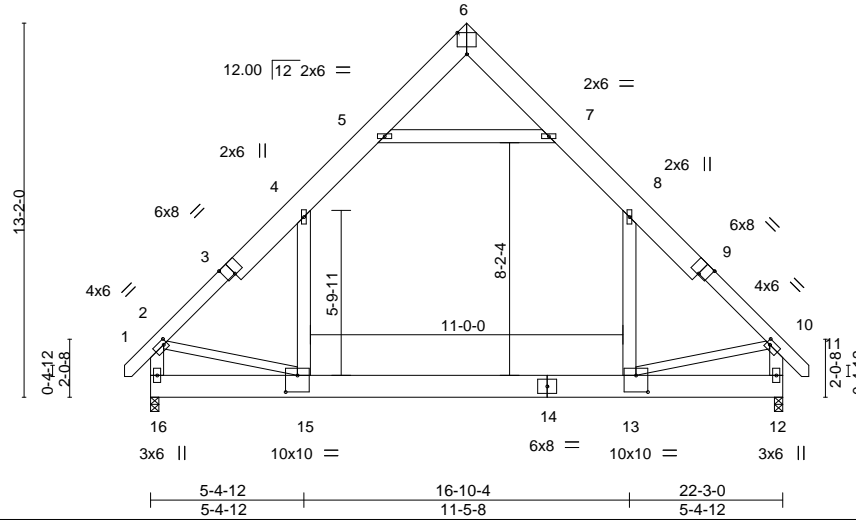
6x8 =

Scale = 1:81.1

Plate Offsets (X,Y)--   [2:0-1-8,0-2-0], [3:0-4-0,Edge], [6:0-4-0,Edge], [9:0-4-0,Edge], [10:0-1-8,0-2-0], [13:0-5-0,0-7-0], [15:0-5-0,0-7-0]

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	0.33	Vert(LL)	-0.12	13-15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.19	13-15	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.01	12	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.05	15	>999	240	Weight: 268 lb	FT = 20%

LUMBER-
TOP CHORD   2x10 SP No.1 *Except*
1-3,9-11: 2x6 SP No.1
BOT CHORD   2x10 SP No.1
WEBS   2x6 SP No.1 *Except*
2-15,10-13: 2x4 SP No.2

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 5-9-8 oc purlins,
except end verticals.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.   (size)   16=0-3-8, 12=0-3-8
Max Horz 16=-419(LC 10)
Max Grav 16=1469(LC 21), 12=1469(LC 20)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-4=-1675/22, 4-5=-1045/187, 7-8=-1045/187, 8-10=-1675/21, 2-16=-1615/65,
10-12=-1616/65
BOT CHORD   15-16=-425/555, 13-15=0/1123
WEBS   5-7=-1194/265, 4-15=0/744, 8-13=0/744, 2-15=-1/1037, 10-13=-10/1044

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) gable end zone and C-C Corner(3) -0-9-0 to 3-7-13, Exterior(2) 3-7-13 to 11-2-0, Corner(3) 11-2-0 to 15-6-13,
Exterior(2) 15-6-13 to 23-1-0 zone; end vertical left and right 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) Ceiling dead load (10.0 psf) on member(s). 4-5, 7-8, 5-7; Wall dead load (5.0psf) on member(s).4-15, 8-13
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 13-15
7) Attic room checked for L/360 deflection.

May 4,2020

ENGINEERING BY
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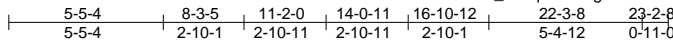
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver / 2 Adcock Farm / Harnett	
J0520-2116	C2	ATTIC	8	1	Job Reference (optional)	E14365415

Comtech, Inc,   Fayetteville, NC - 28314,
8.330 s Mar 23 2020 MiTek Industries, Inc. Mon May 4 11:43:19 2020 Page 1
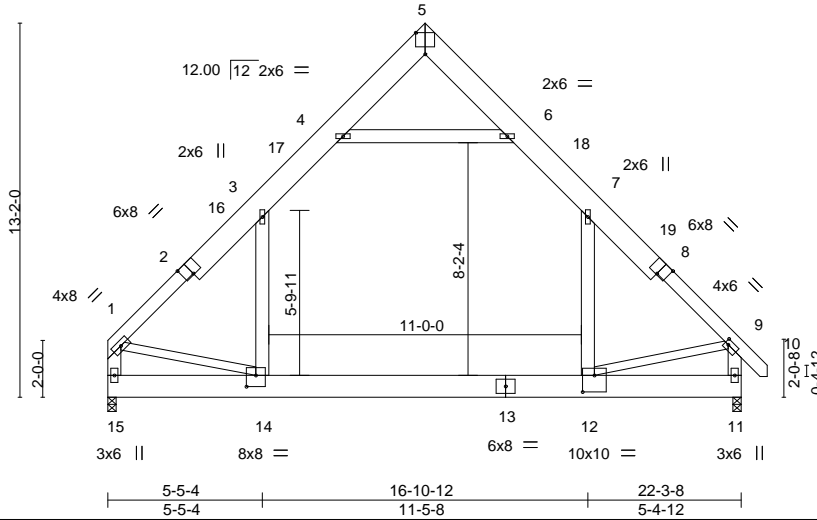ID:FKRF2G2VvSGFSXRUG_ubJqzaK1d-gOtG5WUCqe_CKSJSSDyrdpEFldKRd2aXwdHt4azJuNM

5-5-4 | 8-3-5 | 11-2-0 | 14-0-11 | 16-10-12 | 22-3-8 | 23-2-8
5-5-4 | 2-10-1 | 2-10-11 | 2-10-11 | 2-10-1 | 5-4-12 | 0-11-0

6x8 =

Scale = 1:81.1

Plate Offsets (X,Y)--   [2:0-4-0,Edge], [5:0-4-0,Edge], [8:0-4-0,Edge], [9:0-1-8,0-2-0], [12:0-5-0,0-7-0], [14:0-4-0,0-4-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	-0.12	12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.20	12-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.01	11	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.04	14	>999	240	Weight: 265 lb	FT = 20%

LUMBER-
TOP CHORD   2x10 SP No.1 *Except*
1-2,8-10: 2x6 SP No.1
BOT CHORD   2x10 SP No.1
WEBS   2x6 SP No.1 *Except*
1-14,9-12: 2x4 SP No.2

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

REACTIONS.   (size)   15=0-3-8, 11=0-3-8
Max Horz 15=308(LC 11)
Max Grav 15=1434(LC 21), 11=1478(LC 20)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   1-3=-1661/0, 3-4=-1046/155, 6-7=-1041/146, 7-9=-1669/0, 1-15=-1558/0,
9-11=-1617/31
BOT CHORD   14-15=-292/402, 12-14=0/1100
WEBS   4-6=-1220/199, 3-14=0/727, 7-12=0/751, 1-14=0/1026, 9-12=0/1011

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) 0-2-12 to 4-7-9, Interior(1) 4-7-9 to 11-2-0, Exterior(2) 11-2-0 to 15-6-13, Interior(1) 15-6-13
to 23-1-0 zone; end vertical right 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) Ceiling dead load (10.0 psf) on member(s). 3-4, 6-7, 4-6; Wall dead load (5.0psf) on member(s).3-14, 7-12
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-14
7) Attic room checked for L/360 deflection.

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

Job	Truss	Truss Type	Qty	Ply	Weaver / 2 Adcock Farm / Harnett	
J0520-2116	C3	ATTIC	1	**2**		E14365416
					Job Reference (optional)	

Comtech, Inc,   Fayetteville, NC - 28314,

8.330 s Mar 23 2020 MiTek Industries, Inc. Mon May 4 11:43:20 2020 Page 1
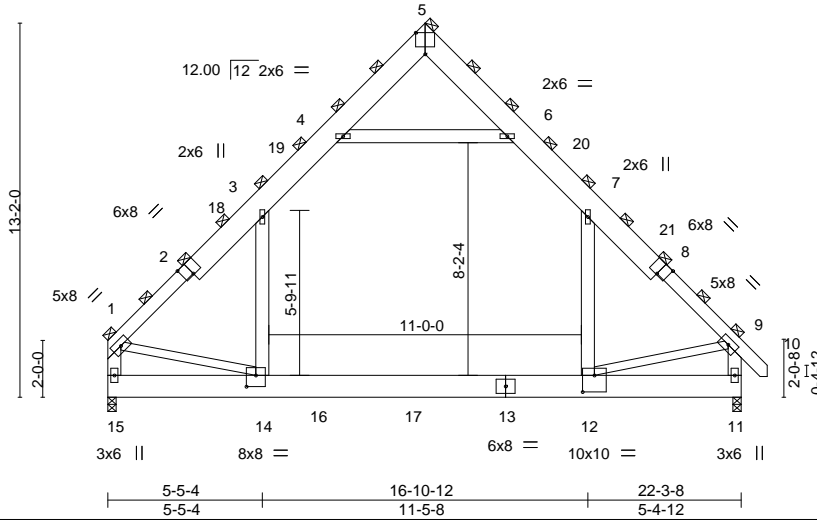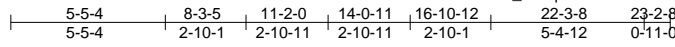ID:FKRF2G2VvSGFSXRUG_ubJqzaK1d-8aReIsVqby63ybuf0wT490nPv1eoMWBg9H1Rc1zJuNL

6x8 ═

Scale = 1:81.1

Plate Offsets (X,Y)--   [2:0-4-0,Edge], [5:0-4-0,Edge], [8:0-4-0,Edge], [12:0-5-0,0-7-0], [14:0-4-0,0-4-12]

LOADING (psf)		SPACING-	3-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	-0.14	12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.22	12-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.23	Horz(CT)	0.01	11	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.04	12-14	>999	240	Weight: 531 lb	FT = 20%

LUMBER-
TOP CHORD   2x10 SP No.1 *Except*
     1-2,8-10: 2x6 SP No.1
BOT CHORD   2x10 SP No.1
WEBS   2x6 SP No.1 *Except*
     1-14,9-12: 2x4 SP No.2

BRACING-
TOP CHORD   2-0-0 oc purlins (6-0-0 max.), except end verticals
     (Switched from sheeted: Spacing > 2-8-0).
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.   (size)   15=0-3-8, 11=0-3-8
      Max Horz 15=461(LC 11)
      Max Grav 15=2782(LC 21), 11=2657(LC 20)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
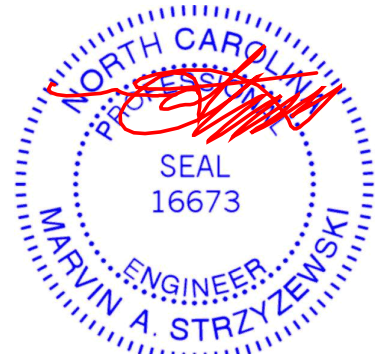TOP CHORD   1-3=-3258/53, 3-4=-1866/275, 4-5=-67/483, 5-6=-65/413, 6-7=-1937/271, 7-9=-3213/57,
     1-15=-3076/74, 9-11=-3100/140
BOT CHORD   14-15=-440/631, 12-14=0/2132, 11-12=-90/352
WEBS   4-6=-2527/395, 3-14=0/1661, 7-12=0/1519, 1-14=0/1953, 9-12=0/2038

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, 2x10 - 2 rows staggered at 0-9-0 oc.
   Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc.
   Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 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) and C-C Exterior(2) 0-2-12 to 4-7-9, Interior(1) 4-7-9 to 11-2-0, Exterior(2) 11-2-0 to 15-6-13, Interior(1) 15-6-13
   to 23-1-0 zone; end vertical right exposed;C-C for members and forces & MWFRS for reactions shown; 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.
7) Ceiling dead load (10.0 psf) on member(s). 3-4, 6-7, 4-6; Wall dead load (5.0psf) on member(s).3-14, 7-12
8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-14
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) 545 lb down and 76 lb up at
    7-4-8, and 545 lb down and 76 lb up at 10-8-8 on bottom chord. The design/selection of such connection device(s) is the
    responsibility of others.
11) Attic room checked for L/360 deflection.

LOAD CASE(S)   Standard

May 4,2020

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Job	Truss	Truss Type	Qty	Ply	Weaver / 2 Adcock Farm / Harnett	
J0520-2116	C3	ATTIC	1	**2**		E14365416
					Job Reference (optional)	

Comtech, Inc,   Fayetteville, NC - 28314,   8.330 s Mar 23 2020 MiTek Industries, Inc. Mon May 4 11:43:20 2020 Page 2
ID:FKRF2G2VvSGFSXRUG_ubJqzaK1d-8aReIsVqby63ybuf0wT490nPv1eoMWBg9H1Rc1zJuNL

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
        Vert: 14-15=-30, 12-14=-60, 11-12=-30, 1-3=-90, 3-4=-120, 4-5=-90, 5-6=-90, 6-7=-120, 7-9=-90, 9-10=-90, 4-6=-30
        Drag: 3-14=-15, 7-12=-15
   Concentrated Loads (lb)
        Vert: 16=-300(B) 17=-300(B)

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Job	Truss	Truss Type	Qty	Ply	Weaver / 2 Adcock Farm / Harnett	E14365417
J0520-2116	PB	PIGGYBACK	8	1	Job Reference (optional)	

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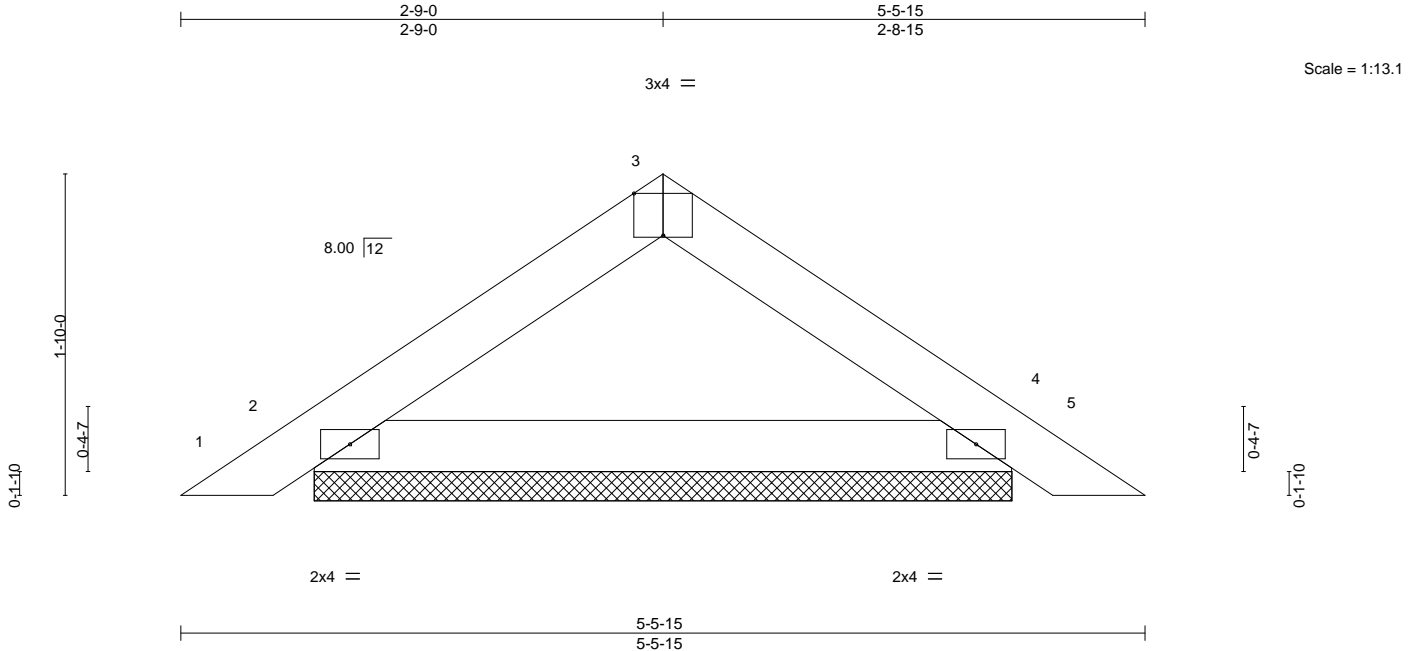ID:FKRF2G2VvSGFSXRUG_ubJqzaK1d-dn?0WCVSMFEwZlTrZe_JiEJgnR7i50zpOwm_9TzJuNK

Scale = 1:13.1

Plate Offsets (X,Y)--   [3:0-2-0,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	0.05	Vert(LL)	0.00	4	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	0.00	5	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 16 lb	FT = 20%

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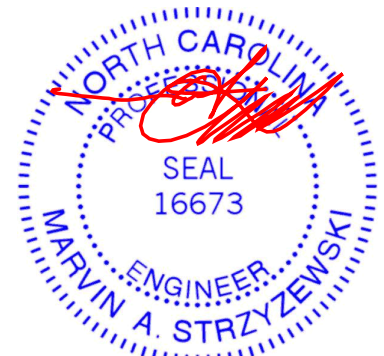TOP CHORD   2x4 SP No.1
BOT CHORD   2x4 SP No.1

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 5-5-15 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.   (size) 2=3-11-11, 4=3-11-11
Max Horz 2=-40(LC 10)
Max Uplift 2=-16(LC 12), 4=-16(LC 13)
Max Grav 2=189(LC 1), 4=189(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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

May 4,2020

ENGINEERING BY
TRENCO
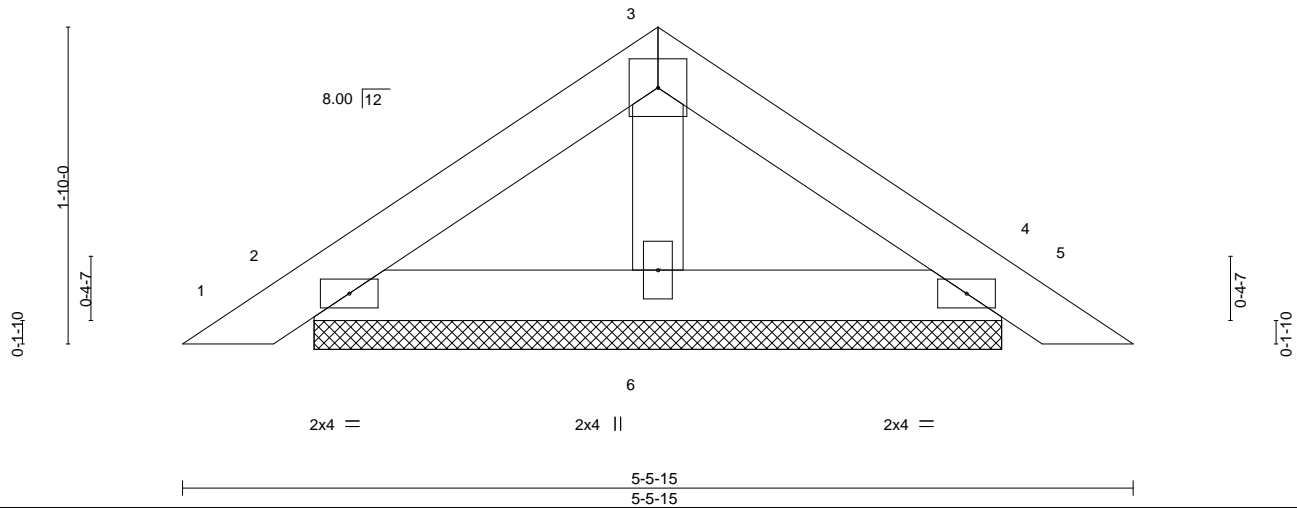A MiTek Affiliate

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8.330 s Mar 23 2020 MiTek Industries, Inc. Mon May 4 11:43:22 2020 Page 1
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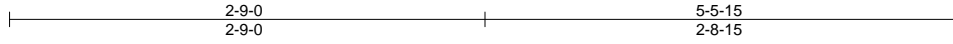
2-9-0 | 5-5-15
2-9-0 | 2-8-15

4x4 ≡

Scale = 1:13.3

8.00 ⌐12

5-5-15
5-5-15

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d		PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	0.00	4	n/r	120		MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	0.00	5	n/r	120			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	4	n/a	n/a			
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P								Weight: 17 lb	FT = 20%

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

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 5-5-15 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.
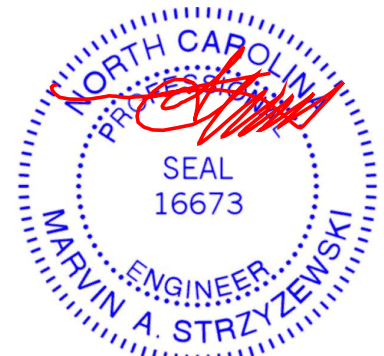
REACTIONS.   (size)   2=3-11-11, 4=3-11-11, 6=3-11-11
                Max Horz 2=50(LC 11)
                Max Uplift 2=-45(LC 12), 4=-52(LC 13)
                Max Grav 2=119(LC 1), 4=119(LC 1), 6=139(LC 1)

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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed;
   MWFRS (envelope) gable end zone and C-C Corner(3) 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) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
   will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building
   designer.

May 4,2020

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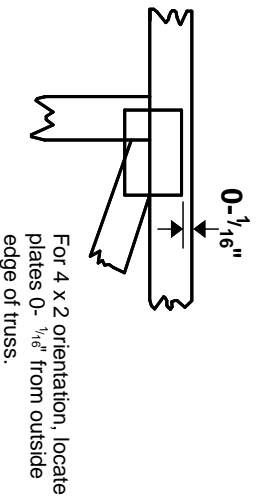**TRENCO**
A MiTek Affiliate
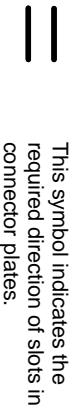
818 Soundside Road
Edenton, NC 27932

Symbols

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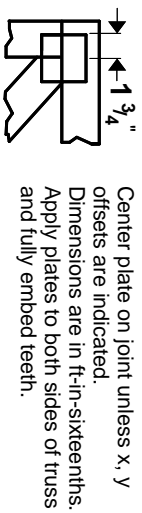
Center plate on joint unless x, y offsets are indicated.
Dimensions are in ft-in-sixteenths.
Apply plates to both sides of truss and fully embed teeth.

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.**
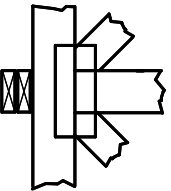
PLATE SIZE

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.
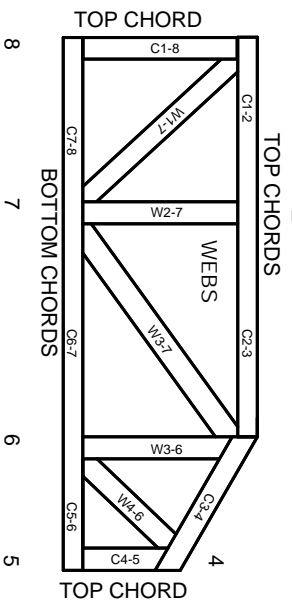
BEARING

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

Numbering System

6-4-8

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

TOP CHORD

1   2   TOP CHORDS   3

C1-8   C1-2   C2-3   C2-4

C7-8   W1-7   W2-7   W3-7   C6-7   W3-6   C5-6   W4-6   C4-5   C3-4

8   7   BOTTOM CHORDS   6   5   4

WEBS

TOP CHORD

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.

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