ENGINEERING BY
TRENCO
A MiTek Affiliate

RE: B0419-1990
Embark B

Trenco
818 Soundside Rd
Edenton, NC 27932

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

Design Code: IRC2015/TPI2014
Design Program: MiTek 20/20 8.1
Wind Code: ASCE 7-10
Wind Speed: 130 mph
Roof Load: 40.0 psf
Floor Load: N/A psf

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

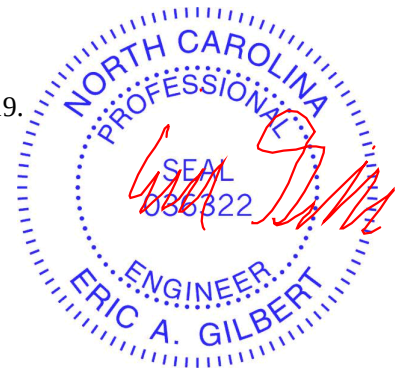
No.	Seal#	Truss Name	Date
1	E12960072	a1	4/25/2019
2	E12960073	a2	4/25/2019
3	E12960074	a3	4/25/2019
4	E12960075	a4-p	4/25/2019
5	E12960076	a4-pa	4/25/2019
6	E12960077	a5-p	4/25/2019
7	E12960078	a6	4/25/2019
8	E12960079	a7	4/25/2019
9	E12960080	b1	4/25/2019
10	E12960081	c1	4/25/2019
11	E12960082	c2	4/25/2019
12	E12960083	g1	4/25/2019
13	E12960084	g2	4/25/2019
14	E12960085	g3	4/25/2019
15	E12960086	g4	4/25/2019
16	E12960087	gj1	4/25/2019
17	E12960088	gj2	4/25/2019
18	E12960089	gjc1	4/25/2019

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, 2019.

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.

April 25, 2019

Gilbert, Eric

Job	Truss	Truss Type	Qty	Ply	Embark B
B0419-1990	A1	KINGPOST	1	1	E12960072
					Job Reference (optional)

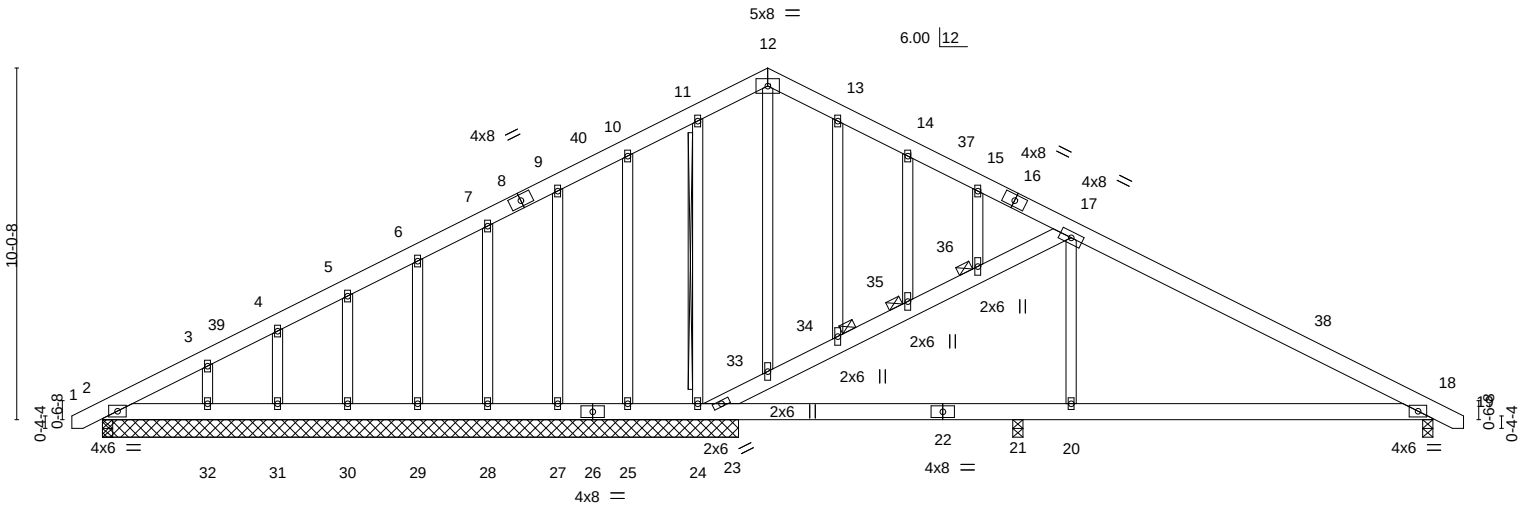
Comtech, Inc., Fayetteville, NC 28309 — 8.130 s Mar 11 2018 MiTek Industries, Inc. Thu Apr 25 07:31:41 2019 Page 1

ID:Wu6AUPOZbrU4SgrgbEwHBtzeN_9-xzgqQuogbGeZOorS7qrSW3fegtW7UaI_fLFAURzNF?G

-0-10-8 | 19-0-0 | 27-8-0 | 38-0-0 | 38-10-8

0-10-8 | 19-0-0 | 8-8-0 | 10-4-0 | 0-10-8

Scale = 1:65.8



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	0.44	Vert(LL)	-0.07	18-20	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	-0.17	18-20	>803	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(CT)	-0.02	2	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.08	18-20	>999	240	Weight: 314 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.3 *Except*
17-23: 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 10-0-0 oc bracing.
WEBS T-Brace: 2x4 SPF No.2 - 11-24
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.
JOINTS 1 Brace at Jt(s): 34, 35, 36

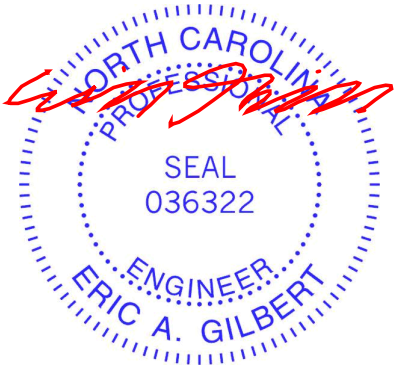
REACTIONS. All bearings 18-2-0 except (jt=length) 2=0-3-8, 2=0-3-8, 18=0-3-8, 21=0-3-8.
(lb) - Max Horz 18=199(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 2, 25, 27, 28, 29, 30, 31, 21 except 24=-939(LC 3), 32=-111(LC 10), 18=-254(LC 11)
Max Grav All reactions 250 lb or less at joint(s) 2, 2, 24, 25, 27, 28, 29, 30, 31, 32, 21 except 23=1544(LC 3), 18=837(LC 1)

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

TOP CHORD 12-13=-175/270, 15-17=-335/211, 17-18=-1097/343, 2-3=-316/29, 3-4=-267/24, 11-12=-246/293
BOT CHORD 2-32=-21/278, 31-32=-21/278, 30-31=-21/278, 29-30=-21/278, 28-29=-21/278, 27-28=-21/278, 25-27=-21/278, 24-25=-21/278, 23-24=-21/278, 21-23=-331/871, 20-21=-331/871, 18-20=-331/871
WEBS 23-33=-796/417, 33-34=-824/456, 34-35=-804/439, 35-36=-753/400, 17-36=-803/434, 11-24=-296/108, 17-20=0/256

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) gable end zone and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 14-7-3, Exterior(2) 14-7-3 to 19-0-0, Interior(1) 23-4-13 to 34-3-13 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 with a clearance greater than 6-0-0 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, 25, 27, 28, 29, 30, 31, 21 except (jt=lb) 24=939, 32=111, 18=254.
7) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



April 25,2019

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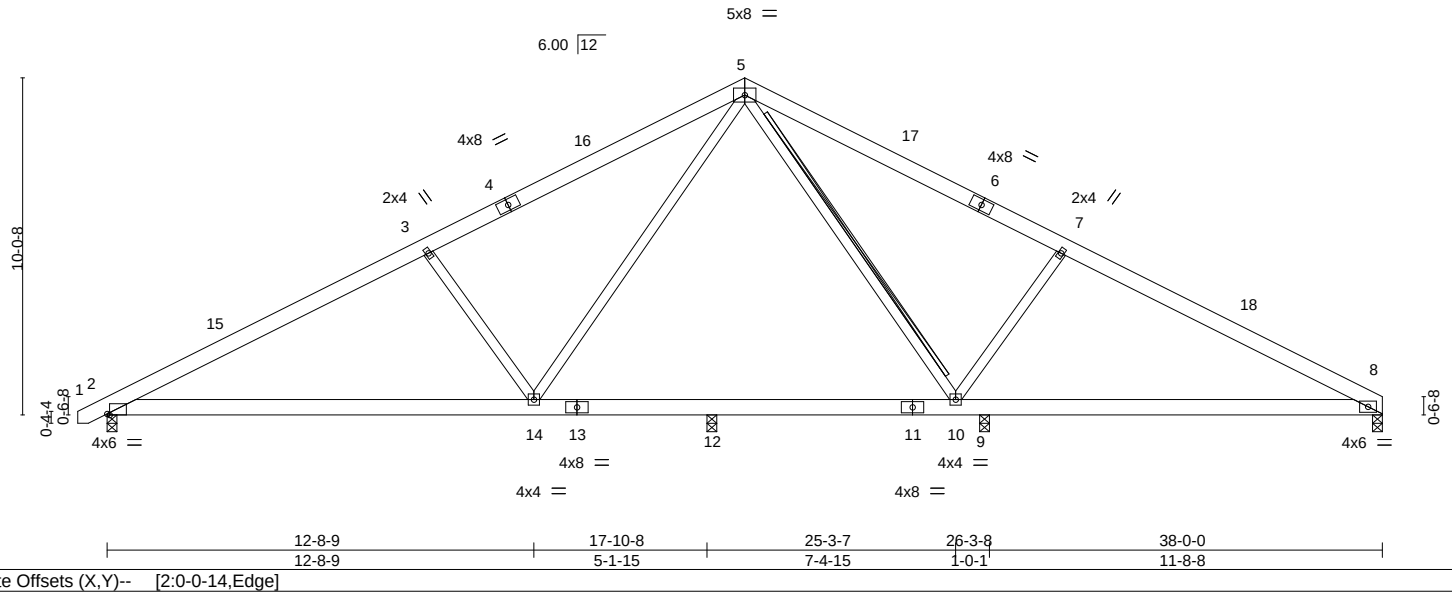
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Embark B
B0419-1990	A2	COMMON	4	1	E12960073
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Thu Apr 25 07:31:42 2019 Page 1
ID:Wu6AUPOZbrU4SgrgbEwHBtzeN_9-P9ECeEpIMamQ0yQegXMh3GCppHpuDy48t??k0tzNF?F

-0-10-8 9-6-14 19-0-0 28-5-2 38-0-0
0-10-8 9-6-14 9-5-2 9-5-2 9-6-14

Scale = 1:68.7



12-8-9 17-10-8 25-3-7 26-3-8 38-0-0
12-8-9 5-1-15 7-4-15 1-0-1 11-8-8

Plate Offsets (X,Y)-- [2:0-0-14,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	0.42	Vert(LL)	-0.17	2-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.37	2-14	>576	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.03	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.07	2-14	>999	240	Weight: 240 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
7-10,3-14: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-8-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS T-Brace: 2x4 SPF No.2 - 5-10
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 0-3-8.
(lb) - Max Horz 2=129(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 9 except 2=-137(LC 10), 8=-103(LC 11)
Max Grav All reactions 250 lb or less at joint(s) except 2=1059(LC 1), 8=550(LC 18), 12=612(LC 16), 9=1233(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1554/513, 3-5=-1249/519, 5-7=-450/333, 7-8=-706/329
BOT CHORD 2-14=-326/1357, 12-14=-29/616, 10-12=-29/616, 9-10=-167/569, 8-9=-167/569
WEBS 5-10=-685/122, 7-10=-600/363, 5-14=-183/820, 3-14=-593/348

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) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 14-7-3, Exterior(2) 14-7-3 to 19-0-0, Interior(1) 23-4-13 to 33-5-7 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 with a clearance greater than 6-0-0 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) 9 except (jt=lb) 2=137, 8=103.
6) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

April 25,2019

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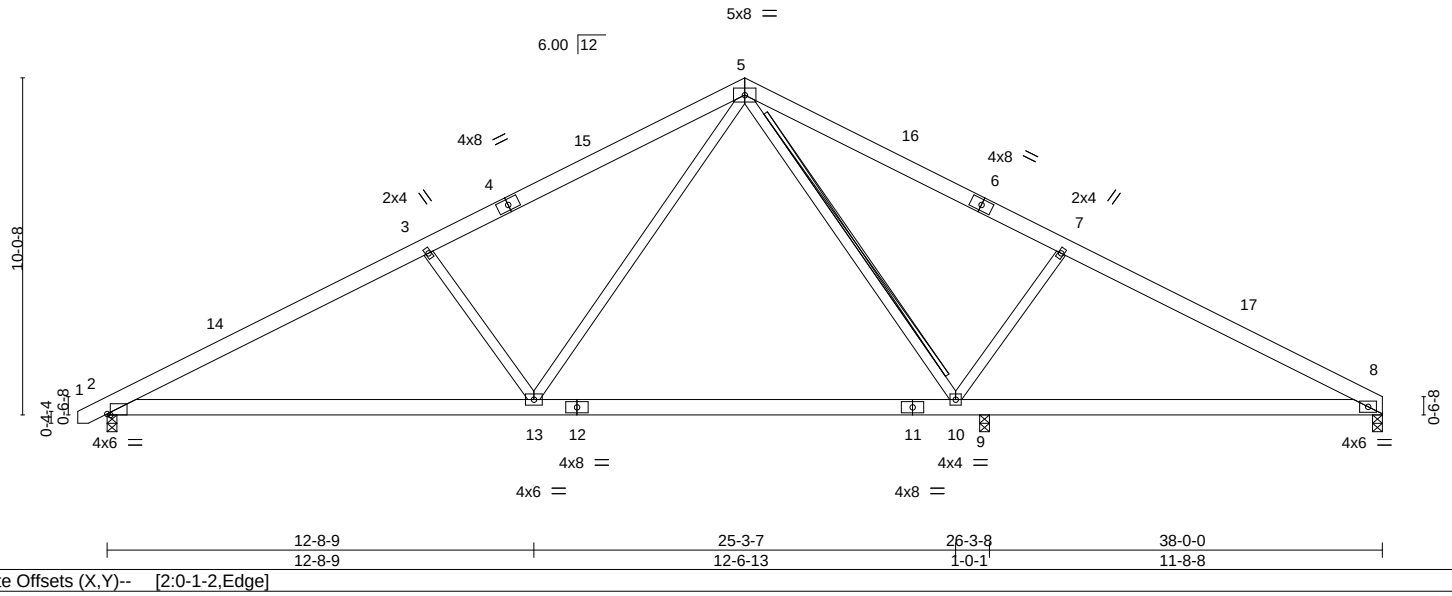
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Embark B
B0419-1990	A3	COMMON	4	1	E12960074
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Thu Apr 25 07:31:43 2019 Page 1
ID:Wu6AUPOZbrU4SgrgbEwHBtzeN_9-tLoaraqw7tuHd6?qEEuwbUk_hh3ByOpH6fkHYJzNF?E

-0-10-8 9-6-14 19-0-0 28-5-2 38-0-0
0-10-8 9-6-14 9-5-2 9-5-2 9-6-14

Scale = 1:68.7



12-8-9 25-3-7 26-3-8 38-0-0
12-8-9 12-6-13 1-0-1 11-8-8

Plate Offsets (X,Y)-- [2:0-1-2,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	0.41	Vert(LL)	-0.59	10-13	>533	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.75	10-13	>415	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.05	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.09	10-13	>999	240	Weight: 240 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
7-10,3-13: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-9-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
8-1-14 oc bracing: 10-13.
WEBS T-Brace: 2x4 SPF No.2 - 5-10
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. (lb/size) 2=1196/0-3-8, 8=699/0-3-8, 9=1173/0-3-8
Max Horz 2=129(LC 9)
Max Uplift 2=-134(LC 10), 8=-97(LC 11), 9=-45(LC 11)
Max Grav 2=1335(LC 2), 8=915(LC 18), 9=1173(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2355/556, 3-5=-2083/562, 5-7=-1323/378, 7-8=-1596/374
BOT CHORD 2-13=-364/2086, 10-13=-55/1131, 9-10=-207/1338, 8-9=-207/1338
WEBS 5-10=-493/301, 7-10=-592/362, 5-13=-205/1241, 3-13=-584/346

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) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 14-7-3, Exterior(2) 14-7-3 to 19-0-0, Interior(1) 23-4-13 to 33-5-7 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 with a clearance greater than 6-0-0 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) 8, 9 except (jt=lb) 2=134.
6) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

April 25,2019

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Embark B
B0419-1990	A4-P	COMMON	3	1	E12960075
					Job Reference (optional)

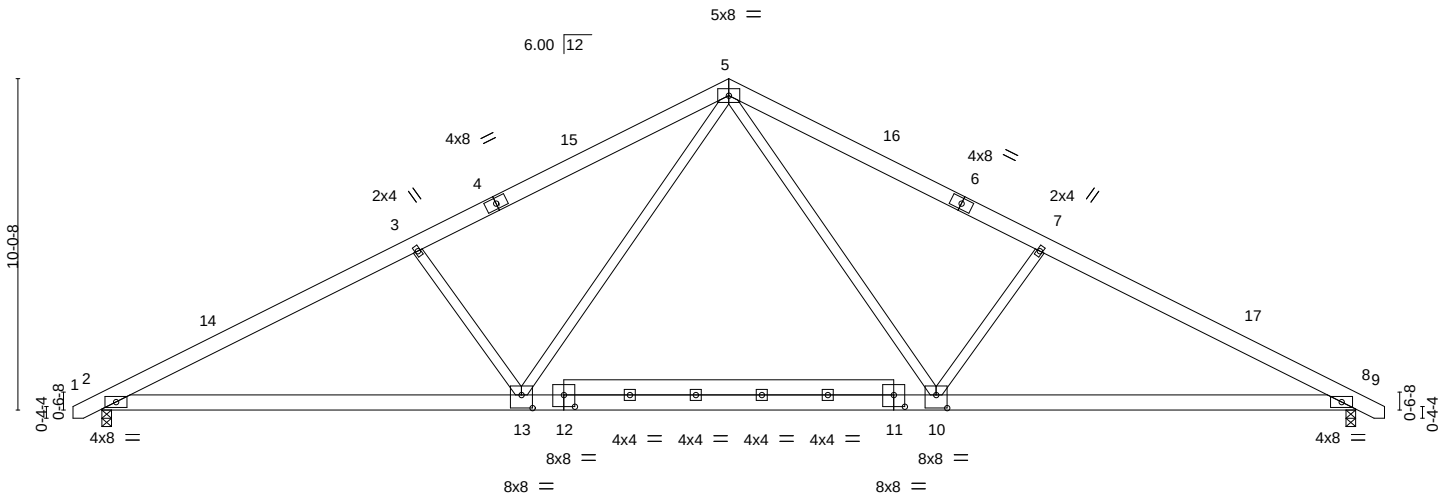
Comtech, Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Thu Apr 25 07:31:44 2019 Page 1

ID:Wu6AUPOZbrU4SgrgbEwHBtzeN_9-MYMy3wrYuB08FGa1oyP98hH9P5SRhsaRLJUr5mzNF?D

-0-10-8 9-6-14 19-0-0 28-5-2 38-0-0 38-10-8

0-10-8 9-6-14 9-5-2 9-5-2 9-6-14 0-10-8

Scale = 1:69.8



12-8-9 25-3-7 38-0-0

12-8-9 12-6-13 12-8-9

Plate Offsets (X,Y)-- [10:0-4-0,0-4-12], [11:0-4-0,0-4-4], [12:0-4-0,0-4-4], [13:0-4-0,0-4-12]

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	0.41	Vert(LL)	-0.28	10-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.40	10-13	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.09	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.08	10-13	>999	240	Weight: 266 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
7-10,3-13: 2x4 SP No.3, 11-12: 2x6 SP No.1

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-2-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=1560/0-3-8, 8=1560/0-3-8
Max Horz 2=128(LC 9)
Max Uplift 2=-141(LC 10), 8=-141(LC 11)
Max Grav 2=1646(LC 2), 8=1646(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2975/722, 3-5=-2725/728, 5-7=-2725/728, 7-8=-2975/722
BOT CHORD 2-13=-493/2635, 10-13=-202/1720, 8-10=-493/2586
WEBS 5-10=-190/1170, 7-10=-575/343, 5-13=-190/1171, 3-13=-575/343

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) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 14-7-3, Exterior(2) 14-7-3 to 19-0-0, Interior(1) 23-4-13 to 34-3-13 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 with a clearance greater than 6-0-0 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) 2=141, 8=141.

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Embark B
B0419-1990	A4-PA	COMMON	2	1	E12960076
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 — 8.130 s Mar 11 2018 MiTek Industries, Inc. Thu Apr 25 07:31:44 2019 Page 1

ID:Wu6AUPOZbrU4SgrgbEwHBtzeN_9-MYMy3wrYuB08FGa1oyP98hH9J5SRhr7RLJUr5mzNF?D

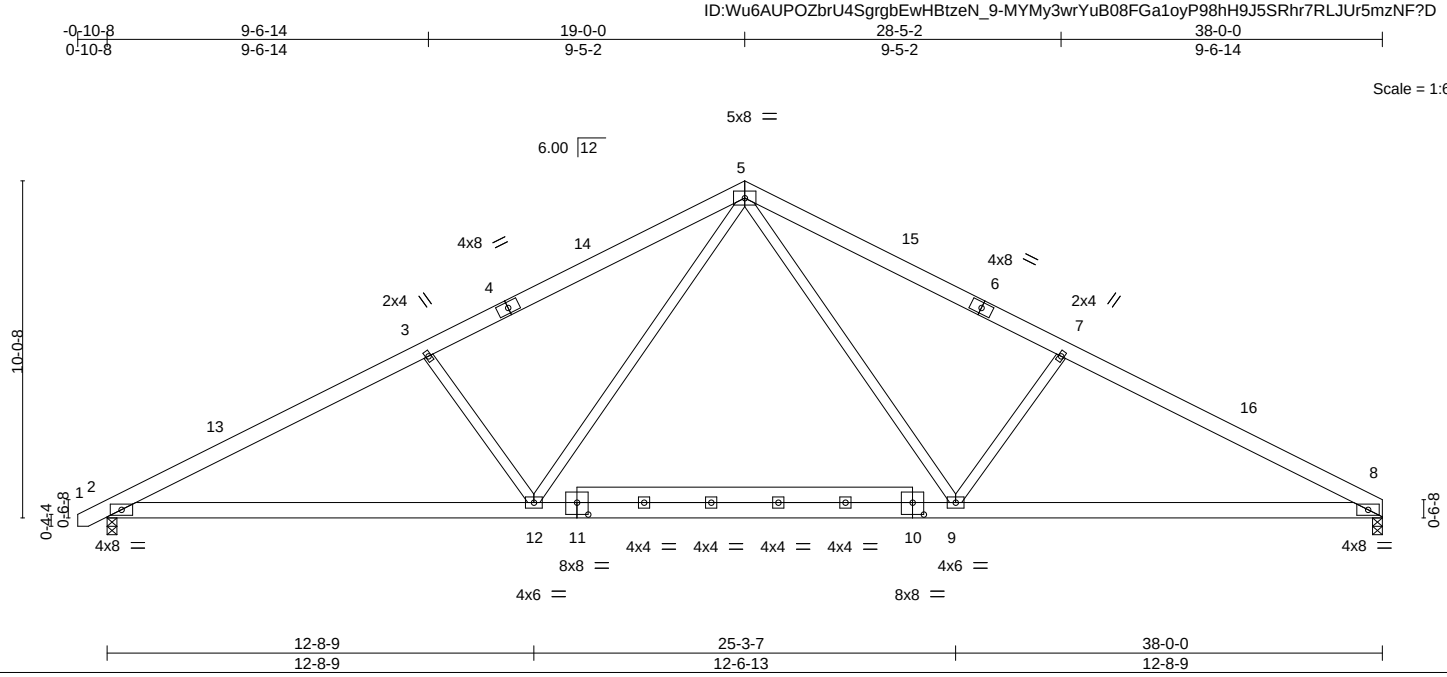

Plate Offsets (X,Y)-- [10:0-4-0,0-4-4], [11:0-4-0,0-4-4]

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	0.42	Vert(LL)	-0.29	9-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.41	9-12	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.09	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.08	9-12	>999	240	Weight: 263 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
7-9,3-12: 2x4 SP No.3, 10-11: 2x6 SP No.1

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-1-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=1561/0-3-8, 8=1508/0-3-8
Max Horz 2=129(LC 7)
Max Uplift 2=-141(LC 10), 8=-129(LC 11)
Max Grav 2=1646(LC 2), 8=1602(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2976/728, 3-5=-2726/734, 5-7=-2728/742, 7-8=-2979/738
BOT CHORD 2-12=-516/2632, 9-12=-225/1717, 8-9=-531/2591
WEBS 5-9=-203/1173, 7-9=-579/359, 5-12=-191/1171, 3-12=-575/344

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) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 14-7-3, Exterior(2) 14-7-3 to 19-0-0, Interior(1) 23-4-13 to 33-5-7 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 with a clearance greater than 6-0-0 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) 2=141, 8=129.

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A MiTek Affiliate
818 Soundside Road
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Job	Truss	Truss Type	Qty	Ply	Embark B
B0419-1990	A5-P	COMMON	2	1	E12960077
					Job Reference (optional)

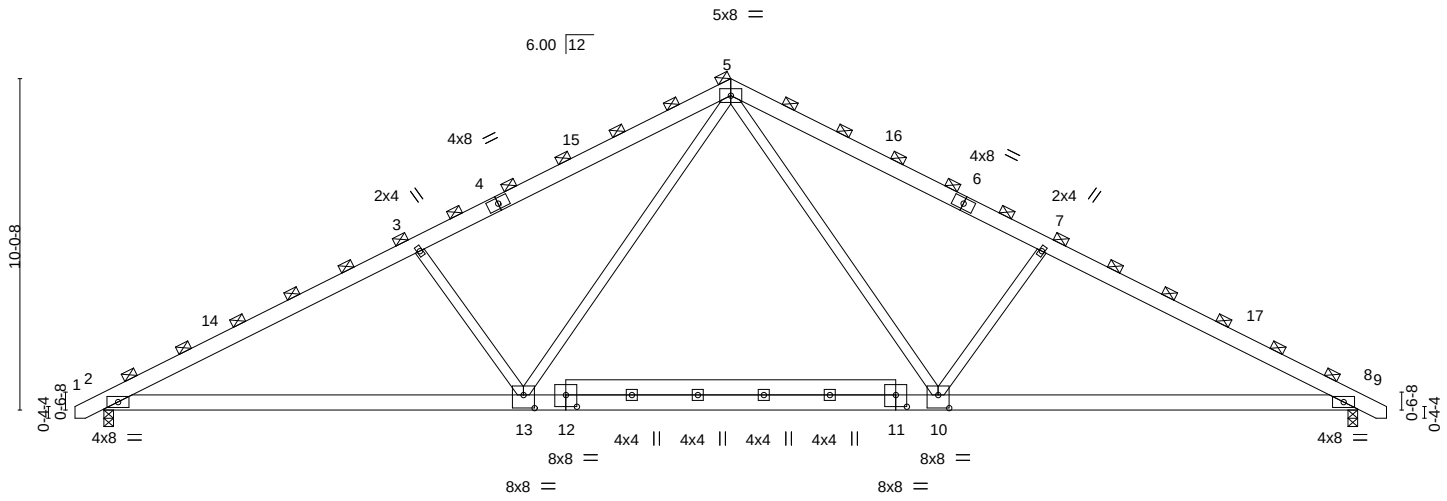
Comtech, Inc., Fayetteville, NC 28309 — 8.130 s Mar 11 2018 MiTek Industries, Inc. Thu Apr 25 07:31:45 2019 Page 1

ID:Wu6AUPOZbrU4SgrgbEwHBtzeN_9-qkwLGGrAfV8?tQ9DMfwOgvqJbUmsQIPaZzDOdCzNF?C

-0-10-8 | 9-6-14 | 19-0-0 | 28-5-2 | 38-0-0 | 38-10-8

0-10-8 | 9-6-14 | 9-5-2 | 9-5-2 | 9-6-14 | 0-10-8

Scale = 1:69.8



12-8-9 | 25-3-7 | 38-0-0

12-8-9 | 12-6-13 | 12-8-9

Plate Offsets (X,Y)-- [10:0-4-0,0-4-12], [11:0-4-0,0-4-4], [12:0-4-0,0-4-4], [13:0-4-0,0-4-12]

LOADING (psf)		SPACING-	2-1-8	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.51	Vert(LL)	-0.30	10-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.43	10-13	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.46	Horz(CT)	0.10	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.08	10-13	>999	240	Weight: 266 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
7-10,3-13: 2x4 SP No.3, 11-12: 2x6 SP No.1

BRACING-

TOP CHORD 2-0-0 oc purlins (4-0-1 max.)
(Switched from sheeted: Spacing > 2-0-0).
BOT CHORD Rigid ceiling directly applied or 9-8-5 oc bracing.

REACTIONS. (lb/size) 2=1658/0-3-8, 8=1658/0-3-8
Max Horz 2=-136(LC 8)
Max Uplift 2=-150(LC 10), 8=-150(LC 11)
Max Grav 2=1749(LC 2), 8=1749(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3161/767, 3-5=-2895/774, 5-7=-2895/774, 7-8=-3161/767
BOT CHORD 2-13=-524/2800, 10-13=-215/1828, 8-10=-524/2748
WEBS 5-10=-202/1243, 7-10=-611/365, 5-13=-202/1244, 3-13=-611/365

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) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 14-7-3, Exterior(2) 14-7-3 to 19-0-0, Interior(1) 23-4-13 to 34-3-13 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 with a clearance greater than 6-0-0 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) 2=150, 8=150.
6) 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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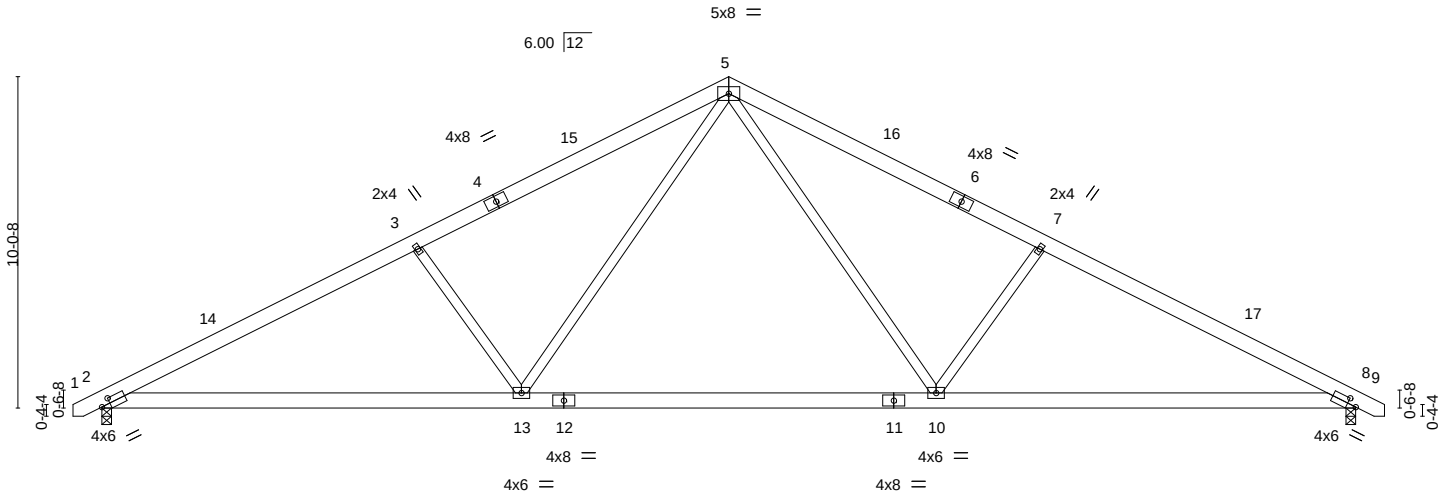
Job	Truss	Truss Type	Qty	Ply	Embark B
B0419-1990	A6	COMMON	11	1	E12960078
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Thu Apr 25 07:31:46 2019 Page 1
ID:Wu6AUPOZbrU4SgrgbEwHBtzeN_9-IwUjTcspQoHsUakPvNRdD6MVsu5S9m9kodzx9ezNF?B

-0-10-8 9-6-14 19-0-0 28-5-2 38-0-0 38-10-8
0-10-8 9-6-14 9-5-2 9-5-2 9-6-14 0-10-8

Scale = 1:69.8



12-8-9 25-3-7 38-0-0
12-8-9 12-6-13 12-8-9

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

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	0.41	Vert(LL)	-0.59	10-13	>772	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.72	10-13	>631	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.08	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.07	2-13	>999	240	Weight: 242 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
7-10,3-13: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-2-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=1560/0-3-8, 8=1560/0-3-8
Max Horz 2=-128(LC 8)
Max Uplift 2=-141(LC 10), 8=-141(LC 11)
Max Grav 2=1646(LC 2), 8=1646(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3017/718, 3-5=-2746/724, 5-7=-2746/724, 7-8=-3017/718
BOT CHORD 2-13=-490/2652, 10-13=-192/1734, 8-10=-490/2603
WEBS 5-10=-188/1180, 7-10=-577/344, 5-13=-188/1180, 3-13=-577/344

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) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 14-7-3, Exterior(2) 14-7-3 to 19-0-0, Interior(1) 23-4-13 to 34-3-13 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 with a clearance greater than 6-0-0 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) 2=141, 8=141.

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818 Soundside Road
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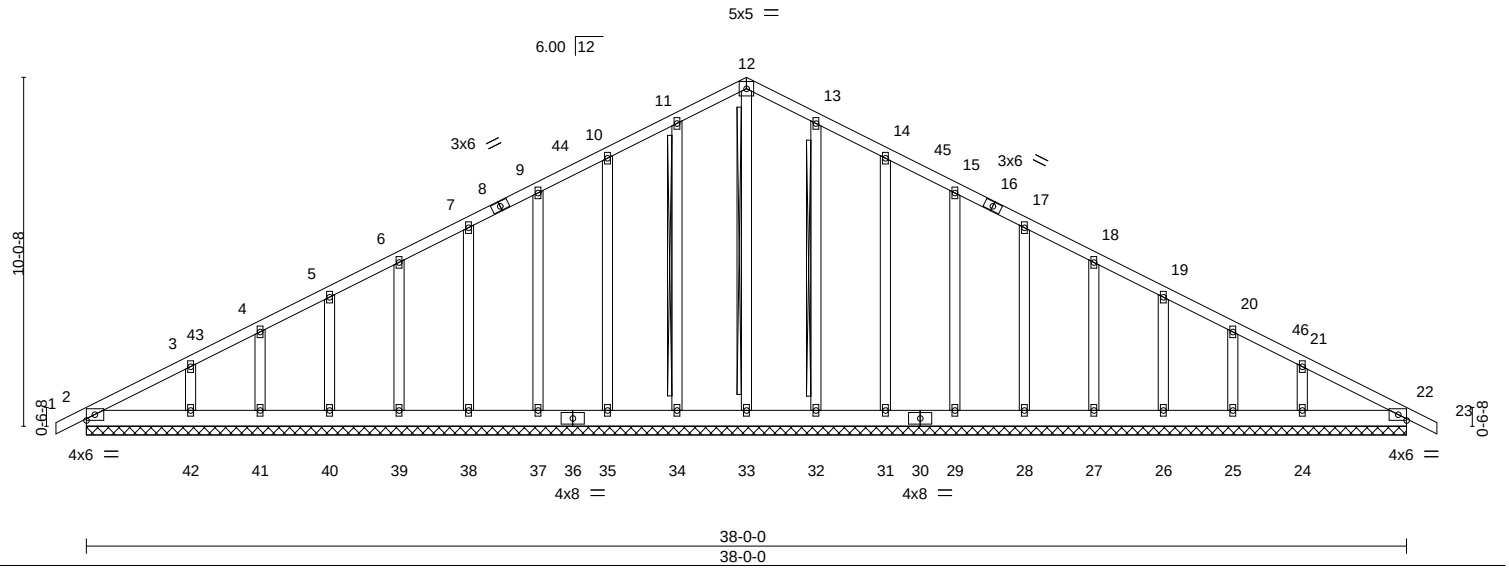
Job	Truss	Truss Type	Qty	Ply	Embark B
B0419-1990	A7	GABLE	1	1	E12960079
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Thu Apr 25 07:31:48 2019 Page 1
ID:Wu6AUPOZbrU4SgrgbEwHBtzeN_9-EJbTuHu3xQXaktuo1oT5IXSwai_XdkI0GxS2EXzNF?9

-0-10-8 19-0-0 38-0-0 38-10-8
0-10-8 19-0-0 19-0-0 0-10-8

Scale = 1:66.3



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	0.08	Vert(LL)	0.00	22	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	22	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.01	22	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 284 lb	FT = 20%

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

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 - 12-33, 11-34, 13-32
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 38-0-0.
(lb) - Max Horz 2=201(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 2, 34, 35, 37, 38, 39, 40, 41, 32, 31, 29, 28, 27, 26, 25 except 42=-119(LC 10), 24=-117(LC 11)
Max Grav All reactions 250 lb or less at joint(s) 2, 22, 34, 35, 37, 38, 39, 40, 41, 42, 32, 31, 29, 28, 27, 26, 25, 24 except 33=285(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-267/81, 10-11=-101/303, 11-12=-121/390, 12-13=-121/390, 13-14=-101/303
BOT CHORD 2-42=-61/262, 41-42=-61/262, 40-41=-61/262, 39-40=-61/262, 38-39=-61/262, 37-38=-61/262, 35-37=-61/262, 34-35=-61/262, 33-34=-61/262, 32-33=-61/262, 31-32=-61/262, 29-31=-61/262, 28-29=-61/262, 27-28=-61/262, 26-27=-61/262, 25-26=-61/262, 24-25=-61/262, 22-24=-61/262

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 14-7-3, Corner(3) 14-7-3 to 19-0-0, Exterior(2) 23-4-13 to 34-5-11 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 with a clearance greater than 6-0-0 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, 34, 35, 37, 38, 39, 40, 41, 32, 31, 29, 28, 27, 26, 25 except (jt=lb) 42=119, 24=117.
10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

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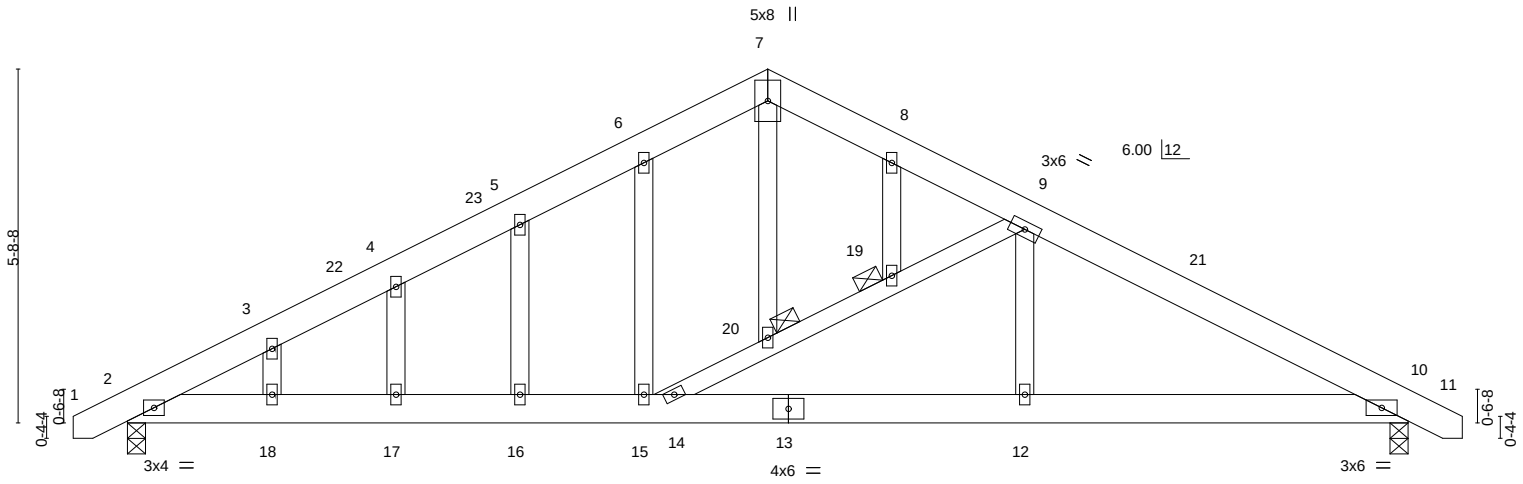
Job	Truss	Truss Type	Qty	Ply	Embark B
B0419-1990	B1	KINGPOST	1	1	E12960080
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Thu Apr 25 07:31:49 2019 Page 1
ID:Wu6AUPOZbrU4SgrgbEwHBtzeN_9-iV9r6duhijfRL1T_bV_Krl_106D2M1JAUbCbmzzNF?8

0-10-8 10-4-0 14-5-12 20-8-0 21-6-8
0-10-8 10-4-0 4-1-12 6-2-4 0-10-8

Scale = 1:37.2



14-5-12 20-8-0
14-5-12 6-2-4

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	0.35	Vert(LL)	-0.10	16-17	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.21	16-17	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.79	Horz(CT)	-0.02	2	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.14	16-17	>999	240	Weight: 144 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 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 19, 20

REACTIONS. (lb/size) 10=867/0-3-8, 2=867/0-3-8
Max Horz 10=-112(LC 11)
Max Uplift 10=-212(LC 11), 2=-212(LC 10)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 7-8=-962/433, 8-9=-991/405, 9-10=-1301/399, 2-3=-1115/285, 3-4=-1064/324, 4-5=-1014/349, 5-6=-1079/422, 6-7=-844/393
BOT CHORD 2-18=-164/908, 17-18=-164/908, 16-17=-164/908, 15-16=-164/908, 14-15=-164/908, 12-14=-253/1068, 10-12=-255/1065
WEBS 14-20=-286/160, 19-20=-338/176, 9-19=-313/167, 6-15=-92/437, 5-16=-278/139

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 Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 5-11-3, Exterior(2) 5-11-3 to 10-4-0, Interior(1) 14-6-14 to 16-11-13 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 with a clearance greater than 6-0-0 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) except (jt=lb) 10=212, 2=212.

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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Embark B
B0419-1990	C1	COMMON SUPPORTED GAB	1	1	E12960081
					Job Reference (optional)

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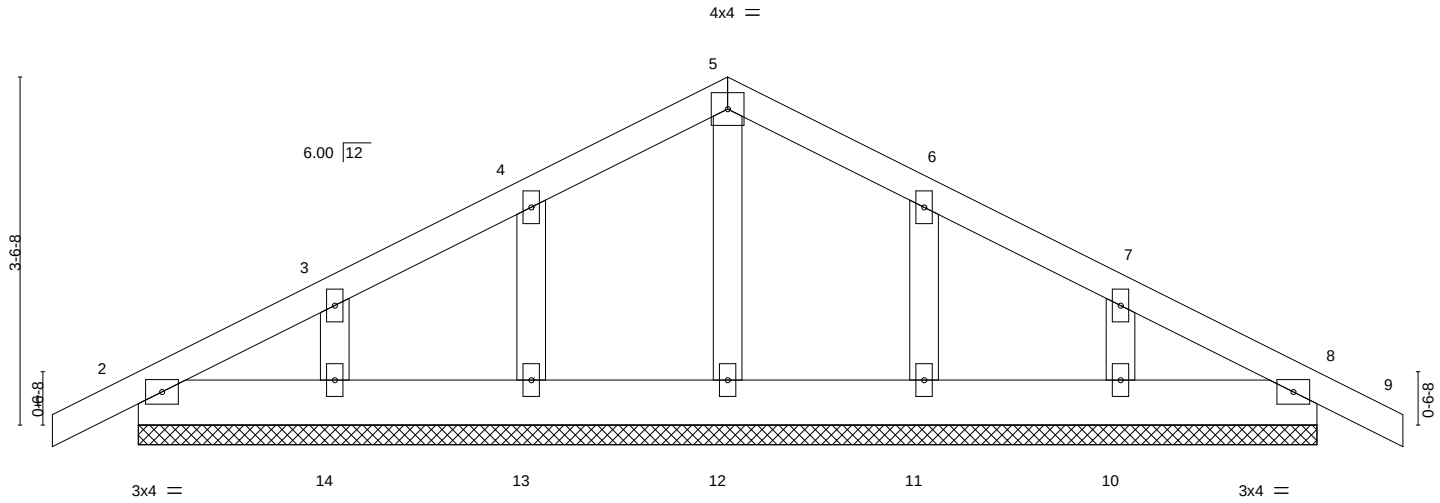
ID:Wu6AUPOZbrU4SgrgbEwHBtzeN_9-AijEJzvJT1nIzB1B8CWZNyXHRVfQ5gvJjFx9lQzNF?7

-0-10-8 / 0-10-8 — 6-0-0 / 6-0-0 — 12-0-0 / 6-0-0 — 12-10-8 / 0-10-8

Scale = 1:23.5



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	-0.00	8	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(CT)	-0.00	8	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 63 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.1
OTHERS 2x4 SP No.3

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 12-0-0.

(lb) - Max Horz 2=70(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 13, 14, 11, 10
Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

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

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (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) 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8, 13, 14, 11, 10.

April 25,2019

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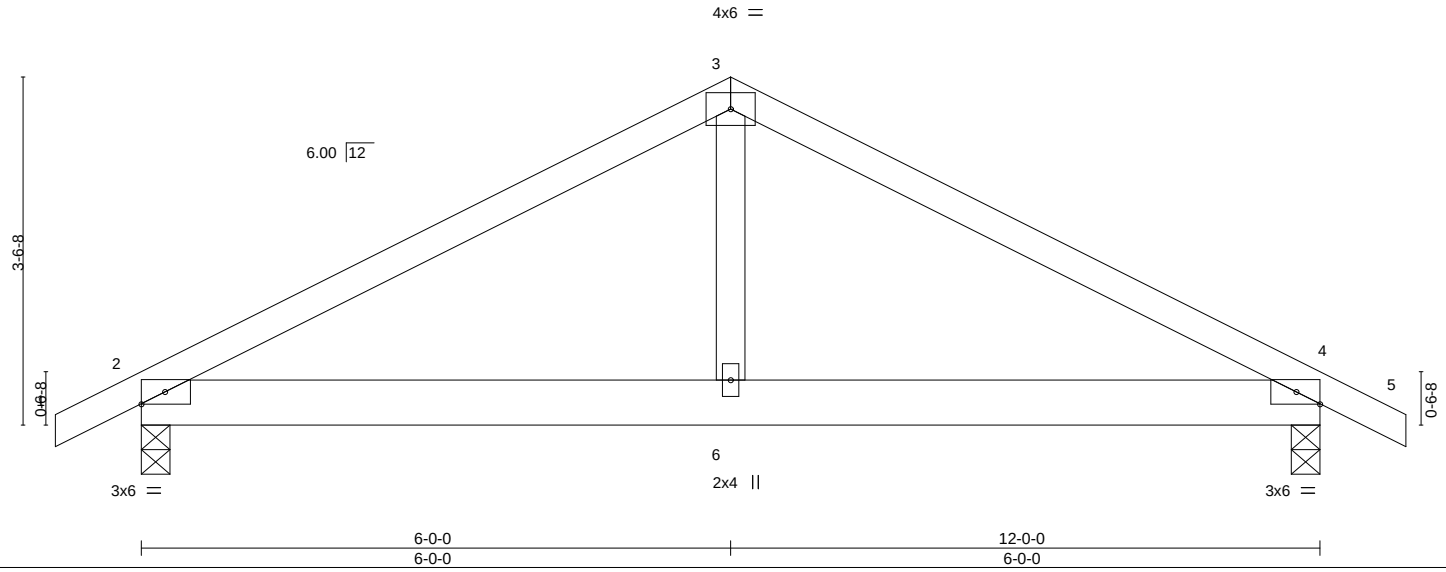
Job	Truss	Truss Type	Qty	Ply	Embark B
B0419-1990	C2	COMMON	1	1	E12960082
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Thu Apr 25 07:31:50 2019 Page 1
ID:Wu6AUPOZbrU4SgrgbEwHBtzeN_9-AijEJzvJT1nIzB1B8CWZNyXDmVd25f5JjFx9lQzNF?7

-0-10-8 6-0-0 12-0-0 12-10-8
0-10-8 6-0-0 6-0-0 0-10-8

Scale = 1:23.5



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.01	4-6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.03	4-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.01	4-6	>999	240	Weight: 55 lb	FT = 20%

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

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. (lb/size) 2=530/0-3-8, 4=530/0-3-8
Max Horz 2=45(LC 9)
Max Uplift 2=-54(LC 10), 4=-54(LC 11)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-648/270, 3-4=-648/270
BOT CHORD 2-6=-104/494, 4-6=-104/494
WEBS 3-6=0/297

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 with a clearance greater than 6-0-0 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, 4.

April 25,2019

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818 Soundside Road
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Job	Truss	Truss Type	Qty	Ply	Embark B
B0419-1990	G1	COMMON	1	1	E12960083

Job Reference (optional)

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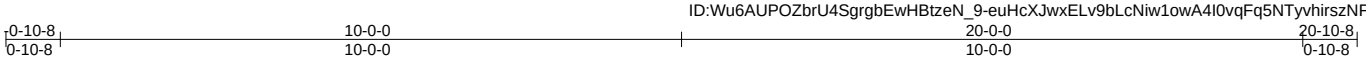

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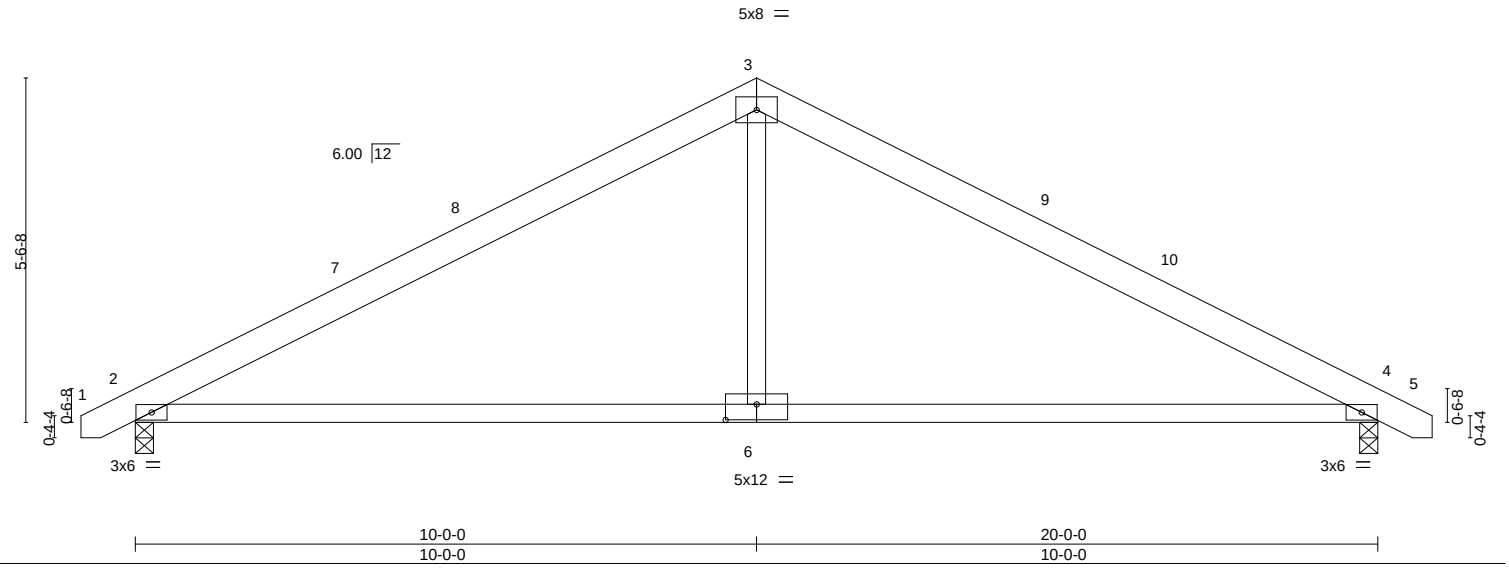

Plate Offsets (X,Y)-- [6:0-6-0,0-3-0]

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	0.58	Vert(LL)	-0.17	2-6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.36	2-6	>659	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.02	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.06	2-6	>999	240	Weight: 94 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (lb/size) 4=840/0-3-8, 2=840/0-3-8
Max Horz 2=70(LC 9)
Max Uplift 4=-79(LC 11), 2=-79(LC 10)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1079/350, 3-4=-1079/350
BOT CHORD 2-6=-151/875, 4-6=-151/875
WEBS 3-6=0/457

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) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 5-7-3, Exterior(2) 5-7-3 to 10-0-0, Interior(1) 14-4-13 to 16-3-13 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 with a clearance greater than 6-0-0 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) 4, 2.

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Job	Truss	Truss Type	Qty	Ply	Embark B
B0419-1990	G2	HIP	1	1	E12960084

Job Reference (optional)

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0-10-8 8-0-0 12-0-0 20-0-0 20-10-8

0-10-8 8-0-0 4-0-0 8-0-0 0-10-8

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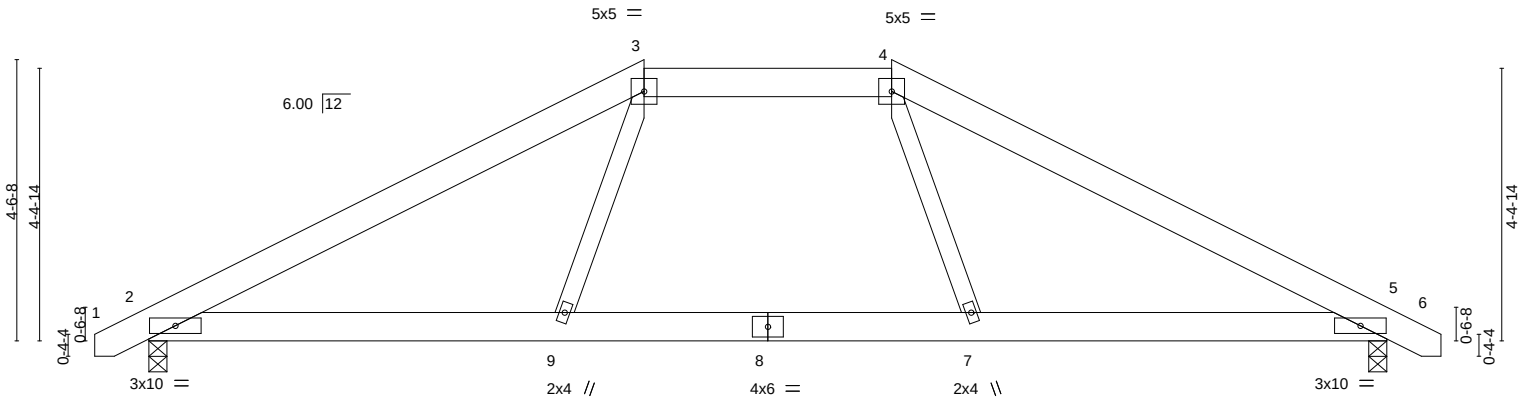

6-8-9 13-3-7 20-0-0

6-8-9 6-6-13 6-8-9

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	-0.07	2-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.10	2-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.04	2-9	>999	240	Weight: 115 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 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=840/0-3-8, 5=840/0-3-8
Max Horz 2=56(LC 9)
Max Uplift 2=-69(LC 10), 5=-69(LC 11)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1256/409, 3-4=-966/462, 4-5=-1256/409
BOT CHORD 2-9=-214/1023, 7-9=-230/966, 5-7=-214/1023
WEBS 3-9=0/306, 4-7=0/306

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) 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 with a clearance greater than 6-0-0 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, 5.

April 25,2019

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Job	Truss	Truss Type	Qty	Ply	Embark B
B0419-1990	G3	HIP	1	1	E12960085
					Job Reference (optional)

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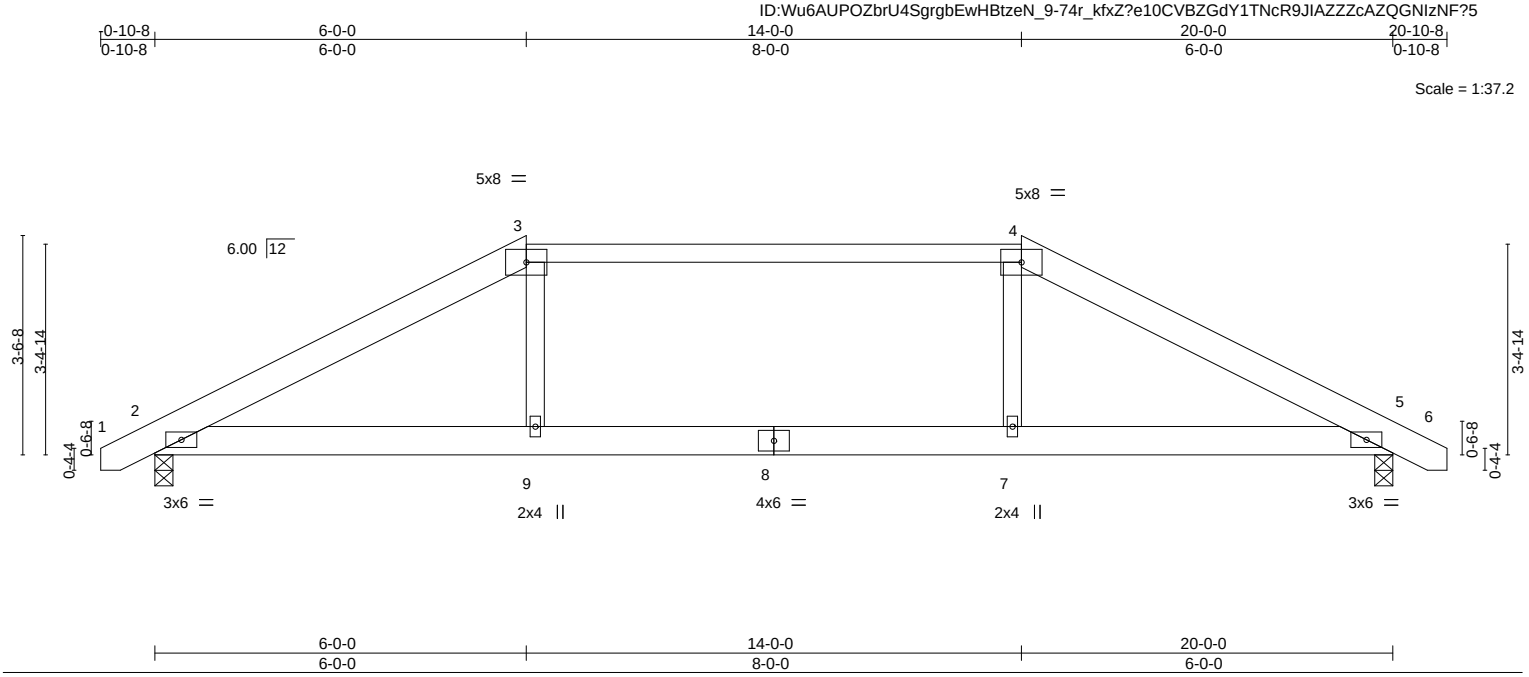

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	-0.07	7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.09	7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.04	9	>999	240	Weight: 103 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.1 *Except*
	3-4: 2x4 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x4 SP No.3

BRACING-

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

REACTIONS. (lb/size) 5=840/0-3-8, 2=840/0-3-8
Max Horz 2=44(LC 9)
Max Uplift 5=-55(LC 11), 2=-55(LC 10)

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

TOP CHORD	2-3=-1359/446, 3-4=-1151/459, 4-5=-1359/446
BOT CHORD	2-9=-280/1144, 7-9=-277/1151, 5-7=-280/1144
WEBS	3-9=0/299, 4-7=0/299

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) 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 with a clearance greater than 6-0-0 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) 5, 2.

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Job	Truss	Truss Type	Qty	Ply	Embark B
B0419-1990	G4	HIP GIRDER	1	1	E12960086
					Job Reference (optional)

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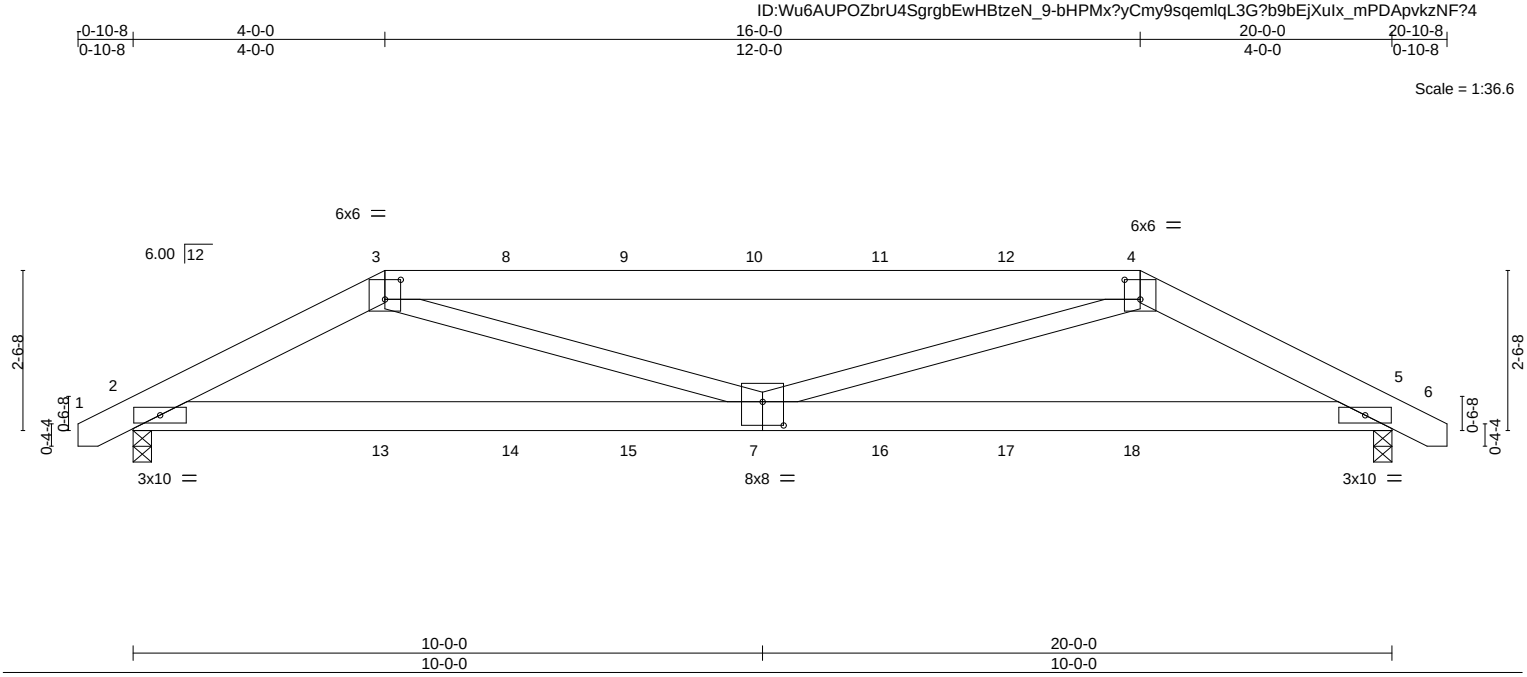


Plate Offsets (X,Y)-- [3:0-3-0,0-3-12], [4:0-3-0,0-3-12], [7:0-4-0,0-4-8]

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	0.79	Vert(LL)	-0.10	2-7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.23	5-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.42	Horz(CT)	0.03	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.08	5-7	>999	240	Weight: 119 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1 *Except*
3-4: 2x6 SP 2400F 2.0E
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.3

BRACING-

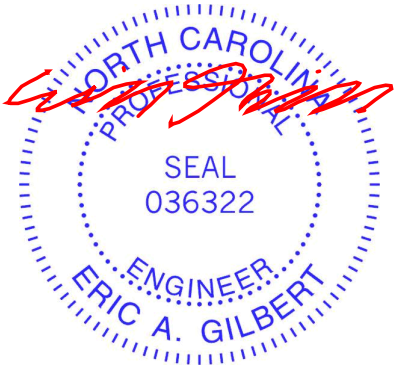
TOP CHORD Structural wood sheathing directly applied or 4-5-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 5=1237/0-3-8, 2=1240/0-3-8
Max Horz 2=-31(LC 6)
Max Uplift 5=-257(LC 9), 2=-259(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2174/607, 3-4=-2609/408, 4-5=-2172/605
BOT CHORD 2-7=-546/1940, 5-7=-520/1938
WEBS 3-7=0/1110, 4-7=0/1111

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); Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) Concentrated loads from layout are not present in Load Case(s): #2 Dead + 0.75 Roof Live (balanced); #6 Dead + 0.6 MWFRS Wind (Neg. Internal) Left; #7 Dead + 0.6 MWFRS Wind (Neg. Internal) Right; #12 Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel; #13 Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel; #14 Dead; #18 Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left); #19 Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right); #20 Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel); #21 Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel); #22 1st Dead + Roof Live (unbalanced); #23 2nd Dead + Roof Live (unbalanced); #24 3rd Dead + 0.75 Roof Live (unbalanced); #25 4th Dead + 0.75 Roof Live (unbalanced).
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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=257, 2=259.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 46 lb down and 54 lb up at 4-0-0, 46 lb down and 54 lb up at 6-0-12, 46 lb down and 54 lb up at 7-11-4, 46 lb down and 54 lb up at 9-11-4, 46 lb down and 54 lb up at 11-11-4, and 46 lb down and 54 lb up at 13-11-4, and 46 lb down and 54 lb up at 16-0-0 on top chord, and 194 lb down and 58 lb up at 4-0-0, 36 lb down at 6-0-12, 36 lb down at 7-11-4, 36 lb down at 9-11-4, 36 lb down at 11-11-4, and 36 lb down at 13-11-4, and 194 lb down and 58 lb up at 15-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).



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LOAD CASE(S) Standard

Continued on page 2

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LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-60, 3-4=-60, 4-6=-60, 2-5=-20
   Concentrated Loads (lb)
   Vert: 3=-46(B) 4=-46(B) 7=-18(B) 8=-46(B) 9=-46(B) 10=-46(B) 11=-46(B) 12=-46(B) 13=-194(B) 14=-18(B) 15=-18(B) 16=-18(B) 17=-18(B) 18=-194(B)

Job	Truss	Truss Type	Qty	Ply	Embark B
B0419-1990	GJ1	JACK-OPEN	7	1	E12960087
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Thu Apr 25 07:31:54 2019 Page 1
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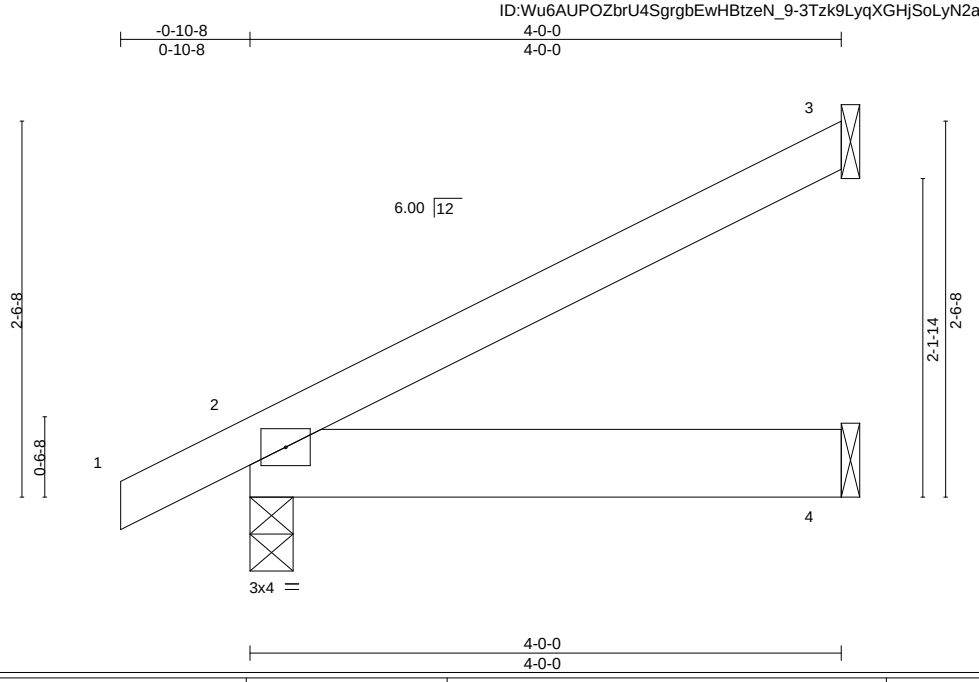

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	-0.00	2-4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.01	2-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P		Wind(LL)	0.00	2	****	240	Weight: 18 lb	FT = 20%

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

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

REACTIONS. (lb/size) 3=106/Mechanical, 2=221/0-3-8, 4=38/Mechanical
Max Horz 2=76(LC 10)
Max Uplift 3=-56(LC 10), 2=-17(LC 10)
Max Grav 3=106(LC 1), 2=221(LC 1), 4=76(LC 3)

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

NOTES-
1) Wind: ASCE 7-10; Vult=130mph (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
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Embark B
B0419-1990	GJ2	JACK-OPEN	4	1	E12960088
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Thu Apr 25 07:31:54 2019 Page 1
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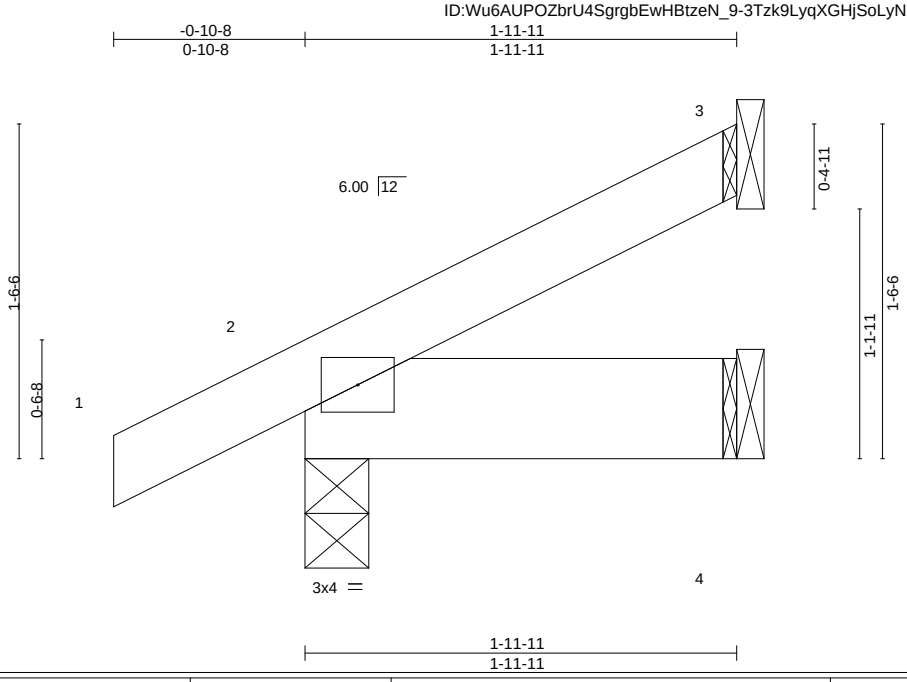

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	-0.00	2	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(CT)	-0.00	2	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P		Wind(LL)	0.00	2	****	240	Weight: 10 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-11-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 3=45/Mechanical, 2=144/0-3-8, 4=19/Mechanical
Max Horz 2=44(LC 10)
Max Uplift 3=-27(LC 10), 2=-15(LC 10)
Max Grav 3=45(LC 1), 2=144(LC 1), 4=39(LC 3)

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

NOTES-
1) Wind: ASCE 7-10; Vult=130mph (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
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.

April 25,2019

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Embark B
B0419-1990	GJC1	DIAGONAL HIP GIRDER	2	1	E12960089
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Thu Apr 25 07:31:55 2019 Page 1
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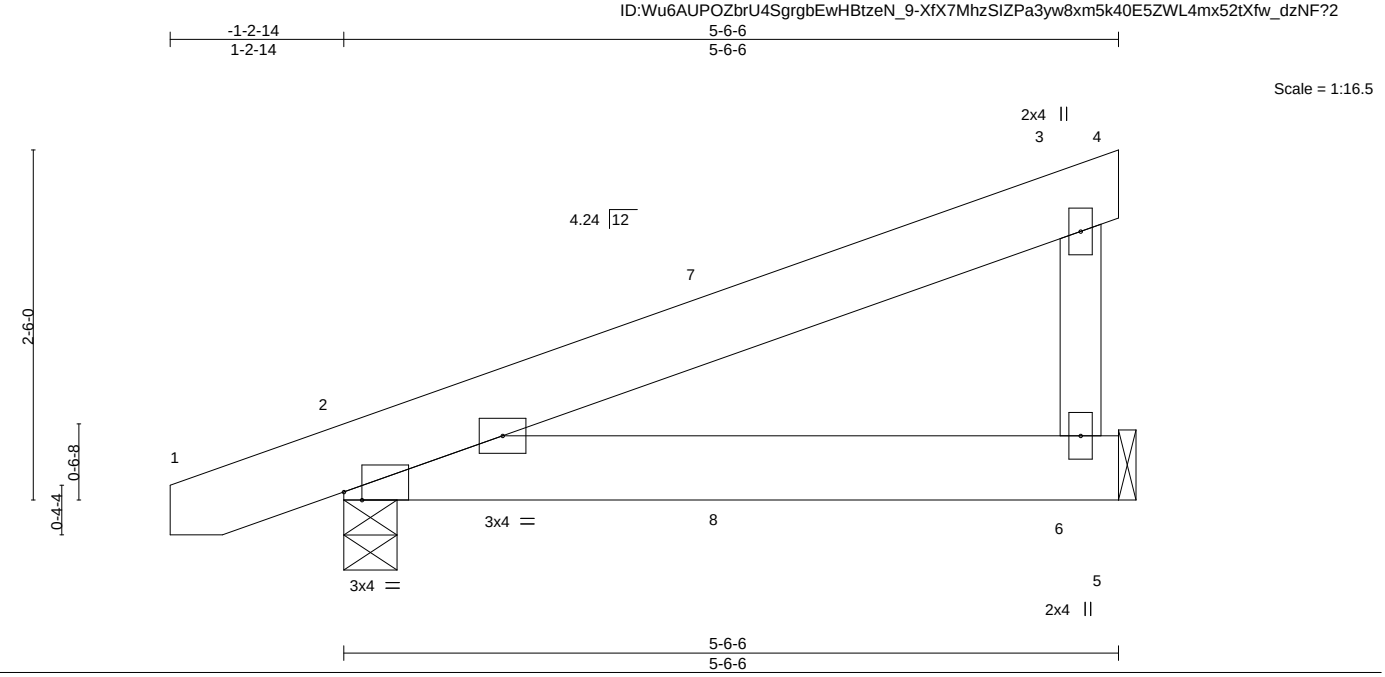


Plate Offsets (X,Y)-- [2:0-1-9,Edge]

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	0.16	Vert(LL)	-0.01	2-6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.02	2-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P		Wind(LL)	0.00	2	****	240	Weight: 32 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 5-6-6 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 6=205/Mechanical, 2=286/0-4-9
Max Horz 2=80(LC 4)
Max Uplift 6=-39(LC 8), 2=-65(LC 4)

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

NOTES-
1) 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
2) Concentrated loads from layout are not present in Load Case(s): #2 Dead + 0.75 Roof Live (balanced); #6 Dead + 0.6 MWFRS Wind (Neg. Internal) Left; #7 Dead + 0.6 MWFRS Wind (Neg. Internal) Right; #12 Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel; #13 Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel; #14 Dead; #18 Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left); #19 Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right); #20 Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel); #21 Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel).
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 with a clearance greater than 6-0-0 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) 6, 2.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2 lb up at 2-9-8, and 2 lb up at 2-9-8 on top chord, and at 2-9-8, and at 2-9-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

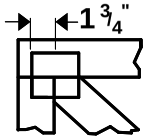
LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-4=-20, 2-5=-20

April 25,2019

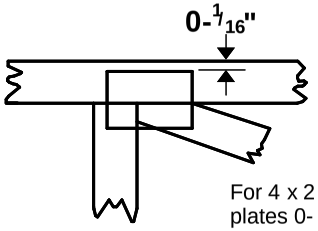
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

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.



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.

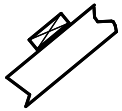
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

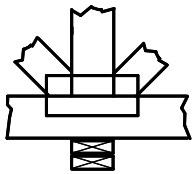
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

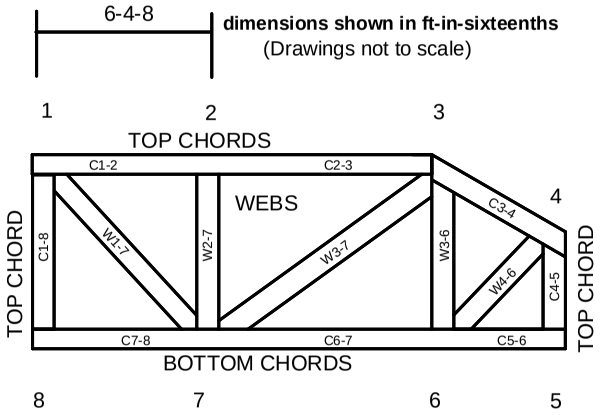


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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



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.

MiTek®

ENGINEERING BY TRENCO
A MiTek Affiliate

MiTek Engineering Reference Sheet: MII-7473 rev. 10/03/2015

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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