ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: B0419-1566
Vantage B

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

Pages or sheets covered by this seal: E12869065 thru E12869075

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

North Carolina COA: C-0844

April 2,2019

Gilbert, Eric

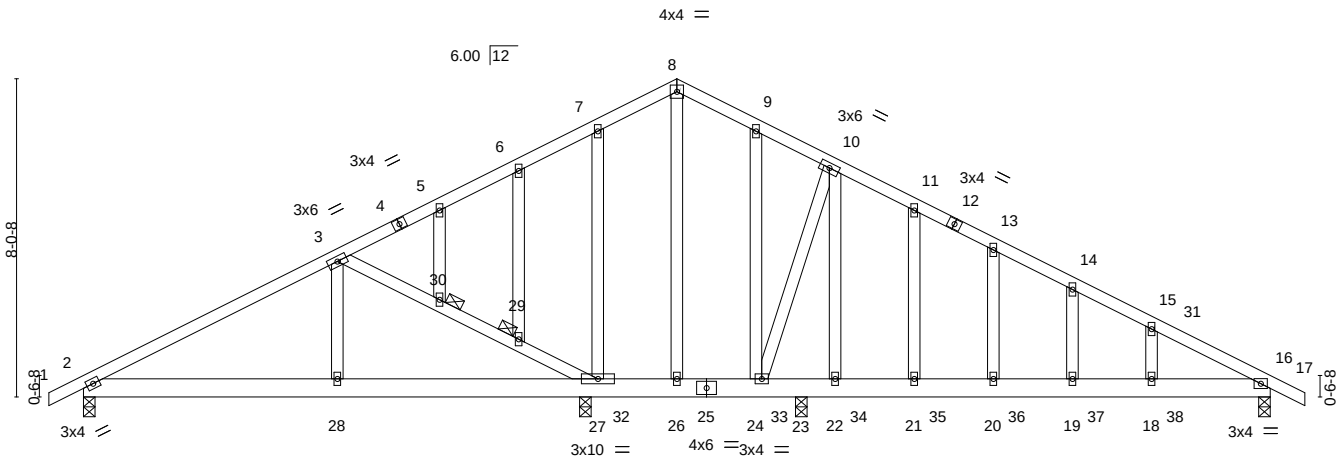
IMPORTANT NOTE: Truss Engineer's responsibility is solely for design of individual trusses based upon design parameters shown on referenced truss drawings. Parameters have not been verified as appropriate for any use. Any location identification specified is for file reference only and has not been used in preparing design. Suitability of truss designs for any particular building is the responsibility of the building designer, not the Truss Engineer, per ANSI/TPI-1, Chapter 2.

Job	Truss	Truss Type	Qty	Ply	Vantage B
B0419-1566	A1	KINGPOST	1	1	E12869065
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Mon Apr 1 16:31:11 2019 Page 1
ID:Wu6AUPOZbrU4SgrgbEwHBtzeN_9-Srcg?Xpl7HAK_VINO2qSpw5vmgWRr?UoXEsFrDzV1LU

-0-10-8 6-5-0 15-0-0 30-0-0 30-10-8
0-10-8 6-5-0 8-7-0 15-0-0 0-10-8

Scale = 1:58.2



6-5-0 12-6-8 18-3-8 30-0-0
6-5-0 6-1-8 5-9-0 11-8-8

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.60	Vert(LL)	-0.24	19	>596	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.44	19	>317	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.73	Horz(CT)	0.01	16	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.32	19	>436	240	Weight: 211 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 9-10-2 oc bracing.
JOINTS 1 Brace at Jt(s): 29, 30

REACTIONS. All bearings 0-3-8.
(lb) - Max Horz 2=-161(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) except 2=-145(LC 8), 27=-319(LC 8), 16=-286(LC 9), 23=-281(LC 9)
Max Grav All reactions 250 lb or less at joint(s) except 2=640(LC 1), 27=825(LC 1), 16=832(LC 20), 23=797(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-857/201, 3-5=-289/188, 7-8=-253/267, 9-10=-337/237, 10-11=-585/326, 11-13=-632/294, 13-14=-638/244, 14-15=-663/206, 15-16=-727/151
BOT CHORD 2-28=-179/682, 27-28=-179/682, 23-24=-63/565, 22-23=-63/565, 21-22=-63/565, 20-21=-63/565, 19-20=-63/565, 18-19=-63/565, 16-18=-63/565
WEBS 3-30=-582/298, 29-30=-590/302, 27-29=-608/318, 7-27=-286/208, 3-28=0/279, 10-22=-379/742, 10-24=-1070/570

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; 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 145 lb uplift at joint 2, 319 lb uplift at joint 27, 286 lb uplift at joint 16 and 281 lb uplift at joint 23.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 48 lb down and 49 lb up at 27-7-4 on top chord, and 69 lb down and 43 lb up at 13-7-4, 69 lb down and 43 lb up at 15-7-4, 69 lb down and 43 lb up at 17-7-4, 69 lb down and 43 lb up at 19-7-4, 69 lb down and 43 lb up at 21-7-4, 69 lb down and 43 lb up at 23-7-4, and 69 lb down and 43 lb up at 25-7-4, and 78 lb down and 48 lb up at 27-7-4 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: 1-8=-60, 8-17=-60, 2-16=-20

NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT
April 2,2019

Continued on page 2

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818 Soundside Road
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LOAD CASE(S) Standard

Concentrated Loads (lb)

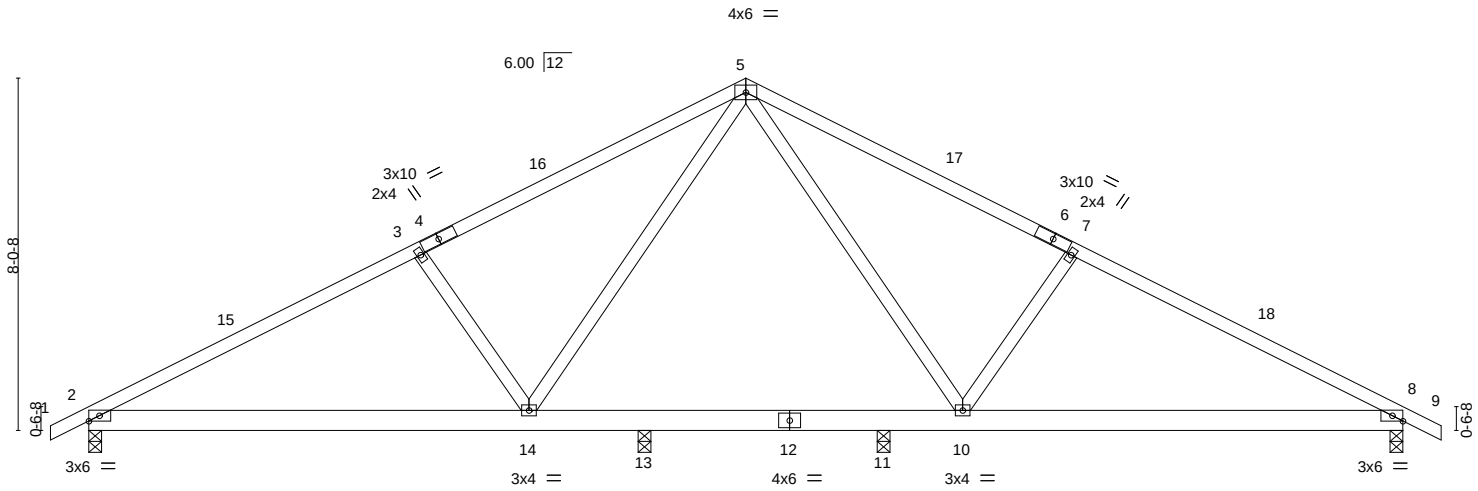
Vert: 25=-69 31=-8(F) 32=-69 33=-69 34=-69 35=-69 36=-69 37=-69 38=-78(F)

Job	Truss	Truss Type	Qty	Ply	Vantage B
B0419-1566	A2	COMMON	3	1	E12869066
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Mon Apr 1 16:31:13 2019 Page 1
ID:Wu6AUPOZbrU4SgrgbEwHBtzeN_9-ODjQQDr?fuQ2DpSlVTswuLAGnTJVJ105_YLMv6zV1LS

-0-10-8	7-6-14	15-0-0	22-5-2	30-0-0	30-10-8
0-10-8	7-6-14	7-5-2	7-5-2	7-6-14	0-10-8

Scale = 1:52.6



10-0-9	12-6-8	18-3-8	19-11-7	30-0-0
10-0-9	2-5-15	5-9-0	1-7-15	10-0-9

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	0.56	Vert(LL)	-0.09	8-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.23	8-10	>600	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.03	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.08	8-10	>999	240	Weight: 162 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 4-5-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 0-3-8.
(lb) - Max Horz 2=103(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 11 except 2=-107(LC 10), 8=-101(LC 11)
Max Grav All reactions 250 lb or less at joint(s) except 2=1030(LC 1), 8=968(LC 1), 13=268(LC 16), 11=478(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1556/470, 3-5=-1305/482, 5-7=-1156/430, 7-8=-1407/419
BOT CHORD 2-14=-286/1295, 13-14=-69/806, 11-13=-69/806, 10-11=-69/806, 8-10=-241/1165
WEBS 5-10=-63/337, 7-10=-434/277, 5-14=-122/526, 3-14=-430/275

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 10-7-3, Exterior(2) 10-7-3 to 15-0-0, Interior(1) 19-4-13 to 26-5-11 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11 except (jt=lb) 2=107, 8=101.

April 2,2019

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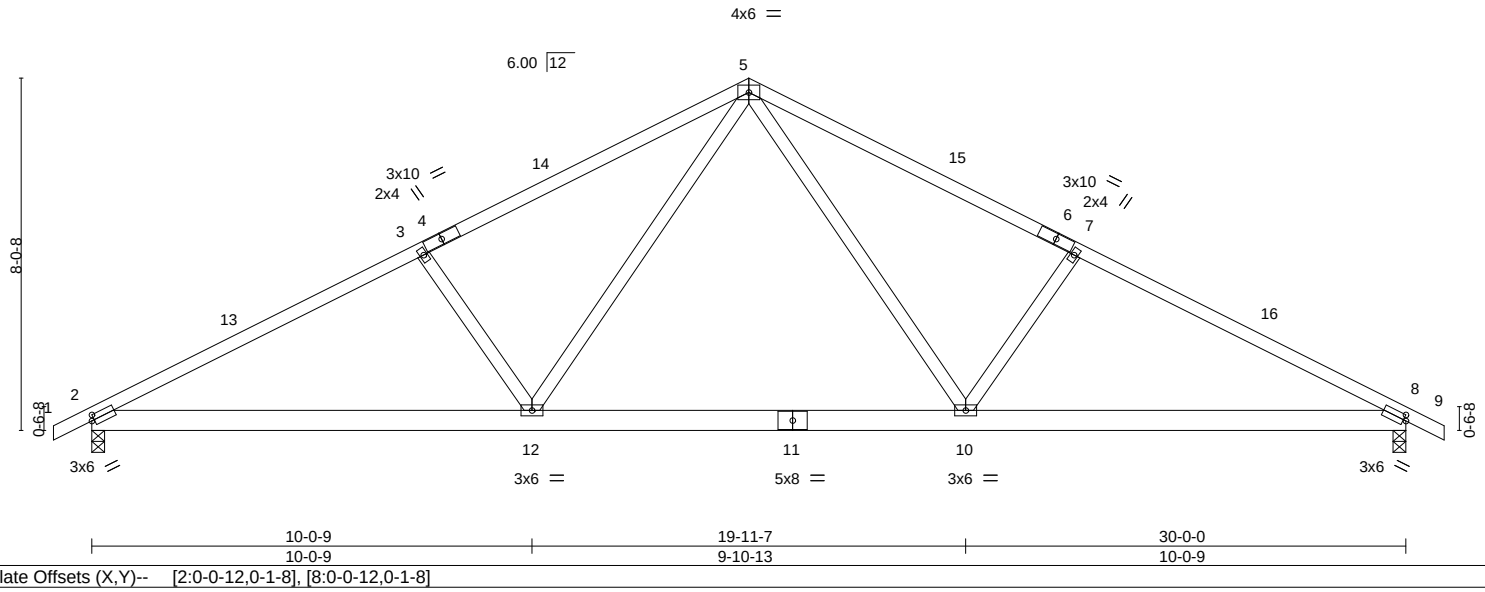
Job	Truss	Truss Type	Qty	Ply	Vantage B
B0419-1566	A3	COMMON	19	1	E12869067
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Mon Apr 1 16:31:14 2019 Page 1
ID:Wu6AUPOZbrU4SgrgbEwHBtzeN_9-sQHpdZsdQCYvrz1y3AN9RYjQ1td42SwEDC4vSYzV1LR

-0-10-8	7-6-14	15-0-0	22-5-2	30-0-0	30-10-8
0-10-8	7-6-14	7-5-2	7-5-2	7-6-14	0-10-8

Scale = 1:52.6



10-0-9	19-11-7	30-0-0
10-0-9	9-10-13	10-0-9

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

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	0.59	Vert(LL)	-0.26	10-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.35	10-12	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.37	Horz(CT)	0.05	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.06	8-10	>999	240	Weight: 162 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 3-6-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=1250/0-3-8, 8=1250/0-3-8
Max Horz 2=-103(LC 8)
Max Uplift 2=-115(LC 10), 8=-115(LC 11)
Max Grav 2=1314(LC 2), 8=1314(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2315/587, 3-5=-2110/599, 5-7=-2110/599, 7-8=-2315/587
BOT CHORD 2-12=-389/2017, 10-12=-156/1344, 8-10=-389/1976
WEBS 5-10=-155/900, 7-10=-416/271, 5-12=-155/899, 3-12=-416/271

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 10-7-3, Exterior(2) 10-7-3 to 15-0-0, Interior(1) 19-4-13 to 26-5-11 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=115, 8=115.

April 2,2019

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Vantage B
B0419-1566	A3-P	COMMON	4	1	E12869068
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 — 8.130 s Mar 11 2018 MiTek Industries, Inc. Mon Apr 1 16:31:15 2019 Page 1

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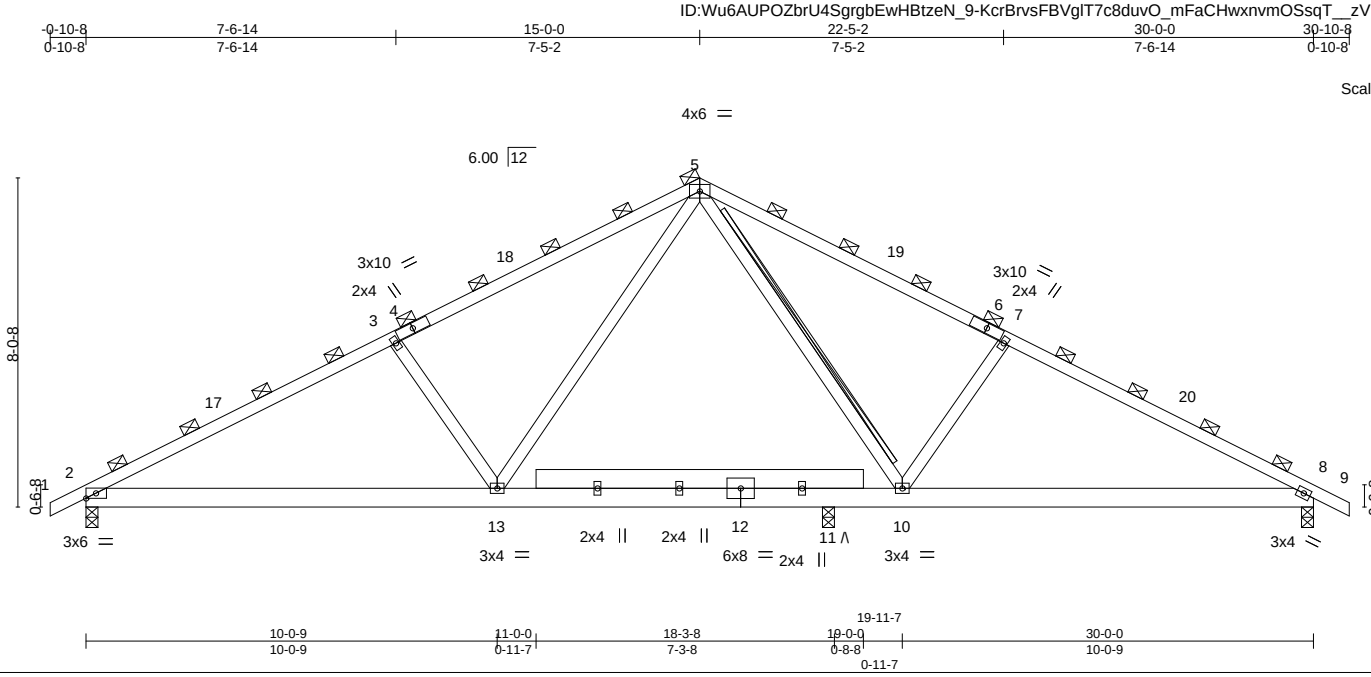

LOADING (psf)		SPACING-	2-1-8	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	-0.10	8-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.25	8-10	>562	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.33	Horz(CT)	0.03	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.08	8-10	>999	240	Weight: 181 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x4 SP No.3 *Except*
	14-15: 2x6 SP No.1

BRACING-

TOP CHORD	2-0-0 oc purlins (4-1-8 max.)
	(Switched from sheeted: Spacing > 2-0-0).
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. (lb/size) 2=1126/0-3-8, 8=1018/0-3-8, 11=511/0-3-8
Max Horz 2=110(LC 9)
Max Uplift 2=-123(LC 10), 8=-123(LC 11), 11=REL
Max Grav 2=1126(LC 1), 8=1018(LC 1), 11=875(LC 2)

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

TOP CHORD	2-3=-1733/624, 3-5=-1467/636, 5-7=-1205/636, 7-8=-1472/624
BOT CHORD	2-13=-413/1464, 11-13=-166/874, 10-11=-166/874, 8-10=-413/1217
WEBS	5-10=-165/315, 7-10=-462/288, 5-13=-165/796, 3-13=-453/288

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 10-7-3, Exterior(2) 10-7-3 to 15-0-0, Interior(1) 19-4-13 to 26-5-11 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=123, 8=123.
6) "/\" indicates Released bearing: allow for upward movement at joint(s) 11.
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.

April 2,2019

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Job	Truss	Truss Type	Qty	Ply	Vantage B
B0419-1566	A4-P	COMMON	2	1	E12869069
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 — 8.130 s Mar 11 2018 MiTek Industries, Inc. Mon Apr 1 16:31:16 2019 Page 1

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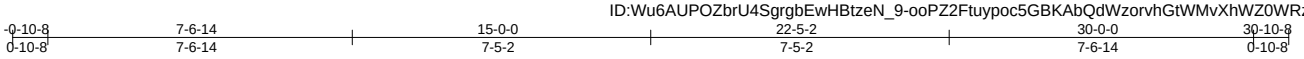

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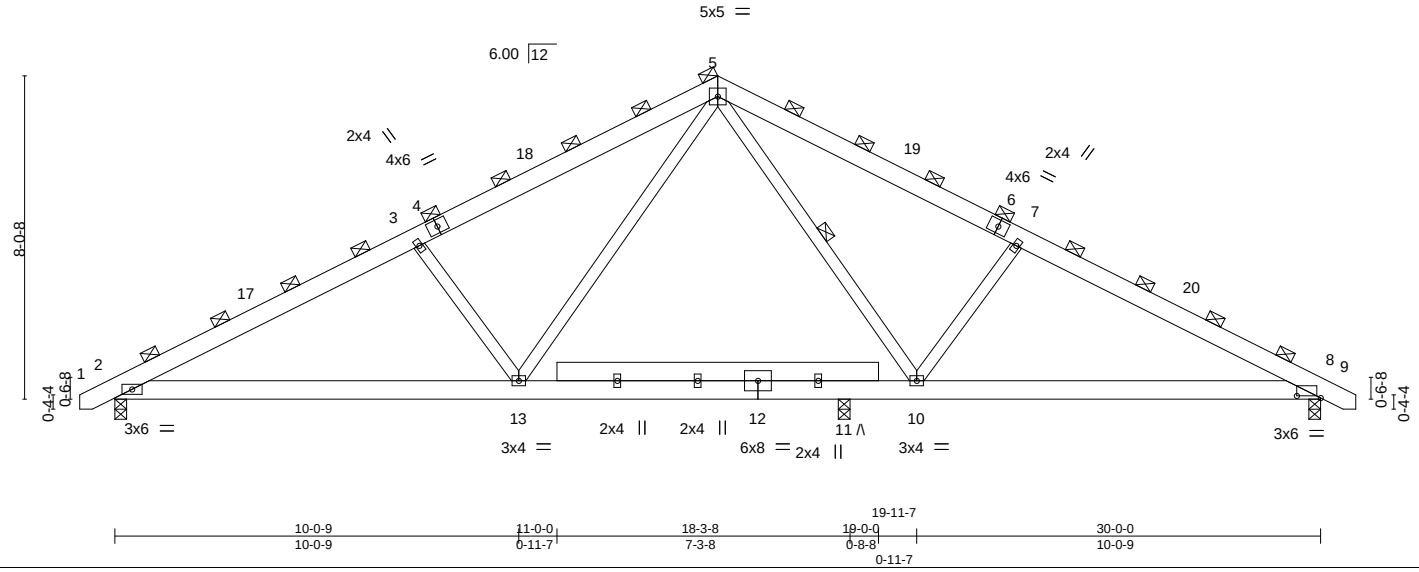

Plate Offsets (X,Y)-- [8:0-7-2,0-0-10]

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	0.31	Vert(LL)	-0.09	8-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.21	8-10	>667	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.34	Horz(CT)	0.03	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.06	8-10	>999	240	Weight: 211 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.3 *Except*
14-15: 2x6 SP No.1

BRACING-

TOP CHORD 2-0-0 oc purlins (5-6-11 max.)
(Switched from sheeted: Spacing > 2-0-0).
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-10

REACTIONS. (lb/size) 2=1136/0-3-8, 8=1038/0-3-8, 11=461/0-3-8
Max Horz 2=109(LC 9)
Max Uplift 2=-120(LC 10), 8=-120(LC 11), 11=REL
Max Grav 2=1136(LC 1), 8=1038(LC 1), 11=829(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1791/641, 3-5=-1535/644, 5-7=-1295/644, 7-8=-1552/641
BOT CHORD 2-13=-435/1542, 11-13=-173/919, 10-11=-173/919, 8-10=-435/1324
WEBS 5-10=-168/358, 7-10=-492/300, 5-13=-168/813, 3-13=-483/300

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 10-7-3, Exterior(2) 10-7-3 to 15-0-0, Interior(1) 19-4-13 to 26-3-13 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=120, 8=120.
6) "/\" indicates Released bearing: allow for upward movement at joint(s) 11.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 2,2019

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Vantage B
B0419-1566	A5	GABLE	1	1	E12869070
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Mon Apr 1 16:31:17 2019 Page 1

ID:Wu6AUPOZbrU4SgrgbEwHBtzeN_9-G_zxGauWj7xTiQmXkJxs3BL2M4mcFrzgvAJZ2tzV1LO

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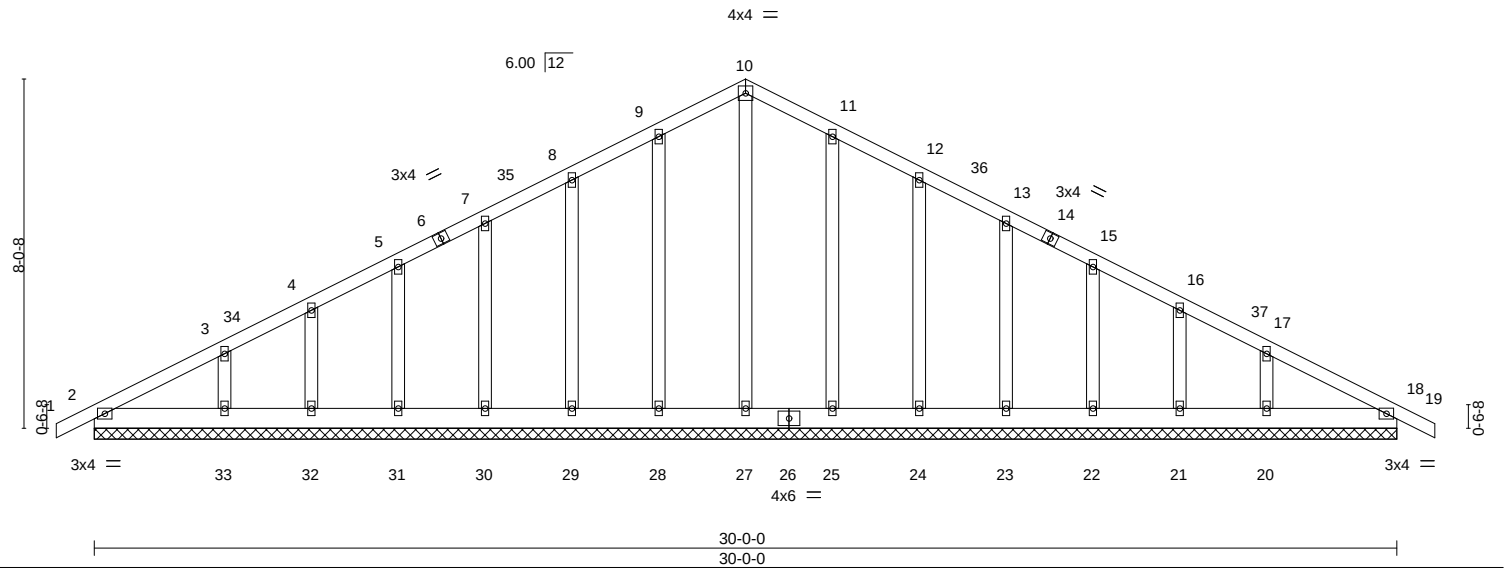
0-10-8 15-0-0 15-0-0 0-10-8

Scale = 1:53.1



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	0.00	18	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	18	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.00	18	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 202 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 30-0-0.

(lb) - Max Horz 2=-161(LC 15)
Max Uplift All uplift 100 lb or less at joint(s) 2, 18, 28, 29, 30, 31, 32, 25, 24, 23, 22, 21 except 33=-117(LC 10), 20=-114(LC 11)
Max Grav All reactions 250 lb or less at joint(s) 2, 18, 27, 28, 29, 30, 31, 32, 33, 25, 24, 23, 22, 21, 20

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 9-10=-98/324, 10-11=-98/324

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 10-7-3, Corner(3) 10-7-3 to 15-0-0, Exterior(2) 19-4-13 to 26-5-11 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, 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, 18, 28, 29, 30, 31, 32, 25, 24, 23, 22, 21 except (jt=lb) 33=117, 20=114.

April 2,2019

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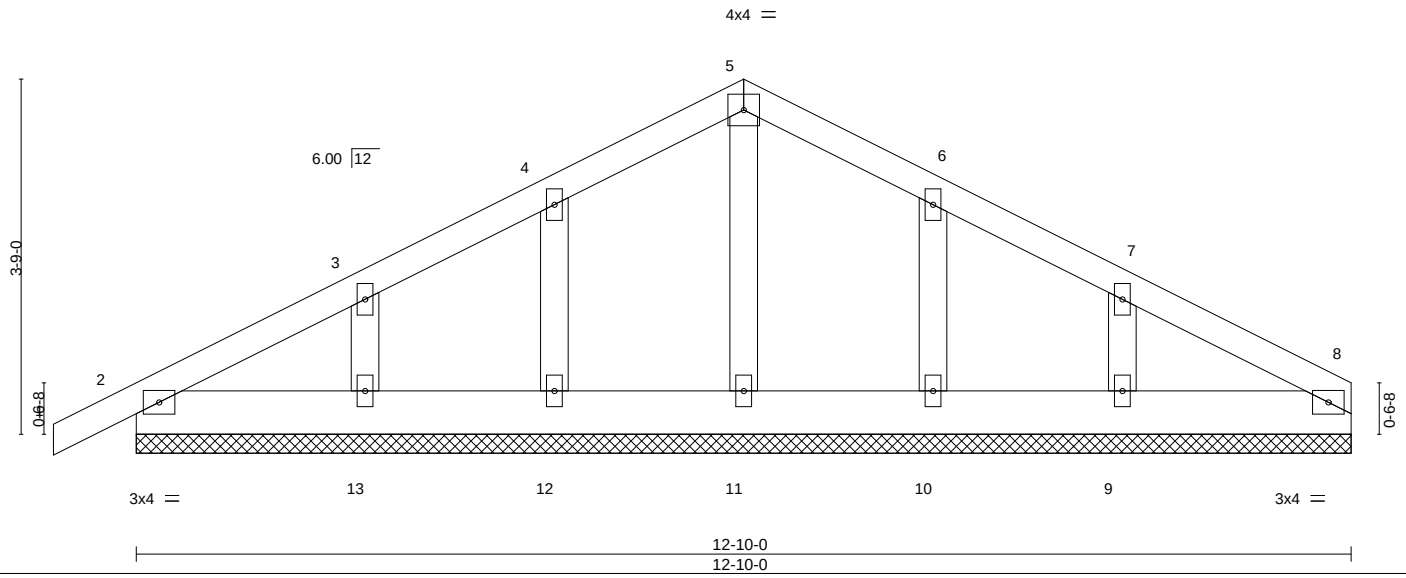
Job	Truss	Truss Type	Qty	Ply	Vantage B
B0419-1566	B01	COMMON SUPPORTED GAB	1	1	E12869071
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Mon Apr 1 16:31:18 2019 Page 1
ID:Wu6AUPOZbrU4SgrgbEwHBtzeN_9-kBXJTwv8UQ3KKaLjl0S5bOtEMU63_JXq8q27bJzV1LN

-0-10-8 6-5-0 12-10-0
0-10-8 6-5-0 6-5-0

Scale = 1:24.3



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	0.06	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 67 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 12-10-0.
(lb) - Max Horz 2=79(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 8, 2, 12, 13, 10, 9
Max Grav All reactions 250 lb or less at joint(s) 8, 2, 11, 12, 13, 10, 9

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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 2, 12, 13, 10, 9.
10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.

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Job	Truss	Truss Type	Qty	Ply	Vantage B
B0419-1566	B02	COMMON	1	1	E12869072
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Mon Apr 1 16:31:19 2019 Page 1
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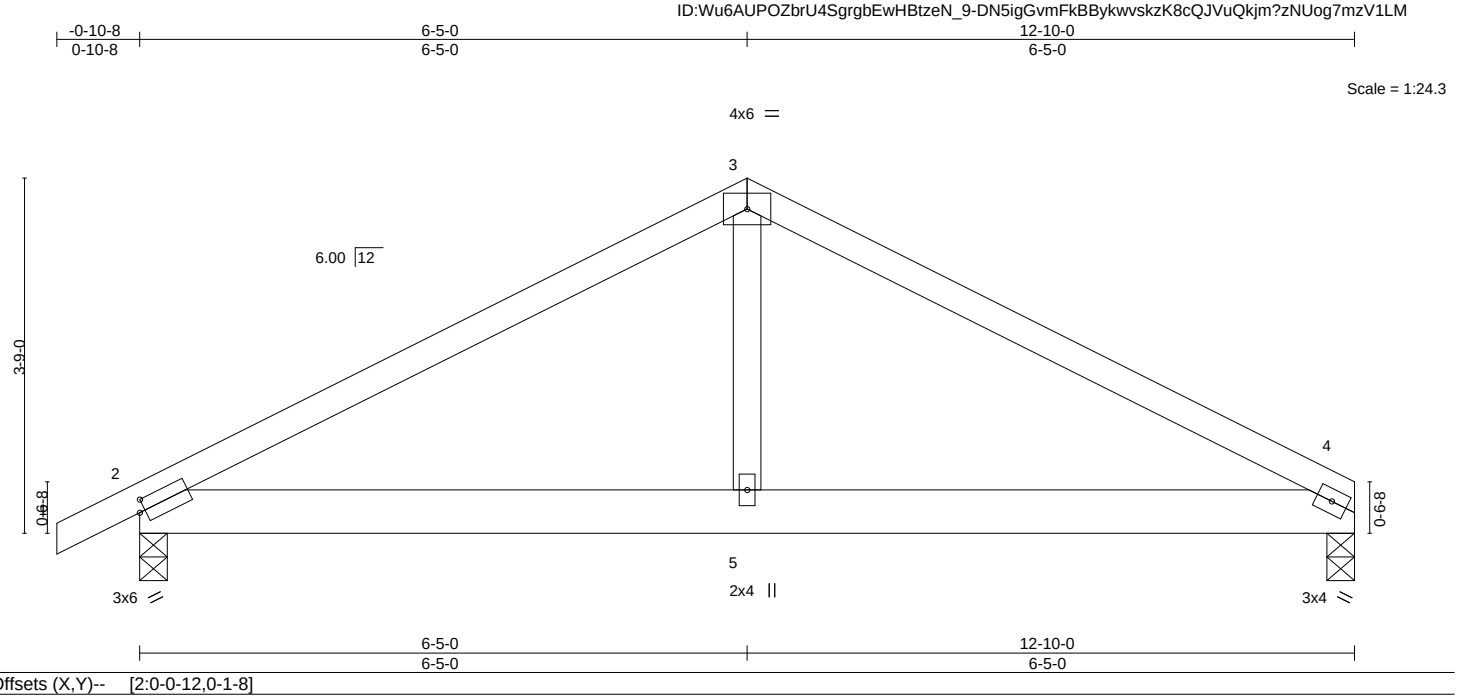

Plate Offsets (X,Y)-- [2:0-0-12,0-1-8]

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	0.42	Vert(LL)	-0.01	2-5	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	-0.03	2-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.01	2-5	>999	240	Weight: 58 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) 4=499/0-3-8, 2=565/0-3-8
Max Horz 2=49(LC 9)
Max Uplift 4=-42(LC 11), 2=-57(LC 10)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-704/290, 3-4=-699/284
BOT CHORD 2-5=-141/540, 4-5=-141/540
WEBS 3-5=0/318

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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
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	Vantage B
B0419-1566	CJ1	DIAGONAL HIP GIRDER	1	1	E12869073
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Mon Apr 1 16:31:20 2019 Page 1
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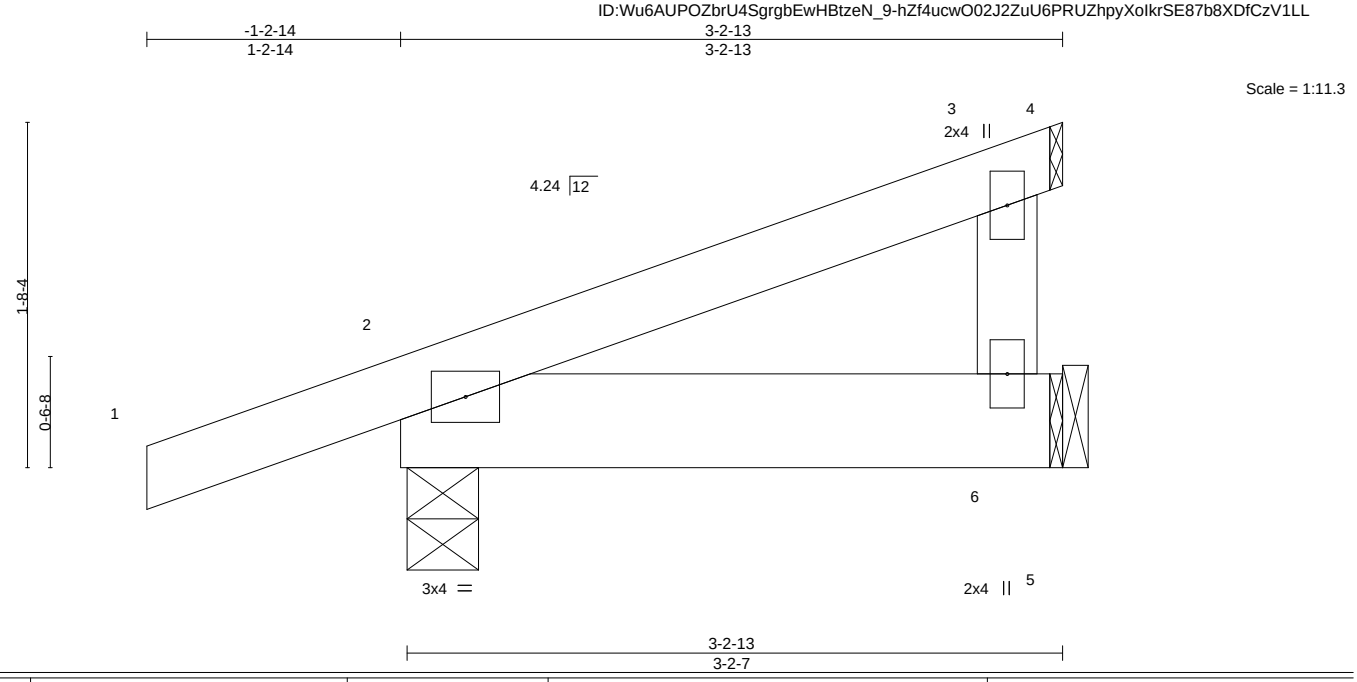

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	-0.00	2	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.00	2-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P		Wind(LL)	0.00	2	****	240	Weight: 16 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 3-2-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 6=101/Mechanical, 2=217/0-4-3
Max Horz 2=55(LC 6)
Max Uplift 6=-20(LC 10), 2=-70(LC 6)

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 Corner(3) 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
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) 6, 2.

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Job	Truss	Truss Type	Qty	Ply	Vantage B
B0419-1566	J3	JACK-OPEN	7	1	E12869074
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Mon Apr 1 16:31:20 2019 Page 1

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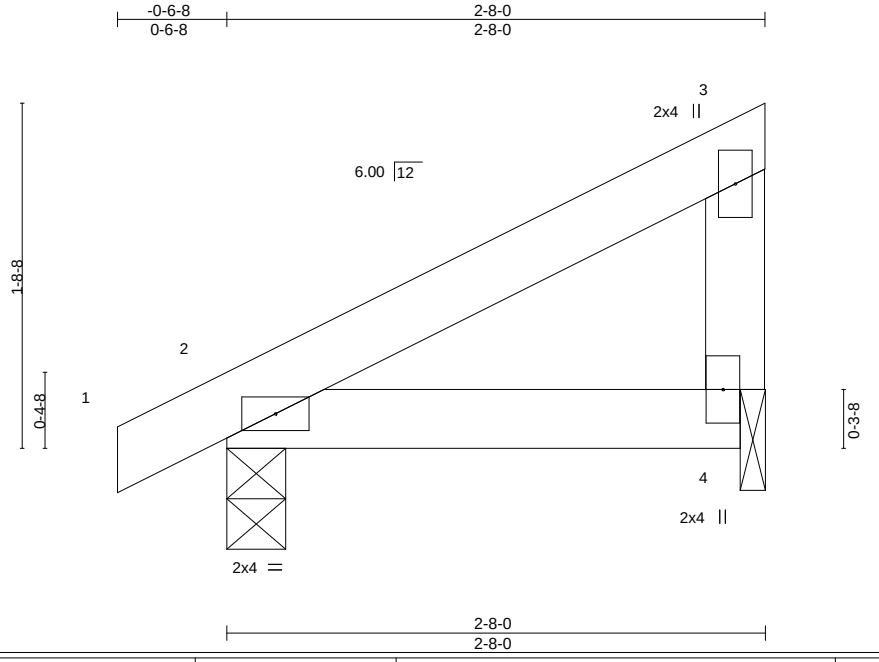

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	-0.00	2-4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.00	2-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P		Wind(LL)	0.00	2	****	240	Weight: 11 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-8-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=142/0-3-8, 4=89/0-1-8
Max Horz 2=49(LC 10)
Max Uplift 2=-12(LC 10), 4=-23(LC 10)

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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.

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Job	Truss	Truss Type	Qty	Ply	Vantage B
B0419-1566	J4	JACK-OPEN	1	1	E12869075
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Mon Apr 1 16:31:21 2019 Page 1
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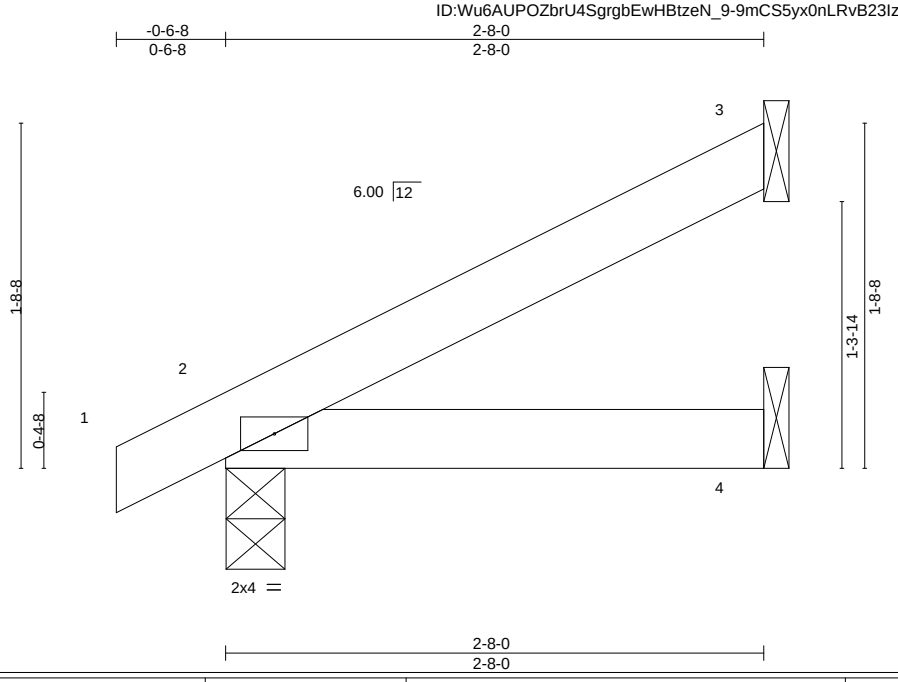

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	2-4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.00	2-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P		Wind(LL)	0.00	2	****	240	Weight: 10 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-8-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 3=68/Mechanical, 2=145/0-3-8, 4=25/Mechanical
Max Horz 2=50(LC 10)
Max Uplift 3=-36(LC 10), 2=-12(LC 10)
Max Grav 3=68(LC 1), 2=145(LC 1), 4=49(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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
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 2,2019

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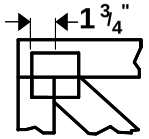
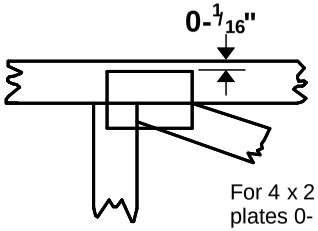
Symbols

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.

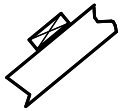
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

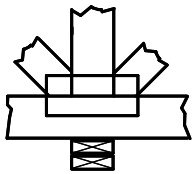
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

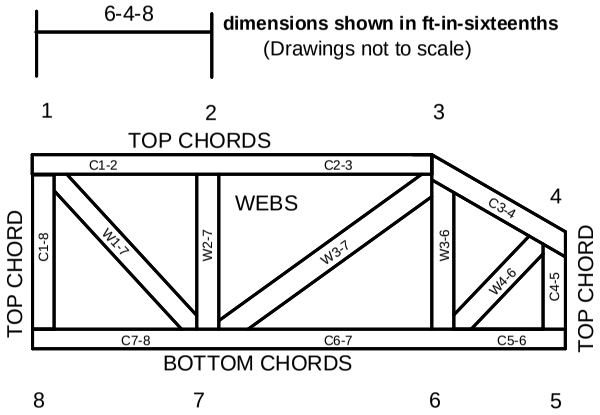


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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.

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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.