ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J0820-3543
Hobson Road

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: E14697928 thru E14697946

My license renewal date for the state of North Carolina is December 31, 2020.

North Carolina COA: C-0844

August 4,2020

Gilbert, Eric

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

Job	Truss	Truss Type	Qty	Ply	Hobson Road
J0820-3543	A1-GE	GABLE	1	1	E14697928
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Aug 4 11:12:34 2020 Page 1
ID:2GNsYO62BI49KgBFP3SlmayOXVO-Kz?tBKDnQF3jSw91eo9Lh__OVqmzlx053cNZXeyrF6B

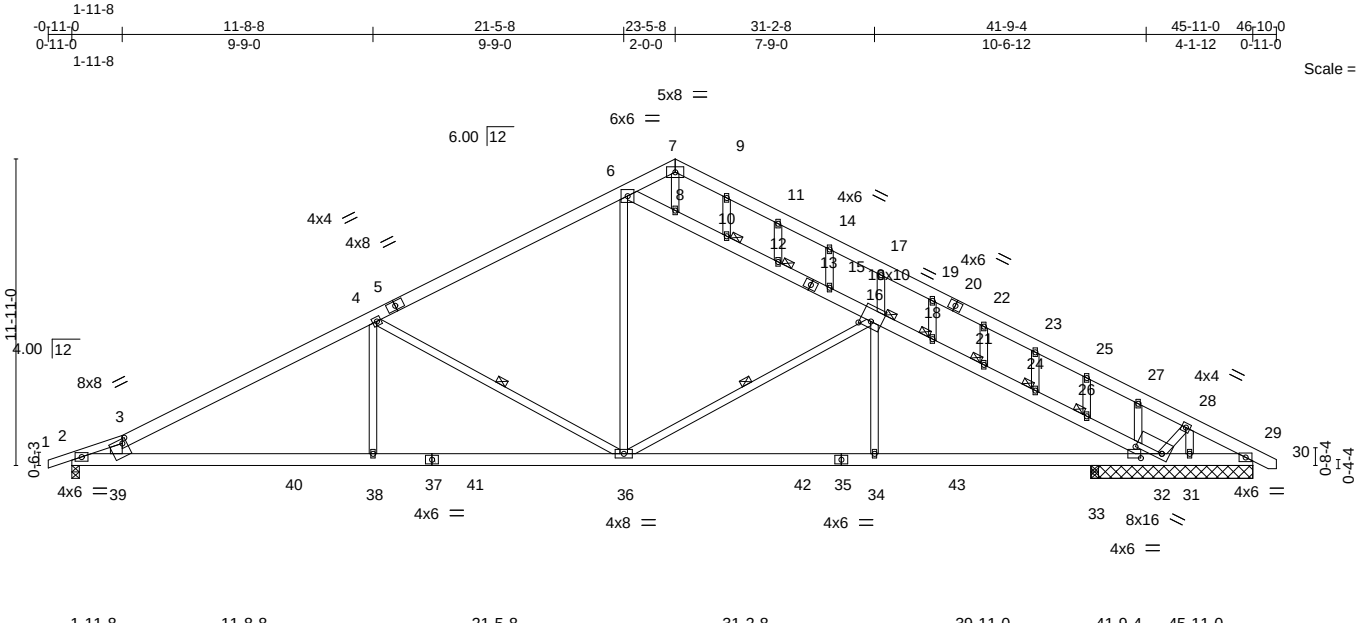


Plate Offsets (X,Y)-- [3:0-2-0,0-2-0], [16:0-5-0,0-3-0], [32:1-0-8,0-2-8], [32:0-9-13,0-2-0], [39:0-2-7,0-1-4]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.82	Vert(LL)	-0.25	38-39	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-0.54	38-39	>884	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.10	29	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.28	38-39	>999	240	Weight: 375 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.1 *Except*
	1-3: 2x4 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x4 SP No.2 *Except*
	3-39: 2x6 SP No.1
OTHERS	2x4 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	1 Row at midpt 4-36, 16-36
JOINTS	1 Brace at Jt(s): 16, 10, 12, 18, 21, 24, 26

REACTIONS. All bearings 6-3-8 except (jt=length) 2=0-3-8, 33=0-3-8.
(lb) - Max Horz 2=-235(LC 17)
Max Uplift All uplift 100 lb or less at joint(s) 31 except 2=-383(LC 12), 32=-937(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 29 except 2=1777(LC 2), 31=343(LC 13), 32=1591(LC 1), 33=406(LC 3)

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

TOP CHORD	2-3=-3029/723, 3-4=-3282/1052, 4-6=-2135/821, 6-7=-442/278, 7-9=-410/222, 9-11=-417/174, 11-14=-445/137, 14-17=-479/112, 17-19=-433/8, 19-22=-461/0, 22-23=-489/0, 23-25=-496/0, 25-27=-585/0, 27-28=-523/149, 28-29=-372/82, 6-8=-1653/742, 8-10=-1544/669, 10-12=-1586/708, 12-15=-1607/733, 15-16=-1625/746, 16-18=-2329/993, 18-21=-2342/1000, 21-24=-2364/1027, 24-26=-2406/1063, 26-32=-2371/1047
BOT CHORD	2-39=-644/2762, 38-39=-767/2895, 36-38=-767/2895, 34-36=-597/2489, 33-34=-597/2489, 32-33=-597/2489, 31-32=-85/372, 29-31=-85/372
WEBS	3-39=-504/411, 4-38=0/622, 4-36=-1245/554, 6-36=-331/1216, 16-34=0/484, 16-36=-843/365, 27-32=-796/566, 28-31=-279/106, 16-17=-314/308

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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 studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 31 except (jt=lb) 2=383, 32=937.

August 4,2020

Continued on page 2

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

NOTES-

9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

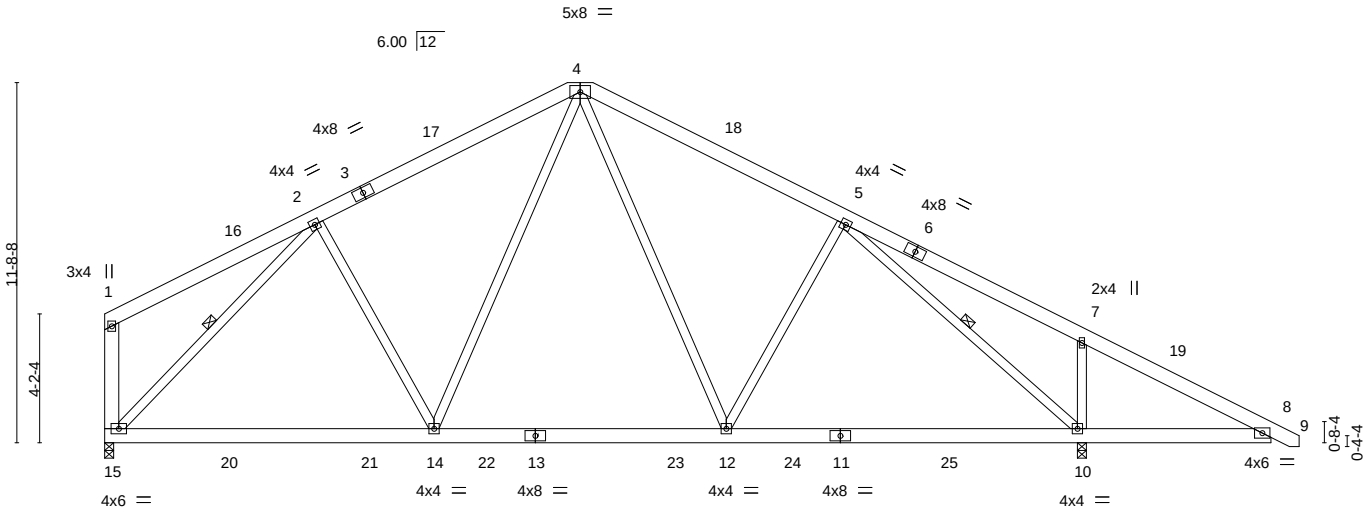
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job	Truss	Truss Type	Qty	Ply	Hobson Road
J0820-3543	A2	Common	6	1	E14697929
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Aug 4 11:12:36 2020 Page 1
ID:2GNsYO62BI49KgBFP3SlmayOXVO-GL7ec0E2ysJRiDJPmDBpmP3sseZdDoHOXwsfbWyrF69

6-11-8	15-5-8	23-11-8	31-9-4	37-11-0	38-10-0
6-11-8	8-6-0	8-6-0	7-9-12	6-1-12	0-11-0

Scale = 1:74.9



10-8-8	20-2-8	31-9-4	37-11-0
10-8-8	9-6-0	11-6-12	6-1-12

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	-0.17	10-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.25	10-12	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.91	Horz(CT)	0.03	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.03	12-14	>999	240	Weight: 290 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 8-10.
WEBS	1 Row at midpt 2-15, 5-10

REACTIONS. (size) 10=0-3-8, 15=0-3-8
Max Horz 15=-220(LC 13)
Max Uplift 10=-132(LC 13), 15=-69(LC 12)
Max Grav 10=1974(LC 2), 15=1413(LC 2)

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

TOP CHORD	2-4=-1374/377, 4-5=-1380/323, 5-7=-351/538, 7-8=-522/540
BOT CHORD	14-15=-59/1154, 12-14=0/1040, 10-12=0/1084, 8-10=-385/530
WEBS	2-14=-93/254, 4-14=-69/442, 4-12=-63/464, 7-10=-463/304, 2-15=-1467/250, 5-10=-1836/574

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-12 to 4-7-9, Interior(1) 4-7-9 to 15-5-8, Exterior(2) 15-5-8 to 19-10-5, Interior(1) 19-10-5 to 38-8-2 zone; cantilever right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15 except (jt=lb) 10=132.

August 4,2020

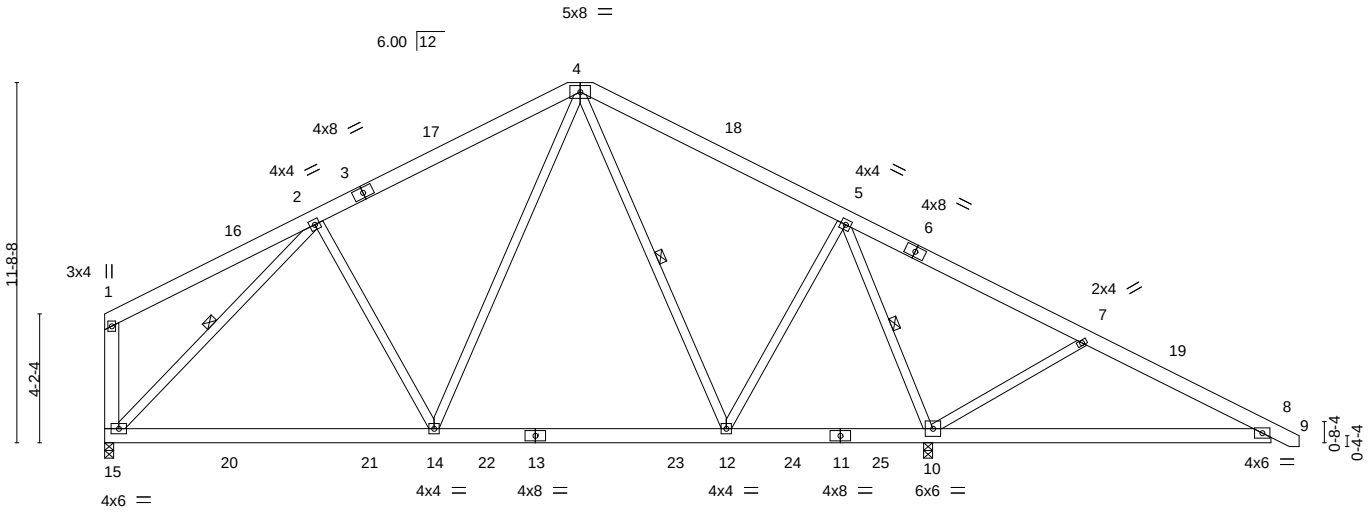
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Hobson Road
J0820-3543	A3	Common	3	1	E14697930
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Aug 4 11:12:37 2020 Page 1
ID:2GNsYO62BI49KgBFP3SlmayOXVO-kYh0pMFgjARIJNucJxj2Jcc?22wSyLlXlabD8zyrF68

6-11-8	15-5-8	23-11-8	31-9-4	37-11-0	38-10-0
6-11-8	8-6-0	8-6-0	7-9-12	6-1-12	0-11-0

Scale = 1:74.9



10-8-8	20-2-8	26-9-4	37-11-0
10-8-8	9-6-0	6-6-12	11-1-12

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.41	Vert(LL)	-0.12	14-15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.19	14-15	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.01	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	-0.03	10-12	>999	240	Weight: 290 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 10=0-3-8, 15=0-3-8
Max Horz 15=-220(LC 13)
Max Uplift 10=-157(LC 13), 15=-72(LC 12)
Max Grav 10=2239(LC 2), 15=1052(LC 25)

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

TOP CHORD	2-4=-917/207, 4-5=-523/172, 5-7=-743/1134, 7-8=-595/664
BOT CHORD	14-15=-60/841, 12-14=0/581, 10-12=-307/603, 8-10=-489/584
WEBS	2-14=-187/285, 4-14=-136/618, 4-12=-591/406, 5-12=-247/869, 7-10=-501/345, 2-15=-999/81, 5-10=-1887/754

NOTES-

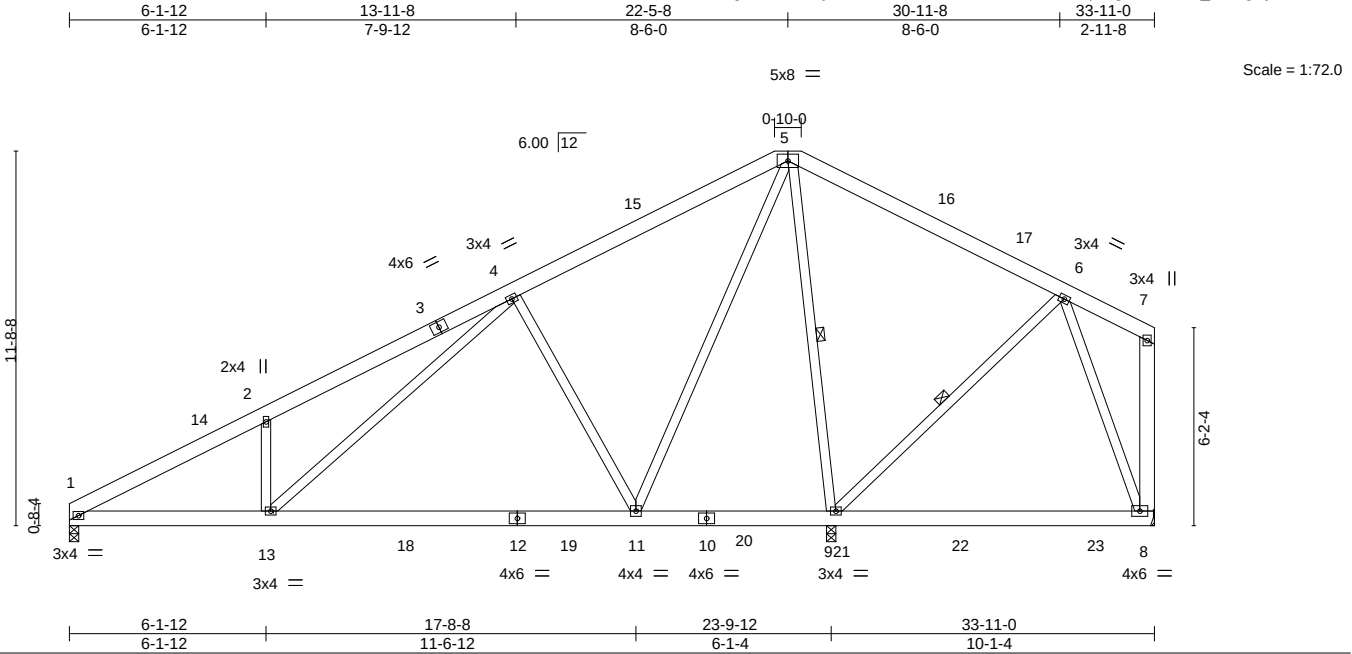
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-12 to 4-7-9, Interior(1) 4-7-9 to 15-5-8, Exterior(2) 15-5-8 to 19-10-5, Interior(1) 19-10-5 to 38-8-2 zone; cantilever right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15 except (jt=lb) 10=157.

August 4,2020

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

Job	Truss	Truss Type	Qty	Ply	Hobson Road
J0820-3543	A4	COMMON	1	1	E14697931
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Aug 4 11:12:38 2020 Page 1
ID:2GNsYO62BI49KgBFP3SlmayOXVO-DkEO1iGIUTZ9xXToteEHrq9CgRGMhkKh_ELmgPyrF67



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)	-0.20	11-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.33	11-13	>854	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.81	Horz(CT)	0.01	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.04	11-13	>999	240	Weight: 271 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x4 SP No.2 *Except*
	7-8: 2x6 SP No.1

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 5-9, 6-9

REACTIONS. (size) 1=0-3-8, 9=0-3-8, 8=Mechanical
Max Horz 1=257(LC 12)
Max Uplift 1=-42(LC 12), 9=-155(LC 12), 8=-75(LC 23)
Max Grav 1=837(LC 1), 9=1946(LC 2), 8=264(LC 26)

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

TOP CHORD	1-2=-1532/204, 2-4=-1522/371, 4-5=-465/193, 5-6=-5/377
BOT CHORD	1-13=-305/1351, 11-13=-165/679
WEBS	4-11=-724/336, 5-11=-200/1088, 5-9=-1367/340, 6-8=-257/192, 6-9=-393/219, 4-13=-222/916, 2-13=-353/270

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 22-5-8, Exterior(2) 22-5-8 to 26-10-5, Interior(1) 26-10-5 to 33-8-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 8 except (jt=lb) 9=155.

August 4,2020

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

Job	Truss	Truss Type	Qty	Ply	Hobson Road
J0820-3543	A5	Common	7	1	E14697932
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Aug 4 11:12:39 2020 Page 1
ID:2GNsYO62BI49KgBFP3SlmayOXVO-hwomE2HwFnh0Zh1_RLlWO1hMvrdHQ8dqDu4KCryrF66

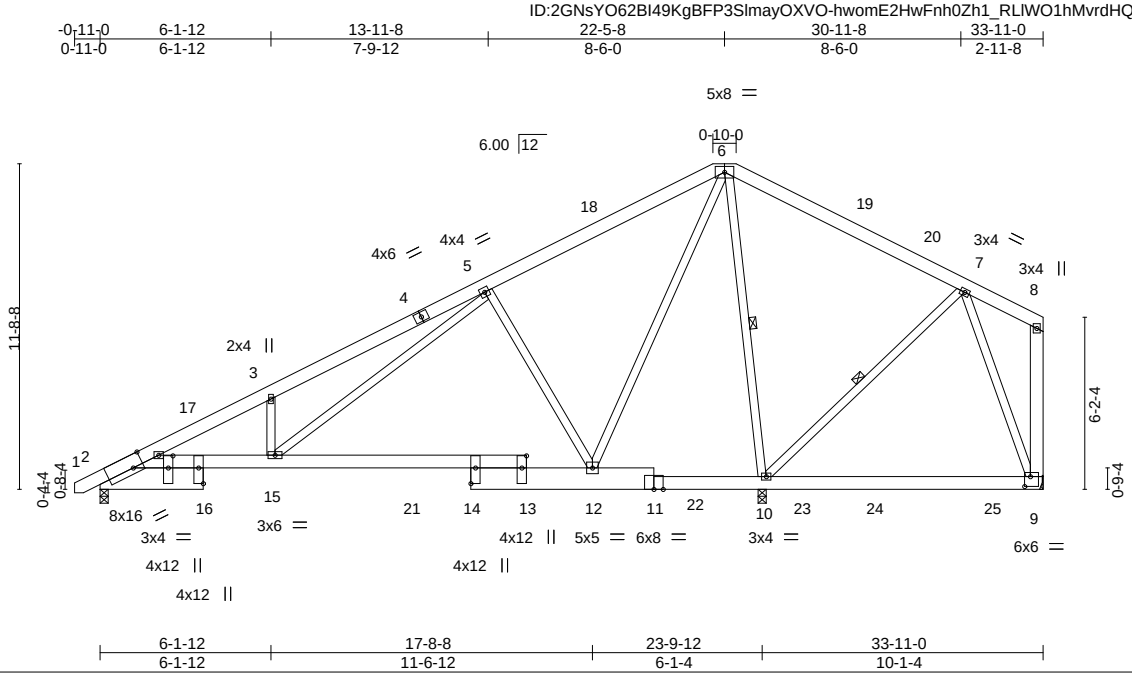


Plate Offsets (X,Y)-- [2:0-4-8,Edge], [9:0-2-8,0-4-4], [13:Edge,0-2-0], [14:Edge,0-2-0], [16:0-5-4,0-2-0], [16:Edge,0-2-0]

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	0.32	Vert(LL)	-0.14	12-15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.26	12-15	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.04	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.06	12-15	>999	240	Weight: 297 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1 *Except*
	11-14,2-16: 2x10 SP No.1
WEBS	2x4 SP No.2 *Except*
	8-9: 2x6 SP No.1

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 6-10, 7-10

REACTIONS. (size) 2=0-3-8, 10=0-3-8, 9=Mechanical
Max Horz 2=260(LC 12)
Max Uplift 2=-52(LC 12), 10=-169(LC 12), 9=-438(LC 23)
Max Grav 2=740(LC 1), 10=2551(LC 19), 9=55(LC 12)

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

TOP CHORD	2-3=-1432/250, 3-5=-1427/399, 6-7=-31/836
BOT CHORD	2-15=-340/1256, 12-15=-155/326, 10-12=-447/109
WEBS	5-12=-754/351, 6-12=-191/1075, 6-10=-1742/356, 7-9=-33/638, 7-10=-723/239, 5-15=-276/1182, 3-15=-355/236

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-2 to 3-7-11, Interior(1) 3-7-11 to 22-5-8, Exterior(2) 22-5-8 to 26-10-5, Interior(1) 26-10-5 to 33-8-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) 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) 2 except (jt=lb) 10=169, 9=438.
7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

August 4,2020

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

Job	Truss	Truss Type	Qty	Ply	Hobson Road
J0820-3543	A6	Common	4	1	E14697933
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Aug 4 11:12:40 2020 Page 1
ID:2GNsYO62BI49KgBFP3SlmayOXVO-96M9SNIY05ptArcB?3GlwFEXAFyq9eszSYqtkIyrF65

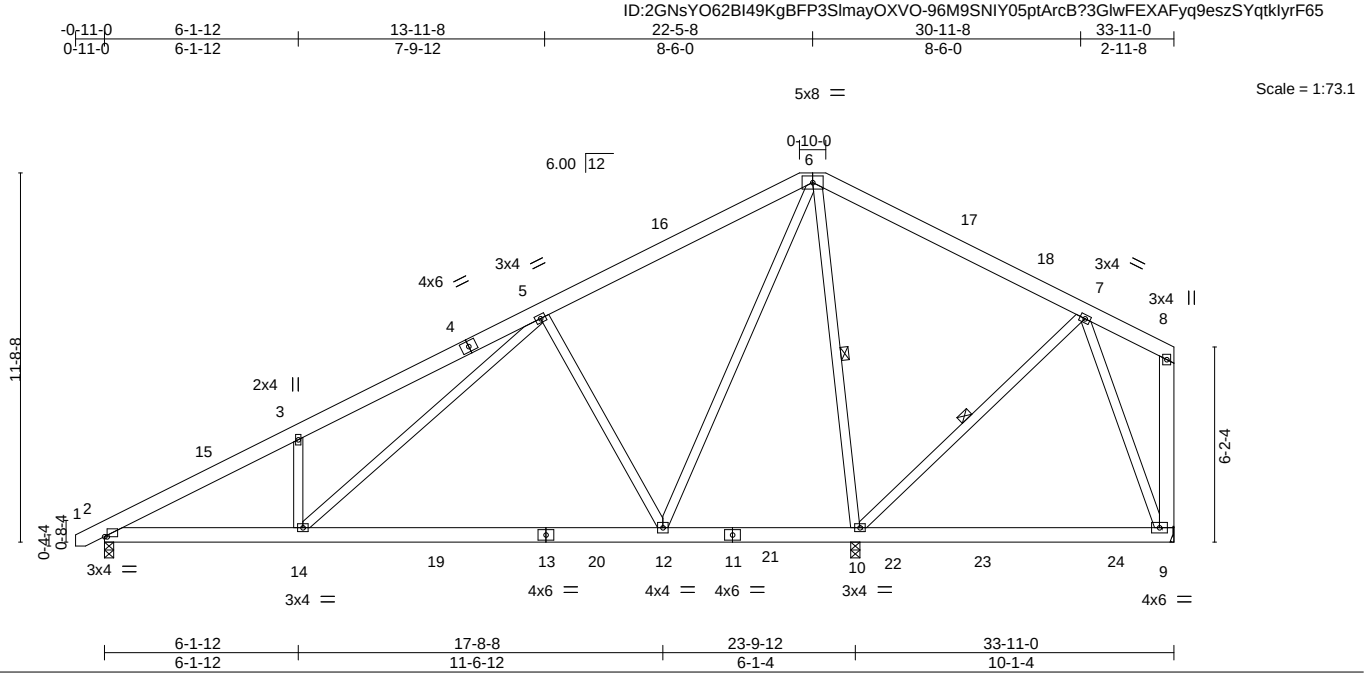


Plate Offsets (X,Y)-- [2:0-1-0,0-0-1]

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	0.29	Vert(LL)	-0.20	12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.33	12-14	>856	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.81	Horz(CT)	0.01	9	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.04	12-14	>999	240	Weight: 273 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
8-9: 2x6 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 6-10, 7-10

REACTIONS. (size) 2=0-3-8, 10=0-3-8, 9=Mechanical
Max Horz 2=261(LC 12)
Max Uplift 2=-55(LC 12), 10=-154(LC 12), 9=-74(LC 23)
Max Grav 2=892(LC 1), 10=1943(LC 2), 9=264(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1530/186, 3-5=-1516/344, 5-6=-465/194, 6-7=-4/376
BOT CHORD 2-14=-282/1346, 12-14=-165/679
WEBS 5-12=-723/336, 6-12=-200/1087, 6-10=-1365/339, 7-9=-258/191, 7-10=-392/215, 5-14=-193/909, 3-14=-345/250

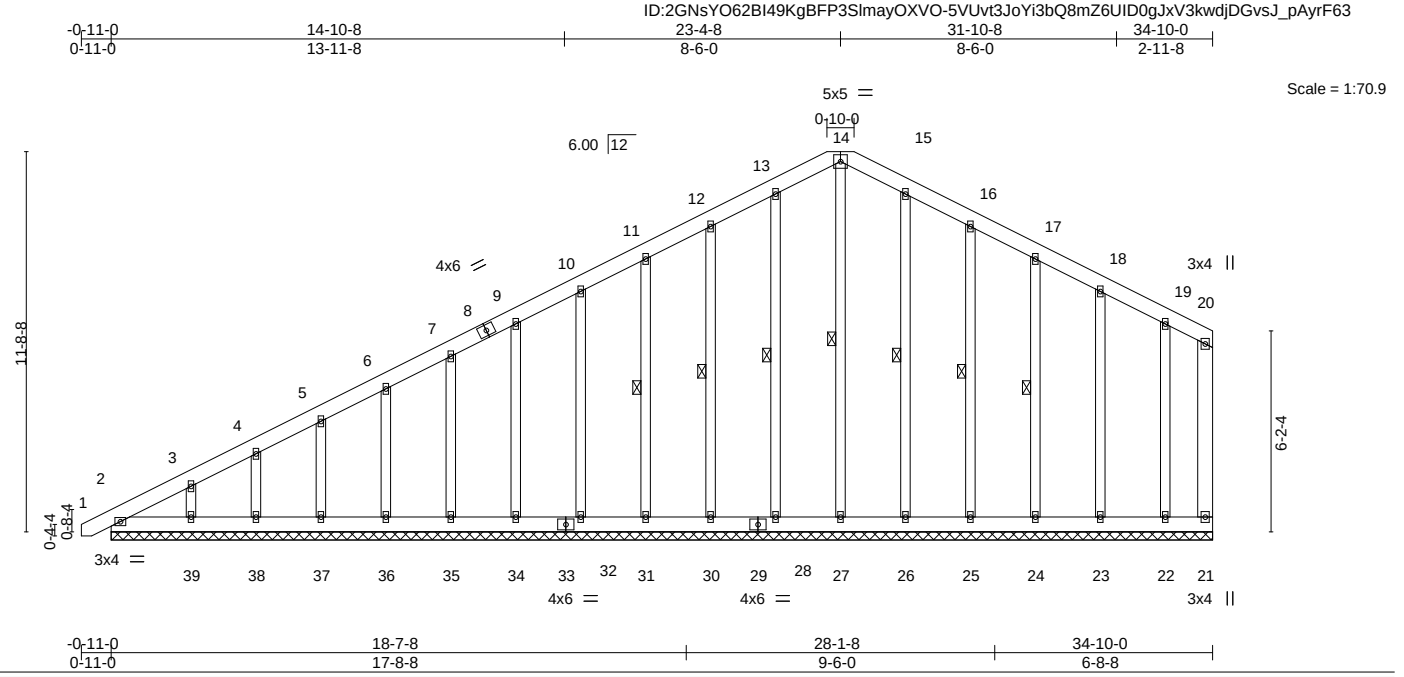
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-2 to 3-7-11, Interior(1) 3-7-11 to 22-5-8, Exterior(2) 22-5-8 to 26-10-5, Interior(1) 26-10-5 to 33-8-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) 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) 2, 9 except (jt=lb) 10=154.
7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

August 4,2020

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

Job	Truss	Truss Type	Qty	Ply	Hobson Road
J0820-3543	A7-GE	GABLE	1	1	E14697934
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Aug 4 11:12:42 2020 Page 1
ID:2GNsYO62BI49KgBFP3SlmayOXVO-5VUvt3JoYi3bQ8mZ6UID0gJxV3kwdjDGvsJ_pAyrF63



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	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(CT)	0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.00	21	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 341 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 14-27, 13-28, 12-30, 11-31, 15-26, 16-25, 17-24

REACTIONS. All bearings 33-11-0.
(lb) - Max Horz 2=393(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 2, 21, 28, 30, 31, 32, 34, 35, 36, 37, 38, 26, 25, 24, 23, 22 except 39=-115(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 2, 21, 27, 28, 30, 31, 32, 34, 35, 36, 37, 38, 39, 26, 25, 24, 23, 22

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-414/121, 3-4=-334/97, 4-5=-283/99, 12-13=-94/256, 13-14=-109/288, 14-15=-109/288

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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 21, 28, 30, 31, 32, 34, 35, 36, 37, 38, 26, 25, 24, 23, 22 except (jt=lb) 39=115.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

August 4,2020

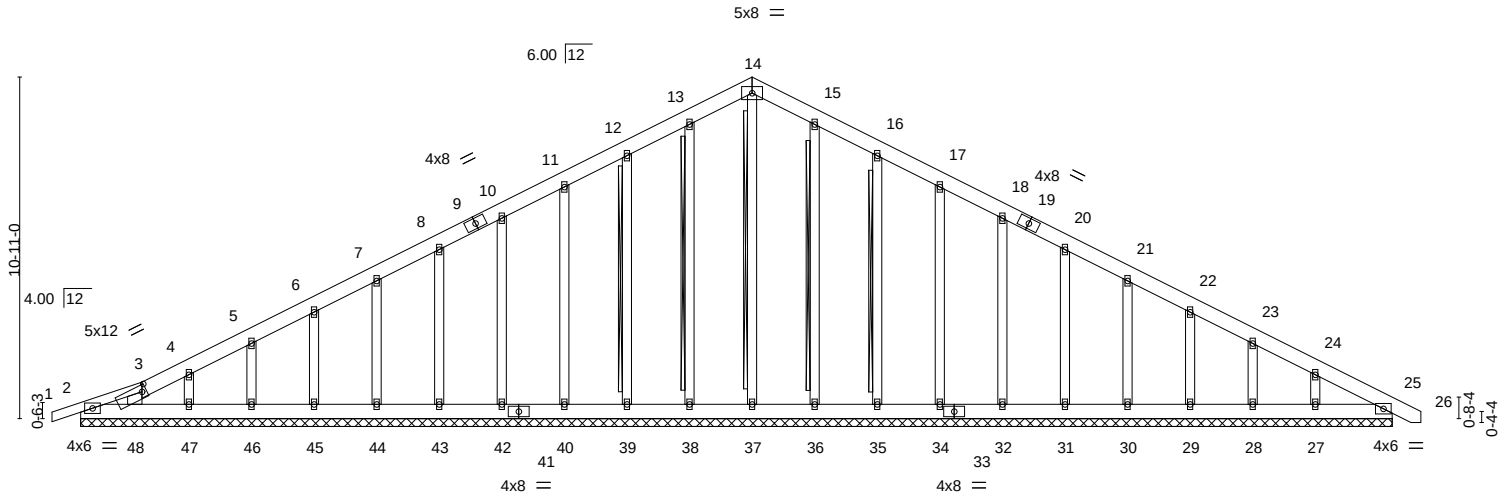
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Hobson Road
J0820-3543	B1-GE	ROOF SPECIAL SUPPORT	1	1	E14697935
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Aug 4 11:12:44 2020 Page 1
ID:2GNsYO62BI49KgBFP3SlmayOXVO-1ucfHIL33JJJfSwyEvLh55PHtsQG5dnZMAo5t3yrF61

-0-11-0 22-4-8 42-10-0 43-9-0
0-11-0 21-5-8 20-5-8 0-11-0

Scale = 1:73.6



-0-11-0 42-10-0 43-9-0
0-11-0 41-11-0 0-11-0

Plate Offsets (X,Y)-- [3:0-1-12,0-2-8], [48:0-2-7,0-1-4]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	0.00	25	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	25	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.01	25	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 360 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 2-48.
WEBS	T-Brace: 2x4 SPF No.2 - 14-37, 13-38, 12-39, 15-36, 16-35 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 41-11-0.
(lb) - Max Horz 2=-215(LC 17)
Max Uplift All uplift 100 lb or less at joint(s) 38, 39, 40, 42, 43, 44, 45, 46, 47, 36, 35, 34, 32, 31, 30, 29, 28, 48, 2 except 27=-101(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 25, 37, 38, 39, 40, 42, 43, 44, 45, 46, 47, 36, 35, 34, 32, 31, 30, 29, 28, 27, 48, 2

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-290/81, 3-4=-255/88, 11-12=-105/260, 12-13=-128/324, 13-14=-141/361, 14-15=-141/361, 15-16=-128/324, 16-17=-105/260

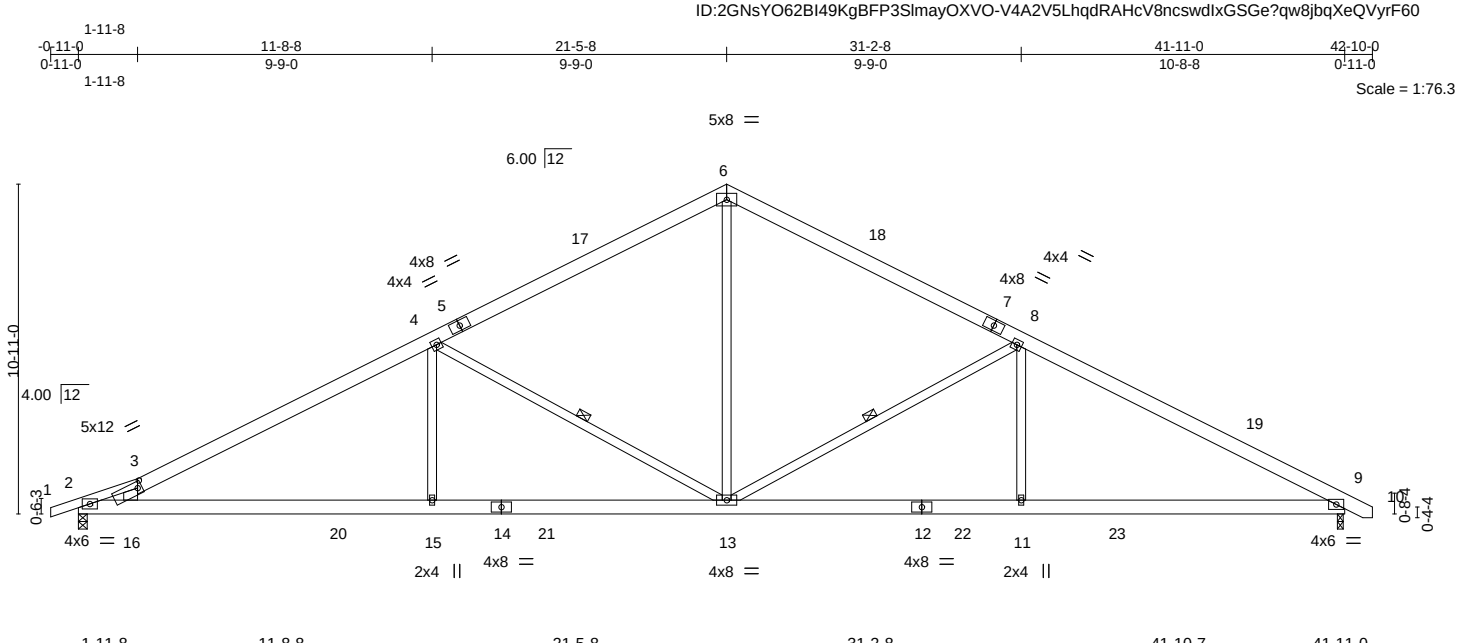
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 38, 39, 40, 42, 43, 44, 45, 46, 47, 36, 35, 34, 32, 31, 30, 29, 28, 48, 2 except (jt=lb) 27=101.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
11) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

August 4,2020

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

Job	Truss	Truss Type	Qty	Ply	Hobson Road
J0820-3543	B2	Roof Special	6	1	E14697936
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Aug 4 11:12:45 2020 Page 1
ID:2GNsYO62BI49KgBFP3SlmayOXVO-V4A2V5LhqdRAHcV8ncswdIxGSGe?qw8jbqXeQVyrF60



1-11-8	11-8-8	21-5-8	31-2-8	41-10-7	41-11-0
1-11-8	9-9-0	9-9-0	9-9-0	10-7-14	0-0-10

Plate Offsets (X,Y)-- [3:0-1-12,0-2-8], [16:0-2-7,0-1-4]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.77	Vert(LL)	-0.22	15-16	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.47	15-16	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.10	9	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.17	15-16	>999	240	Weight: 273 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.1 *Except*
	1-3: 2x4 SP No.1
BOT CHORD	2x6 SP No.1 *Except*
	2-14: 2x6 SP 2400F 2.0E
WEBS	2x4 SP No.2 *Except*
	3-16: 2x6 SP No.1

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-2-4 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 4-13, 8-13

REACTIONS. (size) 2=0-3-8, 9=0-2-5
Max Horz 2=139(LC 11)
Max Uplift 2=-119(LC 12), 9=-110(LC 13)
Max Grav 2=1776(LC 2), 9=1778(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3000/371, 3-4=-3282/610, 4-6=-2101/532, 6-8=-2099/538, 8-9=-3172/595
BOT CHORD 2-16=-327/2790, 15-16=-407/2937, 13-15=-407/2937, 11-13=-379/2717, 9-11=-379/2717
WEBS 3-16=-547/291, 4-15=0/631, 4-13=-1333/339, 6-13=-191/1350, 8-13=-1136/306, 8-11=0/569

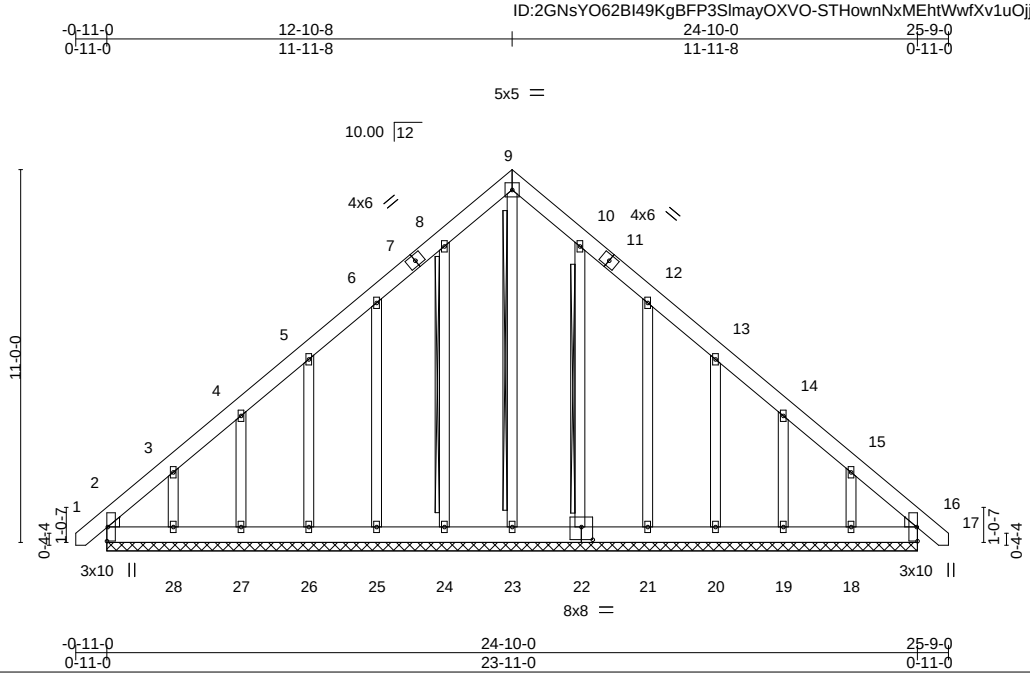
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-11-0 to 1-11-8, Interior(1) 1-11-8 to 21-5-8, Exterior(2) 21-5-8 to 25-10-5, Interior(1) 25-10-5 to 42-8-2 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 9.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=119, 9=110.
7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

August 4,2020

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

Job	Truss	Truss Type	Qty	Ply	Hobson Road
J0820-3543	D1-GE	COMMON SUPPORTED GAB	1	1	E14697937
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Aug 4 11:12:47 2020 Page 1
ID:2GNsYO62BI49KgBFP3SlmayOXVO-STHownNxMEhtWwfXv1uOjj1oG4RpIzw?380lUOyrF6_



Scale = 1:68.0

Plate Offsets (X,Y)-- [2:0-0-2,0-0-2], [2:0-0-4,0-3-1], [16:0-0-4,0-3-1], [16:0-0-2,0-0-2], [22:0-4-0,0-4-8]

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	0.04	Vert(LL)	0.00	16	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	0.00	16	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.01	16	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 226 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
OTHERS 2x4 SP No.2
WEDGE
Left: 2x4 SP No.2 , Right: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS T-Brace: 2x4 SPF No.2 - 9-23, 8-24, 10-22
Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c.,with 3in minimum end distance. Brace must cover 90% of web length.

REACTIONS. All bearings 23-11-0.
(lb) - Max Horz 2=318(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 24, 22, 16 except 2=-114(LC 10), 25=-124(LC 12), 26=-110(LC 12), 27=-109(LC 12), 28=-196(LC 12), 21=-127(LC 13), 20=-110(LC 13), 19=-109(LC 13), 18=-186(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 23, 24, 25, 26, 27, 28, 22, 21, 20, 19, 18, 16 except 2=256(LC 12)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-404/264, 15-16=-343/225
BOT CHORD 2-28=-180/283, 27-28=-180/283, 26-27=-180/283, 25-26=-180/283, 24-25=-180/283, 23-24=-180/283, 22-23=-180/283, 21-22=-181/283, 20-21=-181/283, 19-20=-181/283, 18-19=-181/283, 16-18=-181/283

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 24, 22, 16 except (jt=lb) 2=114, 25=124, 26=110, 27=109, 28=196, 21=127, 20=110, 19=109, 18=186.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
11) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

August 4,2020

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

Job	Truss	Truss Type	Qty	Ply	Hobson Road
J0820-3543	D2	COMMON	5	1	E14697938
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Aug 4 11:12:48 2020 Page 1
ID:2GNsYO62BI49KgBFP3SlmayOXVO-wfrA77OZ7Ypk83DjTkPdFxZw?Tj21LH9HomI?qyrF5z

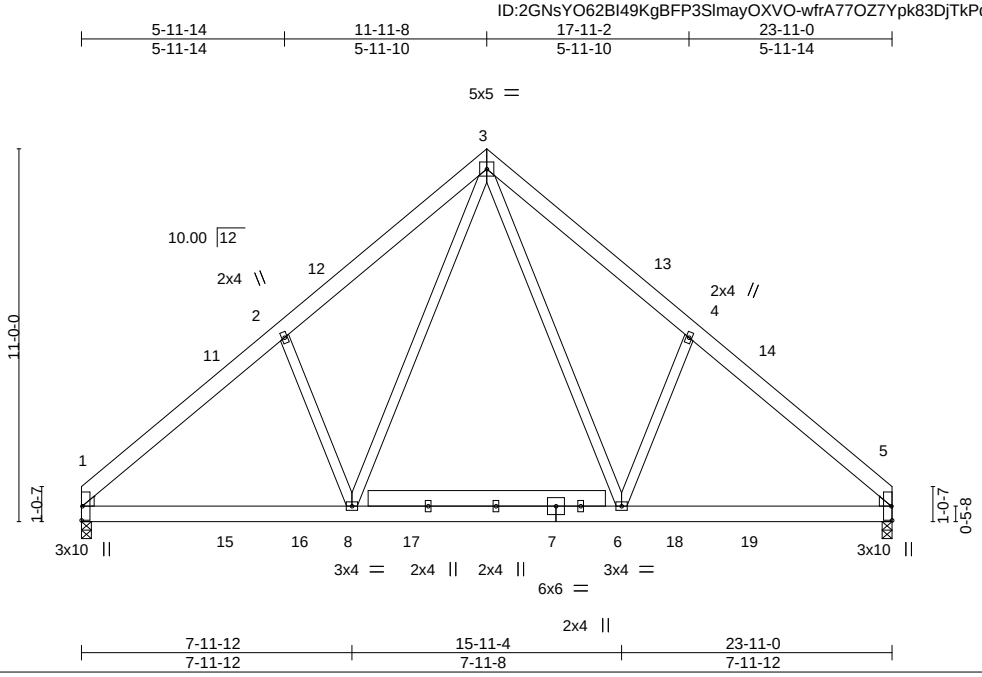


Plate Offsets (X,Y)-- [1:0-0-2,0-0-2], [1:0-0-4,0-3-1], [5:0-0-2,0-0-2], [5:0-0-4,0-3-1]

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	0.24	Vert(LL)	-0.05	6-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.08	6-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.02	1-8	>999	240	Weight: 196 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
WEDGE
Left: 2x4 SP No.2 , Right: 2x4 SP No.2

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

REACTIONS. (size) 1=0-3-8, 5=0-3-8
Max Horz 1=-251(LC 8)
Max Uplift 1=-38(LC 12), 5=-38(LC 13)
Max Grav 1=1057(LC 19), 5=1056(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1310/271, 2-3=-1215/419, 3-4=-1213/419, 4-5=-1307/271
BOT CHORD 1-8=-84/1057, 6-8=0/704, 5-6=-77/924
WEBS 3-6=-185/682, 4-6=-393/288, 3-8=-185/687, 2-8=-393/288

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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 11-11-8, Exterior(2) 11-11-8 to 16-4-5, Interior(1) 16-4-5 to 23-9-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5.

August 4,2020

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

Job	Truss	Truss Type	Qty	Ply	Hobson Road
J0820-3543	D3	COMMON GIRDER	1	2	E14697939
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Aug 4 11:12:49 2020 Page 1
ID:2GNsYO62BI49KgBFP3SlmayOXVO-OrPYLSPBusyblDov0Swso863Lt?amirIWSVsYGyrF5y

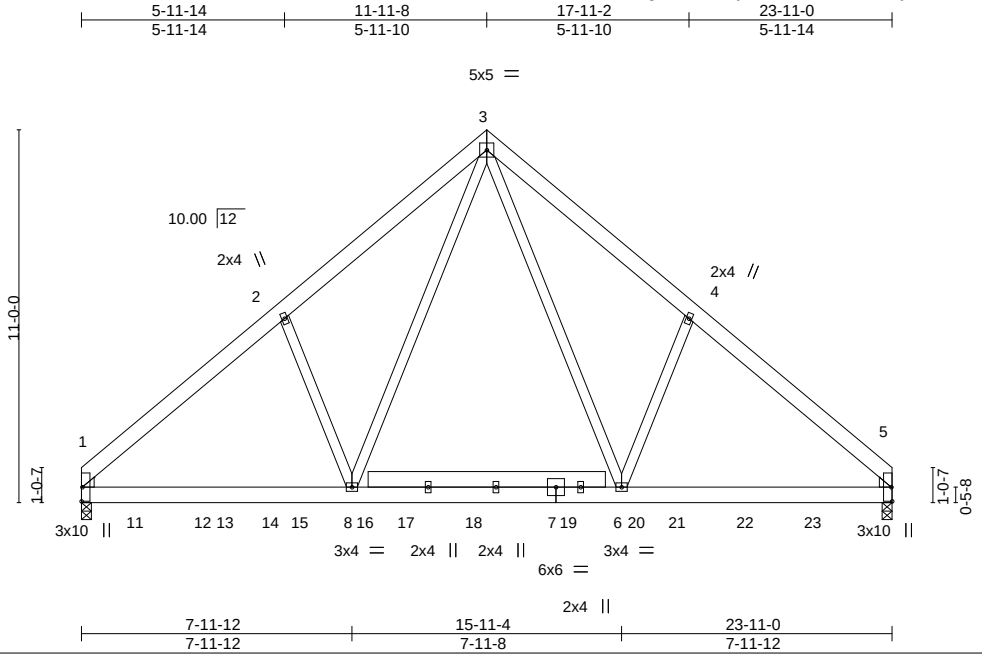


Plate Offsets (X,Y)-- [1:0-0-2,0-0-2], [1:0-0-4,0-3-1], [5:0-0-2,0-0-2], [5:0-0-4,0-3-1]

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	0.33	Vert(LL)	-0.08	1-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.13	1-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.83	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	-0.05	5-6	>999	240	Weight: 391 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
WEDGE
Left: 2x4 SP No.2 , Right: 2x4 SP No.2

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

REACTIONS. (size) 1=0-3-8, 5=0-3-8
Max Horz 1=-251(LC 6)
Max Uplift 1=-827(LC 27), 5=-1658(LC 26)
Max Grav 1=1752(LC 1), 5=1440(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1806/1301, 2-3=-1682/1308, 3-4=-1352/1839, 4-5=-1480/1827
BOT CHORD 1-8=-908/1303, 6-8=-743/817, 5-6=-1316/1027
WEBS 3-6=-1807/608, 4-6=-409/258, 3-8=-668/1196, 2-8=-420/256

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=827, 5=1658.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 244 lb down and 94 lb up at 1-6-12, 237 lb down and 94 lb up at 3-6-12, 236 lb down and 94 lb up at 5-6-12, 244 lb down and 94 lb up at 7-6-12, 43 lb down and 458 lb up at 9-6-12, 43 lb down and 484 lb up at 11-6-12, 43 lb down and 476 lb up at 13-6-12, 43 lb down and 458 lb up at 15-6-12, 43 lb down and 463 lb up at 17-6-12, 43 lb down and 464 lb up at 19-6-12, and 43 lb down and 458 lb up at 21-6-12, and 252 lb down and 87 lb up at 23-9-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

August 4,2020

Continued on page 2

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

LOAD CASE(S) Standard

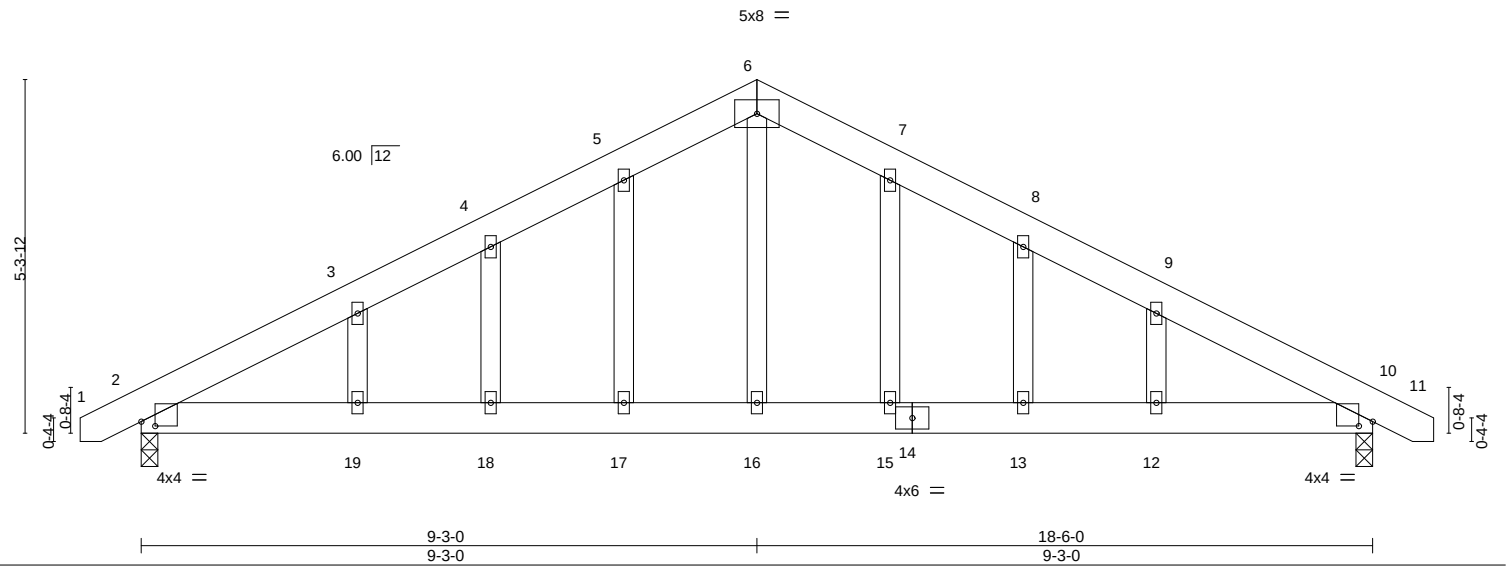
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-60, 3-5=-60, 1-5=-20
   Concentrated Loads (lb)
   Vert: 5=-243(F) 11=-236(F) 12=-236(F) 14=-236(F) 16=-236(F) 17=-17(F) 18=-17(F) 19=-17(F) 20=-17(F) 21=-17(F) 22=-17(F) 23=-17(F)

Job	Truss	Truss Type	Qty	Ply	Hobson Road
J0820-3543	E1-GE	GABLE	1	1	E14697940
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Aug 4 11:12:50 2020 Page 1
ID:2GNsYO62BI49KgBFP3SlmayOXVO-s2zwYoPqf94SNNN6a9S5KMfGOHO3VINSl6FP4iyrF5x

-0-11-0 9-3-0 18-6-0 19-5-0
0-11-0 9-3-0 9-3-0 0-11-0

Scale = 1:34.6



9-3-0 18-6-0
9-3-0 9-3-0

Plate Offsets (X,Y)-- [2:0-2-8,0-0-13], [10:0-2-8,0-0-13]

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	0.24	Vert(LL)	-0.07	12-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.38	Vert(CT)	-0.11	12-13	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.23	Horz(CT)	0.01	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.09	12-13	>999	240	Weight: 125 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 7-11-11 oc bracing.

REACTIONS. (size) 10=0-3-0, 2=0-3-0
Max Horz 2=101(LC 12)
Max Uplift 10=-211(LC 8), 2=-211(LC 9)
Max Grav 10=783(LC 1), 2=783(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1028/1017, 3-4=-941/1019, 4-5=-908/1032, 5-6=-886/1070, 6-7=-886/1070, 7-8=-908/1032, 8-9=-941/1019, 9-10=-1028/1017
BOT CHORD 2-19=-782/821, 18-19=-782/821, 17-18=-782/821, 16-17=-782/821, 15-16=-782/821, 13-15=-782/821, 12-13=-782/821, 10-12=-782/821
WEBS 6-16=-625/458

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left and right exposed;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 studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=211, 2=211.
9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

August 4,2020

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

Job	Truss	Truss Type	Qty	Ply	Hobson Road
J0820-3543	E2	COMMON	1	1	E14697941
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Aug 4 11:12:51 2020 Page 1
ID:2GNsYO62BI49KgBFP3SlmayOXVO-KEXJl8QSQTCJ?Xyl8tzKtZBOUhlJEl8b_m_yc9yrF5w

-0-11-0 9-3-0 18-6-0 19-5-0
0-11-0 9-3-0 9-3-0 0-11-0

Scale = 1:34.6

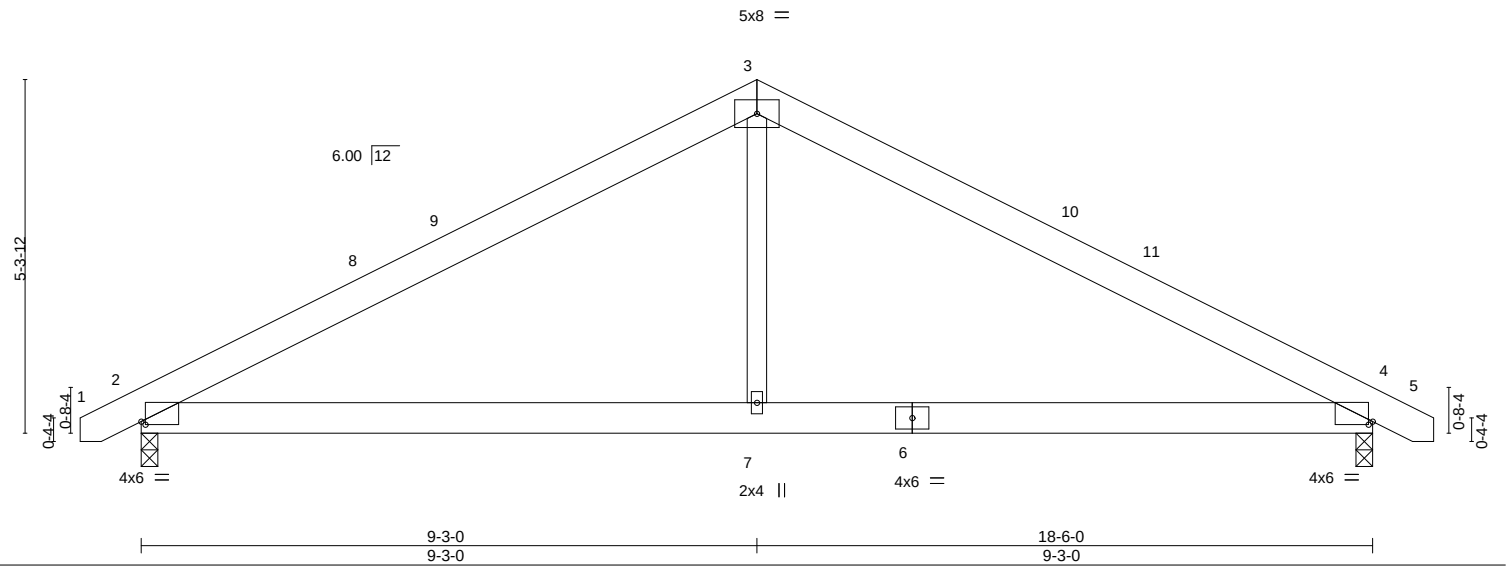


Plate Offsets (X,Y)-- [2:0-0-12,0-0-9], [4:0-0-12,0-0-9]

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	0.41	Vert(LL)	0.10	4-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.09	4-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 104 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 8-9-4 oc bracing.

REACTIONS. (size) 4=0-3-0, 2=0-3-0
Max Horz 2=65(LC 11)
Max Uplift 4=-165(LC 8), 2=-165(LC 9)
Max Grav 4=783(LC 1), 2=783(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1027/949, 3-4=-1027/949
BOT CHORD 2-7=-701/801, 4-7=-701/801
WEBS 3-7=-536/444

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-2 to 3-7-11, Interior(1) 3-7-11 to 9-3-0, Exterior(2) 9-3-0 to 13-7-13, Interior(1) 13-7-13 to 19-3-2 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=165, 2=165.
6) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

August 4,2020

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

Job	Truss	Truss Type	Qty	Ply	Hobson Road
J0820-3543	E3	COMMON	1	1	E14697942
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Aug 4 11:12:52 2020 Page 1
ID:2GNsYO62BI49KgBFP3SlmayOXVO-oQ5hzUR4BnKAchXUiaUZQnkZt55XzCNkCQkW8byrF5v

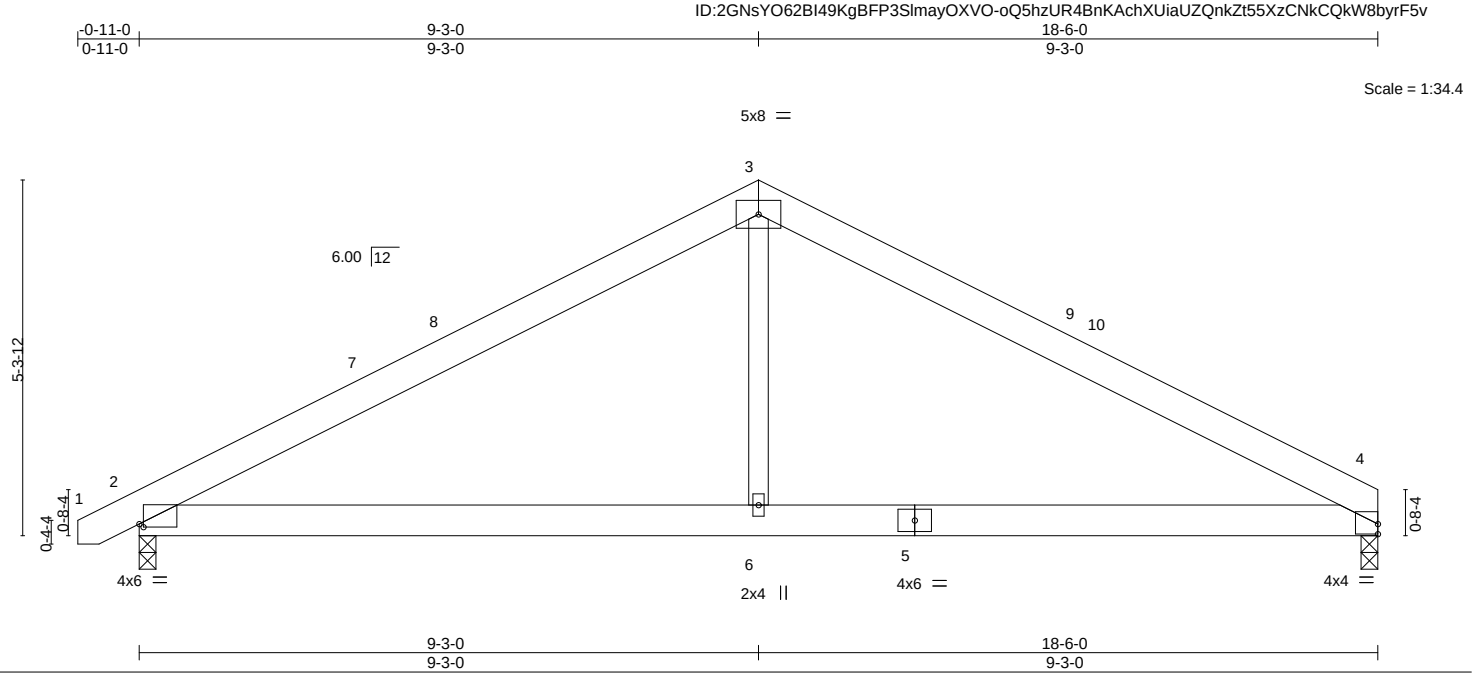


Plate Offsets (X,Y)-- [2:0-0-12,0-0-9], [4:0-0-0,0-1-13]

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)	0.10	2-6	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.09	4-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 101 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 8-8-2 oc bracing.

REACTIONS. (size) 4=0-3-0, 2=0-3-0
Max Horz 2=66(LC 9)
Max Uplift 4=-160(LC 8), 2=-165(LC 9)
Max Grav 4=729(LC 1), 2=784(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1030/950, 3-4=-1027/958
BOT CHORD 2-6=-718/803, 4-6=-718/803
WEBS 3-6=-537/446

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-2 to 3-7-11, Interior(1) 3-7-11 to 9-3-0, Exterior(2) 9-3-0 to 13-7-13, Interior(1) 13-7-13 to 18-4-8 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=160, 2=165.
6) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

August 4,2020

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

Job	Truss	Truss Type	Qty	Ply	Hobson Road
J0820-3543	E4	COMMON	3	1	E14697943
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Aug 4 11:12:53 2020 Page 1
ID:2GNsYO62BI49KgBFP3SlmayOXVO-Gde3AqSiy4S1Er6gFI?oy_HkdUQkifeuR4T3h1yrF5u

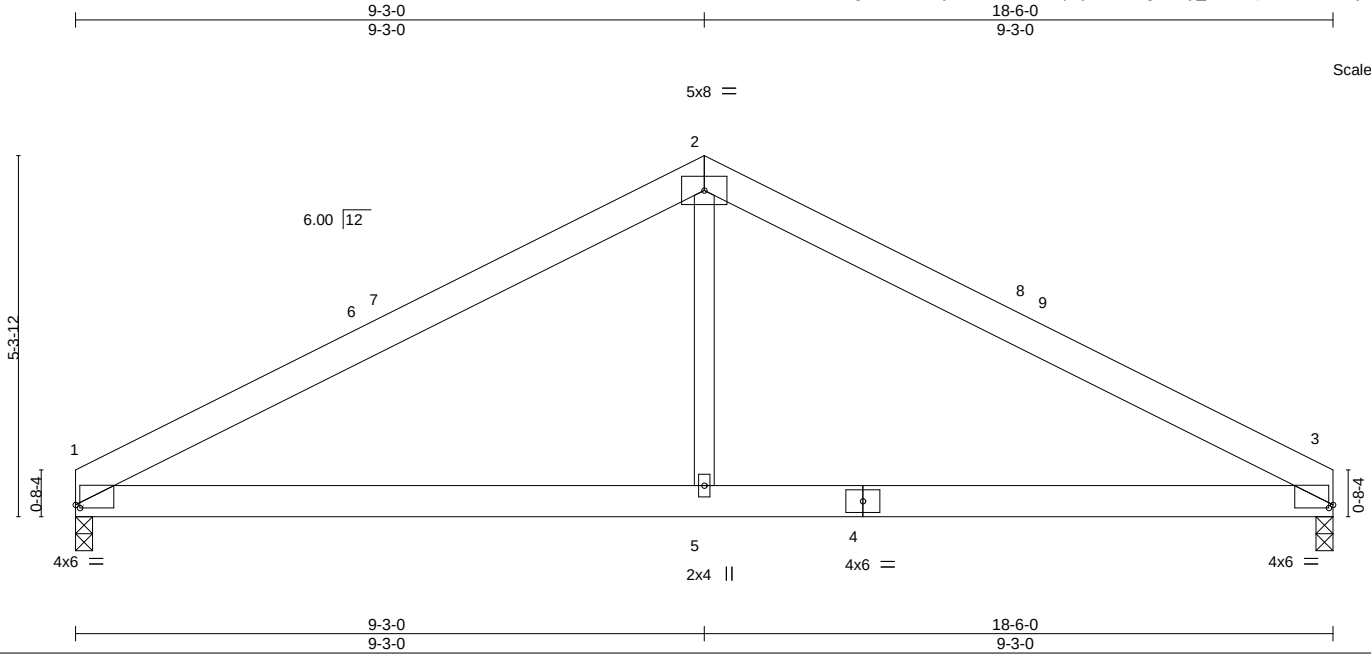


Plate Offsets (X,Y)-- [1:0-0-12,0-0-9], [3:0-0-12,0-0-9]

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	0.44	Vert(LL)	0.10	3-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.09	3-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 99 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 8-8-0 oc bracing.

REACTIONS. (size) 1=0-3-0, 3=0-3-0
Max Horz 1=-63(LC 8)
Max Uplift 1=-161(LC 9), 3=-161(LC 8)
Max Grav 1=730(LC 1), 3=730(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1029/959, 2-3=-1029/959
BOT CHORD 1-5=-719/806, 3-5=-719/806
WEBS 2-5=-536/447

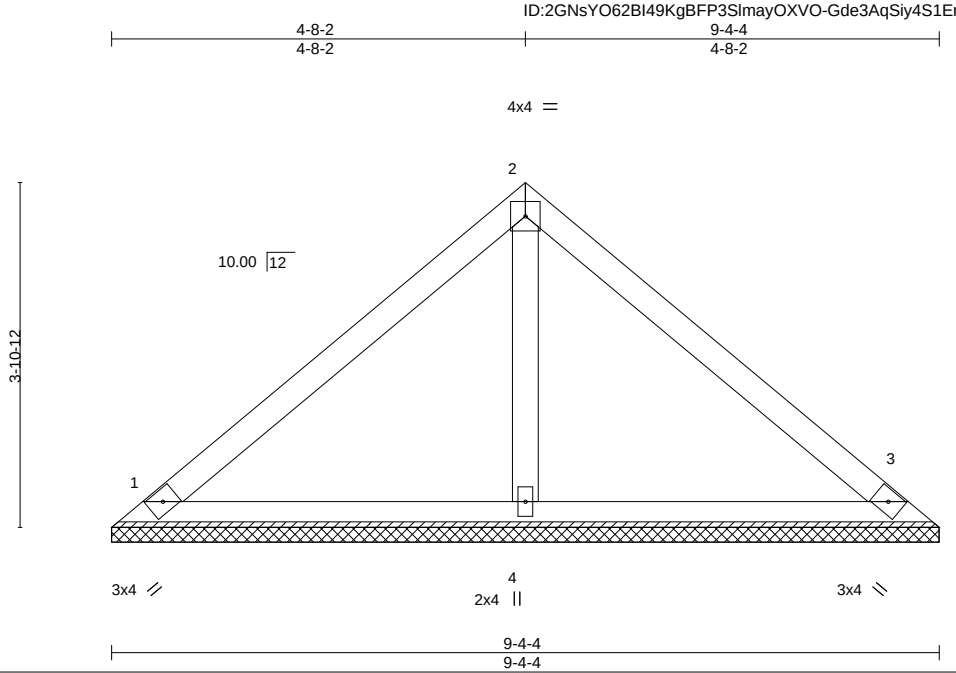
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-8 to 4-6-5, Interior(1) 4-6-5 to 9-3-0, Exterior(2) 9-3-0 to 13-7-13, Interior(1) 13-7-13 to 18-4-8 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=161, 3=161.

August 4,2020

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

Job	Truss	Truss Type	Qty	Ply	Hobson Road
J0820-3543	VD-1	VALLEY	1	1	E14697944
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Aug 4 11:12:53 2020 Page 1
ID:2GNsYO62BI49KgBFP3SlmayOXVO-Gde3AqSiy4S1Er6gFI?oy_HoVUScii2uR4T3h1yrF5u



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)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 35 lb	FT = 20%

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

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

REACTIONS. (size) 1=9-4-4, 3=9-4-4, 4=9-4-4
Max Horz 1=85(LC 11)
Max Uplift 1=-20(LC 13), 3=-28(LC 13)
Max Grav 1=183(LC 1), 3=183(LC 1), 4=319(LC 1)

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

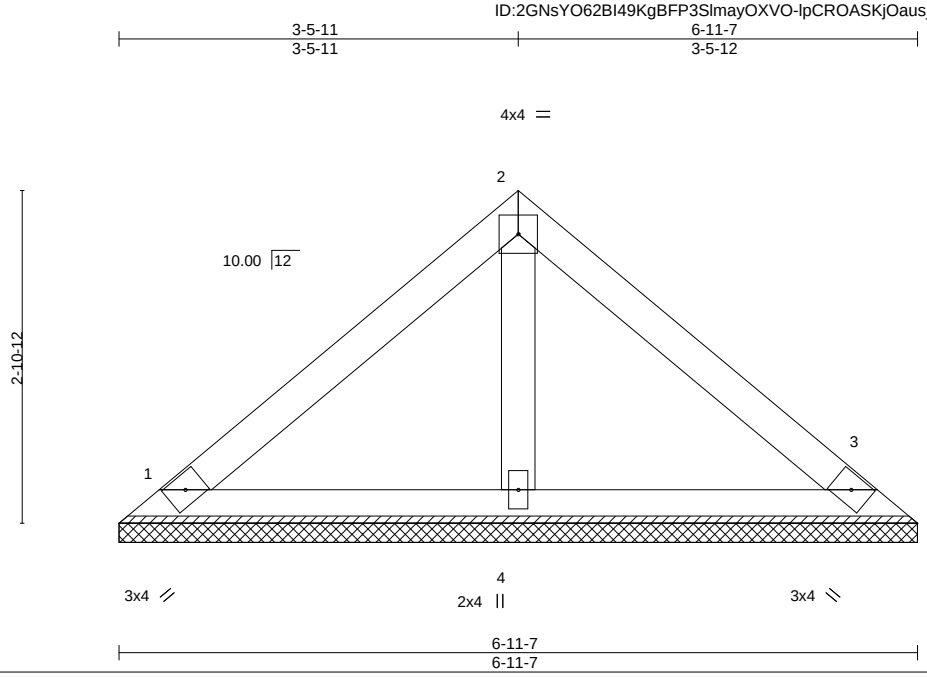
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber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

August 4,2020

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

Job	Truss	Truss Type	Qty	Ply	Hobson Road
J0820-3543	VD-2	VALLEY	1	1	E14697945
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Aug 4 11:12:54 2020 Page 1
ID:2GNsYO62BI49KgBFP3SlmayOXVO-lpCROASKjOaus_htp?W1VCpz4upsR9h1gkDcDUyrF5t



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 26 lb	FT = 20%

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

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

REACTIONS. (size) 1=6-11-7, 3=6-11-7, 4=6-11-7
Max Horz 1=-61(LC 8)
Max Uplift 1=-21(LC 13), 3=-27(LC 13)
Max Grav 1=142(LC 1), 3=142(LC 1), 4=207(LC 1)

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

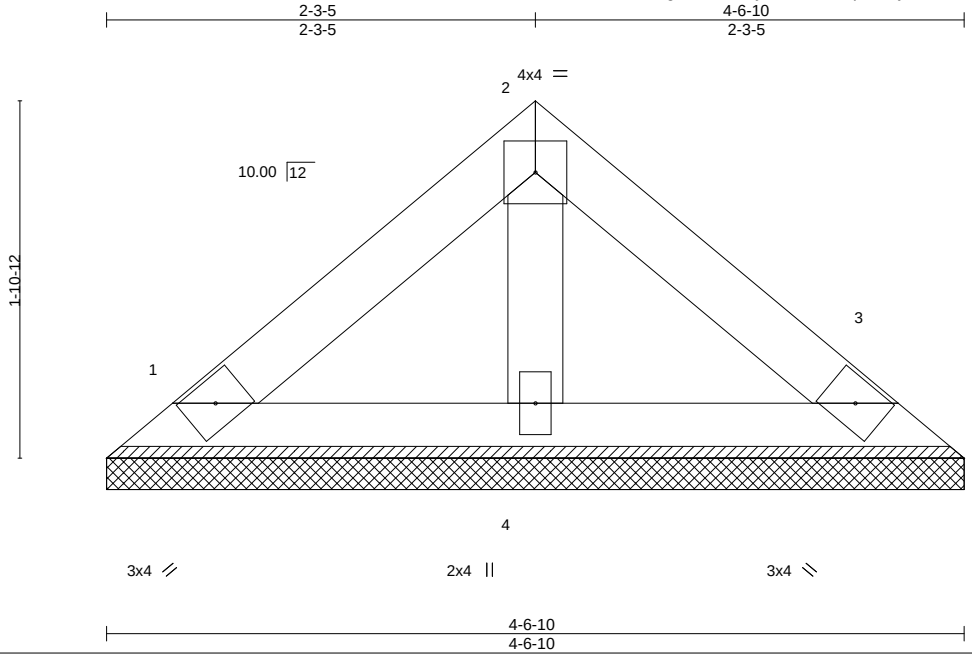
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber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

August 4,2020

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

Job	Truss	Truss Type	Qty	Ply	Hobson Road
J0820-3543	VD-3	VALLEY	1	1	E14697946
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Aug 4 11:12:55 2020 Page 1
ID:2GNsYO62BI49KgBFP3SlmayOXVO-D?mpbWTyUiilT8G3Nj1G1PMABIAnAc5BuOyAlwyrF5s



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)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 16 lb	FT = 20%

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

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

REACTIONS. (size) 1=4-6-10, 3=4-6-10, 4=4-6-10
Max Horz 1=37(LC 9)
Max Uplift 1=-13(LC 13), 3=-16(LC 13)
Max Grav 1=87(LC 1), 3=87(LC 1), 4=126(LC 1)

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

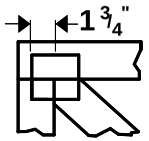
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber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

August 4,2020

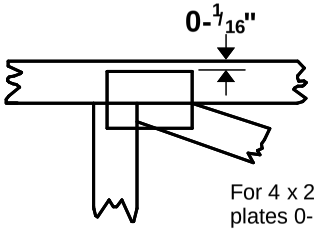
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



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



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.

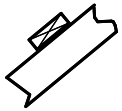
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

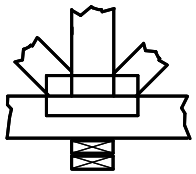
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

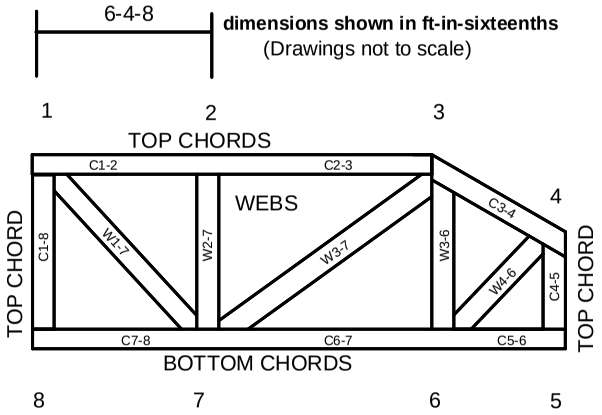


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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. 5/19/2020

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