ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J0920-4400
Lot 60 Happy Acres

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: E14945037 thru E14945049

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

North Carolina COA: C-0844

October 6,2020

Lassiter, Frank

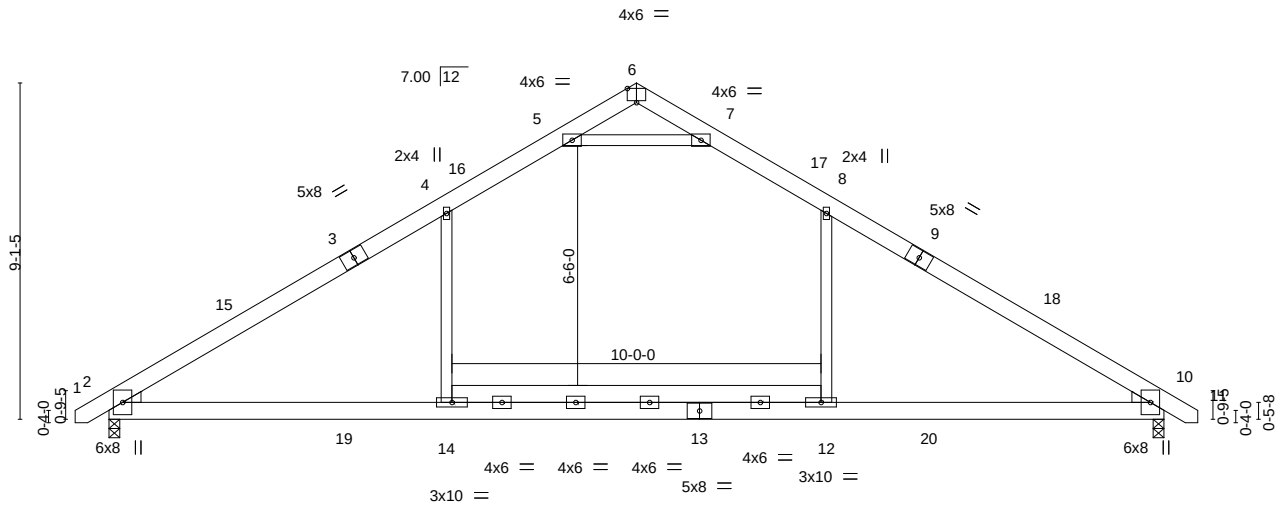
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which 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	Lot 60 Happy Acres
J0920-4400	A1	COMMON	6	1	E14945037
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Oct 6 09:58:24 2020 Page 1
ID:YkalB0Lf1uPsElrXS89ZzOzv2un-uRDn?76aoOs5nD5pQFHRVQ_HdMjKjKlqMwTYpZyWABj

-0-11-0 9-3-8 14-3-8 19-3-8 28-7-0 29-6-0
0-11-0 9-3-8 5-0-0 5-0-0 9-3-8 0-11-0

Scale = 1:62.4



9-3-8 19-3-8 28-7-0
9-3-8 10-0-0 9-3-8

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

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	0.63	Vert(LL)	-0.31	10-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.44	10-12	>769	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.03	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.21	2-14	>999	240	Weight: 196 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP 2400F 2.0E
BOT CHORD 2x6 SP 2400F 2.0E
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) 2=0-3-8, 10=0-3-8
Max Horz 2=210(LC 11)
Max Uplift 2=-76(LC 12), 10=-76(LC 13)
Max Grav 2=1465(LC 19), 10=1465(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-2091/295, 4-5=-1520/370, 5-6=-213/1163, 6-7=-213/1163, 7-8=-1520/370, 8-10=-2092/295
BOT CHORD 2-14=-95/1647, 12-14=-99/1648, 10-12=-95/1647
WEBS 4-14=0/697, 8-12=0/699, 5-7=-2906/658

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) -0-9-0 to 3-7-13, Interior(1) 3-7-13 to 14-3-8, Exterior(2) 14-3-8 to 18-8-5, Interior(1) 18-8-5 to 29-4-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10.
6) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

October 6,2020

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 60 Happy Acres
J0920-4400	A1GE	COMMON SUPPORTED GAB	1	1	E14945038
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Oct 6 09:58:27 2020 Page 1
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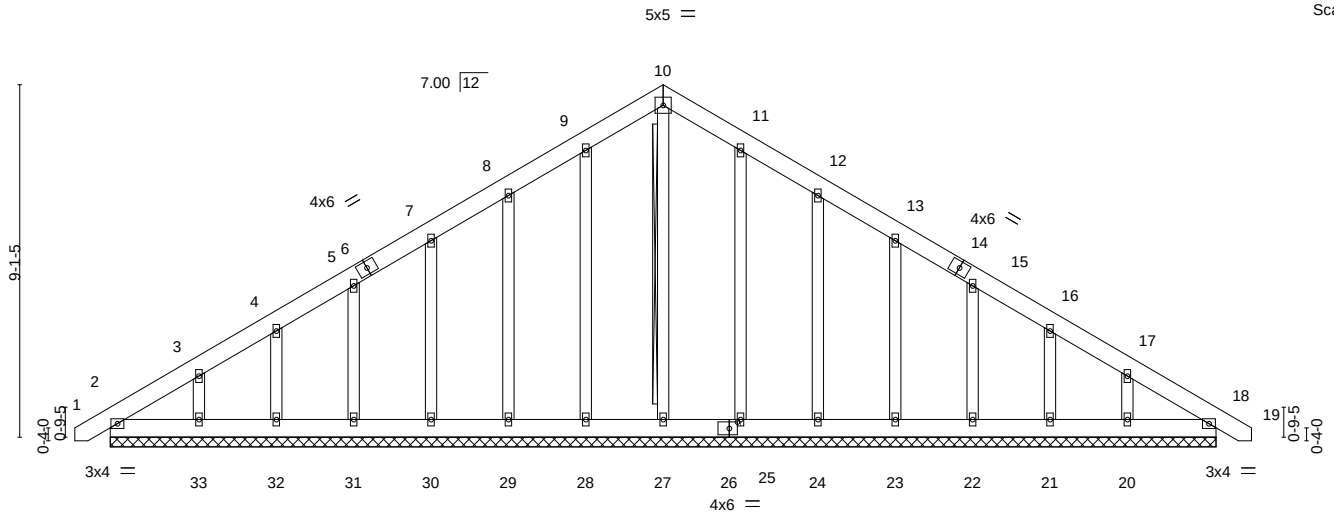
0-11-0 14-3-8 14-3-8 0-11-0

Scale = 1:59.6



-0-11-0 29-6-0 30-5-0
0-11-0 28-7-0 0-11-0

Plate Offsets (X,Y)-- [26:0-2-8,0-2-0]

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	0.04	Vert(LL)	0.00	18	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	18	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.00	18	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 236 lb	FT = 20%

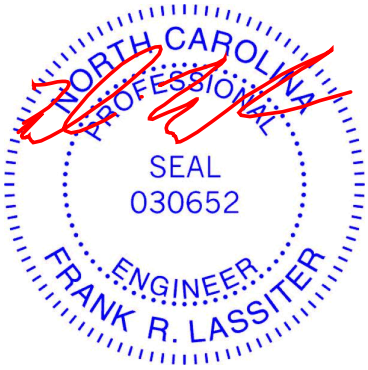
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
OTHERS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS T-Brace: 2x4 SPF No.2 - 10-27
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 28-7-0.
(lb) - Max Horz 2=-263(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 28, 29, 30, 31, 32, 25, 24, 23, 22, 21, 18 except 33=-119(LC 12), 20=-112(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 27, 28, 29, 30, 31, 32, 33, 25, 24, 23, 22, 21, 20, 18

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-253/204

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, 28, 29, 30, 31, 32, 25, 24, 23, 22, 21, 18 except (jt=lb) 33=119, 20=112.
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.



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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 60 Happy Acres
J0920-4400	B1	COMMON	6	1	E14945039
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Oct 6 09:58:30 2020 Page 1
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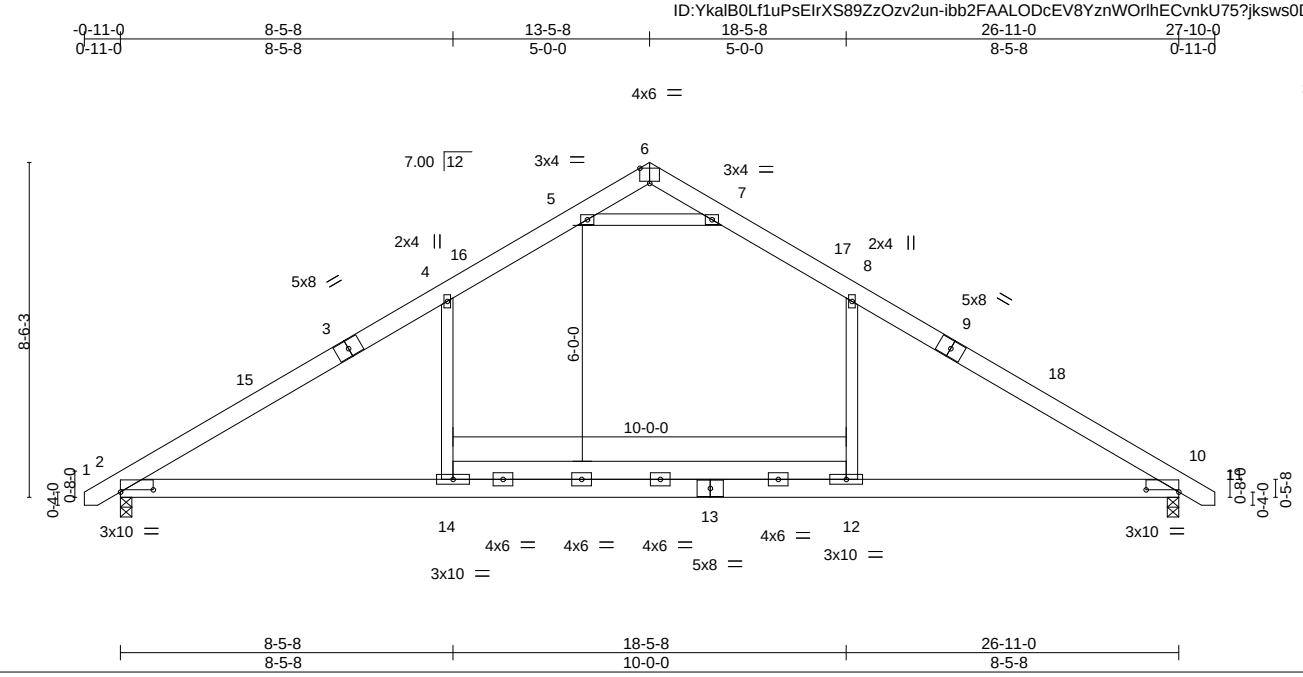

Plate Offsets (X,Y)-- [2:0-10-0,0-0-11], [6:0-3-0,Edge], [10:0-10-0,0-0-11]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.96	Vert(LL)	-0.30	12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.49	12-14	>657	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.57	Horz(CT)	0.04	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.21	2-14	>999	240	Weight: 184 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.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=-199(LC 10)
Max Uplift 2=-73(LC 12), 10=-73(LC 13)
Max Grav 2=1278(LC 19), 10=1278(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1810/277, 4-5=-1328/351, 5-6=-202/1073, 6-7=-202/1073, 7-8=-1328/351, 8-10=-1811/277
BOT CHORD 2-14=-90/1423, 12-14=-94/1424, 10-12=-90/1423
WEBS 4-14=0/537, 8-12=0/538, 5-7=-2582/624

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) -0-9-0 to 3-7-13, Interior(1) 3-7-13 to 13-5-8, Exterior(2) 13-5-8 to 17-10-5, Interior(1) 17-10-5 to 27-8-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10.

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Job	Truss	Truss Type	Qty	Ply	Lot 60 Happy Acres
J0920-4400	B1GE	COMMON SUPPORTED GAB	1	1	E14945040
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Oct 6 09:58:33 2020 Page 1
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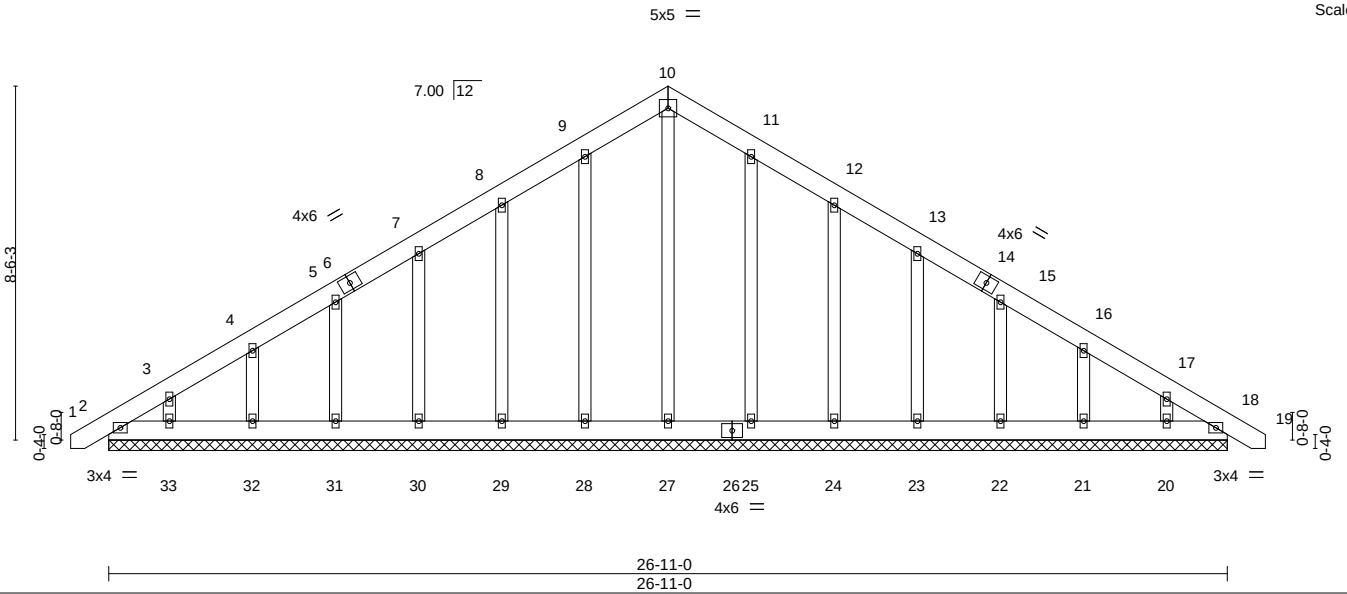
-0-11-0 13-5-8 26-11-0 27-10-0
0-11-0 13-5-8 13-5-8 0-11-0

Scale = 1:55.4



26-11-0
26-11-0

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	0.03	Vert(LL)	-0.00	18	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	18	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.00	18	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 216 lb	FT = 20%

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

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

REACTIONS. All bearings 26-11-0.
(lb) - Max Horz 2=-248(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 28, 29, 30, 31, 32, 33, 25, 24, 23, 22, 21, 20, 18
Max Grav All reactions 250 lb or less at joint(s) 2, 27, 28, 29, 30, 31, 32, 33, 25, 24, 23, 22, 21, 20, 18

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C 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, 28, 29, 30, 31, 32, 33, 25, 24, 23, 22, 21, 20, 18.

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 60 Happy Acres
J0920-4400	B2	COMMON	7	1	E14945041
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Oct 6 09:58:36 2020 Page 1
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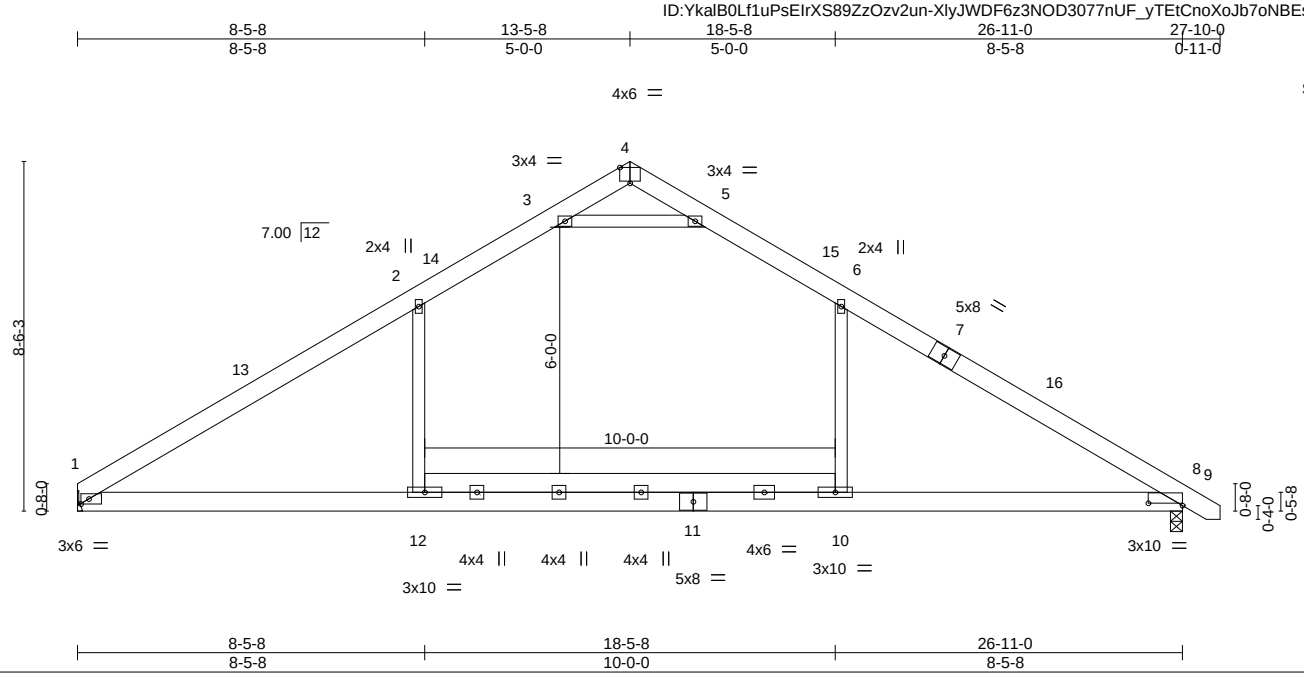


Plate Offsets (X,Y)-- [1:0-2-5,0-1-8], [4:0-3-0,Edge], [8:0-10-0,0-0-11]

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	1.00	Vert(LL)	-0.31	12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.51	10-12	>624	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.58	Horz(CT)	0.04	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.22	1-12	>999	240	Weight: 182 lb	FT = 20%

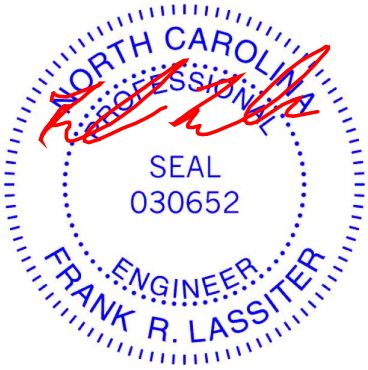
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

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

REACTIONS. (size) 1=Mechanical, 8=0-3-8
Max Horz 1=-197(LC 10)
Max Uplift 1=-60(LC 12), 8=-73(LC 13)
Max Grav 1=1230(LC 19), 8=1282(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1809/274, 2-3=-1339/357, 3-4=-209/1104, 4-5=-219/1107, 5-6=-1336/351, 6-8=-1826/279
BOT CHORD 1-12=-97/1435, 10-12=-100/1435, 8-10=-97/1435
WEBS 2-12=0/523, 6-10=0/549, 3-5=-2632/649

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) 0-0-12 to 4-5-9, Interior(1) 4-5-9 to 13-5-8, Exterior(2) 13-5-8 to 17-10-5, Interior(1) 17-10-5 to 27-8-0 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.



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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 60 Happy Acres
J0920-4400	B2GE	COMMON SUPPORTED GAB	1	1	E14945042
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Oct 6 09:58:40 2020 Page 1
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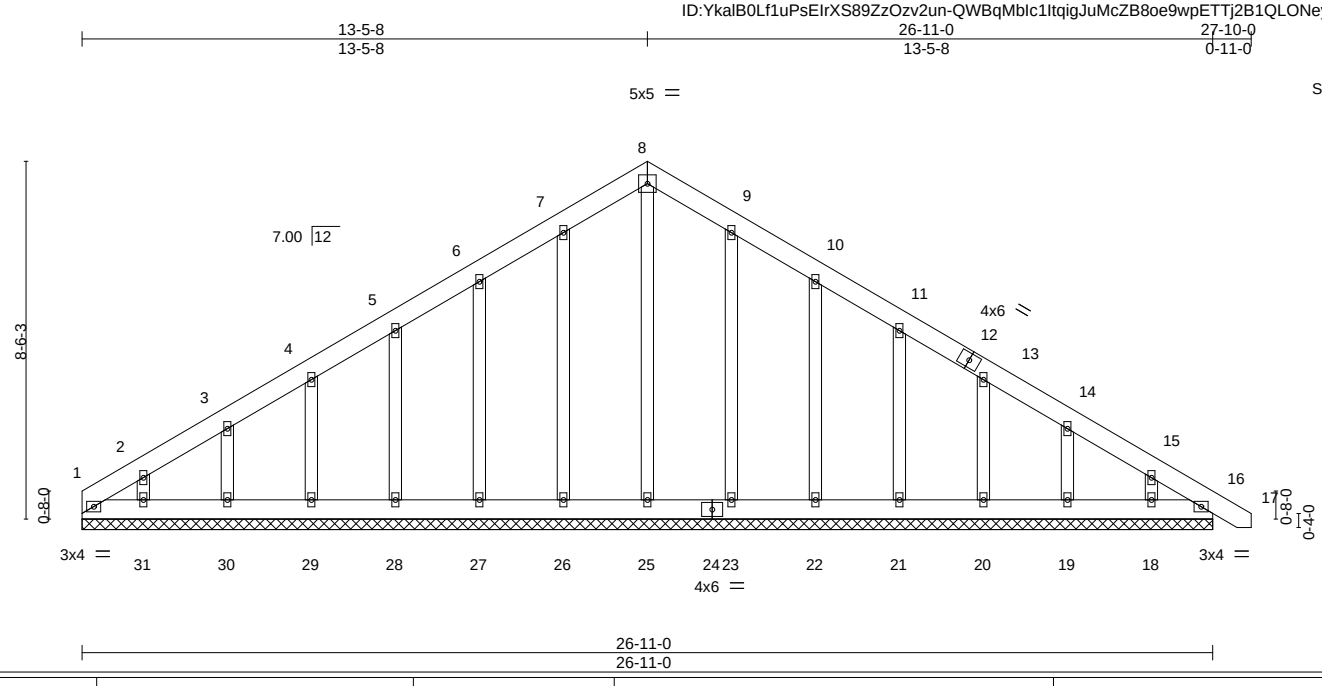


26-11-0
26-11-0

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	0.03	Vert(LL)	-0.00	16	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	16	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.00	16	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 213 lb	FT = 20%

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

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

REACTIONS. All bearings 26-11-0.
(lb) - Max Horz 1=-246(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 26, 27, 28, 29, 30, 31, 23, 22, 21, 20, 19, 18, 16
Max Grav All reactions 250 lb or less at joint(s) 1, 25, 26, 27, 28, 29, 30, 31, 23, 22, 21, 20, 19, 18, 16

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C 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) 1, 26, 27, 28, 29, 30, 31, 23, 22, 21, 20, 19, 18, 16.

October 6,2020

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

Job	Truss	Truss Type	Qty	Ply	Lot 60 Happy Acres
J0920-4400	C1	ATTIC	4	1	E14945043
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Oct 6 09:58:44 2020 Page 1
ID:YkalB0Lf1uPsEIrXS89ZzOzv2un-IIRLCyL75XNFBHdfbSe7JephkQQLPV3my1JcWPyWABP

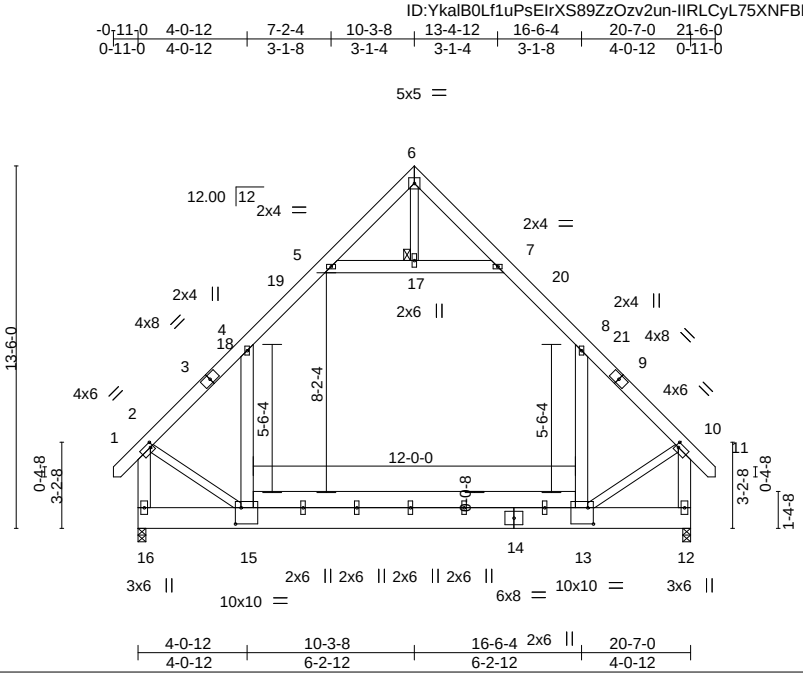


Plate Offsets (X,Y)-- [2:0-1-4,0-2-0], [10:0-1-4,0-2-0], [13:0-2-8,0-7-4], [15:0-2-8,0-7-4]

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	0.69	Vert(LL)	-0.22	13-15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.34	13-15	>706	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.01	12	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.06	13-15	>999	240	Weight: 264 lb	FT = 20%

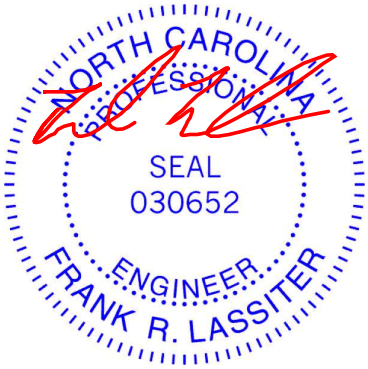
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x10 SP No.1 *Except*
13-15: 2x8 SP No.1
WEBS 2x6 SP No.1 *Except*
6-17,2-15,10-13: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-3-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-9-4 oc bracing.
JOINTS 1 Brace at Jt(s): 17

REACTIONS. (size) 16=0-3-8, 12=0-3-8
Max Horz 16=360(LC 11)
Max Grav 16=1482(LC 21), 12=1482(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1404/0, 4-5=-901/158, 7-8=-901/157, 8-10=-1404/0, 2-16=-1736/0, 10-12=-1736/0
BOT CHORD 15-16=-320/384, 13-15=0/880
WEBS 8-13=-59/587, 4-15=-59/587, 5-17=-854/202, 7-17=-854/202, 2-15=0/974, 10-13=0/975

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) -0-9-6 to 3-7-7, Interior(1) 3-7-7 to 10-3-8, Exterior(2) 10-3-8 to 14-8-5, Interior(1) 14-8-5 to 21-4-6 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Ceiling dead load (10.0 psf) on member(s). 4-5, 7-8, 5-17, 7-17; Wall dead load (5.0psf) on member(s).8-13, 4-15
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 13-15
7) Attic room checked for L/360 deflection.



October 6,2020

ENGINEERING BY TRENCO
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 60 Happy Acres
J0920-4400	C1-GR	ATTIC	2	2	E14945044
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Oct 6 09:58:48 2020 Page 1
ID:YkalB0Lf1uPsElrXS89ZzOzv2un-B3gr1KOe8lthgvwQqIi3TUzNY1tiLIxMtfHpfAyWABL

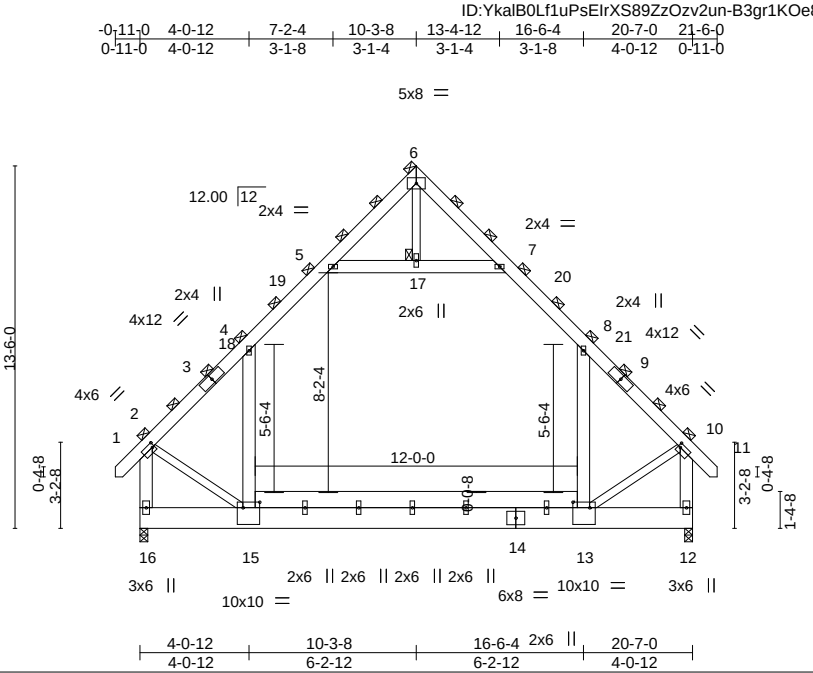


Plate Offsets (X,Y)-- [2:0-1-0,0-2-0], [10:0-1-0,0-1-12], [13:0-7-8,0-2-8], [15:0-7-8,0-2-8]

LOADING (psf)		SPACING- 5-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.63	Vert(LL)	-0.23	13-15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.36	13-15	>666	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.28	Horz(CT)	0.01	12	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.06	13-15	>999	240	Weight: 528 lb	FT = 20%

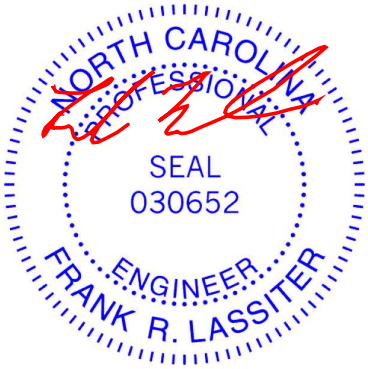
LUMBER-
TOP CHORD 2x6 SP 2400F 2.0E
BOT CHORD 2x10 SP 2400F 2.0E *Except*
13-15: 2x8 SP No.1
WEBS 2x6 SP No.1 *Except*
6-17,2-15,10-13: 2x4 SP No.2

BRACING-
TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals
(Switched from sheeted: Spacing > 2-8-0).
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 6, 17, 2, 10

REACTIONS. (size) 16=0-3-8, 12=0-3-8
Max Horz 16=901(LC 11)
Max Grav 16=3778(LC 21), 12=4398(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-3634/0, 4-5=-2320/377, 5-6=-530/223, 6-7=-526/243, 7-8=-2304/381,
8-10=-3667/0, 2-16=-4491/0, 10-12=-4505/0
BOT CHORD 15-16=-798/948, 13-15=0/2283, 12-13=-102/337
WEBS 8-13=-112/1657, 4-15=-130/1569, 5-17=-2274/474, 7-17=-2274/474, 2-15=0/2539,
10-13=0/2482

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-6 to 3-7-7, Interior(1) 3-7-7 to 10-3-8, Exterior(2) 10-3-8 to 14-8-5, Interior(1) 14-8-5 to 21-4-6 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Ceiling dead load (10.0 psf) on member(s). 4-5, 7-8, 5-17, 7-17; Wall dead load (5.0psf) on member(s).8-13, 4-15
8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 13-15
9) Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Attic room checked for L/360 deflection.



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LOAD CASE(S) Standard

Continued on page 2

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818 Soundside Road
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LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-150, 2-4=-150, 4-5=-200, 5-6=-150, 6-7=-150, 7-8=-200, 8-10=-150, 10-11=-150, 15-16=-50, 13-15=-100, 12-13=-100(F=-50), 5-7=-50
   Drag: 8-13=-25, 4-15=-25
2) Dead + 0.75 Roof Live (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-125, 2-4=-125, 4-5=-175, 5-6=-125, 6-7=-125, 7-8=-175, 8-10=-125, 10-11=-125, 15-16=-50, 13-15=-250, 12-13=-250(F=-200), 5-7=-50
   Drag: 8-13=-25, 4-15=-25
3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-2=-50, 2-4=-50, 4-5=-100, 5-6=-50, 6-7=-50, 7-8=-100, 8-10=-50, 10-11=-50, 13-16=-100, 12-13=-150(F=-50), 5-7=-50
   Drag: 8-13=-25, 4-15=-25
4) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=139, 2-18=81, 4-18=62, 4-5=32, 5-6=62, 6-7=81, 7-20=51, 8-20=32, 8-10=62, 10-11=45, 15-16=-30, 13-15=-60, 12-13=-80(F=-50), 5-7=-30
   Horz: 1-2=-169, 2-18=-111, 6-18=-92, 6-20=111, 10-20=92, 10-11=75, 2-16=58, 10-12=101
   Drag: 8-13=-25, 4-15=-25
5) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=45, 2-4=62, 4-19=32, 5-19=51, 5-6=81, 6-7=62, 7-8=32, 8-21=62, 10-21=81, 10-11=139, 15-16=-30, 13-15=-60, 12-13=-80(F=-50), 5-7=-30
   Horz: 1-2=-75, 2-19=-92, 6-19=-111, 6-21=92, 10-21=111, 10-11=169, 2-16=-101, 10-12=-58
   Drag: 8-13=-25, 4-15=-25
6) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=25, 2-4=-142, 4-5=-192, 5-6=-142, 6-7=-142, 7-8=-192, 8-10=-142, 10-11=-125, 15-16=-50, 13-15=-100, 12-13=-100(F=-50), 5-7=-50
   Horz: 1-2=-75, 2-6=92, 6-10=-92, 10-11=-75, 2-16=-67, 10-12=-91
   Drag: 8-13=-25, 4-15=-25
7) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=-125, 2-4=-142, 4-5=-192, 5-6=-142, 6-7=-142, 7-8=-192, 8-10=-142, 10-11=25, 15-16=-50, 13-15=-100, 12-13=-100(F=-50), 5-7=-50
   Horz: 1-2=75, 2-6=92, 6-10=-92, 10-11=75, 2-16=91, 10-12=67
   Drag: 8-13=-25, 4-15=-25
8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=6, 2-4=-33, 4-5=-63, 5-6=-33, 6-7=27, 7-8=-3, 8-10=27, 10-11=10, 15-16=-30, 13-15=-60, 12-13=-80(F=-50), 5-7=-30
   Horz: 1-2=-36, 2-6=3, 6-10=57, 10-11=40, 2-16=36, 10-12=52
   Drag: 8-13=-25, 4-15=-25
9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=10, 2-4=27, 4-5=-3, 5-6=27, 6-7=-33, 7-8=-63, 8-10=-33, 10-11=6, 15-16=-30, 13-15=-60, 12-13=-80(F=-50), 5-7=-30
   Horz: 1-2=-40, 2-6=-57, 6-10=-3, 10-11=36, 2-16=-52, 10-12=-36
   Drag: 8-13=-25, 4-15=-25
10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
    Uniform Loads (plf)
    Vert: 1-2=-70, 2-4=-87, 4-5=-137, 5-6=-87, 6-7=-27, 7-8=-77, 8-10=-27, 10-11=-10, 15-16=-50, 13-15=-100, 12-13=-100(F=-50), 5-7=-50
    Horz: 1-2=20, 2-6=37, 6-10=23, 10-11=40, 2-16=69, 10-12=18
    Drag: 8-13=-25, 4-15=-25
11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
    Uniform Loads (plf)
    Vert: 1-2=-10, 2-4=-27, 4-5=-77, 5-6=-27, 6-7=-87, 7-8=-137, 8-10=-87, 10-11=-70, 15-16=-50, 13-15=-100, 12-13=-100(F=-50), 5-7=-50
    Horz: 1-2=-40, 2-6=-23, 6-10=-37, 10-11=-20, 2-16=-18, 10-12=-69
    Drag: 8-13=-25, 4-15=-25
12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
    Uniform Loads (plf)
    Vert: 1-2=35, 2-4=51, 4-5=21, 5-6=51, 6-7=22, 7-8=-8, 8-10=22, 10-11=5, 15-16=-30, 13-15=-60, 12-13=-80(F=-50), 5-7=-30
    Horz: 1-2=-65, 2-6=-81, 6-10=52, 10-11=35, 2-16=21, 10-12=44
    Drag: 8-13=-25, 4-15=-25
13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
    Uniform Loads (plf)
    Vert: 1-2=5, 2-4=22, 4-5=-8, 5-6=22, 6-7=51, 7-8=21, 8-10=51, 10-11=35, 15-16=-30, 13-15=-60, 12-13=-80(F=-50), 5-7=-30
    Horz: 1-2=-35, 2-6=-52, 6-10=81, 10-11=65, 2-16=-44, 10-12=-21
    Drag: 8-13=-25, 4-15=-25
14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
    Uniform Loads (plf)
    Vert: 1-2=35, 2-4=51, 4-5=21, 5-6=51, 6-7=22, 7-8=-8, 8-10=22, 10-11=5, 15-16=-30, 13-15=-60, 12-13=-80(F=-50), 5-7=-30
    Horz: 1-2=-65, 2-6=-81, 6-10=52, 10-11=35, 2-16=21, 10-12=44
    Drag: 8-13=-25, 4-15=-25
15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60

Continued on page 3

LOAD CASE(S) Standard

Uniform Loads (plf)
Vert: 1-2=5, 2-4=22, 4-5=-8, 5-6=22, 6-7=51, 7-8=21, 8-10=51, 10-11=35, 15-16=-30, 13-15=-60, 12-13=-80(F=-50), 5-7=-30
Horz: 1-2=-35, 2-6=-52, 6-10=81, 10-11=65, 2-16=-44, 10-12=-21
Drag: 8-13=-25, 4-15=-25

16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=15, 2-4=-2, 4-5=-52, 5-6=-2, 6-7=-32, 7-8=-82, 8-10=-32, 10-11=-15, 15-16=-50, 13-15=-100, 12-13=-100(F=-50), 5-7=-50
Horz: 1-2=-65, 2-6=-48, 6-10=18, 10-11=35, 2-16=54, 10-12=10
Drag: 8-13=-25, 4-15=-25

17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-15, 2-4=-32, 4-5=-82, 5-6=-32, 6-7=-2, 7-8=-52, 8-10=-2, 10-11=15, 15-16=-50, 13-15=-100, 12-13=-100(F=-50), 5-7=-50
Horz: 1-2=-35, 2-6=-18, 6-10=48, 10-11=65, 2-16=-10, 10-12=-54
Drag: 8-13=-25, 4-15=-25

18) Dead + Attic Floor: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 1-2=-50, 2-4=-50, 4-5=-100, 5-6=-50, 6-7=-50, 7-8=-100, 8-10=-50, 10-11=-50, 15-16=-50, 13-15=-300, 12-13=-300(F=-250), 5-7=-50
Drag: 8-13=-25, 4-15=-25

19) Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 1-2=-50, 2-4=-50, 4-5=-100, 5-6=-50, 6-7=-50, 7-8=-100, 8-10=-50, 10-11=-50, 15-16=-50, 13-15=-300, 12-13=-300(F=-250), 5-7=-50
Drag: 8-13=-25, 4-15=-25

20) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-140, 2-4=-152, 4-5=-202, 5-6=-152, 6-7=-107, 7-8=-157, 8-10=-107, 10-11=-95, 15-16=-50, 13-15=-250, 12-13=-250(F=-200), 5-7=-50
Horz: 1-2=15, 2-6=27, 6-10=18, 10-11=30, 2-16=52, 10-12=13
Drag: 8-13=-25, 4-15=-25

21) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-95, 2-4=-107, 4-5=-157, 5-6=-107, 6-7=-152, 7-8=-202, 8-10=-152, 10-11=-140, 15-16=-50, 13-15=-250, 12-13=-250(F=-200), 5-7=-50
Horz: 1-2=-30, 2-6=-18, 6-10=-27, 10-11=-15, 2-16=-13, 10-12=-52
Drag: 8-13=-25, 4-15=-25

22) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-77, 2-4=-89, 4-5=-139, 5-6=-89, 6-7=-112, 7-8=-162, 8-10=-112, 10-11=-99, 15-16=-50, 13-15=-250, 12-13=-250(F=-200), 5-7=-50
Horz: 1-2=-48, 2-6=-36, 6-10=13, 10-11=26, 2-16=41, 10-12=8
Drag: 8-13=-25, 4-15=-25

23) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-99, 2-4=-112, 4-5=-162, 5-6=-112, 6-7=-89, 7-8=-139, 8-10=-89, 10-11=-77, 15-16=-50, 13-15=-250, 12-13=-250(F=-200), 5-7=-50
Horz: 1-2=-26, 2-6=-13, 6-10=36, 10-11=48, 2-16=-8, 10-12=-41
Drag: 8-13=-25, 4-15=-25

24) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-150, 2-4=-150, 4-5=-200, 5-6=-150, 6-7=-50, 7-8=-100, 8-10=-50, 10-11=-50, 15-16=-50, 13-15=-100, 12-13=-100(F=-50), 5-7=-50
Drag: 8-13=-25, 4-15=-25

25) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-50, 2-4=-50, 4-5=-100, 5-6=-50, 6-7=-150, 7-8=-200, 8-10=-150, 10-11=-150, 15-16=-50, 13-15=-100,
12-13=-100(F=-50), 5-7=-50
Drag: 8-13=-25, 4-15=-25

26) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-125, 2-4=-125, 4-5=-175, 5-6=-125, 6-7=-50, 7-8=-100, 8-10=-50, 10-11=-50, 15-16=-50, 13-15=-250,
12-13=-250(F=-200), 5-7=-50
Drag: 8-13=-25, 4-15=-25

27) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-50, 2-4=-50, 4-5=-100, 5-6=-50, 6-7=-125, 7-8=-175, 8-10=-125, 10-11=-125, 15-16=-50, 13-15=-250,
12-13=-250(F=-200), 5-7=-50
Drag: 8-13=-25, 4-15=-25

Job	Truss	Truss Type	Qty	Ply	Lot 60 Happy Acres
J0920-4400	C1GE	GABLE	1	1	E14945045
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Oct 6 09:58:46 2020 Page 1
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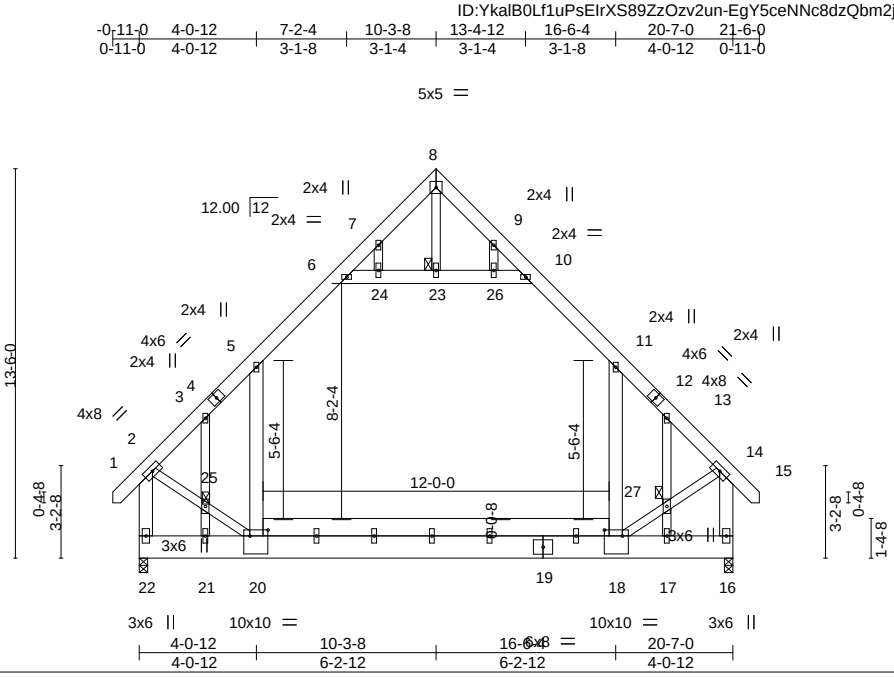

Plate Offsets (X,Y)-- [18:0-7-8,0-2-8], [20:0-7-8,0-2-8]

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	0.69	Vert(LL)	-0.18	18-20	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.28	18-20	>866	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.01	16	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.07	18-20	>999	240	Weight: 279 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x10 SP No.1 *Except*
18-20: 2x8 SP No.1
WEBS 2x6 SP No.1 *Except*
8-23,2-20,14-18: 2x4 SP No.2
OTHERS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-1-1 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 23, 25, 27

REACTIONS. (size) 22=0-3-8, 16=0-3-8
Max Horz 22=451(LC 11)
Max Grav 22=1481(LC 21), 16=1481(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1227/10, 3-5=-1563/72, 5-6=-918/186, 6-7=-262/82, 7-8=-97/253, 8-9=-97/253, 9-10=-262/82, 10-11=-918/186, 11-13=-1562/72, 13-14=-1226/10, 2-22=-1464/0, 14-16=-1464/0
BOT CHORD 21-22=-443/448, 20-21=-443/448, 18-20=0/928
WEBS 11-18=-32/886, 5-20=-32/886, 6-24=-899/247, 23-24=-895/247, 23-26=-895/247, 10-26=-899/247, 8-23=-343/0, 2-25=0/1080, 20-25=0/1169, 18-27=0/1171, 14-27=0/1081, 7-24=-35/385, 3-25=-602/97, 21-25=-726/66, 9-26=-34/385, 13-27=-602/98, 17-27=-727/66

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; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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 2x6 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) Ceiling dead load (10.0 psf) on member(s). 5-6, 10-11, 6-24, 23-24, 23-26, 10-26; Wall dead load (5.0psf) on member(s).11-18, 5-20
9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 18-20
10) Attic room checked for L/360 deflection.

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Job	Truss	Truss Type	Qty	Ply	Lot 60 Happy Acres
J0920-4400	D1-GR	Common Girder	1	2	E14945046
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Oct 6 09:58:51 2020 Page 1
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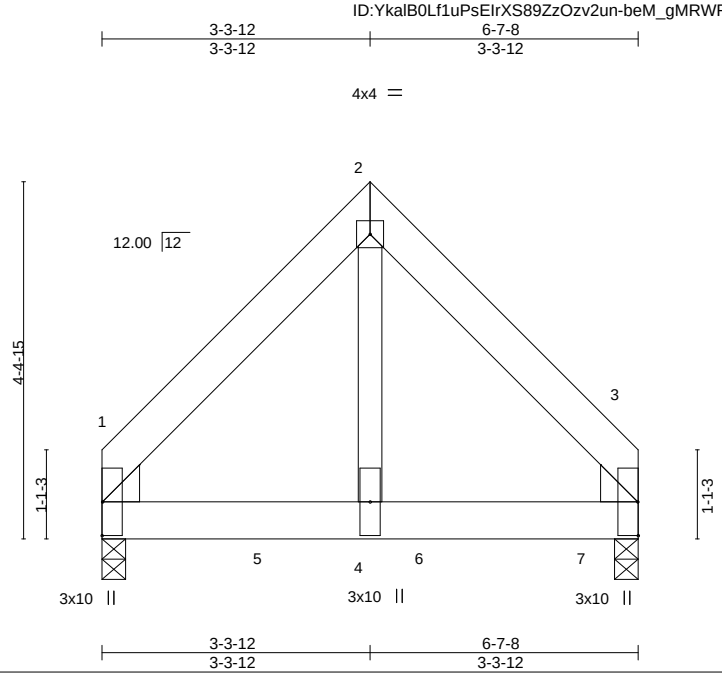


Plate Offsets (X,Y)-- [1:0-0-1,0-0-1], [1:0-0-1,0-3-12], [3:0-0-1,0-0-1], [3:0-0-1,0-3-12]

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	0.26	Vert(LL)	-0.01	3-4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	-0.02	3-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.27	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P		Wind(LL)	0.01	3-4	>999	240	Weight: 93 lb	FT = 20%

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

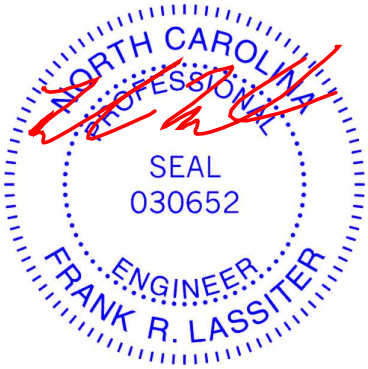
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 3=0-3-8
Max Horz 1=-93(LC 25)
Max Uplift 1=-96(LC 9), 3=-144(LC 8)
Max Grav 1=1533(LC 2), 3=2351(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1564/116, 2-3=-1564/116
BOT CHORD 1-4=-60/961, 3-4=-60/961
WEBS 2-4=-88/2184

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 0-7-0 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.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 3=144.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1145 lb down and 80 lb up at 2-0-12, and 1145 lb down and 80 lb up at 4-0-12, and 1151 lb down and 75 lb up at 6-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

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



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Continued on page 2

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LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 5=-1047(B) 6=-1047(B) 7=-1053(B)

Job	Truss	Truss Type	Qty	Ply	Lot 60 Happy Acres
J0920-4400	D1GE	COMMON SUPPORTED GAB	1	1	E14945047
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Oct 6 09:58:49 2020 Page 1
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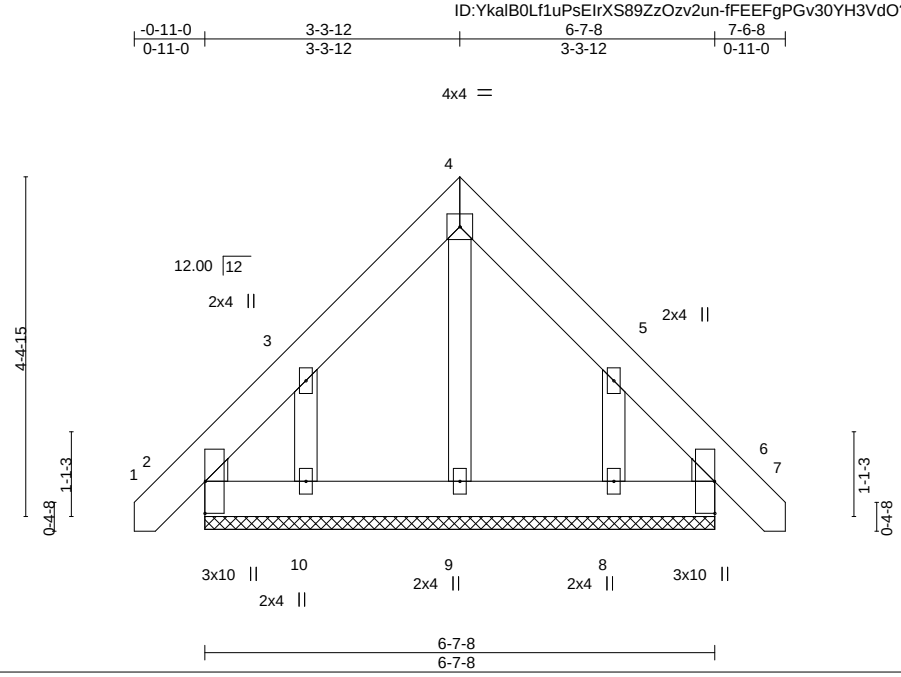


Plate Offsets (X,Y)-- [2:0-0-1,0-0-1], [2:0-0-1,0-2-6], [6:0-0-1,0-0-1], [6:0-0-1,0-2-6]

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	0.03	Vert(LL)	-0.00	6	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(CT)	-0.00	6	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 55 lb	FT = 20%

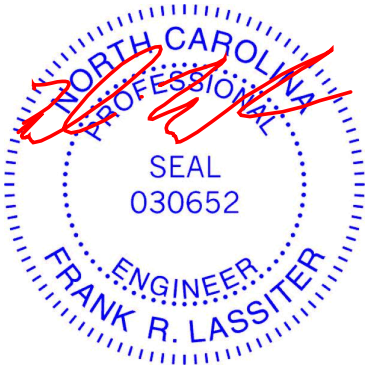
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
OTHERS 2x4 SP No.2
WEDGE
Left: 2x4 SP No.2 , Right: 2x4 SP No.2

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.

REACTIONS. All bearings 6-7-8.
(lb) - Max Horz 2=-123(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 10=-170(LC 12), 8=-165(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9, 10, 8

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C 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) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6 except (jt=lb) 10=170, 8=165.
9) 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	Lot 60 Happy Acres
J0920-4400	M1GE	GABLE	1	1	E14945048
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Oct 6 09:58:53 2020 Page 1
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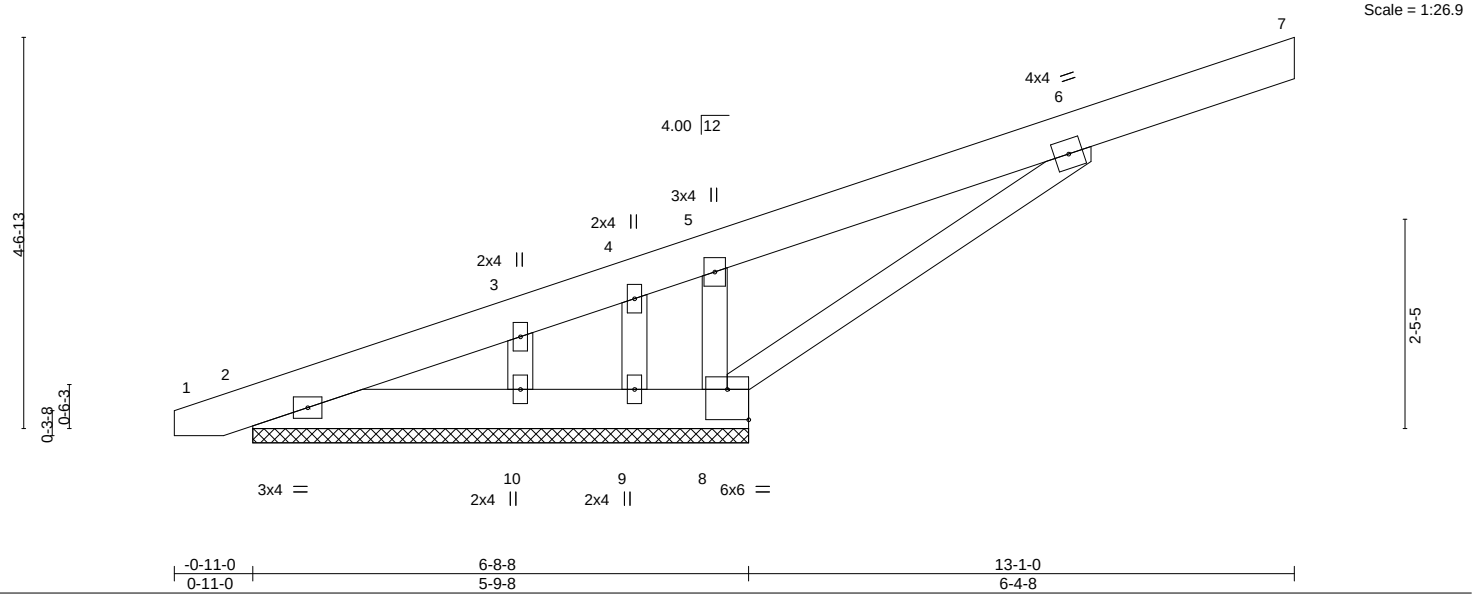

Plate Offsets (X,Y)-- [8:Edge,0-4-4]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	-0.03	6-7	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	-0.02	6-7	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 58 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 5-9-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. All bearings 5-9-8.
(lb) - Max Horz 2=197(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 2, 9, 10 except 8=-493(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 2, 9, 10 except 8=809(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1159/745, 3-4=-1083/712, 4-5=-1114/760, 5-6=-1012/752, 5-8=-288/326
BOT CHORD 2-10=-671/829, 9-10=-671/829, 8-9=-671/829
WEBS 6-8=-843/1041

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) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 1-4-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 9, 10 except (jt=lb) 8=493.
9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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Job	Truss	Truss Type	Qty	Ply	Lot 60 Happy Acres
J0920-4400	M2	MONOPITCH	3	1	E14945049
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Tue Oct 6 09:58:53 2020 Page 1
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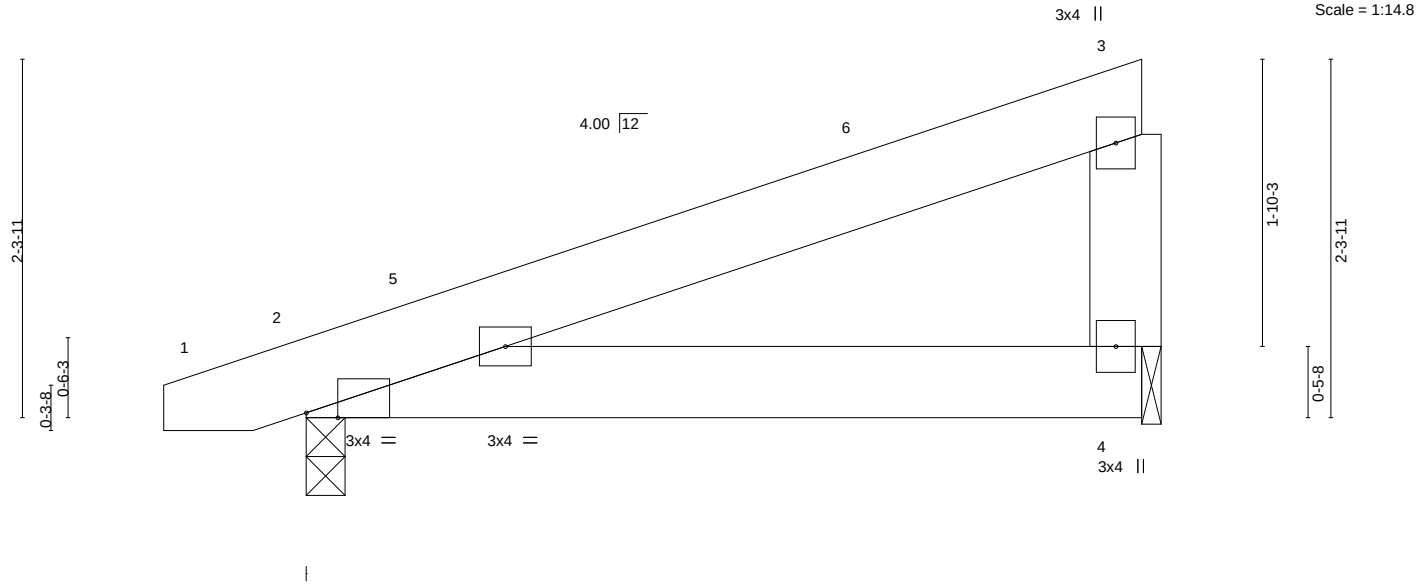


Plate Offsets (X,Y)-- [2:0-2-7,Edge]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	-0.01	2-4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	-0.02	2-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P		Wind(LL)	0.02	2-4	>999	240	Weight: 31 lb	FT = 20%

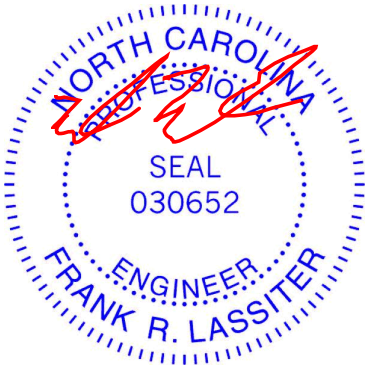
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x6 SP No.1

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

REACTIONS. (size) 2=0-3-0, 4=0-1-8
Max Horz 2=67(LC 8)
Max Uplift 2=-99(LC 8), 4=-88(LC 8)
Max Grav 2=254(LC 1), 4=203(LC 1)

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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-7-9 to 3-9-4, Interior(1) 3-9-4 to 5-3-4 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit 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.
7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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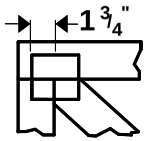
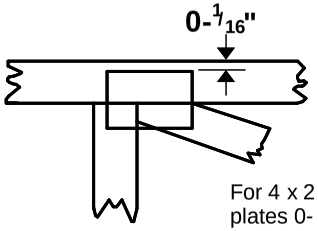
Symbols

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.

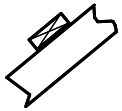
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

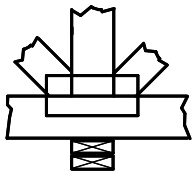
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

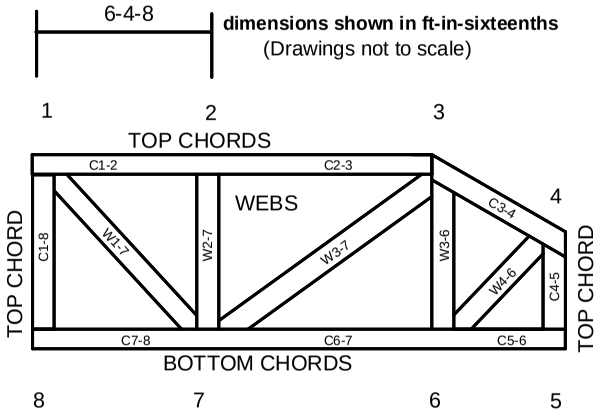


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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.

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.