ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J0822-4240
Jamie Fisher/Fisher Residence/Harnett

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: I55153054 thru I55153079

My license renewal date for the state of North Carolina is December 31, 2022.

North Carolina COA: C-0844

November 9,2022

Gilbert, Eric

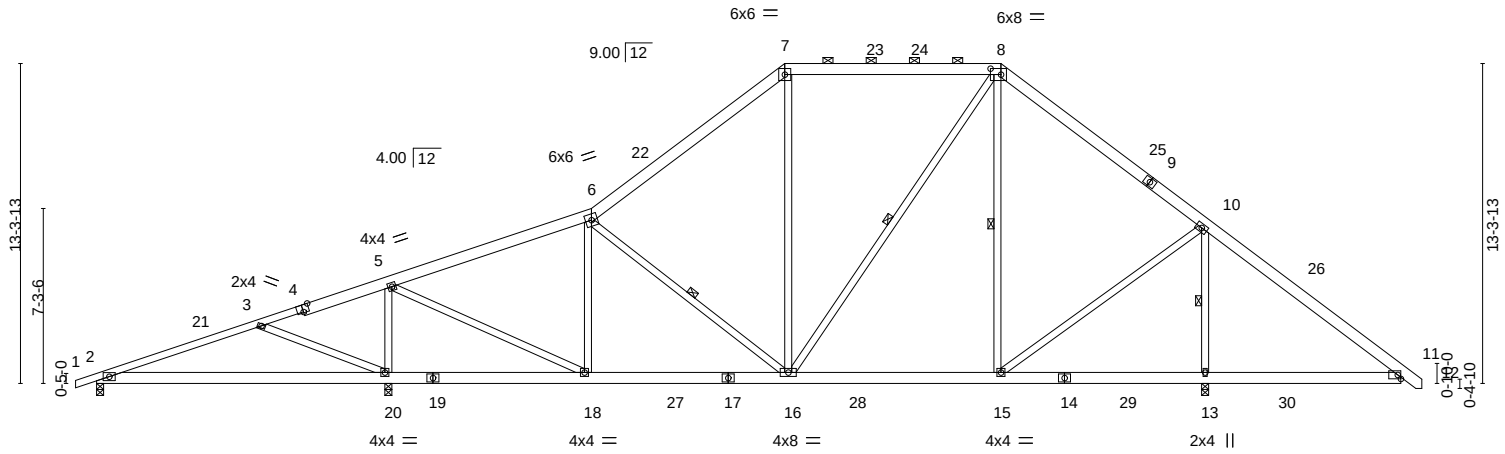
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which 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	Jamie Fisher/Fisher Residence/Harnett
J0822-4240	A1	PIGGYBACK BASE	11	1	I55153054
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Nov 8 09:43:43 2022 Page 1
ID:093MurA5lZpjVaNZXpxgt3ymLxk-e6aCVGVwuNa4zHmgVPX1c?AnUS8wFeEk1rlIVayLHRE

-0-10-8	6-10-5	12-1-12	20-7-3	28-7-12	37-7-12	46-1-12	54-3-8	55-2-0
0-10-8	6-10-5	5-3-7	8-5-7	8-0-9	9-0-0	8-6-0	8-1-12	0-10-8

Scale: 1/8"=1'



12-1-12	20-7-3	28-7-12	37-7-12	46-1-12	54-3-8
12-1-12	8-5-7	8-0-9	9-0-0	8-6-0	8-1-12

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	0.24	2-20	>599	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.27	2-20	>524	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.41	Horz(CT)	0.01	13	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 403 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1 *Except* 1-4: 2x4 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, except 2-0-0 oc purlins (6-0-0 max.): 7-8.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 6-16, 8-16, 8-15, 10-13

REACTIONS. (size) 2=0-3-8, 20=0-3-8, 13=0-3-8
Max Horz 2=324(LC 11)
Max Uplift 2=-201(LC 8), 20=-214(LC 8), 13=-102(LC 13)
Max Grav 2=398(LC 23), 20=1958(LC 1), 13=2345(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-269/167, 3-5=-183/380, 5-6=-1247/173, 6-7=-1172/311, 7-8=-850/337, 8-10=-885/223, 10-11=-414/649
BOT CHORD 18-20=-355/245, 16-18=-51/1188, 15-16=0/668, 13-15=-410/441, 11-13=-410/441
WEBS 3-20=-512/322, 5-20=-1508/323, 5-18=-176/1538, 6-18=-495/249, 6-16=-429/146, 7-16=0/295, 8-16=-164/489, 8-15=-485/268, 10-15=-208/1160, 10-13=-1885/728

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 4-6-10, Interior(1) 4-6-10 to 28-7-12, Exterior(2) 28-7-12 to 34-0-14, Interior(1) 34-0-14 to 37-7-12, Exterior(2) 37-7-12 to 43-0-14, Interior(1) 43-0-14 to 55-0-8 zone; cantilever right exposed ; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are 4x6 MT20 unless otherwise indicated.
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 201 lb uplift at joint 2, 214 lb uplift at joint 20 and 102 lb uplift at joint 13.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

November 9,2022

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

Job	Truss	Truss Type	Qty	Ply	Jamie Fisher/Fisher Residence/Harnett
J0822-4240	A1GE	GABLE	1	1	I55153055 Job Reference (optional)

Comtech, Inc., Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Nov 8 09:43:46 2022 Page 1
ID:093MurA5lZpjVaNZXpxgt3ymLxk-2hFK7IYoBIyfqlVFAX5kDdoIkf9dS?kAjpzy6vyLHRB

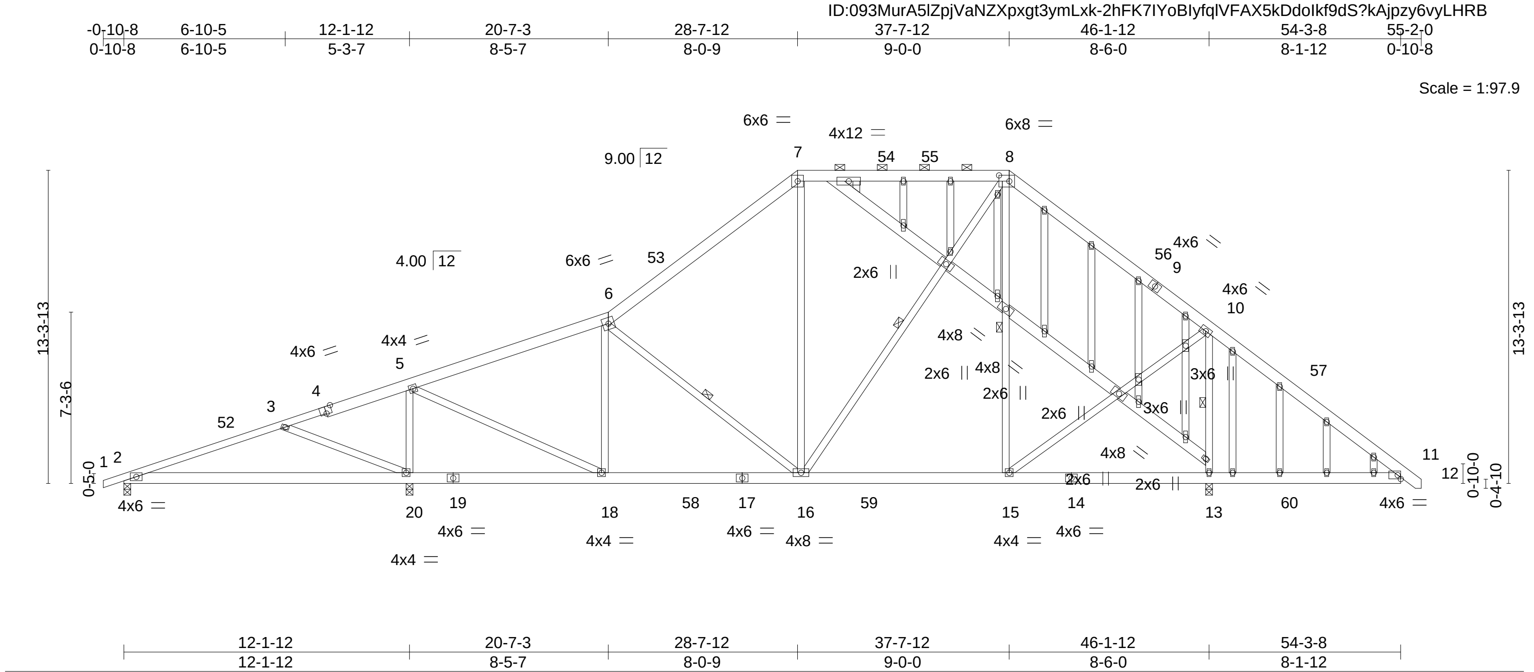


Plate Offsets (X,Y)-- [4:0-3-0,Edge], [8:0-5-4,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	0.24	2-20	>599	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.27	2-20	>524	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.01	13	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 514 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1 *Except*
1-4: 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
21-22,22-23,23-24,24-25: 2x6 SP No.1
OTHERS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except
2-0-0 oc purlins (6-0-0 max.): 7-8.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 6-16, 8-16, 8-15, 10-13

REACTIONS. (size) 2=0-3-8, 20=0-3-8, 13=0-3-8
Max Horz 2=430(LC 11)
Max Uplift 2=-271(LC 8), 20=-504(LC 12), 13=-389(LC 13)
Max Grav 2=398(LC 23), 20=1958(LC 1), 13=2199(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-269/209, 3-5=-258/400, 5-6=-1232/211, 6-7=-1161/311, 7-8=-850/337,
8-10=-863/247, 10-11=-414/649
BOT CHORD 2-20=-284/215, 18-20=-364/258, 16-18=-185/1138, 15-16=-86/701, 13-15=-410/441,
11-13=-410/441
WEBS 3-20=-512/327, 5-20=-1500/510, 5-18=-295/1527, 6-18=-495/249, 6-16=-429/249,
7-16=-22/291, 8-16=-164/498, 8-15=-485/268, 10-15=-208/1152, 10-13=-1878/728

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 4-6-10, Interior(1) 4-6-10 to 28-7-12, Exterior(2) 28-7-12 to 34-0-14, Interior(1) 34-0-14 to 37-7-12, Exterior(2) 37-7-12 to 43-0-14, Interior(1) 43-0-14 to 55-0-8 zone; cantilever right exposed ; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 271 lb uplift at joint 2, 504 lb uplift at joint 20 and 389 lb uplift at joint 13.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

November 9,2022

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

Job	Truss	Truss Type	Qty	Ply	Jamie Fisher/Fisher Residence/Harnett
J0822-4240	A2	PIGGYBACK BASE	4	1	I55153056
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Nov 8 09:43:48 2022 Page 1
ID:093MurA5lZpjVaNZXpxgt3ymLxk-?3N5Y_Z3jvCN42fdHy7CJ2teMTq4wnHTA7S3AoyLHR9

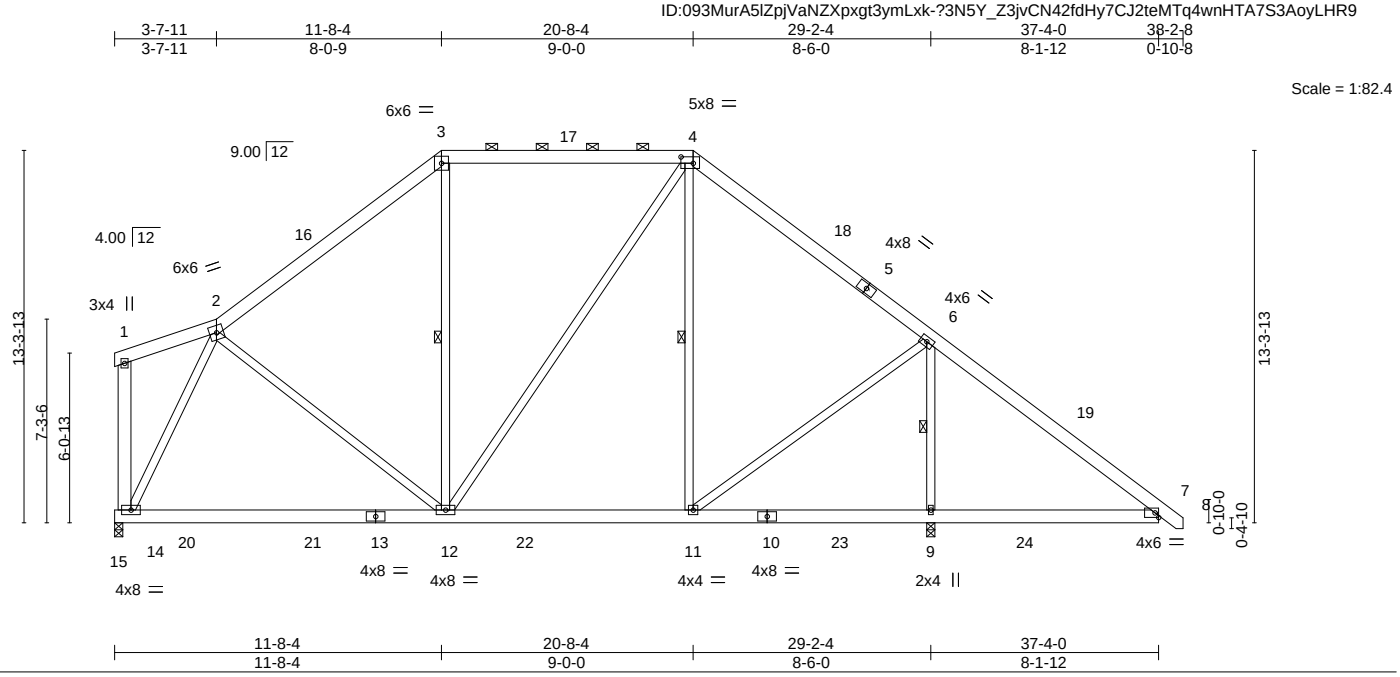


Plate Offsets (X,Y)-- [4:0-5-4,0-2-12]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	-0.15	12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.25	12-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.94	Horz(CT)	0.01	9	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	-0.03	9-11	>999	240	Weight: 315 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 3-12, 4-11, 6-9

REACTIONS. (size) 9=0-3-8, 14=0-3-8
Max Horz 14=-278(LC 13)
Max Uplift 9=-85(LC 13), 14=-44(LC 12)
Max Grav 9=2197(LC 2), 14=1211(LC 25)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-932/265, 3-4=-673/300, 4-6=-757/202, 6-7=-416/648
BOT CHORD 12-14=-166/621, 11-12=-17/580, 9-11=-409/439, 7-9=-409/439
WEBS 2-12=-15/259, 4-12=-120/356, 4-11=-429/244, 6-11=-192/1032, 6-9=-1735/703, 2-14=-989/296

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 3-7-11, Interior(1) 3-7-11 to 11-8-4, Exterior(2) 11-8-4 to 16-1-1, Interior(1) 16-1-1 to 20-8-4, Exterior(2) 20-8-4 to 25-1-1, Interior(1) 25-1-1 to 38-1-0 zone; cantilever right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 85 lb uplift at joint 9 and 44 lb uplift at joint 14.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

November 9,2022

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

Job	Truss	Truss Type	Qty	Ply	Jamie Fisher/Fisher Residence/Harnett
J0822-4240	A3	PIGGYBACK BASE	1	1	I55153057
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Nov 8 09:43:49 2022 Page 1
ID:093MurA5lZpjVaNZXpxgt3ymLxk-TGxTlKahUDKDhCEqrgeRrGQp2tBXfFOdPnCdiEyLHR8

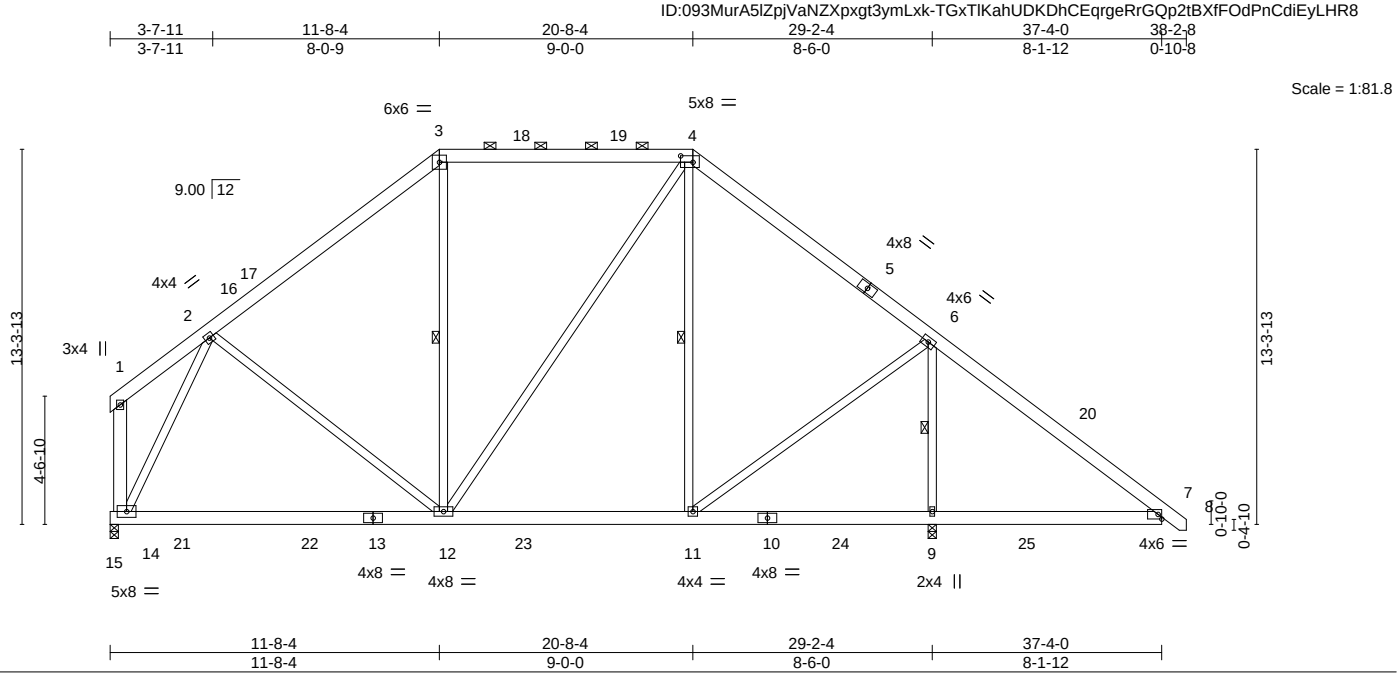


Plate Offsets (X,Y)-- [4:0-5-4,0-2-12]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	-0.14	12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.24	12-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.88	Horz(CT)	0.01	9	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	-0.03	9-11	>999	240	Weight: 313 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 3-12, 4-11, 6-9

REACTIONS. (size) 9=0-3-8, 14=0-3-8
Max Horz 14=-307(LC 8)
Max Uplift 9=-90(LC 13), 14=-36(LC 12)
Max Grav 9=2197(LC 2), 14=1212(LC 25)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-942/299, 3-4=-694/323, 4-6=-758/223, 6-7=-416/648
BOT CHORD 12-14=-194/689, 11-12=-20/580, 9-11=-409/439, 7-9=-409/439
WEBS 2-12=-71/263, 4-12=-139/368, 4-11=-428/255, 6-11=-210/1032, 6-9=-1735/724, 2-14=-988/324

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-9-1, Interior(1) 4-9-1 to 11-8-4, Exterior(2) 11-8-4 to 17-10-15, Interior(1) 17-10-15 to 20-8-4, Exterior(2) 20-8-4 to 26-10-15, Interior(1) 26-10-15 to 38-1-0 zone; cantilever right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 90 lb uplift at joint 9 and 36 lb uplift at joint 14.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

November 9,2022

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

Job	Truss	Truss Type	Qty	Ply	Jamie Fisher/Fisher Residence/Harnett
J0822-4240	A3GE	GABLE	1	1	I55153058
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Nov 8 09:43:51 2022 Page 1
ID:093MurA5lZpjVaNZXpxgt3ymLxk-Pe2DA?cx?qbxxWNCz5hvwhV9Ygtz79tvs5hjn7yLHR6

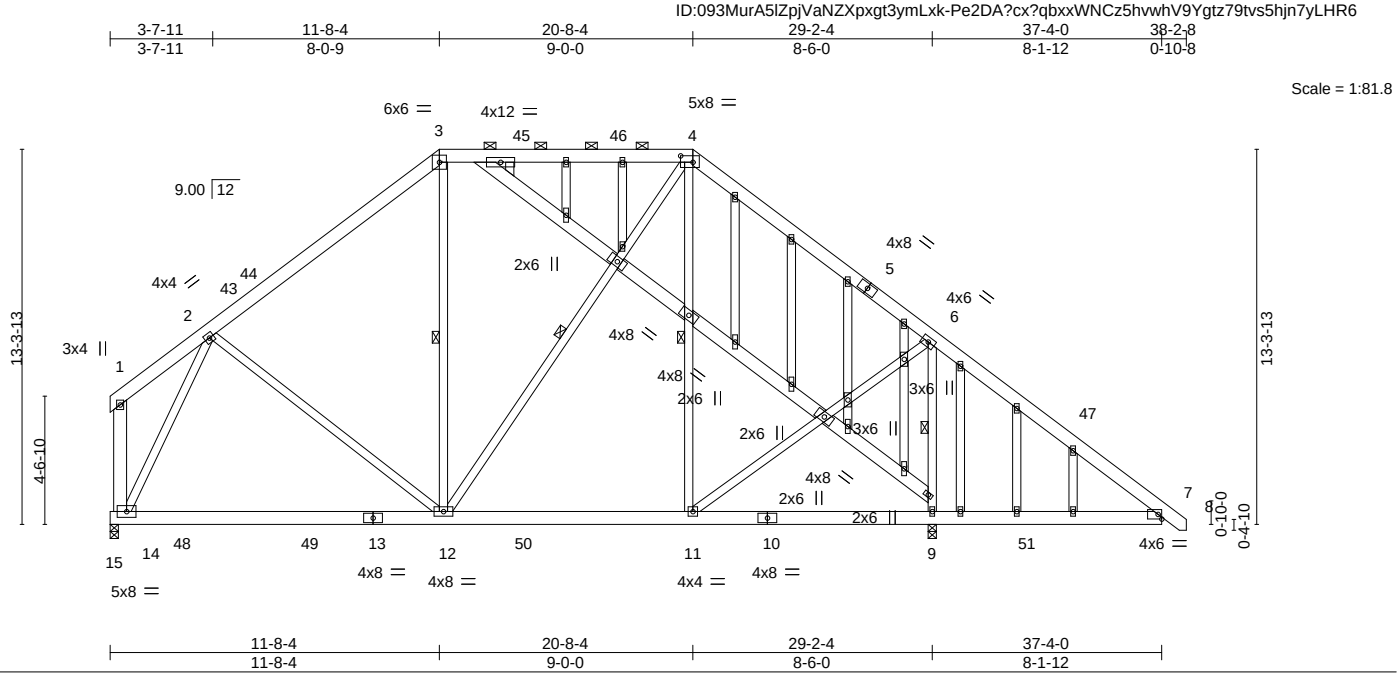


Plate Offsets (X,Y)-- [4:0-5-4,0-2-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	-0.14	12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.23	12-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.88	Horz(CT)	0.01	9	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	-0.03	9-11	>999	240	Weight: 416 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x4 SP No.2 *Except* 1-14,16-17,17-18,18-19,19-20: 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, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 3-12, 4-12, 4-11, 6-9

REACTIONS. (size) 9=0-3-8, 14=0-3-8
Max Horz 14=-384(LC 13)
Max Uplift 9=-357(LC 13), 14=-170(LC 12)
Max Grav 9=2053(LC 2), 14=1203(LC 25)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-933/299, 3-4=-694/323, 4-6=-736/235, 6-7=-416/648
BOT CHORD 12-14=-290/720, 11-12=-100/624, 9-11=-409/439, 7-9=-409/439
WEBS 2-12=-128/311, 4-12=-153/401, 4-11=-428/255, 6-11=-210/1025, 6-9=-1735/724, 2-14=-988/324

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-4 to 4-9-1, Interior(1) 4-9-1 to 11-8-4, Exterior(2) 11-8-4 to 17-10-15, Interior(1) 17-10-15 to 20-8-4, Exterior(2) 20-8-4 to 26-10-15, Interior(1) 26-10-15 to 38-1-0 zone; cantilever 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) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 357 lb uplift at joint 9 and 170 lb uplift at joint 14.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

November 9,2022

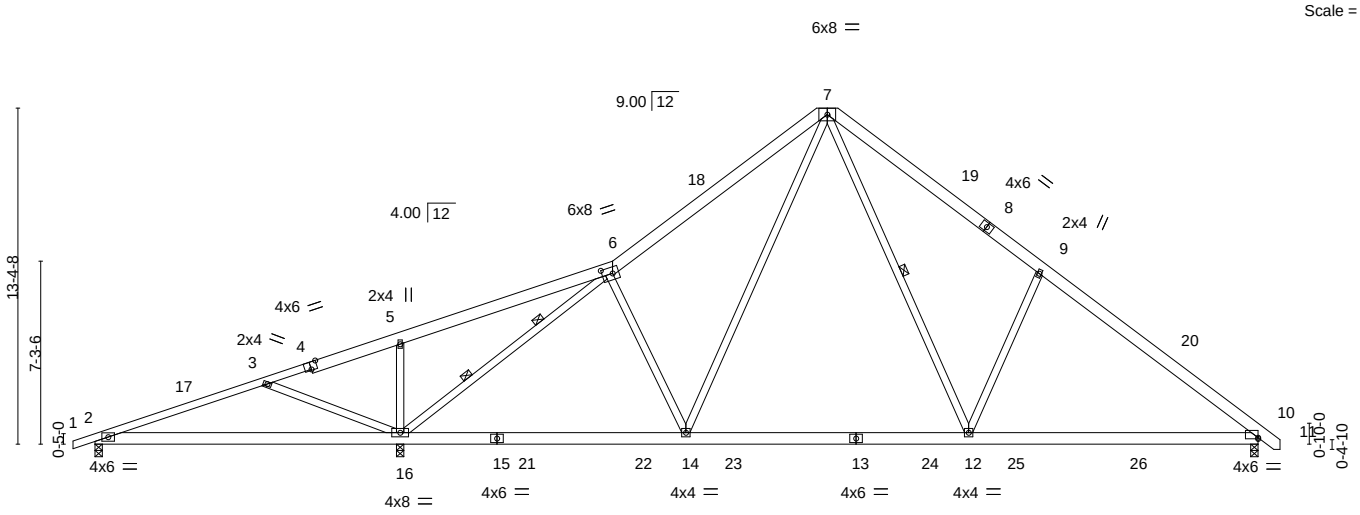
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Jamie Fisher/Fisher Residence/Harnett
J0822-4240	B1	ROOF SPECIAL	5	1	I55153059
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Nov 8 09:43:53 2022 Page 1
ID:093MurA5lZpjVaNZXpxgt3ymLxk-L1A_bhdBXSrfAqXb4WjN06aWSUU9b4UCKPAqr?yLHR4

-0-10-8	6-10-5	12-1-12	20-7-3	29-1-12	37-7-1	46-3-8	47-2-0
0-10-8	6-10-5	5-3-7	8-5-7	8-6-9	8-5-5	8-8-7	0-10-8

Scale = 1:91.7



12-1-12	23-6-4	34-9-4	46-3-8
12-1-12	11-4-8	11-3-1	11-6-4

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

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	0.37	Vert(LL)	-0.19	12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.28	12-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.81	Horz(CT)	0.04	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.25	2-16	>566	240	Weight: 322 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 5-0-9 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
	6-0-0 oc bracing: 2-16.
WEBS	1 Row at midpt 7-12
	2 Rows at 1/3 pts 6-16

REACTIONS. (size) 2=0-3-8, 16=0-3-8, 10=0-3-8
Max Horz 2=332(LC 11)
Max Uplift 2=-192(LC 8), 16=-190(LC 8), 10=-80(LC 13)
Max Grav 2=397(LC 23), 16=2212(LC 2), 10=1660(LC 20)

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

TOP CHORD	2-3=-269/128, 3-5=-169/376, 5-6=-119/403, 6-7=-1823/392, 7-9=-1995/493, 9-10=-2111/343
BOT CHORD	14-16=-29/1453, 12-14=0/1091, 10-12=-105/1557
WEBS	3-16=-507/313, 5-16=-461/195, 7-14=-70/762, 7-12=-228/1147, 9-12=-574/362, 6-14=-301/264, 6-16=-2114/334

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-9-1, Interior(1) 3-9-1 to 29-1-12, Exterior(2) 29-1-12 to 33-9-5, Interior(1) 33-9-5 to 47-0-8 zone; porch left 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 192 lb uplift at joint 2, 190 lb uplift at joint 16 and 80 lb uplift at joint 10.

November 9,2022

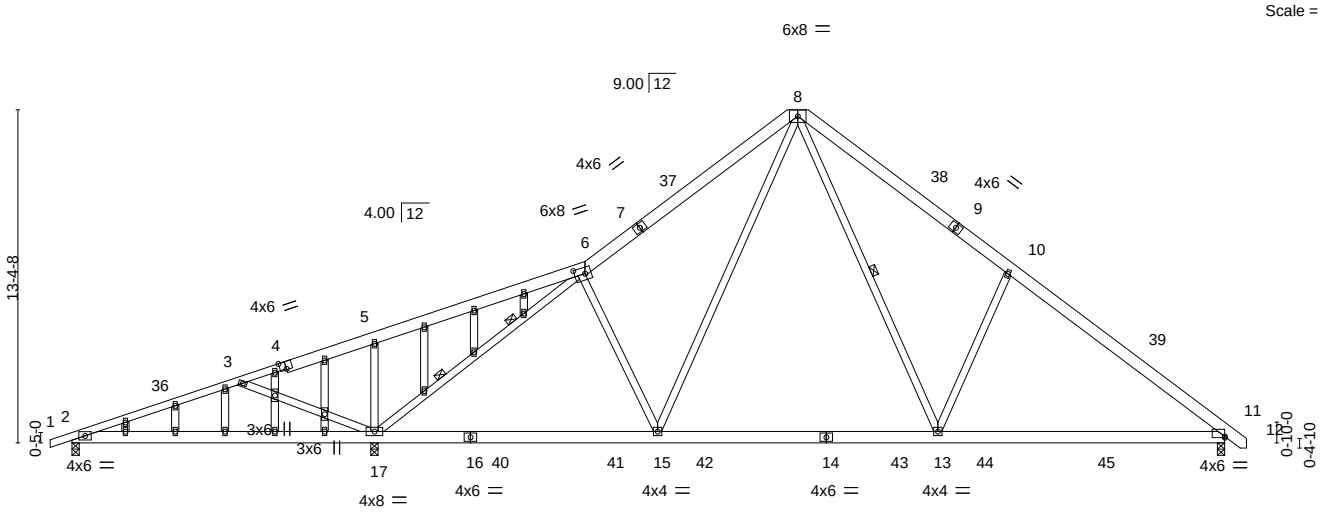
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Jamie Fisher/Fisher Residence/Harnett
J0822-4240	B1GE	GABLE	1	1	I55153060
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Nov 8 09:43:54 2022 Page 1
ID:093MurA5lZpjVaNZXpxgt3ymLxk-pDkMp1eqIlzWoz6neDEcYJ7g8upNKWjMY2vOOSyLHR3

-0-10-8	6-10-5	12-1-12	20-7-3	29-1-12	37-7-1	46-3-8	47-2-0
0-10-8	6-10-5	5-3-7	8-5-7	8-6-9	8-5-5	8-8-7	0-10-8

Scale = 1:92.5



12-1-12	23-6-4	34-9-4	46-3-8
12-1-12	11-4-8	11-3-1	11-6-4

Plate Offsets (X,Y)-- [4:0-3-0,Edge], [6:0-5-0,0-3-0], [11:0-0-0,0-0-9]

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	0.43	Vert(LL)	-0.19	13-15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.28	13-15	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.81	Horz(CT)	0.04	11	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.25	2-17	>566	240	Weight: 342 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.1 *Except*
	1-4: 2x4 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 5-0-9 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
	6-0-0 oc bracing: 2-17.
WEBS	1 Row at midpt 8-13
	2 Rows at 1/3 pts 6-17

REACTIONS. (size) 2=0-3-8, 17=0-3-8, 11=0-3-8
Max Horz 2=440(LC 11)
Max Uplift 2=-261(LC 8), 17=-526(LC 12), 11=-277(LC 13)
Max Grav 2=395(LC 23), 17=2214(LC 2), 11=1662(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-263/165, 3-5=-269/383, 5-6=-172/422, 6-8=-1810/441, 8-10=-1993/531, 10-11=-2103/349
BOT CHORD 2-17=-315/233, 15-17=-189/1444, 13-15=0/1102, 11-13=-104/1545
WEBS 3-17=-508/334, 5-17=-460/324, 8-15=-171/753, 8-13=-338/1171, 10-13=-573/482, 6-15=-299/318, 6-17=-2118/407

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 3-9-1, Interior(1) 3-9-1 to 29-1-12, Exterior(2) 29-1-12 to 33-9-5, Interior(1) 33-9-5 to 47-0-8 zone; porch left 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, with BCDL = 10.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 261 lb uplift at joint 2, 526 lb uplift at joint 17 and 277 lb uplift at joint 11.

November 9,2022

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

Job	Truss	Truss Type	Qty	Ply	Jamie Fisher/Fisher Residence/Harnett
J0822-4240	C1	FINK	1	1	I55153061
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Nov 8 09:43:56 2022 Page 1
ID:093MurA5lZpjVaNZXpxgt3ymLxk-mcs6Djg4qNDE1HGAleG4dkC1EhWzoUge0MOUSKyLHR1

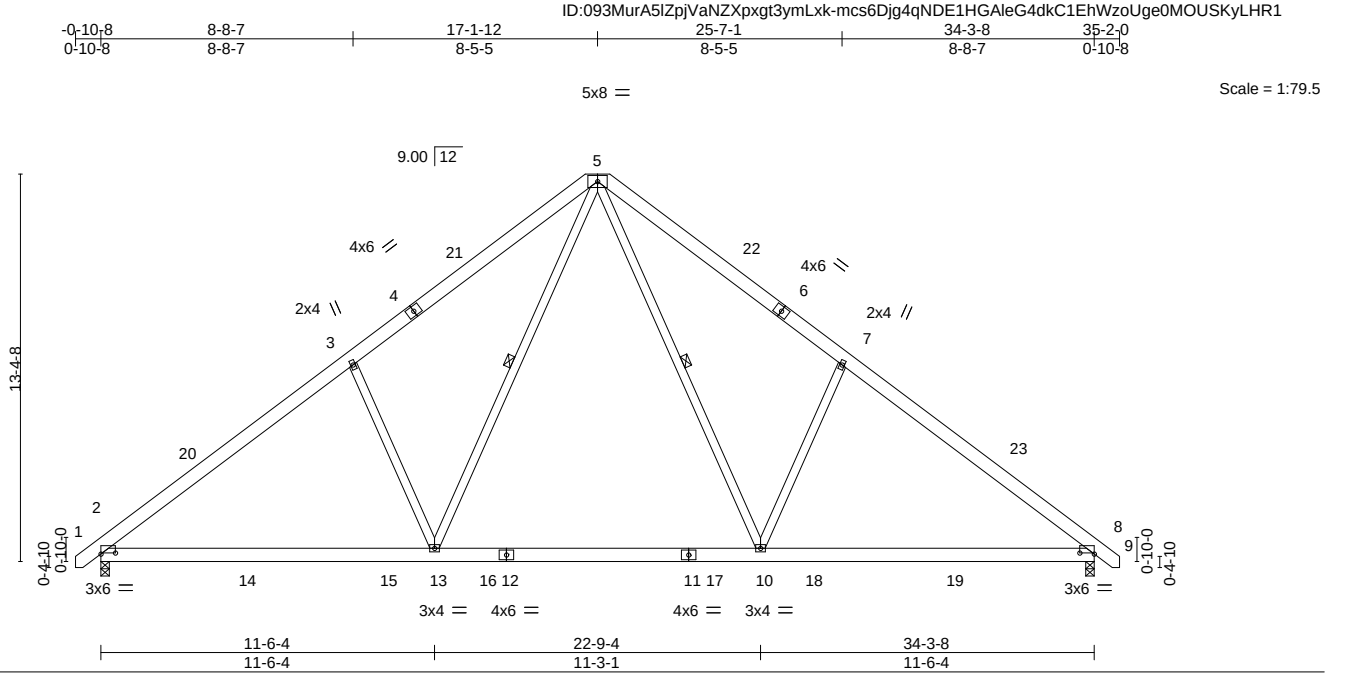


Plate Offsets (X,Y)-- [2:0-6-0,0-0-7], [8:0-6-0,0-0-7]

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)	-0.18	10-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.28	8-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.04	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.05	2-13	>999	240	Weight: 247 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 4-11-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-13, 5-10

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=-322(LC 10)
Max Uplift 2=-77(LC 12), 8=-77(LC 13)
Max Grav 2=1700(LC 19), 8=1700(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2173/385, 3-5=-2057/535, 5-7=-2058/535, 7-8=-2173/385
BOT CHORD 2-13=-136/1847, 10-13=0/1206, 8-10=-141/1656
WEBS 3-13=-579/364, 5-13=-216/1139, 5-10=-216/1140, 7-10=-579/364

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph 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 17-1-12, Exterior(2) 17-1-12 to 21-6-9, Interior(1) 21-6-9 to 35-0-8 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 77 lb uplift at joint 2 and 77 lb uplift at joint 8.

November 9,2022

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

Job	Truss	Truss Type	Qty	Ply	Jamie Fisher/Fisher Residence/Harnett
J0822-4240	C1GE	GABLE	1	1	I55153062
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Nov 8 09:43:58 2022 Page 1
ID:093MurA5lZpjVaNZXpxgt3ymLxk-i__teOhKM_TyGbQYt3JYj9HR?VM3GTbxTgtbXDyLHR?

-0-10-8 17-1-12 34-3-8 35-2-0
0-10-8 17-1-12 17-1-12 0-10-8

Scale = 1:85.3

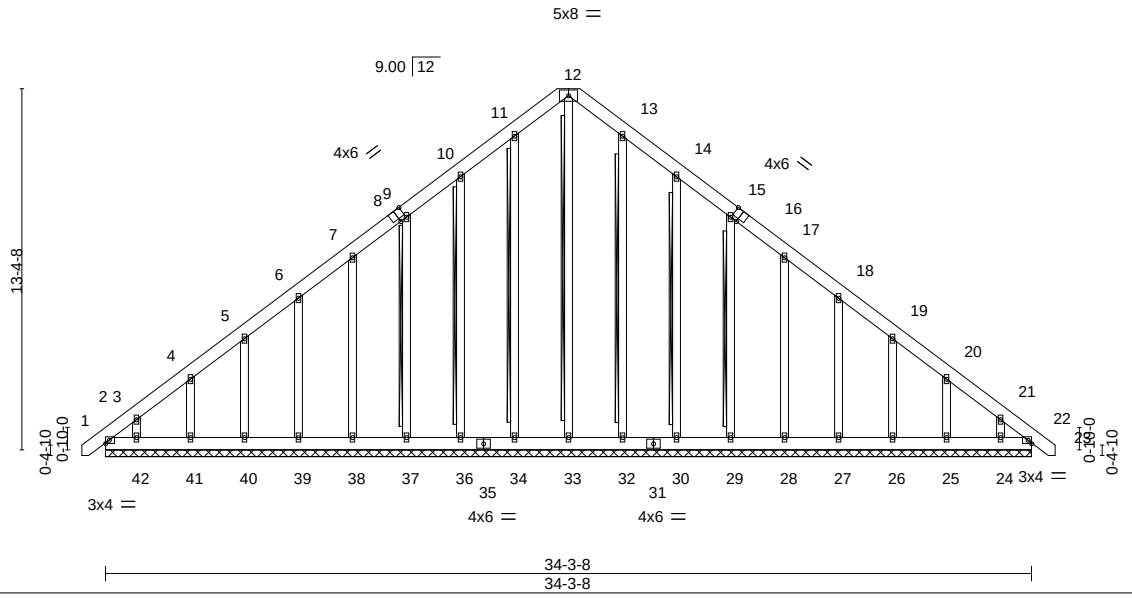


Plate Offsets (X,Y)-- [8:0-3-0,Edge], [16:0-3-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	0.00	22	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	22	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.01	22	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 348 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 - 12-33, 11-34, 10-36, 9-37, 13-32, 14-30, 15-29
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 34-3-8.
(lb) - Max Horz 2=-402(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 22, 34, 37, 38, 39, 40, 32, 28, 27, 26 except 2=-192(LC 10), 36=-114(LC 12), 41=-106(LC 12), 42=-176(LC 12), 30=-118(LC 13), 29=-100(LC 13), 25=-105(LC 13), 24=-160(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 34, 36, 37, 38, 39, 40, 41, 42, 32, 30, 29, 28, 27, 26, 25, 24 except 2=341(LC 12), 22=276(LC 13), 33=277(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-522/342, 3-4=-393/284, 4-5=-299/248, 10-11=-256/299, 11-12=-289/324, 12-13=-289/324, 13-14=-256/280, 20-21=-312/200, 21-22=-432/293
BOT CHORD 2-42=-222/341, 41-42=-222/341, 40-41=-222/341, 39-40=-222/341, 38-39=-222/341, 37-38=-222/341, 36-37=-222/341, 34-36=-222/341, 33-34=-222/341, 32-33=-222/341, 30-32=-222/341, 29-30=-222/341, 28-29=-222/341, 27-28=-222/341, 26-27=-222/341, 25-26=-222/341, 24-25=-222/341, 22-24=-222/341
WEBS 12-33=-258/173

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-9-0 to 3-7-13, Exterior(2) 3-7-13 to 17-1-12, Corner(3) 17-1-12 to 21-6-9, Exterior(2) 21-6-9 to 35-0-8 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) 22, 34, 37, 38, 39, 40, 32, 28, 27, 26 except (jt=lb) 2=192, 36=114, 41=106, 42=176, 30=118, 29=100, 25=105, 24=160.
10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

November 9,2022

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

Job	Truss	Truss Type	Qty	Ply	Jamie Fisher/Fisher Residence/Harnett
J0822-4240	C2	COMMON	6	1	I55153063
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Nov 8 09:44:00 2022 Page 1
ID:093MurA5lZpjVaNZXpxgt3ymLxk-eN5d34jaubjgWuZx_UL0oaNiHItsklZEx_Mia5yLHQz

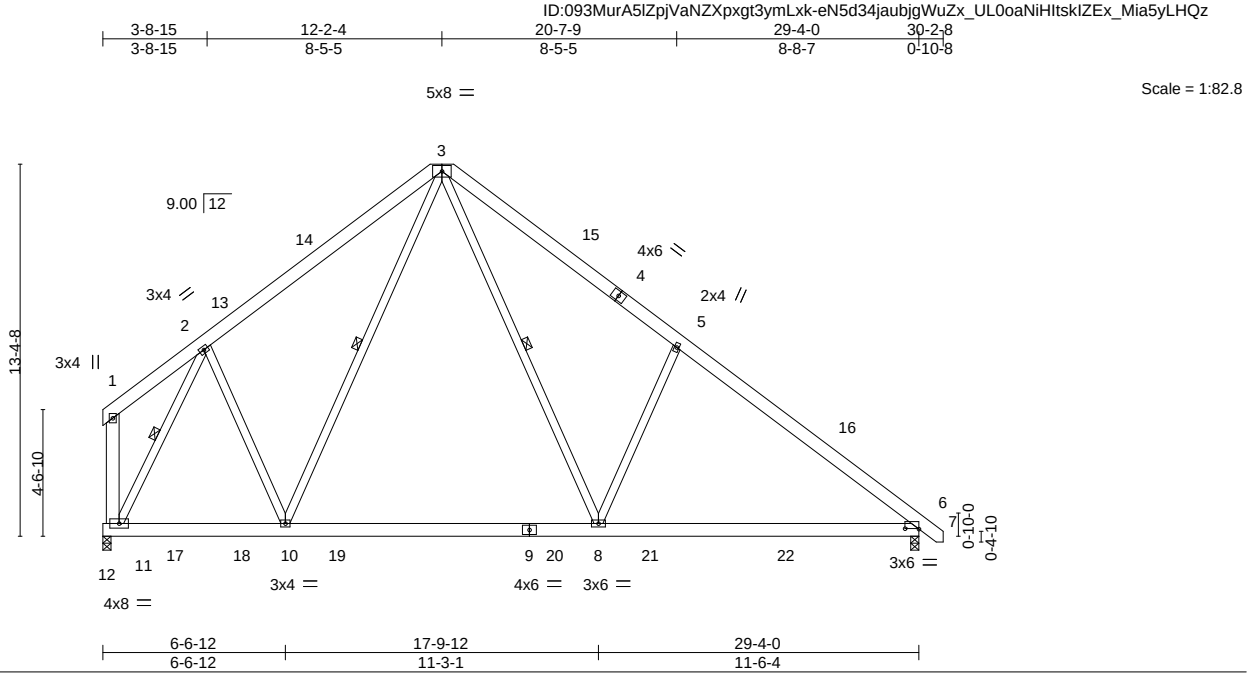


Plate Offsets (X,Y)-- [6:0-6-0,0-0-3]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	-0.20	8-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.28	8-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.05	6-8	>999	240	Weight: 239 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
1-11: 2x6 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-6-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-10, 3-8, 2-11

REACTIONS. (size) 11=0-3-8, 6=0-3-8
Max Horz 11=-315(LC 8)
Max Uplift 11=-49(LC 13), 6=-65(LC 13)
Max Grav 11=1414(LC 20), 6=1444(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1165/388, 3-5=-1658/460, 5-6=-1771/309
BOT CHORD 10-11=-130/847, 8-10=0/861, 6-8=-87/1331
WEBS 2-10=-22/469, 3-8=-212/1181, 5-8=-586/364, 2-11=-1475/283

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-9-1, Interior(1) 4-9-1 to 12-2-4, Exterior(2) 12-2-4 to 16-7-1, Interior(1) 16-7-1 to 30-1-0 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) 11, 6.

November 9,2022

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

Job	Truss	Truss Type	Qty	Ply	Jamie Fisher/Fisher Residence/Harnett
J0822-4240	C2GE	GABLE	1	1	I55153064
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Nov 8 09:44:02 2022 Page 1
ID:093MurA5lZpjVaNZXpxgt3ymLxk-amDNUmkrQDzNlCjK6vNUt?S6i6jrCFiXOIrpf_yLHQx

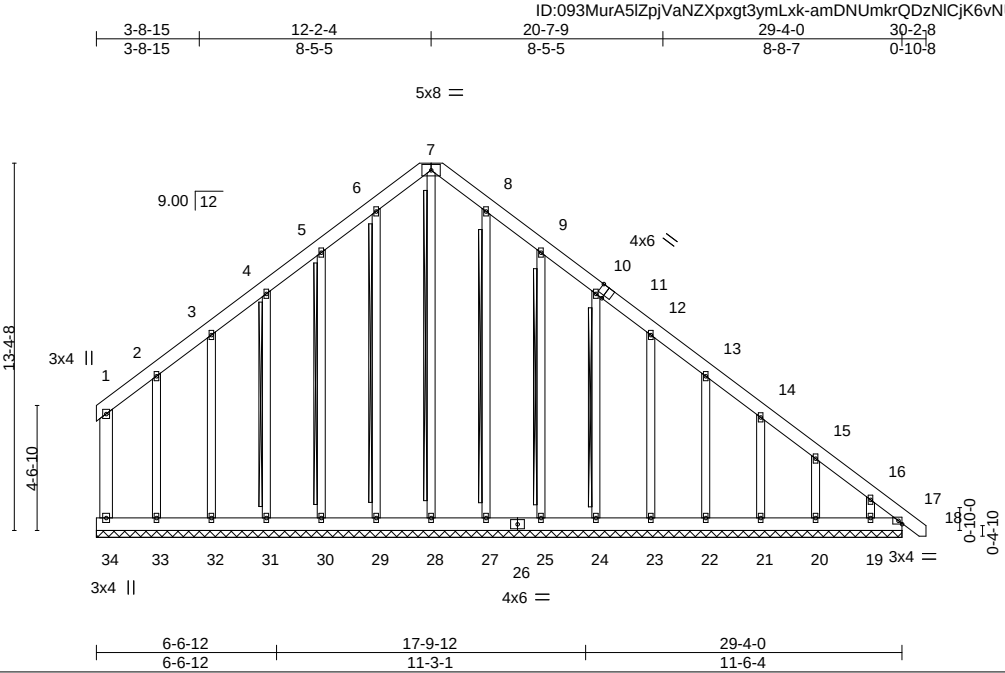


Plate Offsets (X,Y)-- [11:0-3-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	-0.00	17	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	17	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.36	Horz(CT)	0.01	17	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 318 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	T-Brace: 2x4 SPF No.2 - 7-28, 6-29, 5-30, 4-31, 8-27, 9-25, 10-24
	Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c.,with 3in minimum end distance. Brace must cover 90% of web length.

REACTIONS. All bearings 29-4-0.
(lb) - Max Horz 34=-391(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 34, 28, 29, 32, 27, 24, 23, 22, 21 except 17=-269(LC 11), 30=-124(LC 12), 31=-103(LC 12), 33=-151(LC 12), 25=-115(LC 13), 20=-106(LC 13), 19=-172(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 34, 29, 30, 31, 32, 33, 27, 25, 24, 23, 22, 21, 20, 19 except 17=352(LC 8), 28=411(LC 12)

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

TOP CHORD	4-5=-243/289, 5-6=-324/391, 6-7=-350/427, 7-8=-350/445, 8-9=-324/446, 9-10=-245/384, 10-12=-267/332, 12-13=-294/310, 13-14=-316/317, 14-15=-354/343, 15-16=-407/380, 16-17=-501/449
BOT CHORD	33-34=-326/388, 32-33=-326/388, 31-32=-326/388, 30-31=-326/388, 29-30=-326/388, 28-29=-326/388, 27-28=-326/388, 25-27=-326/388, 24-25=-326/388, 23-24=-326/388, 22-23=-326/388, 21-22=-326/388, 20-21=-326/388, 19-20=-326/388, 17-19=-326/388
WEBS	7-28=-387/236

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-4-4 to 4-9-1, Exterior(2) 4-9-1 to 12-2-4, Corner(3) 12-2-4 to 16-7-1, Exterior(2) 16-7-1 to 30-1-0 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) 34, 28, 29, 32, 27, 24, 23, 22, 21 except (jt=lb) 17=269, 30=124, 31=103, 33=151, 25=115, 20=106, 19=172.
10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

November 9,2022

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

Job	Truss	Truss Type	Qty	Ply	Jamie Fisher/Fisher Residence/Harnett
J0822-4240	D1	COMMON	3	1	I55153065
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Nov 8 09:44:03 2022 Page 1
ID:093MurA5lZpjVaNZXpxgt3ymLxk-2ynmi6lTBW5ENMIWgcujQD?89Wz2xhhgdybMBQyLHQw

-0-10-8 7-9-8 11-10-0 15-10-8 23-8-0 24-6-8
0-10-8 7-9-8 4-0-8 4-0-8 7-9-8 0-10-8

Scale = 1:56.6

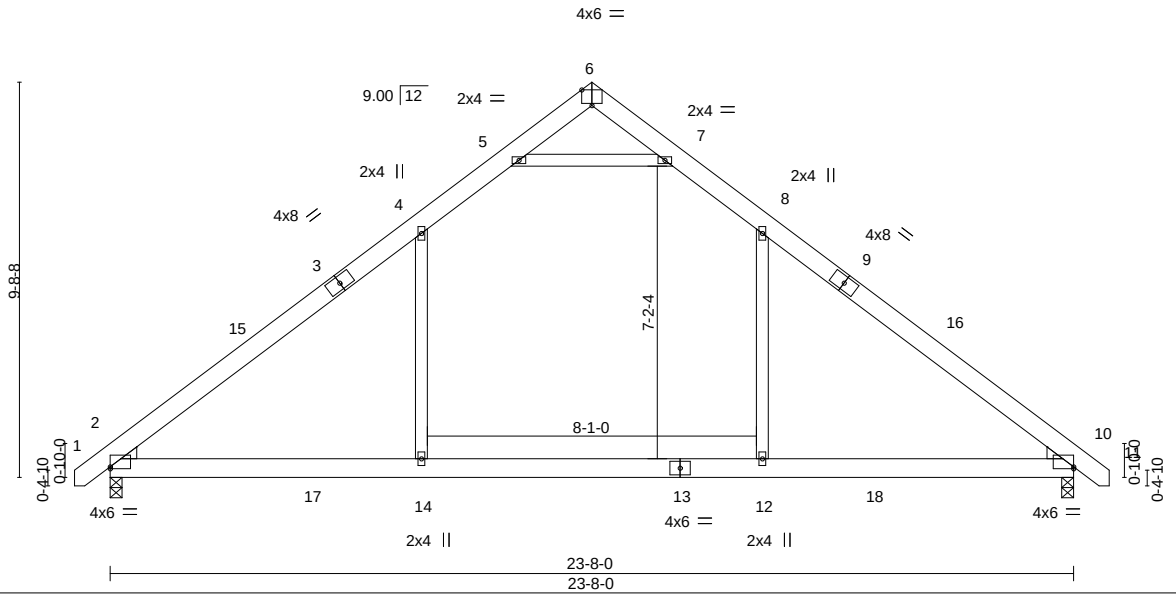


Plate Offsets (X,Y)-- [2:0-0-0,0-0-9], [6:0-3-0,Edge], [10:0-0-0,0-0-9]

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	0.67	Vert(LL)	-0.18	12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.25	12-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.44	Horz(CT)	0.02	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.16	2-14	>999	240	Weight: 154 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.3 , Right: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-8-4 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=226(LC 11)
Max Uplift 2=-56(LC 12), 10=-56(LC 13)
Max Grav 2=1222(LC 19), 10=1222(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1577/232, 4-5=-1001/299, 5-6=-137/517, 6-7=-137/517, 7-8=-1001/299, 8-10=-1577/232
BOT CHORD 2-14=-13/1127, 12-14=-13/1127, 10-12=-13/1127
WEBS 8-12=0/605, 4-14=0/605, 5-7=-1672/522

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph 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 11-10-0, Exterior(2) 11-10-0 to 16-0-4, Interior(1) 16-0-4 to 24-5-0 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.

November 9,2022

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

Job	Truss	Truss Type	Qty	Ply	Jamie Fisher/Fisher Residence/Harnett
J0822-4240	D1GE	GABLE	1	1	I55153066
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Nov 8 09:44:05 2022 Page 1

ID:093MurA5lZpjVaNZXpxgt3ymLxk-?LvW6onji8LycgSun1xBVe4csJg9PcVz4G4TFJyLHQu

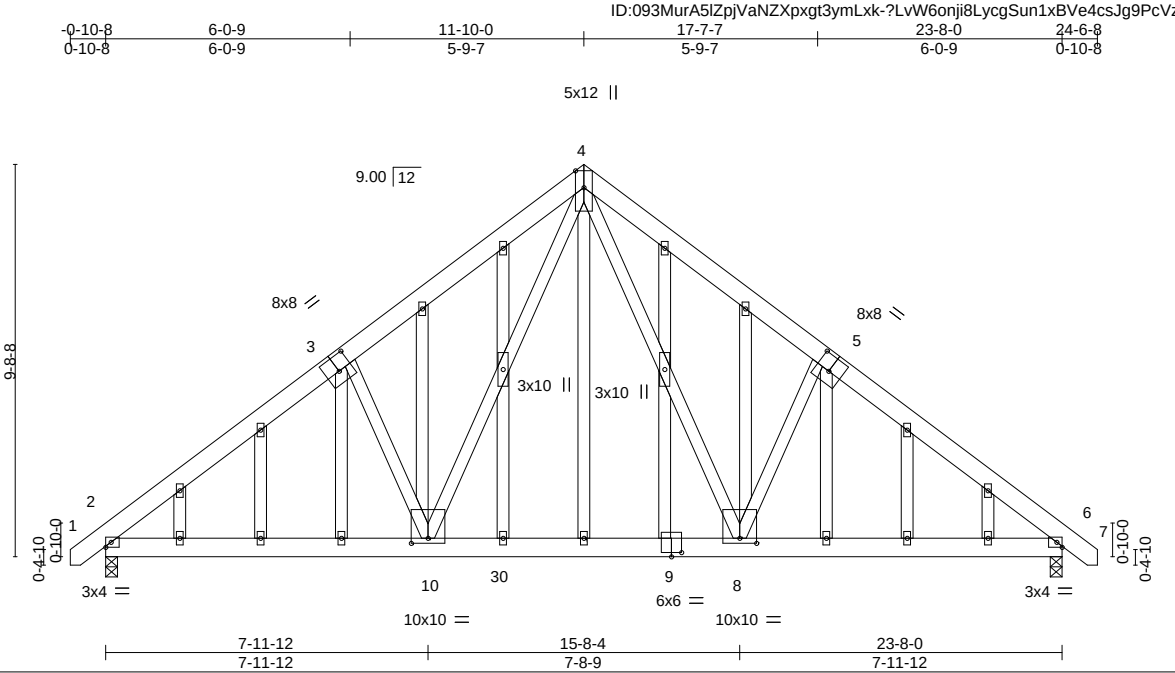


Plate Offsets (X,Y)-- [3:0-4-0,0-4-8], [5:0-4-0,0-4-8], [8:0-5-0,0-1-8], [9:0-3-0,0-1-4], [10:0-5-0,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	-0.07	8-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.09	8-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.36	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.02	10	>999	240	Weight: 248 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 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 6=0-3-8
Max Horz 2=283(LC 11)
Max Uplift 2=-197(LC 12), 6=-197(LC 13)
Max Grav 2=1008(LC 19), 6=1009(LC 20)

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

TOP CHORD	2-3=-1274/347, 3-4=-1159/447, 4-5=-1160/447, 5-6=-1274/347
BOT CHORD	2-10=-255/1112, 8-10=-24/729, 6-8=-152/942
WEBS	3-10=-370/324, 4-10=-212/612, 4-8=-212/614, 5-8=-370/325

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-9-0 to 3-7-13, Exterior(2) 3-7-13 to 11-10-0, Corner(3) 11-10-0 to 16-2-13, Exterior(2) 16-2-13 to 24-5-0 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) except (jt=lb) 2=197, 6=197.

November 9,2022

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

Job	Truss	Truss Type	Qty	Ply	Jamie Fisher/Fisher Residence/Harnett
J0822-4240	D2	COMMON	6	1	I55153067
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Nov 8 09:44:06 2022 Page 1
ID:093MurA5lZpjVaNZXpxgt3ymLxk-TXTuK8nLTRTpEp15LkSQ1rdevj_Y81K7Jwp0olyLHQt

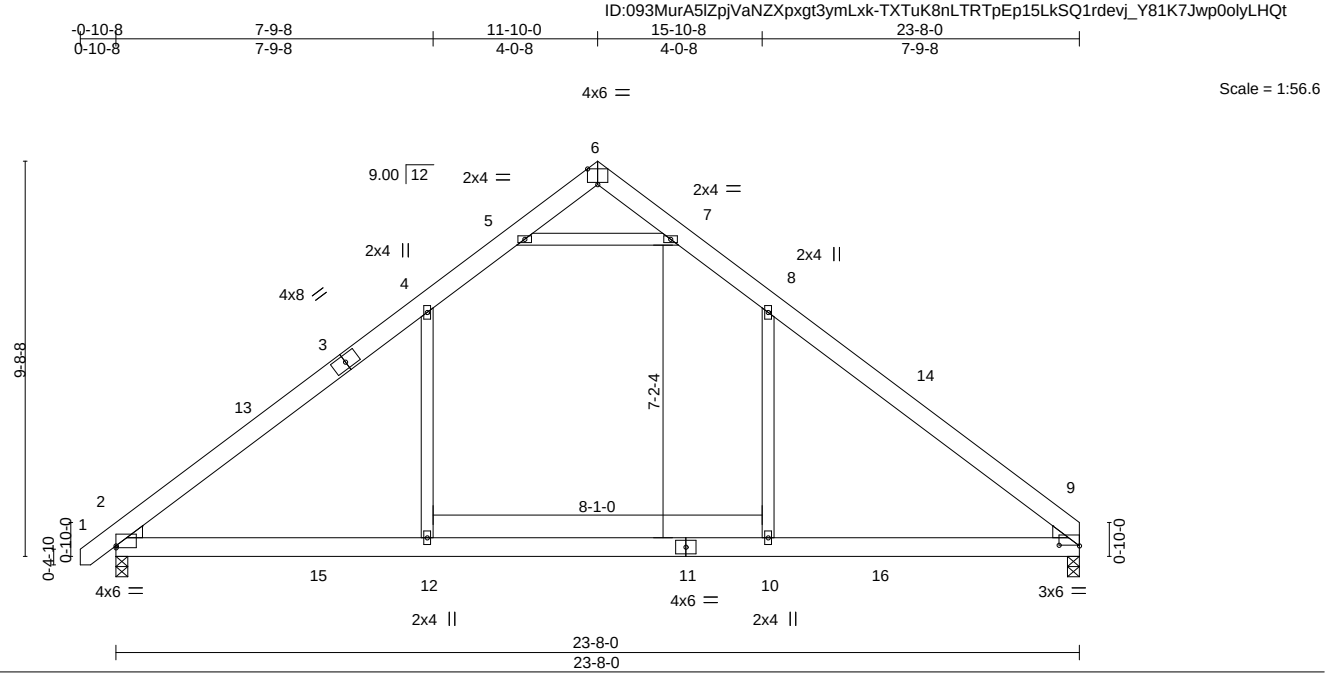


Plate Offsets (X,Y)-- [2:0-0-0,0-0-9], [6:0-3-0,Edge], [9:0-6-0,0-0-3]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	-0.20	10-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.27	10-12	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.45	Horz(CT)	0.02	9	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.16	9-10	>999	240	Weight: 152 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.3 , Right: 2x4 SP No.3

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

REACTIONS. (size) 9=0-3-8, 2=0-3-8
Max Horz 2=224(LC 11)
Max Uplift 9=-44(LC 13), 2=-56(LC 12)
Max Grav 9=1171(LC 20), 2=1223(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1583/233, 4-5=-1001/298, 5-6=-149/540, 6-7=-141/533, 7-8=-1007/305, 8-9=-1574/225
BOT CHORD 2-12=-23/1128, 10-12=-23/1128, 9-10=-23/1128
WEBS 8-10=0/596, 4-12=0/612, 5-7=-1701/542

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph 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 11-10-0, Exterior(2) 11-10-0 to 16-0-4, Interior(1) 16-0-4 to 23-6-4 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) 9, 2.

November 9,2022

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

Job	Truss	Truss Type	Qty	Ply	Jamie Fisher/Fisher Residence/Harnett
J0822-4240	D3	COMMON	3	1	I55153068
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Nov 8 09:44:07 2022 Page 1
ID:093MurA5lZpjVaNZXpxgt3ymLxk-xj0GXTozElcgszcHvSzfa39pO7K2tUSGYaZaKByLHQs

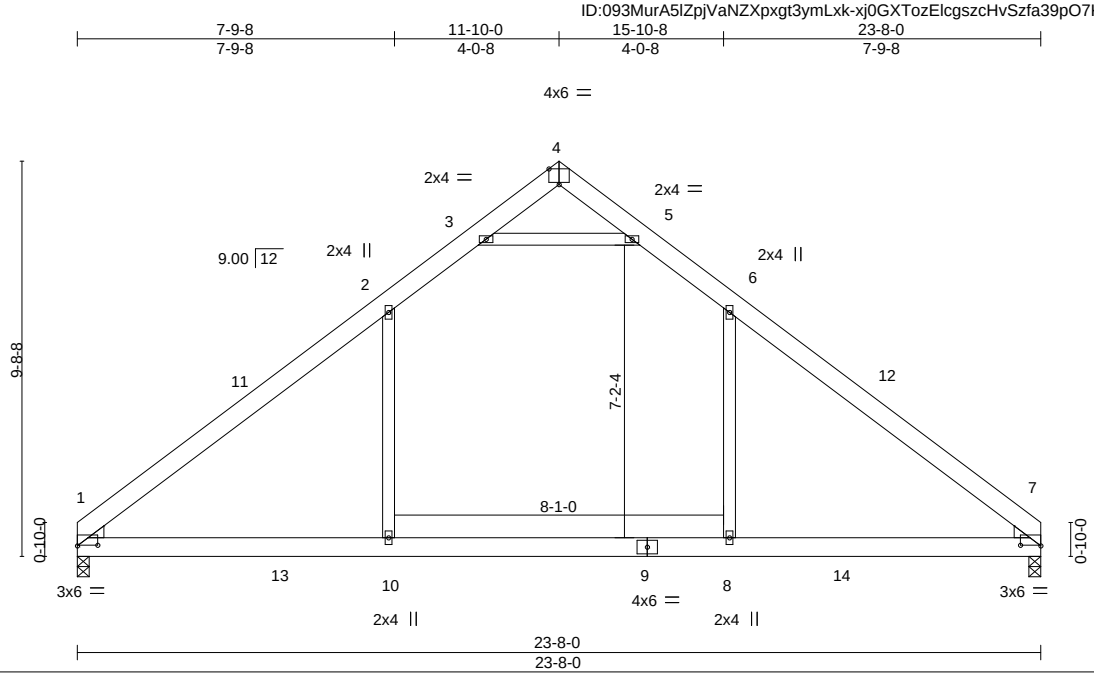


Plate Offsets (X,Y)-- [1:0-6-0,0-0-3], [4:0-3-0,Edge], [7:0-6-0,0-0-3]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	-0.20	8-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.28	8-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.02	7	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.16	1-10	>999	240	Weight: 150 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.3 , Right: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-2-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 7=0-3-8
Max Horz 1=220(LC 11)
Max Uplift 1=-44(LC 12), 7=-44(LC 13)
Max Grav 1=1172(LC 19), 7=1172(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1580/227, 2-3=-1008/304, 3-4=-153/556, 4-5=-153/556, 5-6=-1007/304, 6-7=-1580/227
BOT CHORD 1-10=-27/1133, 8-10=-27/1133, 7-8=-27/1133
WEBS 6-8=0/603, 2-10=0/603, 3-5=-1730/550

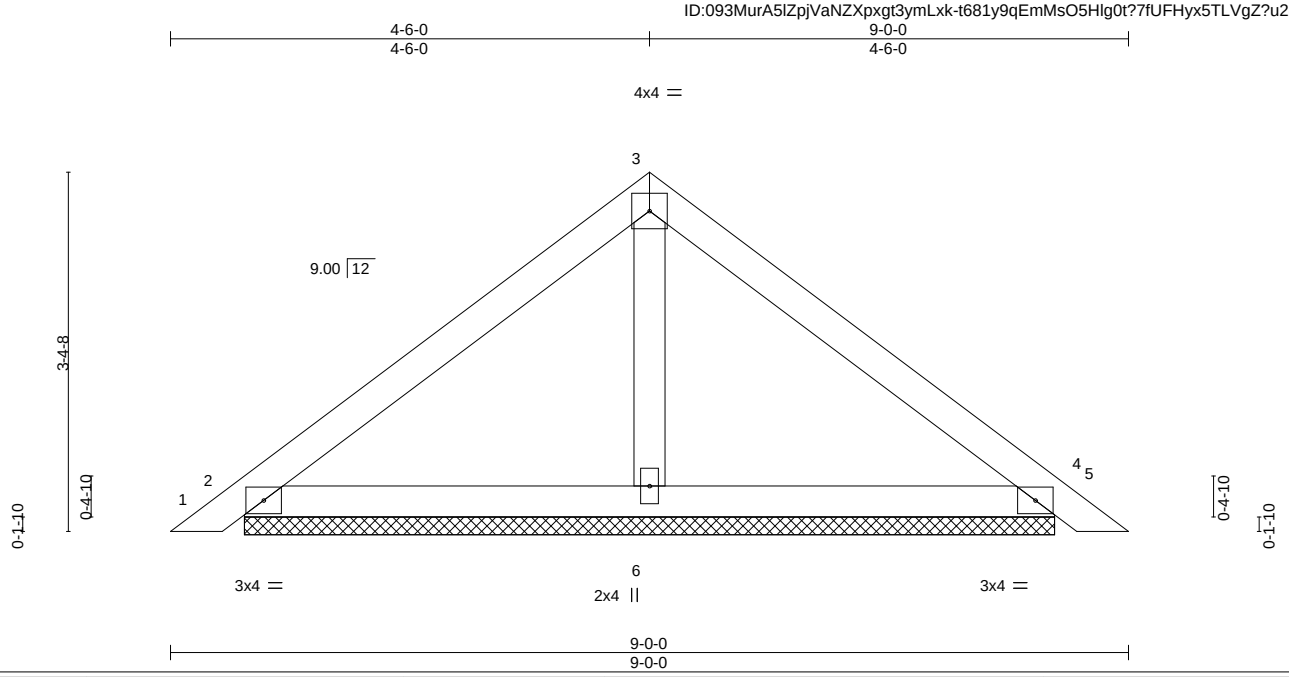
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 11-10-0, Exterior(2) 11-10-0 to 16-0-4, Interior(1) 16-0-4 to 23-6-4 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, 7.

November 9,2022

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

Job	Truss	Truss Type	Qty	Ply	Jamie Fisher/Fisher Residence/Harnett
J0822-4240	PB1	Piggyback	16	1	I55153069
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Nov 8 09:44:09 2022 Page 1
ID:093MurA5lZpjVaNZXpxgt3ymLxk-t681y9qEmMsO5Hlg0t?7fUFHyx5TLVgZ?u2gP4yLHQq



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	0.20	Vert(LL)	0.01	5	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	0.01	5	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 32 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) 2=7-7-5, 4=7-7-5, 6=7-7-5
Max Horz 2=-77(LC 10)
Max Uplift 2=-34(LC 12), 4=-41(LC 13)
Max Grav 2=200(LC 1), 4=200(LC 1), 6=264(LC 1)

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

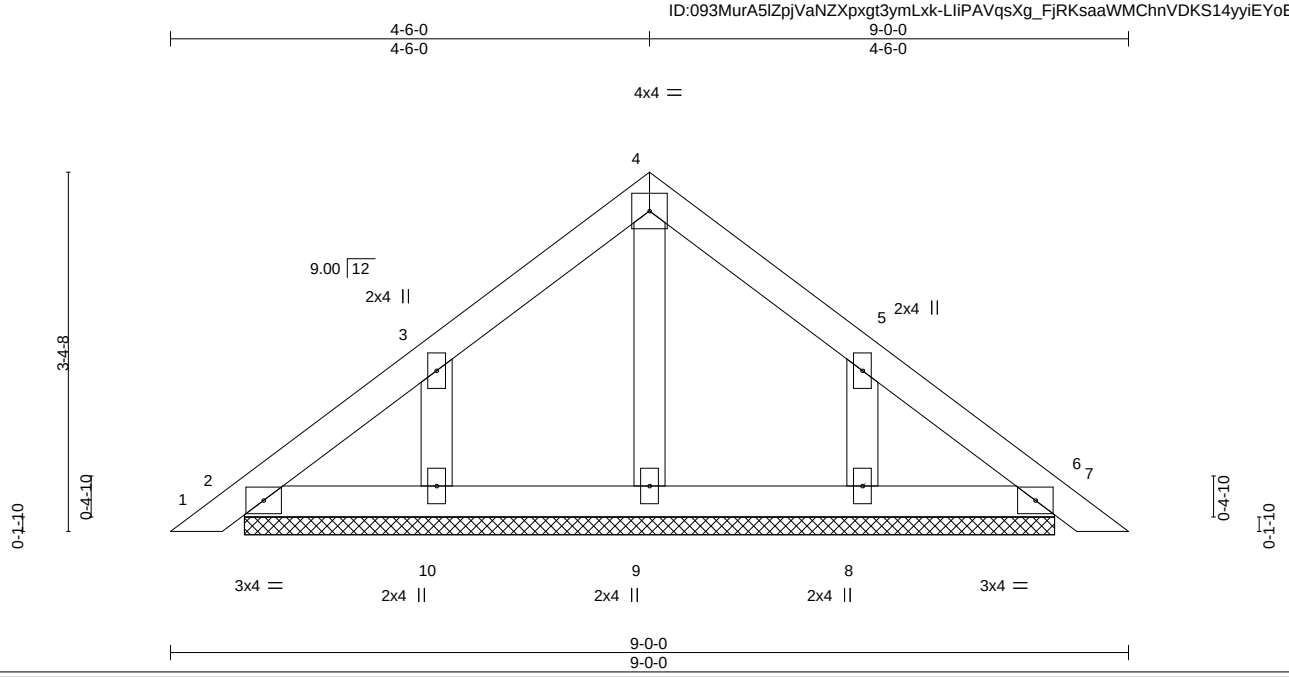
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip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

November 9,2022

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

Job	Truss	Truss Type	Qty	Ply	Jamie Fisher/Fisher Residence/Harnett
J0822-4240	PB1GE	GABLE	2	1	I55153070
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Nov 8 09:44:10 2022 Page 1
ID:093MurA5lZpjVaNZXpxgt3ymLxk-LIiPAVqsXg_FjRKsaaWMChnVDKS14yyiEYoExWyLHQp



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	6	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	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: 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. All bearings 7-7-5.
(lb) - Max Horz 2=96(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 10=-118(LC 12), 8=-117(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 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=118, 8=117.
9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

November 9,2022

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

Job	Truss	Truss Type	Qty	Ply	Jamie Fisher/Fisher Residence/Harnett
J0822-4240	VA1	GABLE	1	1	I55153071
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Nov 8 09:44:12 2022 Page 1
ID:093MurA5lZpjVaNZXpxgt3ymLxk-Ihq9aBs63HEzykUFh?ZqH6trh87PYpg?hsHK?PyLHQn

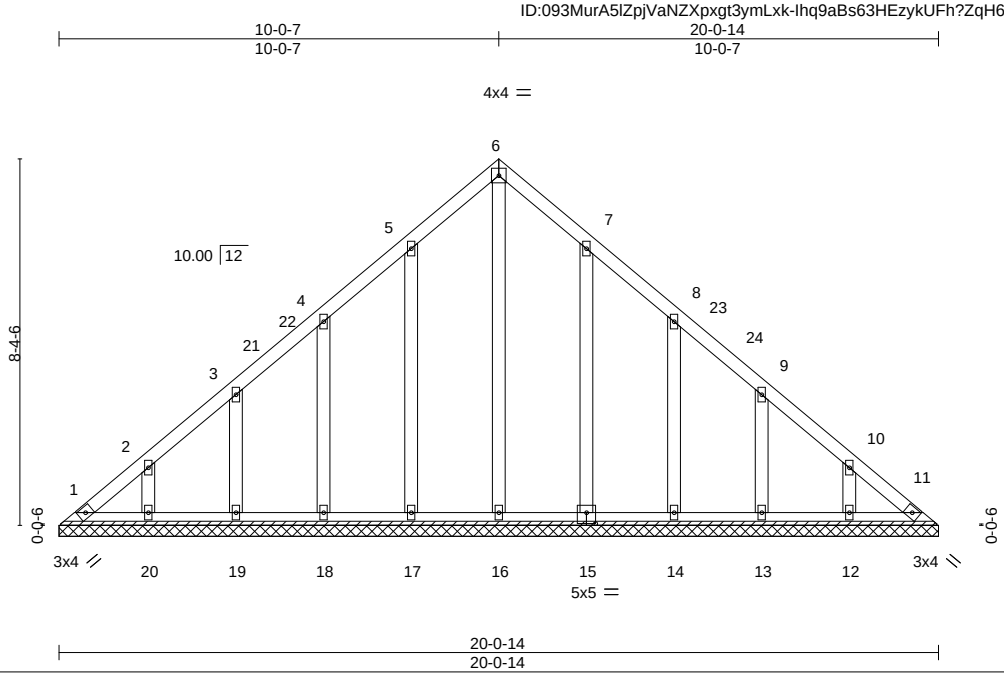


Plate Offsets (X,Y)-- [7:0-0-0,0-0-0], [8:0-0-0,0-0-0], [9:0-0-0,0-0-0], [10:0-0-0,0-0-0], [15:0-2-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.05	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	0.20	Horz(CT)	0.01	11	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 122 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. All bearings 20-0-14.
(lb) - Max Horz 1=-241(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 11 except 17=-110(LC 12), 18=-113(LC 12), 19=-110(LC 12), 20=-112(LC 12), 15=-108(LC 13), 14=-114(LC 13), 13=-110(LC 13), 12=-112(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 11, 16, 17, 18, 19, 20, 15, 14, 13, 12

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-281/193

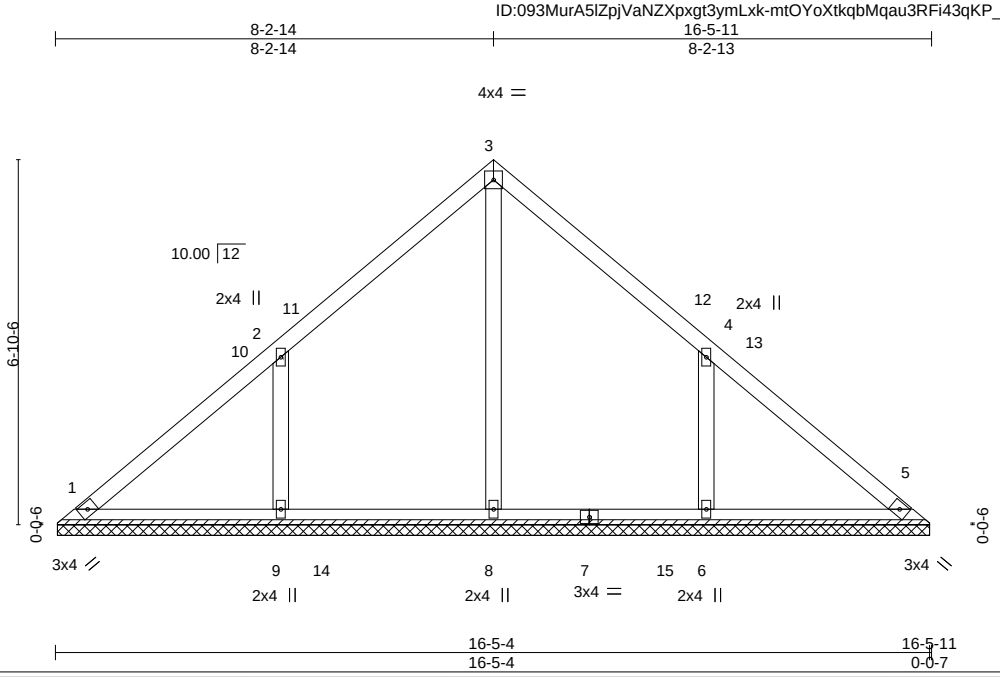
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-13 to 4-9-10, Interior(1) 4-9-10 to 10-0-7, Exterior(2) 10-0-7 to 14-5-4, Interior(1) 14-5-4 to 19-8-1 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
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, 11 except (jt=lb) 17=110, 18=113, 19=110, 20=112, 15=108, 14=114, 13=110, 12=112.

November 9,2022

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

Job	Truss	Truss Type	Qty	Ply	Jamie Fisher/Fisher Residence/Harnett
J0822-4240	VA2	VALLEY	1	1	I55153072
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Nov 8 09:44:13 2022 Page 1
ID:093MurA5lZpjVaNZXpxgt3ymLxk-mtOYoXtkqbMqau3RFi43qKP_YYRKHHQ9wW0uYryLHQm



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 73 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. All bearings 16-4-13.
(lb) - Max Horz 1=157(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 9=-150(LC 12), 6=-150(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 8=415(LC 22), 9=463(LC 19), 6=463(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-9=-373/262, 4-6=-373/262

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-13 to 4-9-10, Interior(1) 4-9-10 to 8-2-14, Exterior(2) 8-2-14 to 12-7-10, Interior(1) 12-7-10 to 16-0-14 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, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 9=150, 6=150.

November 9,2022

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

Job	Truss	Truss Type	Qty	Ply	Jamie Fisher/Fisher Residence/Harnett
J0822-4240	VA3	VALLEY	1	1	I55153073
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Nov 8 09:44:14 2022 Page 1
ID:093MurA5lZpjVaNZXpxgt3ymLxk-E3xw?ttNbvUgB2edpQbIMXy8syow0kII9AmR4HyLHQl

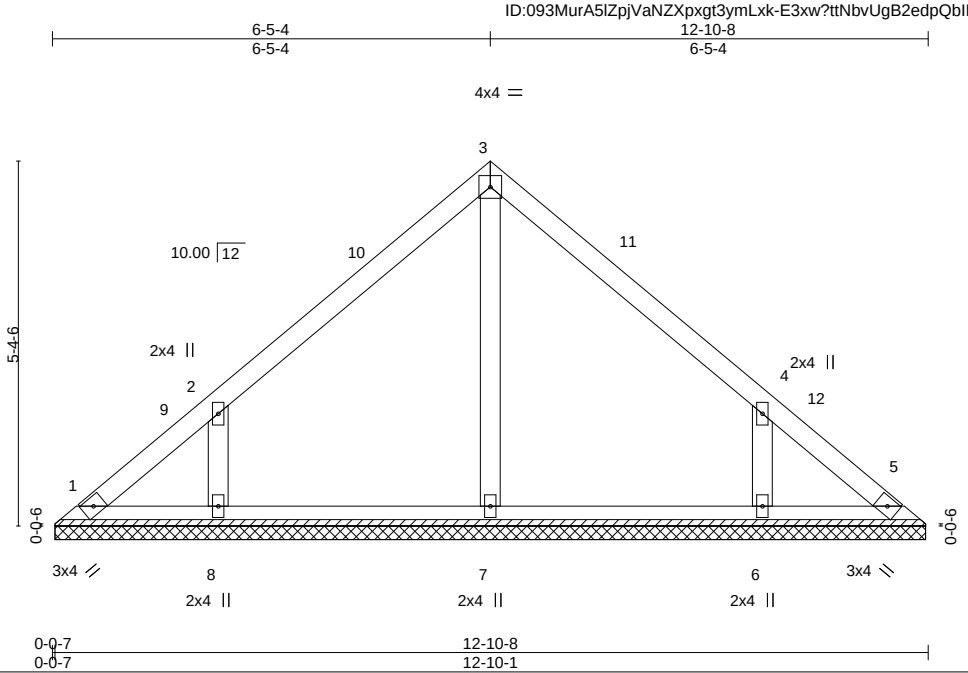


Plate Offsets (X,Y)-- [4:0-0-0,0-0-0]

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	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 54 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. All bearings 12-9-9.
(lb) - Max Horz 1=-121(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-124(LC 12), 6=-124(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=330(LC 19), 6=329(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-313/240, 4-6=-313/239

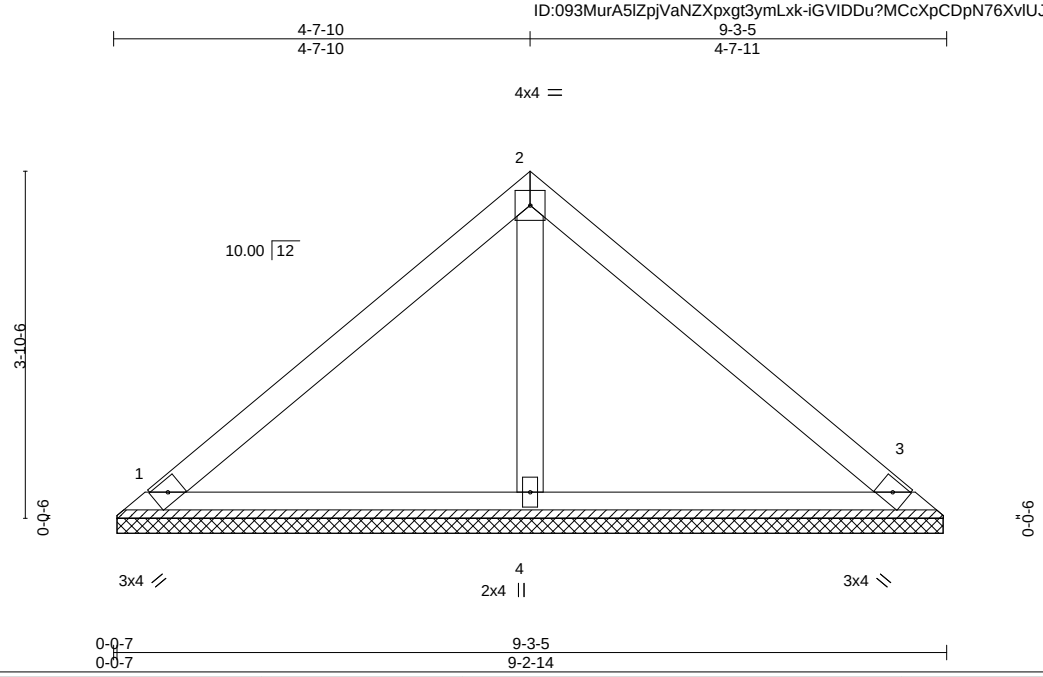
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-13 to 4-9-10, Interior(1) 4-9-10 to 6-5-4, Exterior(2) 6-5-4 to 10-10-1, Interior(1) 10-10-1 to 12-5-11 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas 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, 5 except (jt=lb) 8=124, 6=124.
6) Non Standard bearing condition. Review required.

November 9,2022

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

Job	Truss	Truss Type	Qty	Ply	Jamie Fisher/Fisher Residence/Harnett
J0822-4240	VA4	VALLEY	1	1	I55153074
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Nov 8 09:44:15 2022 Page 1
ID:093MurA5lZpjVaNZXpxgt3ymLxk-iGVIDDu?MCcXpCDpN76XvlUJkL7TlCxRNqV?ckyLHQk



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	0.13	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=9-2-6, 3=9-2-6, 4=9-2-6
Max Horz 1=-85(LC 8)
Max Uplift 1=-20(LC 13), 3=-28(LC 13)
Max Grav 1=181(LC 1), 3=181(LC 1), 4=316(LC 1)

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

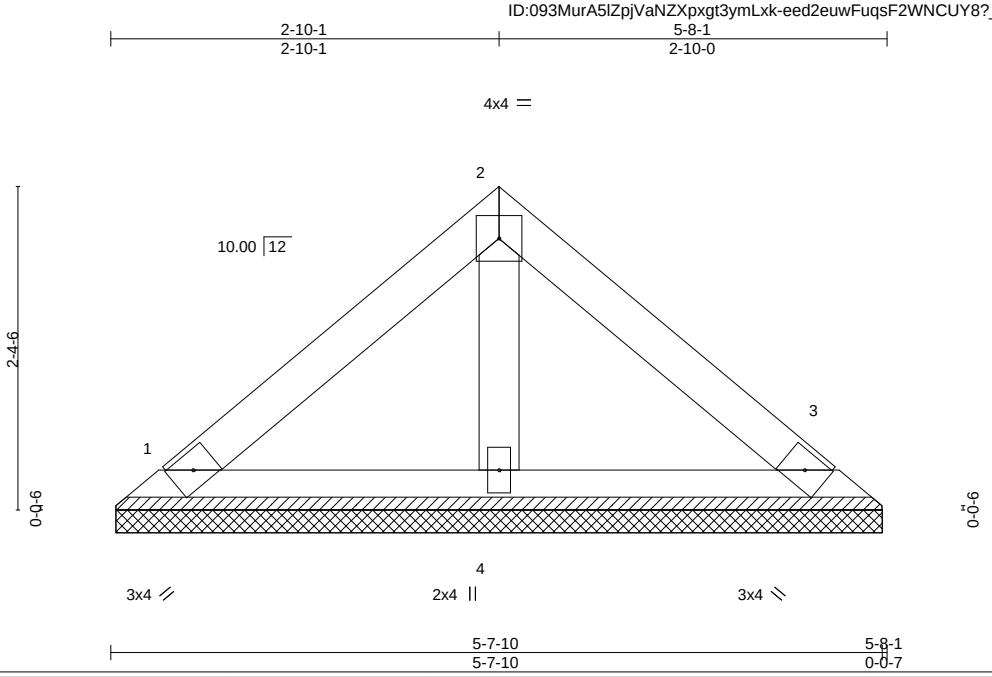
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip 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.

November 9,2022

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

Job	Truss	Truss Type	Qty	Ply	Jamie Fisher/Fisher Residence/Harnett
J0822-4240	VA5	VALLEY	1	1	I55153075
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Nov 8 09:44:17 2022 Page 1
ID:093MurA5lZpjVaNZXpxgt3ymLxk-eed2euwFuqsF2WNCUY8?_Aagr9rKD6ukr8_5hcyLHQi



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	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: 20 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-8-1 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=5-7-3, 3=5-7-3, 4=5-7-3
Max Horz 1=-49(LC 8)
Max Uplift 1=-17(LC 13), 3=-21(LC 13)
Max Grav 1=113(LC 1), 3=113(LC 1), 4=164(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 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.

November 9,2022

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

Job	Truss	Truss Type	Qty	Ply	Jamie Fisher/Fisher Residence/Harnett
J0822-4240	VA6	VALLEY	1	1	I55153076
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Nov 8 09:44:18 2022 Page 1
ID:093MurA5lZpjVaNZXpxgt3ymLxk-6rBRrExte7_6gfyO2GgEXN6snZA3yZLu4nkfD3yLHQh

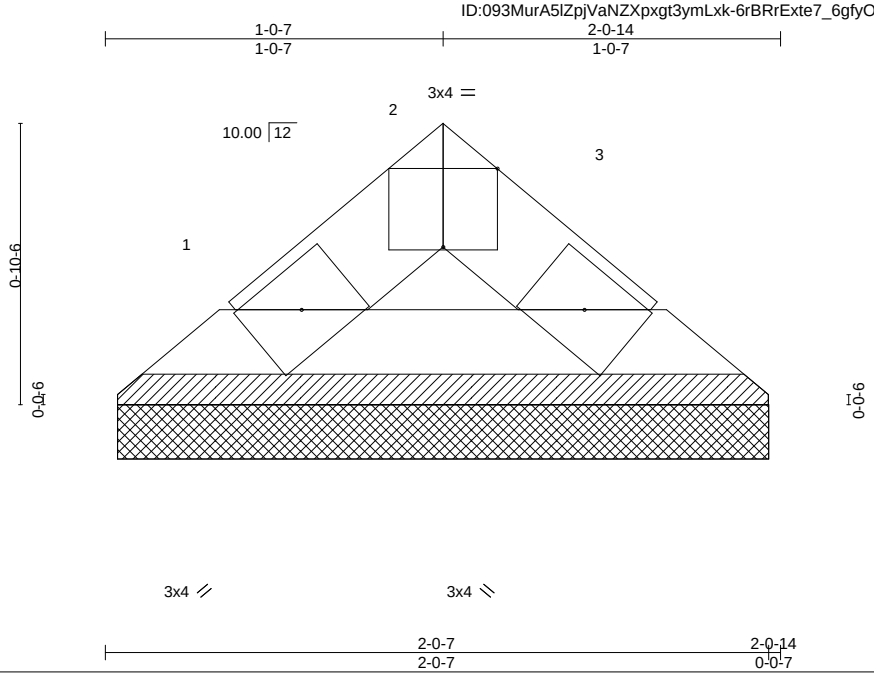


Plate Offsets (X,Y)-- [2:0-2-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.01	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 6 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-0-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=2-0-0, 3=2-0-0
Max Horz 1=-13(LC 8)
Max Uplift 1=-2(LC 12), 3=-2(LC 13)
Max Grav 1=51(LC 1), 3=51(LC 1)

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

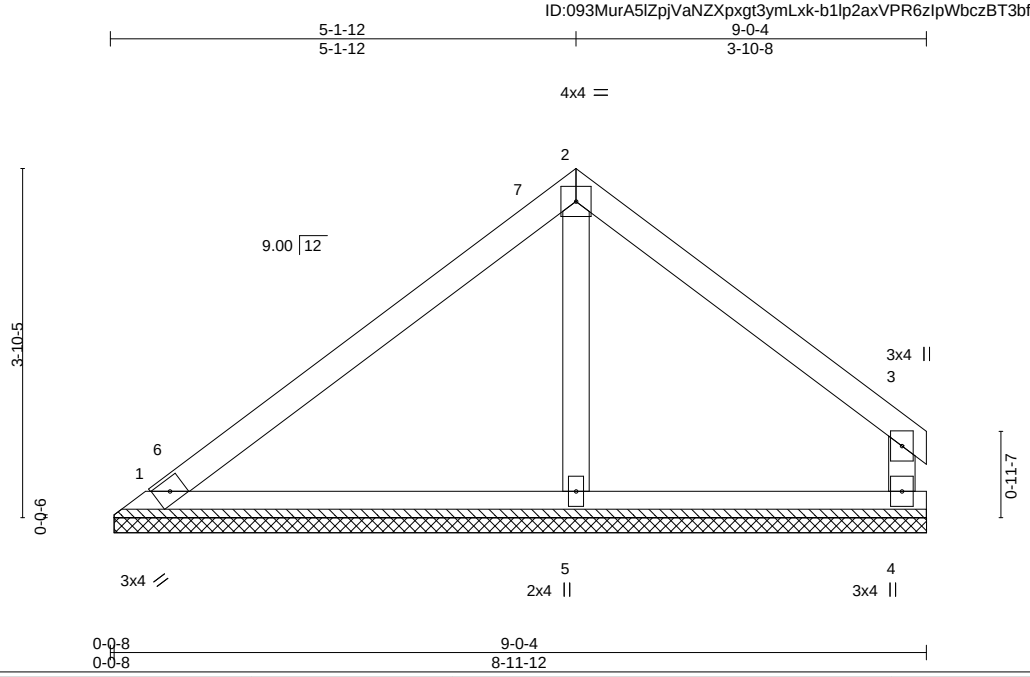
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip 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.

November 9,2022

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

Job	Truss	Truss Type	Qty	Ply	Jamie Fisher/Fisher Residence/Harnett
J0822-4240	VD1	VALLEY	1	1	I55153077
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Nov 8 09:44:19 2022 Page 1
ID:093MurA5lZpjVaNZXpxgt3ymLxk-b1lp2axVPR6zIpWbczBT3bfyZzUOh0i1lRTClVyLHQg



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)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 35 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.1
BOT CHORD	2x4 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, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=8-11-12, 4=8-11-12, 5=8-11-12
Max Horz 1=84(LC 9)
Max Uplift 1=-37(LC 13), 4=-56(LC 13)
Max Grav 1=179(LC 1), 4=144(LC 20), 5=362(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-257/68

NOTES-

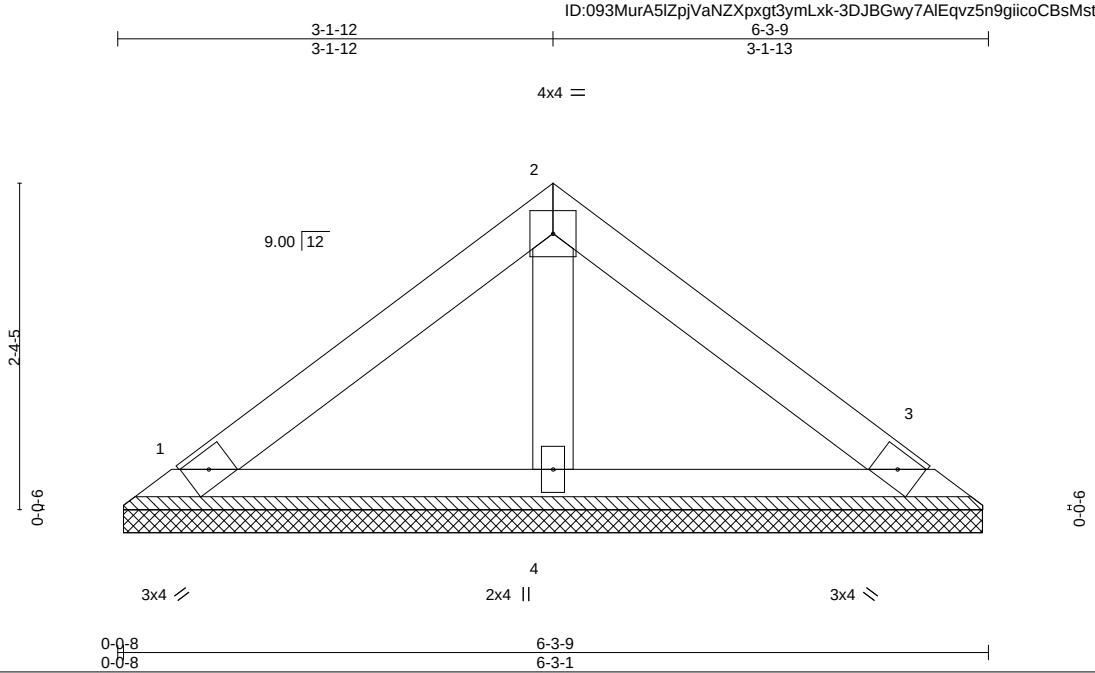
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-5 to 4-10-1, Interior(1) 4-10-1 to 5-1-12, Exterior(2) 5-1-12 to 8-9-0 zone;C-C for members 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, 4.

November 9,2022

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

Job	Truss	Truss Type	Qty	Ply	Jamie Fisher/Fisher Residence/Harnett
J0822-4240	VD2	VALLEY	1	1	I55153078
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Nov 8 09:44:20 2022 Page 1
ID:093MurA5lZpjVaNZXpxgt3ymLxk-3DJBGwy7AlEqvz5n9giicoCBsMstQTcBX5DmHxyLHQf



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	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	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: 22 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=6-2-9, 3=6-2-9, 4=6-2-9
Max Horz 1=-49(LC 8)
Max Uplift 1=-19(LC 12), 3=-23(LC 13)
Max Grav 1=122(LC 1), 3=122(LC 1), 4=190(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 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.

November 9,2022

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

Job	Truss	Truss Type	Qty	Ply	Jamie Fisher/Fisher Residence/Harnett
J0822-4240	VD3	VALLEY	1	1	I55153079
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Nov 8 09:44:21 2022 Page 1
ID:093MurA5lZpjVaNZXpxgt3ymLxk-XQtZTGzmx2MhX7gzjODx80kN?mCi9w5KmlyJqNyLHQe

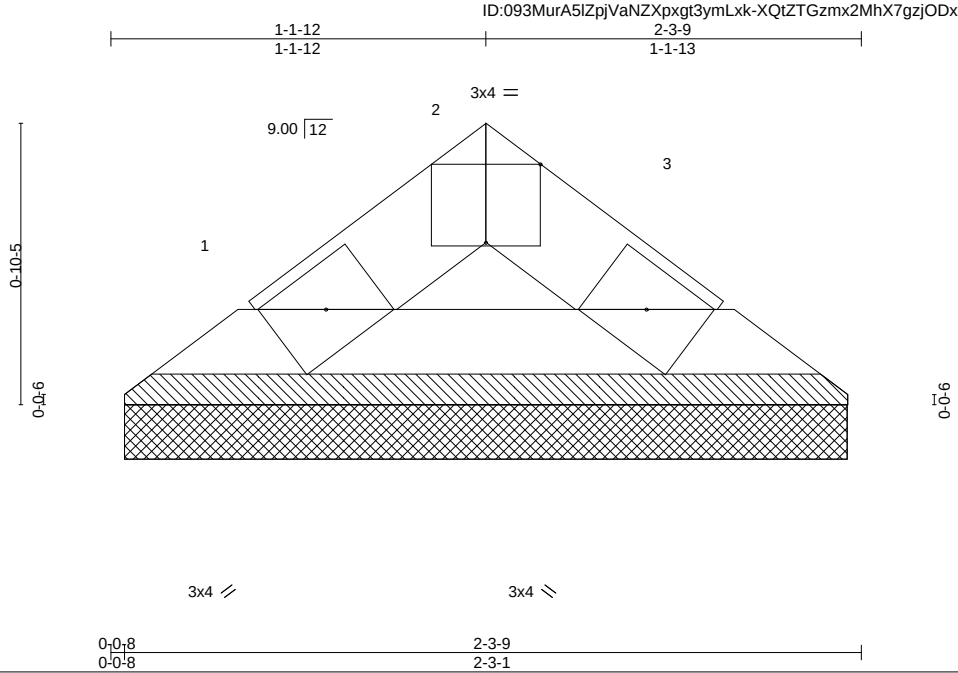


Plate Offsets (X,Y)-- [2:0-2-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.01	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 6 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-3-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=2-2-9, 3=2-2-9
Max Horz 1=-13(LC 8)
Max Uplift 1=-3(LC 12), 3=-3(LC 13)
Max Grav 1=57(LC 1), 3=57(LC 1)

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

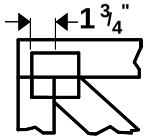
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip 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.

November 9,2022

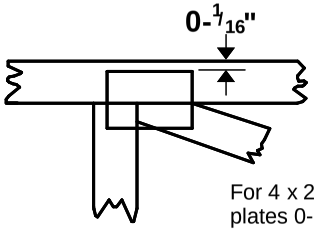
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

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.

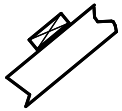
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

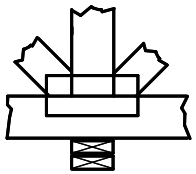
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

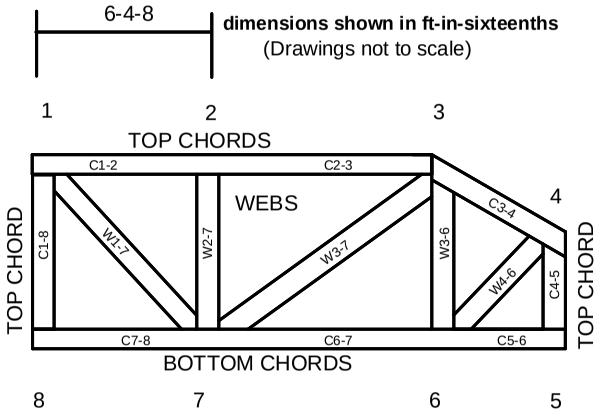


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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 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.