ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J0423-1518
Lot 90 South Creek

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: I57574255 thru I57574262

My license renewal date for the state of North Carolina is December 31, 2023.

North Carolina COA: C-0844

April 5,2023

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	Lot 90 South Creek
J0423-1518	F01	Floor Girder	1	1	I57574255
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 4 13:17:31 2023 Page 1
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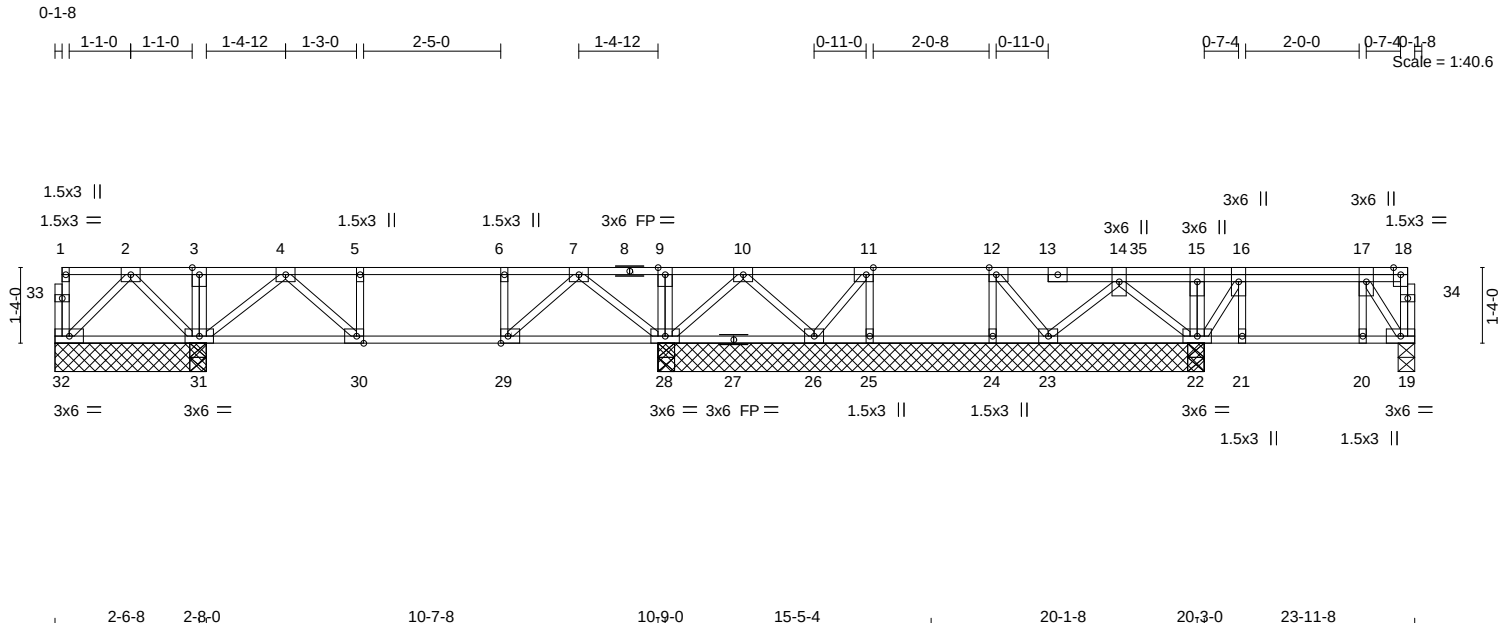

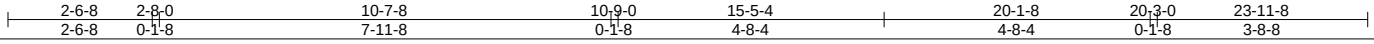

Plate Offsets (X,Y)-- [11:0-1-8,Edge], [12:0-1-8,Edge], [29:0-1-8,Edge], [30:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.21	Vert(LL)	-0.01	29-30	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.09	Vert(CT)	-0.01	29-30	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.17	Horz(CT)	0.00	19	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 137 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

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

REACTIONS. All bearings 9-7-8 except (jt=length) 32=2-8-0, 31=2-8-0, 31=2-8-0, 19=0-3-8.
(lb) - Max Uplift All uplift 100 lb or less at joint(s) except 32=-143(LC 4)
Max Grav All reactions 250 lb or less at joint(s) 32, 26, 23, 25, 24 except 28=747(LC 12), 28=730(LC 1), 31=787(LC 11), 31=764(LC 1), 22=447(LC 11), 22=444(LC 1), 19=261(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=0/385, 3-4=0/386, 4-5=-369/0, 5-6=-369/0, 6-7=-369/0, 7-9=0/392, 9-10=0/391
BOT CHORD 29-30=0/369
WEBS 2-31=-357/0, 4-31=-565/0, 4-30=0/359, 7-28=-566/0, 7-29=0/360, 10-28=-335/0, 16-22=-305/0, 17-19=-298/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x4 MT20 unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 143 lb uplift at joint 32.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
6) CAUTION, Do not erect truss backwards.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 136 lb down at 19-1-4, and 136 lb down at 21-1-4, and 139 lb down at 23-1-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 19-32=-10, 1-18=-100
Concentrated Loads (lb)
Vert: 16=-56(B) 17=-72(B) 35=-56(B)

April 5,2023

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Job	Truss	Truss Type	Qty	Ply	Lot 90 South Creek
J0423-1518	F02	Floor	4	1	I57574256
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 4 13:17:33 2023 Page 1
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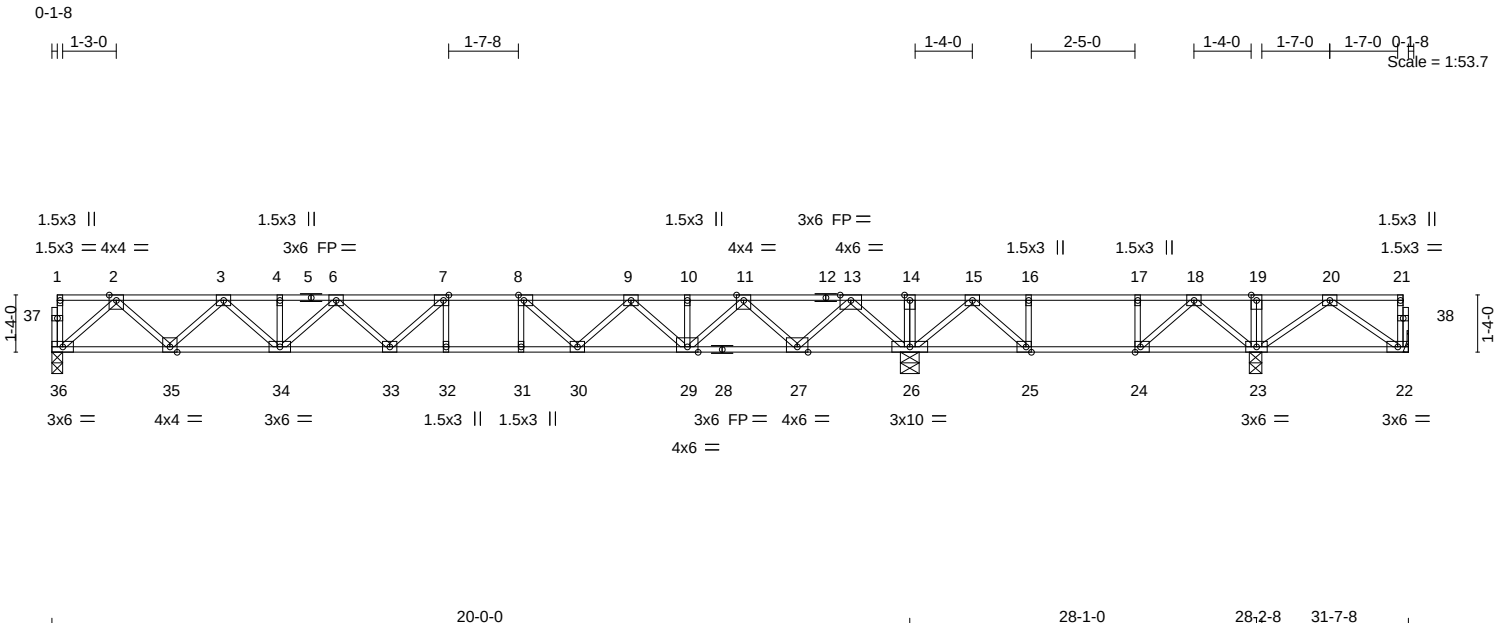

Plate Offsets (X,Y)-- [7:0-1-8,Edge], [8:0-1-8,Edge], [24:0-1-8,Edge], [25:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.67	Vert(LL)	-0.26	32-33	>908	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.66	Vert(CT)	-0.36	32-33	>664	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.05	26	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-S							Weight: 166 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP 2400F 2.0E(flat) *Except*
22-28: 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

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

REACTIONS. (size) 36=0-3-0, 26=0-5-4, 23=0-3-8, 22=Mechanical
Max Uplift 22=-461(LC 3)
Max Grav 36=975(LC 5), 26=1740(LC 3), 23=1093(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1790/0, 3-4=-2975/0, 4-6=-2975/0, 6-7=-3521/0, 7-8=-3566/0, 8-9=-3119/0, 9-10=-2112/0, 10-11=-2112/0, 11-13=-444/53, 13-14=0/1997, 14-15=0/1998, 15-16=-70/1353, 16-17=-70/1353, 17-18=-70/1353, 18-19=0/1499, 19-20=0/1500
BOT CHORD 35-36=0/1058, 34-35=0/2490, 33-34=0/3395, 32-33=0/3566, 31-32=0/3566, 30-31=0/3566, 29-30=0/2737, 27-29=0/1377, 26-27=-698/0, 25-26=-1608/0, 24-25=-1353/70, 23-24=-1251/0, 22-23=-683/0
WEBS 2-36=-1406/0, 13-26=-1729/0, 2-35=0/1017, 13-27=0/1355, 3-35=-974/0, 11-27=-1317/0, 3-34=0/659, 11-29=0/1016, 6-34=-571/0, 9-29=-864/0, 6-33=-25/319, 9-30=0/597, 7-33=-364/264, 8-30=-791/0, 7-32=-280/108, 8-31=-82/307, 15-26=-675/0, 15-25=0/595, 18-23=-516/21, 18-24=-139/309, 16-25=-328/0, 20-23=-1082/0, 20-22=0/838

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x4 MT20 unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 461 lb uplift at joint 22.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
7) CAUTION, Do not erect truss backwards.

April 5,2023

ENGINEERING BY
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Job	Truss	Truss Type	Qty	Ply	Lot 90 South Creek
J0423-1518	F04	Floor	5	1	I57574257
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 4 13:17:35 2023 Page 1
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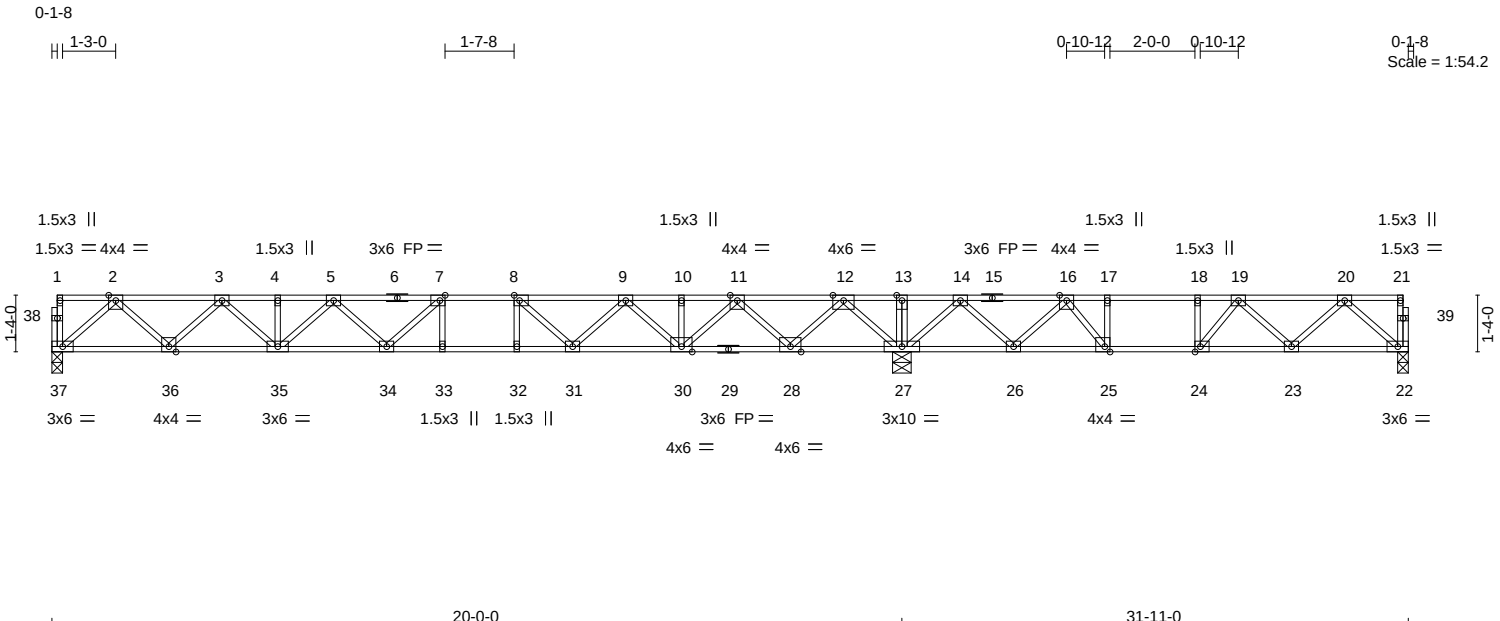

Plate Offsets (X,Y)-- [7:0-1-8,Edge], [8:0-1-8,Edge], [24:0-1-8,Edge], [25:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.94	Vert(LL)	-0.26	33-34	>910	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.67	Vert(CT)	-0.36	33-34	>669	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.05	27	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 167 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP 2400F 2.0E(flat) *Except*
22-29: 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

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

REACTIONS. (size) 37=0-3-0, 27=0-5-4, 22=0-3-0
Max Uplift 22=-22(LC 3)
Max Grav 37=970(LC 10), 27=2105(LC 1), 22=549(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1779/0, 3-4=-2953/0, 4-5=-2953/0, 5-7=-3489/0, 7-8=-3525/0, 8-9=-3069/0, 9-10=-2053/0, 10-11=-2053/0, 11-12=-369/229, 12-13=0/2285, 13-14=0/2285, 14-16=-350/1220, 16-17=-1097/537, 17-18=-1097/537, 18-19=-1097/537, 19-20=-874/110
BOT CHORD 36-37=0/1053, 35-36=0/2474, 34-35=0/3369, 33-34=0/3525, 32-33=0/3525, 31-32=0/3525, 30-31=0/2681, 28-30=0/1309, 27-28=-962/0, 26-27=-1516/0, 25-26=-888/822, 24-25=-537/1097, 23-24=-263/1117, 22-23=-41/578
WEBS 2-37=-1399/0, 12-27=-1761/0, 2-36=0/1010, 12-28=0/1367, 3-36=-967/0, 11-28=-1344/0, 3-35=0/652, 11-30=0/1047, 5-35=-565/0, 9-30=-885/0, 5-34=-46/296, 9-31=0/617, 7-34=-330/296, 8-31=-824/0, 7-33=-295/93, 8-32=-66/322, 14-27=-1218/0, 14-26=0/822, 16-26=-888/0, 16-25=0/907, 17-25=-515/0, 20-22=-767/55, 20-23=-96/413, 19-23=-337/213, 19-24=-495/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x4 MT20 unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 22 lb uplift at joint 22.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
6) CAUTION, Do not erect truss backwards.

April 5,2023

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Job	Truss	Truss Type	Qty	Ply	Lot 90 South Creek
J0423-1518	F05	Floor	8	1	I57574258
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 4 13:17:36 2023 Page 1
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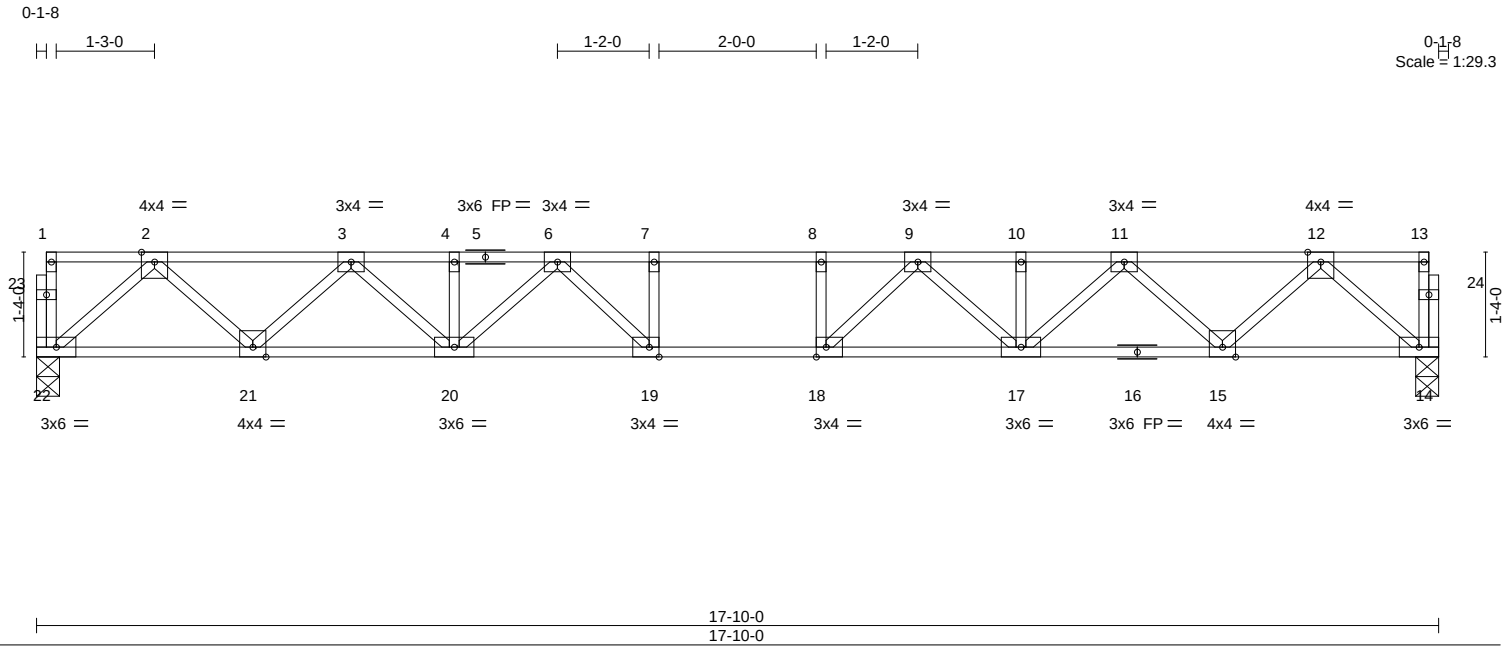

Plate Offsets (X,Y)-- [18:0-1-8,Edge], [19:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.53	Vert(LL)	-0.21	18-19	>996	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.74	Vert(CT)	-0.29	18-19	>724	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.06	14	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 94 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

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) 14=0-3-8, 22=0-3-8
Max Grav 14=961(LC 1), 22=961(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1757/0, 3-4=-2926/0, 4-6=-2926/0, 6-7=-3482/0, 7-8=-3482/0, 8-9=-3482/0, 9-10=-2926/0, 10-11=-2926/0, 11-12=-1757/0
BOT CHORD 21-22=0/1042, 20-21=0/2442, 19-20=0/3273, 18-19=0/3482, 17-18=0/3273, 15-17=0/2442, 14-15=0/1042
WEBS 2-22=-1385/0, 2-21=0/994, 3-21=-953/0, 3-20=0/658, 12-14=-1385/0, 12-15=0/994, 11-15=-953/0, 11-17=0/658, 9-17=-472/0, 6-20=-472/0, 6-19=-67/597, 7-19=-312/0, 9-18=-67/597, 8-18=-312/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 1.5x3 MT20 unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

April 5,2023

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Job	Truss	Truss Type	Qty	Ply	Lot 90 South Creek
J0423-1518	F06	Floor Girder	1	1	I57574259
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 4 13:17:37 2023 Page 1
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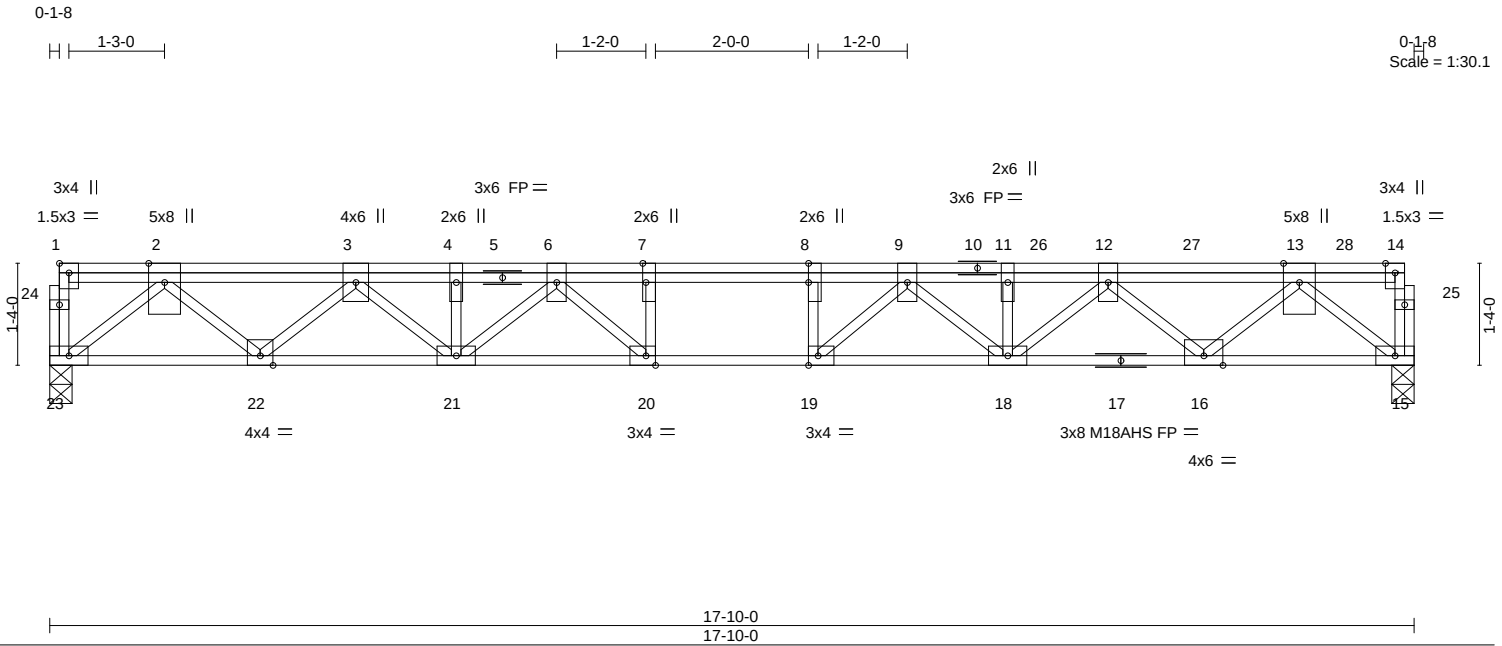

17-10-0
17-10-0

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [7:0-3-0,Edge], [8:0-3-0,0-0-0], [19:0-1-8,Edge], [20:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.29	Vert(LL)	-0.19	19-20	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.78	Vert(CT)	-0.26	19-20	>806	360	M18AHS	186/179
BCLL	0.0	Rep Stress Incr	NO	WB	0.52	Horz(CT)	0.07	15	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-S							Weight: 118 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

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) 23=0-3-8, 15=0-3-8
Max Grav 23=988(LC 1), 15=1118(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1899/0, 3-4=-3202/0, 4-6=-3202/0, 6-7=-3860/0, 7-8=-3860/0, 8-9=-3860/0, 9-11=-3371/0, 11-12=-3371/0, 12-13=-2062/0
BOT CHORD 22-23=0/1122, 21-22=0/2644, 20-21=0/3566, 19-20=0/3860, 18-19=0/3677, 16-18=0/2843, 15-16=0/1251
WEBS 2-23=-1458/0, 2-22=0/1054, 3-22=-1011/0, 3-21=0/741, 13-15=-1624/0, 13-16=0/1100, 12-16=-1059/0, 12-18=0/700, 9-18=-407/0, 9-19=-148/470, 8-19=-283/92, 6-21=-482/0, 6-20=0/724, 7-20=-439/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) All plates are 3x6 MT20 unless otherwise indicated.
4) Plates checked for a plus or minus 1 degree rotation about its center.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 136 lb down at 12-11-12, and 136 lb down at 14-11-12, and 139 lb down at 16-11-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 15-23=-10, 1-14=-100
Concentrated Loads (lb)
Vert: 26=-56(F) 27=-56(F) 28=-72(F)

April 5,2023

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 90 South Creek
J0423-1518	F07	Floor	4	1	I57574260
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 4 13:17:38 2023 Page 1
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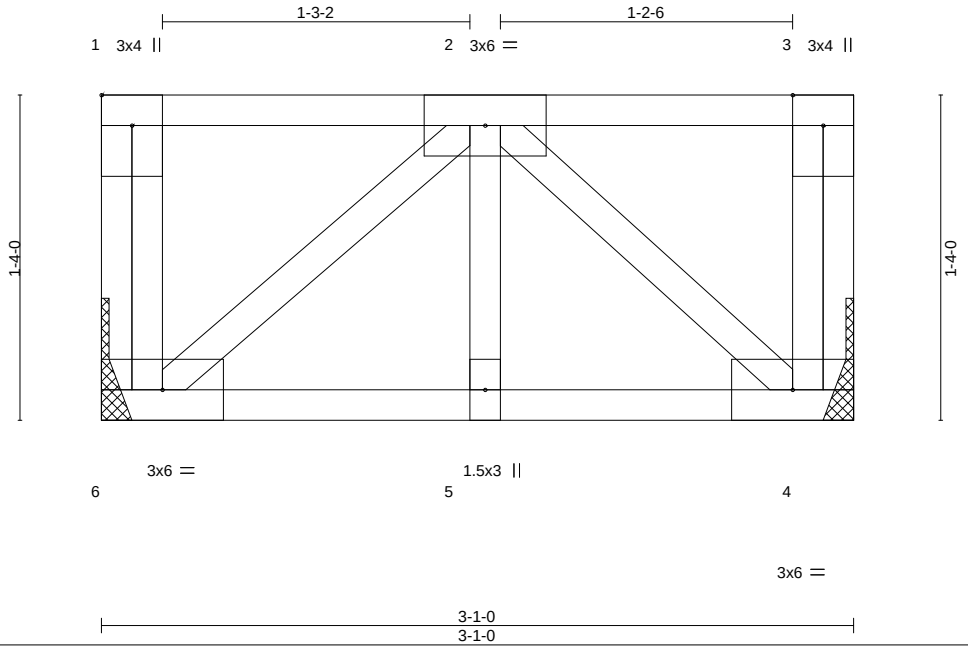


Plate Offsets (X,Y)-- [1:Edge,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.09	Vert(LL)	-0.00	6	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.03	Vert(CT)	-0.00	5	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	4	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 22 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-1-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 6=Mechanical, 4=Mechanical
Max Grav 6=156(LC 1), 4=156(LC 1)

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

NOTES-
1) Plates checked for a plus or minus 1 degree rotation about its center.
2) Refer to girder(s) for truss to truss connections.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

April 5,2023

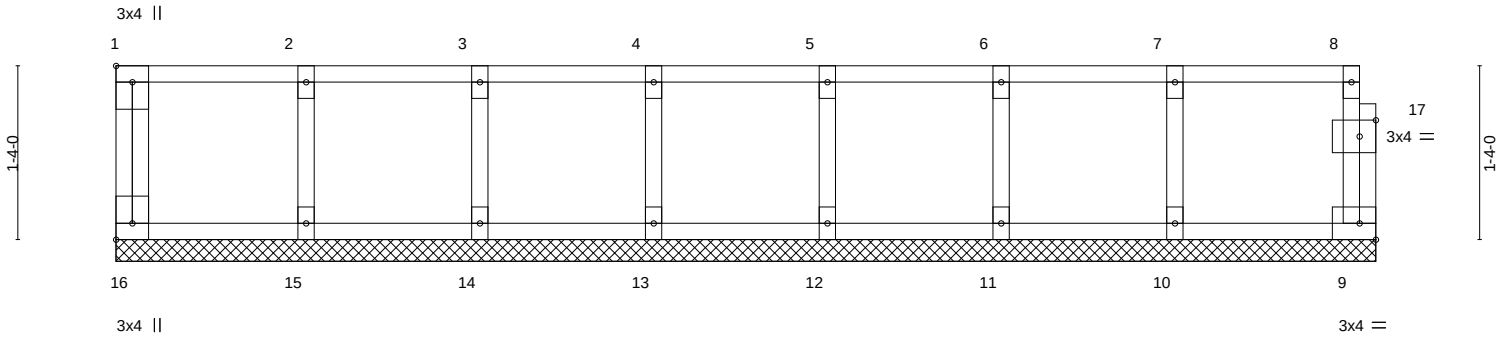
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 90 South Creek
J0423-1518	FKW1	Floor Supported Gable	1	1	I57574261
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 4 13:17:39 2023 Page 1
ID:ZyxR5MYexMn1OulsRggYZvzvq71-d_aq_UgXs41VmfwqPz2OXjR3Nu8d8TOaIwX?nezU4uw

0-1-8

Scale = 1:17.7



1-5-8	2-9-8	4-1-8	5-5-8	6-9-8	8-1-8	9-8-0
1-5-8	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-6-8

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [16:Edge,0-1-8], [17:0-1-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	9	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-R							Weight: 44 lb	FT = 20%F, 11%E

LUMBER-

TOP CHORD	2x4 SP No.1(flat)
BOT CHORD	2x4 SP No.1(flat)
WEBS	2x4 SP No.3(flat)
OTHERS	2x4 SP No.3(flat)

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. All bearings 9-8-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 16, 9, 15, 14, 13, 12, 11, 10

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

NOTES-
1) All plates are 1.5x3 MT20 unless otherwise indicated.
2) Plates checked for a plus or minus 1 degree rotation about its center.
3) Gable requires continuous bottom chord bearing.
4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
5) Gable studs spaced at 1-4-0 oc.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
7) CAUTION, Do not erect truss backwards.

April 5,2023

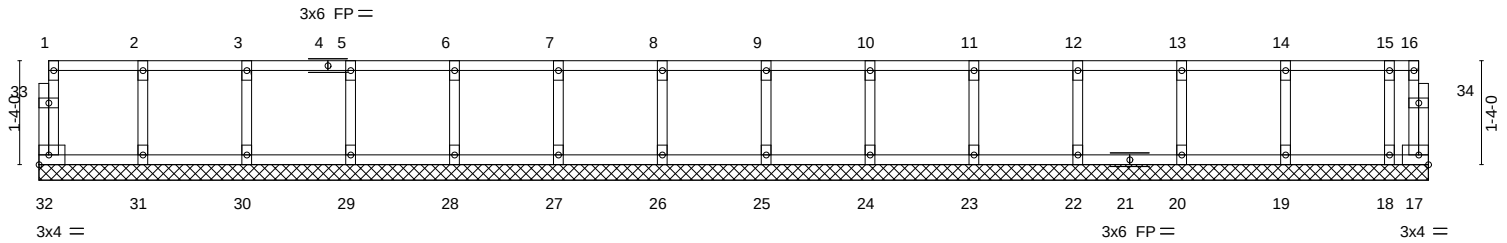
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 90 South Creek
J0423-1518	FKW2	GABLE	1	1	I57574262
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 4 13:17:40 2023 Page 1
ID:ZyxR5MYexMn1OulsRggYZvzvq71-5A7CBqh9dN9MOpV0zgZd4xzFfIUptwfkXaHYJ5zU4uv

0-1-8 0-1-8

Scale = 1:29.6



1-4-0	2-8-0	4-0-0	5-4-0	6-8-0	8-0-0	9-4-0	10-8-0	12-0-0	13-4-0	14-8-0	16-0-0	17-4-0	17-10-0
1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	0-6-0

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL	40.0	Plate Grip DOL	1.00	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	17	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-R							Weight: 80 lb	FT = 20%F, 11%E

LUMBER-

TOP CHORD	2x4 SP No.1(flat)
BOT CHORD	2x4 SP No.1(flat)
WEBS	2x4 SP No.3(flat)
OTHERS	2x4 SP No.3(flat)

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. All bearings 17-10-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 32, 17, 31, 30, 29, 28, 27, 26, 25, 24, 23, 22, 20, 19, 18

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

NOTES-
1) All plates are 1.5x3 MT20 unless otherwise indicated.
2) Plates checked for a plus or minus 1 degree rotation about its center.
3) Gable requires continuous bottom chord bearing.
4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
5) Gable studs spaced at 1-4-0 oc.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

April 5,2023

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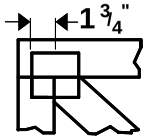
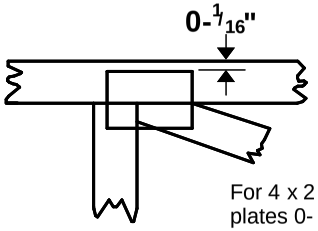
Symbols

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.

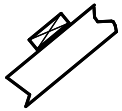
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

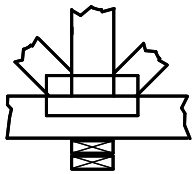
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

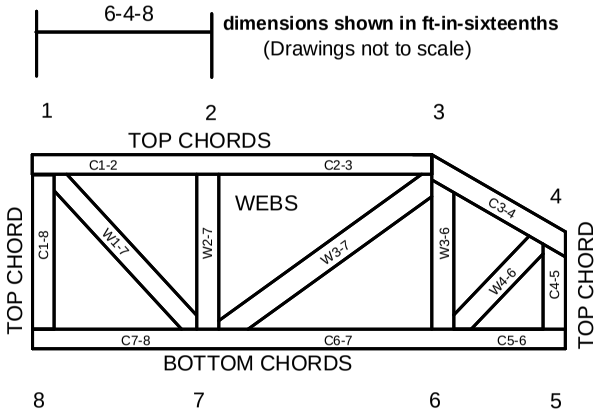


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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 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.