ENGINEERING BY TRENCO
A MiTek Affiliate

RE: J0924-5307
Lot 10 Ballard Road

Trenco
818 Soundside Rd
Edenton, NC 27932

Site Information:

Customer: Project Name: J0924-5307
Lot/Block: Model:
Address: Subdivision:
City: State:

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: IRC2015/TPI2014 Design Program: MiTek 20/20 8.4
Wind Code: N/A Wind Speed: N/A mph
Roof Load: N/A psf Floor Load: 55.0 psf

This package includes 19 individual, dated Truss Design Drawings and 0 Additional Drawings.

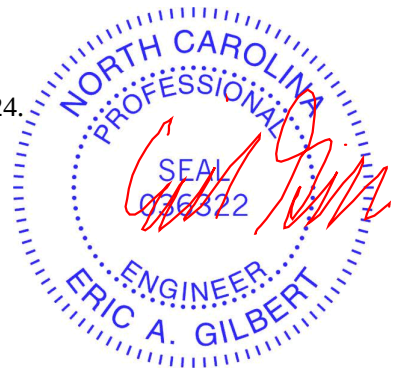
No.	Seal#	Truss Name	Date
1	I64359475	F01	3/21/2024
2	I64359476	F02	3/21/2024
3	I64359477	F03	3/21/2024
4	I64359478	F04	3/21/2024
5	I64359479	F05	3/21/2024
6	I64359480	F06	3/21/2024
7	I64359481	F07	3/21/2024
8	I64359482	F08	3/21/2024
9	I64359483	F09	3/21/2024
10	I64359484	F11	3/21/2024
11	I64359485	F12	3/21/2024
12	I64359486	F13	3/21/2024
13	I64359487	F14-GR	3/21/2024
14	I64359488	F15-GR	3/21/2024
15	I64359489	F16	3/21/2024
16	I64359490	FKW1	3/21/2024
17	I64359491	FKW2	3/21/2024
18	I64359492	FKW3	3/21/2024
19	I64359493	FKW4	3/21/2024

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

Truss Design Engineer's Name: Gilbert, Eric

My license renewal date for the state of North Carolina is December 31, 2024.

North Carolina COA: C-0844



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 TRENCO. Any project specific information included is for TRENCO customers file reference purpose only, and was not taken into account in the preparation of these designs. 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.

March 21, 2024

Gilbert, Eric

Job	Truss	Truss Type	Qty	Ply	Lot 10 Ballard Road
J0924-5307	F01	Floor	5	1	I64359475
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 20 08:57:25 2024 Page 1
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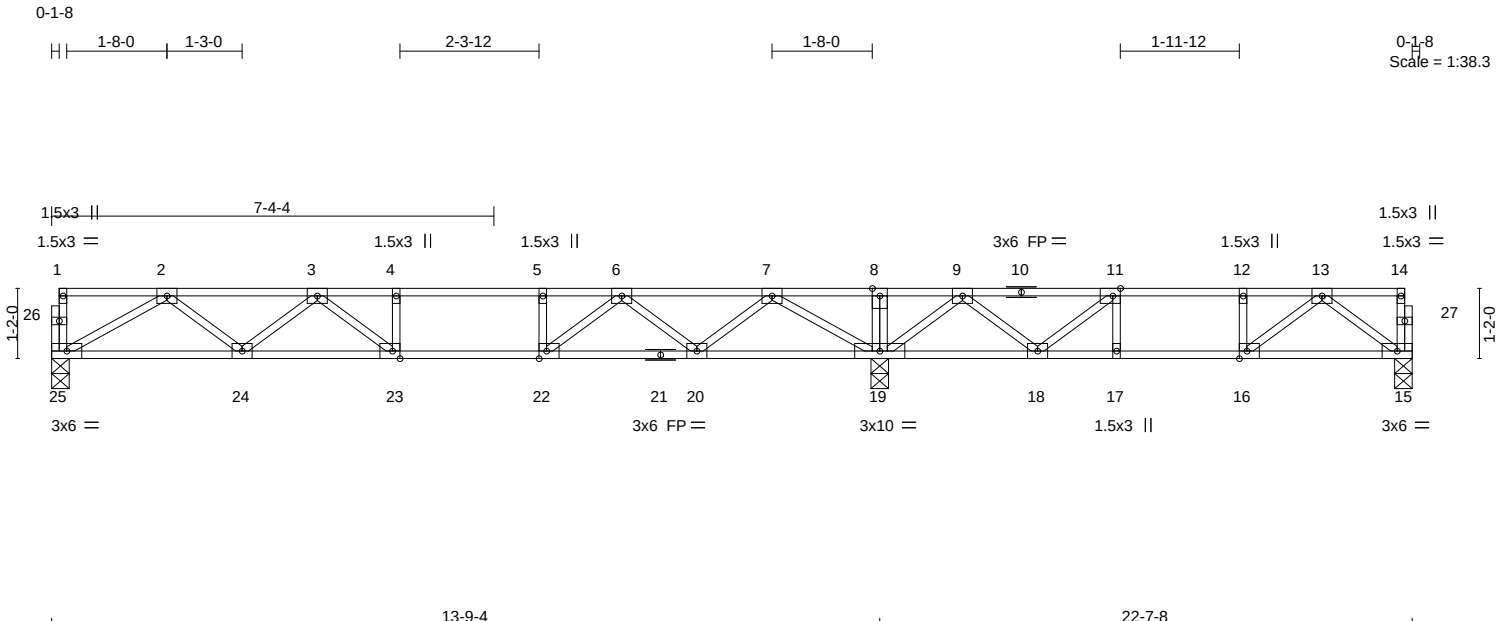

Plate Offsets (X,Y)-- [11:0-1-8,Edge], [16:0-1-8,Edge], [22:0-1-8,Edge], [23:0-1-8,Edge]

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	0.59	Vert(LL)	-0.14	23-24	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.62	Vert(CT)	-0.19	23-24	>859	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.37	Horz(CT)	0.03	15	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-S							Weight: 111 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. (size) 25=0-3-8, 15=0-3-8, 19=0-3-8
Max Grav 25=686(LC 10), 15=405(LC 4), 19=1439(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1506/0, 3-4=-2025/0, 4-5=-2025/0, 5-6=-2025/0, 6-7=-1060/2, 7-8=0/1109, 8-9=0/1108, 9-11=-407/304, 11-12=-714/61, 12-13=-714/61
BOT CHORD 24-25=0/1057, 23-24=0/1898, 22-23=0/2025, 20-22=0/1621, 19-20=-201/491, 18-19=-505/86, 17-18=-61/714, 16-17=-61/714, 15-16=0/450
WEBS 2-25=-1219/0, 2-24=0/584, 3-24=-510/0, 3-23=-86/307, 7-19=-1462/0, 7-20=0/781, 6-20=-784/0, 6-22=0/723, 5-22=-333/0, 13-15=-561/0, 13-16=-101/336, 9-19=-886/0, 9-18=0/544, 11-18=-584/0

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) 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.
5) CAUTION, Do not erect truss backwards.

March 21,2024

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818 Soundside Road
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Job	Truss	Truss Type	Qty	Ply	Lot 10 Ballard Road
J0924-5307	F02	FLOOR	2	1	I64359476
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 20 08:57:26 2024 Page 1
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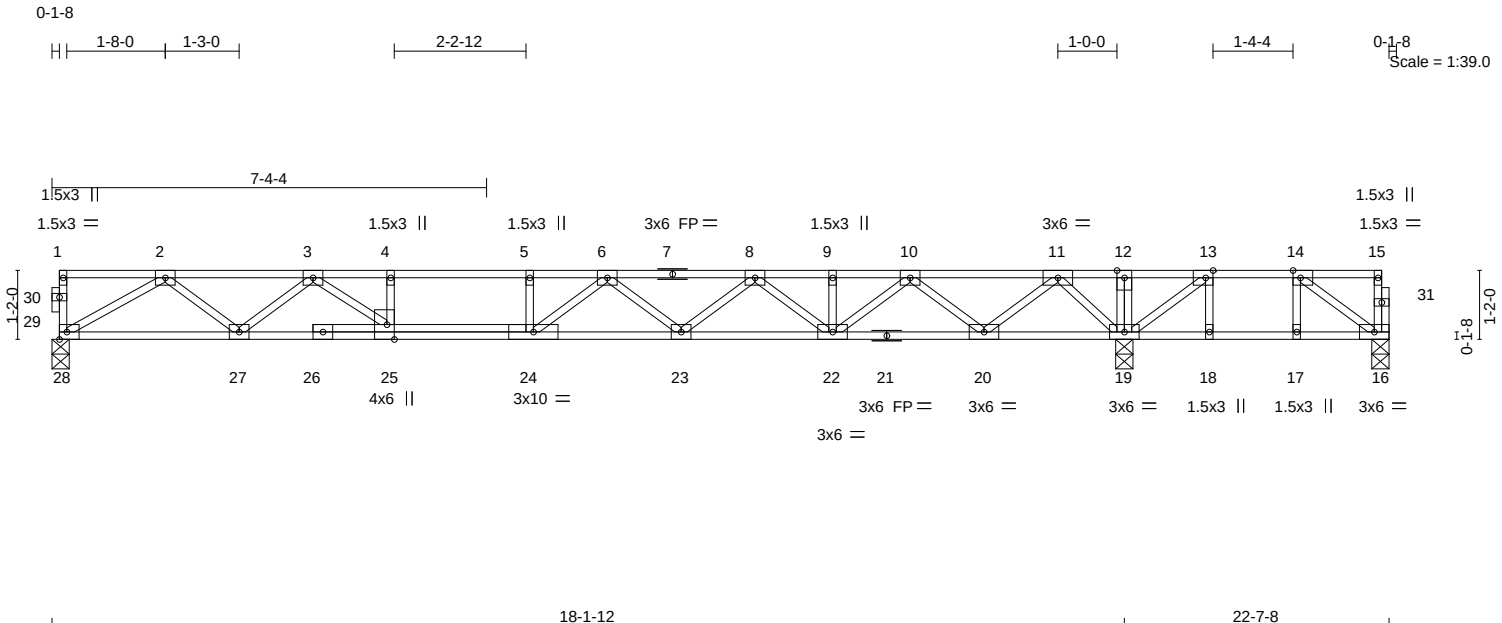

Plate Offsets (X,Y)-- [13:0-1-8,Edge], [14:0-1-8,Edge], [25:0-3-0,Edge]

LOADING (psf)		SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.79	Vert(LL)	-0.22	23-24	>973	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.76	Vert(CT)	-0.30	23-24	>709	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.04	19	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 6-0-0 oc bracing.

REACTIONS. (size) 28=0-3-8, 16=0-3-8, 19=0-3-8
Max Uplift 16=-249(LC 3)
Max Grav 28=719(LC 10), 16=101(LC 4), 19=1357(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1630/0, 3-4=-2766/0, 4-5=-2766/0, 5-6=-2766/0, 6-8=-2581/0, 8-9=-1826/0, 9-10=-1826/0, 10-11=-492/0, 11-12=0/1325, 12-13=0/1324, 13-14=-15/569
BOT CHORD 27-28=0/1085, 25-27=0/2240, 24-25=0/2768, 23-24=0/2786, 22-23=0/2322, 20-22=0/1251, 19-20=-387/0, 18-19=-569/15, 17-18=-569/15, 16-17=-569/15
WEBS 2-28=-1267/0, 2-27=0/710, 3-27=-792/0, 3-25=0/792, 11-19=-1283/0, 11-20=0/1046, 10-20=-997/0, 10-22=0/742, 8-22=-640/0, 8-23=0/344, 6-23=-276/0, 6-24=-180/296, 14-16=-14/710, 13-19=-1050/0, 13-18=0/255

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 100 lb uplift at joint(s) except (jt=lb) 16=249.
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.

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Job	Truss	Truss Type	Qty	Ply	Lot 10 Ballard Road
J0924-5307	F03	Floor	4	1	I64359477
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 20 08:57:27 2024 Page 1
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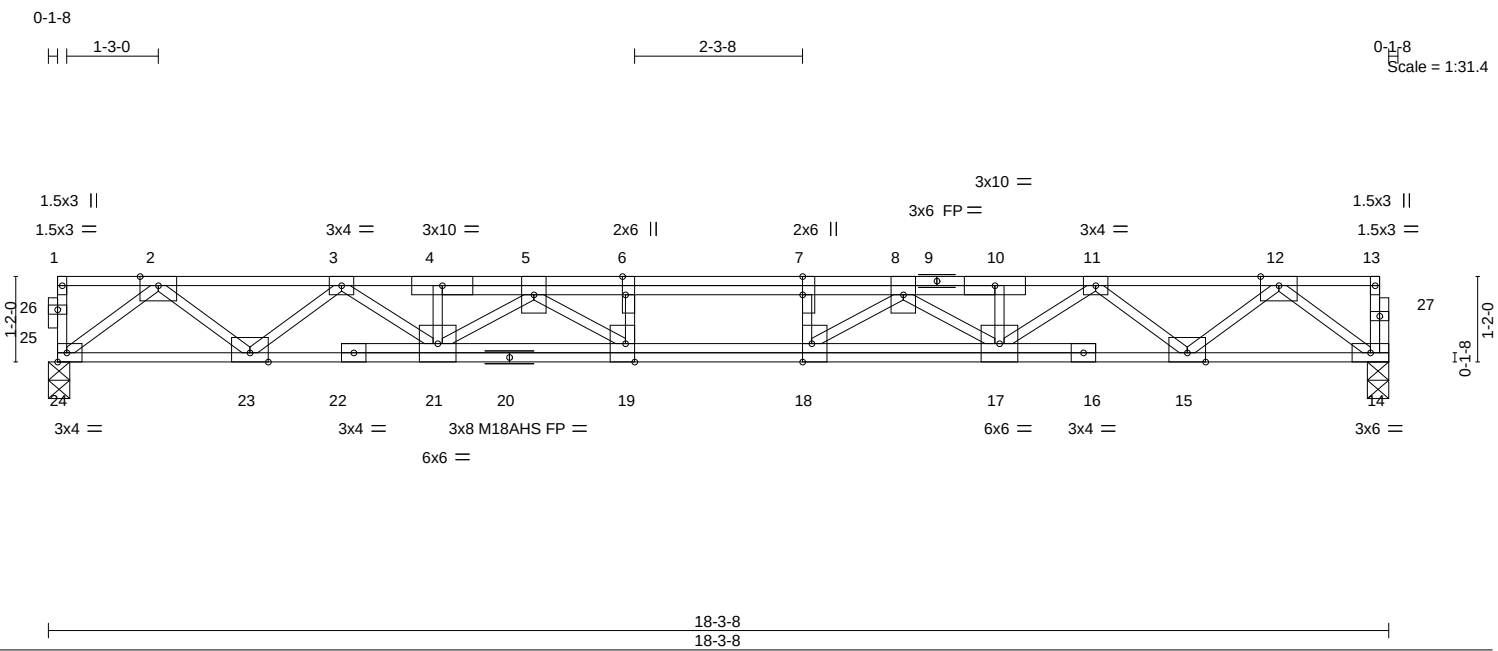

Plate Offsets (X,Y)-- [6:0-3-0,Edge], [7:0-3-0,0-0-0], [18:0-3-0,Edge], [19:0-3-0,Edge]

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	0.28	Vert(LL)	-0.23	18-19	>957	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.65	Vert(CT)	-0.31	18-19	>695	360	M18AHS	186/179
BCLL	0.0	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.06	14	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 116 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) 24=0-3-8, 14=0-3-8
Max Grav 24=989(LC 1), 14=983(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2035/0, 3-4=-3611/0, 4-5=-3617/0, 5-6=-4741/0, 6-7=-4741/0, 7-8=-4741/0, 8-10=-3647/0, 10-11=-3643/0, 11-12=-2076/0
BOT CHORD 23-24=0/1178, 21-23=0/2922, 19-21=0/4361, 18-19=0/4741, 17-18=0/4412, 15-17=0/2955, 14-15=0/1228
WEBS 2-24=-1504/0, 2-23=0/1114, 3-23=-1155/0, 3-21=0/860, 5-21=-915/0, 5-19=0/798, 6-19=-335/0, 12-14=-1538/0, 12-15=0/1104, 11-15=-1144/0, 11-17=0/858, 8-17=-939/0, 8-18=-37/759, 7-18=-312/0

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 4x6 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.

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Job	Truss	Truss Type	Qty	Ply	Lot 10 Ballard Road
J0924-5307	F04	Floor	3	1	I64359478
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 20 08:57:27 2024 Page 1
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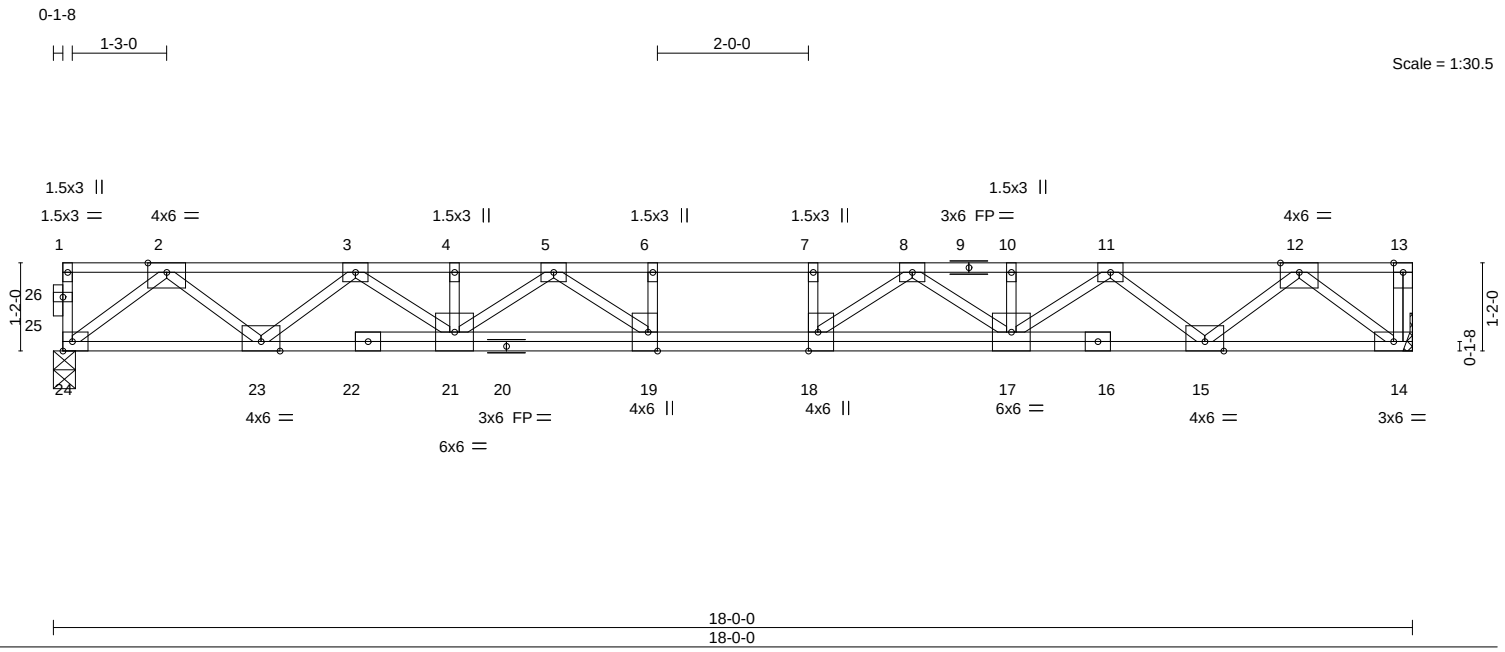

Plate Offsets (X,Y)-- [18:0-3-0,Edge], [19:0-3-0,Edge]

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	0.46	Vert(LL)	-0.25	18-19	>839	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.63	Vert(CT)	-0.35	18-19	>610	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.05	14	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 104 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 5-11-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 24=0-3-8, 14=Mechanical
Max Grav 24=973(LC 1), 14=973(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1996/0, 3-4=-3526/0, 4-5=-3526/0, 5-6=-4319/0, 6-7=-4319/0, 7-8=-4319/0, 8-10=-3552/0, 10-11=-3552/0, 11-12=-2037/0
BOT CHORD 23-24=0/1159, 21-23=0/2860, 19-21=0/4013, 18-19=0/4319, 17-18=0/4027, 15-17=0/2894, 14-15=0/1208
WEBS 2-24=-1480/0, 2-23=0/1090, 3-23=-1124/0, 3-21=0/832, 5-21=-607/0, 5-19=0/662, 12-14=-1515/0, 12-15=0/1080, 11-15=-1115/0, 11-17=0/822, 8-17=-594/0, 8-18=-5/650

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) 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.

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Job	Truss	Truss Type	Qty	Ply	Lot 10 Ballard Road
J0924-5307	F05	FLOOR	1	1	I64359479
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 20 08:57:28 2024 Page 1
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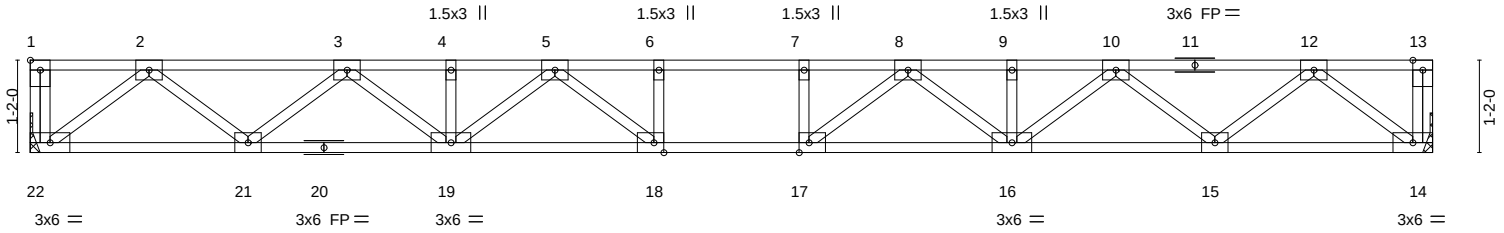
1-3-0 1-8-8

Scale = 1:29.1



2-9-0 14-11-8 17-8-8
2-9-0 12-2-8 2-9-0

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [17:0-1-8,Edge], [18:0-1-8,Edge]

LOADING (psf)		SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.36	Vert(LL)	-0.22	17-18	>958	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.62	Vert(CT)	-0.30	17-18	>698	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.41	Horz(CT)	0.05	14	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 91 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) 22=Mechanical, 14=Mechanical
Max Grav 22=768(LC 1), 14=768(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1614/0, 3-4=-2683/0, 4-5=-2683/0, 5-6=-3186/0, 6-7=-3186/0, 7-8=-3186/0, 8-9=-2683/0, 9-10=-2683/0, 10-12=-1614/0
BOT CHORD 21-22=0/959, 19-21=0/2242, 18-19=0/3000, 17-18=0/3186, 16-17=0/3000, 15-16=0/2242, 14-15=0/959
WEBS 12-14=-1203/0, 2-22=-1203/0, 12-15=0/853, 2-21=0/853, 10-15=-818/0, 3-21=-818/0, 10-16=0/563, 3-19=0/563, 8-16=-405/0, 5-19=-405/0, 8-17=-68/488, 5-18=-68/488

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) 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.

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Job	Truss	Truss Type	Qty	Ply	Lot 10 Ballard Road
J0924-5307	F06	Floor	1	1	I64359480
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 20 08:57:28 2024 Page 1
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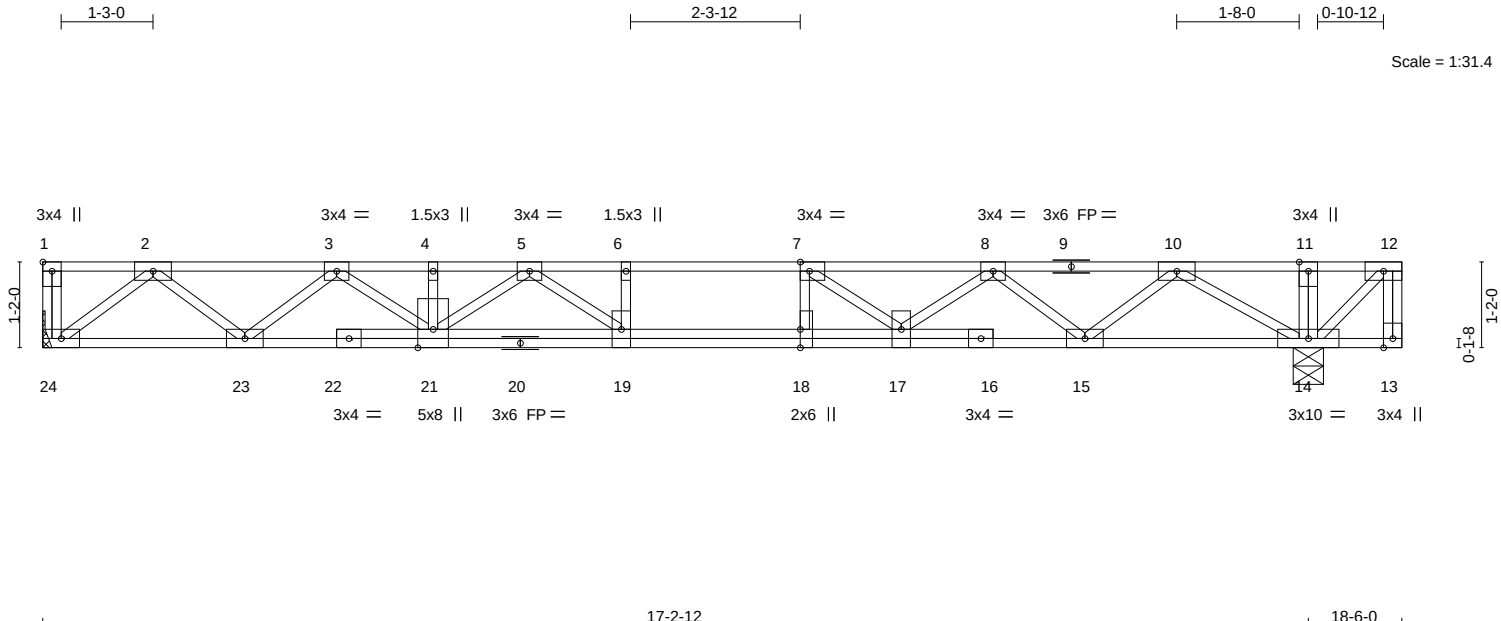

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [7:0-1-8,Edge], [18:0-3-0,Edge]

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	0.59	Vert(LL)	-0.23	19	>894	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.61	Vert(CT)	-0.32	19	>650	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.05	14	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 107 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) 24=Mechanical, 14=0-4-15
Max Grav 24=938(LC 3), 14=1072(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1950/0, 3-4=-3382/0, 4-5=-3382/0, 5-6=-4002/0, 6-7=-4002/0, 7-8=-3429/0, 8-10=-2179/0
BOT CHORD 23-24=0/1162, 21-23=0/2767, 19-21=0/3788, 18-19=0/4002, 17-18=0/4002, 15-17=0/2941, 14-15=0/1437
WEBS 10-14=-1652/0, 10-15=0/972, 8-15=-997/0, 8-17=0/633, 7-17=-921/0, 7-18=-108/349, 2-24=-1458/0, 2-23=0/1025, 3-23=-1064/0, 3-21=0/767, 5-21=-529/0, 5-19=-45/573

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x6 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) 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.

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 10 Ballard Road
J0924-5307	F07	Floor	5	1	I64359481
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 20 08:57:29 2024 Page 1
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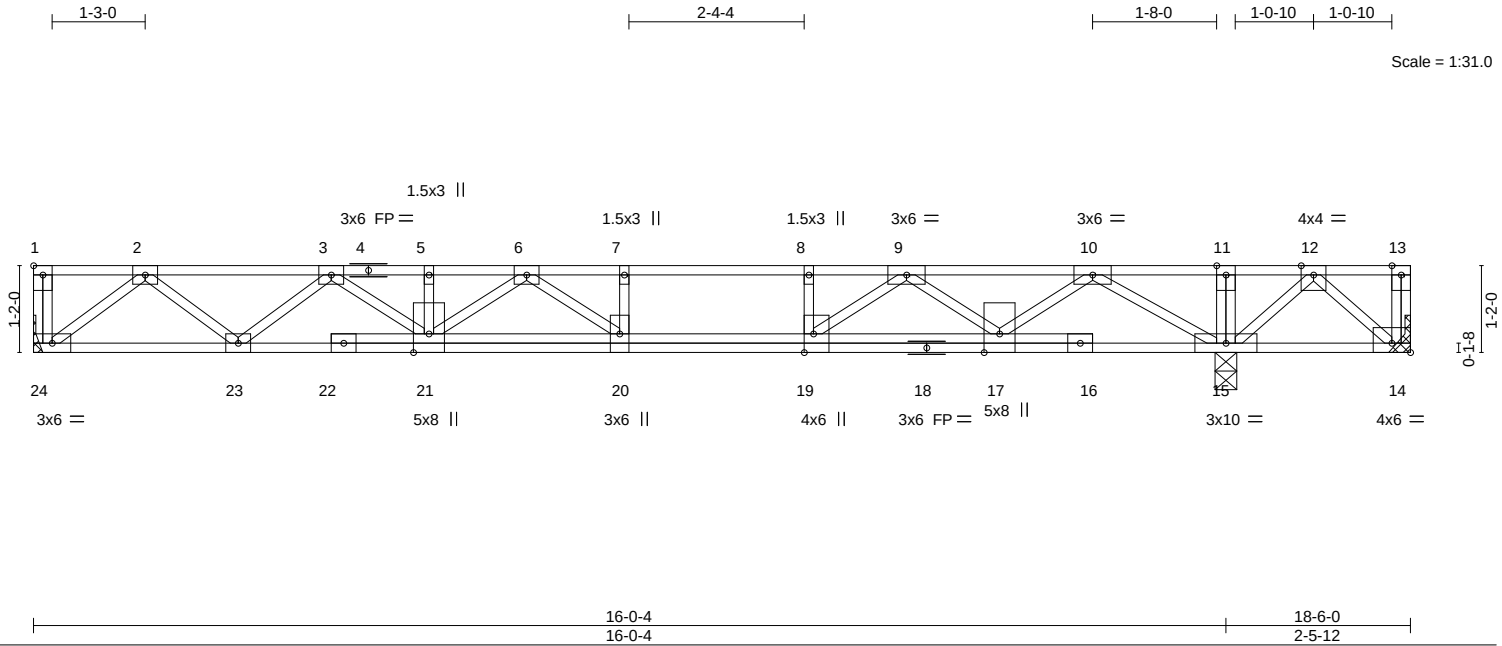


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [14:Edge,0-1-8], [19:0-3-0,Edge]

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)	-0.19	20-21	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.64	Vert(CT)	-0.26	20-21	>739	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.02	15	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-S							Weight: 109 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, Except: 6-0-0 oc bracing: 15-17,14-15.

REACTIONS. (size) 24=Mechanical, 14=Mechanical, 15=0-3-8
Max Uplift 14=-726(LC 3)
Max Grav 24=760(LC 3), 15=1882(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1499/0, 3-5=-2496/0, 5-6=-2496/0, 6-7=-2350/0, 7-8=-2350/0, 8-9=-2350/0, 9-10=-607/0, 10-11=0/1683, 11-12=0/1681
BOT CHORD 23-24=0/926, 21-23=0/2113, 20-21=0/2558, 19-20=0/2350, 17-19=0/1536, 14-15=-833/0
WEBS 2-24=-1162/0, 2-23=0/746, 3-23=-798/0, 3-21=0/479, 6-20=-364/149, 10-15=-1716/0, 10-17=0/1027, 9-17=-1181/0, 9-19=0/1074, 8-19=-305/0, 12-14=0/1113, 12-15=-1207/0

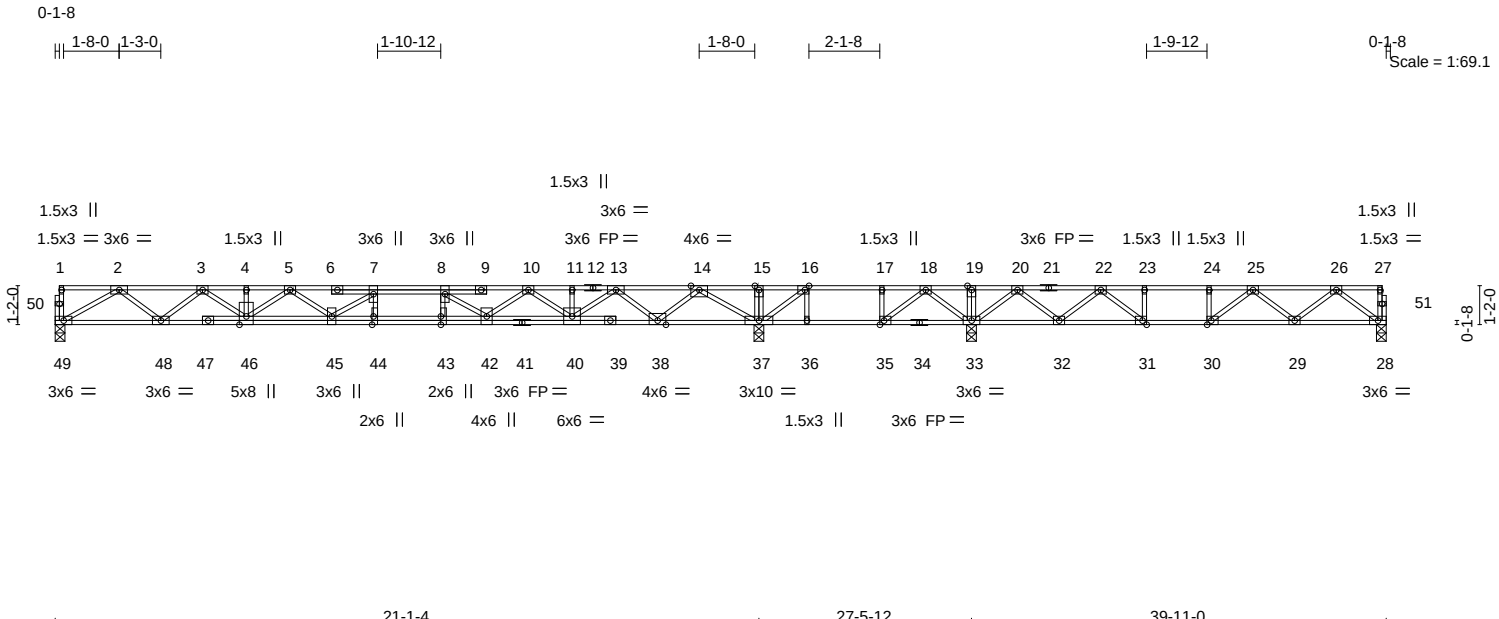
NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x4 MT20 unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=726.
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.

March 21,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 10 Ballard Road
J0924-5307	F08	FLOOR	1	1	I64359482
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 20 08:57:30 2024 Page 1
ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



21-1-4 | 27-5-12 | 39-11-0
21-1-4 | 6-4-8 | 12-5-4

Plate Offsets (X,Y)-- [16:0-1-8,Edge], [30:0-1-8,Edge], [31:0-1-8,Edge], [35:0-1-8,Edge], [43:0-3-0,0-0-0], [44:0-3-0,Edge]

LOADING (psf)		SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.82	Vert(LL)	-0.28	44	>892	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.58	Vert(CT)	-0.38	44	>654	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.57	Horz(CT)	0.05	37	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-S							Weight: 221 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 0-3-8.
(lb) - Max Grav All reactions 250 lb or less at joint(s) except 49=827(LC 3), 37=1380(LC 3), 33=936(LC 4), 28=459(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1998/0, 3-4=-3261/0, 4-5=-3261/0, 5-7=-3958/0, 7-8=-4114/0, 8-10=-3526/0, 10-11=-2397/0, 11-13=-2397/0, 13-14=-711/0, 14-15=0/2024, 15-16=0/2024, 16-17=0/1661, 17-18=0/1661, 18-19=0/1585, 19-20=0/1585, 20-22=-317/732, 22-23=-1117/207, 23-24=-1117/207, 24-25=-1117/207, 25-26=-861/0
BOT CHORD 48-49=0/1312, 46-48=0/2705, 45-46=0/3676, 44-45=0/4114, 43-44=0/4114, 42-43=0/4114, 40-42=0/3011, 38-40=0/1615, 37-38=-454/0, 36-37=-1661/0, 35-36=-1661/0, 33-35=-1480/0, 32-33=-950/0, 31-32=-493/780, 30-31=-207/1117, 29-30=-26/1112, 28-29=0/561
WEBS 2-49=-1515/0, 2-48=0/892, 3-48=-921/0, 3-46=0/693, 14-37=-1886/0, 14-38=0/1191, 13-38=-1192/0, 13-40=0/989, 10-40=-781/0, 10-42=0/662, 8-42=-890/0, 5-46=-518/0, 5-45=0/418, 7-45=-471/184, 7-44=-251/97, 8-43=-87/260, 18-33=-401/81, 16-37=-742/0, 20-33=-1023/0, 20-32=0/675, 22-32=-711/0, 22-31=0/688, 23-31=-299/0, 26-28=-702/0, 26-29=-2/391, 25-29=-327/77, 25-30=-282/5

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) 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.
5) CAUTION, Do not erect truss backwards.

March 21,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 10 Ballard Road
J0924-5307	F09	Floor	6	1	I64359483
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 20 08:57:31 2024 Page 1
ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

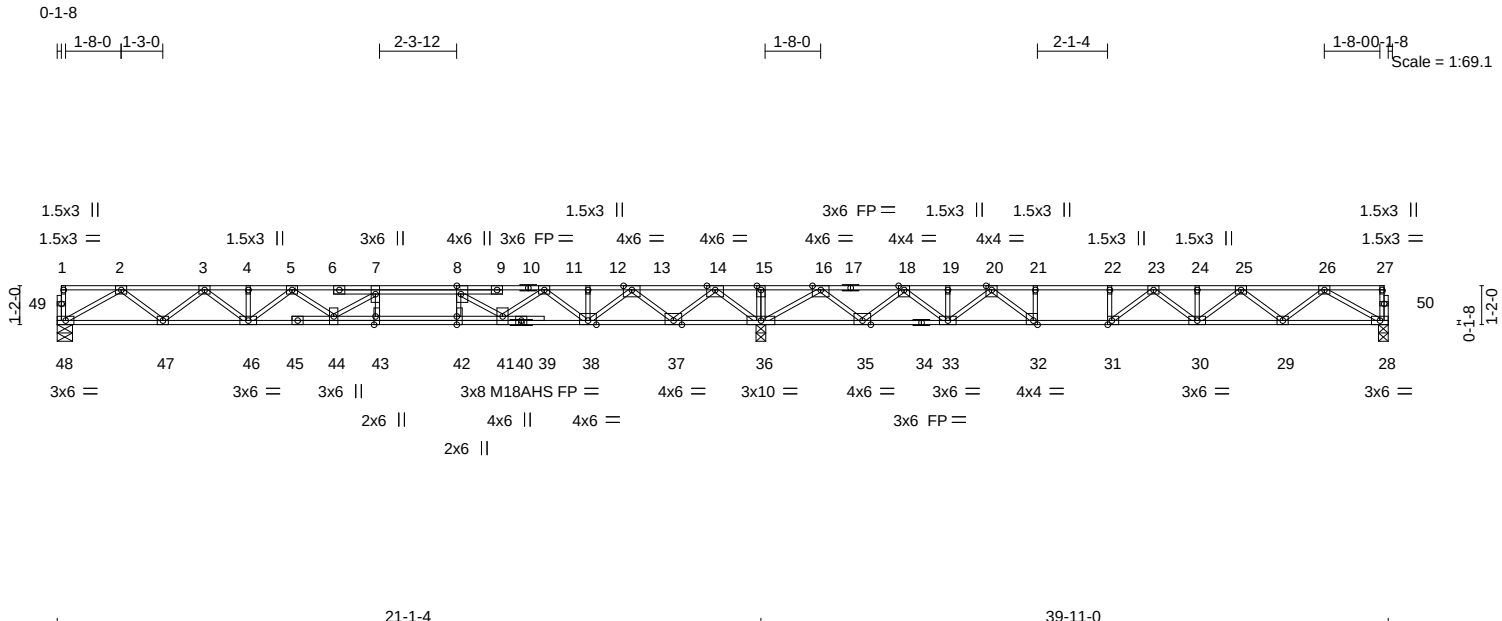


Plate Offsets (X,Y)-- [8:0-3-0,Edge], [31:0-1-8,Edge], [32:0-1-8,Edge], [42:0-3-0,0-0-0], [43:0-3-0,Edge]

LOADING (psf)		SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.87	Vert(LL)	-0.27	43	>939	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.58	Vert(CT)	-0.35	43	>721	360	M18AHS	186/179
BCLL	0.0	Rep Stress Incr	YES	WB	0.64	Horz(CT)	0.04	28	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 216 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP 2400F 2.0E(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) 48=0-5-8, 36=0-3-8, 28=0-3-8
Max Grav 48=803(LC 3), 36=2108(LC 1), 28=701(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1942/0, 3-4=-2996/0, 4-5=-2996/0, 5-7=-3653/0, 7-8=-3821/0, 8-11=-3024/121, 11-12=-1714/600, 12-13=-1714/600, 13-14=0/1300, 14-15=0/3395, 15-16=0/3396, 16-18=-242/1391, 18-19=-1628/785, 19-20=-1628/785, 20-21=-2607/162, 21-22=-2607/162, 22-23=-2607/162, 23-24=-2476/0, 24-25=-2476/0, 25-26=-1638/0
BOT CHORD 47-48=0/1280, 46-47=0/2562, 44-46=0/3385, 43-44=0/3821, 42-43=0/3821, 41-42=0/3821, 38-41=-357/2391, 37-38=-912/937, 36-37=-2035/0, 35-36=-1831/0, 33-35=-1076/1023, 32-33=-522/2125, 31-32=-162/2607, 30-31=0/2656, 29-30=0/2156, 28-29=0/1101
WEBS 14-36=-1701/0, 14-37=0/1353, 13-37=-1326/0, 13-38=0/1085, 11-38=-930/0, 11-41=0/852, 8-41=-1214/0, 8-42=0/402, 2-48=-1477/0, 2-47=0/861, 3-47=-808/0, 3-46=0/553, 5-46=-497/0, 5-44=-58/335, 7-44=-277/361, 7-43=-321/27, 16-36=-1836/0, 16-35=0/1178, 18-35=-1130/0, 18-33=0/892, 26-28=-1270/0, 26-29=0/699, 25-29=-674/0, 25-30=-34/409, 23-31=-506/31, 20-33=-769/0, 20-32=0/1006, 21-32=-419/0

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 3x4 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) CAUTION, Do not erect truss backwards.

March 21,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 10 Ballard Road
J0924-5307	F11	Floor	2	1	I64359484
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 20 08:57:31 2024 Page 1
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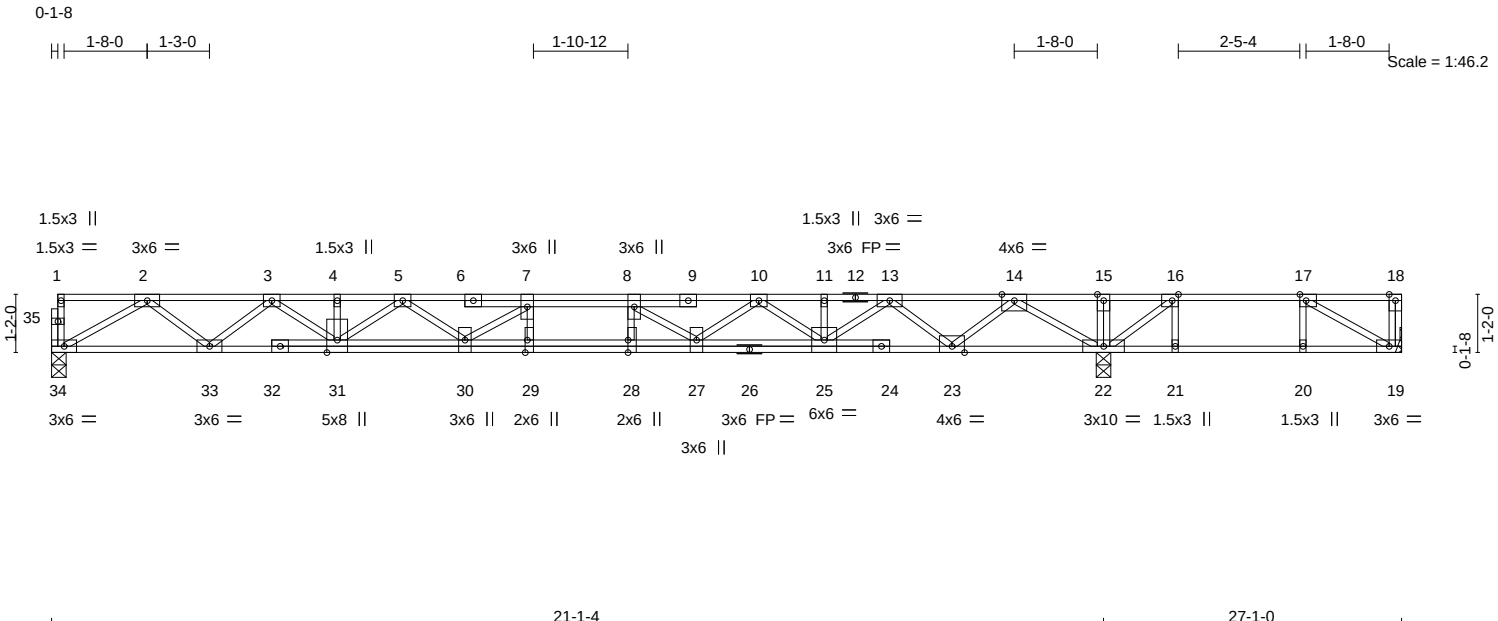

Plate Offsets (X,Y)-- [16:0-1-8,Edge], [17:0-1-8,Edge], [28:0-3-0,0-0-0], [29:0-3-0,Edge]

LOADING (psf)		SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.77	Vert(LL)	-0.29	29	>856	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.43	Vert(CT)	-0.40	29	>623	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.05	22	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 158 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP 2400F 2.0E(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, Except: 6-0-0 oc bracing: 21-22,20-21,19-20.

REACTIONS. (size) 34=0-3-8, 22=0-3-8, 19=Mechanical
Max Uplift 19=-93(LC 3)
Max Grav 34=876(LC 10), 22=1382(LC 9), 19=222(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2140/0, 3-4=-3531/0, 4-5=-3531/0, 5-7=-4367/0, 7-8=-4658/0, 8-10=-4169/0, 10-11=-3135/0, 11-13=-3135/0, 13-14=-1553/0, 14-15=0/976, 15-16=0/976, 16-17=-224/391
BOT CHORD 33-34=0/1396, 31-33=0/2908, 30-31=0/4001, 29-30=0/4658, 28-29=0/4658, 27-28=0/4658, 25-27=0/3697, 23-25=0/2408, 22-23=0/709, 21-22=-391/224, 20-21=-391/224, 19-20=-391/224
WEBS 2-34=-1611/0, 2-33=0/968, 3-33=-1000/0, 3-31=0/778, 5-31=-586/0, 5-30=0/508, 7-30=-623/58, 14-22=-1796/0, 14-23=0/1111, 13-23=-1124/0, 13-25=0/916, 10-25=-711/0, 10-27=0/607, 8-27=-799/0, 16-22=-932/0, 17-19=-257/448

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 93 lb uplift at joint 19.
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.

March 21,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 10 Ballard Road
J0924-5307	F12	Floor	1	1	I64359485
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 20 08:57:32 2024 Page 1
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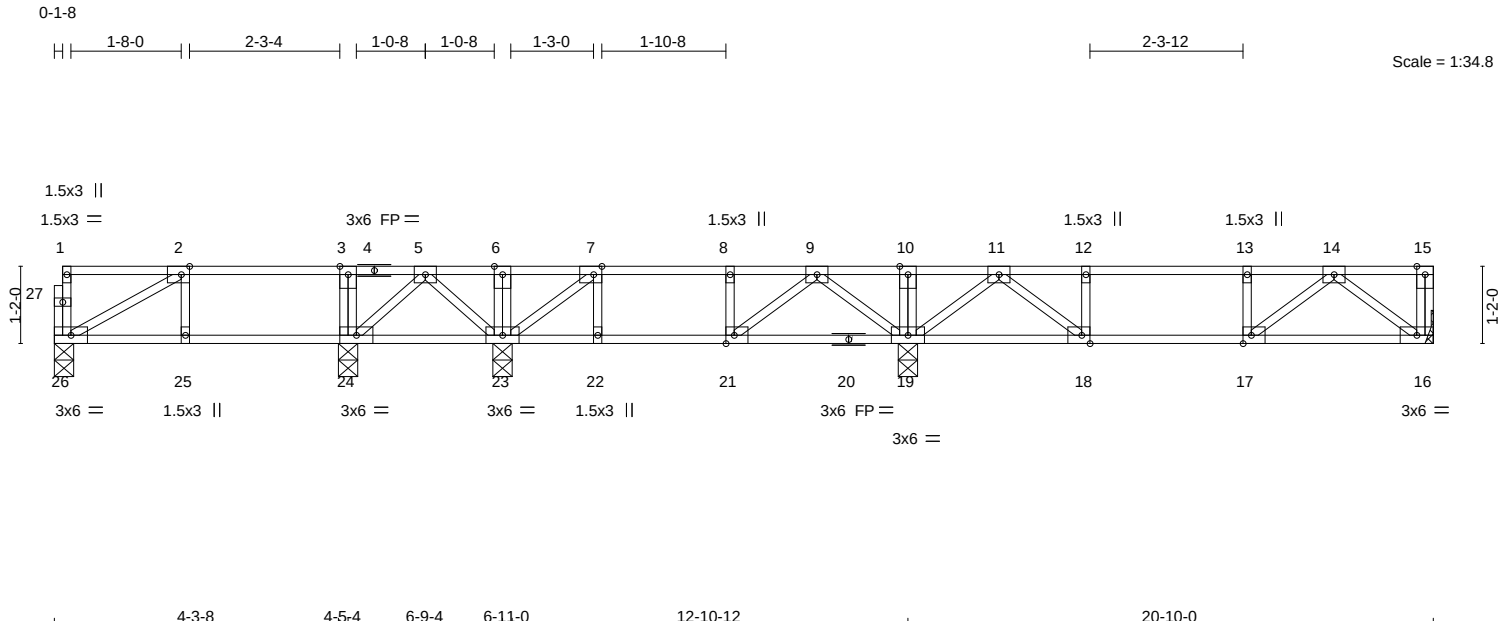

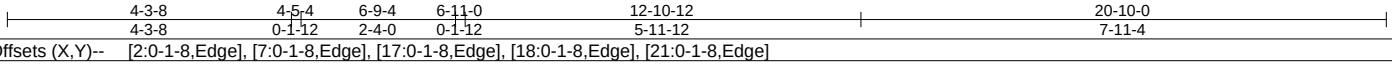

Plate Offsets (X,Y)-- [2:0-1-8,Edge], [7:0-1-8,Edge], [17:0-1-8,Edge], [18:0-1-8,Edge], [21:0-1-8,Edge]

LOADING (psf)		SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.25	Vert(LL)	-0.03	16-17	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.19	Vert(CT)	-0.04	16-17	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.19	Horz(CT)	0.01	16	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 105 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, Except: 6-0-0 oc bracing: 19-21,18-19.

REACTIONS. All bearings 0-3-8 except (jt=length) 16=Mechanical.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 24 except 26=258(LC 6), 19=686(LC 16), 16=327(LC 7), 23=477(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-348/0, 3-5=-348/0, 7-8=-417/0, 8-9=-417/0, 9-10=0/288, 10-11=0/288, 11-12=-552/0, 12-13=-552/0, 13-14=-552/0
BOT CHORD 25-26=0/348, 24-25=0/348, 23-24=0/277, 22-23=0/417, 21-22=0/417, 19-21=-29/259, 18-19=-22/276, 17-18=0/552, 16-17=0/355
WEBS 2-26=-395/0, 7-23=-331/0, 9-19=-400/0, 5-23=-295/0, 11-19=-487/0, 11-18=0/392, 14-16=-445/0, 14-17=0/252

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) 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.

March 21,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 10 Ballard Road
J0924-5307	F13	Floor	1	1	I64359486
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 20 08:57:33 2024 Page 1
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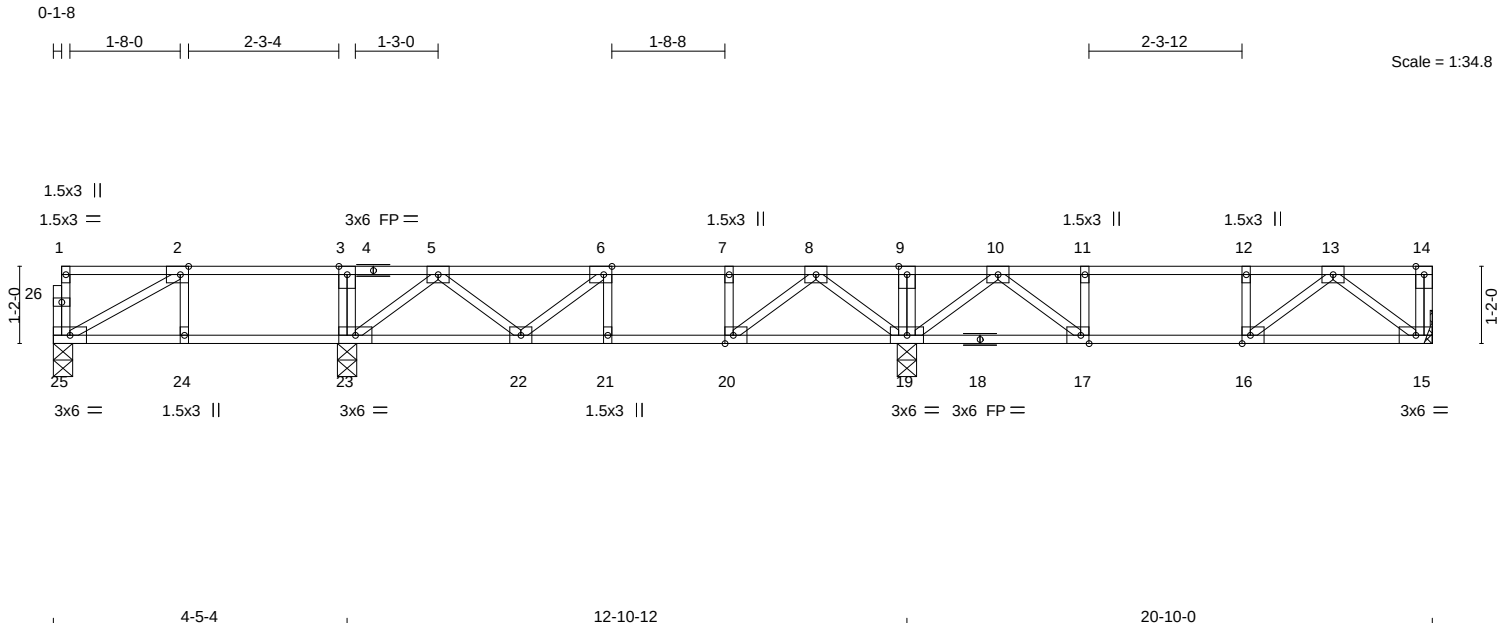

Plate Offsets (X,Y)-- [2:0-1-8,Edge], [6:0-1-8,Edge], [16:0-1-8,Edge], [17:0-1-8,Edge], [20:0-1-8,Edge]

LOADING (psf)		SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.29	Vert(LL)	-0.05	21-22	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.39	Vert(CT)	-0.06	21-22	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.23	Horz(CT)	0.01	15	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 103 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. All bearings 0-3-8 except (jt=length) 15=Mechanical.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 25 except 23=511(LC 16), 15=347(LC 13), 19=746(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-301/0, 3-5=-301/0, 5-6=-748/0, 6-7=-852/0, 7-8=-852/0, 10-11=-628/0, 11-12=-628/0, 12-13=-628/0
BOT CHORD 24-25=0/301, 23-24=0/301, 22-23=0/607, 21-22=0/852, 20-21=0/852, 19-20=0/523, 17-19=0/394, 16-17=0/628, 15-16=0/382
WEBS 2-25=-341/0, 5-23=-512/0, 8-19=-562/0, 8-20=0/492, 13-15=-479/0, 13-16=0/314, 10-19=-469/0, 10-17=0/360

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) 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.

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Job	Truss	Truss Type	Qty	Ply	Lot 10 Ballard Road
J0924-5307	F14-GR	Floor Girder	1	1	I64359487
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 20 08:57:34 2024 Page 1
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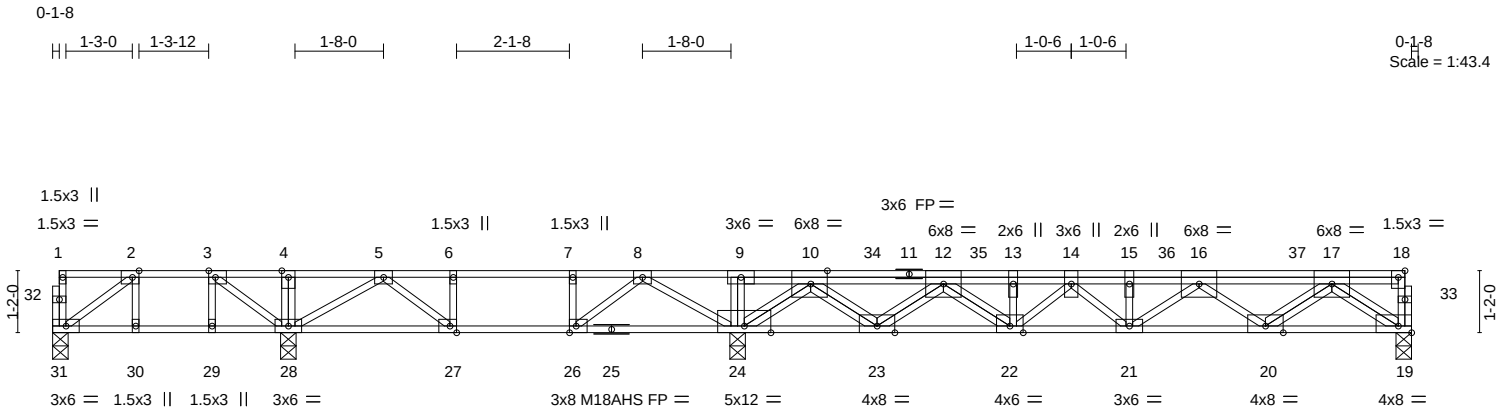

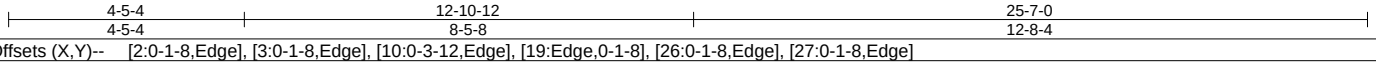

Plate Offsets (X,Y)-- [2:0-1-8,Edge], [3:0-1-8,Edge], [10:0-3-12,Edge], [19:Edge,0-1-8], [26:0-1-8,Edge], [27:0-1-8,Edge]

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	0.79	Vert(LL)	0.18	21-22	>827	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.70	Vert(CT)	0.22	21-22	>689	360	M18AHS	186/179
BCLL	0.0	Rep Stress Incr	NO	WB	0.84	Horz(CT)	-0.05	19	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 162 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, Except:
10-0-0 oc bracing: 26-27
5-1-3 oc bracing: 21-22
5-7-10 oc bracing: 20-21.

REACTIONS. All bearings 0-3-8.
(lb) - Max Uplift All uplift 100 lb or less at joint(s) 31 except 19=-1575(LC 21), 24=-1397(LC 23)
Max Grav All reactions 250 lb or less at joint(s) except 31=321(LC 23), 19=335(LC 13), 28=775(LC 21), 24=866(LC 11)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-420/75, 3-4=-390/304, 4-5=-389/306, 5-6=-1788/0, 6-7=-1788/0, 7-8=-1788/0, 8-9=-1582/632, 9-10=-1615/604, 10-12=-269/2756, 12-13=-652/5312, 13-14=-653/5339, 14-15=-1005/5339, 15-16=-1005/5339, 16-17=-634/3630
BOT CHORD 30-31=-75/420, 29-30=-75/420, 28-29=-75/420, 27-28=-19/1187, 26-27=0/1788, 24-26=-124/1847, 23-24=-1006/50, 22-23=-4528/454, 21-22=-5632/780, 20-21=-5035/897, 19-20=-2388/358
WEBS 9-24=-326/0, 2-31=-516/94, 3-28=-454/147, 5-28=-990/0, 5-27=0/772, 6-27=-377/0, 8-24=-796/183, 8-26=-277/444, 17-19=-435/2940, 17-20=-1607/357, 16-20=-328/1755, 16-21=-380/135, 15-21=-261/0, 10-24=-434/3211, 10-23=-2223/320, 12-23=-282/2252, 12-22=-998/292, 13-22=-24/397, 14-22=-209/384, 14-21=0/437

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 3x4 MT20 unless otherwise indicated.
4) Plates checked for a plus or minus 1 degree rotation about its center.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 31 except (jt=lb) 19=1575, 24=1397.
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.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 826 lb up at 15-5-4, 826 lb up at 17-5-4, 826 lb up at 19-5-4, 336 lb down at 20-11-12, and 826 lb up at 21-5-4, and 826 lb up at 23-5-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
9) 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

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Continued on page 2

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LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
   Vert: 19-31=-10, 1-18=-100
   Concentrated Loads (lb)
   Vert: 16=192(B) 14=192(B) 34=192(B) 35=192(B) 36=-272(F) 37=192(B)

Job	Truss	Truss Type	Qty	Ply	Lot 10 Ballard Road
J0924-5307	F15-GR	FLOOR GIRDER	1	1	I64359488

Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 20 08:57:34 2024 Page 1

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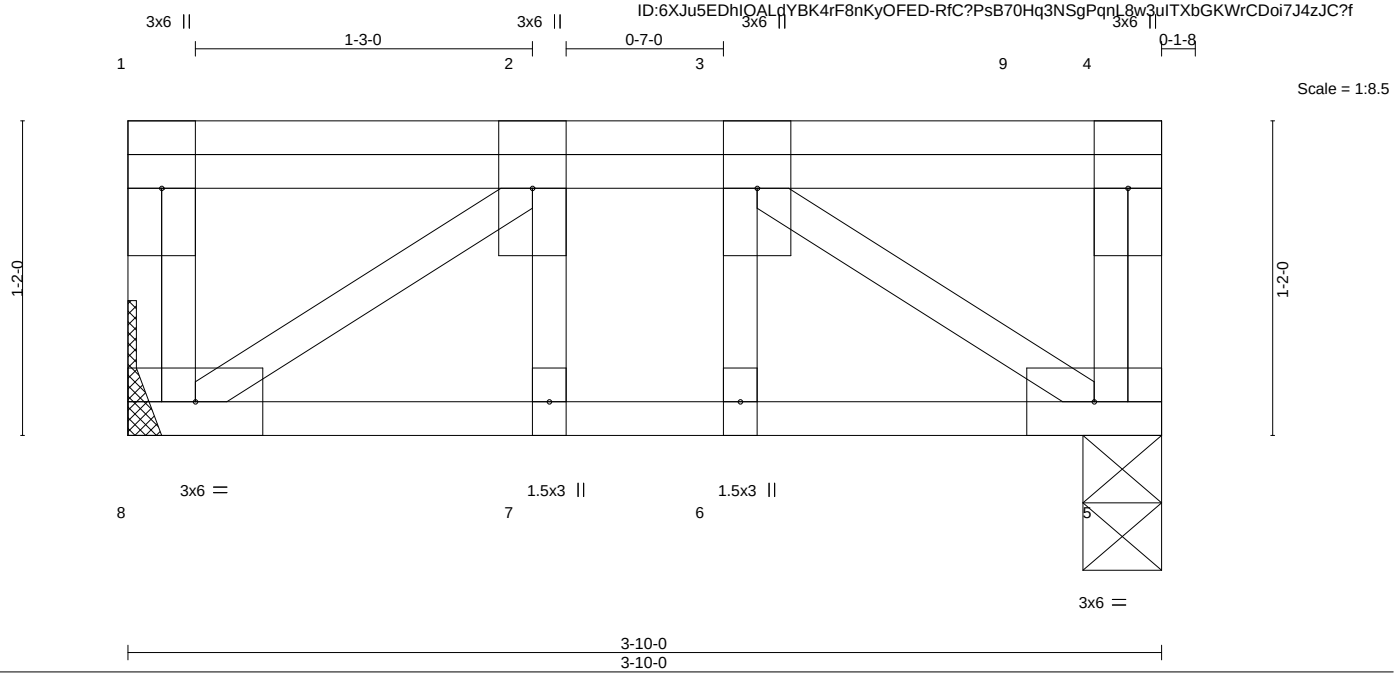

LOADING (psf)		SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.12	Vert(LL)	-0.00	7	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.10	Vert(CT)	-0.00	7	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.11	Horz(CT)	0.00	5	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 29 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 3-10-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 8=Mechanical, 5=0-3-8
Max Grav 8=352(LC 1), 5=529(LC 1)

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

TOP CHORD	4-5=-255/0, 2-3=-400/0
BOT CHORD	7-8=0/400, 6-7=0/400, 5-6=0/400
WEBS	3-5=-484/0, 2-8=-484/0

NOTES-

1) Unbalanced floor live loads have been considered for this design.
2) Plates checked for a plus or minus 1 degree rotation about its center.
3) Refer to girder(s) for truss to truss connections.
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.
5) CAUTION, Do not erect truss backwards.
6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 314 lb down at 1-4-12, and 318 lb down at 3-4-12 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: 5-8=-8, 1-4=-80
   Concentrated Loads (lb)
   Vert: 2=-283(F) 9=-283(F)

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Job	Truss	Truss Type	Qty	Ply	Lot 10 Ballard Road
J0924-5307	F16	Floor	4	1	I64359489
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 20 08:57:35 2024 Page 1
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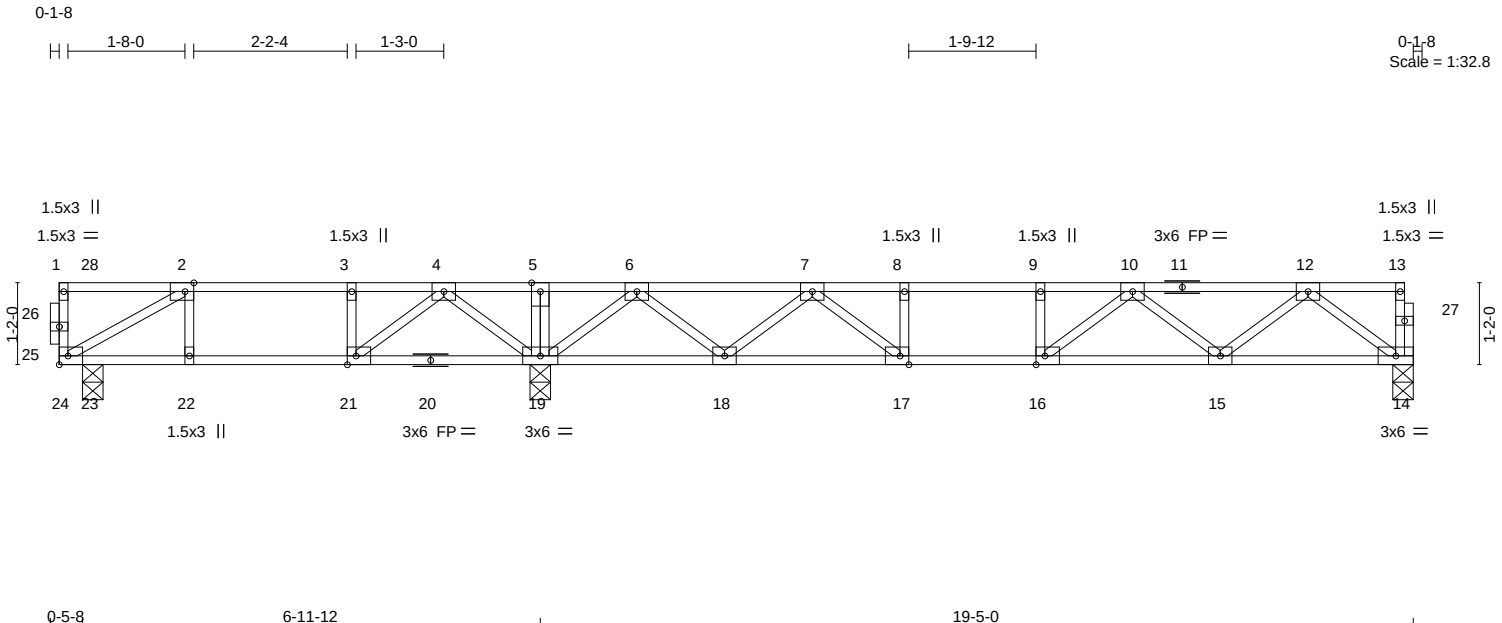

Plate Offsets (X,Y)-- [2:0-1-8,Edge], [16:0-1-8,Edge], [17:0-1-8,Edge], [21:0-1-8,Edge]

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	0.52	Vert(LL)	-0.09	15-16	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.92	Vert(CT)	-0.12	15-16	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.35	Horz(CT)	0.02	14	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 96 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. (size) 19=0-3-8, 14=0-3-8, 23=0-3-8
Max Grav 19=1230(LC 1), 14=619(LC 5), 23=610(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-24=-375/0, 4-5=0/910, 5-6=0/910, 6-7=-817/161, 7-8=-1658/0, 8-9=-1658/0, 9-10=-1658/0, 10-12=-1183/0
BOT CHORD 19-21=-409/0, 18-19=-363/280, 17-18=0/1334, 16-17=0/1658, 15-16=0/1558, 14-15=0/760
WEBS 4-19=-655/0, 4-21=0/504, 12-14=-951/0, 12-15=0/551, 10-15=-487/0, 10-16=-127/258, 6-19=-1137/0, 6-18=0/735, 7-18=-723/0, 7-17=0/628, 8-17=-282/0

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) Magnitude of user added load(s) on this truss have been applied uniformly across all gravity load cases with no adjustments.
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.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 14-24=-10, 1-13=-100
Concentrated Loads (lb)
Vert: 1=-300

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Job	Truss	Truss Type	Qty	Ply	Lot 10 Ballard Road
J0924-5307	FKW1	Floor Supported Gable	1	1	I64359490
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 20 08:57:35 2024 Page 1
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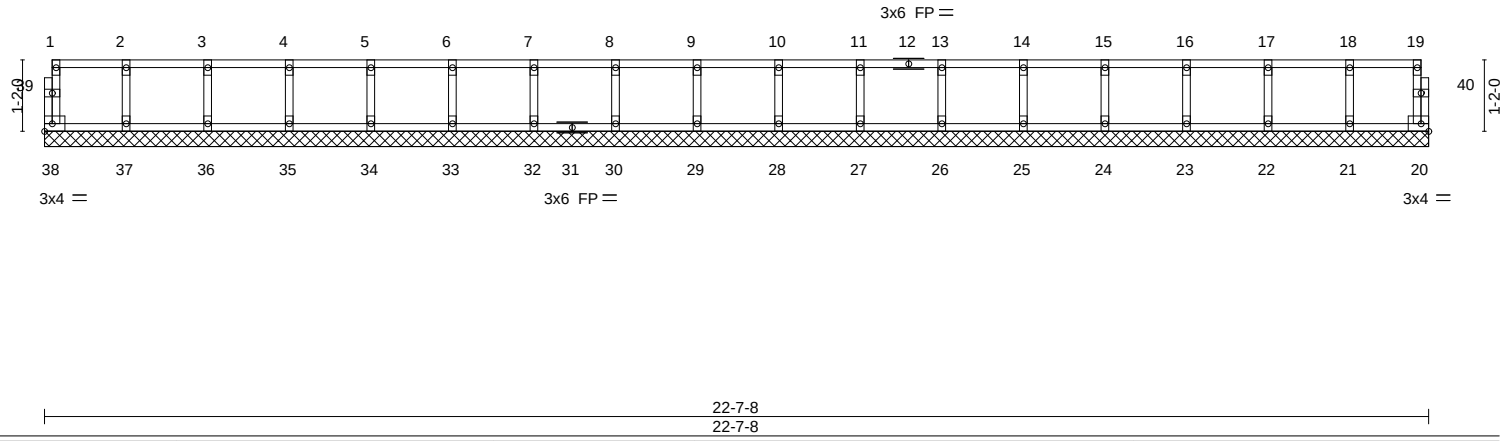

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	20	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-R							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)
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 22-7-8.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 38, 20, 37, 36, 35, 34, 33, 32, 30, 29, 28, 27, 26, 25, 24, 23, 22, 21

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.

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 10 Ballard Road
J0924-5307	FKW2	Floor Supported Gable	1	1	I64359491
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 20 08:57:36 2024 Page 1
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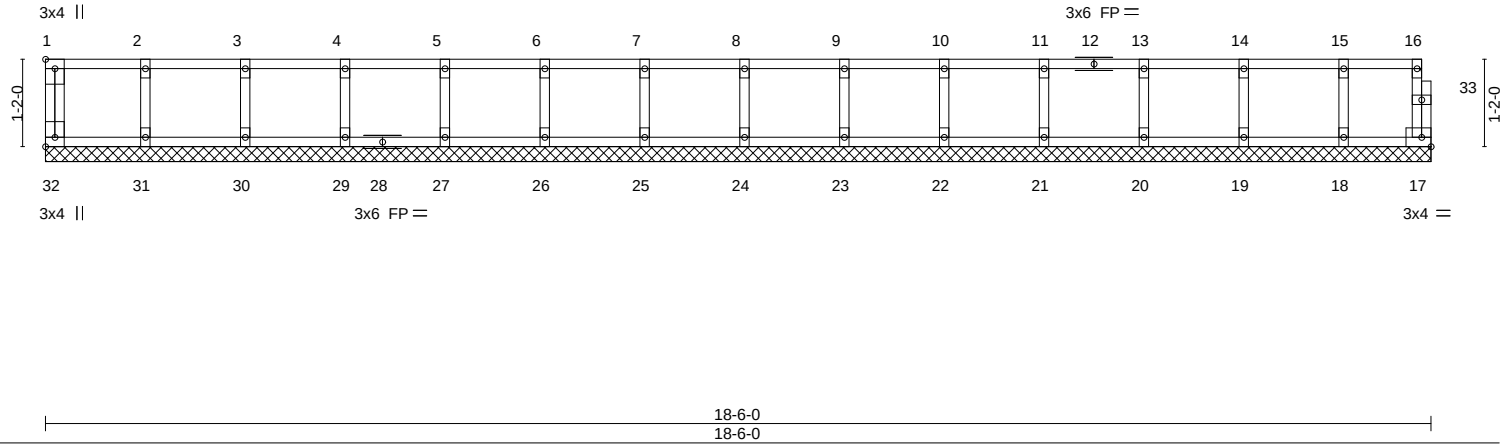

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [32:Edge,0-1-8]

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	0.06	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	17	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-R							Weight: 78 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 18-6-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 32, 17, 31, 30, 29, 27, 26, 25, 24, 23, 22, 21, 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.
7) CAUTION, Do not erect truss backwards.

March 21,2024

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Job	Truss	Truss Type	Qty	Ply	Lot 10 Ballard Road
J0924-5307	FKW3	Floor Supported Gable	1	1	I64359492
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 20 08:57:36 2024 Page 1
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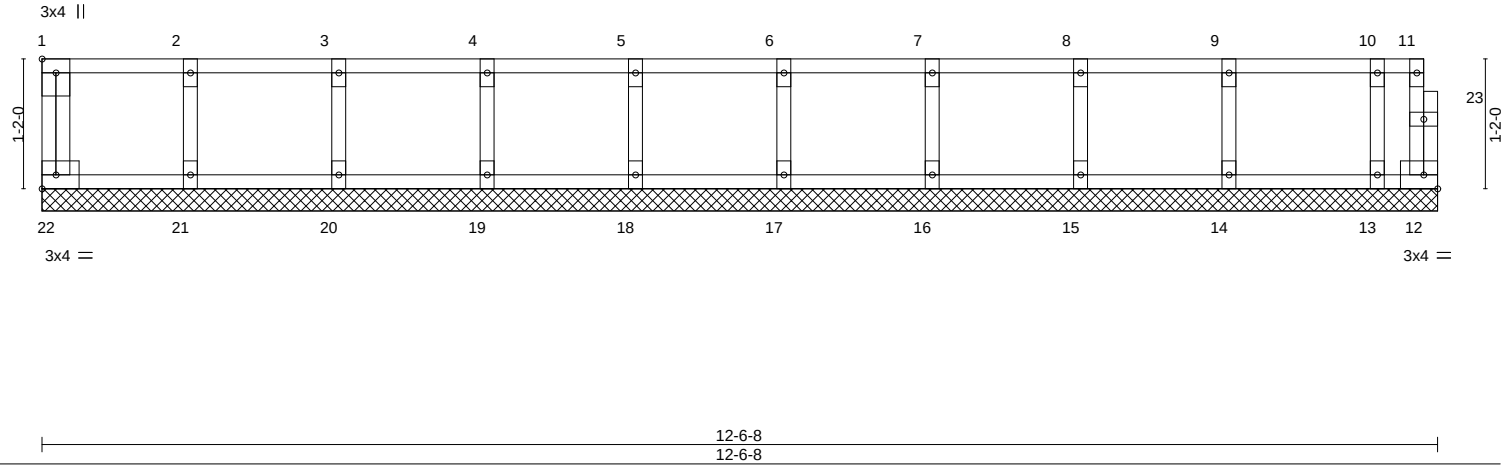

Plate Offsets (X,Y)-- [1:Edge,0-1-8]

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	0.06	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	12	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-R							Weight: 55 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 12-6-8.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 22, 12, 21, 20, 19, 18, 17, 16, 15, 14, 13

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.

March 21,2024

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 10 Ballard Road
J0924-5307	FKW4	Floor Supported Gable	1	1	I64359493
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 20 08:57:37 2024 Page 1
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0-1-8

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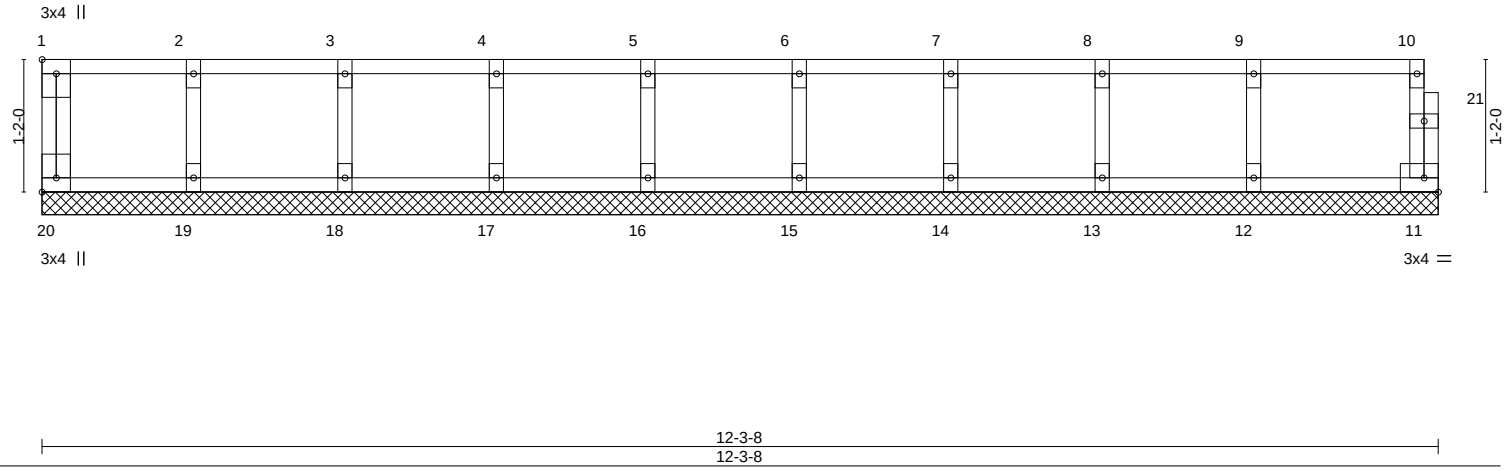


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [20:Edge,0-1-8]

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	0.10	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	11	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-R							Weight: 52 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 12-3-8.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 20, 11, 19, 18, 17, 16, 15, 14, 13, 12

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

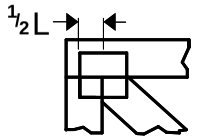
NOTES-
1) All plates are 1.5x3 MT20 unless otherwise indicated.
2) Plates checked for a plus or minus 1 degree rotation about its center.
3) Gable requires continuous bottom chord bearing.
4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
5) 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.

March 21,2024

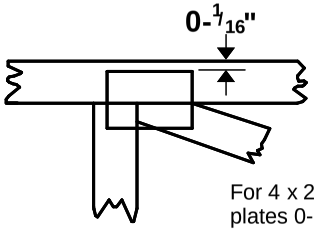
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

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.

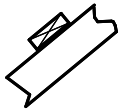
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

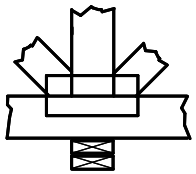
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

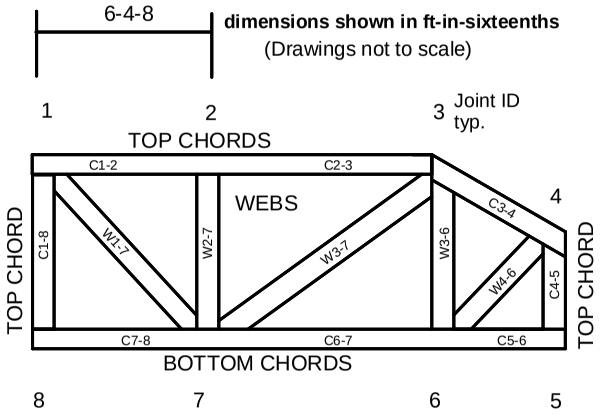


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & 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-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

Design General Notes

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

MiTek®

ENGINEERING BY TRENCO
A MiTek Affiliate

MiTek Engineering Reference Sheet: MII-7473 rev. 1/2/2023

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.