ENGINEERING BY TRENCO
A MiTek Affiliate

RE: J0623-3331
215 Mamie Upchurch Rd.

Trenco
818 Soundside Rd
Edenton, NC 27932

Site Information:
Customer: Project Name: J0623-3331
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 15 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date
1	I59168544	ET1	6/26/2023
2	I59168545	ET2	6/26/2023
3	I59168546	ET3	6/26/2023
4	I59168547	ET4	6/26/2023
5	I59168548	F01	6/26/2023
6	I59168549	F02	6/26/2023
7	I59168550	F03	6/26/2023
8	I59168551	F04	6/26/2023
9	I59168552	F05	6/26/2023
10	I59168553	F06	6/26/2023
11	I59168554	F07	6/26/2023
12	I59168555	F08	6/26/2023
13	I59168556	F09	6/26/2023
14	I59168557	F10	6/26/2023
15	I59168558	F11	6/26/2023

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, 2023.
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.

June 26, 2023

Gilbert, Eric

Job	Truss	Truss Type	Qty	Ply	215 Mamie Upchurch Rd.	
J0623-3331	ET1	GABLE	1	1		I59168544
					Job Reference (optional)	

Comtech, Inc,   Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 26 06:51:01 2023 Page 1
ID:tLzISiCk4ttUXohUqmfgStyJZ5j-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

0-1-8

Scale = 1:31.0

3x4 ═   3x6 FP ═   3x4 ‖

1-4-0   33

1-4-0

3x4 ═   3x6 FP ═   3x4 ═   3x4 ‖
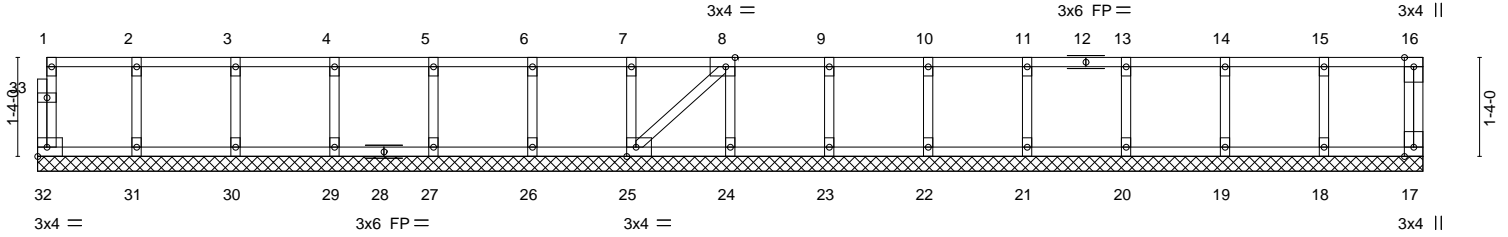
	1-4-0	2-8-0	4-0-0	5-4-0	6-8-0	8-0-0	9-4-0	10-8-0	12-0-0	13-4-0	14-8-0	16-0-0	17-4-0	18-8-0
	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0

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

LOADING (psf)		SPACING-		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-S							Weight: 85 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 18-8-0.
     (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.
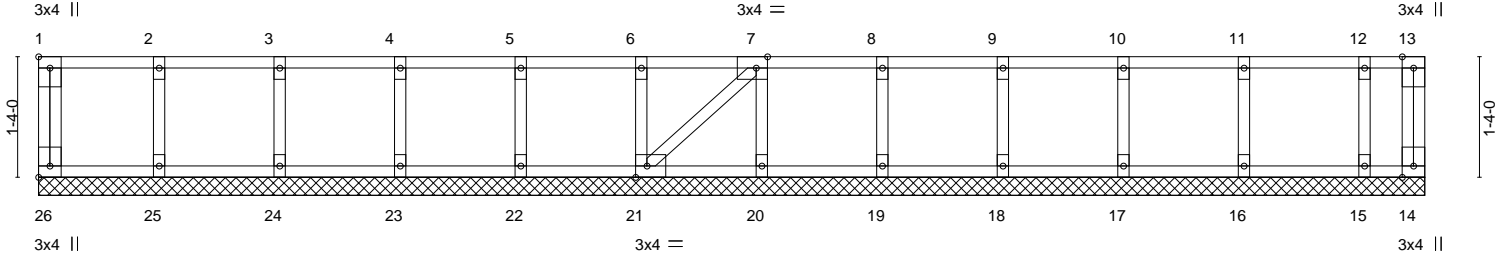7) CAUTION, Do not erect truss backwards.

NORTH CAROLINA
PROFESSIONAL
SEAL
036322
ERIC A. GILBERT
ENGINEER

June 26,2023

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	215 Mamie Upchurch Rd.	
J0623-3331	ET2	GABLE	1	1		I59168545
					Job Reference (optional)	

Comtech, Inc,   Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 26 06:51:02 2023 Page 1
ID:tLzISiCk4ttUXohUqmfgStyJZ5j-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Scale = 1:25.5

Plate Offsets (X,Y)--   [1:Edge,0-1-8], [7:0-1-8,Edge], [21:0-1-8,Edge], [26: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	16	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-S							Weight: 72 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 10-0-0 oc purlins, except end verticals.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.   All bearings 15-4-0.
(lb) - Max Grav   All reactions 250 lb or less at joint(s) 26, 14, 25, 24, 23, 22, 21, 20, 19, 18, 17, 16, 15

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.

June 26,2023

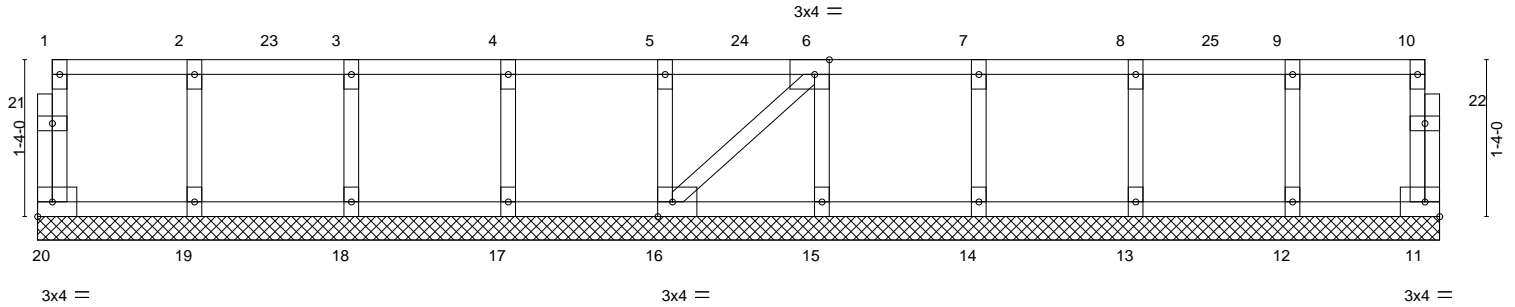| Job	Truss	Truss Type	Qty	Ply	215 Mamie Upchurch Rd.	I59168546
J0623-3331	ET3	GABLE	1	1	Job Reference (optional)	

Comtech, Inc,   Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 26 06:51:03 2023 Page 1
ID:tLzISiCk4ttUXohUqmfgStyJZ5j-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

0-1-8

0-1-8

Scale = 1:19.6

1-4-0	2-8-0	4-0-0	5-4-0	6-8-0	8-0-0	9-4-0	10-8-0	11-11-0
1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-3-0

Plate Offsets (X,Y)--   [6:0-1-8,Edge], [16:0-1-8,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	0.12	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	0.05	Horz(CT)	0.00	11	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-S							Weight: 56 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 11-11-0.
      (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.

LOAD CASE(S)   Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
    Uniform Loads (plf)
          Vert: 11-20=-10, 1-10=-100
    Concentrated Loads (lb)
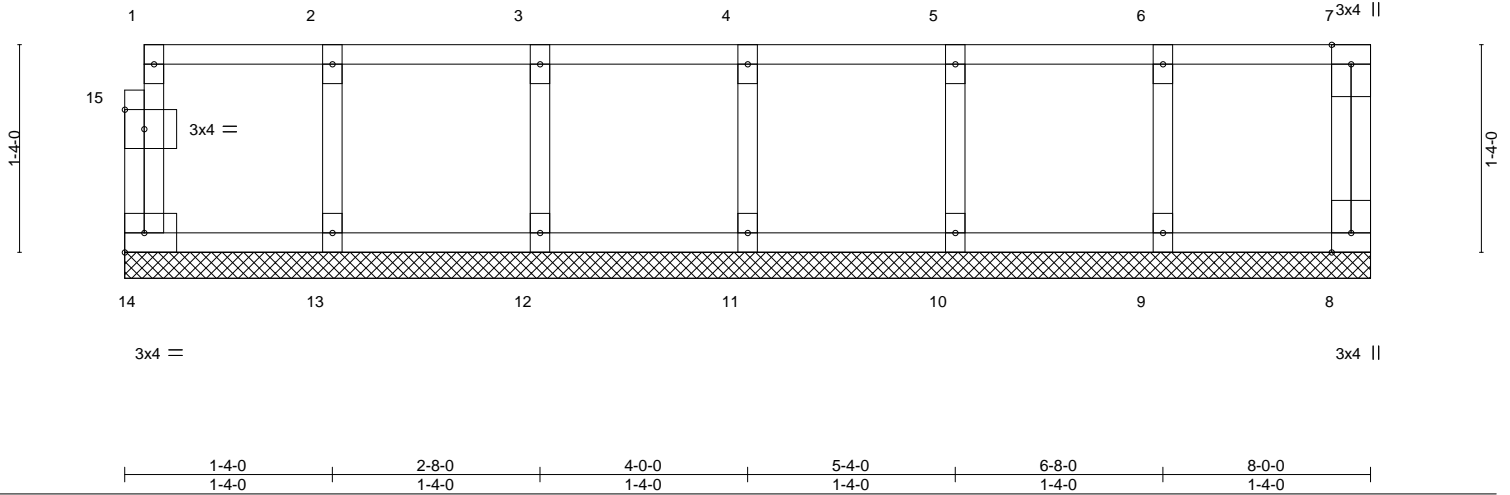   Vert: 4=-92 7=-92 23=-92 24=-92 25=-92

June 26,2023

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8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 26 06:51:04 2023 Page 1
ID:tLzISiCk4ttUXohUqmfgStyJZ5j-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

0-1-8

Scale = 1:14.8

1-4-0

15

3x4 =

1-4-0

3x4 =

3x4 ||

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

Plate Offsets (X,Y)--   [15:0-1-8,0-1-8]

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	0.06	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	8	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-R							Weight: 38 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 8-0-0.
    (lb) - Max Grav   All reactions 250 lb or less at joint(s) 14, 8, 13, 12, 11, 10, 9

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
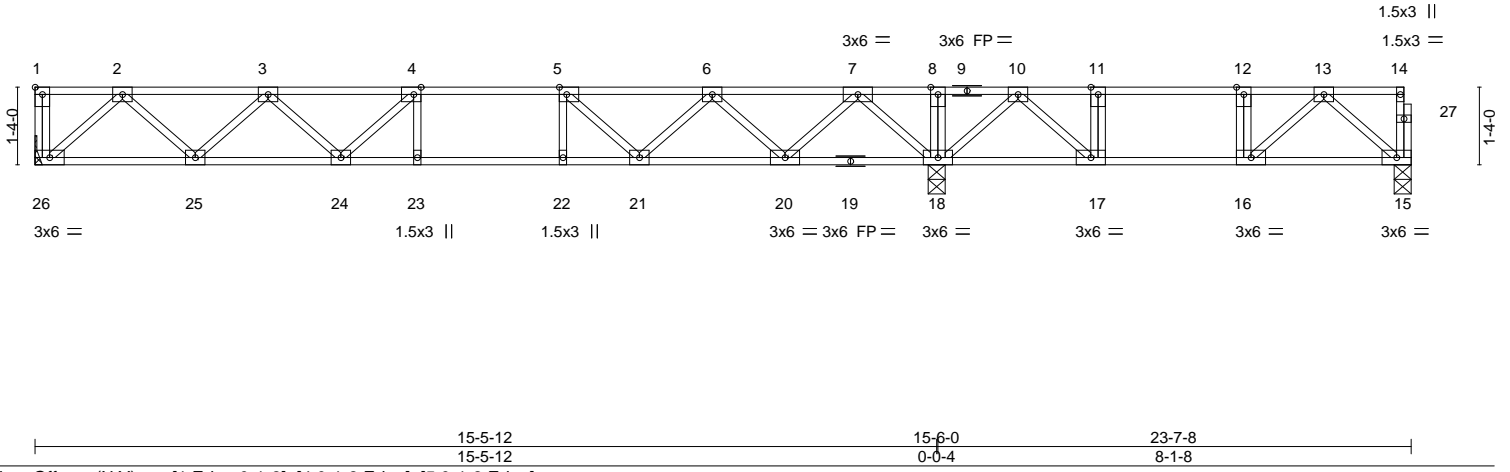
NOTES-
1) All plates are 1.5x3 MT20 unless otherwise indicated.
2) Plates checked for a plus or minus 1 degree rotation about its center.
3) Gable requires continuous bottom chord bearing.
4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
5) 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.

June 26,2023

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	215 Mamie Upchurch Rd.	
J0623-3331	F01	Floor	1	1		I59168548
					Job Reference (optional)	

Comtech, Inc,   Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 26 06:51:05 2023 Page 1
ID:tLzISiCk4ttUXohUqmfgStyJZ5j-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

1-3-0   2-4-8   2-3-0   0-1-8

Scale = 1:39.6

1.5x3 ||
1.5x3 =

3x6 =   3x6 FP =

1-4-0   27   1-4-0

26   25   24   23   22   21   20   19   18   17   16   15

3x6 =   1.5x3 || 1.5x3 || 3x6 = 3x6 FP =   3x6 =   3x6 =   3x6 =   3x6 =

15-5-12   15-6-0   23-7-8
15-5-12   0-0-4   8-1-8

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

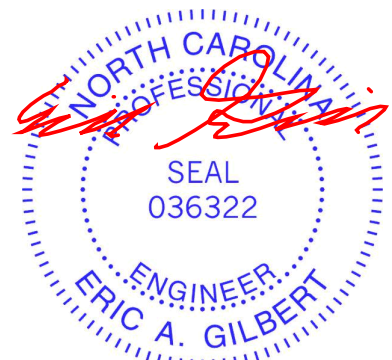| LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.53	Vert(LL)	-0.17	23-24	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.82	Vert(CT)	-0.22	23-24	>857	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.04	15	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-S							Weight: 124 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: 17-18,16-17.

REACTIONS.   (size)   26=Mechanical, 18=0-3-8, 15=0-3-8
               Max Grav 26=810(LC 10), 18=1425(LC 1), 15=401(LC 4)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-1423/0, 3-4=-2212/0, 4-5=-2432/0, 5-6=-2066/0, 6-7=-1128/0, 7-8=0/713,
             8-10=0/713, 10-11=-586/83, 11-12=-586/83, 12-13=-586/83
BOT CHORD   25-26=0/860, 24-25=0/1958, 23-24=0/2432, 22-23=0/2432, 21-22=0/2432, 20-21=0/1727,
             18-20=0/493, 17-18=-345/238, 16-17=-83/586, 15-16=0/379
WEBS   2-26=-1145/0, 2-25=0/783, 3-25=-745/0, 3-24=0/376, 4-24=-429/0, 7-18=-1261/0,
             7-20=0/911, 6-20=-862/0, 6-21=0/511, 5-21=-632/0, 10-18=-688/0, 10-17=0/672,
             11-17=-356/0, 13-15=-500/0, 13-16=-127/276

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.

NORTH CAROLINA
PROFESSIONAL
SEAL
036322
ENGINEER
ERIC A. GILBERT

June 26,2023

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818 Soundside Road
Edenton, NC 27932

Comtech, Inc,   Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 26 06:51:06 2023 Page 1
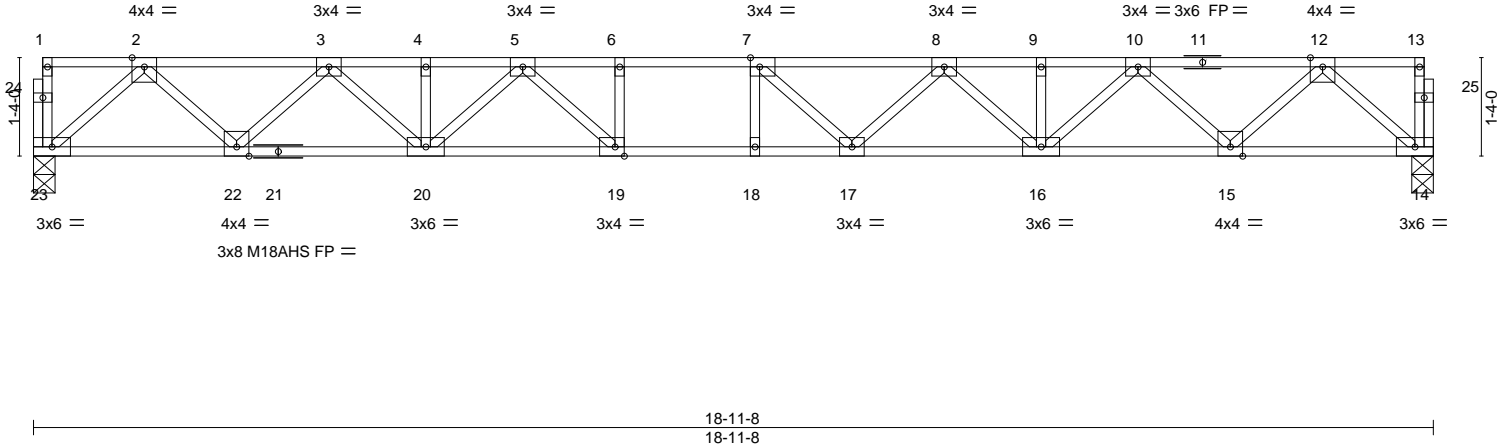ID:tLzISiCk4ttUXohUqmfgStyJZ5j-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f
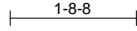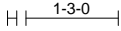
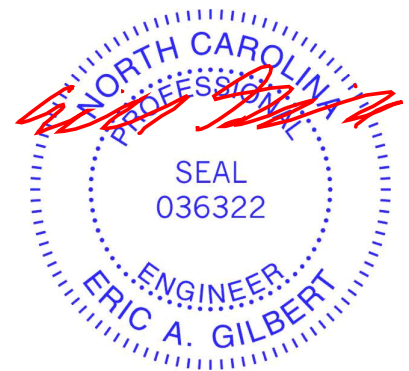

Plate Offsets (X,Y)--	[7:0-1-8,Edge], [19:0-1-8,Edge]

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	0.38	Vert(LL)	-0.24	18	>939	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC	0.60	Vert(CT)	-0.33	17-18	>686	360	M18AHS	186/179
BCLL 0.0	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.06	14	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-S							Weight: 100 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD   2x4 SP 2400F 2.0E(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.

REACTIONS.   (size)   23=0-3-8, 14=0-3-8
              Max Grav 23=1023(LC 1), 14=1023(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-1892/0, 3-4=-3184/0, 4-5=-3184/0, 5-6=-3940/0, 6-7=-3940/0, 7-8=-3823/0,
             8-9=-3179/0, 9-10=-3179/0, 10-12=-1891/0
BOT CHORD   22-23=0/1113, 20-22=0/2637, 19-20=0/3610, 18-19=0/3940, 17-18=0/3940, 16-17=0/3645,
             15-16=0/2641, 14-15=0/1112
WEBS   2-23=-1479/0, 2-22=0/1084, 3-22=-1036/0, 3-20=0/744, 5-20=-578/0, 5-19=0/710,
             6-19=-308/0, 12-14=-1478/0, 12-15=0/1085, 10-15=-1042/0, 10-16=0/732, 8-16=-633/0,
             8-17=0/407, 7-17=-466/162

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 1.5x3 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.

NORTH CAROLINA
PROFESSIONAL
SEAL
036322
ERIC A. GILBERT
ENGINEER

June 26,2023

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	215 Mamie Upchurch Rd.	
J0623-3331	F03	Floor	9	1		I59168550
					Job Reference (optional)	

Comtech, Inc,   Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 26 06:51:07 2023 Page 1
ID:tLzISiCk4ttUXohUqmfgStyJZ5j-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f
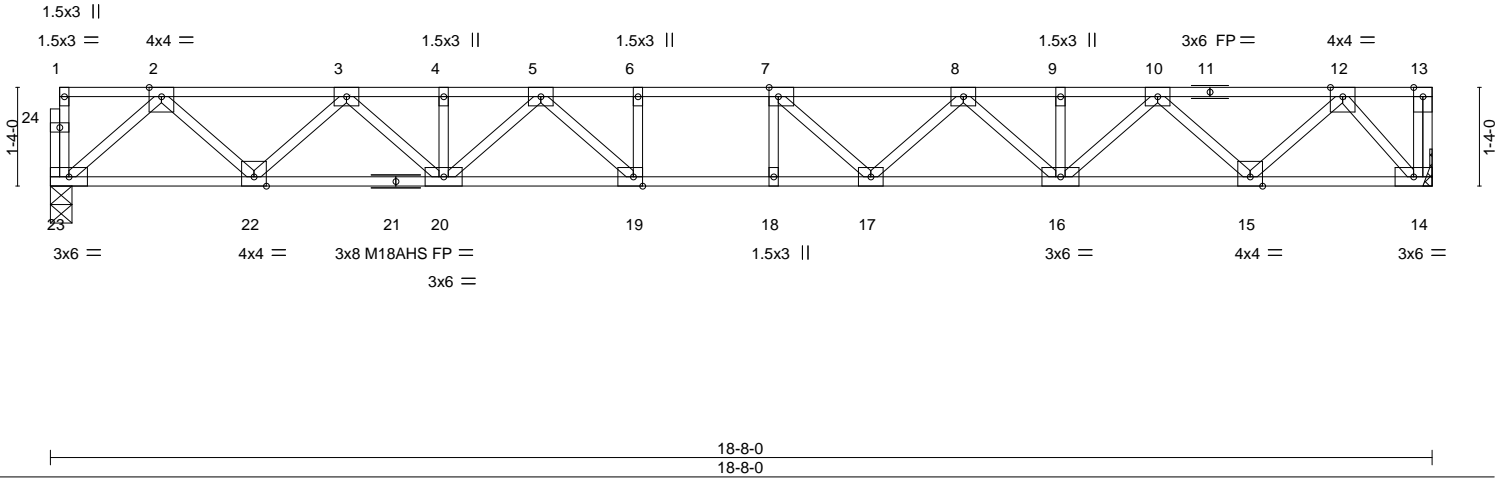
0-1-8

1-3-0   1-8-8   0-11-8
Scale = 1:31.1

18-8-0
18-8-0

Plate Offsets (X,Y)--   [7:0-1-8,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	0.35	Vert(LL)	-0.22	18	>998	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.57	Vert(CT)	-0.30	18	>729	360	M18AHS	186/179
BCLL	0.0	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.05	14	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-S							Weight: 100 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD   2x4 SP 2400F 2.0E(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.

REACTIONS.   (size)   23=0-3-8, 14=Mechanical
                 Max Grav 23=1007(LC 1), 14=1013(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-1857/0, 3-4=-3117/0, 4-5=-3117/0, 5-6=-3825/0, 6-7=-3825/0, 7-8=-3678/0,
                  8-9=-3002/0, 9-10=-3002/0, 10-12=-1678/0
BOT CHORD   22-23=0/1095, 20-22=0/2586, 19-20=0/3524, 18-19=0/3825, 17-18=0/3825, 16-17=0/3481,
                  15-16=0/2444, 14-15=0/884
WEBS   2-23=-1455/0, 2-22=0/1061, 3-22=-1014/0, 3-20=0/721, 5-20=-553/0, 5-19=-13/675,
                  6-19=-294/0, 12-14=-1324/0, 12-15=0/1105, 10-15=-1065/0, 10-16=0/757, 8-16=-652/0,
                  8-17=0/419, 7-17=-484/128

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) Refer to girder(s) for truss to truss connections.
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.

June 26,2023

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	215 Mamie Upchurch Rd.	
J0623-3331	F04	Floor	5	1		I59168551
					Job Reference (optional)	

Comtech, Inc,   Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 26 06:51:08 2023 Page 1
ID:tLzISiCk4ttUXohUqmfgStyJZ5j-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

0-1-8

1-3-0   2-5-0   0-1-8
Scale = 1:26.8

15-11-0
15-11-0
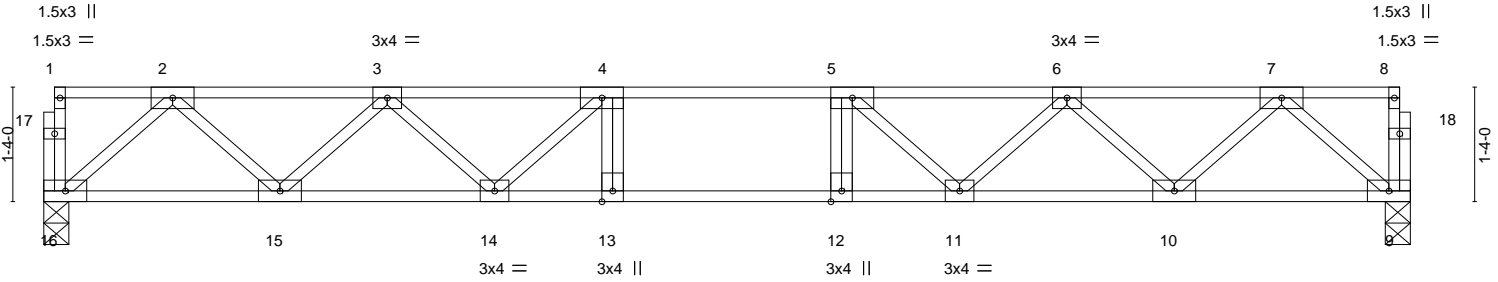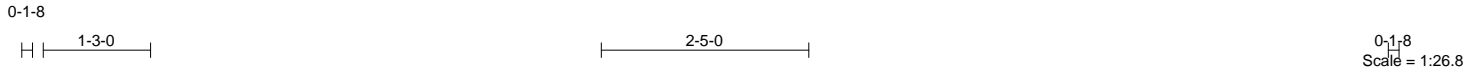
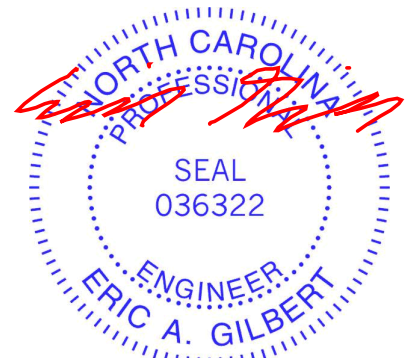| **LOADING** (psf)		**SPACING-**		**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL	40.0	Plate Grip DOL	1.00	TC	0.49	Vert(LL)	-0.19	13-14	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.82	Vert(CT)	-0.23	13-14	>803	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.41	Horz(CT)	0.04	9	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-S							Weight: 84 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)   16=0-3-8, 9=0-3-8
             Max Grav 16=855(LC 1), 9=855(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-1533/0, 3-4=-2429/0, 4-5=-2753/0, 5-6=-2429/0, 6-7=-1533/0
BOT CHORD   15-16=0/919, 14-15=0/2117, 13-14=0/2753, 12-13=0/2753, 11-12=0/2753, 10-11=0/2117, 9-10=0/919
WEBS   2-16=-1221/0, 2-15=0/854, 3-15=-812/0, 3-14=0/488, 4-14=0/-621, 7-9=-1221/0, 7-10=0/854, 6-10=-812/0,
             6-11=0/488, 5-11=-621/0

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) 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.

June 26,2023

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	215 Mamie Upchurch Rd.	
J0623-3331	F05	Floor	8	1		I59168552
					Job Reference (optional)	

Comtech, Inc,   Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 26 06:51:09 2023 Page 1
ID:tLzISiCk4ttUXohUqmfgStyJZ5j-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

0-11-8   1-3-0   2-5-0   0-1-8

Scale = 1:26.0

1.5x3 ||
1.5x3 =

3x6 =   3x6 =   3x6 =

17

1-4-0   1-4-0

3x6 =   3x6 =   3x6 =

15-7-8
15-7-8

Plate Offsets (X,Y)--   [1:Edge,0-1-8]
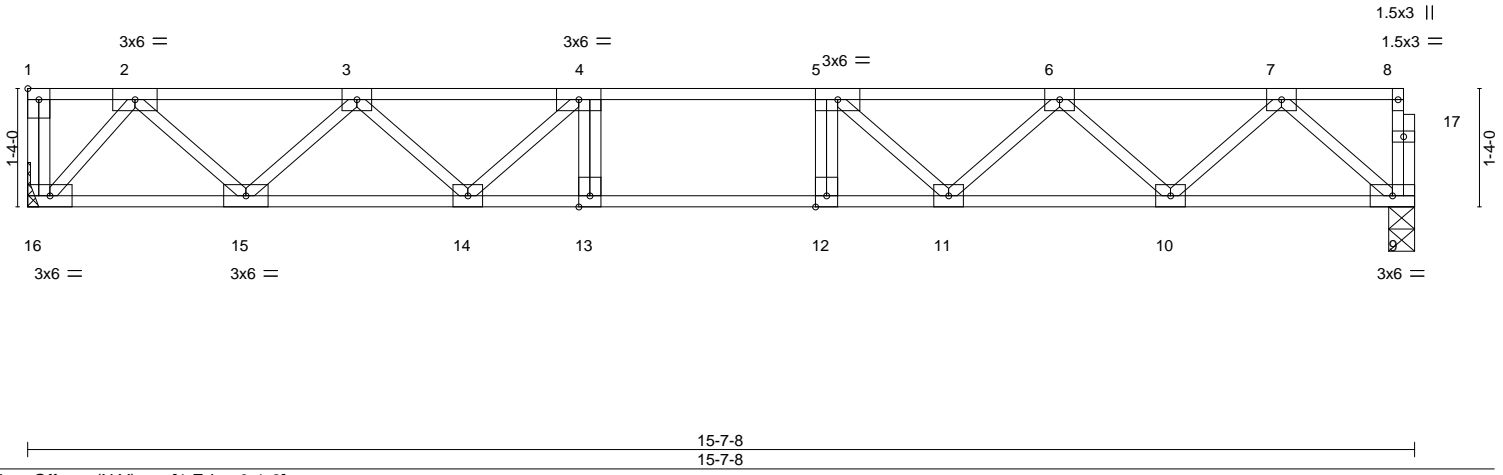
LOADING (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC	0.51	Vert(LL)	-0.19	11-12	>985	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC	0.84	Vert(CT)	-0.24	11-12	>780	360		
BCLL 0.0	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.04	9	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-S							Weight: 83 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)   16=Mechanical, 9=0-3-8
              Max Grav 16=846(LC 1), 9=839(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-1360/0, 3-4=-2290/0, 4-5=-2650/0, 5-6=-2361/0, 6-7=-1499/0
BOT CHORD   15-16=0/732, 14-15=0/1958, 13-14=0/2650, 12-13=0/2650, 11-12=0/2650, 10-11=0/2068,
             9-10=0/900
WEBS   2-16=-1096/0, 2-15=0/874, 3-15=-832/0, 3-14=0/503, 4-14=-646/0, 7-9=-1195/0,
             7-10=0/833, 6-10=-793/0, 6-11=0/464, 5-11=-580/0

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) 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.

NORTH CAROLINA
PROFESSIONAL
SEAL
036322
ENGINEER
ERIC A. GILBERT

June 26,2023

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	215 Mamie Upchurch Rd.	I59168553
J0623-3331	F06	Floor	1	1	Job Reference (optional)	

Comtech, Inc,   Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 26 06:51:10 2023 Page 1
ID:tLzISiCk4ttUXohUqmfgStyJZ5j-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Plate Offsets (X,Y)--   [10:0-1-8,Edge], [19:0-1-8,Edge], [23:0-1-8,Edge], [24:0-1-8,Edge]
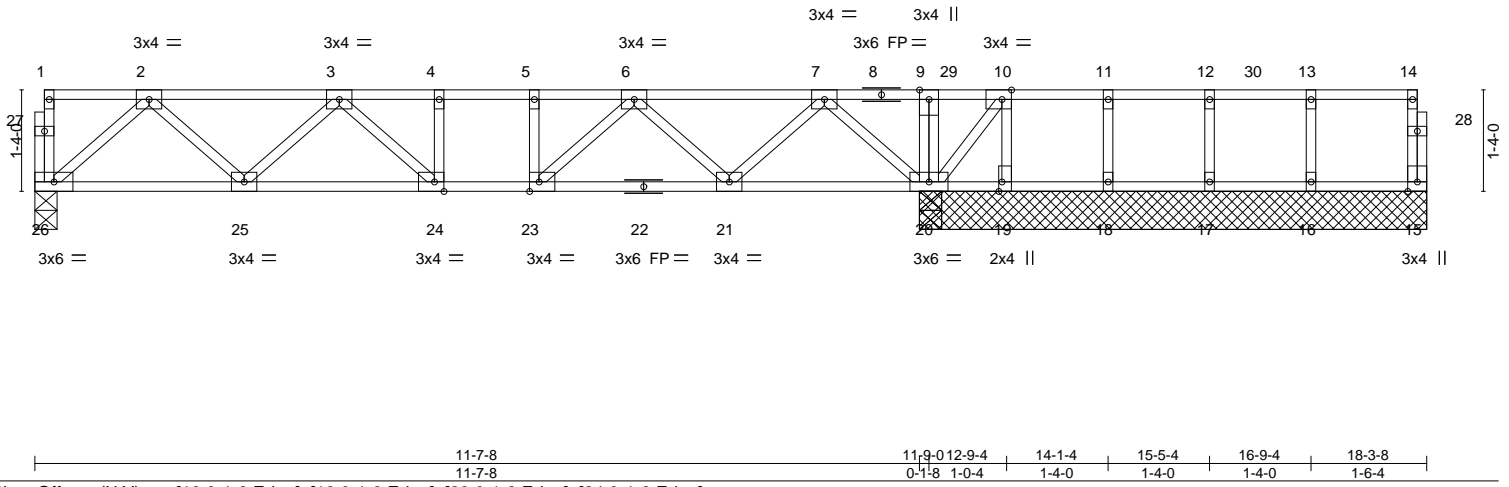
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.27	Vert(LL)	-0.05	24-25	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.32	Vert(CT)	-0.06	24-25	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.01	15	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-S							Weight: 95 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 6-8-0 except (jt=length) 26=0-3-8.
       (lb) - Max Uplift   All uplift 100 lb or less at joint(s) except 19=-602(LC 1)
                Max Grav   All reactions 250 lb or less at joint(s) 15, 16, 17, 18 except 26=563(LC 1), 20=1615(LC 1), 20=1615(LC
                                1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-901/0, 3-4=-1186/0, 4-5=-1186/0, 5-6=-1186/0, 6-7=-518/0, 7-9=0/642,
                    9-10=0/641
BOT CHORD   25-26=0/592, 24-25=0/1168, 23-24=0/1186, 21-23=0/946
WEBS   2-26=-786/0, 2-25=0/430, 3-25=-372/0, 7-20=-961/0, 7-21=0/612, 10-19=0/594,
                    10-20=-992/0, 6-21=-596/0, 6-23=0/409

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 602 lb uplift at joint 19.
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: 15-26=-10, 1-14=-100
    Concentrated Loads (lb)
   Vert: 11=-112 29=-112 30=-112

June 26,2023

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

Job	Truss	Truss Type	Qty	Ply	215 Mamie Upchurch Rd.	
J0623-3331	F07	Floor	3	1		I59168554
					Job Reference (optional)	

Comtech, Inc,   Fayetteville, NC - 28314,
8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 26 06:51:11 2023 Page 1
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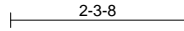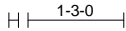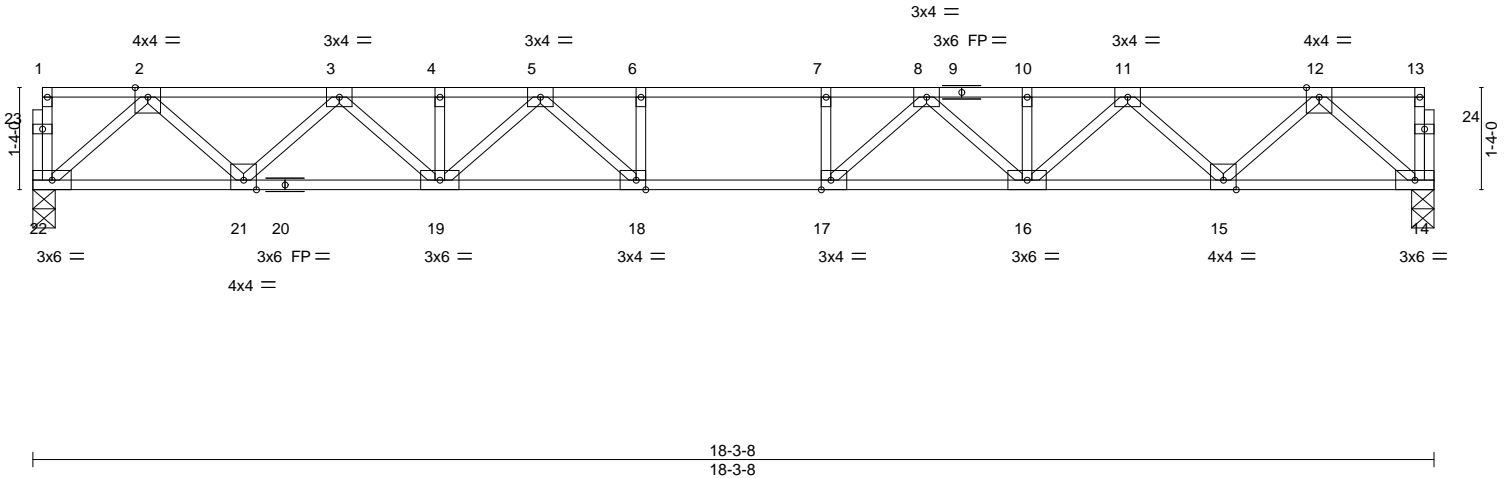
Plate Offsets (X,Y)--   [17:0-1-8,Edge], [18:0-1-8,Edge]

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	0.66	Vert(LL)	-0.24	18-19	>885	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC	0.81	Vert(CT)	-0.33	18-19	>658	360		
BCLL 0.0	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.06	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 10-0-0 oc bracing.

REACTIONS.   (size)   22=0-3-8, 14=0-3-8
              Max Grav 22=986(LC 1), 14=986(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-1811/0, 3-4=-3034/0, 4-5=-3034/0, 5-6=-3661/0, 6-7=-3661/0, 7-8=-3661/0,
            8-10=-3034/0, 10-11=-3034/0, 11-12=-1811/0
BOT CHORD   21-22=0/1071, 19-21=0/2523, 18-19=0/3407, 17-18=0/3661, 16-17=0/3407, 15-16=0/2523,
            14-15=0/1071
WEBS   2-22=-1423/0, 2-21=0/1030, 3-21=-989/0, 3-19=0/695, 5-19=-507/0, 5-18=-40/665,
            6-18=-338/0, 12-14=-1423/0, 12-15=0/1030, 11-15=-989/0, 11-16=0/695, 8-16=-507/0,
            8-17=-40/665, 7-17=-338/0

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.

June 26,2023

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	215 Mamie Upchurch Rd.	
J0623-3331	F08	Floor	2	1		I59168555
					Job Reference (optional)	

Comtech, Inc,   Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 26 06:51:12 2023 Page 1
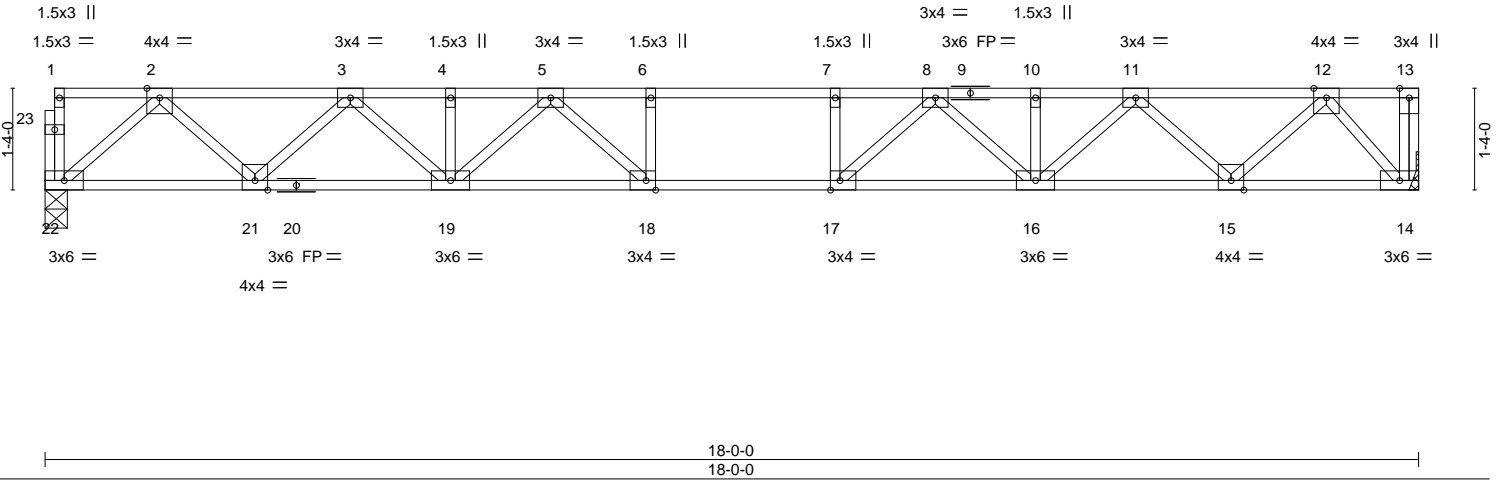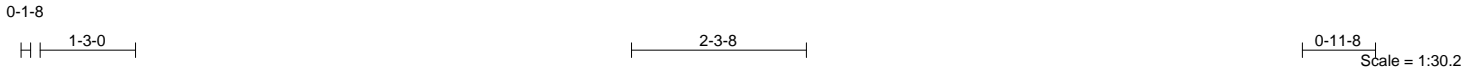ID:tLzISiCk4ttUXohUqmfgStyJZ5j-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

0-1-8

1-3-0

2-3-8

0-11-8
Scale = 1:30.2

18-0-0
18-0-0

Plate Offsets (X,Y)--   [17:0-1-8,Edge], [18:0-1-8,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	0.68	Vert(LL)	-0.24	18-19	>873	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.82	Vert(CT)	-0.33	18-19	>651	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.06	14	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-S							Weight: 95 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=0-3-8, 14=Mechanical
             Max Grav 22=970(LC 1), 14=976(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-1776/0, 3-4=-2967/0, 4-5=-2967/0, 5-6=-3541/0, 6-7=-3541/0, 7-8=-3541/0,
             8-10=-2863/0, 10-11=-2863/0, 11-12=-1607/0
BOT CHORD   21-22=0/1052, 19-21=0/2472, 18-19=0/3321, 17-18=0/3541, 16-17=0/3255, 15-16=0/2334,
             14-15=0/852
WEBS   2-22=-1399/0, 2-21=0/1007, 3-21=-968/0, 3-19=0/672, 5-19=-482/0, 5-18=-63/626,
             6-18=-320/0, 12-14=-1276/0, 12-15=0/1051, 11-15=-1011/0, 11-16=0/719, 8-16=-532/0,
             8-17=-1/688, 7-17=-348/0

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.

NORTH CAROLINA
PROFESSIONAL
SEAL
036322
ERIC A. GILBERT
ENGINEER

June 26,2023

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	215 Mamie Upchurch Rd.	
J0623-3331	F09	Floor Girder	1	1		I59168556
					Job Reference (optional)	

Comtech, Inc,   Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 26 06:51:13 2023 Page 1
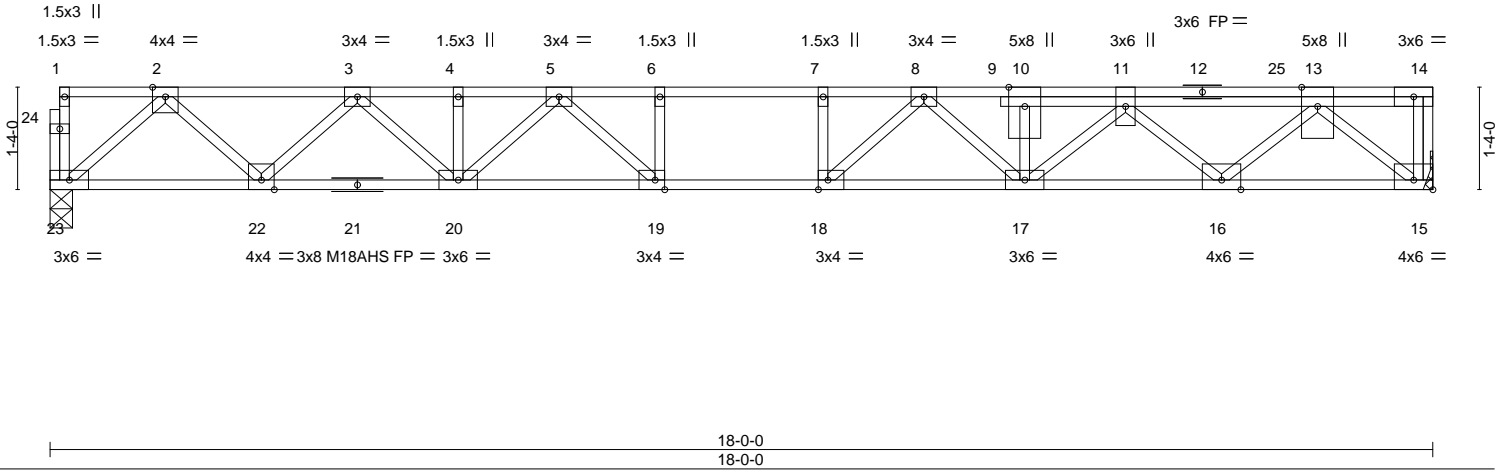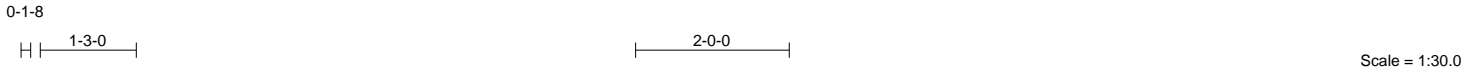ID:tLzISiCk4ttUXohUqmfgStyJZ5j-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Scale = 1:30.0

Plate Offsets (X,Y)--   [15:Edge,0-1-8], [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	0.77	Vert(LL)	-0.23	17-18	>928	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.63	Vert(CT)	-0.32	17-18	>672	360	M18AHS	186/179
BCLL	0.0	Rep Stress Incr	NO	WB	0.51	Horz(CT)	0.06	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 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.

REACTIONS.   (size)   23=0-3-8, 15=Mechanical
              Max Grav 23=1019(LC 1), 15=1398(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-1884/0, 3-4=-3170/0, 4-5=-3170/0, 5-6=-3909/0, 6-7=-3909/0, 7-8=-3909/0,
             8-10=-3544/0, 10-11=-3544/0, 11-13=-2466/0
BOT CHORD   22-23=0/1109, 20-22=0/2627, 19-20=0/3589, 18-19=0/3909, 17-18=0/3765, 16-17=0/3237,
             15-16=0/1670
WEBS   2-23=-1474/0, 2-22=0/1079, 3-22=-1032/0, 3-20=0/739, 5-20=-570/0, 5-19=0/735,
             6-19=-344/0, 13-15=-2174/0, 13-16=0/1080, 11-16=-1046/0, 11-17=0/407, 8-17=-300/0,
             8-18=-171/468

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates 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.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 550 lb down at 16-0-4 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: 15-23=-10, 1-14=-100
   Concentrated Loads (lb)
           Vert: 25=-470(F)

June 26,2023

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	215 Mamie Upchurch Rd.	I59168557
J0623-3331	F10	Floor	1	1	Job Reference (optional)	

Comtech, Inc,   Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 26 06:51:14 2023 Page 1
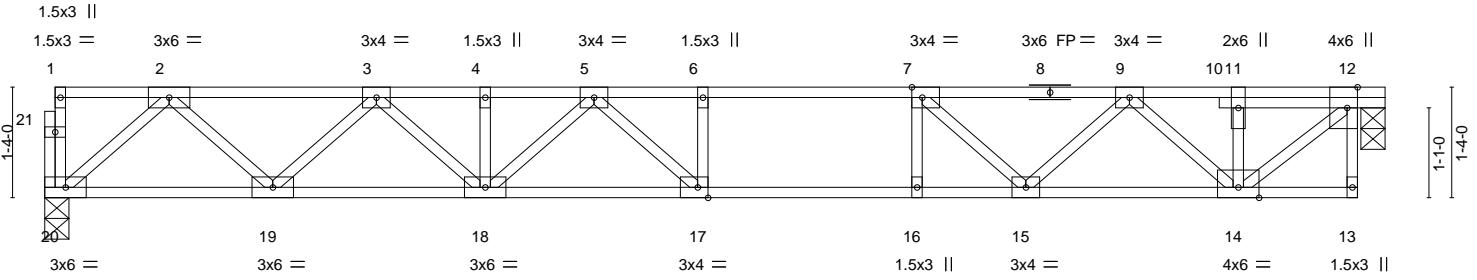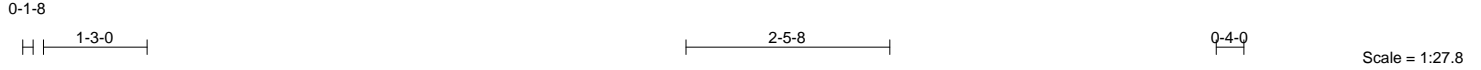ID:tLzISiCk4ttUXohUqmfgStyJZ5j-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

0-1-8

1-3-0

2-5-8

0-4-0

Scale = 1:27.8

1.5x3 ‖

1.5x3 =   3x6 =   3x4 = 1.5x3 ‖   3x4 = 1.5x3 ‖   3x4 = 3x6 FP 3x4 = 2x6 ‖   4x6 ‖
1   2   3   4   5   6   7   8   9   1011   12

21

1-4-0

1-1-0
1-4-0

20   19   18   17   16   15   14   13

3x6 =   3x6 =   3x6 =   3x4 =   1.5x3 ‖ 3x4 =   4x6 =   1.5x3 ‖

15-10-0
15-10-0

16-2-0
0-4-0

Plate Offsets (X,Y)--   [7:0-1-8,Edge], [12:0-3-0,Edge], [17:0-1-8,Edge]

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.73	Vert(LL)	-0.25	17-18	>741	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.71	Vert(CT)	-0.33	17-18	>563	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.57	Horz(CT)	0.03	12	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-S							Weight: 85 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.

REACTIONS.   (size)   20=0-3-8, 12=0-3-8
              Max Grav 20=854(LC 1), 12=861(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-1522/0, 3-4=-2483/0, 4-5=-2483/0, 5-6=-2672/0, 6-7=-2672/0, 7-9=-2070/0,
              9-11=-926/0, 11-12=-926/0
BOT CHORD   19-20=0/919, 18-19=0/2109, 17-18=0/2695, 16-17=0/2672, 15-16=0/2672, 14-15=0/1580
WEBS   12-14=0/1206, 2-20=-1221/0, 2-19=0/839, 3-19=-817/0, 3-18=0/508, 5-18=-307/0,
              5-17=-234/348, 9-14=-889/0, 9-15=0/681, 7-15=-900/0, 7-16=-14/284

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) 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.
4) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
5) CAUTION, Do not erect truss backwards.

June 26,2023

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

Job	Truss	Truss Type	Qty	Ply	215 Mamie Upchurch Rd.	I59168558
J0623-3331	F11	Floor Girder	1	1	Job Reference (optional)	

Comtech, Inc,   Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 26 06:51:15 2023 Page 1
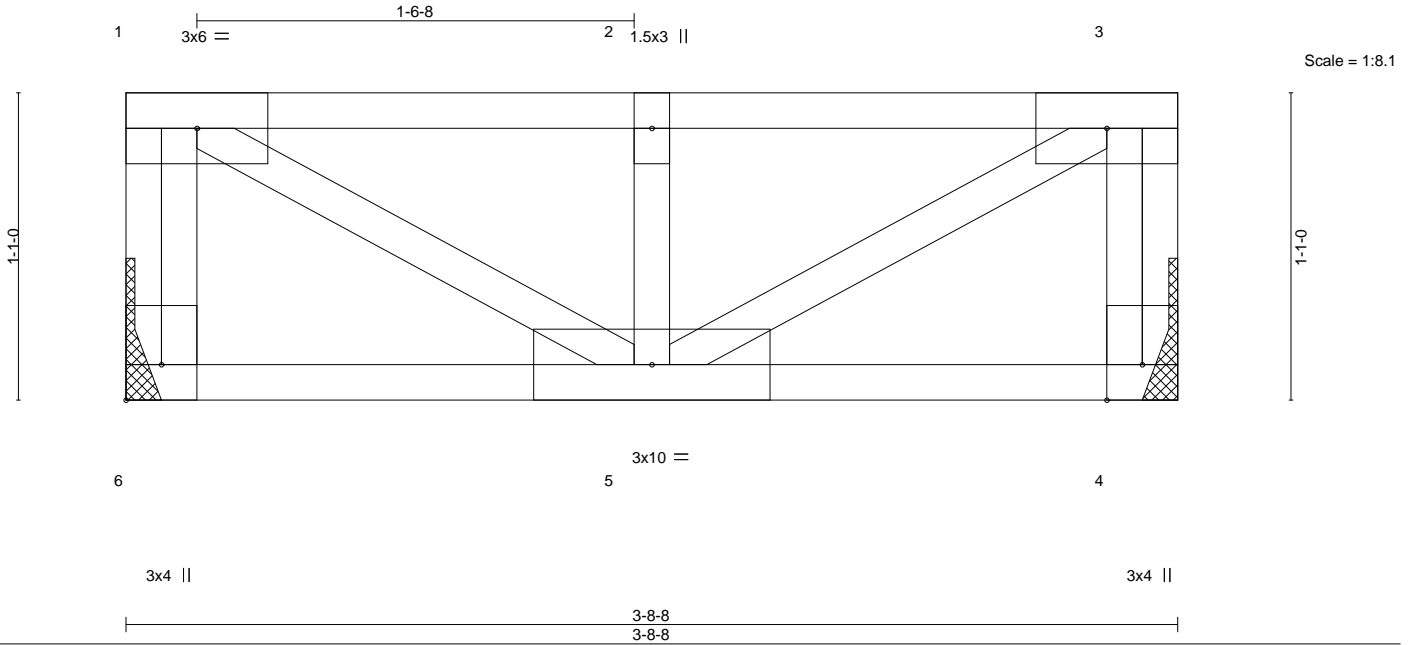ID:tLzISiCk4ttUXohUqmfgStyJZ5j-RfC?PsB70Hq3NSgPgnL8w3uITXbGKWrCDoi7J4zJC?f

Plate Offsets (X,Y)--   [6: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 0.15	Vert(LL) -0.01 5 >999 480	MT20 244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.04	Vert(CT) -0.01 5 >999 360	
BCLL 0.0	Rep Stress Incr NO	WB 0.48	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 3-8-8 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=570(LC 1), 4=570(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   1-6=-558/0, 3-4=-558/0, 1-2=-877/0, 2-3=-877/0
WEBS   1-5=0/1003, 2-5=-963/0, 3-5=0/1003

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.
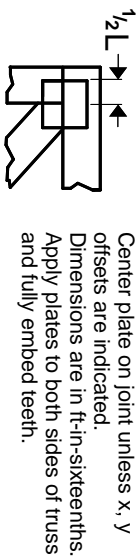
LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
        Vert: 4-6=-10, 1-3=-100
   Concentrated Loads (lb)
        Vert: 2=-761

June 26,2023

TRENCO
ENGINEERING BY
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION

½"L

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.

0-¹⁄₁₆"

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
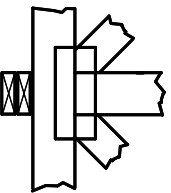software or upon request.

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
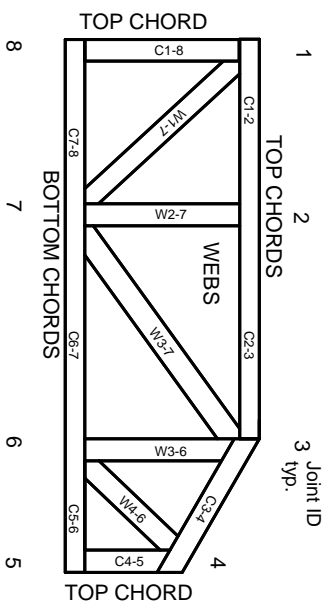if indicated.

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

6-4-8 **dimensions shown in ft-in-sixteenths**
(Drawings not to scale)

Joint ID
3 typ.

TOP CHORD

TOP CHORDS

BOTTOM CHORDS

WEBS

TOP CHORD

C1-8
C1-2
C7-8
W1-7
W2-7
W3-7
C6-7
C2-3
W3-6
C3-4
W4-6
C5-6
C4-5

1 2 3 4 5 6 7 8

**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.

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⚠ 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 T or 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.