ENGINEERING BY TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

RE: Drayton Rev 2

Site Information:

Project Customer: DRB Raleigh Project Name: DRB Raleigh Model Track
Lot/Block: 00.0110 Subdivision: DRB Raleigh
Model:
Address: 79 Frost Meadow Way LILLINGTON, NC 27546
City: Raleigh State: NC

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

Design Code: IRC2021/TPI2014
Wind Code: ASCE 7-16
Wind Speed: 115 mph
Roof Load: 50.0 psf
Mean Roof Height (feet): 25

Design Program: MiTek 20/20 8.8
Design Method: MWFRS (Envelope)/C-C hybrid Wind ASCE 7-16
Floor Load: N/A psf

Exposure Category: B

No.	Seal#	Truss Name	Date
1	I73101679	1FGE2	5/1/25
2	I73101680	1F2	5/1/25
3	I73101681	1F2A	5/1/25
4	I73101682	1F2L	5/1/25
5		1F5	5/1/25
6	I73101684	1F6	5/1/25
7	I73101685	1F6A	5/1/25
8	I73101686	1FGE3	5/1/25
9	I73101687	1FGE4	5/1/25
10	I73101688	1F7	5/1/25
11	I73101689	1F8	5/1/25
12	I73101690	1FGE5	5/1/25
13	I73101691	1FGE6	5/1/25
14		1FGE7	5/1/25
	I73101693	1F9	5/1/25
16	I73101694	1F10	5/1/25
17	I73101695	1F11	5/1/25
18	I73101696	1FGE8	5/1/25
	I73101702	2FGE1	5/1/25
25	I73101703	2F1	5/1/25
26	I73101704	2F2	5/1/25
27	I73101705	2F3	5/1/25
28	I73101706	2F4	5/1/25
29	I73101707	2F5	5/1/25
30	I73101708	2FGE2	5/1/25
31	I73101709	2F6	5/1/25
32	I73101710	2F7	5/1/25
	I73101711	2F8	5/1/25
34	I73101712	2F9	5/1/25
35	I73101713	2F10	5/1/25
36	I73101714	2F13	5/1/25
37	I73101715	2F12	5/1/25
38	I73101716	2F11	5/1/25
39	I73101717	2F11A	5/1/25

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

Truss Design Engineer's Name: Galinski, John
My license renewal date for the state of North Carolina is December 31, 2025.

IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

May 1,2025

Galinski, John

Job	Truss	Truss Type	Qty	Ply	Drayton Rev 2
	1FGE2	Floor Supported Gable	1	1	I73101679
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 10:14:20 Page: 1

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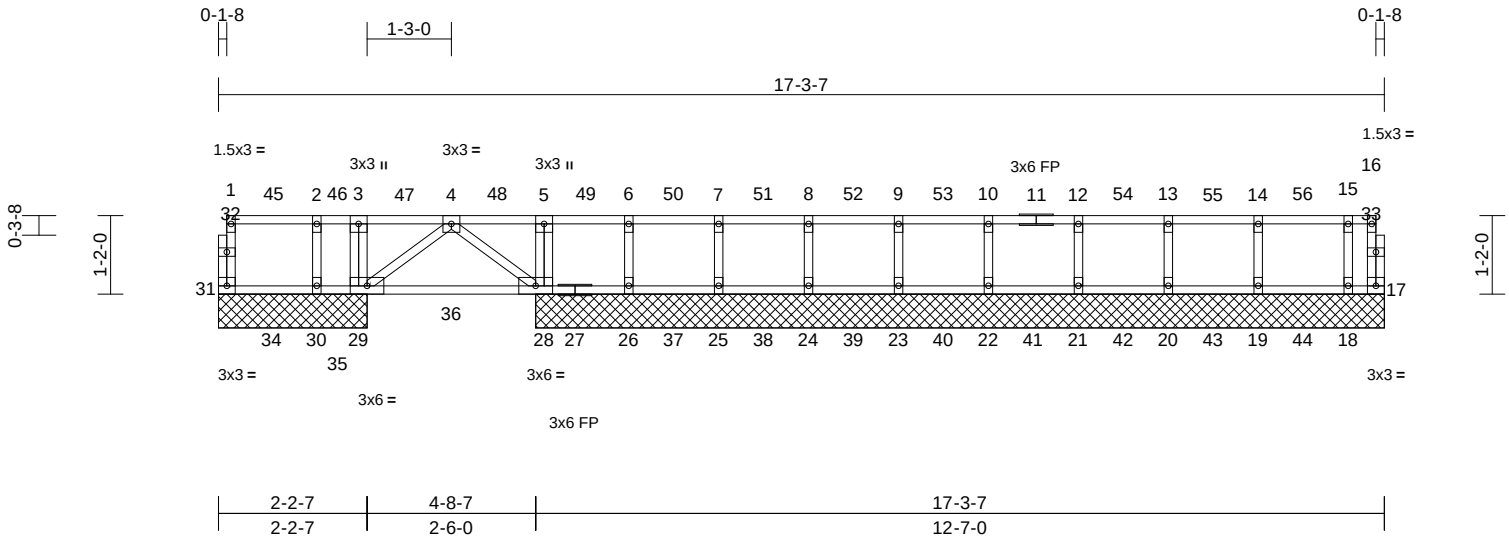

Scale = 1:34.2

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.29	Vert(LL)	-0.05	28-29	>653	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.57	Vert(CT)	-0.05	28-29	>621	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	28	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 80 lb	FT = 20%F, 12%E

LUMBER

TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(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 6-0-0 oc bracing, Except:
10-0-0 oc bracing: 30-31,29-30.

REACTIONS (size) 17=12-7-0, 18=12-7-0, 19=12-7-0, 20=12-7-0, 21=12-7-0, 22=12-7-0, 23=12-7-0, 24=12-7-0, 25=12-7-0, 26=12-7-0, 28=12-7-0, 29=2-2-7, 30=2-2-7, 31=2-2-7
Max Uplift 17=-112 (LC 20), 18=-34 (LC 19), 19=-6 (LC 47), 20=-6 (LC 17), 21=-6 (LC 45), 22=-6 (LC 44), 23=-5 (LC 46), 24=-6 (LC 45), 25=-4 (LC 44), 26=-58 (LC 40), 29=-43 (LC 38), 30=-146 (LC 40)
Max Grav 17=251 (LC 64), 18=275 (LC 50), 19=281 (LC 62), 20=279 (LC 61), 21=280 (LC 60), 22=280 (LC 59), 23=280 (LC 58), 24=279 (LC 57), 25=281 (LC 56), 26=275 (LC 55), 28=296 (LC 54), 29=323 (LC 40), 30=269 (LC 52), 31=264 (LC 51)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-31=-260/0, 16-17=-247/111, 1-2=-16/0, 2-3=-16/0, 3-4=-16/0, 4-5=-15/7, 5-6=-15/7, 6-7=-15/7, 7-8=-15/7, 8-9=-15/7, 9-10=-15/7, 10-12=-15/7, 12-13=-15/7, 13-14=-15/7, 14-15=-15/7, 15-16=-15/7
BOT CHORD 30-31=0/16, 29-30=0/16, 28-29=-6/175, 26-28=-7/15, 25-26=-7/15, 24-25=-7/15, 23-24=-7/15, 22-23=-7/15, 21-22=-7/15, 20-21=-7/15, 19-20=-7/15, 18-19=-7/15, 17-18=-7/15
WEBS 3-29=-262/67, 5-28=-269/15, 4-29=-219/8, 4-28=-219/7, 6-26=-268/19, 7-25=-269/13, 8-24=-269/14, 9-23=-269/14, 10-22=-269/14, 12-21=-269/14, 13-20=-268/15, 14-19=-269/14, 15-18=-262/41, 2-30=-262/59

NOTES

1) Unbalanced floor live loads have been considered for this design.
2) All plates are 1.5x3 (||) MT20 unless otherwise indicated.
3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
4) Gable studs spaced at 1-4-0 oc.
5) N/A
6) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
7) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.
8) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

May 1,2025

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Job	Truss	Truss Type	Qty	Ply	Drayton Rev 2
	1F2	Floor	8	1	I73101680
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 10:14:15 Page: 1
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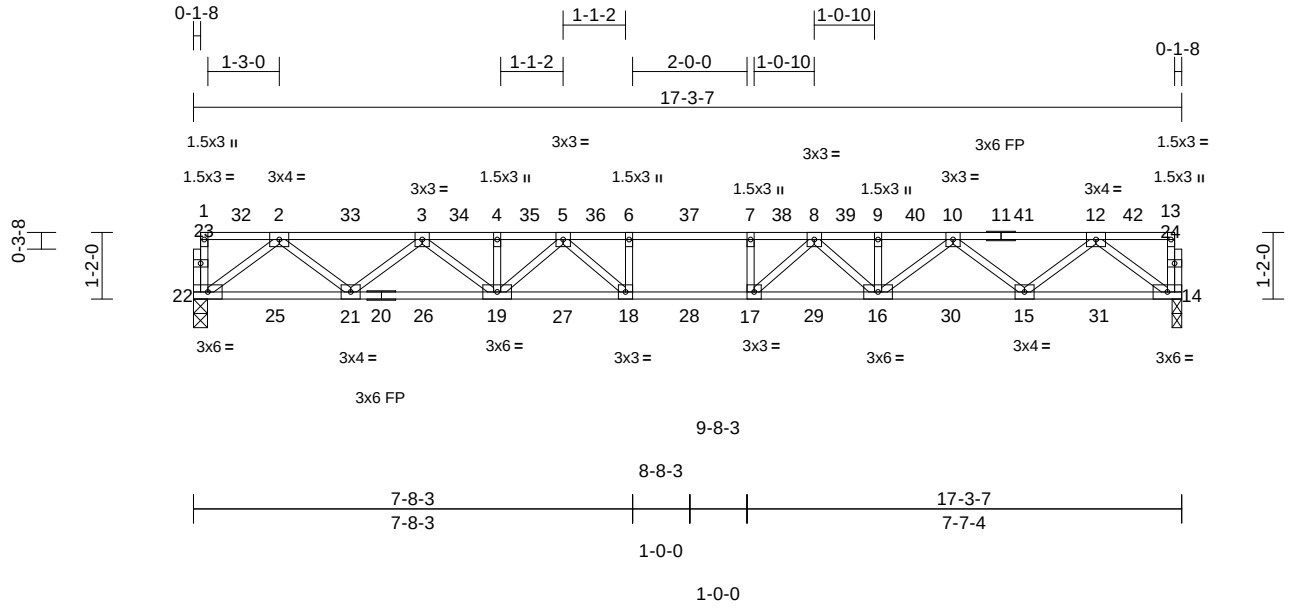

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Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.59	Vert(LL)	-0.17	17-18	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.82	Vert(CT)	-0.23	17-18	>877	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.33	Horz(CT)	0.04	14	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 88 lb	FT = 20%F, 12%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat) *Except* 20-14:2x4 SP SS (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 (size) 14=0-2-0, 22=0-2-15
Max Grav 14=621 (LC 1), 22=621 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-22=-258/38, 13-14=-258/38, 1-2=-15/2, 2-3=-1307/0, 3-4=-2157/0, 4-5=-2157/0, 5-6=-2523/0, 6-7=-2523/0, 7-8=-2523/0, 8-9=-2156/0, 9-10=-2156/0, 10-12=-1307/0, 12-13=-15/2
BOT CHORD 21-22=0/778, 19-21=0/1813, 18-19=0/2380, 17-18=0/2523, 16-17=0/2374, 15-16=0/1812, 14-15=0/778
WEBS 6-18=-202/119, 7-17=-208/118, 2-22=-975/0, 2-21=0/688, 3-21=-658/0, 3-19=-30/440, 12-14=-975/0, 12-15=0/688, 10-15=-658/0, 10-16=-30/439, 4-19=-241/74, 9-16=-241/75, 5-19=-322/77, 5-18=-216/402, 8-16=-317/78, 8-17=-212/411

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 22, 14.
3) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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

May 1,2025

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Drayton Rev 2
	1F2A	Floor	5	1	I73101681
					Job Reference (optional)

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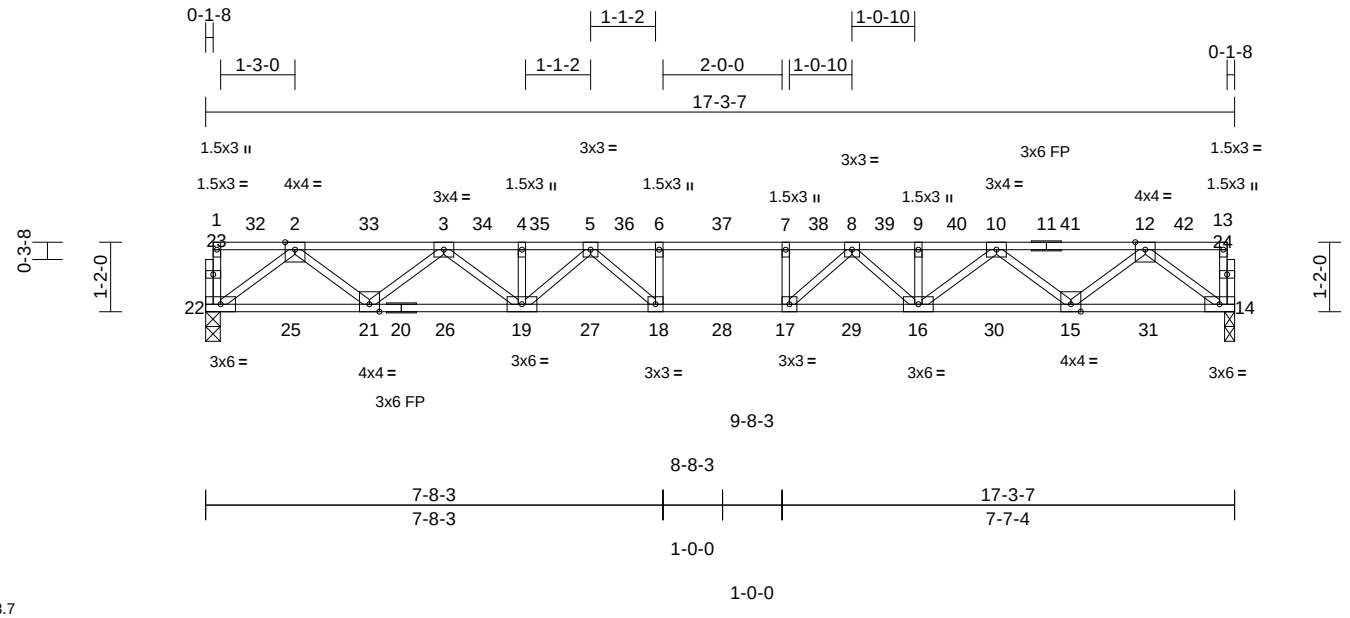

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Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.74	Vert(LL)	-0.17	17-18	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.87	Vert(CT)	-0.34	17-18	>603	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.05	14	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 88 lb	FT = 20%F, 12%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat) *Except* 20-14:2x4 SP SS (flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-2-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 14=0-2-0, 22=0-2-15
Max Grav 14=787 (LC 1), 22=803 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-22=-259/37, 13-14=-259/37, 1-2=-16/2, 2-3=-1765/0, 3-4=-3067/0, 4-5=-3067/0, 5-6=-3703/0, 6-7=-3703/0, 7-8=-3703/0, 8-9=-2979/0, 9-10=-2979/0, 10-12=-1725/0, 12-13=-15/2
BOT CHORD 21-22=0/1018, 19-21=0/2491, 18-19=0/3469, 17-18=0/3703, 16-17=0/3377, 15-16=0/2428, 14-15=0/997
WEBS 6-18=-300/22, 7-17=-358/0, 2-22=-1275/0, 2-21=0/973, 3-21=-944/0, 3-19=0/736, 12-14=-1249/0, 12-15=0/947, 10-15=-915/0, 10-16=0/703, 4-19=-258/58, 9-16=-243/73, 5-19=-563/0, 5-18=-84/524, 8-16=-565/0, 8-17=0/653

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 22, 14.
3) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
4) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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 (lb/ft)
Vert: 14-22=-7, 1-35=-67, 8-35=-133, 8-13=-67

May 1,2025

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Drayton Rev 2
	1F2L	Floor Girder	1	1	I73101682 Job Reference (optional)

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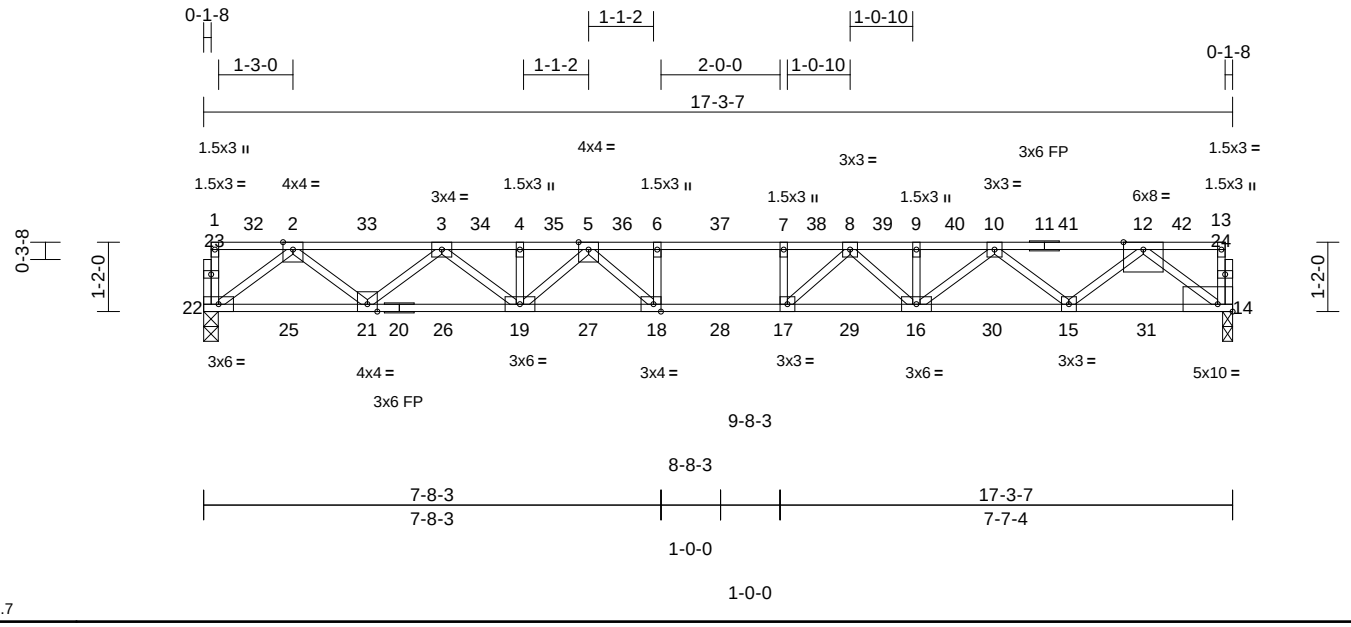

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Plate Offsets (X, Y): [14:Edge,0-1-8], [18:0-1-8,Edge]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.73	Vert(LL)	-0.15	17-18	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.79	Vert(CT)	-0.40	16-17	>514	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.94	Horz(CT)	0.07	14	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 88 lb	FT = 20%F, 12%E

LUMBER
TOP CHORD 2x4 SP SS(flat)
BOT CHORD 2x4 SP SS(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 (size) 14=0-2-0, 22=0-2-15
Max Grav 14=2459 (LC 1), 22=782 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-22=-258/37, 13-14=-273/23, 1-2=-15/2, 2-3=-1715/0, 3-4=-2948/0, 4-5=-2948/0, 5-6=-3842/0, 6-7=-3842/0, 7-8=-3842/0, 8-9=-3996/0, 9-10=-3996/0, 10-12=-3516/0, 12-13=-16/1
BOT CHORD 21-22=0/993, 19-21=0/2403, 18-19=0/3357, 17-18=0/3842, 16-17=0/4028, 15-16=0/3851, 14-15=0/3179
WEBS 6-18=-409/0, 7-17=-3/342, 2-22=-1243/0, 2-21=0/940, 3-21=-895/0, 3-19=0/696, 12-14=-3986/0, 12-15=-86/438, 10-15=-435/134, 10-16=-285/186, 4-19=-273/40, 9-16=-201/112, 5-19=-582/0, 5-18=0/866, 8-16=-72/325, 8-17=-675/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 22, 14.
3) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
4) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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 (lb/ft)
Vert: 14-22=-7, 1-13=-67
Concentrated Loads (lb)
Vert: 12=-2000

May 1,2025

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Job	Truss	Truss Type	Qty	Ply	Drayton Rev 2
	1F5	Floor	6	1	I73101683
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 10:14:17 Page: 1

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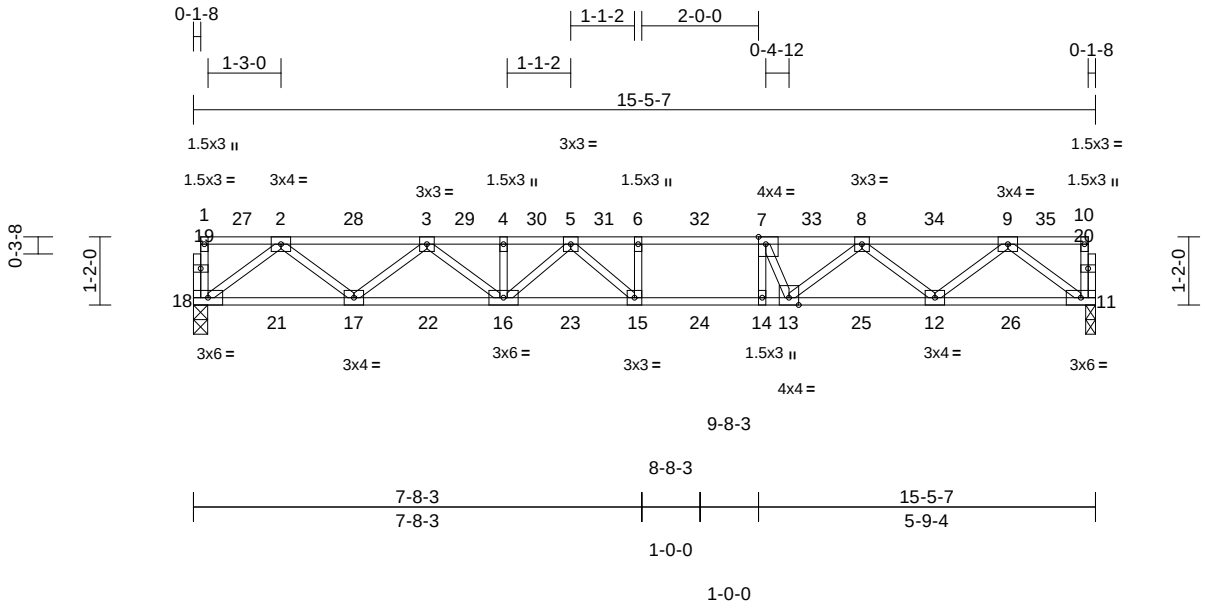

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Plate Offsets (X, Y): [7:0-1-8,Edge]

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	0.60	Vert(LL)	-0.16	15-16	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.46	Vert(CT)	-0.22	15-16	>812	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.33	Horz(CT)	0.03	11	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 79 lb	FT = 20%F, 12%E

LUMBER

TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP SS(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 (size) 11=0-2-0, 18=0-2-15
Max Grav 11=664 (LC 1), 18=664 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-18=-259/37, 10-11=-258/38, 1-2=-16/2, 2-3=-1364/0, 3-4=-2197/0, 4-5=-2197/0, 5-6=-2374/0, 6-7=-2374/0, 7-8=-2196/0, 8-9=-1364/0, 9-10=-15/2

BOT CHORD 17-18=0/827, 16-17=0/1880, 15-16=0/2361, 14-15=0/2374, 13-14=0/2374, 12-13=0/1866, 11-12=0/832

WEBS 6-15=-174/126, 7-14=-268/355, 2-18=-1035/0, 2-17=0/699, 3-17=-673/0, 3-16=-45/404, 9-11=-1041/0, 9-12=0/693, 8-12=-653/0, 8-13=-22/500, 7-13=-615/291, 4-16=-241/75, 5-16=-273/116, 5-15=-280/288

NOTES

1) Unbalanced floor live loads have been considered for this design.
2) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 18, 11.
3) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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

May 1,2025

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Job	Truss	Truss Type	Qty	Ply	Drayton Rev 2
	1F6	Floor	5	1	I73101684 Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 10:14:18 Page: 1
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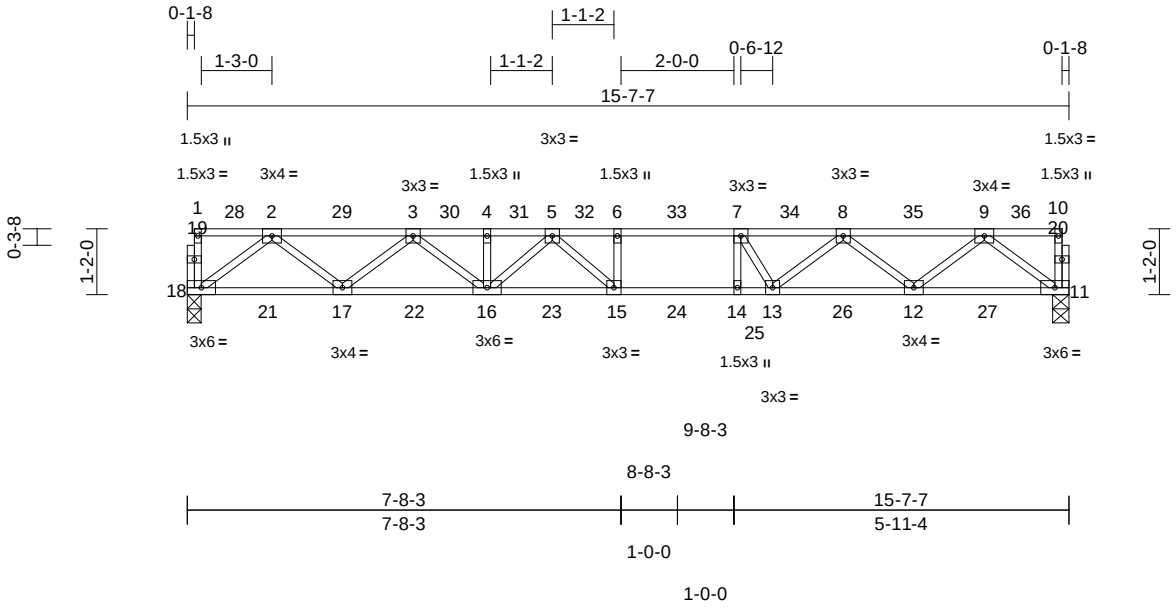


Scale = 1:40.8

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	0.61	Vert(LL)	-0.17	15-16	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.46	Vert(CT)	-0.23	15-16	>808	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.34	Horz(CT)	0.03	11	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 79 lb	FT = 20%F, 12%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP SS(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 (size) 11=0-3-8, 18=0-2-15
Max Grav 11=671 (LC 1), 18=671 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-18=-259/37, 10-11=-259/39, 1-2=-16/2, 2-3=-1382/0, 3-4=-2232/0, 4-5=-2232/0, 5-6=-2433/0, 6-7=-2433/0, 7-8=-2219/0, 8-9=-1383/0, 9-10=-15/2
BOT CHORD 17-18=0/836, 16-17=0/1907, 15-16=0/2407, 14-15=0/2433, 13-14=0/2433, 12-13=0/1894, 11-12=0/841
WEBS 6-15=-178/124, 7-14=-201/299, 2-18=-1047/0, 2-17=0/710, 3-17=-683/0, 3-16=-41/415, 9-11=-1053/0, 9-12=0/706, 8-12=-665/0, 8-13=-13/485, 7-13=-567/229, 4-16=-241/75, 5-16=-279/112, 5-15=-275/305

LOAD CASE(S) Standard

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 18.
3) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.

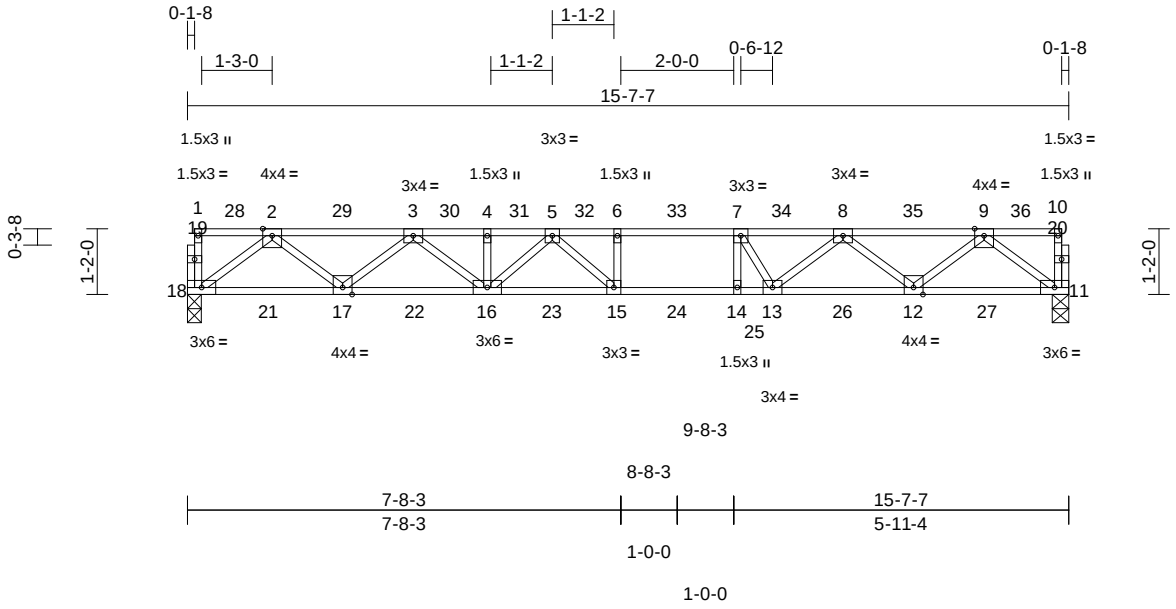
May 1,2025

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

Job	Truss	Truss Type	Qty	Ply	Drayton Rev 2
	1F6A	Floor	2	1	I73101685
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 10:14:18 Page: 1

ID:2VlWRYdLMy5fdkoOB1?HXHzoUc4-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:40.8

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	0.50	Vert(LL)	-0.15	15-16	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.67	Vert(CT)	-0.29	15-16	>637	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.46	Horz(CT)	0.05	11	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 79 lb	FT = 20%F, 12%E

LUMBER

TOP CHORD 2x4 SP SS(flat)
BOT CHORD 2x4 SP SS(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 (size) 11=0-3-8, 18=0-2-15
Max Grav 11=841 (LC 1), 18=836 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-18=-260/36, 10-11=-258/39, 1-2=-16/2, 2-3=-1794/0, 3-4=-3057/0, 4-5=-3057/0, 5-6=-3418/0, 6-7=-3418/0, 7-8=-3065/0, 8-9=-1807/0, 9-10=-15/2
BOT CHORD 17-18=0/1052, 16-17=0/2519, 15-16=0/3369, 14-15=0/3418, 13-14=0/3418, 12-13=0/2515, 11-12=0/1066
WEBS 6-15=-234/83, 7-14=-114/375, 2-18=-1318/0, 2-17=0/966, 3-17=-943/0, 3-16=0/687, 9-11=-1336/0, 9-12=0/965, 8-12=-922/0, 8-13=0/782, 7-13=-831/0, 4-16=-269/44, 5-16=-471/0, 5-15=-247/343

NOTES

1) Unbalanced floor live loads have been considered for this design.
2) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 18.
3) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
4) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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 (lb/ft)
Vert: 11-18=-8, 1-4=-80, 4-34=-144, 10-34=-80

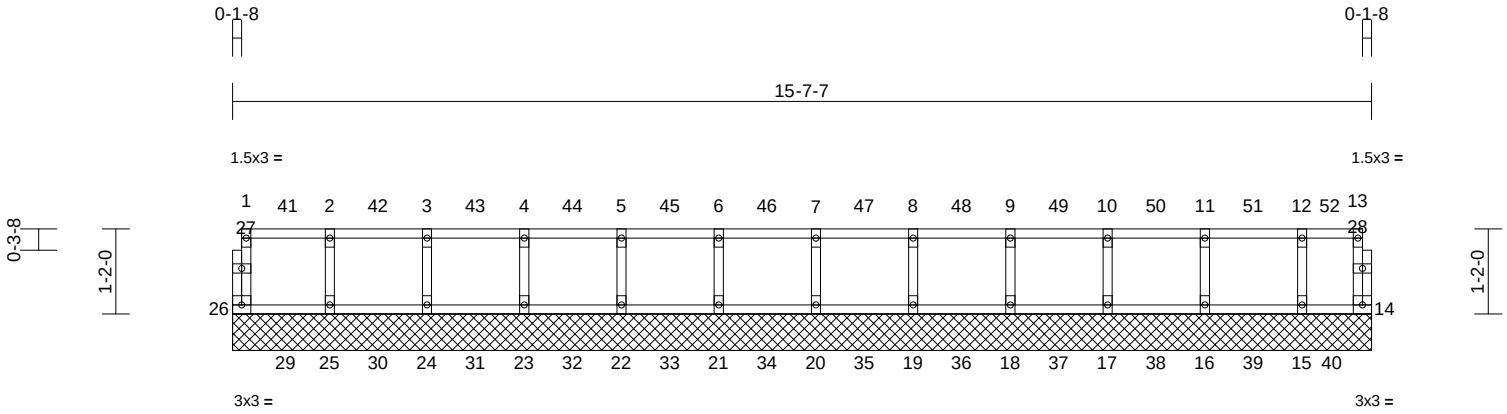
May 1,2025

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

Job	Truss	Truss Type	Qty	Ply	Drayton Rev 2
	1FGE3	Floor Supported Gable	1	1	I73101686
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 10:14:21 Page: 1

ID:_V6rLdP6LJscWRVJqUaw1azoUVv-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:31.6

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)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.28	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.06	Horiz(TL)	0.00	14	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 66 lb	FT = 20%F, 12%E

LUMBER

TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(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 6-0-0 oc bracing.

REACTIONS (size) 14=15-7-7, 15=15-7-7, 16=15-7-7, 17=15-7-7, 18=15-7-7, 19=15-7-7, 20=15-7-7, 21=15-7-7, 22=15-7-7, 23=15-7-7, 24=15-7-7, 25=15-7-7, 26=15-7-7
Max Uplift 14=-38 (LC 40), 15=-13 (LC 39), 17=-3 (LC 37), 23=-2 (LC 34), 25=-2 (LC 32), 26=-17 (LC 31)
Max Grav 14=261 (LC 54), 15=279 (LC 53), 16=287 (LC 52), 17=282 (LC 51), 18=302 (LC 50), 19=321 (LC 49), 20=318 (LC 48), 21=321 (LC 47), 22=302 (LC 46), 23=283 (LC 45), 24=286 (LC 44), 25=285 (LC 43), 26=265 (LC 42)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-26=-257/23, 13-14=-251/44, 1-2=-24/5, 2-3=-24/5, 3-4=-24/5, 4-5=-24/5, 5-6=-24/5, 6-7=-24/5, 7-8=-24/5, 8-9=-24/5, 9-10=-24/5, 10-11=-24/5, 11-12=-24/5, 12-13=-24/5
BOT CHORD 25-26=-5/24, 24-25=-5/24, 23-24=-5/24, 22-23=-5/24, 21-22=-5/24, 20-21=-5/24, 19-20=-5/24, 18-19=-5/24, 17-18=-5/24, 16-17=-5/24, 15-16=-5/24, 14-15=-5/24
WEBS 2-25=-271/12, 3-24=-273/10, 4-23=-270/12, 5-22=-289/0, 6-21=-308/0, 7-20=-305/0, 8-19=-308/0, 9-18=-289/0, 10-17=-270/12, 11-16=-273/9, 12-15=-266/21

NOTES

1) All plates are 1.5x3 (||) MT20 unless otherwise indicated.
2) Gable requires continuous bottom chord bearing.
3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
4) Gable studs spaced at 1-4-0 oc.
5) N/A
6) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
7) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
8) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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 (lb/ft)
Vert: 14-26=-8, 1-5=-80, 5-9=-105, 9-13=-80

May 1,2025

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

Job	Truss	Truss Type	Qty	Ply	Drayton Rev 2
	1FGE4	Floor Supported Gable	1	1	I73101687 Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 10:14:21 Page: 1
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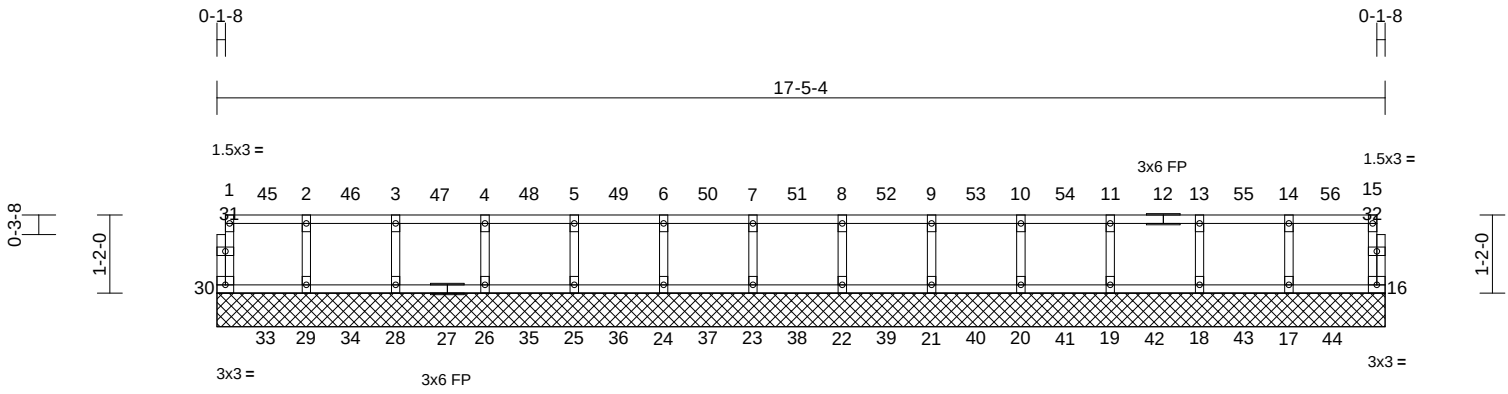


Scale = 1:34.4

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.27	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.28	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	16	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 73 lb	FT = 20%F, 12%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(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 6-0-0 oc bracing.

REACTIONS (size) 16=17-5-4, 17=17-5-4, 18=17-5-4, 19=17-5-4, 20=17-5-4, 21=17-5-4, 22=17-5-4, 23=17-5-4, 24=17-5-4, 25=17-5-4, 26=17-5-4, 28=17-5-4, 29=17-5-4, 30=17-5-4
Max Uplift 16=-13 (LC 43), 17=-6 (LC 14), 18=-6 (LC 44), 19=-6 (LC 43), 20=-6 (LC 42), 21=-6 (LC 41), 22=-6 (LC 40), 23=-6 (LC 39), 24=-6 (LC 38), 25=-8 (LC 34), 26=-6 (LC 36), 28=-5 (LC 35), 29=-6 (LC 6), 30=-17 (LC 33)
Max Grav 16=265 (LC 58), 17=280 (LC 57), 18=280 (LC 56), 19=280 (LC 55), 20=280 (LC 54), 21=280 (LC 53), 22=280 (LC 52), 23=280 (LC 51), 24=280 (LC 50), 25=280 (LC 49), 26=280 (LC 48), 28=280 (LC 47), 29=279 (LC 46), 30=264 (LC 45)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-30=-256/23, 15-16=-257/19, 1-2=-24/4, 2-3=-24/4, 3-4=-24/4, 4-5=-24/4, 5-6=-24/4, 6-7=-24/4, 7-8=-24/4, 8-9=-24/4, 9-10=-24/4, 10-11=-24/4, 11-13=-24/4, 13-14=-24/4, 14-15=-24/4
BOT CHORD 29-30=-4/24, 28-29=-4/24, 26-28=-4/24, 25-26=-4/24, 24-25=-4/24, 23-24=-4/24, 22-23=-4/24, 21-22=-4/24, 20-21=-4/24, 19-20=-4/24, 18-19=-4/24, 17-18=-4/24, 16-17=-4/24
WEBS 2-29=-268/16, 3-28=-269/14, 4-26=-269/14, 5-25=-269/14, 6-24=-269/14, 7-23=-269/14, 8-22=-269/14, 9-21=-269/14, 10-20=-269/14, 11-19=-269/14, 13-18=-269/14, 14-17=-269/16

NOTES
1) All plates are 1.5x3 (||) MT20 unless otherwise indicated.
2) Gable requires continuous bottom chord bearing.
3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
4) Gable studs spaced at 1-4-0 oc.
5) N/A
6) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
7) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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

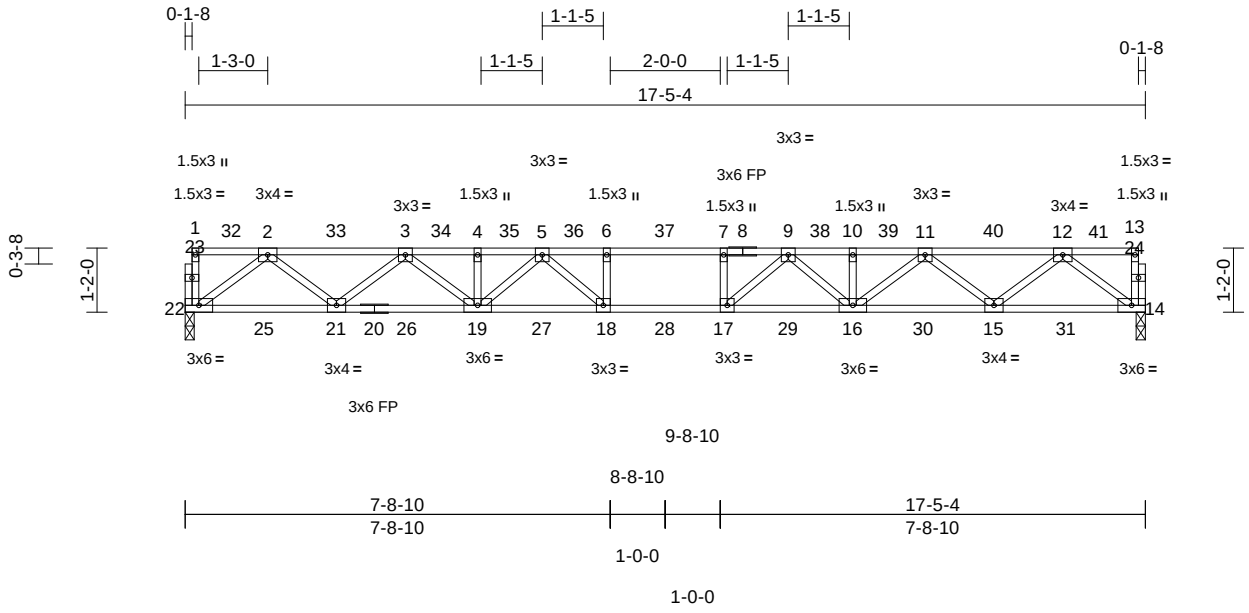
May 1,2025

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

Job	Truss	Truss Type	Qty	Ply	Drayton Rev 2
	1F7	Floor	14	1	I73101688
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 10:14:19 Page: 1

ID:6wC1jJD4q0Gi?G2pZpNn0czoUbJ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:41.8

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.59	Vert(LL)	-0.18	17-18	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.82	Vert(CT)	-0.24	17-18	>855	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.33	Horz(CT)	0.04	14	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 89 lb	FT = 20%F, 12%E

LUMBER

TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat) *Except* 20-14:2x4 SP SS (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 (size) 14=0-2-0, 22=0-2-0
Max Grav 14=626 (LC 1), 22=626 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-22=-258/38, 13-14=-258/38, 1-2=-15/2, 2-3=-1321/0, 3-4=-2185/0, 4-5=-2185/0, 5-6=-2568/0, 6-7=-2568/0, 7-9=-2568/0, 9-10=-2185/0, 10-11=-2185/0, 11-12=-1321/0, 12-13=-15/2
BOT CHORD 21-22=0/786, 19-21=0/1833, 18-19=0/2416, 17-18=0/2568, 16-17=0/2417, 15-16=0/1833, 14-15=0/786
WEBS 6-18=-203/118, 7-17=-203/118, 2-22=-984/0, 2-21=0/697, 3-21=-666/0, 3-19=-27/449, 12-14=-984/0, 12-15=0/696, 11-15=-667/0, 11-16=-26/449, 4-19=-242/73, 10-16=-242/73, 5-19=-328/74, 5-18=-212/413, 9-16=-310/74, 9-17=-212/413

NOTES

1) Unbalanced floor live loads have been considered for this design.
2) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 22, 14.
3) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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

May 1,2025

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

Job	Truss	Truss Type	Qty	Ply	Drayton Rev 2
	1F8	Floor	5	1	I73101689 Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 10:14:19 Page: 1
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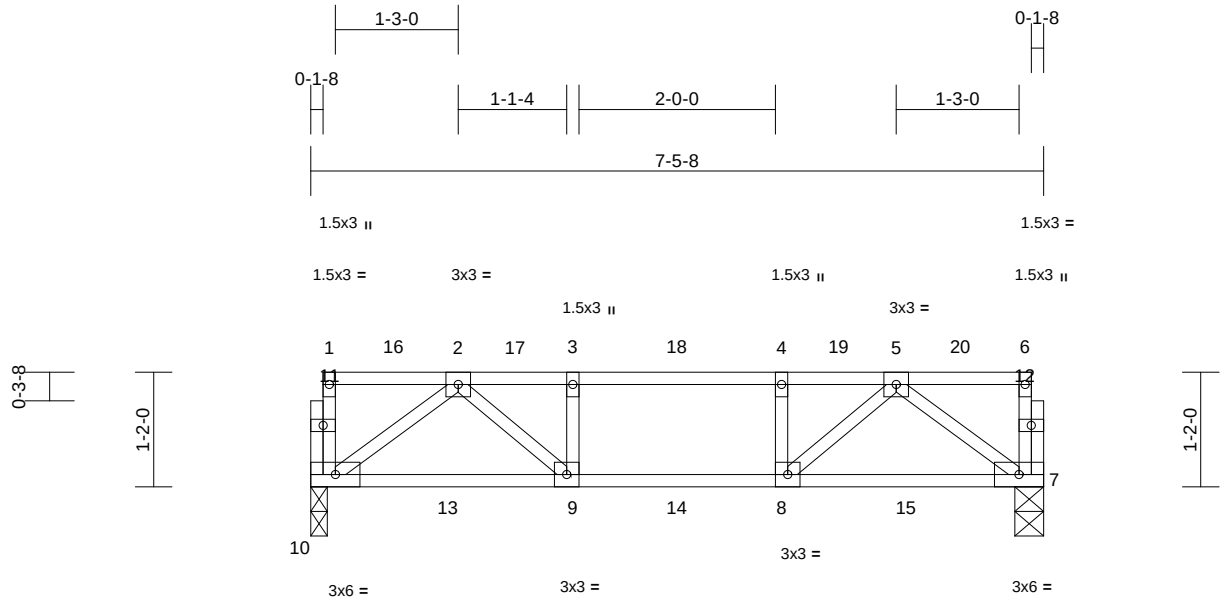

Scale = 1:23.5

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	0.47	Vert(LL)	-0.11	7-8	>783	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.85	Vert(CT)	-0.12	7-8	>740	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.00	7	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 38 lb	FT = 20%F, 12%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(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 (size) 7=0-3-8, 10=0-2-0
Max Grav 7=339 (LC 26), 10=339 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-10=-262/15, 6-7=-262/15, 1-2=-16/1, 2-3=-525/0, 3-4=-525/0, 4-5=-525/0, 5-6=-16/1
BOT CHORD 9-10=0/354, 8-9=0/525, 7-8=0/354
WEBS 2-10=-444/0, 5-7=-444/0, 2-9=-58/341, 5-8=-58/341, 3-9=-207/90, 4-8=-207/90

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 10.
3) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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

May 1,2025

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

Job	Truss	Truss Type	Qty	Ply	Drayton Rev 2
	1FGE5	Floor Supported Gable	1	1	I73101690 Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 10:14:21 Page: 1
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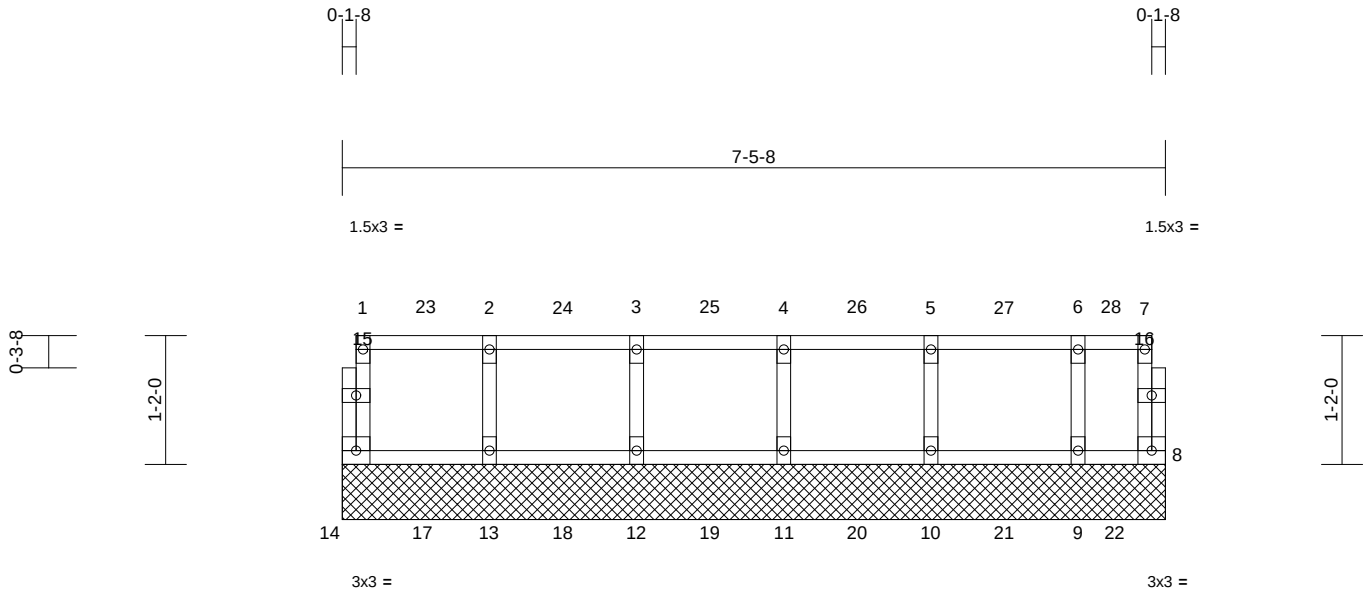

Scale = 1:20.9

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	0.28	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.28	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	8	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 34 lb	FT = 20%F, 12%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(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 6-0-0 oc bracing.

REACTIONS (size) 8=7-5-8, 9=7-5-8, 10=7-5-8, 11=7-5-8, 12=7-5-8, 13=7-5-8, 14=7-5-8
Max Uplift 8=-55 (LC 22), 9=-26 (LC 18), 13=-1 (LC 20), 14=-18 (LC 19)
Max Grav 8=259 (LC 30), 9=277 (LC 29), 10=286 (LC 28), 11=285 (LC 27), 12=285 (LC 26), 13=285 (LC 25), 14=265 (LC 24)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-14=-258/23, 7-8=-247/61, 1-2=-26/6, 2-3=-26/6, 3-4=-26/6, 4-5=-26/6, 5-6=-26/6, 6-7=-26/6
BOT CHORD 13-14=-6/26, 12-13=-6/26, 11-12=-6/26, 10-11=-6/26, 9-10=-6/26, 8-9=-6/26
WEBS 2-13=-272/12, 3-12=-272/10, 4-11=-272/10, 5-10=-273/10, 6-9=-263/26

NOTES
1) All plates are 1.5x3 (||) MT20 unless otherwise indicated.
2) Gable requires continuous bottom chord bearing.
3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
4) Gable studs spaced at 1-4-0 oc.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 18 lb uplift at joint 14, 55 lb uplift at joint 8, 1 lb uplift at joint 13 and 26 lb uplift at joint 9.
6) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
7) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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

May 1,2025

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

Job	Truss	Truss Type	Qty	Ply	Drayton Rev 2
	1FGE6	Floor Supported Gable	1	1	I73101691 Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 10:14:21 Page: 1
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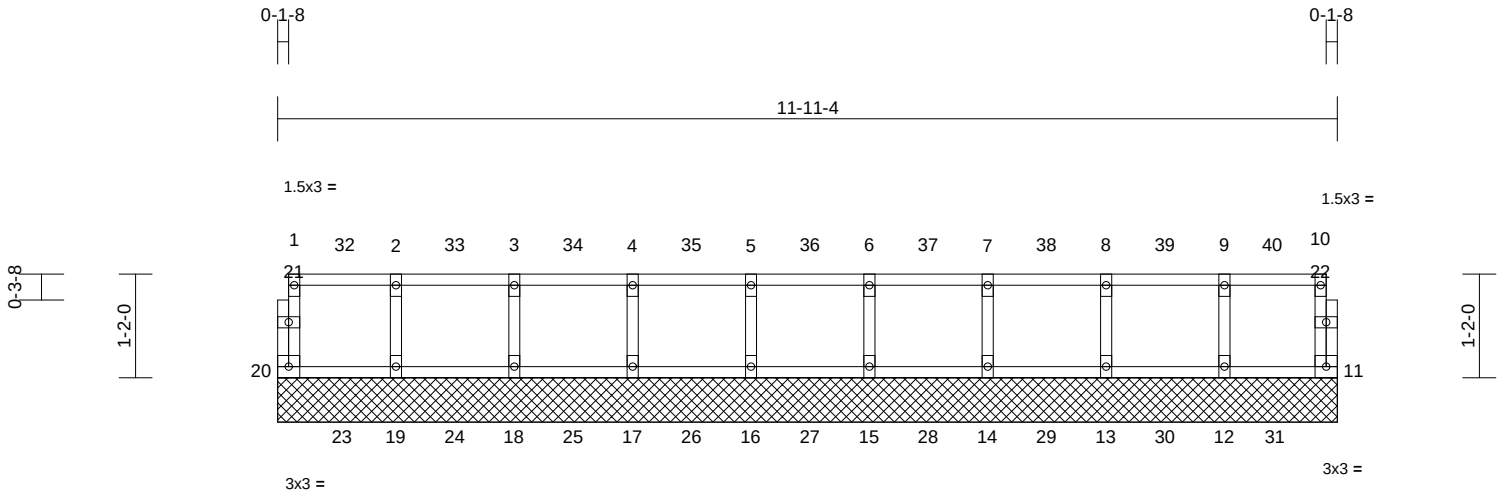

Scale = 1:26

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	0.28	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.28	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	11	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 51 lb	FT = 20%F, 12%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(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 6-0-0 oc bracing.

REACTIONS (size) 11=11-11-4, 12=11-11-4, 13=11-11-4, 14=11-11-4, 15=11-11-4, 16=11-11-4, 17=11-11-4, 18=11-11-4, 19=11-11-4, 20=11-11-4
Max Uplift 11=-18 (LC 31), 12=-4 (LC 30), 19=-2 (LC 26), 20=-16 (LC 25)
Max Grav 11=265 (LC 42), 12=283 (LC 41), 13=285 (LC 40), 14=285 (LC 39), 15=285 (LC 38), 16=285 (LC 37), 17=285 (LC 36), 18=285 (LC 35), 19=284 (LC 34), 20=266 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-20=-257/22, 10-11=-256/25, 1-2=-22/4, 2-3=-22/4, 3-4=-22/4, 4-5=-22/4, 5-6=-22/4, 6-7=-22/4, 7-8=-22/4, 8-9=-22/4, 9-10=-22/4
BOT CHORD 19-20=-4/22, 18-19=-4/22, 17-18=-4/22, 16-17=-4/22, 15-16=-4/22, 14-15=-4/22, 13-14=-4/22, 12-13=-4/22, 11-12=-4/22
WEBS 2-19=-271/12, 3-18=-272/10, 4-17=-272/10, 5-16=-272/10, 6-15=-272/10, 7-14=-272/10, 8-13=-272/10, 9-12=-270/14

NOTES
1) All plates are 1.5x3 (||) MT20 unless otherwise indicated.
2) Gable requires continuous bottom chord bearing.
3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
4) Gable studs spaced at 1-4-0 oc.
5) N/A
6) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
7) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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

May 1,2025

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

Job	Truss	Truss Type	Qty	Ply	Drayton Rev 2
	1FGE7	Floor Supported Gable	1	1	I73101692
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 10:14:22 Page: 1

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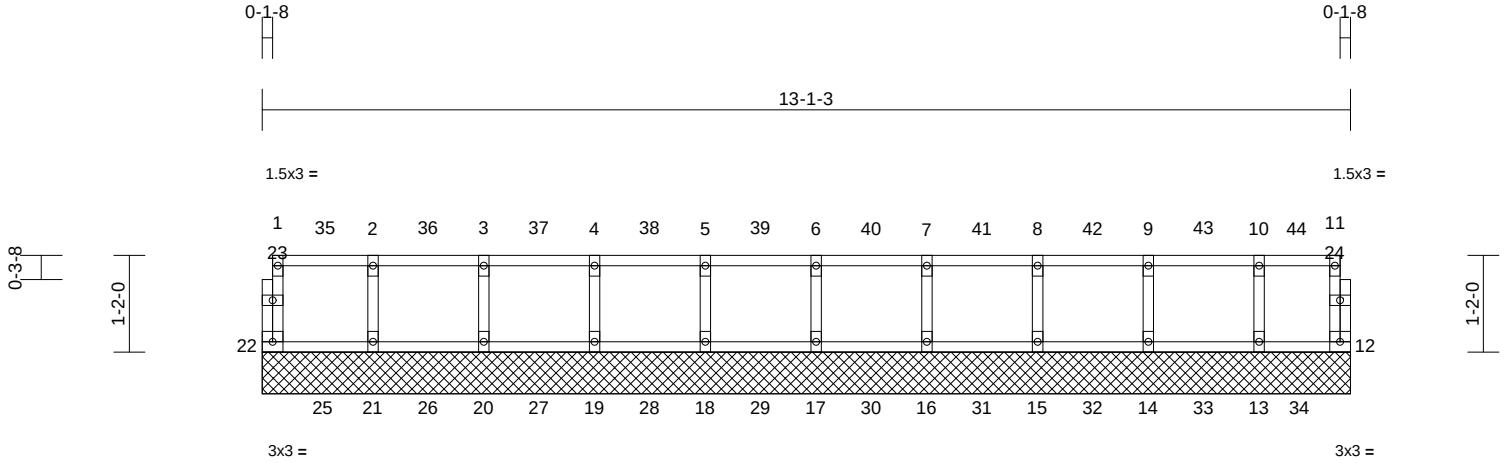

Scale = 1:27.7

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	0.28	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.28	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	12	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 56 lb	FT = 20%F, 12%E

LUMBER

TOP CHORD	2x4 SP No.2(flat)
BOT CHORD	2x4 SP No.2(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 6-0-0 oc bracing.

REACTIONS (size) 12=13-1-3, 13=13-1-3, 14=13-1-3, 15=13-1-3, 16=13-1-3, 17=13-1-3, 18=13-1-3, 19=13-1-3, 20=13-1-3, 21=13-1-3, 22=13-1-3

Max Uplift 12=-28 (LC 34), 13=-8 (LC 33), 21=-2 (LC 28), 22=-17 (LC 27)

Max Grav 12=263 (LC 46), 13=281 (LC 45), 14=286 (LC 44), 15=285 (LC 43), 16=285 (LC 42), 17=285 (LC 41), 18=285 (LC 40), 19=285 (LC 39), 20=285 (LC 38), 21=285 (LC 37), 22=265 (LC 36)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-22=-257/22, 11-12=-254/34, 1-2=-23/5, 2-3=-23/5, 3-4=-23/5, 4-5=-23/5, 5-6=-23/5, 6-7=-23/5, 7-8=-23/5, 8-9=-23/5, 9-10=-23/5, 10-11=-23/5
BOT CHORD	21-22=-5/23, 20-21=-5/23, 19-20=-5/23, 18-19=-5/23, 17-18=-5/23, 16-17=-5/23, 15-16=-5/23, 14-15=-5/23, 13-14=-5/23, 12-13=-5/23
WEBS	2-21=-271/12, 3-20=-272/10, 4-19=-272/10, 5-18=-272/10, 6-17=-272/10, 7-16=-272/10, 8-15=-272/10, 9-14=-273/10, 10-13=-268/17

NOTES

1) All plates are 1.5x3 (||) MT20 unless otherwise indicated.
2) Gable requires continuous bottom chord bearing.
3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
4) Gable studs spaced at 1-4-0 oc.
5) N/A
6) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
7) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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

May 1,2025

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

Job	Truss	Truss Type	Qty	Ply	Drayton Rev 2
	1F9	Floor	7	1	I73101693
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 10:14:19 Page: 1

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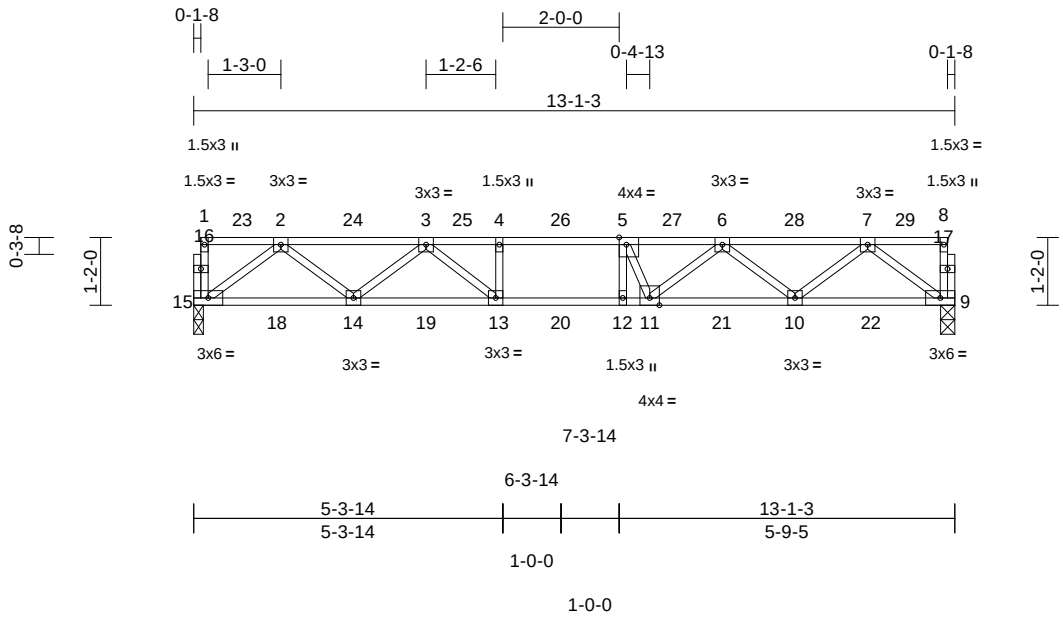

Scale = 1:39.7

Plate Offsets (X, Y): [5:0-1-8,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	0.59	Vert(LL)	-0.14	13-14	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.90	Vert(CT)	-0.16	13-14	>951	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.03	9	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 66 lb	FT = 20%F, 12%E

LUMBER

TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(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 (size) 9=0-2-15, 15=0-2-0
Max Grav 9=560 (LC 1), 15=560 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-15=-259/36, 8-9=-259/37, 1-2=-15/2, 2-3=-1102/0, 3-4=-1707/0, 4-5=-1707/0, 5-6=-1664/0, 6-7=-1106/0, 7-8=-16/2
BOT CHORD 14-15=0/693, 13-14=0/1491, 12-13=0/1707, 11-12=0/1707, 10-11=0/1493, 9-10=0/692
WEBS 4-13=-207/83, 5-12=-342/252, 2-15=-867/0, 2-14=0/533, 3-14=-506/0, 3-13=-140/429, 7-9=-866/0, 7-10=0/539, 6-10=-504/0, 6-11=-97/322, 5-11=-338/413

NOTES

1) Unbalanced floor live loads have been considered for this design.
2) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 15, 9.
3) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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

May 1,2025

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

Job	Truss	Truss Type	Qty	Ply	Drayton Rev 2
	1F10	Floor	1	1	I73101694
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 10:14:20 Page: 1
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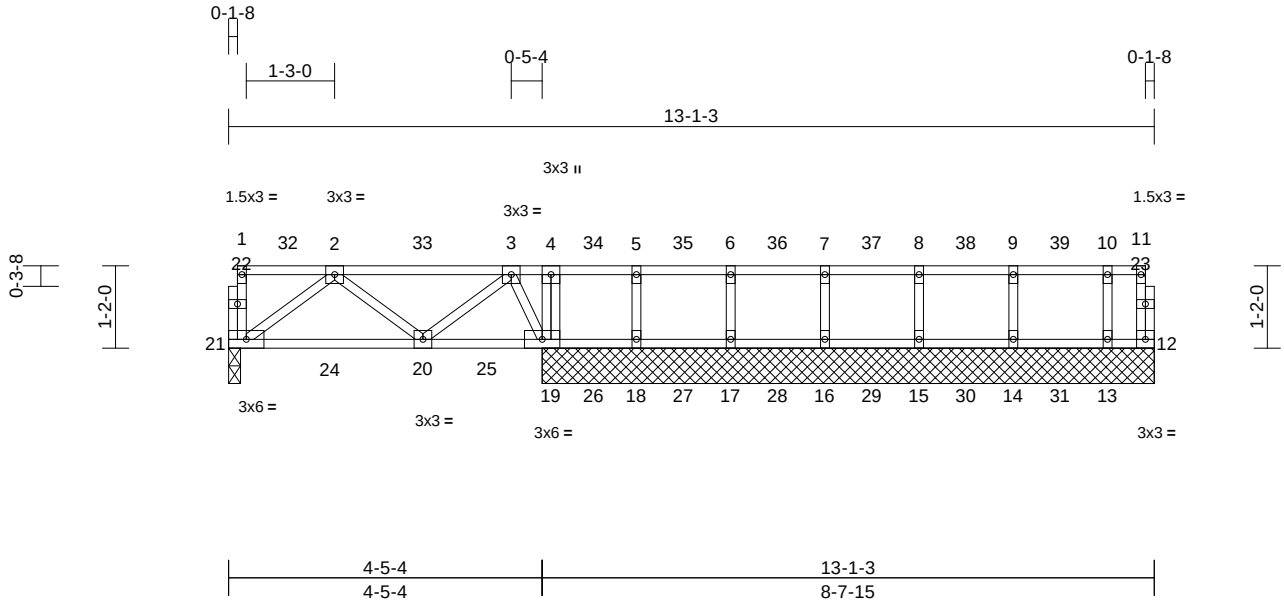

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Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.53	Vert(LL)	-0.08	20-21	>679	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.75	Vert(CT)	-0.08	20-21	>639	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	19	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 63 lb	FT = 20%F, 12%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(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 6-0-0 oc bracing, Except:
10-0-0 oc bracing: 20-21,19-20.

REACTIONS (size) 12=8-7-15, 13=8-7-15, 14=8-7-15, 15=8-7-15, 16=8-7-15, 17=8-7-15, 18=8-7-15, 19=8-7-15, 21=0-2-0
Max Uplift 12=-76 (LC 16), 13=-20 (LC 15), 15=-1 (LC 34), 18=-31 (LC 31)
Max Grav 12=254 (LC 48), 13=280 (LC 38), 14=286 (LC 46), 15=285 (LC 45), 16=285 (LC 44), 17=285 (LC 43), 18=284 (LC 42), 19=330 (LC 31), 21=305 (LC 39)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-21=-259/34, 11-12=-251/77, 1-2=-16/2, 2-3=-308/0, 3-4=-15/5, 4-5=-15/5, 5-6=-15/5, 6-7=-15/5, 7-8=-15/5, 8-9=-15/5, 9-10=-15/5, 10-11=-15/5
BOT CHORD 20-21=0/277, 19-20=0/189, 18-19=-5/15, 17-18=-5/15, 16-17=-5/15, 15-16=-5/15, 14-15=-5/15, 13-14=-5/15, 12-13=-5/15
WEBS 4-19=-251/155, 2-21=-347/0, 2-20=-119/162, 3-20=-19/262, 3-19=-397/0, 5-18=-272/12, 6-17=-272/10, 7-16=-272/10, 8-15=-272/10, 9-14=-273/10, 10-13=-264/29

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 1.5x3 (||) MT20 unless otherwise indicated.
3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
4) Gable studs spaced at 1-4-0 oc.
5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 21.
6) N/A
7) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
8) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.
9) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

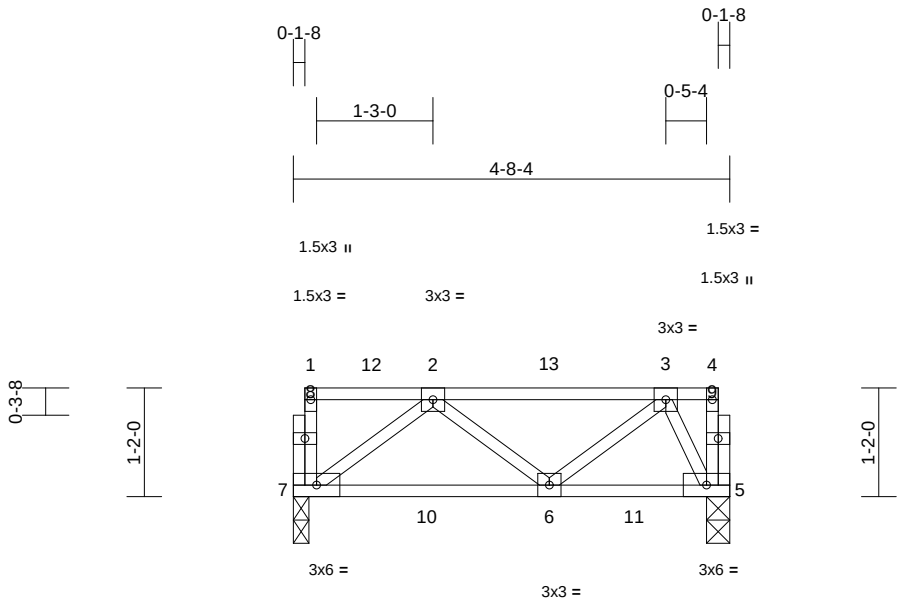
May 1,2025

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

Job	Truss	Truss Type	Qty	Ply	Drayton Rev 2
	1F11	Floor	3	1	I73101695
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 10:14:20 ID:cedyJDvKYDECeO0UZRMr?RzoUXr-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:24.7

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	0.53	Vert(LL)	-0.08	6-7	>659	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.76	Vert(CT)	-0.09	6-7	>622	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	5	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 27 lb	FT = 20%F, 12%E

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied or 4-8-4 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 5=0-3-0, 7=0-2-0
Max Grav 5=305 (LC 16), 7=305 (LC 14)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-7=-259/34, 4-5=-242/161, 1-2=-16/2, 2-3=-313/0, 3-4=-14/10
BOT CHORD	6-7=0/279, 5-6=0/184
WEBS	2-7=-349/0, 2-6=-117/165, 3-6=-19/263, 3-5=-407/0

NOTES

1) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 7, 5.
2) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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

May 1,2025

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

Job	Truss	Truss Type	Qty	Ply	Drayton Rev 2
	1FGE8	Floor Supported Gable	1	1	I73101696
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 10:14:22 Page: 1
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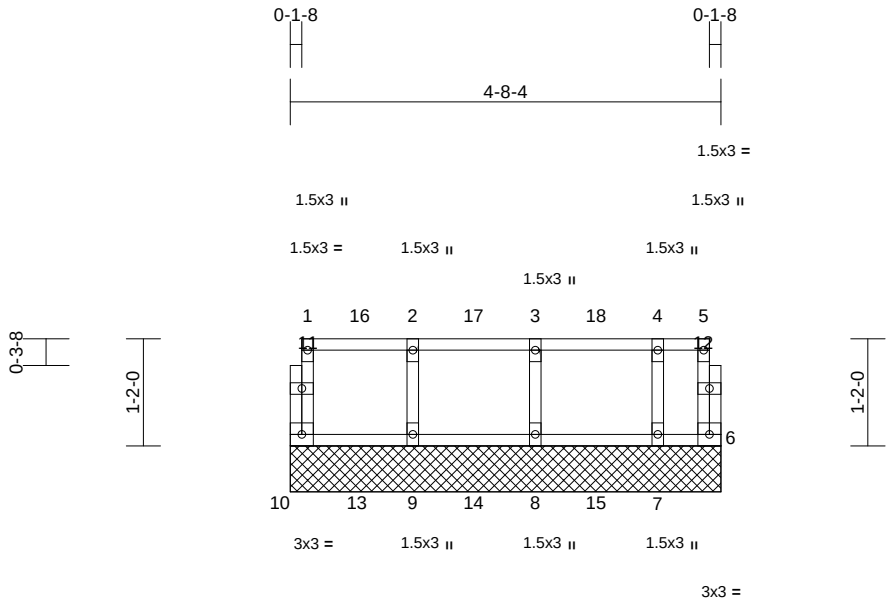

Scale = 1:25.1

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	0.27	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.28	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	6	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 23 lb	FT = 20%F, 12%E

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-8-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 6=4-8-4, 7=4-8-4, 8=4-8-4, 9=4-8-4, 10=4-8-4
Max Uplift 6=-67 (LC 16), 7=-28 (LC 14), 10=-17 (LC 15)
Max Grav 6=257 (LC 22), 7=276 (LC 17), 8=286 (LC 20), 9=285 (LC 19), 10=265 (LC 18)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-10=-258/22, 5-6=-244/74, 1-2=-28/5, 2-3=-28/5, 3-4=-28/5, 4-5=-28/5
BOT CHORD 9-10=-5/28, 8-9=-5/28, 7-8=-5/28, 6-7=-5/28
WEBS 2-9=-271/7, 3-8=-273/1, 4-7=-260/23

NOTES
1) Gable requires continuous bottom chord bearing.
2) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
3) Gable studs spaced at 1-4-0 oc.
4) N/A
5) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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

May 1,2025

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

Job	Truss	Truss Type	Qty	Ply	Drayton Rev 2
	2FGE1	Floor Supported Gable	1	1	I73101702 Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 10:14:30 Page: 1
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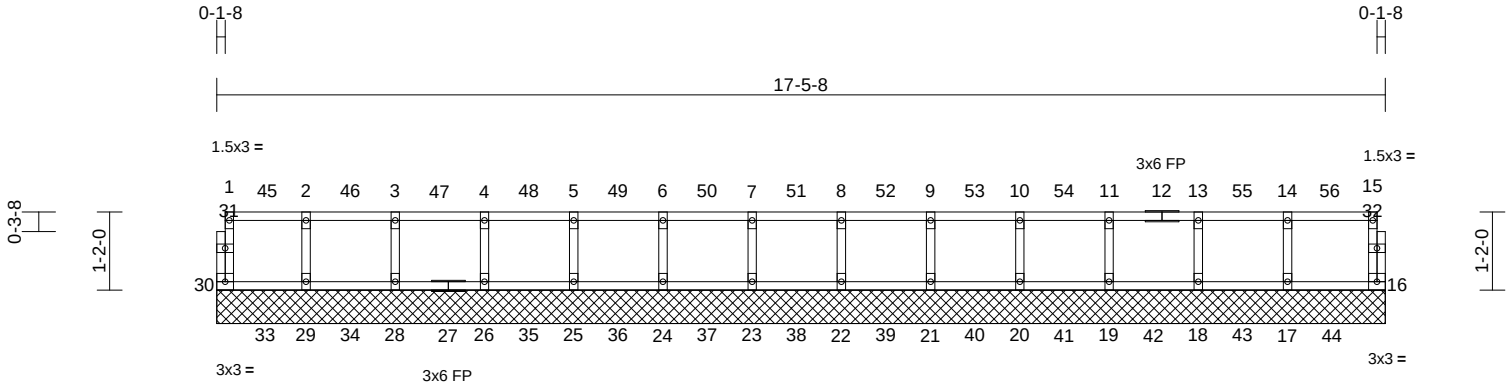

Scale = 1:34.4

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	0.28	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.28	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	16	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 73 lb	FT = 20%F, 12%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(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 6-0-0 oc bracing.

REACTIONS (size) 16=17-5-8, 17=17-5-8, 18=17-5-8, 19=17-5-8, 20=17-5-8, 21=17-5-8, 22=17-5-8, 23=17-5-8, 24=17-5-8, 25=17-5-8, 26=17-5-8, 28=17-5-8, 29=17-5-8, 30=17-5-8
Max Uplift 16=-10 (LC 43), 18=-2 (LC 44), 25=-2 (LC 34), 29=-1 (LC 6), 30=-15 (LC 33)
Max Grav 16=267 (LC 58), 17=286 (LC 57), 18=285 (LC 56), 19=285 (LC 55), 20=285 (LC 54), 21=285 (LC 53), 22=285 (LC 52), 23=285 (LC 51), 24=285 (LC 50), 25=285 (LC 49), 26=285 (LC 48), 28=285 (LC 47), 29=284 (LC 46), 30=266 (LC 45)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-30=-257/21, 15-16=-259/17, 1-2=-25/3, 2-3=-25/3, 3-4=-25/3, 4-5=-25/3, 5-6=-25/3, 6-7=-25/3, 7-8=-25/3, 8-9=-25/3, 9-10=-25/3, 10-11=-25/3, 11-13=-25/3, 13-14=-25/3, 14-15=-25/3
BOT CHORD 29-30=-3/25, 28-29=-3/25, 26-28=-3/25, 25-26=-3/25, 24-25=-3/25, 23-24=-3/25, 22-23=-3/25, 21-22=-3/25, 20-21=-3/25, 19-20=-3/25, 18-19=-3/25, 17-18=-3/25, 16-17=-3/25
WEBS 2-29=-271/12, 3-28=-272/10, 4-26=-272/10, 5-25=-272/10, 6-24=-272/10, 7-23=-272/10, 8-22=-272/10, 9-21=-272/10, 10-20=-272/10, 11-19=-272/10, 13-18=-272/10, 14-17=-273/12

NOTES
1) All plates are 1.5x3 (||) MT20 unless otherwise indicated.
2) Gable requires continuous bottom chord bearing.
3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
4) Gable studs spaced at 1-4-0 oc.
5) N/A
6) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
7) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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

May 1,2025

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

Job	Truss	Truss Type	Qty	Ply	Drayton Rev 2
	2F1	Floor	7	1	I73101703 Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 10:14:22 Page: 1

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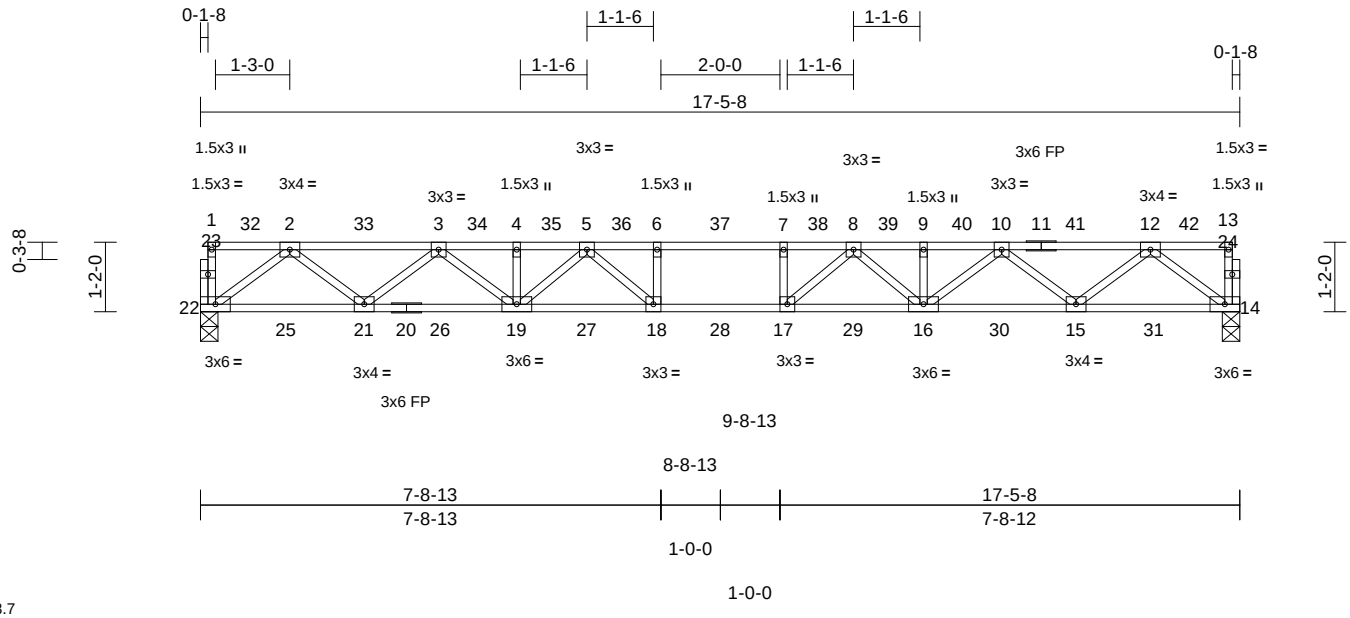

Scale = 1:38.7

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	0.60	Vert(LL)	-0.21	17-18	>977	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.83	Vert(CT)	-0.29	17-18	>710	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.05	14	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 89 lb	FT = 20%F, 12%E

LUMBER

TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat) *Except* 20-14:2x4 SP SS (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 (size) 14=0-3-8, 22=0-3-8
Max Grav 14=752 (LC 1), 22=752 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-22=-259/37, 13-14=-259/37, 1-2=-16/2, 2-3=-1587/0, 3-4=-2625/0, 4-5=-2625/0, 5-6=-3088/0, 6-7=-3088/0, 7-8=-3088/0, 8-9=-2625/0, 9-10=-2625/0, 10-12=-1586/0, 12-13=-16/2
BOT CHORD 21-22=0/943, 19-21=0/2202, 18-19=0/2906, 17-18=0/3088, 16-17=0/2905, 15-16=0/2202, 14-15=0/943
WEBS 6-18=-233/113, 7-17=-234/113, 2-22=-1181/0, 2-21=0/837, 3-21=-801/0, 3-19=0/540, 12-14=-1182/0, 12-15=0/837, 10-15=-801/0, 10-16=0/540, 4-19=-244/71, 9-16=-244/71, 5-19=-375/57, 5-18=-201/496, 8-16=-374/57, 8-17=-200/497

LOAD CASE(S) Standard

NOTES

1) Unbalanced floor live loads have been considered for this design.
2) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.

May 1,2025

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

Job	Truss	Truss Type	Qty	Ply	Drayton Rev 2
	2F2	Floor	3	1	I73101704
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 10:14:23 Page: 1

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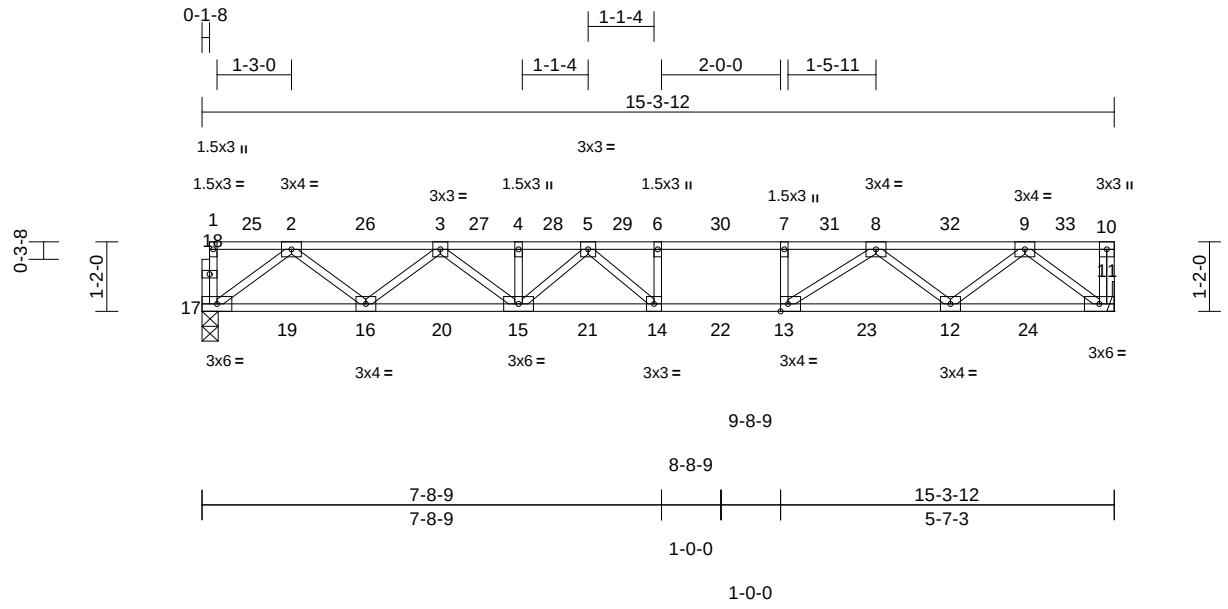

Scale = 1:38.7

Plate Offsets (X, Y): [13:0-1-8,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	0.60	Vert(LL)	-0.18	14-15	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.47	Vert(CT)	-0.24	14-15	>749	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.33	Horz(CT)	0.03	11	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 78 lb	FT = 20%F, 12%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP SS(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 (size) 11= Mechanical, 17=0-3-4
Max Grav 11=662 (LC 1), 17=657 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-17=-259/37, 10-11=-258/35, 1-2=-16/2, 2-3=-1347/0, 3-4=-2166/0, 4-5=-2166/0, 5-6=-2309/0, 6-7=-2309/0, 7-8=-2309/0, 8-9=-1336/0, 9-10=0/0
BOT CHORD 16-17=0/818, 15-16=0/1857, 14-15=0/2326, 13-14=0/2309, 12-13=0/1853, 11-12=0/819
WEBS 6-14=-160/158, 7-13=-253/49, 2-17=-1024/0, 2-16=0/689, 3-16=-664/0, 3-15=-48/397, 9-11=-1027/0, 9-12=0/673, 8-12=-674/0, 4-15=-237/77, 5-15=-275/118, 5-14=-311/277, 8-13=-44/677

LOAD CASE(S) Standard

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Refer to girder(s) for truss to truss connections.
3) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.

May 1,2025

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

Job	Truss	Truss Type	Qty	Ply	Drayton Rev 2
	2F3	Floor	4	1	I73101705
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 10:14:24 Page: 1

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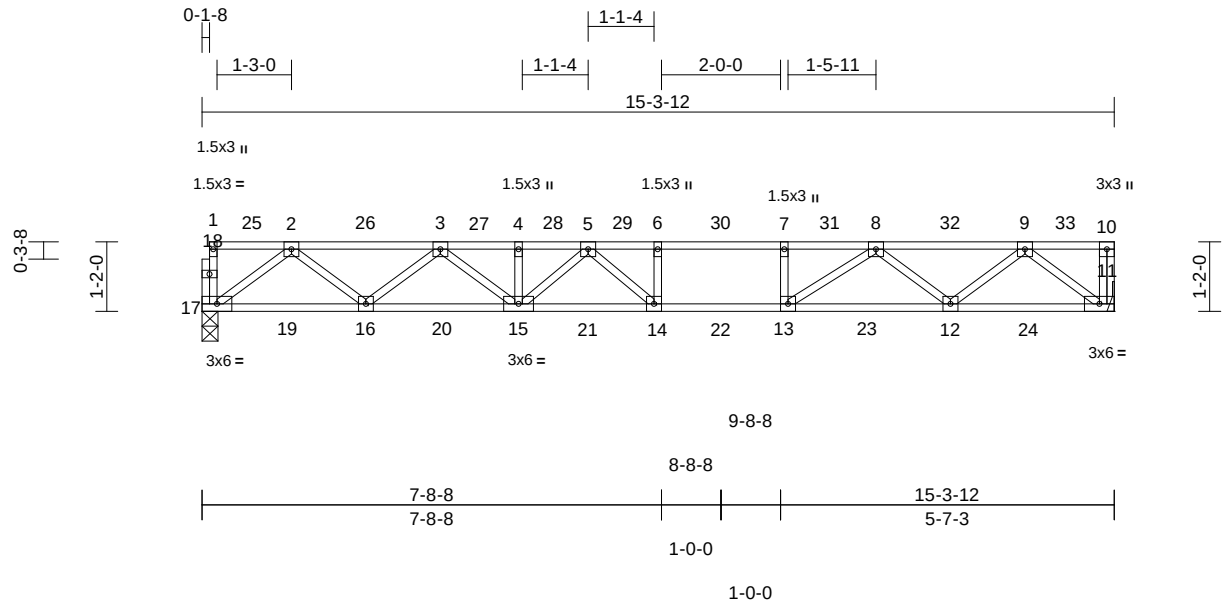

Scale = 1:38.7

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.59	Vert(LL)	-0.17	14-15	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.45	Vert(CT)	-0.22	14-15	>812	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.03	11	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 78 lb	FT = 20%F, 12%E

LUMBER

TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP SS(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 (size) 11= Mechanical, 17=0-3-3
Max Grav 11=552 (LC 1), 17=548 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-17=-258/38, 10-11=-258/36, 1-2=-15/2, 2-3=-1123/0, 3-4=-1806/0, 4-5=-1806/0, 5-6=-1925/0, 6-7=-1925/0, 7-8=-1925/0, 8-9=-1113/0, 9-10=0/0
BOT CHORD 16-17=0/682, 15-16=0/1548, 14-15=0/1939, 13-14=0/1925, 12-13=0/1545, 11-12=0/683
WEBS 6-14=-160/158, 7-13=-220/58, 2-17=-854/0, 2-16=0/574, 3-16=-554/0, 3-15=-67/378, 9-11=-856/0, 9-12=0/561, 8-12=-562/0, 4-15=-236/78, 8-13=-70/564, 5-15=-266/126, 5-14=-310/255

LOAD CASE(S) Standard

NOTES

1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x3 (=) MT20 unless otherwise indicated.
3) Refer to girder(s) for truss to truss connections.
4) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.

May 1,2025

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

Job	Truss	Truss Type	Qty	Ply	Drayton Rev 2
	2F4	Floor	4	1	I73101706 Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 10:14:24 Page: 1

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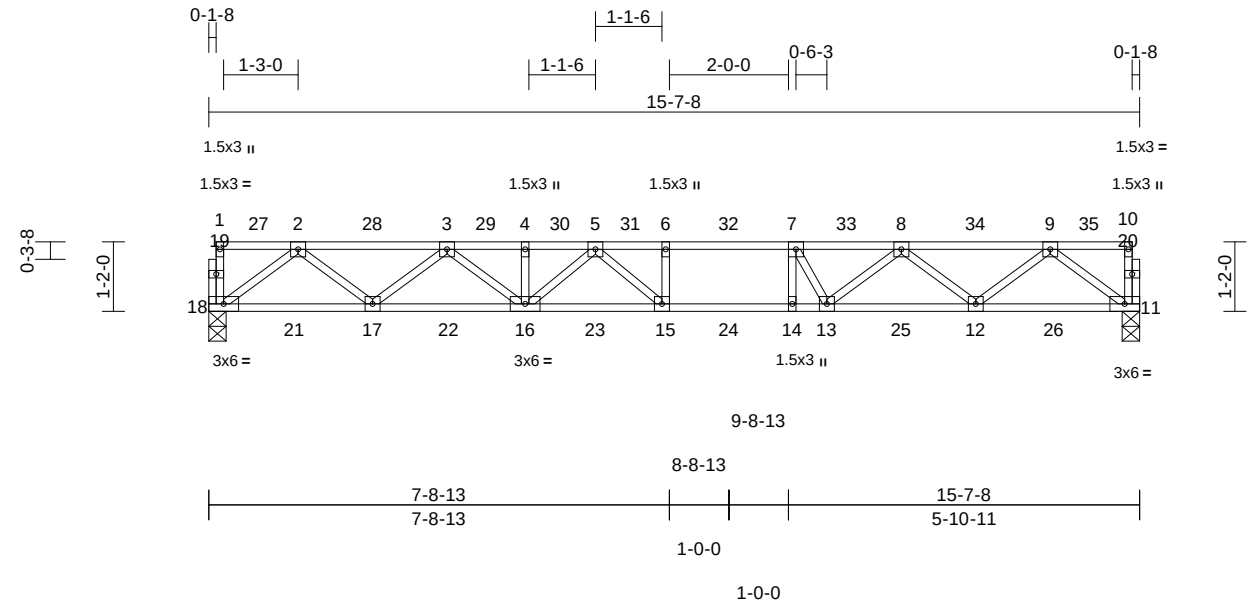

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Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.71	Vert(LL)	-0.16	15-16	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.52	Vert(CT)	-0.23	15-16	>810	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.30	Horz(CT)	0.03	11	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 79 lb	FT = 20%F, 12%E

LUMBER

TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP SS(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 (size) 11=0-3-8, 18=0-3-8
Max Grav 11=571 (LC 1), 18=613 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-18=-262/34, 10-11=-257/40, 1-2=-16/2, 2-3=-1242/0, 3-4=-1970/0, 4-5=-1970/0, 5-6=-2098/0, 6-7=-2098/0, 7-8=-1909/0, 8-9=-1180/0, 9-10=-15/2
BOT CHORD 17-18=0/762, 16-17=0/1706, 15-16=0/2103, 14-15=0/2098, 13-14=0/2098, 12-13=0/1618, 11-12=0/716
WEBS 6-15=-163/136, 7-14=-202/325, 2-18=-954/0, 2-17=0/625, 3-17=-604/0, 3-16=-71/376, 9-11=-897/0, 9-12=0/604, 8-12=-570/0, 8-13=-13/432, 7-13=-519/226, 4-16=-242/73, 5-15=-308/229, 5-16=-253/140

NOTES

1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x3 (=) MT20 unless otherwise indicated.
3) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
4) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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 (lb/ft)
Vert: 11-18=-7, 1-4=-79, 4-10=-67

May 1,2025

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

Job	Truss	Truss Type	Qty	Ply	Drayton Rev 2
	2F5	Floor	7	1	I73101707
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 10:14:25 Page: 1
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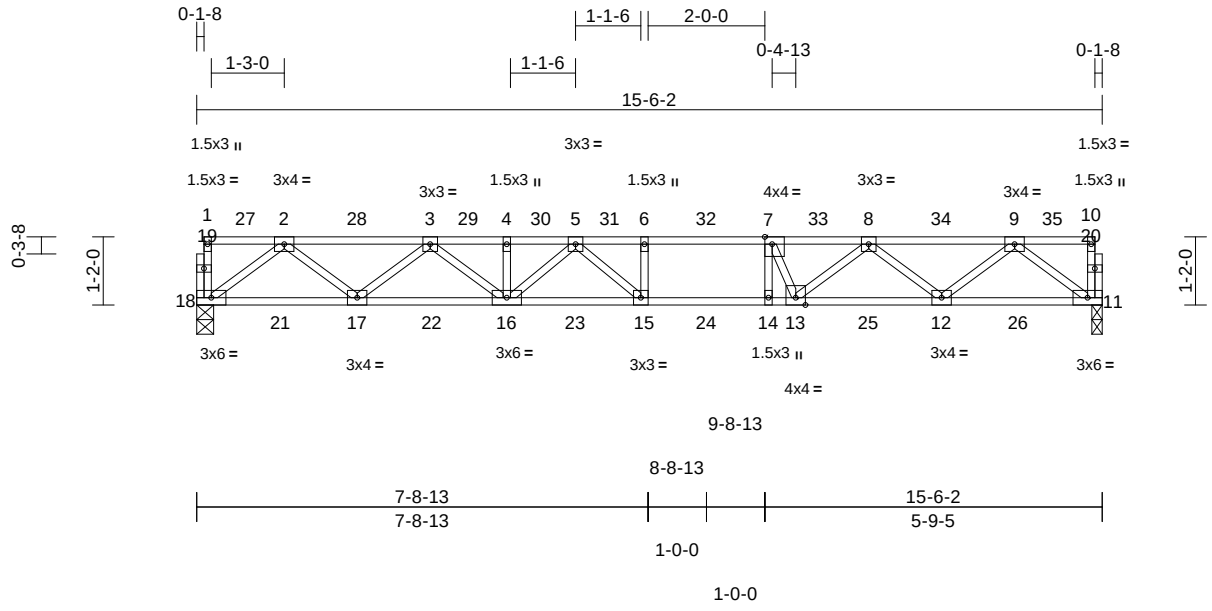

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Plate Offsets (X, Y): [7:0-1-8,Edge]

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	0.60	Vert(LL)	-0.17	15-16	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.47	Vert(CT)	-0.23	15-16	>787	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.34	Horz(CT)	0.03	11	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 79 lb	FT = 20%F, 12%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP SS(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 (size) 11=0-2-2, 18=0-3-8
Max Grav 11=669 (LC 1), 18=680 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-18=-260/36, 10-11=-258/39, 1-2=-16/2, 2-3=-1392/0, 3-4=-2236/0, 4-5=-2236/0, 5-6=-2408/0, 6-7=-2408/0, 7-8=-2221/0, 8-9=-1377/0, 9-10=-15/2
BOT CHORD 17-18=0/846, 16-17=0/1919, 15-16=0/2403, 14-15=0/2408, 13-14=0/2408, 12-13=0/1884, 11-12=0/838
WEBS 6-15=-170/128, 7-14=-256/360, 2-18=-1059/0, 2-17=0/711, 3-17=-685/0, 3-16=-46/406, 9-11=-1050/0, 9-12=0/701, 8-12=-661/0, 8-13=-14/509, 7-13=-628/276, 4-16=-242/73, 5-16=-273/120, 5-15=-289/280

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 11.
3) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
4) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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 (lb/ft)
Vert: 11-18=-8, 1-4=-83, 4-10=-80

May 1,2025

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

Job	Truss	Truss Type	Qty	Ply	Drayton Rev 2
	2FGE2	Floor Supported Gable	1	1	I73101708 Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 10:14:30 Page: 1
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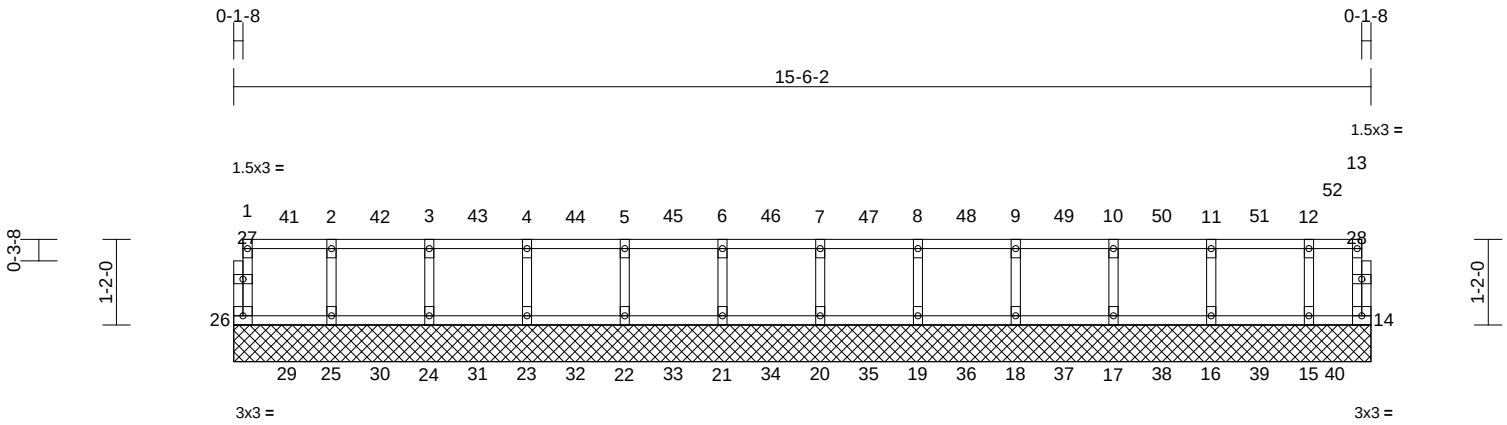

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Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.28	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.28	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	14	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 66 lb	FT = 20%F, 12%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(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 6-0-0 oc bracing.

REACTIONS (size) 14=15-6-2, 15=15-6-2, 16=15-6-2, 17=15-6-2, 18=15-6-2, 19=15-6-2, 20=15-6-2, 21=15-6-2, 22=15-6-2, 23=15-6-2, 24=15-6-2, 25=15-6-2, 26=15-6-2
Max Uplift 14=-48 (LC 40), 15=-19 (LC 30), 17=-1 (LC 37), 25=-1 (LC 32), 26=-17 (LC 31)
Max Grav 14=259 (LC 54), 15=278 (LC 53), 16=286 (LC 52), 17=285 (LC 51), 18=285 (LC 50), 19=285 (LC 49), 20=285 (LC 48), 21=285 (LC 47), 22=285 (LC 46), 23=285 (LC 45), 24=285 (LC 44), 25=285 (LC 43), 26=265 (LC 42)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-26=-257/23, 13-14=-249/54, 1-2=-25/6, 2-3=-25/6, 3-4=-25/6, 4-5=-25/6, 5-6=-25/6, 6-7=-25/6, 7-8=-25/6, 8-9=-25/6, 9-10=-25/6, 10-11=-25/6, 11-12=-25/6, 12-13=-25/6
BOT CHORD 25-26=-6/25, 24-25=-6/25, 23-24=-6/25, 22-23=-6/25, 21-22=-6/25, 20-21=-6/25, 19-20=-6/25, 18-19=-6/25, 17-18=-6/25, 16-17=-6/25, 15-16=-6/25, 14-15=-6/25
WEBS 2-25=-272/12, 3-24=-272/10, 4-23=-272/10, 5-22=-272/10, 6-21=-272/10, 7-20=-272/10, 8-19=-272/10, 9-18=-272/10, 10-17=-272/10, 11-16=-273/10, 12-15=-264/25

NOTES
1) All plates are 1.5x3 (||) MT20 unless otherwise indicated.
2) Gable requires continuous bottom chord bearing.
3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
4) Gable studs spaced at 1-4-0 oc.
5) N/A
6) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
7) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.

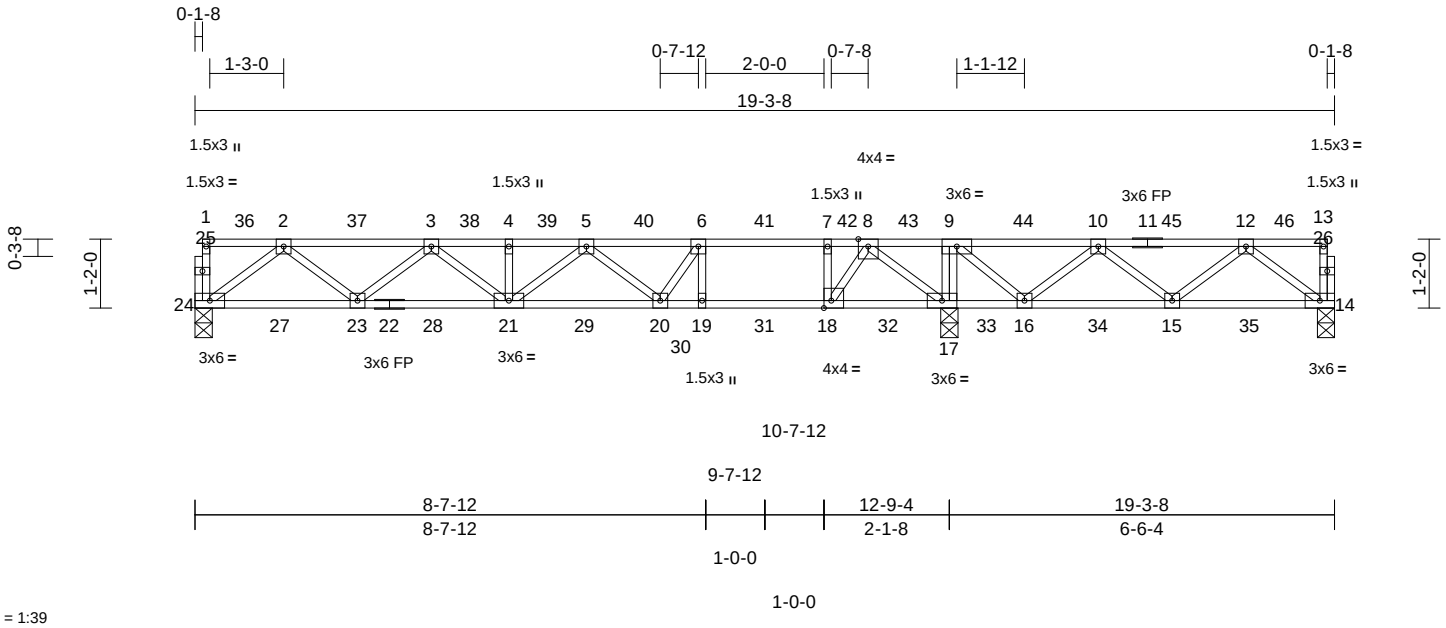
LOAD CASE(S) Standard

May 1,2025

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

Job	Truss	Truss Type	Qty	Ply	Drayton Rev 2
	2F6	Floor	2	1	I73101709
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 10:14:25 Page: 1
ID:4LVn?yG_PsrCw2rZLeA73syFIoZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:39

Plate Offsets (X, Y): [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	0.90	Vert(LL)	-0.19	19-20	>812	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.81	Vert(CT)	-0.26	19-20	>592	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.02	14	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 100 lb	FT = 20%F, 12%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat) *Except* 22-14:2x4 SP SS (flat)
WEBS 2x4 SP No.3(flat)
OTHERS 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 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 16-17,15-16.

REACTIONS (size) 14=0-3-8, 17=0-3-8, 24=0-3-8
Max Grav 14=325 (LC 54), 17=853 (LC 1), 24=552 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-24=-259/37, 13-14=-259/41, 1-2=-16/2, 2-3=-1087/0, 3-4=-1622/0, 4-5=-1622/0, 5-6=-1555/0, 6-7=-1234/0, 7-8=-1234/0, 8-9=-184/306, 9-10=-274/174, 10-12=-453/14, 12-13=-16/2
BOT CHORD 23-24=0/681, 21-23=0/1462, 20-21=0/1742, 19-20=0/1234, 18-19=0/1234, 17-18=0/722, 16-17=-306/184, 15-16=-70/464, 14-15=0/329
WEBS 6-19=-455/0, 7-18=-530/0, 9-17=-430/0, 2-24=-852/0, 2-23=0/529, 3-23=-488/0, 3-21=-120/316, 4-21=-233/79, 5-21=-337/123, 5-20=-297/58, 6-20=0/646, 8-17=-917/0, 8-18=0/960, 12-14=-412/0, 12-15=-57/253, 10-15=-139/175, 10-16=-317/2, 9-16=0/460

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x3 (=) MT20 unless otherwise indicated.
3) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.

LOAD CASE(S) Standard

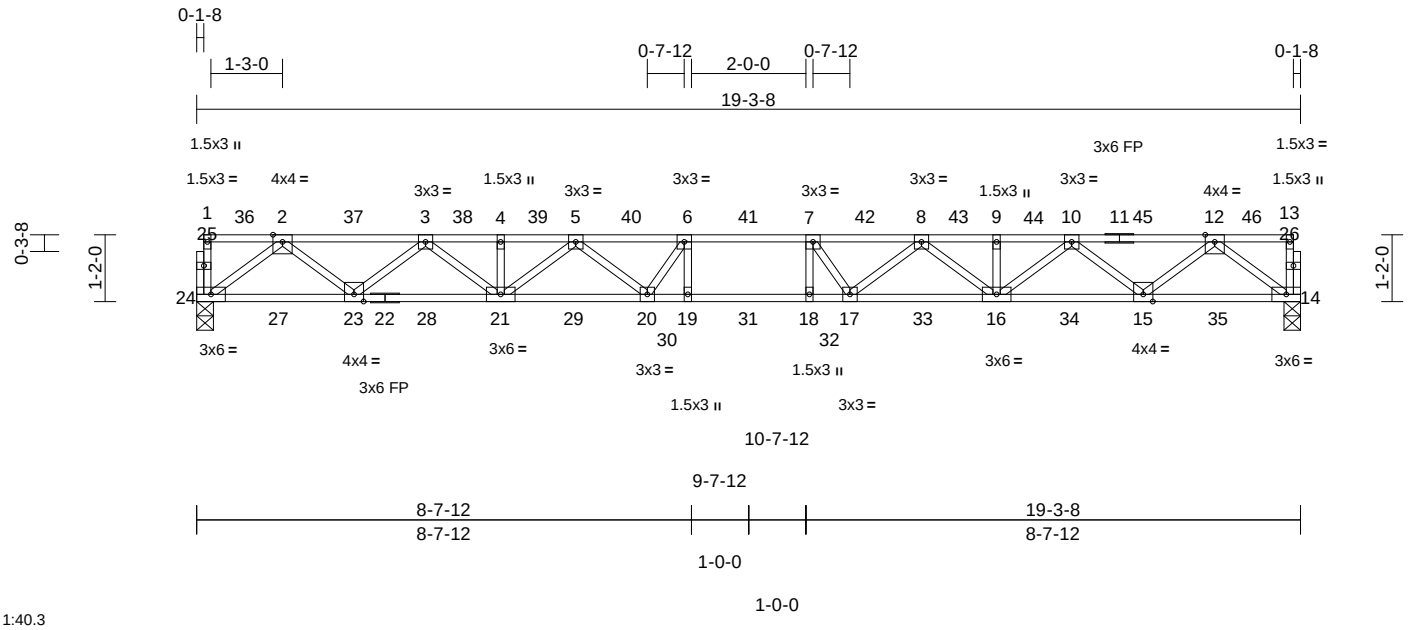
May 1,2025

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

Job	Truss	Truss Type	Qty	Ply	Drayton Rev 2
	2F7	Floor	5	1	I73101710
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 10:14:25 Page: 1

ID:4LVn?yG_PsrCw2rZLeA73syFIoZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:40.3

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	0.62	Vert(LL)	-0.30	18-19	>754	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.50	Vert(CT)	-0.42	18-19	>547	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.06	14	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 98 lb	FT = 20%F, 12%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP DSS(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 (size) 14=0-3-8, 24=0-3-8
Max Grav 14=832 (LC 1), 24=832 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-24=-259/37, 13-14=-259/37, 1-2=-16/2, 2-3=-1788/0, 3-4=-3023/0, 4-5=-3023/0, 5-6=-3669/0, 6-7=-3789/0, 7-8=-3669/0, 8-9=-3023/0, 9-10=-3023/0, 10-12=-1788/0, 12-13=-16/2
BOT CHORD 23-24=0/1049, 21-23=0/2500, 20-21=0/3441, 19-20=0/3789, 18-19=0/3789, 17-18=0/3789, 16-17=0/3441, 15-16=0/2500, 14-15=0/1049
WEBS 6-19=-261/236, 7-18=-261/236, 2-24=-1314/0, 2-23=0/962, 3-23=-927/0, 3-21=0/667, 4-21=-250/65, 5-21=-534/0, 5-20=-75/432, 6-20=-494/329, 12-14=-1314/0, 12-15=0/962, 10-15=-927/0, 10-16=0/667, 9-16=-250/65, 8-16=-534/0, 8-17=-75/432, 7-17=-494/329

LOAD CASE(S) Standard

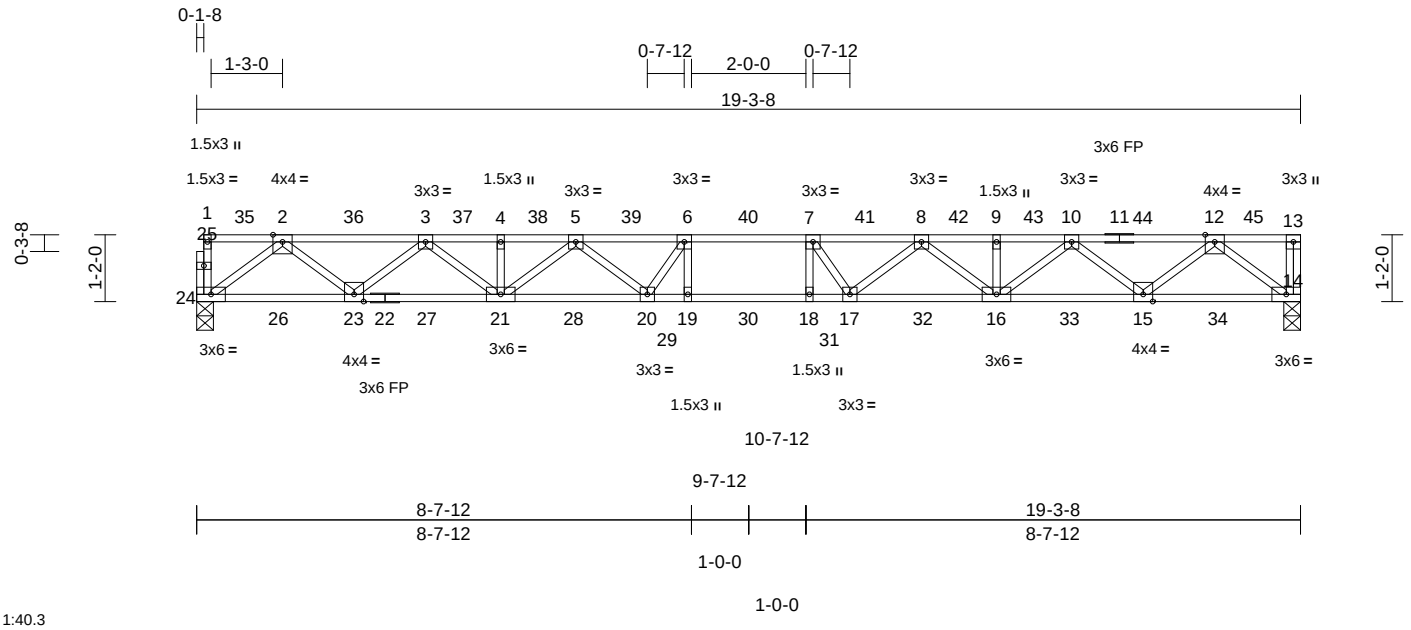
NOTES
1) Unbalanced floor live loads have been considered for this design.
2) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.

May 1,2025

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

Job	Truss	Truss Type	Qty	Ply	Drayton Rev 2
	2F8	Floor	5	1	I73101711
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 10:14:26 Page: 1
ID:4LVn?yG_PsrCw2rZLeA73syFIoZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:40.3

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	0.62	Vert(LL)	-0.30	18-19	>754	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.50	Vert(CT)	-0.42	18-19	>547	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.06	14	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 99 lb	FT = 20%F, 12%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP DSS(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 (size) 14=0-3-8, 24=0-3-8
Max Grav 14=837 (LC 1), 24=832 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-24=-259/37, 13-14=-259/34, 1-2=-16/2, 2-3=-1788/0, 3-4=-3023/0, 4-5=-3023/0, 5-6=-3668/0, 6-7=-3789/0, 7-8=-3668/0, 8-9=-3023/0, 9-10=-3023/0, 10-12=-1788/0, 12-13=0/0
BOT CHORD 23-24=0/1049, 21-23=0/2500, 20-21=0/3441, 19-20=0/3789, 18-19=0/3789, 17-18=0/3789, 16-17=0/3441, 15-16=0/2500, 14-15=0/1050
WEBS 6-19=-261/236, 7-18=-261/236, 2-24=-1314/0, 2-23=0/962, 3-23=-927/0, 3-21=0/667, 4-21=-250/65, 5-21=-534/0, 5-20=-75/432, 6-20=-494/329, 12-14=-1317/0, 12-15=0/962, 10-15=-927/0, 10-16=0/667, 9-16=-250/66, 8-16=-534/0, 8-17=-75/432, 7-17=-495/329

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

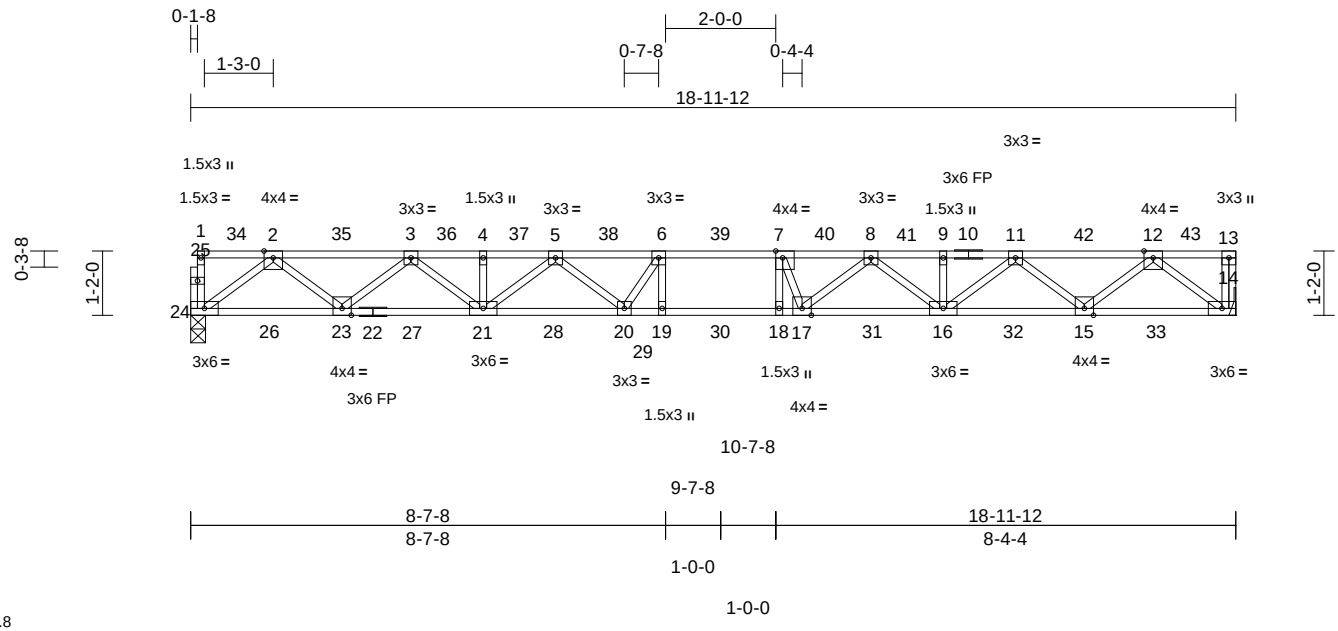
May 1,2025

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

Job	Truss	Truss Type	Qty	Ply	Drayton Rev 2
	2F9	Floor	3	1	I73101712
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 10:14:26 Page: 1

ID:Jo0lKDAzIPqLzpE0tz1FlAyFIoh-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:41.8

Plate Offsets (X, Y): [7:0-1-8,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	0.61	Vert(LL)	-0.29	18-19	>765	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.84	Vert(CT)	-0.40	18-19	>556	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.45	Horz(CT)	0.06	14	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 98 lb	FT = 20%F, 12%E

LUMBER

TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat) *Except* 22-14:2x4 SP SS (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 (size) 14= Mechanical, 24=0-3-4
Max Grav 14=823 (LC 1), 24=818 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-24=-259/37, 13-14=-259/34, 1-2=-16/2, 2-3=-1754/0, 3-4=-2954/0, 4-5=-2954/0, 5-6=-3567/0, 6-7=-3663/0, 7-8=-3581/0, 8-9=-2957/0, 9-11=-2957/0, 11-12=-1754/0, 12-13=0/0
BOT CHORD 23-24=0/1031, 21-23=0/2449, 20-21=0/3357, 19-20=0/3663, 18-19=0/3663, 17-18=0/3663, 16-17=0/3349, 15-16=0/2449, 14-15=0/1032
WEBS 6-19=-274/213, 7-18=-408/335, 2-24=-1291/0, 2-23=0/941, 3-23=-905/0, 3-21=0/645, 4-21=-250/65, 5-21=-513/0, 5-20=-85/413, 6-20=-456/345, 12-14=-1294/0, 12-15=0/940, 11-15=-905/0, 11-16=0/648, 9-16=-252/64, 8-16=-501/0, 8-17=-91/453, 7-17=-557/459

NOTES

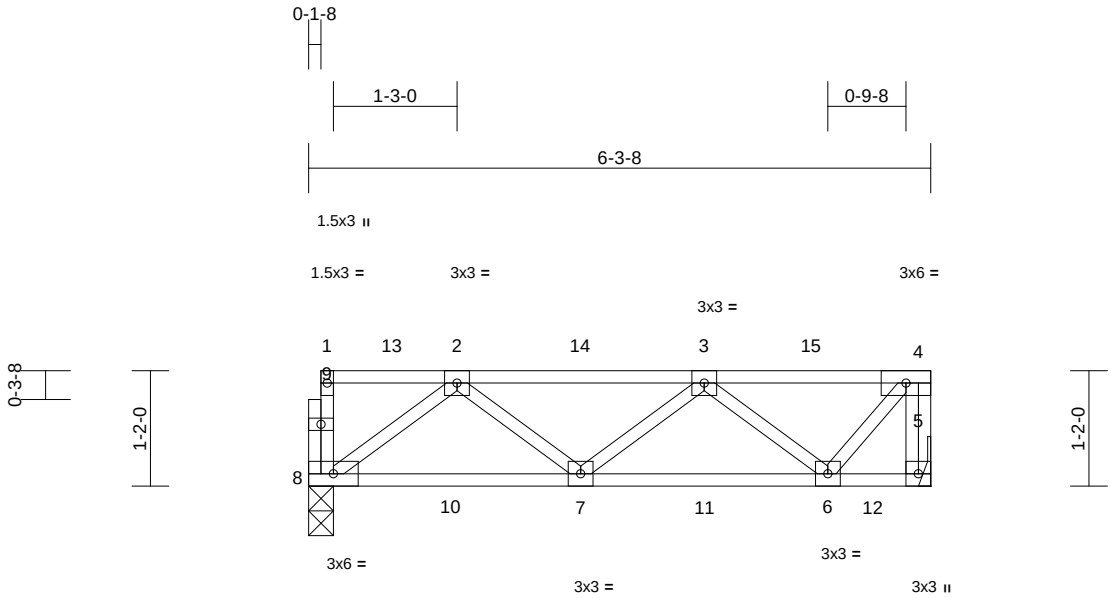
1) Unbalanced floor live loads have been considered for this design.
2) Refer to girder(s) for truss to truss connections.
3) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.

LOAD CASE(S) Standard

May 1,2025

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

Job	Truss	Truss Type	Qty	Ply	Drayton Rev 2
	2F10	Floor	1	1	I73101713
					Job Reference (optional)



Scale = 1:23.3

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	0.60	Vert(LL)	-0.08	7-8	>868	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.78	Vert(CT)	-0.09	7-8	>817	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.00	5	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 35 lb	FT = 20%F, 12%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(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 (size) 5= Mechanical, 8=0-3-0
Max Grav 5=325 (LC 7), 8=324 (LC 15)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-8=-259/41, 4-5=-324/0, 1-2=-16/2, 2-3=-461/0, 3-4=-261/0
BOT CHORD 7-8=0/331, 6-7=0/438, 5-6=0/0
WEBS 2-8=-415/0, 2-7=-53/259, 3-7=-140/171, 3-6=-320/0, 4-6=0/396

NOTES
1) Refer to girder(s) for truss to truss connections.
2) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 8.
3) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.

LOAD CASE(S) Standard

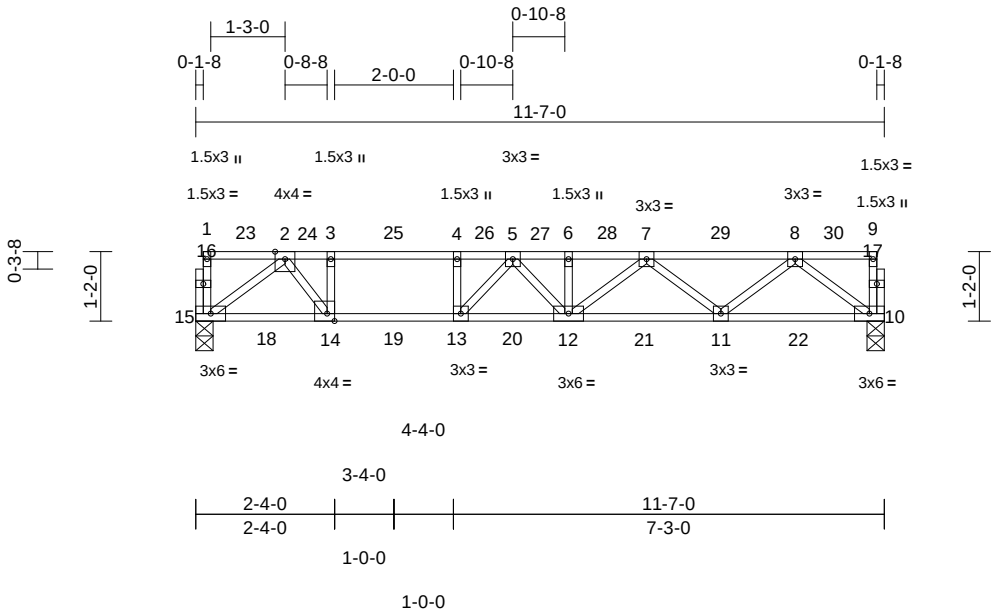
May 1,2025

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

Job	Truss	Truss Type	Qty	Ply	Drayton Rev 2
	2F13	Floor	4	1	I73101714
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 10:14:29 Page: 1

ID:n?a7XZAb3iyBbzpDQgYUHOyFIog-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:38.8

Plate Offsets (X, Y): [14:0-1-8,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	0.89	Vert(LL)	-0.16	12-13	>830	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.96	Vert(CT)	-0.22	12-13	>610	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.02	10	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 60 lb	FT = 20%F, 12%E

LUMBER

TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 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 10-0-0 oc bracing, Except:
2-2-0 oc bracing: 12-13.

REACTIONS (size) 10=0-3-8, 15=0-3-8
Max Grav 10=493 (LC 1), 15=493 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-15=-268/0, 9-10=-259/37, 1-2=-16/0, 2-3=-1071/0, 3-4=-1071/0, 4-5=-1071/0, 5-6=-1356/0, 6-7=-1356/0, 7-8=-934/0, 8-9=-16/2
BOT CHORD 14-15=0/608, 13-14=0/1071, 12-13=0/1339, 11-12=0/1253, 10-11=0/601
WEBS 3-14=-493/0, 4-13=-59/289, 2-15=-758/0, 2-14=0/798, 8-10=-752/0, 8-11=0/434, 7-11=-415/0, 7-12=-146/269, 6-12=-217/98, 5-13=-497/28, 5-12=-150/210

NOTES

1) Unbalanced floor live loads have been considered for this design.
2) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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

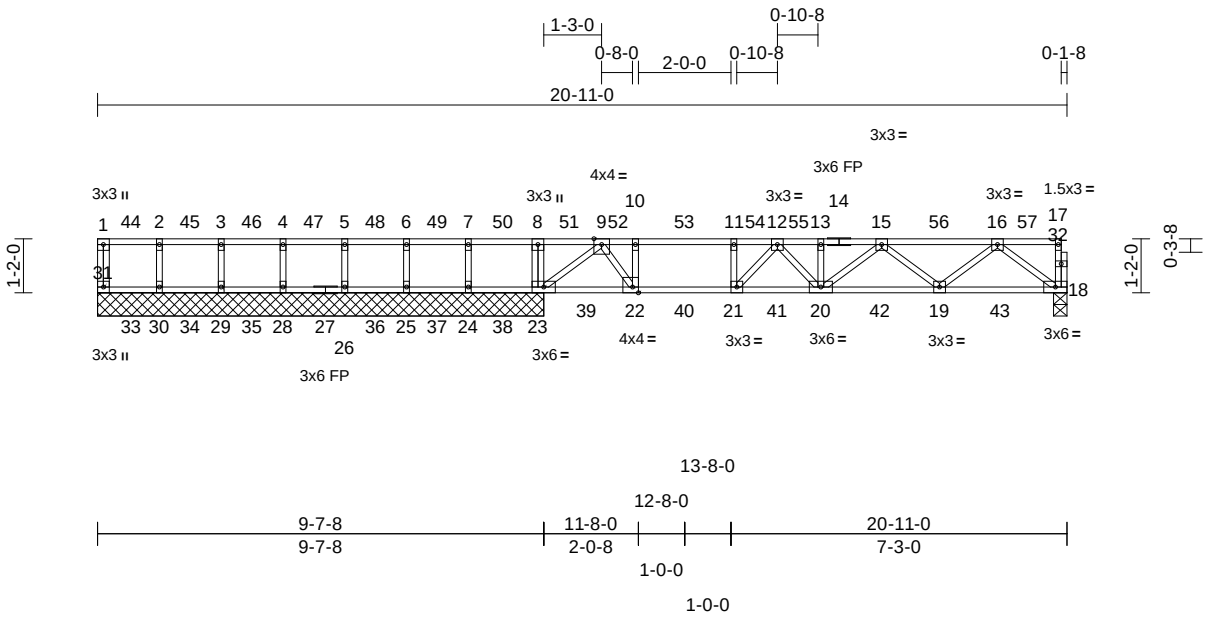
May 1,2025

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

Job	Truss	Truss Type	Qty	Ply	Drayton Rev 2
	2F12	Floor	1	1	I73101715
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 10:14:28 Page: 1

ID:Ur4CMkTCjufQd3N31VWtx9yFIpa-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:49.7

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

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.66	Vert(LL)	-0.19	20-21	>716	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.89	Vert(CT)	-0.23	20-21	>584	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.42	Horz(CT)	0.03	18	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 99 lb	FT = 20%F, 12%E

LUMBER

TOP CHORD 2x4 SP SS(flat) *Except* 14-17:2x4 SP No.2 (flat)
BOT CHORD 2x4 SP No.2(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 6-0-0 oc bracing.

REACTIONS (size) 18=0-3-8, 23=9-7-8, 24=9-7-8, 25=9-7-8, 26=9-7-8, 28=9-7-8, 29=9-7-8, 30=9-7-8, 31=9-7-8
Max Horiz 31=72 (LC 5)
Max Uplift 18=-210 (LC 8), 23=-126 (LC 7), 24=-81 (LC 7), 25=-16 (LC 122), 26=-6 (LC 121), 28=-6 (LC 117), 29=-9 (LC 116), 30=-3 (LC 118), 31=-12 (LC 117)
Max Grav 18=544 (LC 18), 23=527 (LC 4), 24=285 (LC 134), 25=278 (LC 133), 26=280 (LC 132), 28=280 (LC 131), 29=279 (LC 130), 30=281 (LC 129), 31=262 (LC 128)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-31=-259/15, 17-18=-258/38, 1-2=-181/181, 2-3=-381/381, 3-4=-581/581, 4-5=-781/781, 5-6=-981/961, 6-7=-1181/1181, 7-8=-1406/1407, 8-9=-1592/1592, 9-10=-1314/641, 10-11=-1553/959, 11-12=-1659/1100, 12-13=-1355/411, 13-15=-1513/608, 15-16=-1015/375, 16-17=-197/197

BOT CHORD 30-31=-113/113, 29-30=-317/317, 28-29=-521/521, 26-28=-725/705, 25-26=-929/929, 24-25=-1133/1133, 23-24=-1363/1363, 22-23=-1120/1332, 21-22=-929/1530, 20-21=-646/1532, 19-20=-450/1313, 18-19=-249/654

WEBS 8-23=-280/25, 10-22=-719/402, 11-21=-396/480, 9-23=-966/510, 9-22=-674/1162, 16-18=-857/363, 16-19=-369/623, 15-19=-588/364, 15-20=-419/474, 2-30=-270/11, 3-29=-268/16, 4-28=-268/13, 5-26=-268/14, 6-25=-268/19, 7-24=-268/27, 13-20=-215/104, 12-21=-897/741, 12-20=-380/391

NOTES

1) Unbalanced floor live loads have been considered for this design.
2) All plates are 1.5x3 (||) MT20 unless otherwise indicated.
3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
4) Gable studs spaced at 1-4-0 oc.
5) N/A
6) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
7) This truss has been designed for a total drag load of 150 plf. Lumber DOL=(1.33) Plate grip DOL=(1.33) Connect truss to resist drag loads along bottom chord from 0-0-0 to 20-6-1 for 153.0 plf.
8) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.
9) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

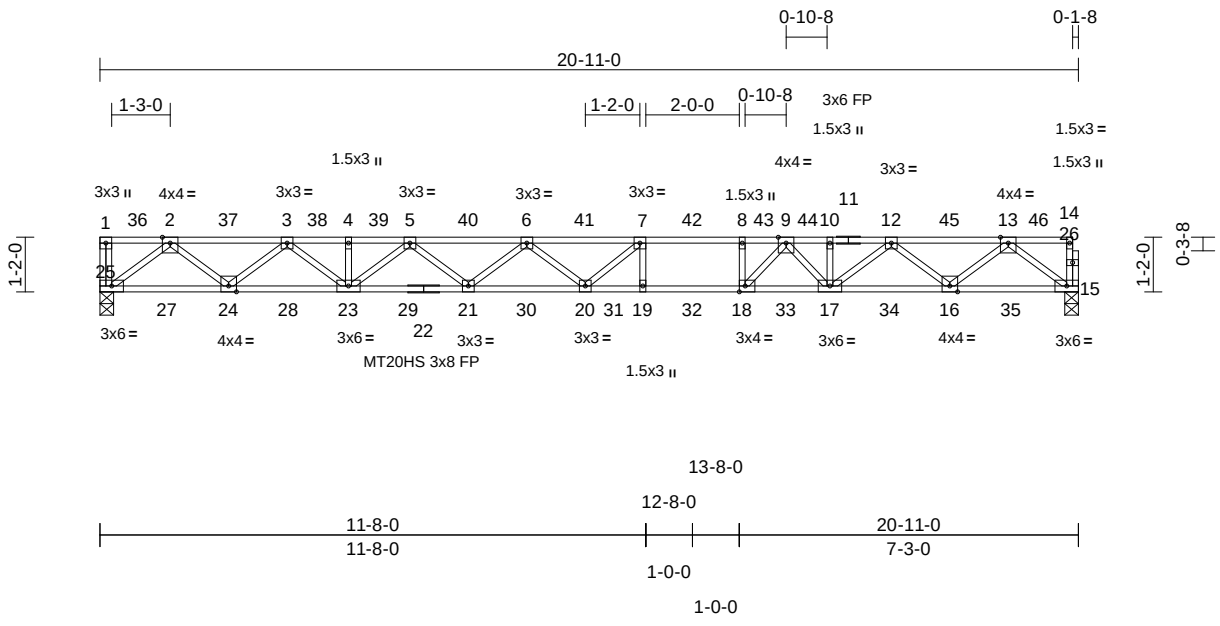
May 1,2025

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

Job	Truss	Truss Type	Qty	Ply	Drayton Rev 2
	2F11	Floor	4	1	I73101716
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 10:14:27 Page: 1

ID:jNiuyFCraKCvqHzbY5byMpyFIoe-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:49.3

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

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.48	Vert(LL)	-0.37	19-20	>676	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.63	Vert(CT)	-0.50	19-20	>492	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.06	15	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 106 lb	FT = 20%F, 12%E

LUMBER

TOP CHORD 2x4 SP SS(flat)
BOT CHORD 2x4 SP DSS(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 (size) 15=0-3-8, 25=0-3-8
Max Grav 15=754 (LC 1), 25=758 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-25=-258/35, 14-15=-258/38, 1-2=0/0, 2-3=-1641/0, 3-4=-2818/0, 4-5=-2818/0, 5-6=-3493/0, 6-7=-3715/0, 7-8=-3561/0, 8-9=-3561/0, 9-10=-2802/0, 10-12=-2802/0, 12-13=-1645/0, 13-14=-15/2
BOT CHORD 24-25=0/953, 23-24=0/2306, 21-23=0/3241, 20-21=0/3736, 19-20=0/3561, 18-19=0/3561, 17-18=0/3132, 16-17=0/2298, 15-16=0/956
WEBS 7-19=-238/107, 8-18=-380/47, 2-25=-1196/0, 2-24=0/894, 3-24=-866/0, 3-23=0/654, 4-23=-260/61, 5-23=-540/0, 5-21=-21/363, 6-21=-343/77, 6-20=-207/194, 7-20=-183/449, 13-15=-1197/0, 13-16=0/897, 12-16=-849/0, 12-17=0/644, 10-17=-248/71, 9-18=-49/796, 9-17=-494/9

NOTES

1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.

LOAD CASE(S) Standard

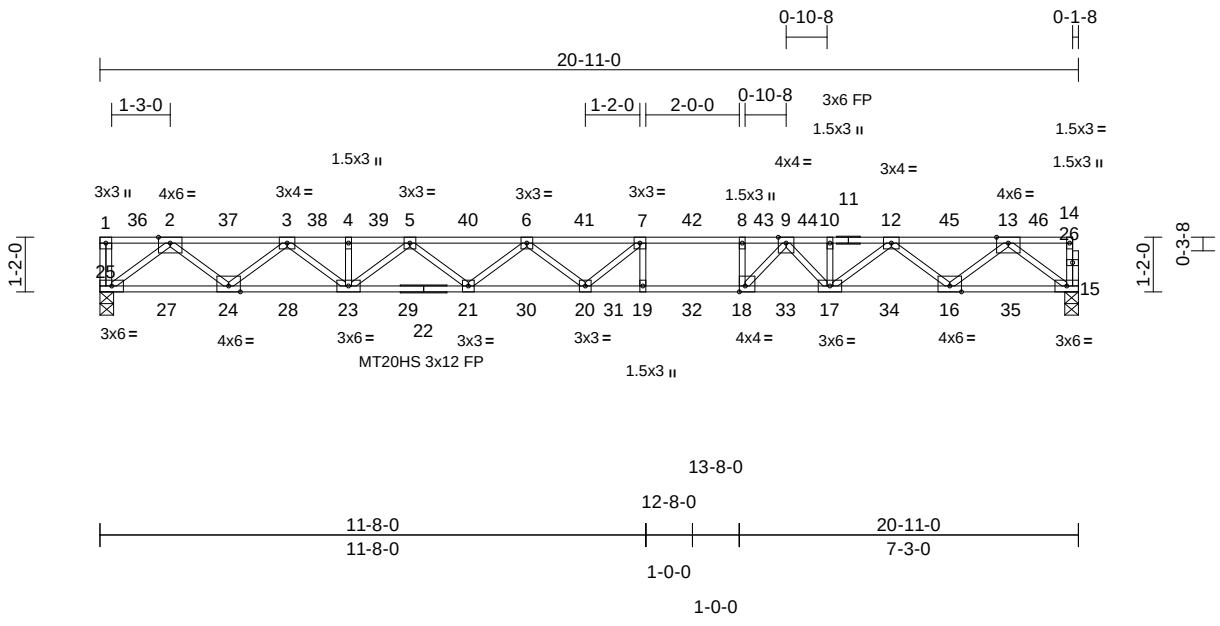
May 1,2025

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

Job	Truss	Truss Type	Qty	Ply	Drayton Rev 2
	2F11A	Floor	2	1	I73101717
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 10:14:28 Page: 1

ID:jNiuyFCraKCvqHzbY5byMpyFIoe-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:49.3

Plate Offsets (X, Y): [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	0.65	Vert(LL)	-0.44	19-20	>563	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.76	Vert(CT)	-0.60	19-20	>410	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.08	15	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 106 lb	FT = 20%F, 12%E

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-11-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 15=0-3-8, 25=0-3-8
Max Grav 15=904 (LC 1), 25=909 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-25=-259/33, 14-15=-259/37, 1-2=0/0, 2-3=-1969/0, 3-4=-3382/0, 4-5=-3382/0, 5-6=-4191/0, 6-7=-4458/0, 7-8=-4273/0, 8-9=-4273/0, 9-10=-3362/0, 10-12=-3362/0, 12-13=-1974/0, 13-14=-16/2
BOT CHORD 24-25=0/1144, 23-24=0/2767, 21-23=0/3889, 20-21=0/4484, 19-20=0/4273, 18-19=0/4273, 17-18=0/3759, 16-17=0/2757, 15-16=0/1147
WEBS 7-19=-286/100, 8-18=-456/31, 2-25=-1435/0, 2-24=0/1073, 3-24=-1039/0, 3-23=0/785, 4-23=-262/59, 5-23=-648/0, 5-21=-1/393, 6-21=-380/62, 6-20=-206/233, 7-20=-220/461, 13-15=-1437/0, 13-16=0/1077, 12-16=-1019/0, 12-17=0/772, 10-17=-252/67, 9-18=-14/956, 9-17=-593/0

NOTES

1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.

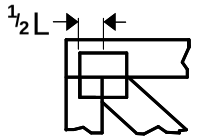
LOAD CASE(S) Standard

May 1,2025

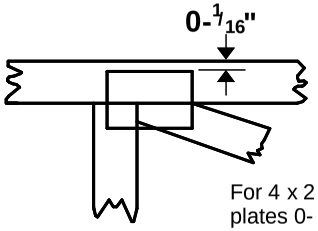
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

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.

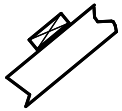
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

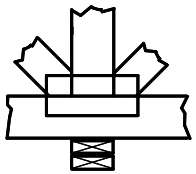
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

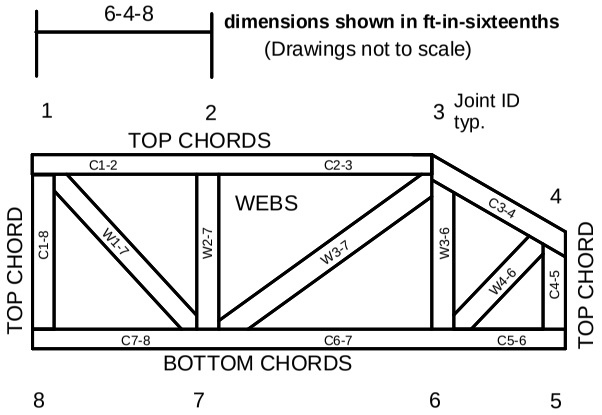


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

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.