ENGINEERING BY TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

RE: M00210-A - Arlington Rev.1-El.4-Floor

Site Information:

Project Customer: DRB Raleigh Project Name: DRB Raleigh Model Track
Lot/Block: Subdivision: DRB Raleigh
Model: Arlington Rev.1
Address:
City: 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: 120 mph
Roof Load: 40.0 psf
Mean Roof Height (feet): 25

Design Program: MiTek 20/20 25.2
Design Method: MWFRS (Directional)/C-C hybrid Wind ASCE 7-16
Floor Load: N/A psf

Exposure Category: B

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I73911554	1FGE1	6/3/25	35	I73911588	2F14	6/3/25
2	I73911555	1F1	6/3/25	36	I73911589	2FGE4	6/3/25
3	I73911556	1F2	6/3/25	37	I73911590	2F18	6/3/25
4	I73911557	1F3A	6/3/25	38	I73911591	2F19	6/3/25
5	I73911558	1F3	6/3/25	39	I73911592	2FGE5A	6/3/25
6	I73911559	1FGE2	6/3/25	40	I73911593	2FGE6	6/3/25
7	I73911560	1FGE3	6/3/25	41	I73911594	2FGE7	6/3/25
8	I73911561	1FGE4	6/3/25		I73911595	2F20A	6/3/25
9	I73911562	1FGE5	6/3/25	43	I73911596	2F20	6/3/25
10	I73911563	1F4	6/3/25	44	I73911597	2F6	6/3/25
11	I73911564	1F5	6/3/25	45	I73911598	2F7	6/3/25
12	I73911565	1F6	6/3/25	46	I73911599	2F8	6/3/25
13	I73911566	1F7	6/3/25	47	I73911600	2FGE5	6/3/25
14	I73911567	1F7A	6/3/25	48	I73911601	1F1C	6/3/25
	I73911568	1FGE6	6/3/25	49		1F1A	6/3/25
16	I73911569	1FGE7	6/3/25	50	I73911603	1F1D	6/3/25
17	I73911570	1F8	6/3/25		I73911604	1F4A	6/3/25
18	I73911571	2FGE1	6/3/25	52	I73911605	1F5A	6/3/25
19	I73911572	2F1A	6/3/25	53	I73911606	1F1B	6/3/25
20	I73911573	2F1	6/3/25	54	I73911607	1F5B	6/3/25
21	I73911574	2F2	6/3/25	55	I73911608	1F9	6/3/25
22	I73911575	2F3	6/3/25	56	I73911609	2F16	6/3/25
23	I73911576	2F4	6/3/25	57	I73911610	2F17	6/3/25
	I73911577	2F5	6/3/25	58		2F20B	6/3/25
25	I73911578	2F6A	6/3/25	59	I73911612	2F15	6/3/25
26	I73911579	2FGE2	6/3/25				
27	I73911580	2F7A	6/3/25				
28	I73911581	2F8A	6/3/25				
29	I73911582	2F9	6/3/25				
30	I73911583	2F10	6/3/25				
31	I73911584	2F11	6/3/25				
32	I73911585	2FGE3	6/3/25				
	I73911586	2F12	6/3/25				
34	I73911587	2F13	6/3/25				

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: Gilbert, Eric
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.

June 3,2025

Gilbert, Eric

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor
	1FGE1	Floor Supported Gable	1	1	I73911554
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 02 18:25:20 Page: 1
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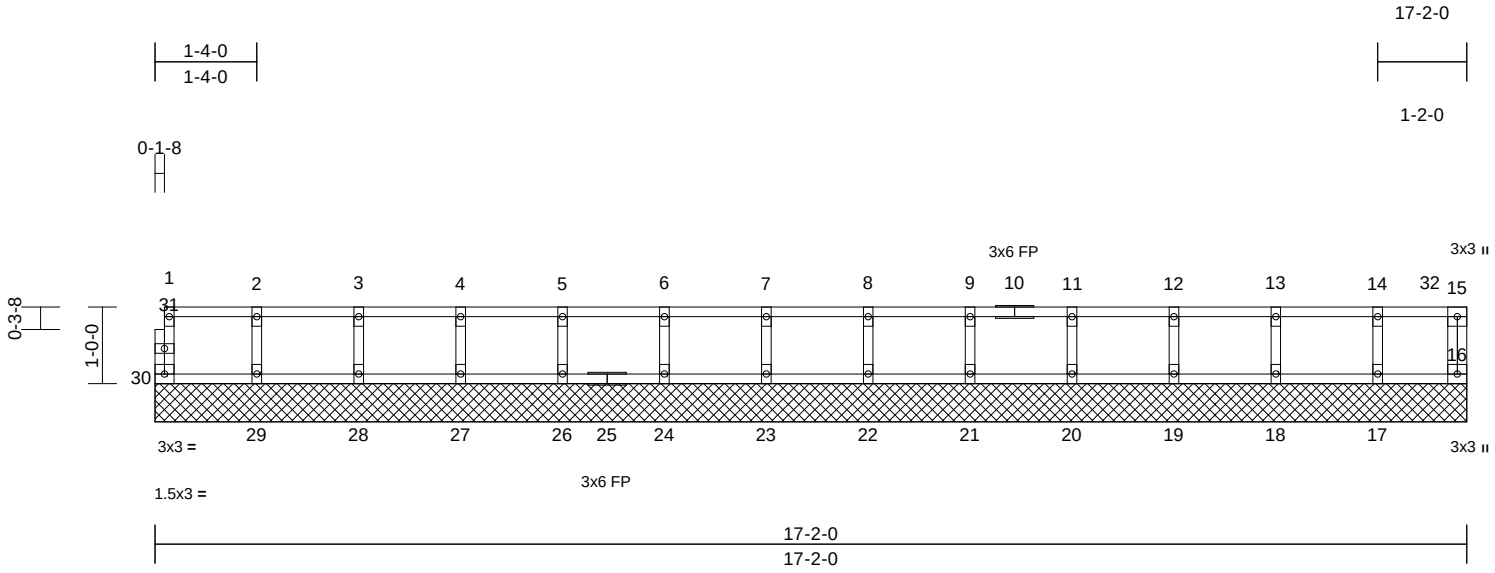

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Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.16	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.04	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	NO	WB	0.03	Horiz(TL)	0.00	16	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 68 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) 16=17-2-0, 17=17-2-0, 18=17-2-0, 19=17-2-0, 20=17-2-0, 21=17-2-0, 22=17-2-0, 23=17-2-0, 24=17-2-0, 26=17-2-0, 27=17-2-0, 28=17-2-0, 29=17-2-0, 30=17-2-0
Max Grav 16=133 (LC 1), 17=146 (LC 1), 18=90 (LC 1), 19=100 (LC 1), 20=97 (LC 1), 21=98 (LC 1), 22=98 (LC 1), 23=98 (LC 1), 24=98 (LC 1), 26=98 (LC 1), 27=97 (LC 1), 28=101 (LC 1), 29=85 (LC 1), 30=46 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-30=-39/0, 15-16=-135/0, 1-2=-17/0, 2-3=-17/0, 3-4=-17/0, 4-5=-17/0, 5-6=-17/0, 6-7=-17/0, 7-8=-17/0, 8-9=-17/0, 9-11=-17/0, 11-12=-17/0, 12-13=-17/0, 13-14=-17/0, 14-15=-17/0
BOT CHORD 29-30=0/17, 28-29=0/17, 27-28=0/17, 26-27=0/17, 24-26=0/17, 23-24=0/17, 22-23=0/17, 21-22=0/17, 20-21=0/17, 19-20=0/17, 18-19=0/17, 17-18=0/17, 16-17=0/17
WEBS 2-29=-82/0, 3-28=-91/0, 4-27=-88/0, 5-26=-89/0, 6-24=-89/0, 7-23=-89/0, 8-22=-89/0, 9-21=-89/0, 11-20=-88/0, 12-19=-91/0, 13-18=-82/0, 14-17=-131/0

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

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 16-30=-7, 1-15=-67
Concentrated Loads (lb)
Vert: 32=-147

June 3,2025

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Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor
	1F1	Floor	3	1	I73911555
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 02 18:25:17 Page: 1

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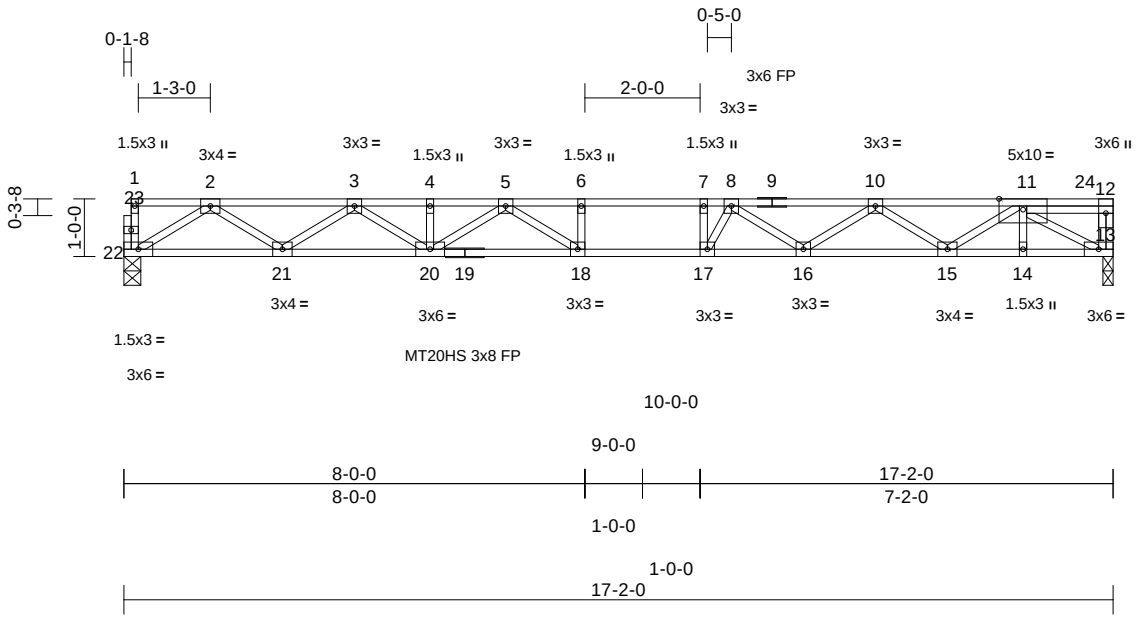

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Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.61	Vert(LL)	-0.27	18	>762	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.97	Vert(CT)	-0.38	17-18	>531	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.38	Horz(CT)	0.06	13	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 86 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) 13=0-2-2, 22=0-3-8
Max Grav 13=1482 (LC 1), 22=635 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-22=-24/0, 12-13=-669/0, 1-2=-2/0, 2-3=-1593/0, 3-4=-2650/0, 4-5=-2650/0, 5-6=-3135/0, 6-7=-3135/0, 7-8=-3135/0, 8-10=-2771/0, 10-11=-1972/0, 11-12=0/0
BOT CHORD 21-22=0/946, 20-21=0/2215, 18-20=0/2960, 17-18=0/3135, 16-17=0/3069, 15-16=0/2458, 14-15=0/1360, 13-14=0/1360
WEBS 6-18=-192/0, 7-17=-302/108, 2-22=-1120/0, 2-21=0/790, 3-21=-759/0, 3-20=0/523, 4-20=-64/0, 5-20=-372/0, 5-18=-30/462, 11-13=-1579/0, 11-14=0/5, 11-15=0/707, 10-15=-597/0, 10-16=0/381, 8-16=-382/0, 8-17=-179/427

NOTES

1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 13.
4) 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.
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.

LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 13-22=-7, 1-12=-67
Concentrated Loads (lb)
Vert: 24=-880

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Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor	
	1F2	Floor	2	1	Job Reference (optional)	I73911556

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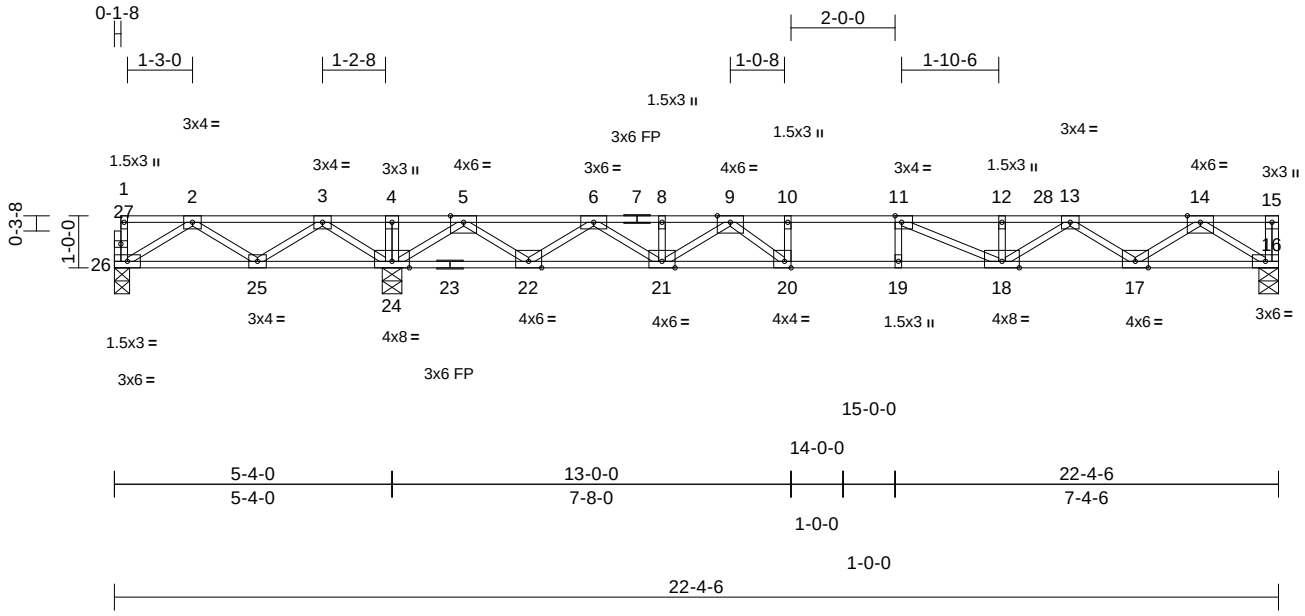

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Plate Offsets (X, Y): [11:0-1-8,Edge], [20:0-1-8,Edge]

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	1.00	Vert(LL)	-0.16	18-19	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.91	Vert(CT)	-0.45	18-19	>448	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.68	Horz(CT)	0.04	16	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 110 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, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 16=0-4-8, 24=0-4-8, 26=0-3-8
Max Uplift 26=-369 (LC 4)
Max Grav 16=984 (LC 4), 24=1542 (LC 1), 26=-8 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-26=-21/0, 15-16=-38/0, 1-2=-2/0, 2-3=0/1176, 3-4=0/2495, 4-5=0/2496, 5-6=0/114, 6-8=-1810/0, 8-9=-1810/0, 9-10=-3450/0, 10-11=-3450/0, 11-12=-4217/0, 12-13=-4217/0, 13-14=-2631/0, 14-15=0/0

BOT CHORD 25-26=-592/0, 24-25=-1785/0, 22-24=-1126/0, 21-22=0/961, 20-21=0/2580, 19-20=0/3450, 18-19=0/3450, 17-18=0/3794, 16-17=0/1466

WEBS 4-24=-80/0, 10-20=-522/0, 11-19=-228/0, 2-26=0/702, 14-16=-1737/0, 2-25=-728/0, 3-25=0/755, 3-24=-1032/0, 5-24=-1623/0, 5-22=0/1284, 6-22=-1227/0, 6-21=0/1024, 8-21=-119/0, 9-21=-929/0, 9-20=0/1225, 14-17=0/1423, 13-17=-1419/0, 13-18=0/508, 12-18=-536/0, 11-18=0/1033

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 26. This connection is for uplift only and does not consider lateral forces.
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) 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
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 16-26=-7, 1-15=-67
Concentrated Loads (lb)
Vert: 28=-667

June 3,2025

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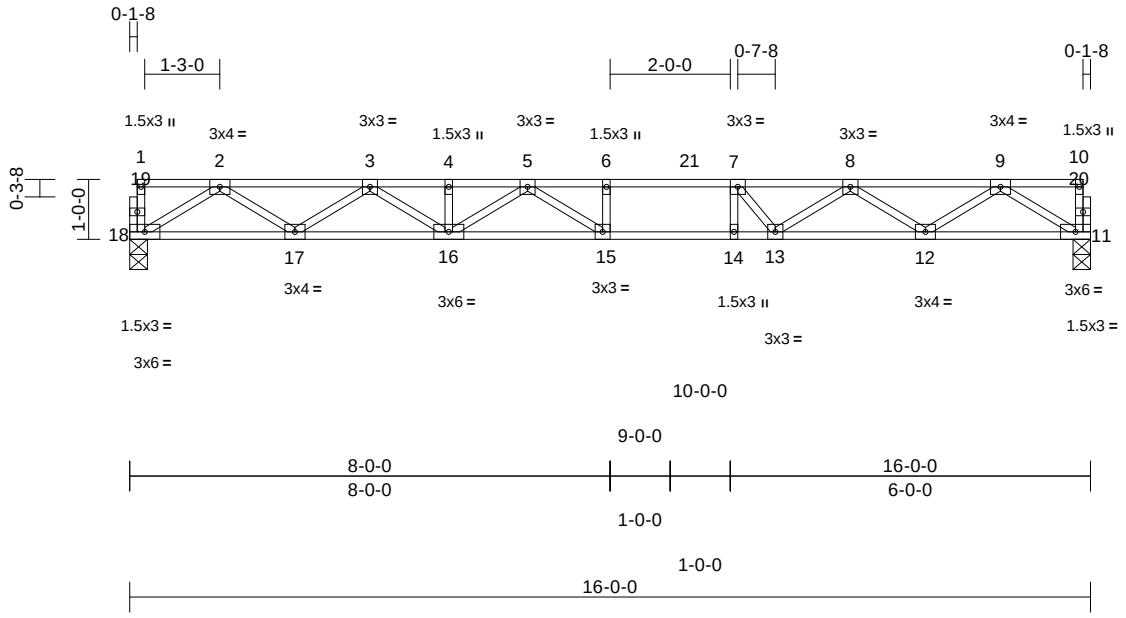
Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor	
	1F3A	Floor	2	1	Job Reference (optional)	I73911557



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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	0.80	Vert(LL)	-0.20	15-16	>928	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.71	Vert(CT)	-0.36	15-16	>527	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.39	Horz(CT)	0.04	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=0-3-8, 18=0-3-8
Max Grav 11=639 (LC 1), 18=652 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-18=-24/0, 10-11=-23/0, 1-2=-2/0, 2-3=-1641/0, 3-4=-2766/0, 4-5=-2766/0, 5-6=-3033/0, 6-7=-3033/0, 7-8=-2673/0, 8-9=-1607/0, 9-10=-2/0
BOT CHORD 17-18=0/971, 16-17=0/2299, 15-16=0/3052, 14-15=0/3033, 13-14=0/3033, 12-13=0/2217, 11-12=0/960
WEBS 6-15=-135/0, 7-14=0/325, 2-18=-1149/0, 2-17=0/818, 3-17=-803/0, 3-16=0/561, 4-16=-67/0, 5-16=-351/0, 5-15=-198/243, 9-11=-1137/0, 9-12=0/789, 8-12=-745/0, 8-13=0/610, 7-13=-711/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) 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.
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
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (lb/ft)
Vert: 11-18=-7, 1-4=-67, 4-21=-103, 10-21=-67

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor	
	1F3	Floor	4	1	Job Reference (optional)	I73911558

Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 02 18:25:18 Page: 1

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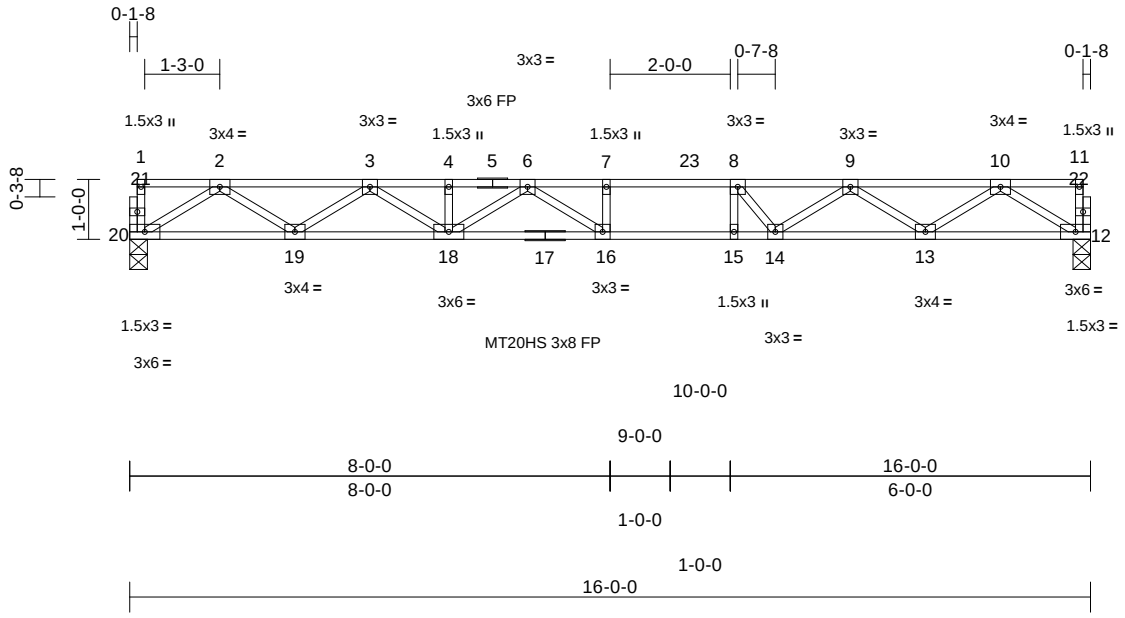

Scale = 1:38.4

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	0.54	Vert(LL)	-0.21	16-18	>891	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.92	Vert(CT)	-0.29	16-18	>644	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.33	Horz(CT)	0.04	12	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 No.2(flat) *Except* 17-12:2x4 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) 12=0-3-8, 20=0-3-8
Max Grav 12=573 (LC 1), 20=573 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-20=-24/0, 11-12=-24/0, 1-2=-2/0, 2-3=-1410/0, 3-4=-2297/0, 4-6=-2297/0, 6-7=-2525/0, 7-8=-2525/0, 8-9=-2277/0, 9-10=-1411/0, 10-11=-2/0
BOT CHORD 19-20=0/850, 18-19=0/1950, 16-18=0/2505, 15-16=0/2525, 14-15=0/2525, 13-14=0/1936, 12-13=0/855
WEBS 7-16=-119/0, 8-15=-46/236, 2-20=-1005/0, 2-19=0/683, 3-19=-660/0, 3-18=0/417, 4-18=-54/0, 6-18=-258/0, 6-16=-151/289, 10-12=-1011/0, 10-13=0/679, 9-13=-640/0, 9-14=0/470, 8-14=-531/0

NOTES

1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates 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) 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: 12-20=-7, 1-4=-67, 4-23=-67, 11-23=-67

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor
	1FGE2	Floor Supported Gable	1	1	I73911559 Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 02 18:25:20 Page: 1
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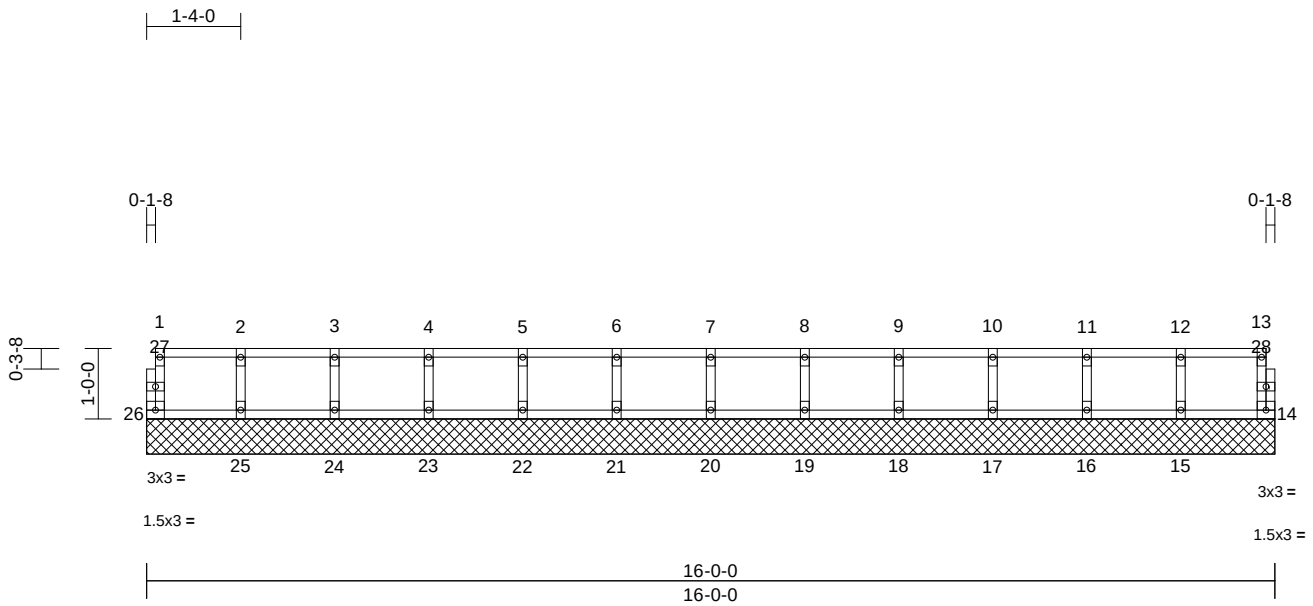

Scale = 1:32.7

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	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	14	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							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 10-0-0 oc bracing.

REACTIONS (size) 14=16-0-0, 15=16-0-0, 16=16-0-0, 17=16-0-0, 18=16-0-0, 19=16-0-0, 20=16-0-0, 21=16-0-0, 22=16-0-0, 23=16-0-0, 24=16-0-0, 25=16-0-0, 26=16-0-0
Max Grav 14=37 (LC 1), 15=95 (LC 1), 16=98 (LC 1), 17=98 (LC 1), 18=98 (LC 1), 19=98 (LC 1), 20=98 (LC 1), 21=98 (LC 1), 22=98 (LC 1), 23=98 (LC 1), 24=98 (LC 1), 25=95 (LC 1), 26=37 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-26=-34/0, 13-14=-34/0, 1-2=-8/0, 2-3=-8/0, 3-4=-8/0, 4-5=-8/0, 5-6=-8/0, 6-7=-8/0, 7-8=-8/0, 8-9=-8/0, 9-10=-8/0, 10-11=-8/0, 11-12=-8/0, 12-13=-8/0
BOT CHORD 25-26=0/8, 24-25=0/8, 23-24=0/8, 22-23=0/8, 21-22=0/8, 20-21=0/8, 19-20=0/8, 18-19=0/8, 17-18=0/8, 16-17=0/8, 15-16=0/8, 14-15=0/8
WEBS 2-25=-87/0, 3-24=-90/0, 4-23=-89/0, 5-22=-89/0, 6-21=-89/0, 7-20=-89/0, 8-19=-89/0, 9-18=-89/0, 10-17=-89/0, 11-16=-90/0, 12-15=-87/0

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) 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

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor	
	1FGE3	Floor Supported Gable	2	1	Job Reference (optional)	I73911560

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 02 18:25:20 Page: 1
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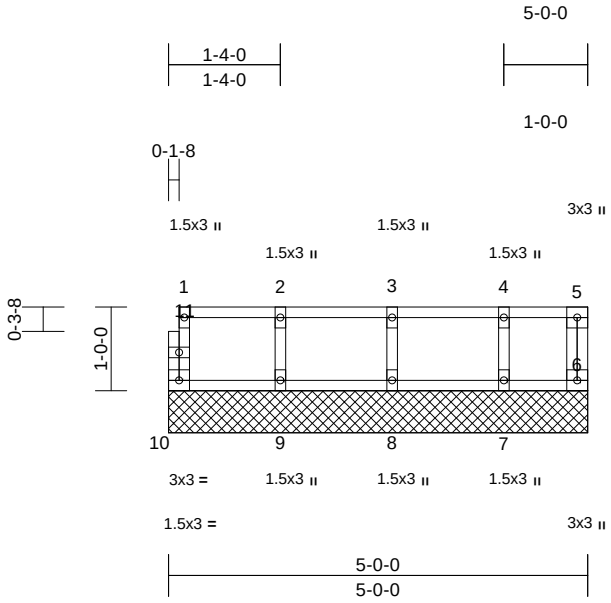

Scale = 1:27.5

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	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	6	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 22 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 5-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 6=5-0-0, 7=5-0-0, 8=5-0-0, 9=5-0-0, 10=5-0-0
Max Grav 6=29 (LC 1), 7=81 (LC 1), 8=102 (LC 1), 9=96 (LC 1), 10=36 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-10=-33/0, 5-6=-25/0, 1-2=-6/0, 2-3=-6/0, 3-4=-6/0, 4-5=-6/0
BOT CHORD	9-10=0/6, 8-9=0/6, 7-8=0/6, 6-7=0/6
WEBS	2-9=-87/0, 3-8=-92/0, 4-7=-76/0

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) 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

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor	
	1FGE4	Floor Supported Gable	1	1	Job Reference (optional)	I73911561

Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 02 18:25:20 Page: 1
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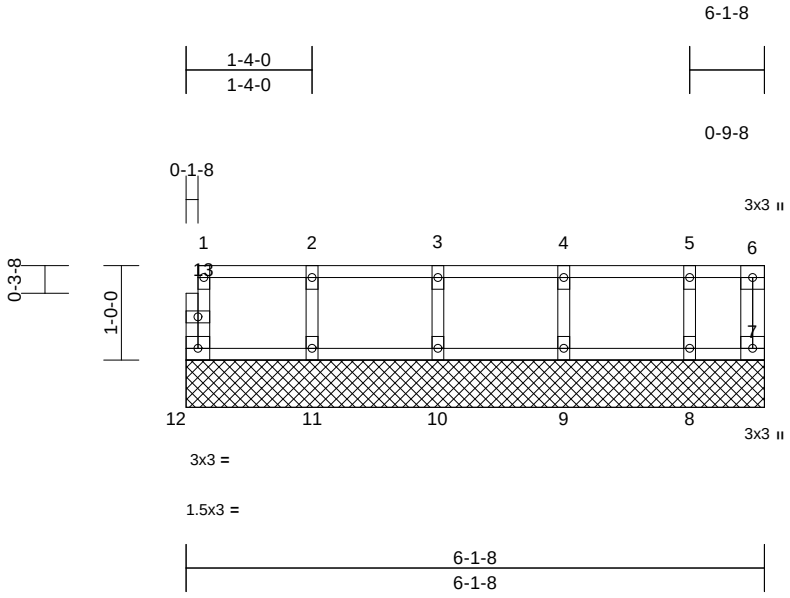

Scale = 1:24.4

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	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	7	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							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 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 7=6-1-8, 8=6-1-8, 9=6-1-8, 10=6-1-8, 11=6-1-8, 12=6-1-8
Max Grav 7=20 (LC 1), 8=74 (LC 1), 9=102 (LC 1), 10=97 (LC 1), 11=98 (LC 1), 12=35 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-12=-33/0, 6-7=-15/0, 1-2=-5/0, 2-3=-5/0, 3-4=-5/0, 4-5=-5/0, 5-6=-5/0
BOT CHORD 11-12=0/5, 10-11=0/5, 9-10=0/5, 8-9=0/5, 7-8=0/5
WEBS 2-11=-88/0, 3-10=-88/0, 4-9=-92/0, 5-8=-71/0

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) 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.

LOAD CASE(S) Standard

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor
	1FGE5	Floor Supported Gable	1	1	I73911562 Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 02 18:25:20 Page: 1
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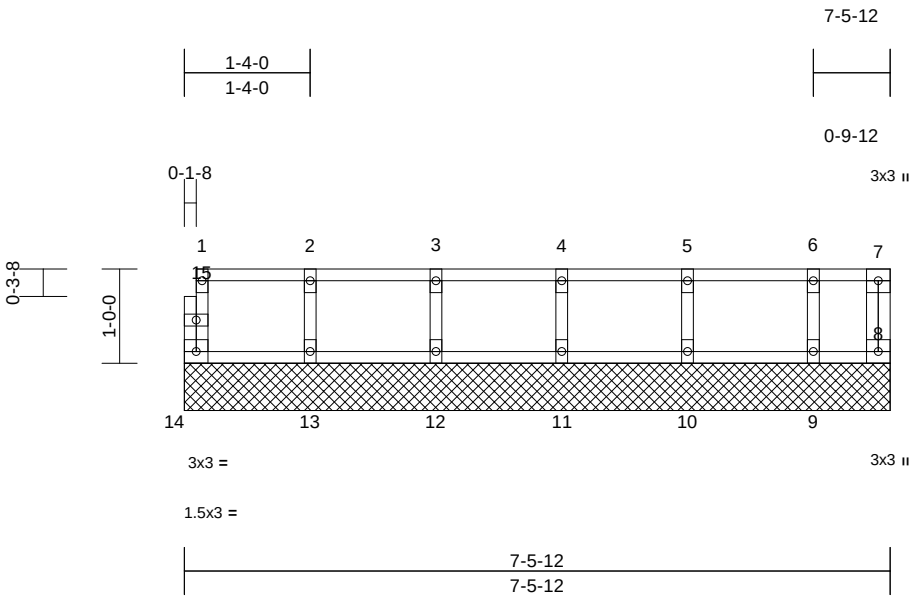

Scale = 1:24.4

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	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	8	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 32 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) 8=7-5-12, 9=7-5-12, 10=7-5-12, 11=7-5-12, 12=7-5-12, 13=7-5-12, 14=7-5-12
Max Grav 8=25 (LC 1), 9=90 (LC 1), 10=122 (LC 1), 11=116 (LC 1), 12=118 (LC 1), 13=118 (LC 1), 14=42 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-14=-39/0, 7-8=-20/0, 1-2=-6/0, 2-3=-6/0, 3-4=-6/0, 4-5=-6/0, 5-6=-6/0, 6-7=-6/0
BOT CHORD 13-14=0/6, 12-13=0/6, 11-12=0/6, 10-11=0/6, 9-10=0/6, 8-9=0/6
WEBS 2-13=-106/0, 3-12=-107/0, 4-11=-106/0, 5-10=-111/0, 6-9=-85/0

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) 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.

LOAD CASE(S) Standard

NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor	
	1F4	Floor	1	1	Job Reference (optional)	I73911563

Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 02 18:25:19 Page: 1
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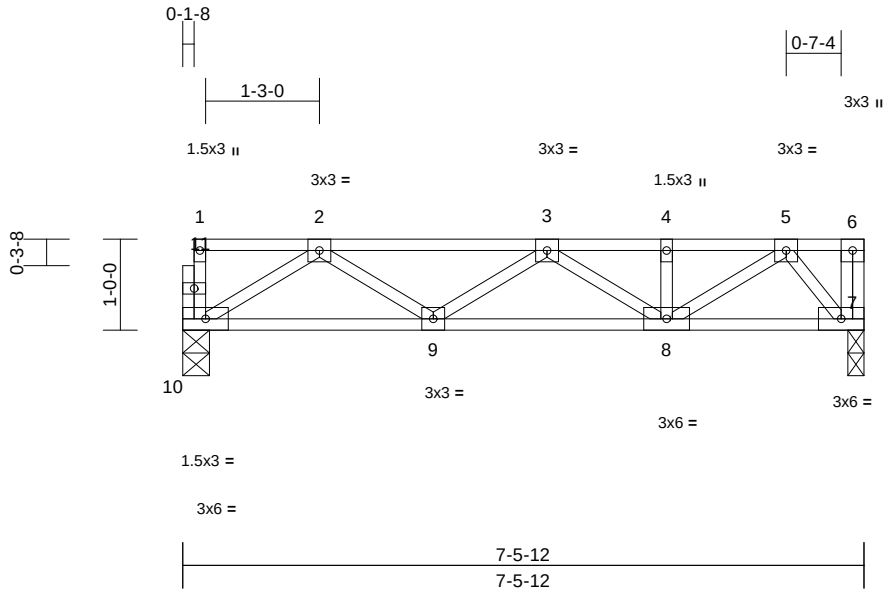

Scale = 1:25.3

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	0.20	Vert(LL)	-0.01	8-9	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.20	Vert(CT)	-0.02	8-9	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.01	7	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 40 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=0-2-2, 10=0-3-8
Max Grav 7=318 (LC 1), 10=313 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-10=-27/0, 6-7=-14/0, 1-2=-2/0, 2-3=-577/0, 3-4=-538/0, 4-5=-538/0, 5-6=0/0
BOT CHORD 9-10=0/437, 8-9=0/685, 7-8=0/247
WEBS 2-10=-515/0, 2-9=0/171, 3-9=-132/0, 3-8=-176/0, 4-8=-78/0, 5-8=0/350, 5-7=-386/0

NOTES
1) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 7.
2) 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.
3) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor	
	1F5	Floor	13	1	Job Reference (optional)	I73911564

Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 02 18:25:19 Page: 1

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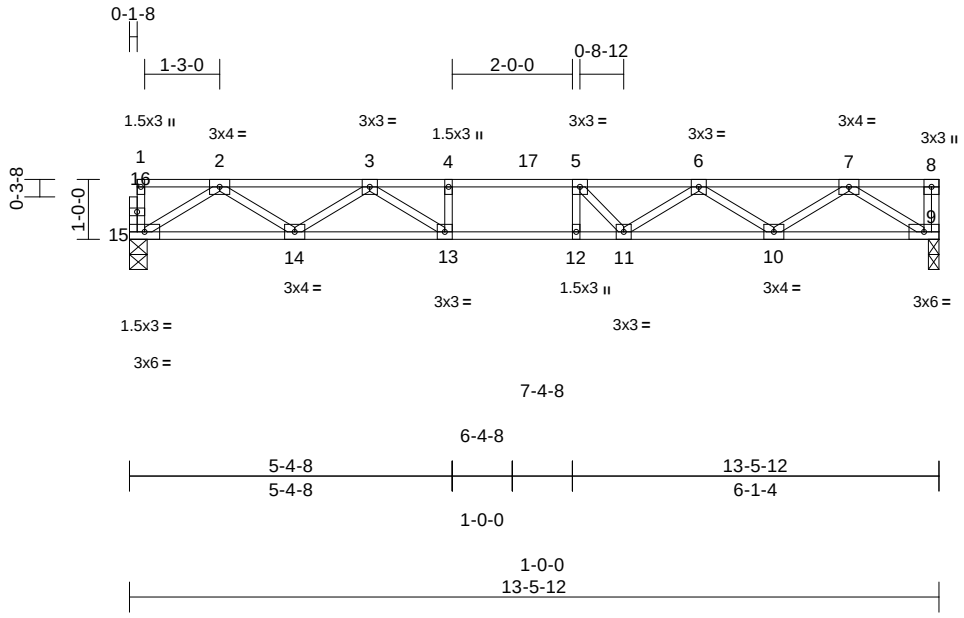

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Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.61	Vert(LL)	-0.12	12	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.51	Vert(CT)	-0.18	12	>861	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.33	Horz(CT)	0.03	9	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 65 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) 9=0-2-2, 15=0-3-8
Max Grav 9=623 (LC 1), 15=619 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-15=-28/0, 8-9=-34/0, 1-2=-2/0, 2-3=-1477/0, 3-4=-2421/0, 4-5=-2421/0, 5-6=-2303/0, 6-7=-1485/0, 7-8=0/0
BOT CHORD 14-15=0/913, 13-14=0/2029, 12-13=0/2421, 11-12=0/2421, 10-11=0/2030, 9-10=0/910
WEBS 4-13=-240/0, 5-12=-166/75, 2-15=-1080/0, 2-14=0/689, 3-14=-674/0, 3-13=0/630, 7-9=-1079/0, 7-10=0/701, 6-10=-665/0, 6-11=0/421, 5-11=-369/21

Uniform Loads (lb/ft)
Vert: 9-15=-8, 1-8=-80
Concentrated Loads (lb)
Vert: 17=-82

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) 9.
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) 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

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor	
	1F6	Floor	2	1	Job Reference (optional)	I73911565

Structural, LLC, Thurmont, MD - 21788,

Run: 25.10 E Apr 28 2025 Print: 25.1.0 E Apr 28 2025 MiTek Industries, Inc. Tue Jun 03 16:59:33 Page: 1
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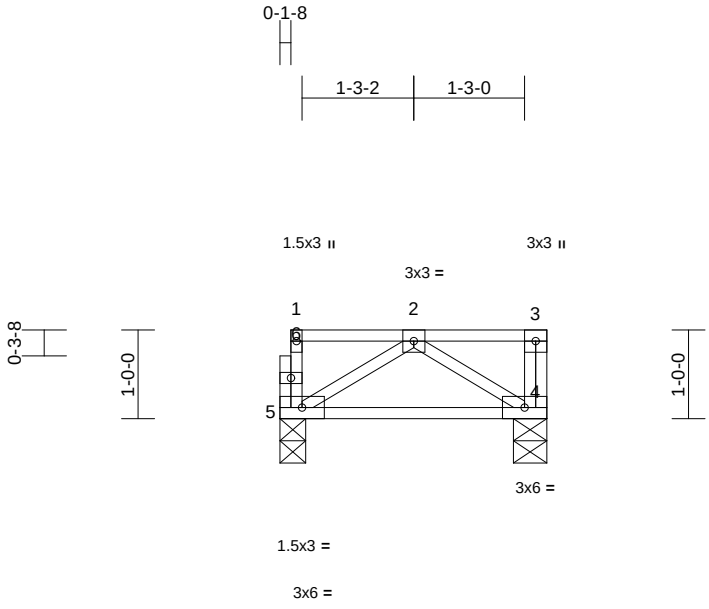

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Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.08	Vert(CT)	-0.01	4-5	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	4	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 17 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 3-0-2 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 4=121/0-4-8, 5=117/0-3-8

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

NOTES
1) 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.
2) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor	
	1F7	Floor	5	1	Job Reference (optional)	I73911566

Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 02 18:25:19 Page: 1

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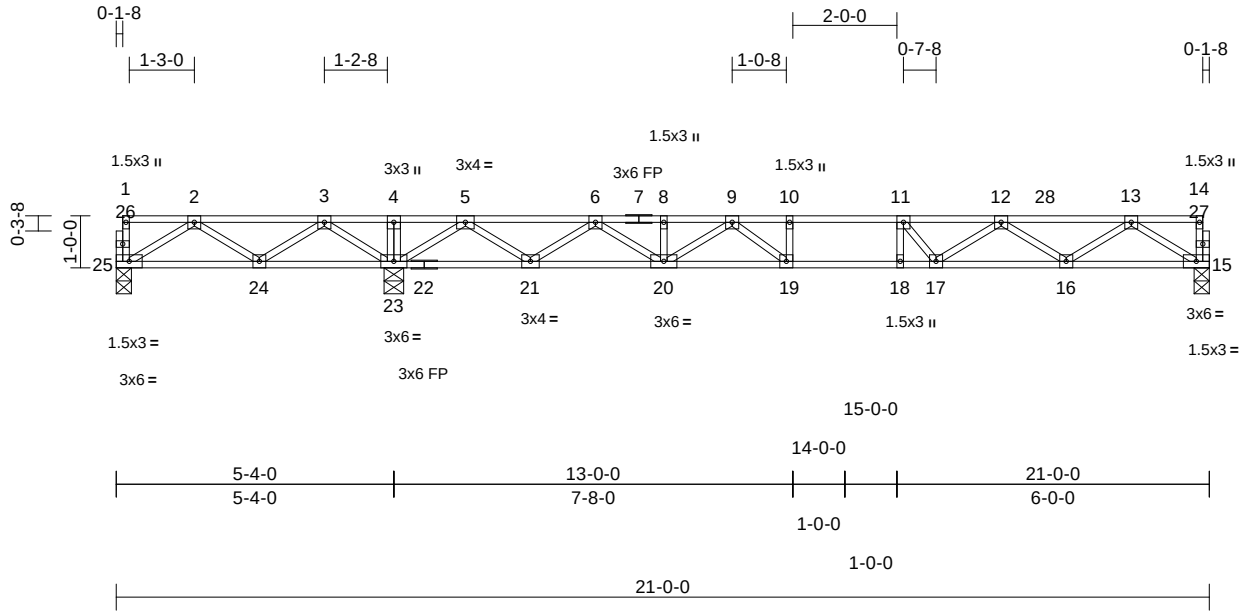

Scale = 1:44.3

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)	-0.12	18-19	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.79	Vert(CT)	-0.17	18-19	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.40	Horz(CT)	0.02	15	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 103 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) 15=0-3-8, 23=0-4-8, 25=0-3-8
Max Uplift 25=-237 (LC 4)
Max Grav 15=481 (LC 4), 23=1158 (LC 1), 25=98 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-25=-22/0, 14-15=-24/0, 1-2=-2/0, 2-3=0/784, 3-4=0/1729, 4-5=0/1729, 5-6=0/109, 6-8=-1121/0, 8-9=-1121/0, 9-10=-1729/0, 10-11=-1729/0, 11-12=-1683/0, 12-13=-1134/0, 13-14=-2/0
BOT CHORD	24-25=-387/109, 23-24=-1206/0, 21-23=-749/0, 20-21=0/640, 19-20=0/1481, 18-19=0/1729, 17-18=0/1729, 16-17=0/1534, 15-16=0/708
WEBS	4-23=-68/0, 10-19=-194/0, 11-18=-126/58, 2-25=-127/459, 5-23=-1162/0, 6-20=0/582, 13-15=-837/0, 13-16=0/520, 12-16=-489/0, 12-17=0/253, 11-17=-216/84, 2-24=-500/0, 3-24=0/528, 3-23=-806/0, 5-21=0/843, 6-21=-814/0, 8-20=-74/0, 9-20=-438/0, 9-19=0/443

NOTES

1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x3 (=) MT20 unless otherwise indicated.
3) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 25. This connection is for uplift only and does not consider lateral forces.
4) 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.
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.

LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (lb/ft)
   Vert: 15-25=-7, 1-14=-67
   Concentrated Loads (lb)
   Vert: 28=-15

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor	I73911567
	1F7A	Floor	1	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 02 18:25:19 Page: 1

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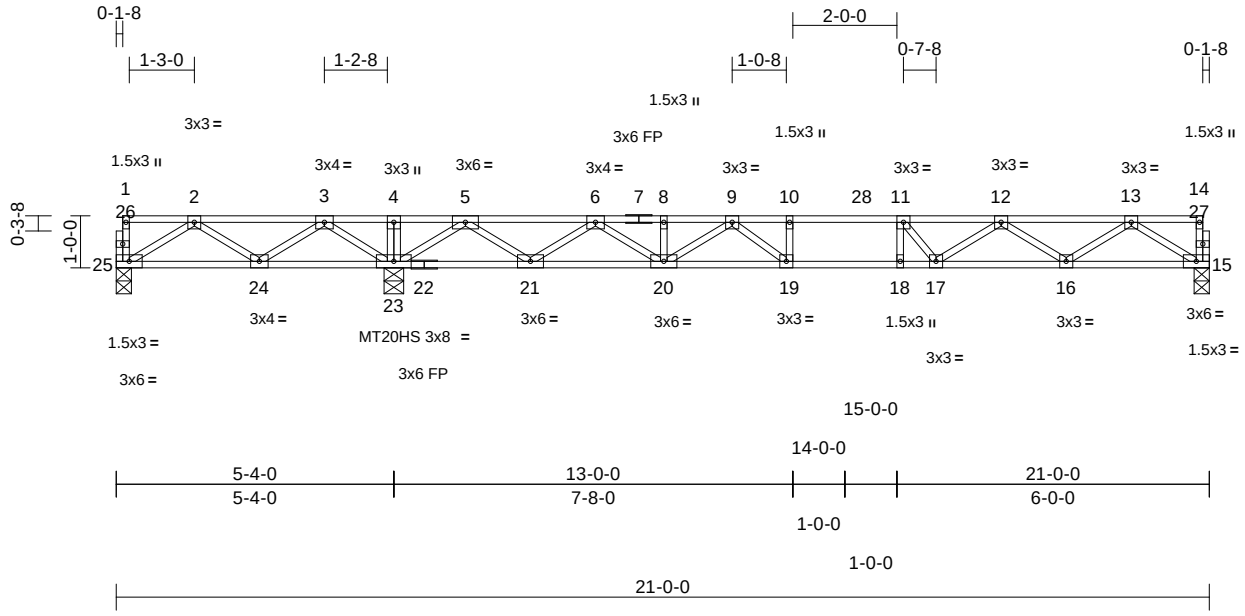

Scale = 1:44.3

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	0.80	Vert(LL)	-0.12	18-19	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.74	Vert(CT)	-0.19	18-19	>970	360	MT20HS	187/143
BCLL	0.0	Rep Stress Incr	NO	WB	0.50	Horz(CT)	0.02	15	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 103 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) 15=0-3-8, 23=0-4-8, 25=0-3-8
Max Uplift 25=-319 (LC 4)
Max Grav 15=521 (LC 4), 23=1359 (LC 1), 25=16 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-25=-21/0, 14-15=-25/0, 1-2=-2/0, 2-3=0/1028, 3-4=0/2208, 4-5=0/2208, 5-6=0/237, 6-8=-1348/0, 8-9=-1348/0, 9-10=-2096/0, 10-11=-2096/0, 11-12=-1964/0, 12-13=-1256/0, 13-14=-2/0
BOT CHORD	24-25=-514/0, 23-24=-1565/0, 21-23=-1046/0, 20-21=0/684, 19-20=0/1837, 18-19=0/2096, 17-18=0/2096, 16-17=0/1715, 15-16=0/770
WEBS	4-23=-72/0, 10-19=-231/0, 11-18=-71/113, 2-25=0/610, 5-23=-1379/0, 13-15=-911/0, 13-16=0/593, 12-16=-560/0, 12-17=0/377, 11-17=-354/0, 2-24=-642/0, 3-24=0/669, 3-23=-950/0, 5-21=0/1048, 6-21=-1024/0, 6-20=0/803, 8-20=-100/0, 9-20=-592/0, 9-19=0/457

NOTES

1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 25. This connection is for uplift only and does not consider lateral forces.
4) 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.
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.

LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 15-25=-7, 1-8=-67, 8-28=-112, 14-28=-67

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor	
	1FGE6	Floor Supported Gable	1	1	Job Reference (optional)	I73911568

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 02 18:25:20 Page: 1
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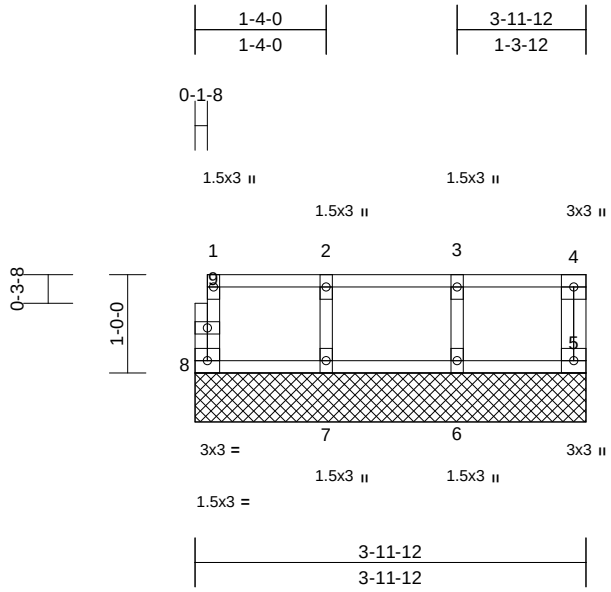

Scale = 1:23.5

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	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 18 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 3-11-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 5=3-11-12, 6=3-11-12, 7=3-11-12, 8=3-11-12
Max Grav 5=49 (LC 1), 6=114 (LC 1), 7=115 (LC 1), 8=45 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-8=-41/0, 4-5=-44/0, 1-2=-10/0, 2-3=-10/0, 3-4=-10/0
BOT CHORD 7-8=0/10, 6-7=0/10, 5-6=0/10
WEBS 2-7=-105/0, 3-6=-104/0

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) 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

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor
	1FGE7	Floor Supported Gable	1	1	I73911569
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 02 18:25:20 Page: 1
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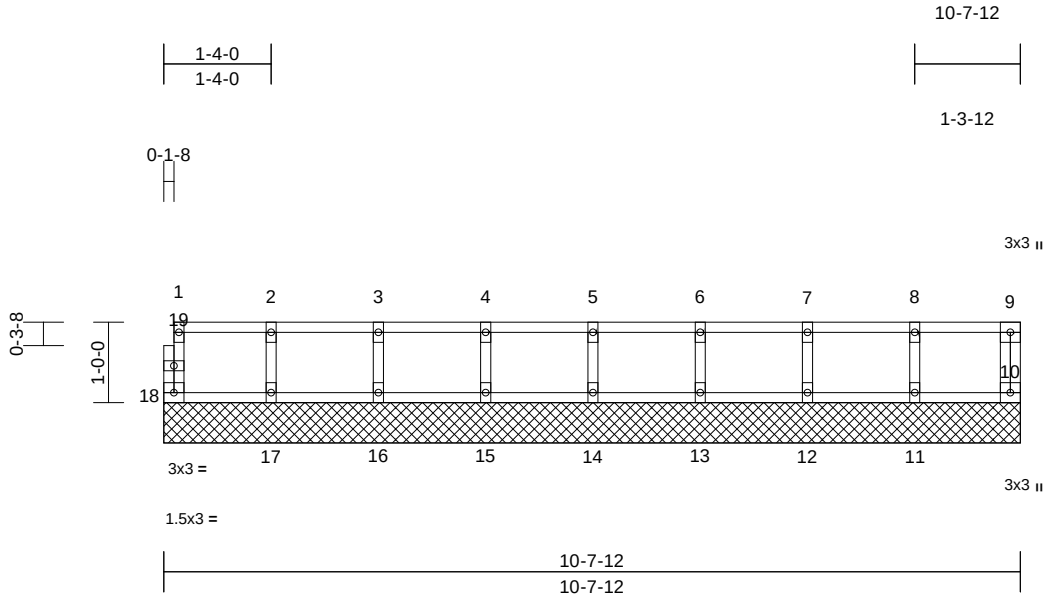

Scale = 1:28.6

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	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	10	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 43 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) 10=10-7-12, 11=10-7-12, 12=10-7-12, 13=10-7-12, 14=10-7-12, 15=10-7-12, 16=10-7-12, 17=10-7-12, 18=10-7-12
Max Grav 10=49 (LC 1), 11=113 (LC 1), 12=118 (LC 1), 13=117 (LC 1), 14=117 (LC 1), 15=117 (LC 1), 16=118 (LC 1), 17=114 (LC 1), 18=45 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-18=-41/0, 9-10=-44/0, 1-2=-10/0, 2-3=-10/0, 3-4=-10/0, 4-5=-10/0, 5-6=-10/0, 6-7=-10/0, 7-8=-10/0, 8-9=-10/0
BOT CHORD 17-18=0/10, 16-17=0/10, 15-16=0/10, 14-15=0/10, 13-14=0/10, 12-13=0/10, 11-12=0/10, 10-11=0/10
WEBS 2-17=-104/0, 3-16=-107/0, 4-15=-106/0, 5-14=-107/0, 6-13=-106/0, 7-12=-108/0, 8-11=-103/0

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) 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.

LOAD CASE(S) Standard

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor	I73911570
	1F8	Floor	1	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 02 18:25:19 Page: 1

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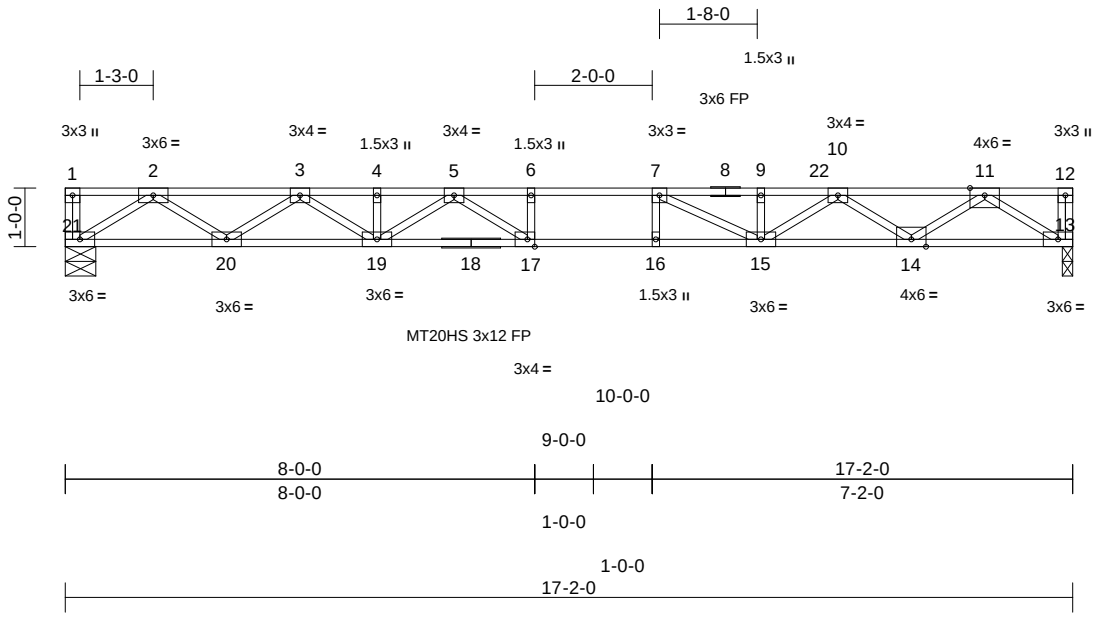

Scale = 1:39.3

Plate Offsets (X, Y): [17:0-1-8,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	0.74	Vert(LL)	-0.26	17	>786	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.69	Vert(CT)	-0.44	16-17	>461	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.65	Horz(CT)	0.07	13	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 84 lb	FT = 20%F, 12%E

LUMBER

TOP CHORD 2x4 SP No.2(flat) *Except* 8-1:2x4 SP SS (flat)
BOT CHORD 2x4 SP SS(flat)
WEBS 2x4 SP No.3(flat)

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-11-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 13=0-2-2, 21=0-6-4
Max Grav 13=999 (LC 1), 21=828 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-21=-33/0, 12-13=-38/0, 1-2=0/0, 2-3=-2098/0, 3-4=-3539/0, 4-5=-3539/0, 5-6=-4383/0, 6-7=-4383/0, 7-9=-4198/0, 9-10=-4198/0, 10-11=-2613/0, 11-12=0/0
BOT CHORD 20-21=0/1234, 19-20=0/2926, 17-19=0/4008, 16-17=0/4383, 15-16=0/4383, 14-15=0/3707, 13-14=0/1491
WEBS 6-17=-296/0, 7-16=-114/55, 2-21=-1462/0, 2-20=0/1055, 3-20=-1011/0, 3-19=0/736, 4-19=-89/0, 5-19=-564/0, 5-17=0/763, 11-13=-1767/0, 11-14=0/1370, 10-14=-1336/0, 10-15=0/589, 9-15=-263/0, 7-15=-446/245

NOTES

1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 13.
4) 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.
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: 13-21=-8, 1-12=-80
Concentrated Loads (lb)
Vert: 22=-339

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor
	2FGE1	Floor Supported Gable	1	1	I73911571
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 02 18:25:23 Page: 1

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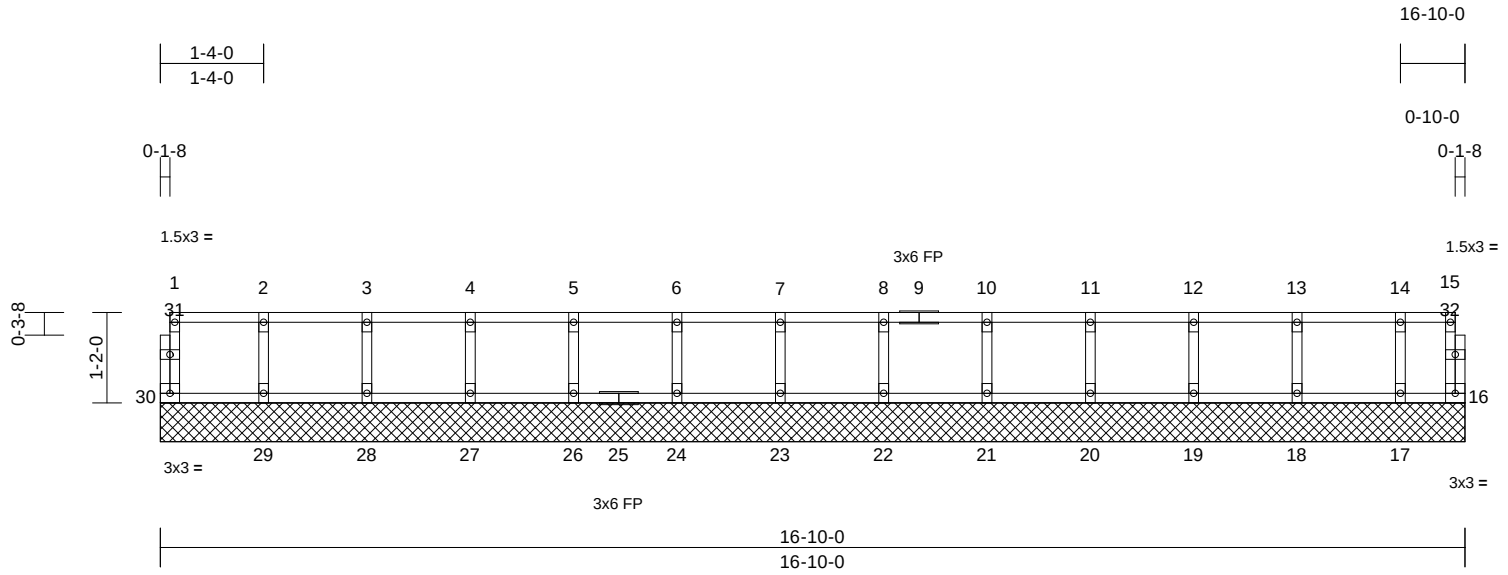

Scale = 1:29.7

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	16	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 71 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) 16=16-10-0, 17=16-10-0, 18=16-10-0, 19=16-10-0, 20=16-10-0, 21=16-10-0, 22=16-10-0, 23=16-10-0, 24=16-10-0, 26=16-10-0, 27=16-10-0, 28=16-10-0, 29=16-10-0, 30=16-10-0
Max Grav 16=27 (LC 1), 17=113 (LC 1), 18=153 (LC 1), 19=145 (LC 1), 20=147 (LC 1), 21=147 (LC 1), 22=147 (LC 1), 23=147 (LC 1), 24=147 (LC 1), 26=147 (LC 1), 27=147 (LC 1), 28=147 (LC 1), 29=148 (LC 1), 30=52 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-30=-49/0, 15-16=-20/0, 1-2=-6/0, 2-3=-6/0, 3-4=-6/0, 4-5=-6/0, 5-6=-6/0, 6-7=-6/0, 7-8=-6/0, 8-10=-6/0, 10-11=-6/0, 11-12=-6/0, 12-13=-6/0, 13-14=-6/0, 14-15=-6/0
BOT CHORD 29-30=0/6, 28-29=0/6, 27-28=0/6, 26-27=0/6, 24-26=0/6, 23-24=0/6, 22-23=0/6, 21-22=0/6, 20-21=0/6, 19-20=0/6, 18-19=0/6, 17-18=0/6, 16-17=0/6
WEBS 2-29=-132/0, 3-28=-134/0, 4-27=-133/0, 5-26=-133/0, 6-24=-133/0, 7-23=-133/0, 8-22=-133/0, 10-21=-133/0, 11-20=-134/0, 12-19=-132/0, 13-18=-138/0, 14-17=-107/0

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) 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

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor
	2F1A	Floor	1	1	I73911572
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 02 18:25:20 Page: 1
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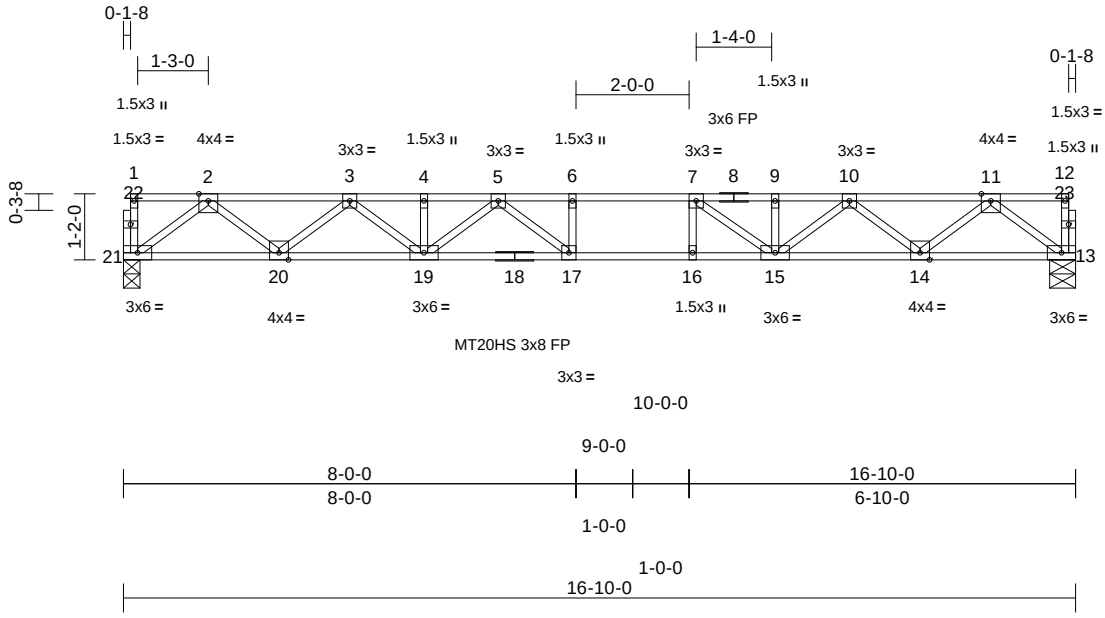

Scale = 1:40.7

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.72	Vert(LL)	-0.25	17-19	>796	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.58	Vert(CT)	-0.35	17-19	>576	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.05	13	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 86 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 5-7-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 13=0-5-8, 21=0-3-8
Max Grav 13=906 (LC 1), 21=906 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-21=-35/0, 12-13=-35/0, 1-2=-2/0, 2-3=-1896/0, 3-4=-3120/0, 4-5=-3120/0, 5-6=-3570/0, 6-7=-3570/0, 7-9=-3096/0, 9-10=-3096/0, 10-11=-1900/0, 11-12=-2/0
BOT CHORD 20-21=0/1134, 19-20=0/2629, 17-19=0/3451, 16-17=0/3570, 15-16=0/3570, 14-15=0/2625, 13-14=0/1135
WEBS 6-17=-219/0, 7-16=-70/186, 2-21=-1420/0, 2-20=0/992, 3-20=-955/0, 3-19=0/627, 4-19=-84/0, 5-19=-422/0, 5-17=-146/496, 11-13=-1422/0, 11-14=0/995, 10-15=0/602, 10-14=-943/0, 9-15=-133/104, 7-15=-841/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
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

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor	
	2F1	Floor	7	1	Job Reference (optional)	I73911573

Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 02 18:25:20 Page: 1
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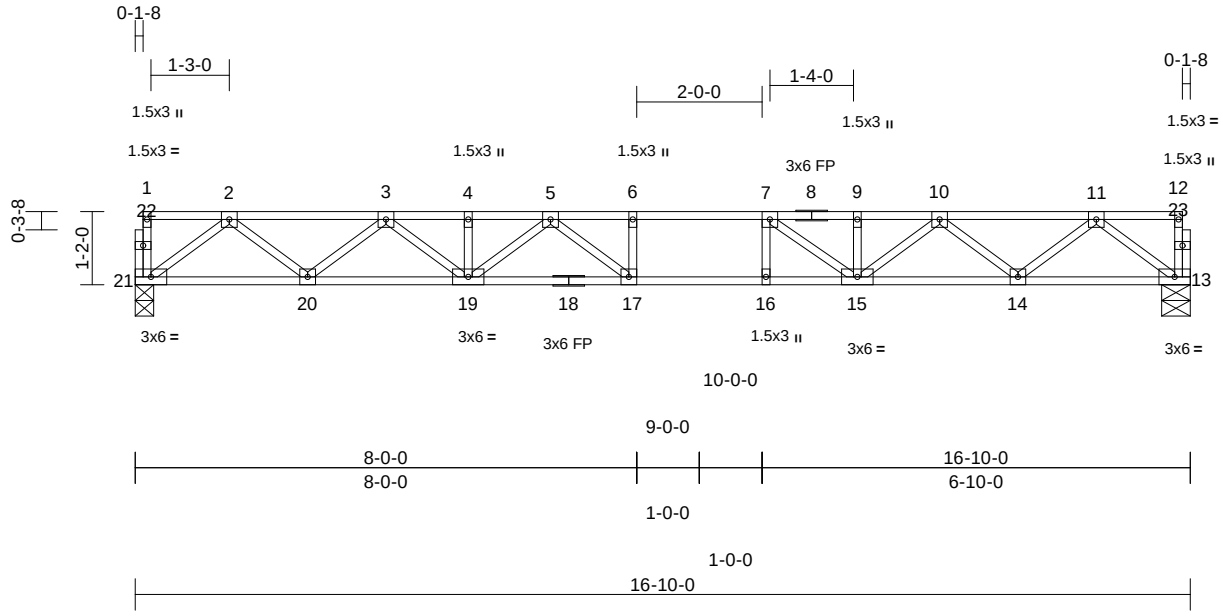

Scale = 1:36.8

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	0.45	Vert(LL)	-0.19	17-19	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.83	Vert(CT)	-0.26	17-19	>771	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.32	Horz(CT)	0.04	13	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 86 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) 13=0-5-8, 21=0-3-8
Max Grav 13=604 (LC 1), 21=604 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-21=-23/0, 12-13=-24/0, 1-2=-1/0, 2-3=-1264/0, 3-4=-2081/0, 4-5=-2081/0, 5-6=-2380/0, 6-7=-2380/0, 7-9=-2065/0, 9-10=-2065/0, 10-11=-1267/0, 11-12=-1/0
BOT CHORD 20-21=0/756, 19-20=0/1752, 17-19=0/2301, 16-17=0/2380, 15-16=0/2380, 14-15=0/1750, 13-14=0/757
WEBS 6-17=-154/4, 7-16=-40/110, 2-21=-947/0, 2-20=0/661, 3-20=-636/0, 3-19=0/420, 4-19=-59/0, 5-19=-281/0, 5-17=-103/335, 11-13=-948/0, 11-14=0/663, 10-15=0/403, 10-14=-629/0, 9-15=-94/76, 7-15=-559/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x3 (=) MT20 unless otherwise indicated.
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

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor
	2F2	Floor	1	1	I73911574
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 02 18:25:20 Page: 1

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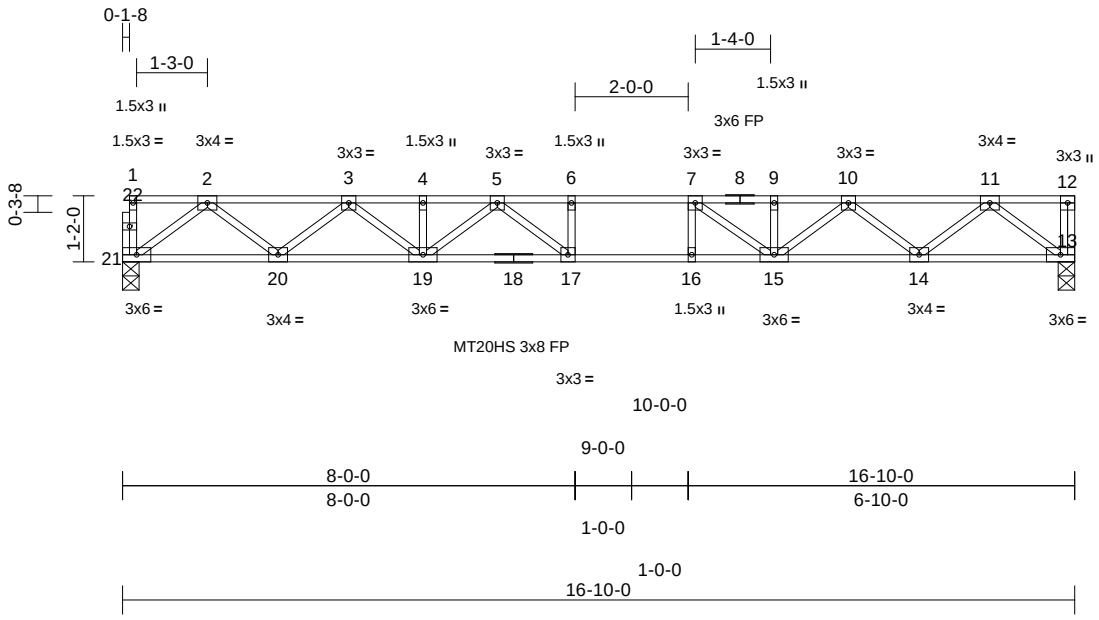

Scale = 1:40.7

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	0.55	Vert(LL)	-0.22	17-19	>887	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	1.00	Vert(CT)	-0.31	17-19	>642	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.05	13	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 86 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 2-2-0 oc bracing.

REACTIONS (size) 13=0-3-8, 21=0-3-8
Max Grav 13=730 (LC 1), 21=725 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-21=-28/0, 12-13=-32/0, 1-2=-2/0, 2-3=-1517/0, 3-4=-2497/0, 4-5=-2497/0, 5-6=-2856/0, 6-7=-2856/0, 7-9=-2479/0, 9-10=-2479/0, 10-11=-1520/0, 11-12=0/0

BOT CHORD 20-21=0/907, 19-20=0/2103, 17-19=0/2761, 16-17=0/2856, 15-16=0/2856, 14-15=0/2100, 13-14=0/909

WEBS 6-17=-185/5, 7-16=-48/132, 2-21=-1136/0, 2-20=0/793, 3-20=-763/0, 3-19=0/503, 4-19=-70/0, 5-19=-337/0, 5-17=-123/402, 11-13=-1140/0, 11-14=0/796, 10-14=-755/0, 10-15=0/484, 9-15=-114/92, 7-15=-671/0

NOTES

1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
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

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor	
	2F3	Floor	2	1	Job Reference (optional)	I73911575

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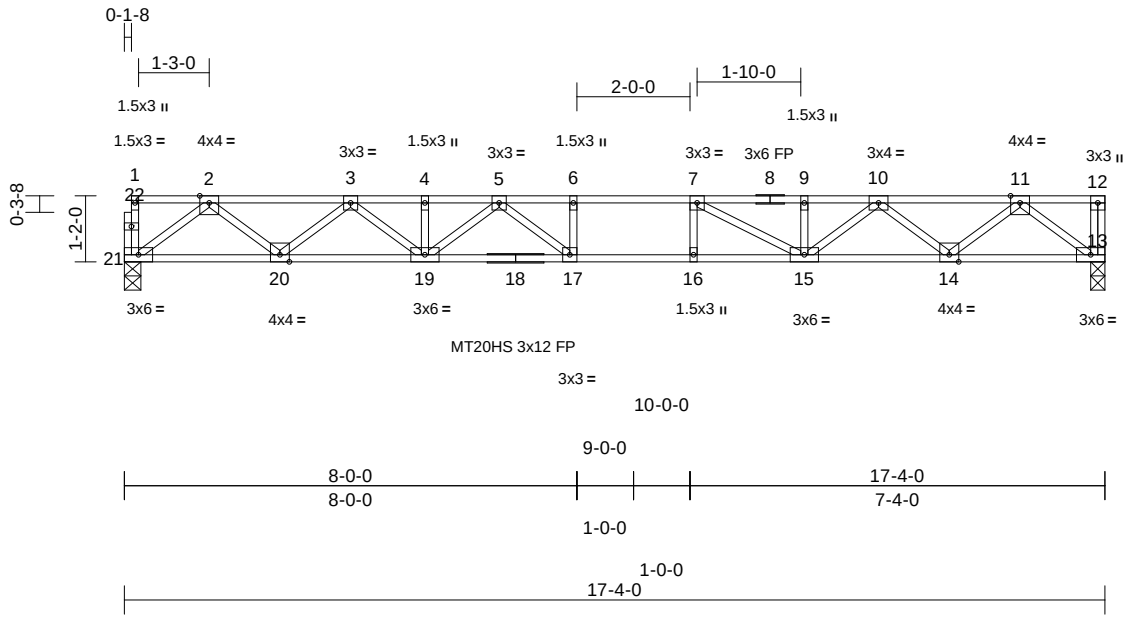

Scale = 1:40.7

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.72	Vert(LL)	-0.26	17	>777	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.58	Vert(CT)	-0.36	17	>563	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.06	13	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 SS(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-9-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 13=0-3-0, 21=0-3-8
Max Grav 13=940 (LC 1), 21=933 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-21=-35/0, 12-13=-39/0, 1-2=-2/0, 2-3=-1965/0, 3-4=-3254/0, 4-5=-3254/0, 5-6=-3803/0, 6-7=-3803/0, 7-9=-3252/0, 9-10=-3252/0, 10-11=-1967/0, 11-12=0/0
BOT CHORD 20-21=0/1170, 19-20=0/2730, 17-19=0/3623, 16-17=0/3803, 15-16=0/3803, 14-15=0/2725, 13-14=0/1173
WEBS 6-17=-243/0, 7-16=-80/155, 2-21=-1466/0, 2-20=0/1035, 3-20=-995/0, 3-19=0/669, 4-19=-88/0, 5-19=-472/0, 5-17=-115/569, 11-13=-1471/0, 11-14=0/1035, 10-14=-986/0, 10-15=0/673, 9-15=-181/63, 7-15=-898/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
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

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor	
	2F4	Floor	5	1	Job Reference (optional)	I73911576

Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 02 18:25:21 Page: 1
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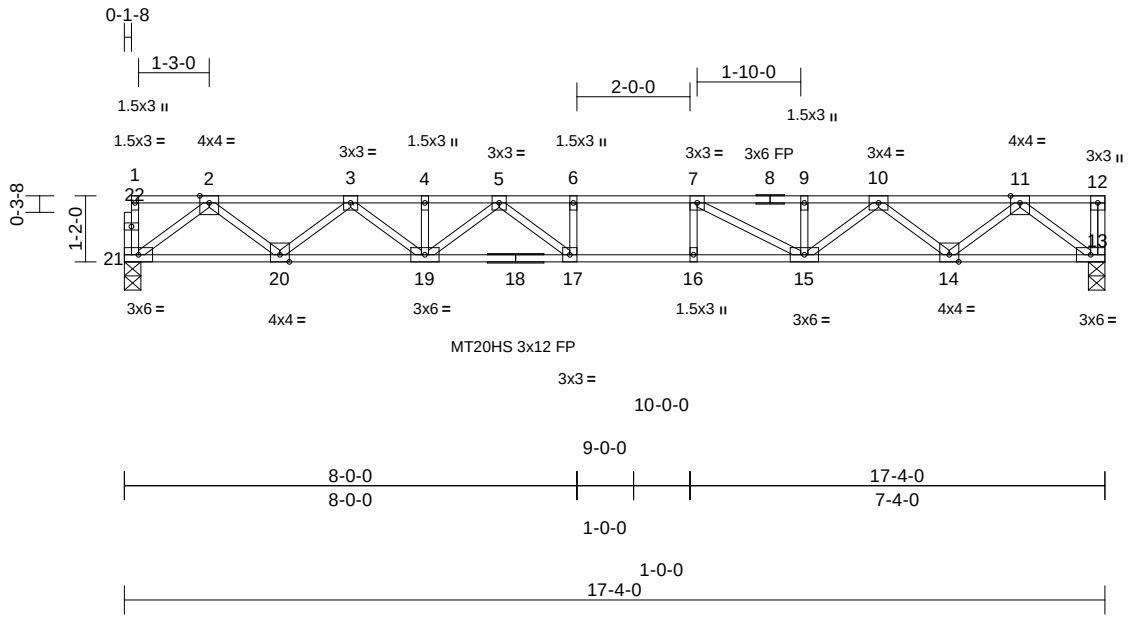

Scale = 1:40.7

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.72	Vert(LL)	-0.26	17	>777	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.58	Vert(CT)	-0.36	17	>563	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.06	13	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 SS(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-9-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 13=0-3-8, 21=0-3-8
Max Grav 13=940 (LC 1), 21=933 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-21=-35/0, 12-13=-39/0, 1-2=-2/0, 2-3=-1965/0, 3-4=-3254/0, 4-5=-3254/0, 5-6=-3803/0, 6-7=-3803/0, 7-9=-3252/0, 9-10=-3252/0, 10-11=-1967/0, 11-12=0/0
BOT CHORD 20-21=0/1170, 19-20=0/2730, 17-19=0/3623, 16-17=0/3803, 15-16=0/3803, 14-15=0/2725, 13-14=0/1173
WEBS 6-17=-243/0, 7-16=-80/155, 2-21=-1466/0, 2-20=0/1035, 3-20=-995/0, 3-19=0/669, 4-19=-88/0, 5-19=-472/0, 5-17=-115/569, 11-13=-1471/0, 10-15=0/673, 11-14=0/1035, 10-14=-986/0, 9-15=-181/63, 7-15=-898/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
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

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor	I73911577
	2F5	Floor	1	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 02 18:25:21 Page: 1
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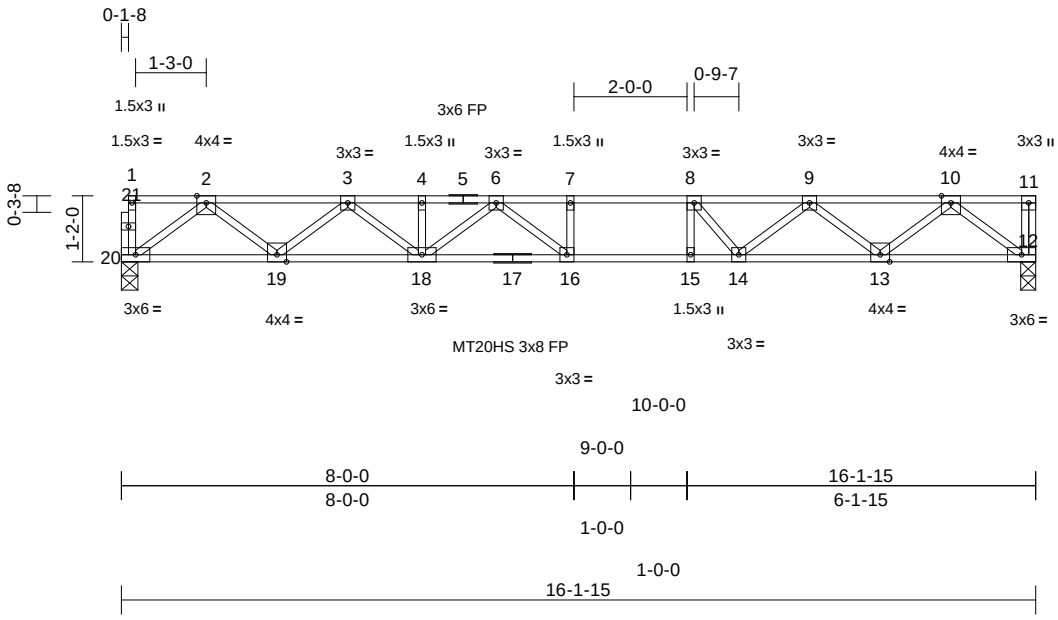

Scale = 1:40.7

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.70	Vert(LL)	-0.24	16-18	>800	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.67	Vert(CT)	-0.33	16-18	>580	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.44	Horz(CT)	0.05	12	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 82 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 5-10-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 12=0-3-3, 20=0-3-8
Max Grav 12=875 (LC 1), 20=869 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-20=-35/0, 11-12=-41/0, 1-2=-2/0, 2-3=-1802/0, 3-4=-2942/0, 4-6=-2942/0, 6-7=-3262/0, 7-8=-3262/0, 8-9=-2906/0, 9-10=-1806/0, 10-11=0/0
BOT CHORD 19-20=0/1085, 18-19=0/2495, 16-18=0/3219, 15-16=0/3262, 14-15=0/3262, 13-14=0/2480, 12-13=0/1090
WEBS 7-16=-183/0, 8-15=-73/302, 2-20=-1358/0, 2-19=0/934, 3-19=-902/0, 3-18=0/570, 4-18=-79/0, 6-18=-363/0, 6-16=-195/409, 10-12=-1368/0, 10-13=0/931, 9-13=-877/0, 9-14=0/618, 8-14=-734/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
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

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor	I73911578
	2F6A	Floor	2	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 02 18:25:21 Page: 1

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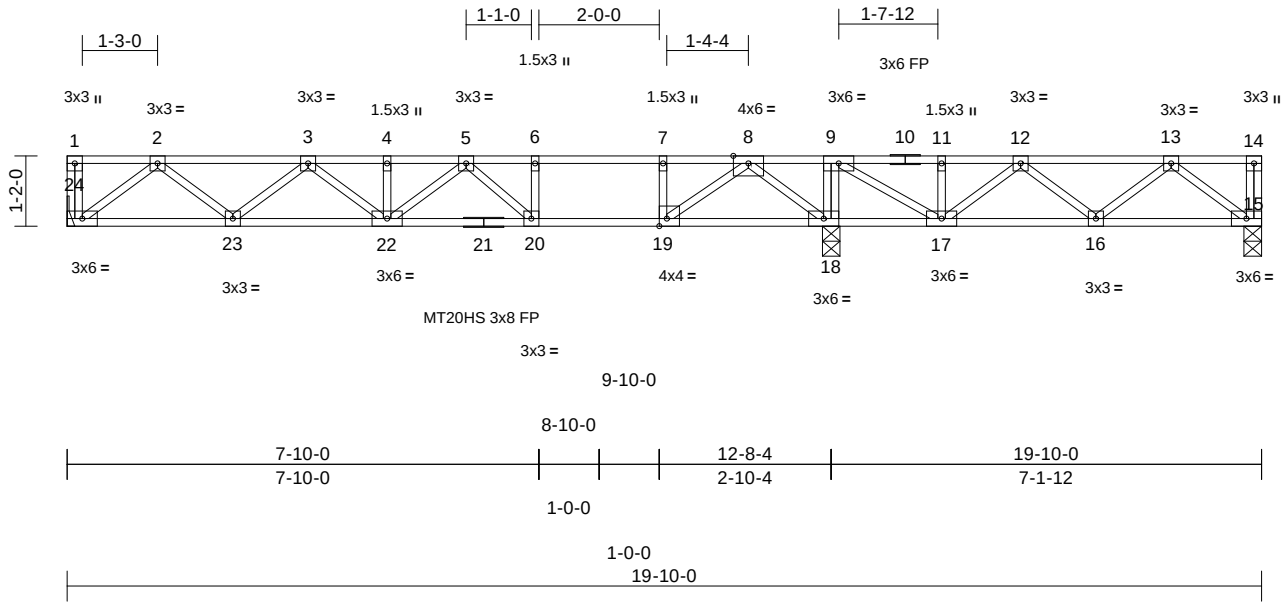

Scale = 1:38.3

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.62	Vert(LL)	-0.21	20-22	>734	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.60	Vert(CT)	-0.28	20-22	>535	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.56	Horz(CT)	0.02	15	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 103 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)

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 17-18.

REACTIONS (size) 15=0-3-8, 18=0-3-8, 24= Mechanical
Max Grav 15=392 (LC 7), 18=1112 (LC 1), 24=687 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-24=-39/0, 14-15=-37/0, 1-2=0/0, 2-3=-1327/0, 3-4=-2020/0, 4-5=-2020/0, 5-6=-1698/0, 6-7=-1698/0, 7-8=-1698/0, 8-9=-49/346, 9-11=-546/0, 11-12=-546/0, 12-13=-591/0, 13-14=0/0

BOT CHORD 23-24=0/836, 22-23=0/1804, 20-22=0/2047, 19-20=0/1698, 18-19=0/770, 17-18=-346/49, 16-17=0/699, 15-16=0/452

WEBS 6-20=0/195, 7-19=-514/0, 9-18=-547/0, 2-24=-1049/0, 2-23=0/639, 3-22=0/275, 8-18=-1022/0, 8-19=0/1182, 13-15=-567/0, 3-23=-622/0, 4-22=-52/0, 5-22=-65/17, 5-20=-524/0, 13-16=0/181, 12-16=-141/0, 12-17=-299/0, 11-17=-129/0, 9-17=0/666

NOTES

1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) Refer to girder(s) for truss to truss connections.
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

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor	
	2FGE2	Floor Supported Gable	1	1	Job Reference (optional)	I73911579

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 02 18:25:23
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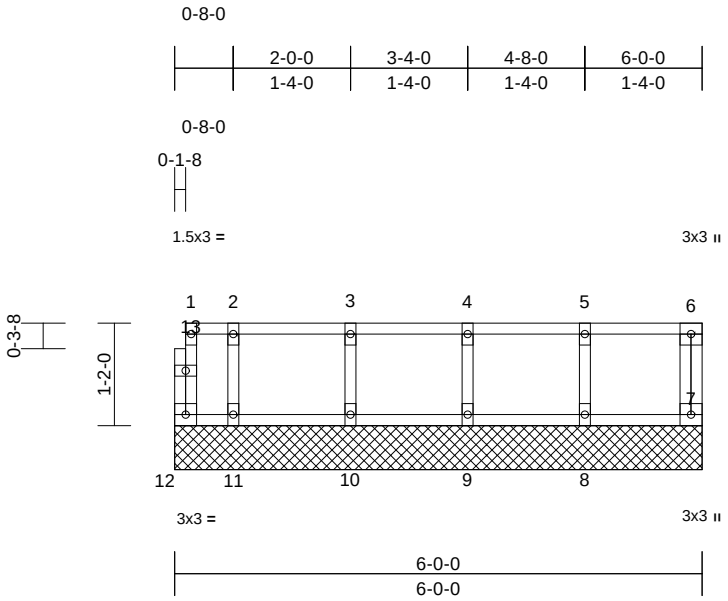

Scale = 1:26.2

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	7	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 28 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=6-0-0, 8=6-0-0, 9=6-0-0, 10=6-0-0, 11=6-0-0, 12=6-0-0
Max Grav 7=59 (LC 1), 8=148 (LC 1), 9=145 (LC 1), 10=153 (LC 1), 11=105 (LC 1), 12=17 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	6-7=-55/0, 1-12=-9/0, 1-2=-7/0, 2-3=-7/0, 3-4=-7/0, 4-5=-7/0, 5-6=-7/0
BOT CHORD	11-12=0/7, 10-11=0/7, 9-10=0/7, 8-9=0/7, 7-8=0/7
WEBS	5-8=-133/0, 4-9=-132/0, 3-10=-139/0, 2-11=-102/0

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) 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.

LOAD CASE(S) Standard

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor	
	2F7A	Floor	3	1	Job Reference (optional)	I73911580

Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 02 18:25:21 Page: 1
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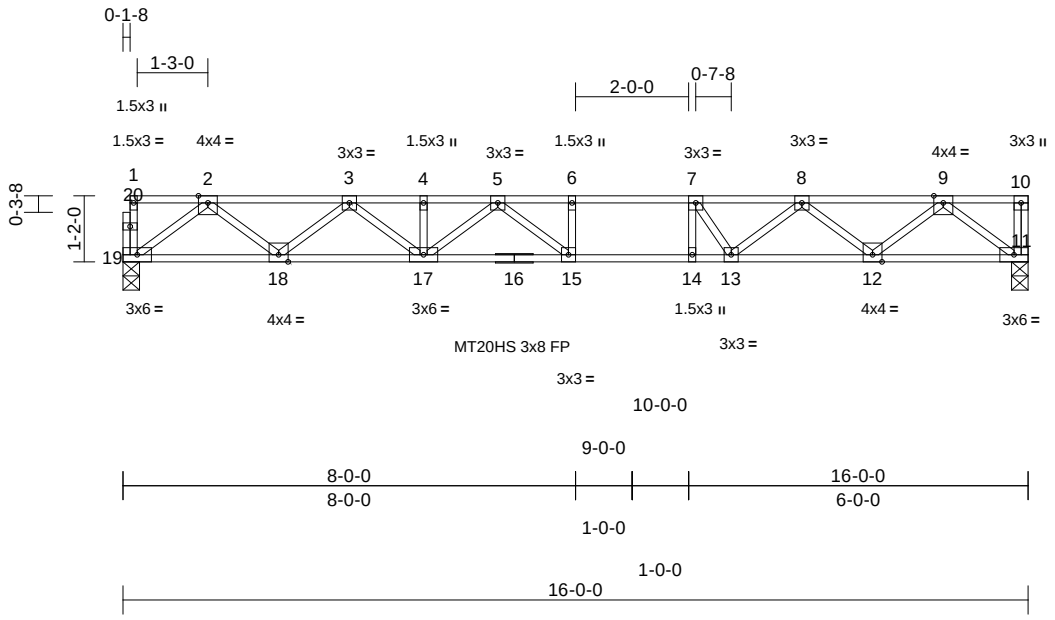

Scale = 1:40.7

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.71	Vert(LL)	-0.23	15-17	>804	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.68	Vert(CT)	-0.32	15-17	>583	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.44	Horz(CT)	0.04	11	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 81 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 5-11-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 11=0-3-8, 19=0-3-8
Max Grav 11=866 (LC 1), 19=860 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-19=-35/0, 10-11=-40/0, 1-2=-2/0, 2-3=-1779/0, 3-4=-2898/0, 4-5=-2898/0, 5-6=-3187/0, 6-7=-3187/0, 7-8=-2875/0, 8-9=-1782/0, 9-10=0/0
BOT CHORD 18-19=0/1073, 17-18=0/2462, 15-17=0/3163, 14-15=0/3187, 13-14=0/3187, 12-13=0/2444, 11-12=0/1080
WEBS 6-15=-177/0, 7-14=-70/353, 2-19=-1343/0, 2-18=0/920, 3-18=-889/0, 3-17=0/557, 4-17=-79/0, 5-17=-349/0, 5-15=-205/387, 9-11=-1354/0, 9-12=0/914, 8-12=-861/0, 8-13=0/632, 7-13=-749/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
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

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor	I73911581
	2F8A	Floor	1	1	Job Reference (optional)	

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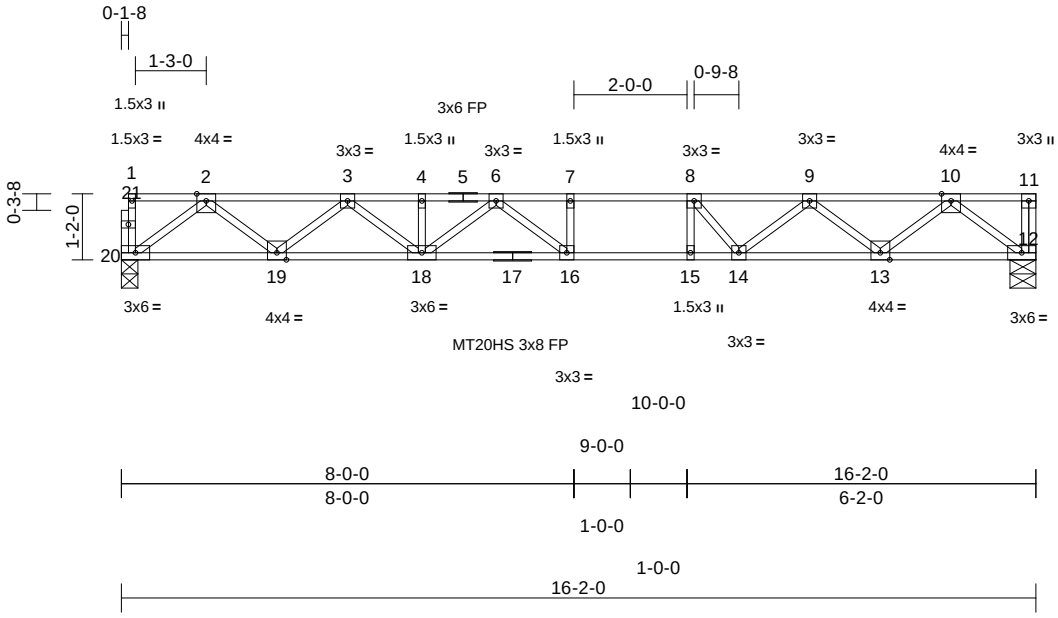

Scale = 1:40.7

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.70	Vert(LL)	-0.24	16-18	>800	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.66	Vert(CT)	-0.33	16-18	>580	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.44	Horz(CT)	0.05	12	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 82 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 5-10-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 12=0-5-8, 20=0-3-8
Max Grav 12=875 (LC 1), 20=869 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-20=-35/0, 11-12=-41/0, 1-2=-2/0, 2-3=-1803/0, 3-4=-2943/0, 4-6=-2943/0, 6-7=-3263/0, 7-8=-3263/0, 8-9=-2907/0, 9-10=-1806/0, 10-11=0/0
BOT CHORD 19-20=0/1085, 18-19=0/2496, 16-18=0/3220, 15-16=0/3263, 14-15=0/3263, 13-14=0/2480, 12-13=0/1091
WEBS 7-16=-184/0, 8-15=-73/301, 2-20=-1359/0, 2-19=0/934, 3-19=-902/0, 3-18=0/571, 4-18=-79/0, 6-18=-363/0, 6-16=-195/410, 10-12=-1368/0, 10-13=0/931, 9-13=-878/0, 9-14=0/617, 8-14=-734/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
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

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor	
	2F9	Floor	2	1	Job Reference (optional)	I73911582

Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 02 18:25:21 Page: 1

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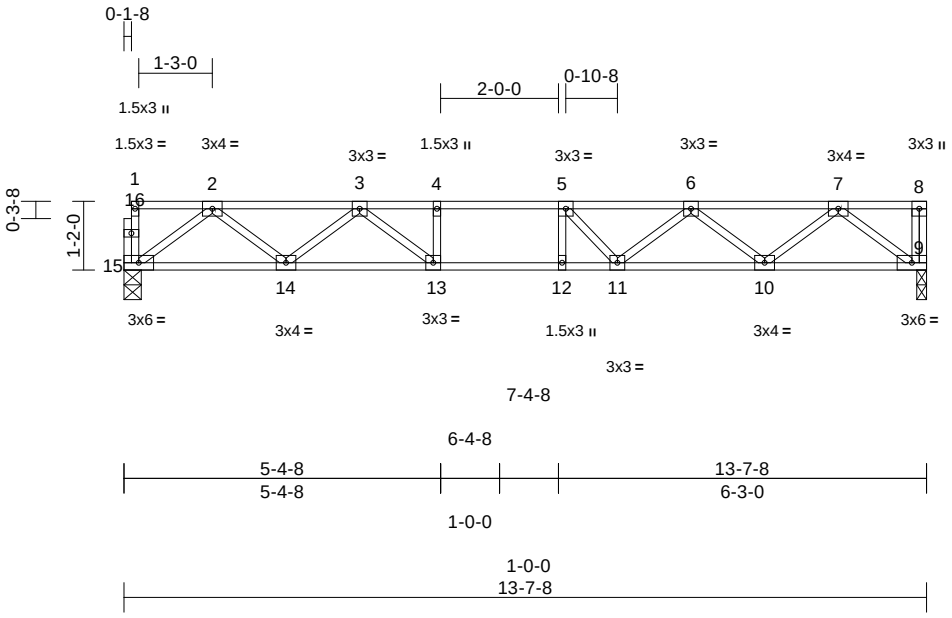

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.54	Vert(LL)	-0.13	11-12	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.48	Vert(CT)	-0.17	11-12	>934	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.35	Horz(CT)	0.03	9	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 69 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) 9=0-2-0, 15=0-3-8
Max Grav 9=736 (LC 1), 15=729 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-15=-34/0, 8-9=-43/0, 1-2=-2/0, 2-3=-1446/0, 3-4=-2310/0, 4-5=-2310/0, 5-6=-2204/0, 6-7=-1458/0, 7-8=0/0
BOT CHORD 14-15=0/903, 13-14=0/1975, 12-13=0/2310, 11-12=0/2310, 10-11=0/1985, 9-10=0/900
WEBS 4-13=-243/0, 5-12=-177/102, 2-15=-1130/0, 2-14=0/707, 3-14=-689/0, 3-13=0/605, 7-9=-1129/0, 7-10=0/726, 6-10=-686/0, 6-11=0/376, 5-11=-378/65

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) 9.
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

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor	
	2F10	Floor	3	1	Job Reference (optional)	I73911583

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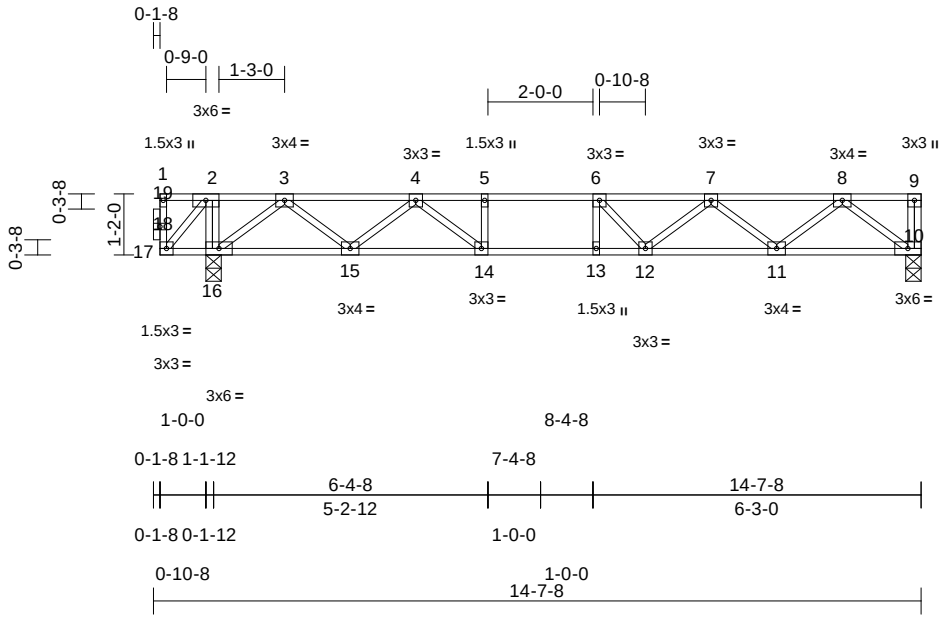

Scale = 1:43.9

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.67	Vert(LL)	-0.13	12-13	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.55	Vert(CT)	-0.17	12-13	>927	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.34	Horz(CT)	0.03	10	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 76 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, Except:
6-0-0 oc bracing: 16-17.

REACTIONS (size) 10=0-3-8, 16=0-3-8
Max Grav 10=723 (LC 4), 16=1015 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-17=-200/0, 9-10=-43/0, 1-2=0/0, 2-3=0/176, 3-4=-1315/0, 4-5=-2226/0, 5-6=-2226/0, 6-7=-2143/0, 7-8=-1427/0, 8-9=0/0
BOT CHORD 16-17=-176/0, 15-16=0/765, 14-15=0/1864, 13-14=0/2226, 12-13=0/2226, 11-12=0/1941, 10-11=0/883
WEBS 2-16=-290/0, 5-14=-254/0, 6-13=-198/84, 2-17=0/262, 3-16=-1132/0, 3-15=0/720, 4-15=-720/0, 4-14=0/647, 8-10=-1108/0, 8-11=0/708, 7-11=-669/0, 7-12=0/354, 6-12=-344/107

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) 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.
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

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 10-17=-10, 1-9=-100
Concentrated Loads (lb)
Vert: 1=-161

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor	
	2F11	Floor	3	1	Job Reference (optional)	I73911584

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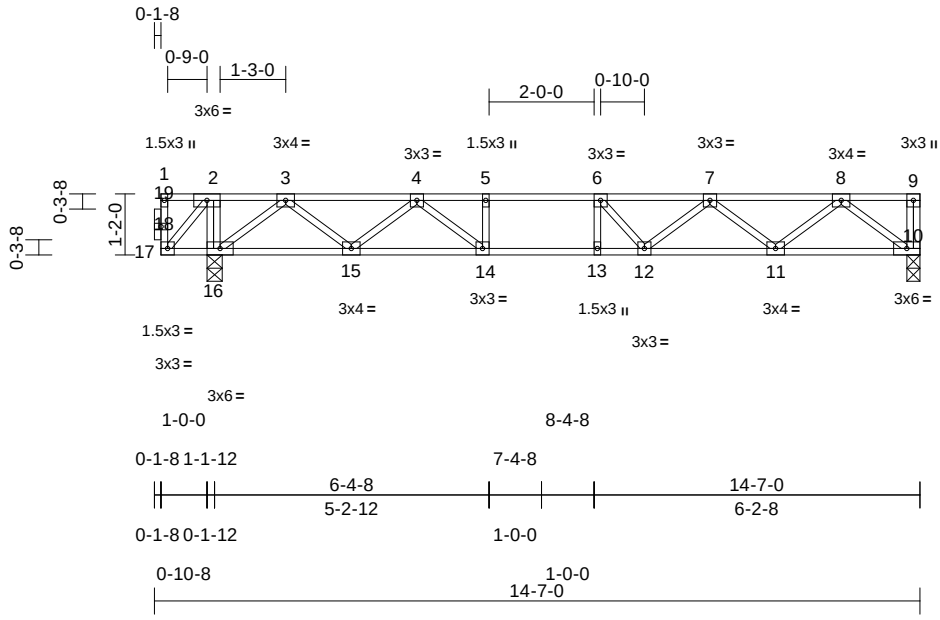

Scale = 1:43.9

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.69	Vert(LL)	-0.13	12-13	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.56	Vert(CT)	-0.17	12-13	>938	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.35	Horz(CT)	0.03	10	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 75 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, Except:
6-0-0 oc bracing: 16-17,15-16.

REACTIONS (size) 10=0-3-0, 16=0-3-8
Max Grav 10=711 (LC 4), 16=1161 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 9-10=-43/0, 1-17=-338/0, 1-2=0/0, 2-3=0/298, 3-4=-1208/0, 4-5=-2146/0, 5-6=-2146/0, 6-7=-2084/0, 7-8=-1397/0, 8-9=0/0
BOT CHORD 16-17=-298/0, 15-16=-43/650, 14-15=0/1768, 13-14=0/2146, 12-13=0/2146, 11-12=0/1896, 10-11=0/868
WEBS 2-16=-428/0, 5-14=-261/0, 6-13=-215/74, 3-16=-1142/0, 3-15=0/730, 4-15=-734/0, 4-14=0/668, 8-10=-1088/0, 8-11=0/689, 7-11=-650/0, 7-12=0/337, 6-12=-315/137, 2-17=0/446

NOTES

1) Unbalanced floor live loads have been considered for this design.
2) 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.
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

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 10-17=-10, 1-9=-100
Concentrated Loads (lb)
Vert: 1=-300

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor	
	2FGE3	Floor Supported Gable	1	1	Job Reference (optional)	I73911585

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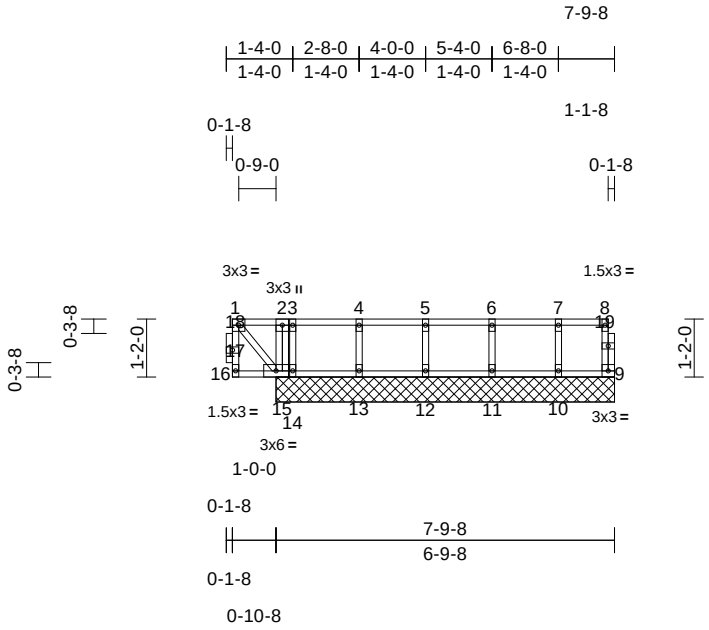

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Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.35	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.37	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	NO	WB	0.11	Horiz(TL)	0.00	9	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 39 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 All bearings 6-9-8.
(lb) - Max Uplift All uplift 100 (lb) or less at joint(s) except 14=-525 (LC 3)
Max Grav All reactions 250 (lb) or less at joint (s) 9, 10, 11, 12, 13, 14 except 15=696 (LC 3)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-15=-334/0

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) Non Standard bearing condition. Review required.
7) 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.
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
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 9-16=-7, 1-8=-67
Concentrated Loads (lb)
Vert: 1=-86

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor	
	2F12	Floor	3	1	Job Reference (optional)	I73911586

Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 02 18:25:22 Page: 1

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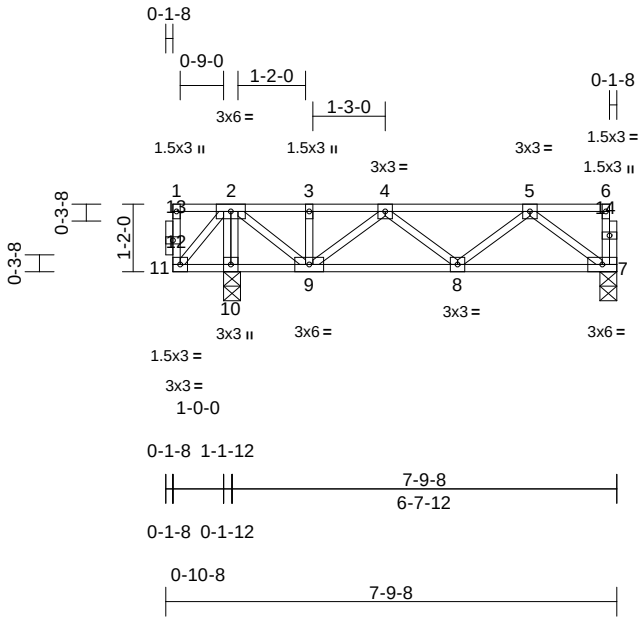

Scale = 1:39.8

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	0.18	Vert(LL)	-0.01	8-9	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.10	Vert(CT)	-0.01	8-9	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.16	Horz(CT)	0.00	7	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 45 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: 7-8.

REACTIONS (size) 7=0-3-8, 10=0-3-8
Max Grav 7=208 (LC 4), 10=526 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-11=-210/0, 6-7=-22/0, 1-2=0/0, 2-3=-112/88, 3-4=-112/88, 4-5=-272/0, 5-6=-1/0
BOT CHORD 10-11=-190/0, 9-10=-187/0, 8-9=-15/283, 7-8=0/237
WEBS 2-10=-510/0, 2-11=0/283, 5-7=-296/0, 5-8=-12/46, 4-8=-14/44, 4-9=-225/0, 3-9=-65/0, 2-9=0/343

NOTES

1) Unbalanced floor live loads have been considered for this design.
2) 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.
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

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 7-11=-7, 1-6=-67
Concentrated Loads (lb)
Vert: 1=-186

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor	I73911587
	2F13	Floor	1	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 02 18:25:22 Page: 1
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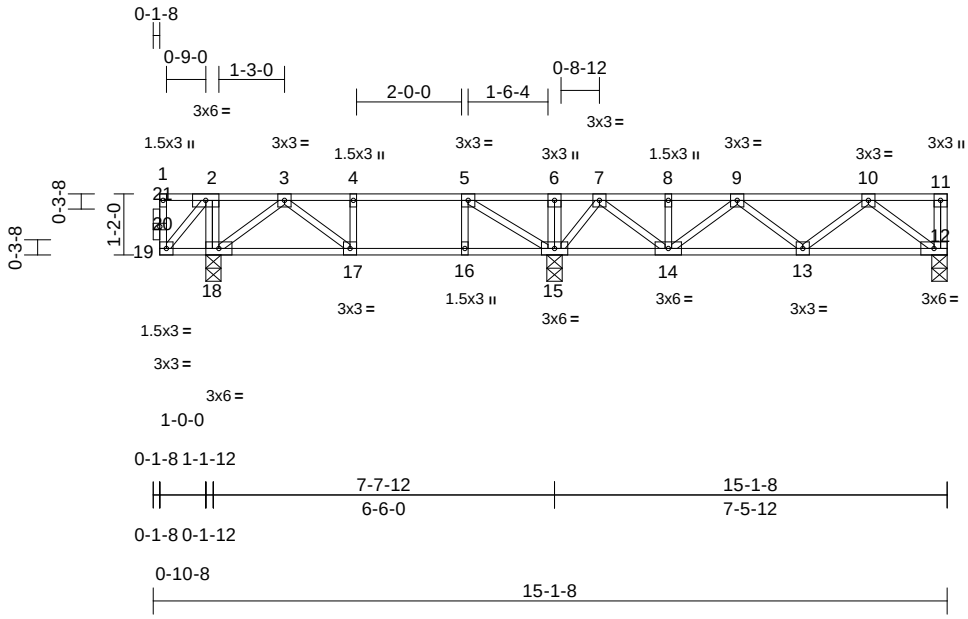

Scale = 1:43.9

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	0.23	Vert(LL)	-0.02	17-18	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.16	Vert(CT)	-0.02	17-18	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.16	Horz(CT)	0.01	12	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 81 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: 13-14,12-13.

REACTIONS (size) 12=0-3-8, 15=0-3-8, 18=0-3-8
Max Grav 12=264 (LC 11), 15=514 (LC 12), 18=562 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-19=-252/0, 11-12=-25/0, 1-2=0/0, 2-3=0/224, 3-4=-221/115, 4-5=-221/115, 5-6=0/227, 6-7=0/225, 7-8=-375/0, 8-9=-375/0, 9-10=-404/0, 10-11=0/0
BOT CHORD 18-19=-224/0, 17-18=-160/73, 16-17=-115/221, 15-16=-115/221, 14-15=-8/171, 13-14=0/478, 12-13=0/306
WEBS 2-18=-336/0, 6-15=-80/0, 2-19=0/335, 5-15=-344/0, 3-18=-337/0, 4-17=-112/0, 5-16=0/29, 10-12=-384/0, 10-13=0/127, 9-13=-97/0, 9-14=-177/0, 8-14=-67/0, 7-14=0/307, 7-15=-347/0, 3-17=0/195

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) 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.
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
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 12-19=-7, 1-11=-67
Concentrated Loads (lb)
Vert: 1=-228

NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor	
	2F14	Floor	1	1	Job Reference (optional)	I73911588

Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 02 18:25:22 Page: 1
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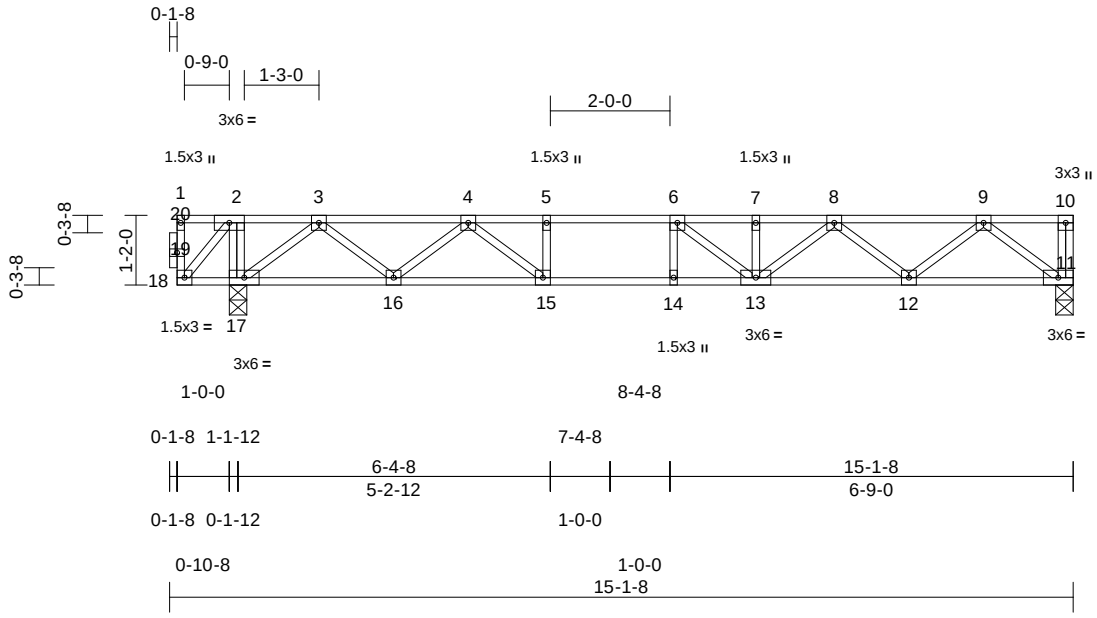

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Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.60	Vert(LL)	-0.11	13-14	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.81	Vert(CT)	-0.16	13-14	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.25	Horz(CT)	0.02	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 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, Except:
6-0-0 oc bracing: 17-18,16-17.

REACTIONS (size) 11=0-3-8, 17=0-3-8
Max Grav 11=489 (LC 4), 17=877 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-18=-303/0, 10-11=-25/0, 1-2=0/0, 2-3=0/268, 3-4=-794/0, 4-5=-1506/0, 5-6=-1506/0, 6-7=-1503/0, 7-8=-1503/0, 8-9=-966/0, 9-10=0/0
BOT CHORD 17-18=-268/0, 16-17=-85/396, 15-16=0/1198, 14-15=0/1506, 13-14=0/1506, 12-13=0/1312, 11-12=0/601
WEBS 2-17=-363/0, 5-15=-220/0, 6-14=-103/21, 2-18=0/401, 3-17=-802/0, 3-16=0/521, 4-16=-529/0, 4-15=0/515, 9-11=-754/0, 9-12=0/475, 8-13=0/244, 8-12=-450/0, 7-13=-136/15, 6-13=-219/170

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) 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
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 11-18=-7, 1-10=-67
Concentrated Loads (lb)
Vert: 1=-278

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor
	2FGE4	Floor Supported Gable	1	1	I73911589 Job Reference (optional)

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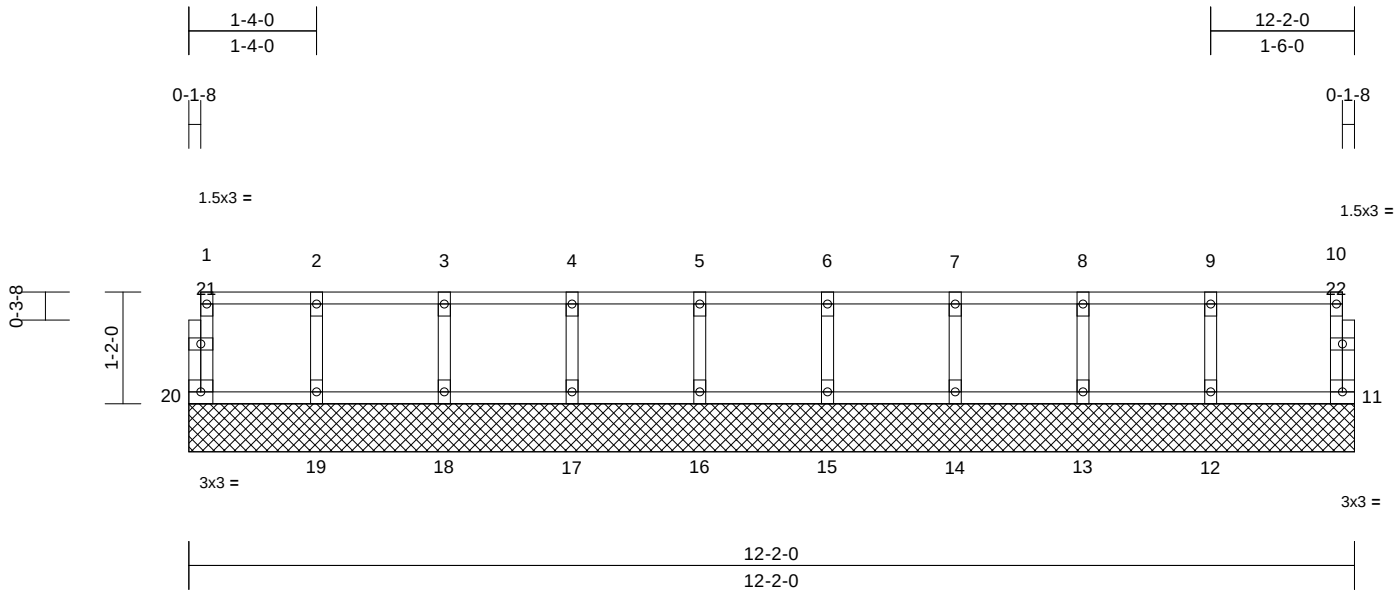

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Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	11	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 52 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) 11=12-2-0, 12=12-2-0, 13=12-2-0, 14=12-2-0, 15=12-2-0, 16=12-2-0, 17=12-2-0, 18=12-2-0, 19=12-2-0, 20=12-2-0
Max Grav 11=44 (LC 1), 12=103 (LC 1), 13=97 (LC 1), 14=98 (LC 1), 15=98 (LC 1), 16=98 (LC 1), 17=97 (LC 1), 18=99 (LC 1), 19=93 (LC 1), 20=39 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-20=-35/0, 10-11=-40/0, 1-2=-8/0, 2-3=-8/0, 3-4=-8/0, 4-5=-8/0, 5-6=-8/0, 6-7=-8/0, 7-8=-8/0, 8-9=-8/0, 9-10=-8/0
BOT CHORD 19-20=0/8, 18-19=0/8, 17-18=0/8, 16-17=0/8, 15-16=0/8, 14-15=0/8, 13-14=0/8, 12-13=0/8, 11-12=0/8
WEBS 2-19=-86/0, 3-18=-90/0, 4-17=-89/0, 5-16=-89/0, 6-15=-89/0, 7-14=-89/0, 8-13=-88/0, 9-12=-93/0

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) 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

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor	I73911590
	2F18	Floor	2	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

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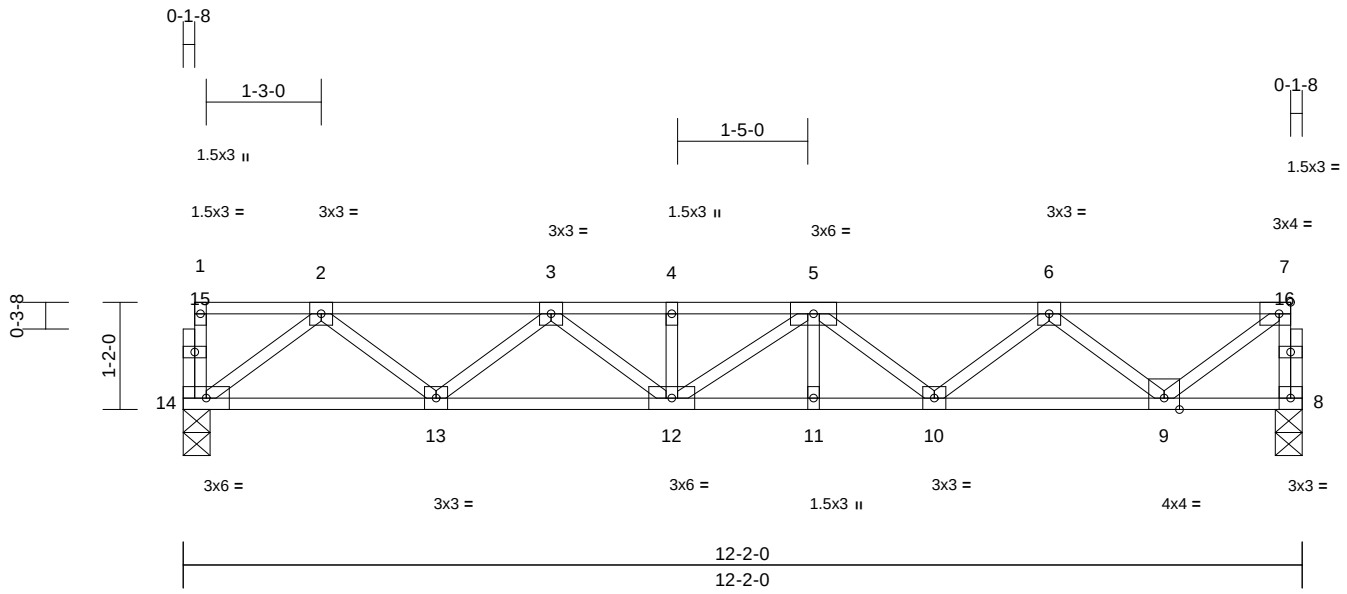

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Plate Offsets (X, Y): [7:0-1-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.38	Vert(LL)	-0.07	11-12	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.52	Vert(CT)	-0.10	11-12	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.02	8	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 64 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) 8=0-3-8, 14=0-3-8
Max Grav 8=649 (LC 1), 14=649 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-14=-34/0, 7-8=-644/0, 1-2=-2/0, 2-3=-1254/0, 3-4=-1842/0, 4-5=-1842/0, 5-6=-1616/0, 6-7=-721/0
BOT CHORD 13-14=0/798, 12-13=0/1675, 11-12=0/1870, 10-11=0/1870, 9-10=0/1346, 8-9=0/39
WEBS 2-14=-999/0, 2-13=0/594, 3-13=-548/0, 4-12=-92/0, 5-11=0/8, 3-12=0/213, 5-12=-34/0, 5-10=-325/0, 6-10=0/351, 6-9=-813/0, 7-9=0/872

NOTES
1) 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

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor	
	2F19	Floor	1	1	Job Reference (optional)	I73911591

Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 02 18:25:23 Page: 1
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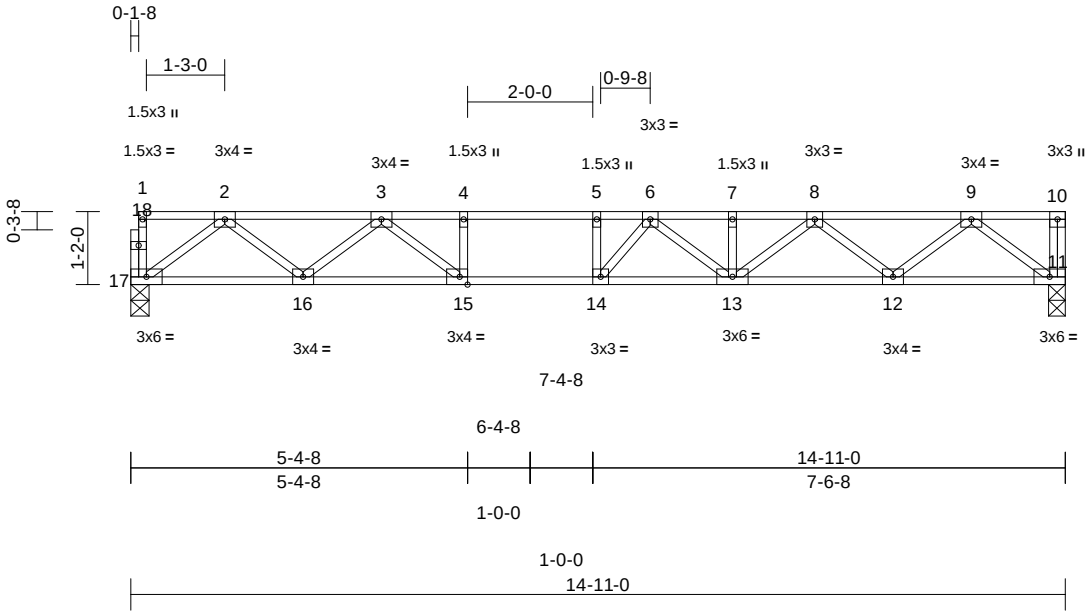

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Plate Offsets (X, Y): [15:0-1-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.80	Vert(LL)	-0.20	13-14	>878	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.56	Vert(CT)	-0.27	13-14	>643	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.39	Horz(CT)	0.04	11	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 76 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 5-8-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 11=0-3-3, 17=0-3-8
Max Grav 11=807 (LC 1), 17=800 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-17=-34/0, 10-11=-39/0, 1-2=-2/0, 2-3=-1615/0, 3-4=-2729/0, 4-5=-2729/0, 5-6=-2729/0, 6-7=-2603/0, 7-8=-2603/0, 8-9=-1630/0, 9-10=0/0
BOT CHORD 16-17=0/995, 15-16=0/2240, 14-15=0/2729, 13-14=0/2780, 12-13=0/2241, 11-12=0/995
WEBS 4-15=-333/0, 5-14=-192/94, 2-17=-1246/0, 2-16=0/807, 3-16=-814/0, 3-15=0/785, 9-11=-1249/0, 8-12=-795/0, 8-13=0/462, 9-12=0/826, 7-13=-83/0, 6-13=-299/0, 6-14=-282/299

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) 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.
3) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor
	2FGE5A	Floor Supported Gable	1	1	I73911592
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 02 18:25:23 Page: 1
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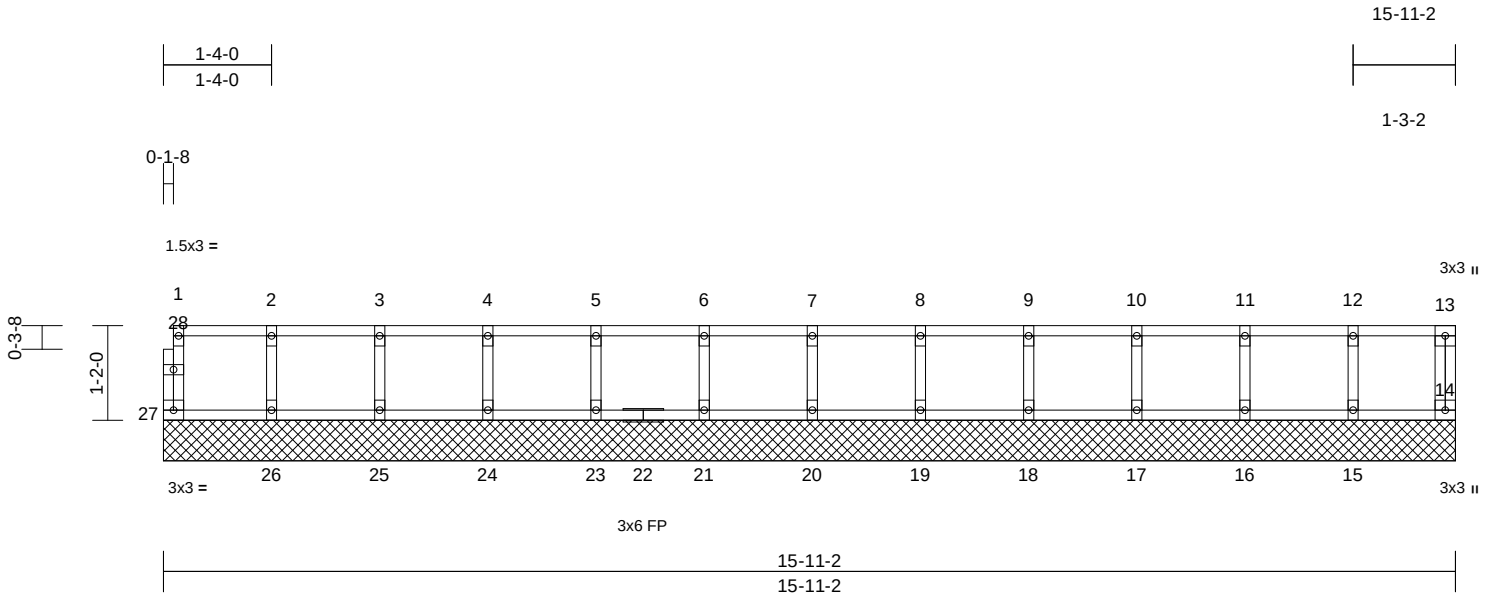

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	14	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 67 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) 14=15-11-2, 15=15-11-2, 16=15-11-2, 17=15-11-2, 18=15-11-2, 19=15-11-2, 20=15-11-2, 21=15-11-2, 23=15-11-2, 24=15-11-2, 25=15-11-2, 26=15-11-2, 27=15-11-2
Max Grav 14=58 (LC 1), 15=138 (LC 1), 16=149 (LC 1), 17=146 (LC 1), 18=147 (LC 1), 19=147 (LC 1), 20=147 (LC 1), 21=147 (LC 1), 23=147 (LC 1), 24=146 (LC 1), 25=148 (LC 1), 26=144 (LC 1), 27=56 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-27=-51/0, 13-14=-52/0, 1-2=-9/0, 2-3=-9/0, 3-4=-9/0, 4-5=-9/0, 5-6=-9/0, 6-7=-9/0, 7-8=-9/0, 8-9=-9/0, 9-10=-9/0, 10-11=-9/0, 11-12=-9/0, 12-13=-9/0
BOT CHORD 26-27=0/9, 25-26=0/9, 24-25=0/9, 23-24=0/9, 21-23=0/9, 20-21=0/9, 19-20=0/9, 18-19=0/9, 17-18=0/9, 16-17=0/9, 15-16=0/9, 14-15=0/9
WEBS 2-26=-130/0, 3-25=-134/0, 4-24=-133/0, 5-23=-133/0, 6-21=-133/0, 7-20=-133/0, 8-19=-133/0, 9-18=-133/0, 10-17=-133/0, 11-16=-135/0, 12-15=-126/0

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) 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.

LOAD CASE(S) Standard

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor	
	2FGE6	Floor Supported Gable	1	1	Job Reference (optional)	I73911593

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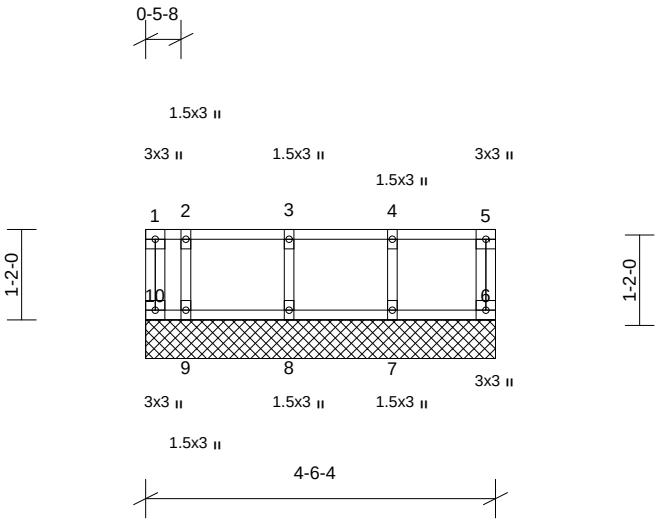

Scale = 1:29.8

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	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 4-6-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS All bearings 4-6-4.
(lb) - Max Grav All reactions 250 (lb) or less at joint (s) 6, 7, 8, 9, 10

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

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) 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

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor	
	2FGE7	Floor Supported Gable	1	1	Job Reference (optional)	I73911594

Structural, LLC, Thurmont, MD - 21788,

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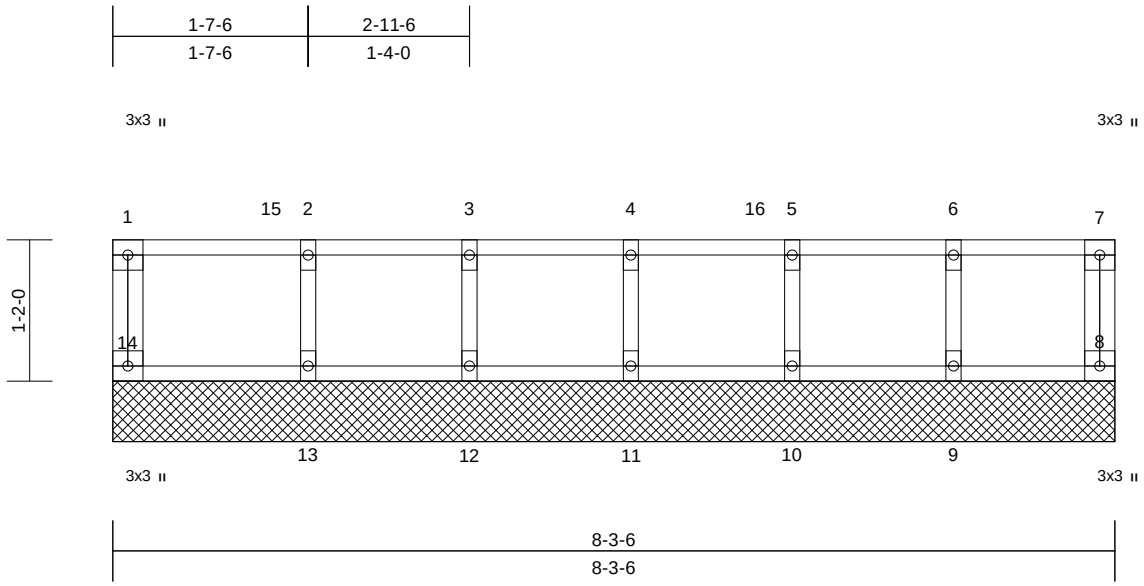

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Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	NO	WB	0.02	Horiz(TL)	0.00	8	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 37 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) 8=8-3-6, 9=8-3-6, 10=8-3-6, 11=8-3-6, 12=8-3-6, 13=8-3-6, 14=8-3-6
Max Grav 8=45 (LC 1), 9=91 (LC 1), 10=101 (LC 1), 11=102 (LC 1), 12=100 (LC 1), 13=111 (LC 1), 14=53 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-14=-48/0, 7-8=-39/0, 1-2=-10/0, 2-3=-10/0, 3-4=-10/0, 4-5=-10/0, 5-6=-10/0, 6-7=-10/0
BOT CHORD 13-14=0/10, 12-13=0/10, 11-12=0/10, 10-11=0/10, 9-10=0/10, 8-9=0/10
WEBS 6-9=-85/0, 5-10=-91/0, 4-11=-94/0, 3-12=-91/0, 2-13=-100/0

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) 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.
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.

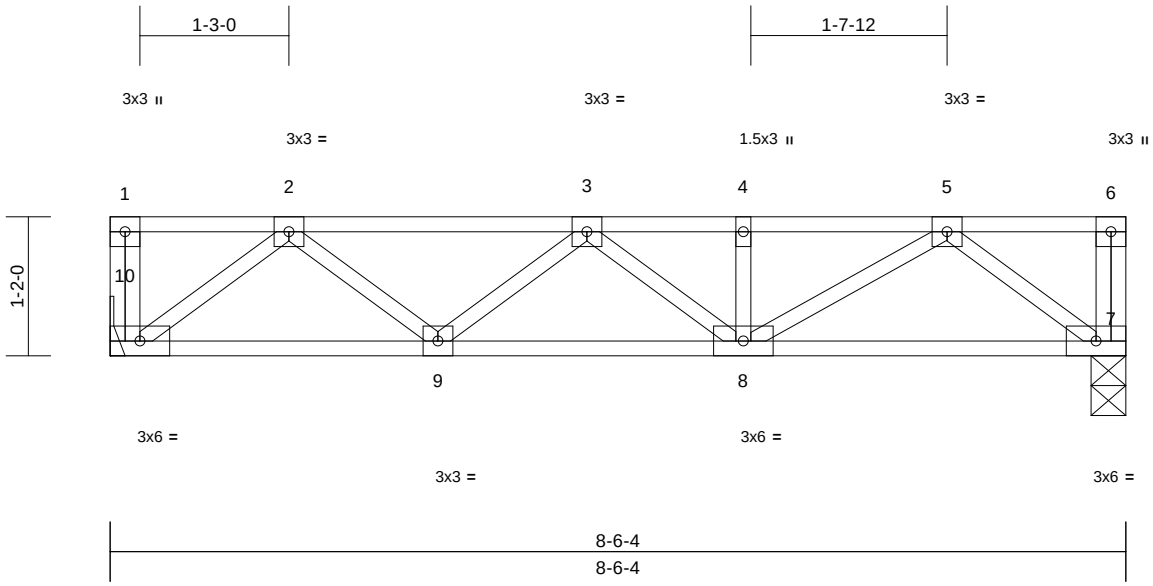
LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 8-14=-7, 1-15=-67, 15-16=-70, 7-16=-67

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor
	2F20	Floor	9	1	I73911596
					Job Reference (optional)



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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	0.20	Vert(LL)	-0.01	8-9	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.21	Vert(CT)	-0.02	8-9	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.13	Horz(CT)	0.01	7	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 46 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)

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= Mechanical
Max Grav 7=311 (LC 1), 10=315 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-10=-24/0, 6-7=-33/0, 1-2=0/0, 2-3=-523/0, 3-4=-595/0, 4-5=-595/0, 5-6=0/0
BOT CHORD 9-10=0/373, 8-9=0/652, 7-8=0/354
WEBS 2-10=-469/0, 2-9=0/195, 3-9=-167/0, 3-8=-72/0, 4-8=-81/0, 5-7=-444/0, 5-8=0/282

NOTES
1) Refer to girder(s) for truss to truss connections.
2) 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.
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
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 7-10=-7, 1-2=-67, 2-4=-72, 4-6=-67

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor	
	1F1C	Floor	3	1	Job Reference (optional)	I73911601

Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 02 18:25:18 Page: 1
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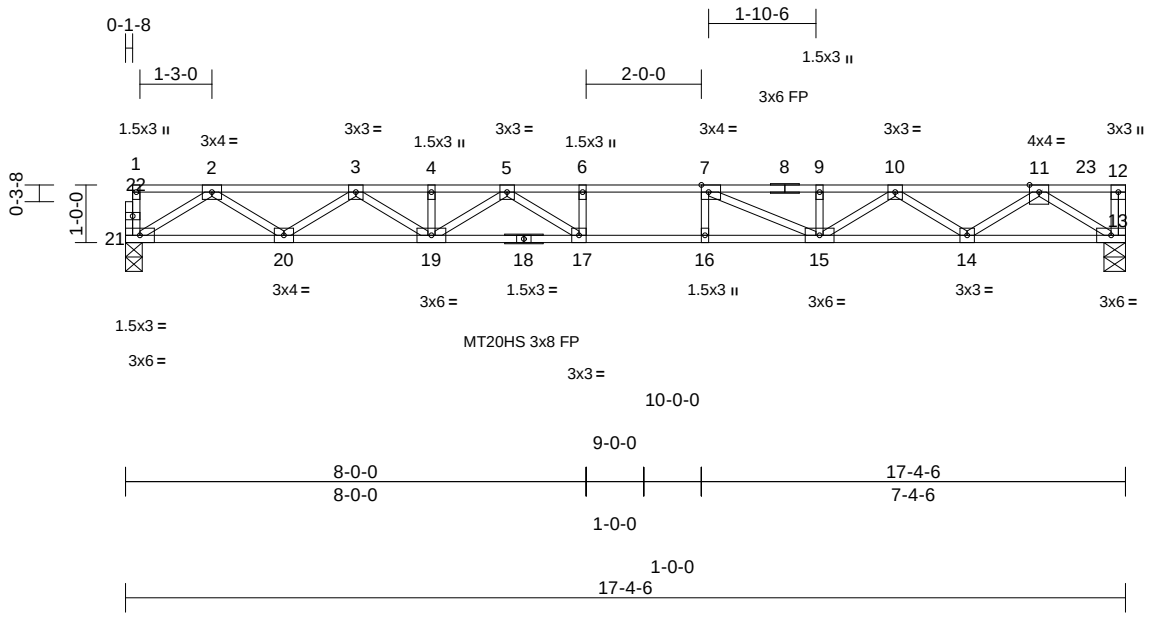

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Plate Offsets (X, Y): [7:0-1-8,Edge]

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	0.84	Vert(LL)	-0.25	17	>826	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.96	Vert(CT)	-0.37	16-17	>559	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.42	Horz(CT)	0.06	13	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 85 lb	FT = 20%F, 12%E

LUMBER
TOP CHORD 2x4 SP No.2(flat) *Except* 8-12:2x4 SP SS (flat)
BOT CHORD 2x4 SP No.2(flat) *Except* 18-13:2x4 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) 13=0-4-8, 21=0-3-8
Max Grav 13=1479 (LC 1), 21=652 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-21=-24/0, 12-13=-498/0, 1-2=-2/0, 2-3=-1645/0, 3-4=-2750/0, 4-5=-2750/0, 5-6=-3309/0, 6-7=-3309/0, 7-9=-2984/0, 9-10=-2984/0, 10-11=-2055/0, 11-12=0/0
BOT CHORD 20-21=0/974, 19-20=0/2290, 17-19=0/3088, 16-17=0/3309, 15-16=0/3309, 14-15=0/2559, 13-14=0/1526
WEBS 6-17=-194/0, 7-16=-77/77, 2-21=-1152/0, 2-20=0/820, 3-20=-787/0, 3-19=0/553, 4-19=-66/0, 5-19=-407/0, 5-17=0/517, 11-13=-1809/0, 11-14=0/645, 10-15=0/511, 10-14=-616/0, 9-15=-167/4, 7-15=-570/40

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) The Fabrication Tolerance at joint 18 = 12%
4) 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.
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.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 13-21=-7, 1-12=-67
Concentrated Loads (lb)
Vert: 23=-880

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor	
	1F1A	Floor	3	1	Job Reference (optional)	I73911602

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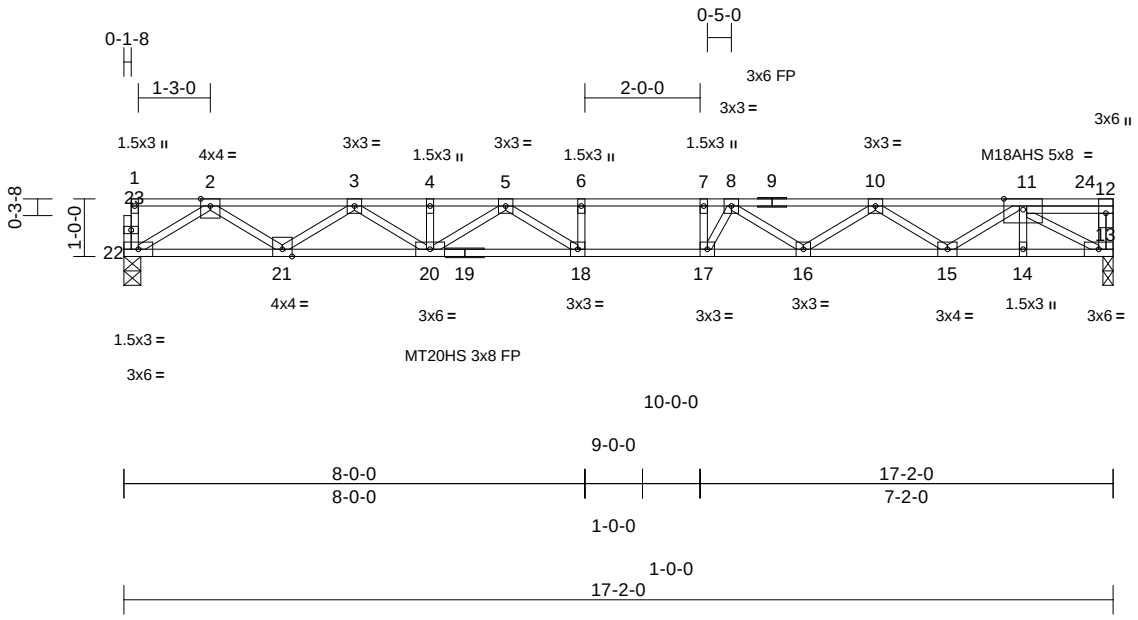

Scale = 1:40

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	0.78	Vert(LL)	-0.29	18	>711	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.52	Vert(CT)	-0.41	17-18	>497	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.45	Horz(CT)	0.06	13	n/a	n/a	M18AHS	186/179
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 86 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 5-11-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 13=0-2-2, 22=0-3-8
Max Grav 13=1692 (LC 1), 22=760 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-22=-29/0, 12-13=-737/0, 1-2=-2/0, 2-3=-1907/0, 3-4=-3167/0, 4-5=-3167/0, 5-6=-3743/0, 6-7=-3743/0, 7-8=-3743/0, 8-10=-3299/0, 10-11=-2334/0, 11-12=0/0
BOT CHORD 21-22=0/1132, 20-21=0/2651, 18-20=0/3540, 17-18=0/3743, 16-17=0/3662, 15-16=0/2922, 14-15=0/1596, 13-14=0/1596
WEBS 6-18=-215/0, 7-17=-341/105, 2-22=-1340/0, 2-21=0/945, 3-21=-909/0, 3-20=0/620, 4-20=-71/0, 5-20=-449/0, 5-18=-40/541, 11-13=-1854/0, 11-14=0/7, 11-15=0/853, 10-15=-722/0, 10-16=0/461, 8-16=-472/0, 8-17=-197/504

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 13.
4) 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.
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.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 13-22=-8, 1-12=-80
Concentrated Loads (lb)
Vert: 24=-968

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor	I73911603
	1F1D	Floor	1	1	Job Reference (optional)	

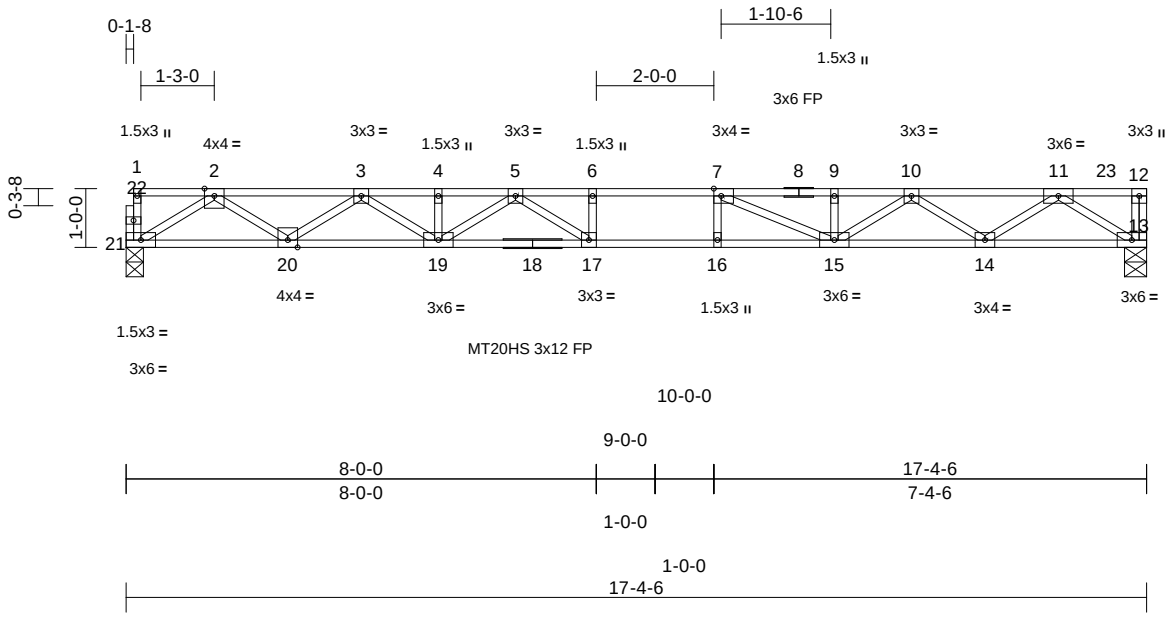

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Plate Offsets (X, Y): [7:0-1-8,Edge]

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	0.73	Vert(LL)	-0.29	17	>714	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.55	Vert(CT)	-0.41	16-17	>503	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.45	Horz(CT)	0.06	13	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 85 lb	FT = 20%F, 12%E

LUMBER
TOP CHORD 2x4 SP SS(flat) *Except* 8-1:2x4 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 5-10-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 13=0-4-8, 21=0-3-8
Max Grav 13=1264 (LC 1), 21=765 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-21=-29/0, 12-13=-315/0, 1-2=-2/0, 2-3=-1923/0, 3-4=-3198/0, 4-5=-3198/0, 5-6=-3799/0, 6-7=-3799/0, 7-9=-3342/0, 9-10=-3342/0, 10-11=-2169/0, 11-12=0/0
BOT CHORD 20-21=0/1141, 19-20=0/2675, 17-19=0/3581, 16-17=0/3799, 15-16=0/3799, 14-15=0/2833, 13-14=0/1474
WEBS 6-17=-213/0, 7-16=-79/106, 2-21=-1350/0, 2-20=0/955, 3-20=-917/0, 3-19=0/629, 4-19=-72/0, 5-19=-461/0, 5-17=-48/566, 11-13=-1747/0, 10-15=0/611, 11-14=0/849, 10-14=-811/0, 9-15=-176/29, 7-15=-757/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates 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) 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
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 13-21=-8, 1-12=-80
Concentrated Loads (lb)
Vert: 23=-528

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor	
	1F4A	Floor	1	1	Job Reference (optional)	I73911604

Structural, LLC, Thurmont, MD - 21788,

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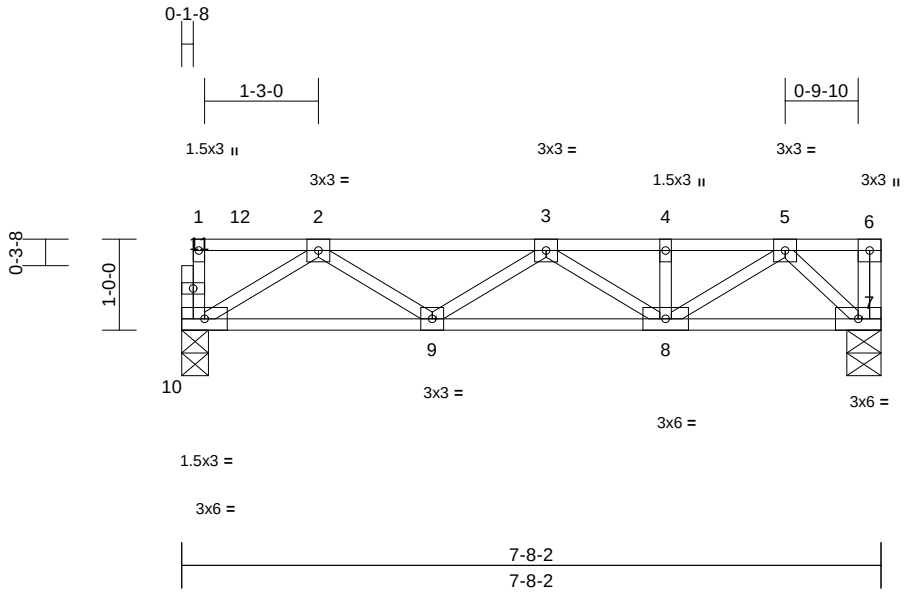

Scale = 1:25.3

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	0.23	Vert(LL)	-0.01	8-9	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.24	Vert(CT)	-0.02	8-9	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.16	Horz(CT)	0.01	7	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 40 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=0-4-8, 10=0-3-8
Max Grav 7=327 (LC 1), 10=323 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-10=-28/0, 6-7=-25/0, 1-2=-2/0, 2-3=-603/0, 3-4=-590/0, 4-5=-590/0, 5-6=0/0
BOT CHORD 9-10=0/451, 8-9=0/724, 7-8=0/311
WEBS 2-9=0/186, 2-10=-532/0, 3-9=-147/0, 3-8=-161/0, 4-8=-77/0, 5-8=0/335, 5-7=-428/0

NOTES
1) 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.
2) 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.
3) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 7-10=-8, 1-6=-80
Concentrated Loads (lb)
Vert: 12=-1

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor	I73911605
	1F5A	Floor	1	1	Job Reference (optional)	

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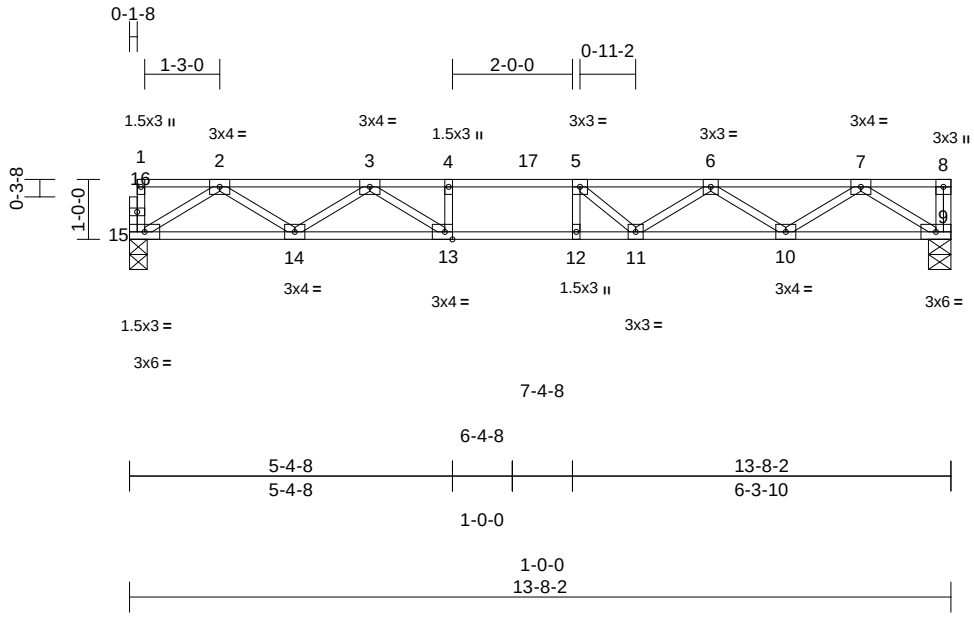

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Plate Offsets (X, Y): [13:0-1-8,Edge]

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	0.47	Vert(LL)	-0.11	12	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.58	Vert(CT)	-0.20	12	>790	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.39	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 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) 9=0-4-8, 15=0-3-8
Max Grav 9=682 (LC 1), 15=682 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-15=-27/0, 8-9=-35/0, 1-2=-2/0, 2-3=-1662/0, 3-4=-2847/0, 4-5=-2847/0, 5-6=-2647/0, 6-7=-1662/0, 7-8=0/0
BOT CHORD 14-15=0/1013, 13-14=0/2306, 12-13=0/2847, 11-12=0/2847, 10-11=0/2296, 9-10=0/1001
WEBS 4-13=-332/0, 5-12=-158/36, 2-15=-1199/0, 2-14=0/792, 3-14=-786/0, 3-13=0/812, 7-9=-1187/0, 7-10=0/806, 6-10=-773/0, 6-11=0/515, 5-11=-450/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) 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.
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
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 9-15=-8, 1-8=-80
Concentrated Loads (lb)
Vert: 17=-188

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor	
	1F1B	Floor	10	1	Job Reference (optional)	I73911606

Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 02 18:25:18 Page: 1

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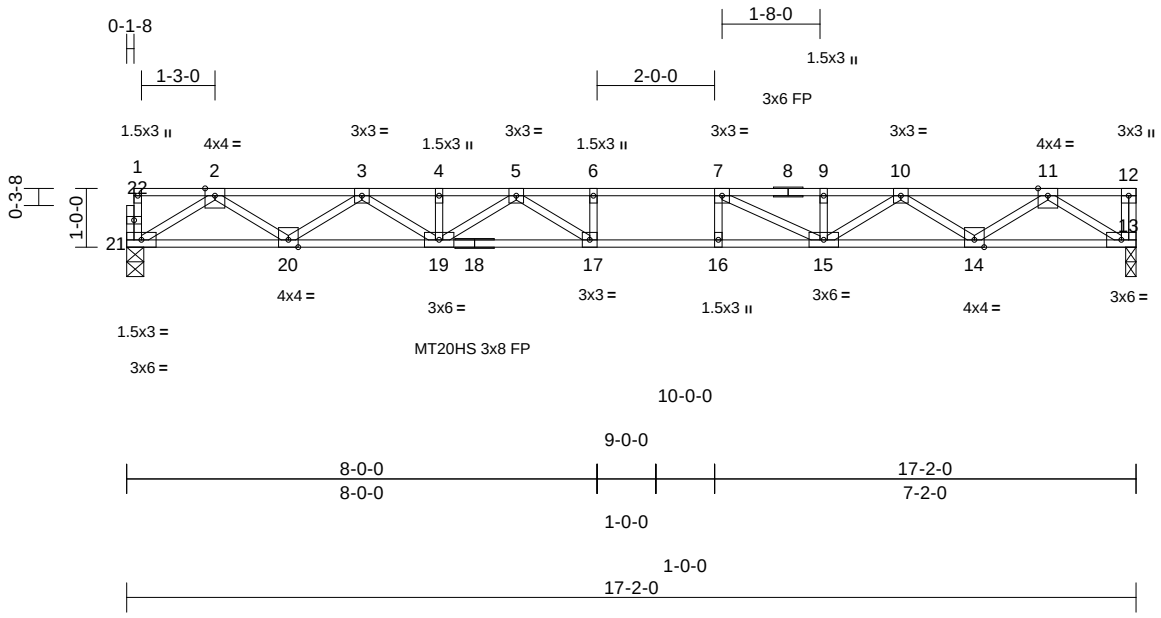

Scale = 1:39.2

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	0.78	Vert(LL)	-0.28	17	>713	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.57	Vert(CT)	-0.39	17-19	>517	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.43	Horz(CT)	0.05	13	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 84 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 5-10-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 13=0-2-2, 21=0-3-8
Max Grav 13=744 (LC 1), 21=739 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-21=-29/0, 12-13=-32/0, 1-2=-2/0, 2-3=-1846/0, 3-4=-3049/0, 4-5=-3049/0, 5-6=-3540/0, 6-7=-3540/0, 7-9=-3040/0, 9-10=-3040/0, 10-11=-1848/0, 11-12=0/0
BOT CHORD 20-21=0/1100, 19-20=0/2563, 17-19=0/3390, 16-17=0/3540, 15-16=0/3540, 14-15=0/2558, 13-14=0/1103
WEBS 6-17=-188/0, 7-16=-61/130, 2-21=-1302/0, 2-20=0/910, 3-20=-876/0, 3-19=0/584, 4-19=-68/0, 5-19=-409/0, 5-17=-113/486, 11-13=-1307/0, 11-14=0/910, 10-14=-867/0, 10-15=0/579, 9-15=-131/60, 7-15=-800/0

NOTES

1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 13.
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

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor	
	1F5B	Floor	2	1	Job Reference (optional)	I73911607

Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 02 18:25:19 Page: 1
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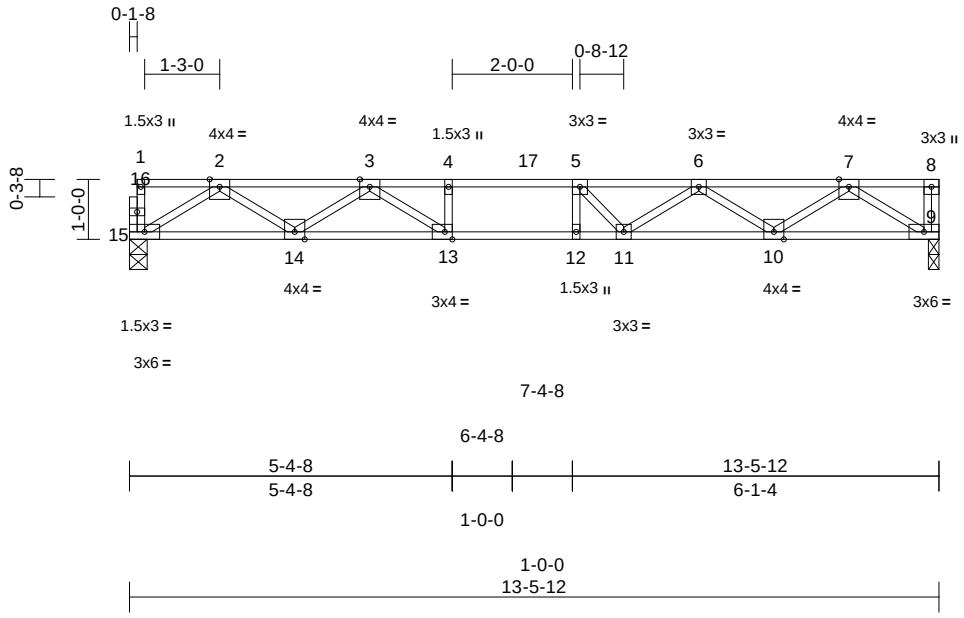

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Plate Offsets (X, Y): [13:0-1-8,Edge]

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	0.66	Vert(LL)	-0.10	12	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.64	Vert(CT)	-0.22	12	>734	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.45	Horz(CT)	0.04	9	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 65 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) 9=0-2-2, 15=0-3-8
Max Grav 9=733 (LC 1), 15=733 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-15=-26/0, 8-9=-33/0, 1-2=-2/0, 2-3=-1810/0, 3-4=-3171/0, 4-5=-3171/0, 5-6=-2963/0, 6-7=-1813/0, 7-8=0/0
BOT CHORD 14-15=0/1093, 13-14=0/2524, 12-13=0/3171, 11-12=0/3171, 10-11=0/2513, 9-10=0/1085
WEBS 4-13=-399/0, 5-12=-193/22, 2-15=-1294/0, 2-14=0/875, 3-14=-871/0, 3-13=0/940, 7-9=-1286/0, 7-10=0/889, 6-10=-855/0, 6-11=0/644, 5-11=-493/0

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) 9.
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) 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

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 9-15=-8, 1-8=-80
Concentrated Loads (lb)
Vert: 17=-307

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor	
	1F9	Floor	1	1	Job Reference (optional)	I73911608

Structural, LLC, Thurmont, MD - 21788,

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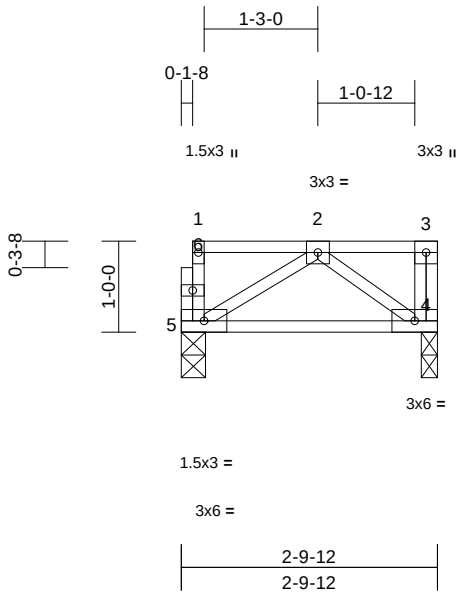

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Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.07	Vert(CT)	-0.01	4-5	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	4	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 16 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)

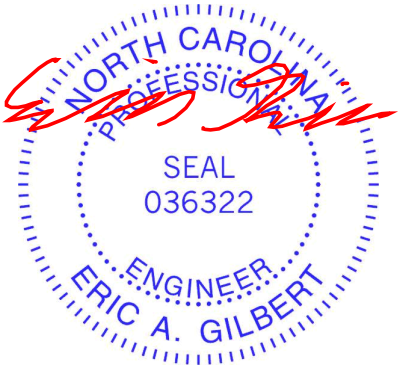
BRACING
TOP CHORD Structural wood sheathing directly applied or 2-9-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4=0-2-2, 5=0-3-3
Max Grav 4=113 (LC 1), 5=108 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-5=-41/0, 3-4=-35/0, 1-2=-3/0, 2-3=0/0
BOT CHORD 4-5=0/91
WEBS 2-5=-105/0, 2-4=-113/0

NOTES
1) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
2) 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.
3) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor	
	2F16	Floor	3	1	Job Reference (optional)	I73911609

Structural, LLC, Thurmont, MD - 21788,

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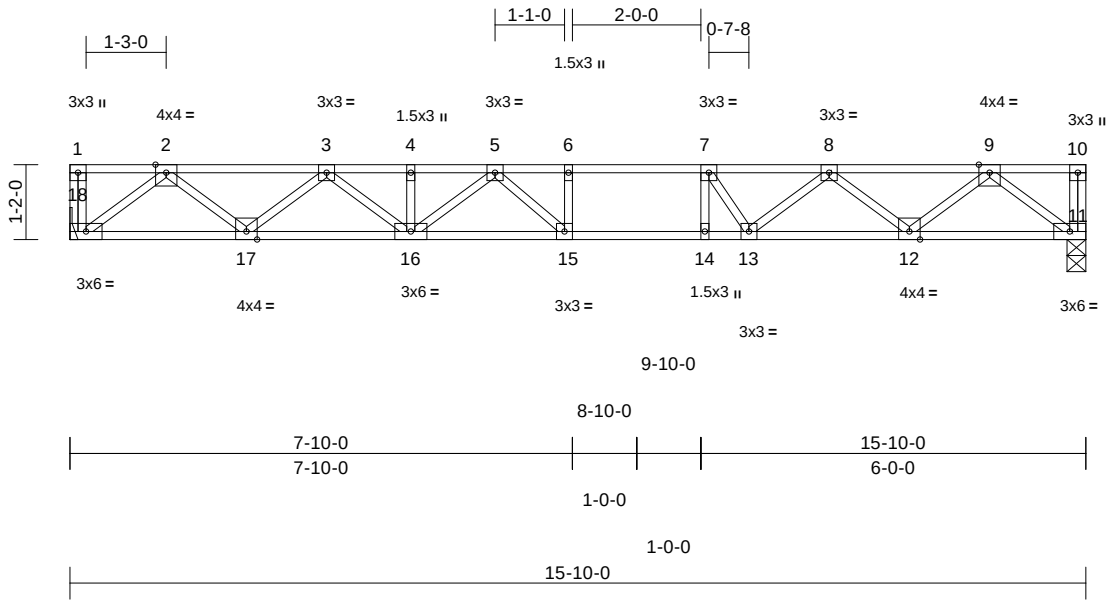

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.68	Vert(LL)	-0.22	15-16	>850	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.65	Vert(CT)	-0.30	15-16	>616	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.04	11	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 81 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)

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= Mechanical
Max Grav 11=857 (LC 1), 18=857 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-18=-39/0, 10-11=-40/0, 1-2=0/0, 2-3=-1757/0, 3-4=-2852/0, 4-5=-2852/0, 5-6=-3124/0, 6-7=-3124/0, 7-8=-2828/0, 8-9=-1759/0, 9-10=0/0
BOT CHORD 17-18=0/1062, 16-17=0/2427, 15-16=0/3102, 14-15=0/3124, 13-14=0/3124, 12-13=0/2411, 11-12=0/1067
WEBS 6-15=-188/1, 7-14=-75/334, 2-18=-1332/0, 2-17=0/905, 3-17=-872/0, 3-16=0/542, 9-11=-1339/0, 9-12=0/901, 8-12=-848/0, 8-13=0/616, 7-13=-720/0, 4-16=-83/0, 5-16=-351/0, 5-15=-202/377

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Refer to girder(s) for truss to truss connections.
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

NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor	
	2F17	Floor	1	1	Job Reference (optional)	I73911610

Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 02 18:25:22 Page: 1

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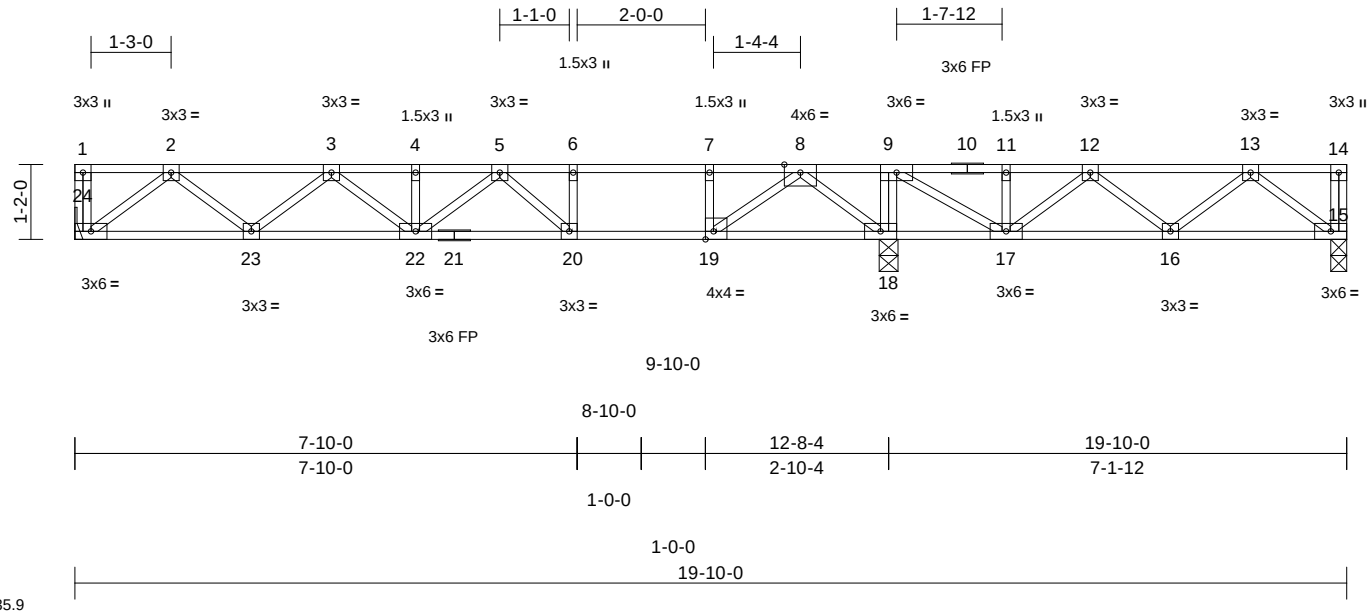

Scale = 1:35.9

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.63	Vert(LL)	-0.21	20-22	>716	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.69	Vert(CT)	-0.29	20-22	>523	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.57	Horz(CT)	0.03	15	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 103 lb	FT = 20%F, 12%E

LUMBER

TOP CHORD 2x4 SP No.2(flat) *Except* 10-1:2x4 SP SS (flat)

BOT CHORD 2x4 SP No.2(flat) *Except* 21-15:2x4 SP SS (flat)

WEBS 2x4 SP No.3(flat)

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 17-18.

REACTIONS (size) 15=0-3-0, 18=0-3-8, 24= Mechanical

Max Grav 15=385 (LC 7), 18=1123 (LC 1), 24=684 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-24=-39/0, 14-15=-37/0, 1-2=0/0, 2-3=-1321/0, 3-4=-2003/0, 4-5=-2003/0, 5-6=-1674/0, 6-7=-1674/0, 7-8=-1674/0, 8-9=-3/367, 9-11=-510/0, 11-12=-510/0, 12-13=-574/0, 13-14=0/0

BOT CHORD 23-24=0/833, 22-23=0/1792, 20-22=0/2027, 19-20=0/1674, 18-19=0/739, 17-18=-367/3, 16-17=0/674, 15-16=0/443

WEBS 6-20=0/200, 7-19=-520/0, 9-18=-555/0, 2-24=-1045/0, 3-22=0/270, 8-18=-1027/0, 8-19=0/1194, 2-23=0/635, 3-23=-613/0, 4-22=-54/0, 5-22=-63/19, 5-20=-531/0, 13-15=-556/0, 13-16=0/170, 12-16=-130/0, 12-17=-305/0, 11-17=-127/0, 9-17=0/672

NOTES

1) Unbalanced floor live loads have been considered for this design.
2) Refer to girder(s) for truss to truss connections.
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

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor
	2F20B	Floor	2	1	I73911611
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788,

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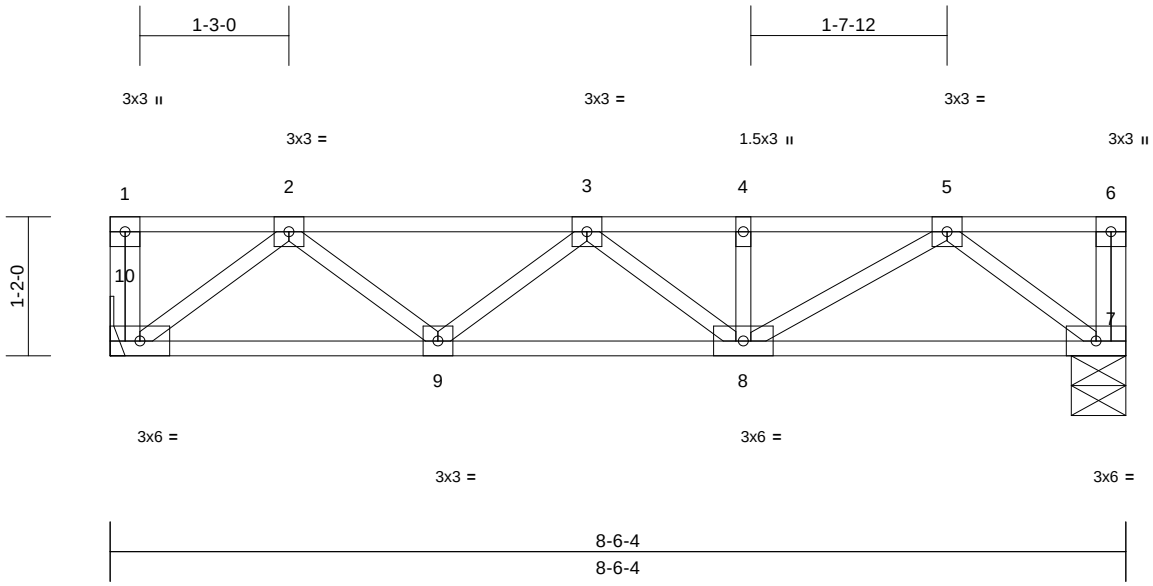

Scale = 1:19.3

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	0.22	Vert(LL)	-0.01	8-9	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.22	Vert(CT)	-0.02	8-9	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.14	Horz(CT)	0.01	7	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 46 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)

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=0-5-8, 10= Mechanical
Max Grav 7=322 (LC 1), 10=331 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-10=-22/0, 6-7=-33/0, 1-2=0/0, 2-3=-556/0, 3-4=-626/0, 4-5=-626/0, 5-6=0/0
BOT CHORD 9-10=0/397, 8-9=0/694, 7-8=0/368
WEBS 2-10=-499/0, 2-9=0/207, 3-9=-179/0, 3-8=-86/0, 4-8=-83/0, 5-7=-462/0, 5-8=0/302

NOTES
1) Refer to girder(s) for truss to truss connections.
2) 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.
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
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 7-10=-7, 1-2=-67, 2-4=-79, 4-6=-67

June 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Arlington Rev.1-El.4-Floor
	2F15	Floor	3	1	I73911612
					Job Reference (optional)

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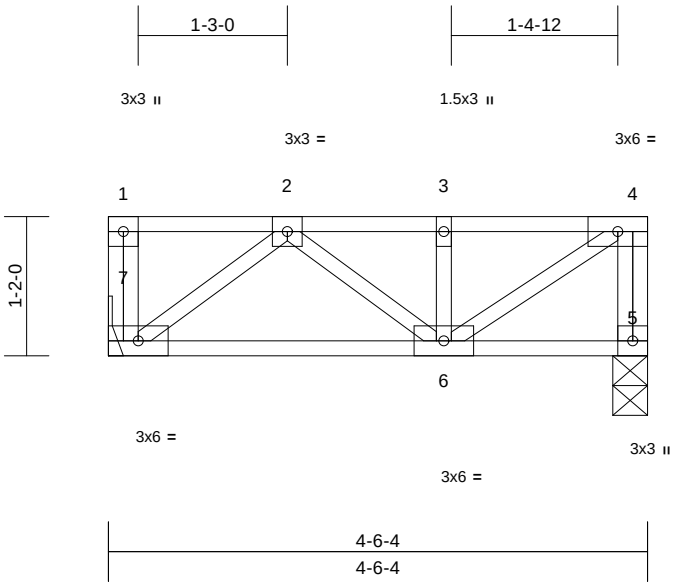


Scale = 1:19.3

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	0.09	Vert(LL)	0.00	6	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.07	Vert(CT)	0.00	6-7	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.09	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)

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-6-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 5=0-3-8, 7= Mechanical
Max Grav 5=157 (LC 1), 7=157 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-7=-38/0, 4-5=-153/0, 1-2=0/0, 2-3=-166/0, 3-4=-166/0
BOT CHORD 6-7=0/146, 5-6=0/0
WEBS 2-7=-184/0, 2-6=0/26, 3-6=-108/0, 4-6=0/199

NOTES
1) Refer to girder(s) for truss to truss connections.
2) 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.

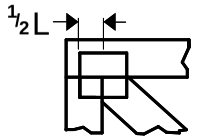
LOAD CASE(S) Standard

June 3,2025

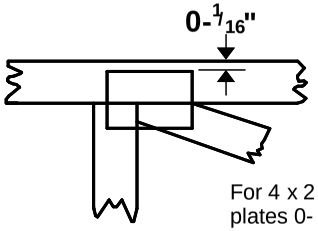
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

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.

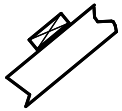
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

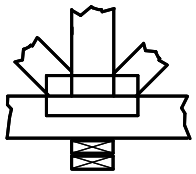
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

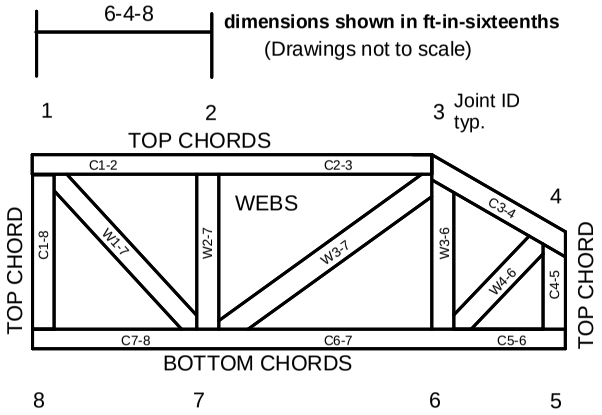


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

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.