ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

RE:Devon

Site Information:

Project Customer: DRB Raleigh Project Name: DRB Raleigh Model Track
Lot/Block: Subdivision:
Model:
Address:
City: State:

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

Design Code: IRC2021/TPI2014
Wind Code: ASCE 7-16
Wind Speed: 115 mph
Roof Load: 40.0 psf
Mean Roof Height (feet): 25

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

Exposure Category: B

No.	Seal#	Truss Name	Date
1	I71733923	2F1GR	3/3/25
2	I71733924	2F1	3/3/25
3	I71733925	2F8	3/3/25
4	I71733926	2F9	3/3/25
5	I71733927	2F2	3/3/25
6	I71733928	2F3	3/3/25
7	I71733929	2F5	3/3/25
8	I71733930	2F10	3/3/25
9	I71733931	2F6	3/3/25
10	I71733932	2F7	3/3/25
11	I71733933	2F4	3/3/25
12	I71733934	2F2GE	3/3/25
13	I71733935	2F1GE	3/3/25
14	I71733936	2F3GE	3/3/25
	I71733937	2F11	3/3/25
16	I71733938	2F4GE	3/3/25

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: Galinski, John
My license renewal date for the state of North Carolina is December 31, 2025.

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

March 3,2025
Galinski, John

Job	Truss	Truss Type	Qty	Ply	Devon
	2F1GR	Floor Girder	1	1	I71733923 Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Feb 18 2025 Print: 8.830 S Feb 18 2025 MiTek Industries, Inc. Fri Feb 28 12:46:19 Page: 1
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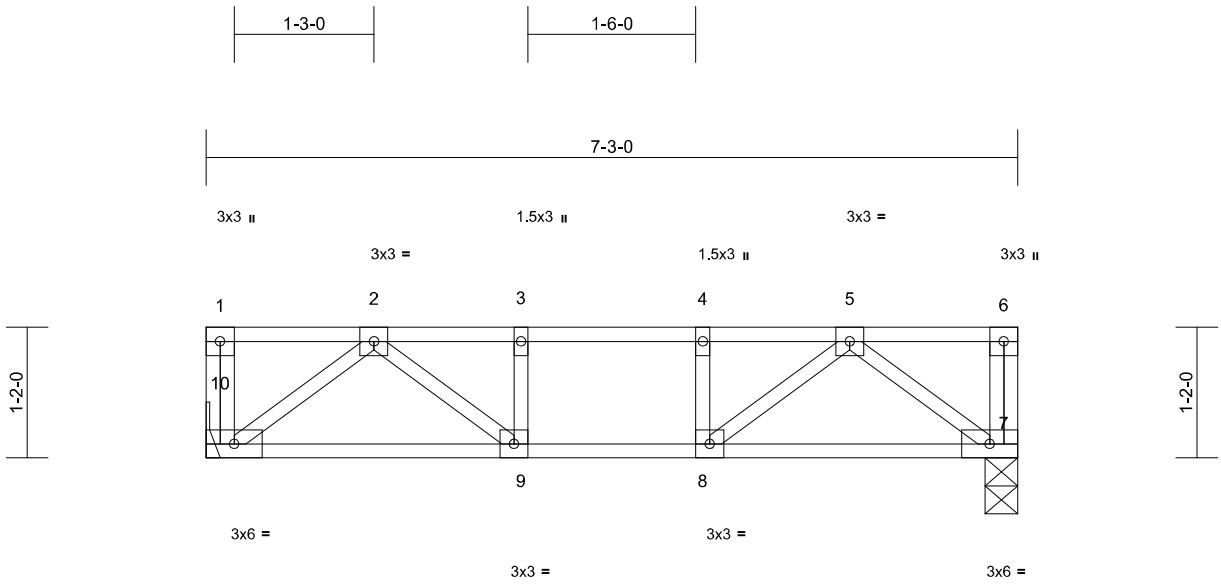

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.24	Vert(LL)	-0.02	9-10	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.26	Vert(CT)	-0.03	9-10	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.15	Horz(CT)	0.01	7	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)

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=385 (LC 1), 10=385 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-10=-57/0, 6-7=-57/0, 1-2=0/0, 2-3=-631/0, 3-4=-631/0, 4-5=-631/0, 5-6=0/0
BOT CHORD 9-10=0/417, 8-9=0/631, 7-8=0/417
WEBS 5-7=-523/0, 2-10=-523/0, 5-8=0/312, 2-9=0/312, 3-9=-150/0, 4-8=-150/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Bearings are assumed to be: , Joint 7 SP No.2 .
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.

LOAD CASE(S) Standard

March 3,2025

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A MiTek Affiliate
818 Soundside Road
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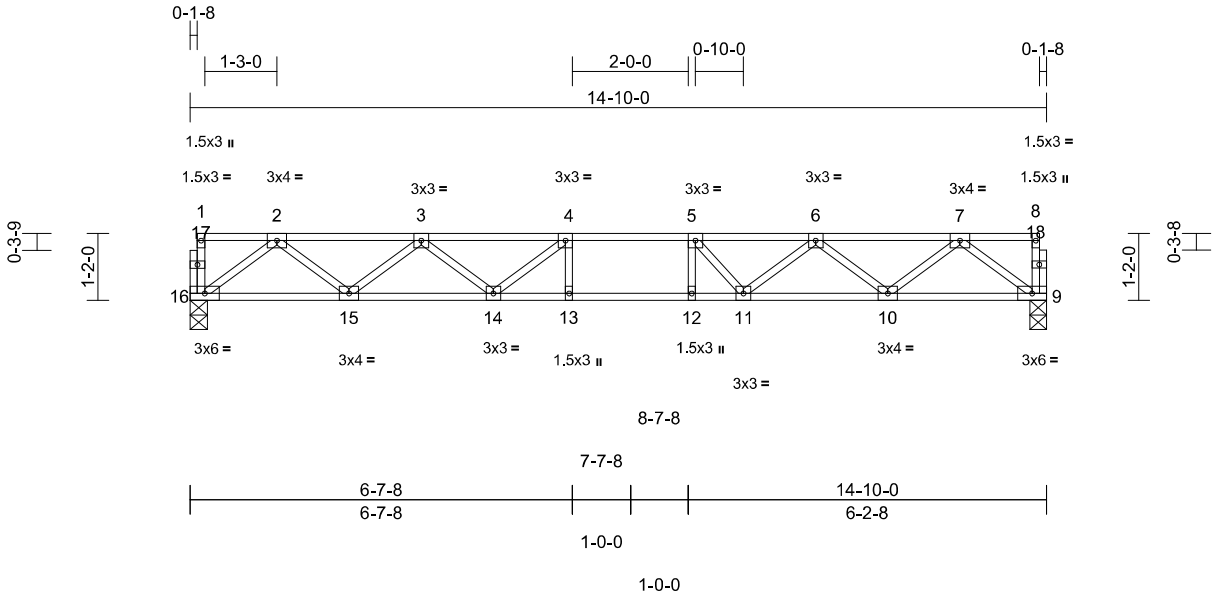
Job	Truss	Truss Type	Qty	Ply	Devon
	2F1	Floor	4	1	I71733924
					Job Reference (optional)



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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	0.46	Vert(LL)	-0.15	13-14	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.51	Vert(CT)	-0.20	13-14	>860	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.04	9	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 74 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=0-3-8, 16=0-3-8
Max Grav 9=796 (LC 1), 16=796 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-16=-41/0, 8-9=-38/0, 1-2=-2/0, 2-3=-1627/0, 3-4=-2520/0, 4-5=-2773/0, 5-6=-2535/0, 6-7=-1624/0, 7-8=-2/0
BOT CHORD 15-16=0/985, 14-15=0/2237, 13-14=0/2773, 12-13=0/2773, 11-12=0/2773, 10-11=0/2220, 9-10=0/990
WEBS 4-13=-154/139, 5-12=-138/229, 2-16=-1232/0, 2-15=0/836, 3-15=-794/0, 3-14=0/427, 4-14=-515/0, 7-9=-1239/0, 7-10=0/825, 6-10=-777/0, 6-11=0/481, 5-11=-560/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All bearings are assumed to be SP SS .
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.

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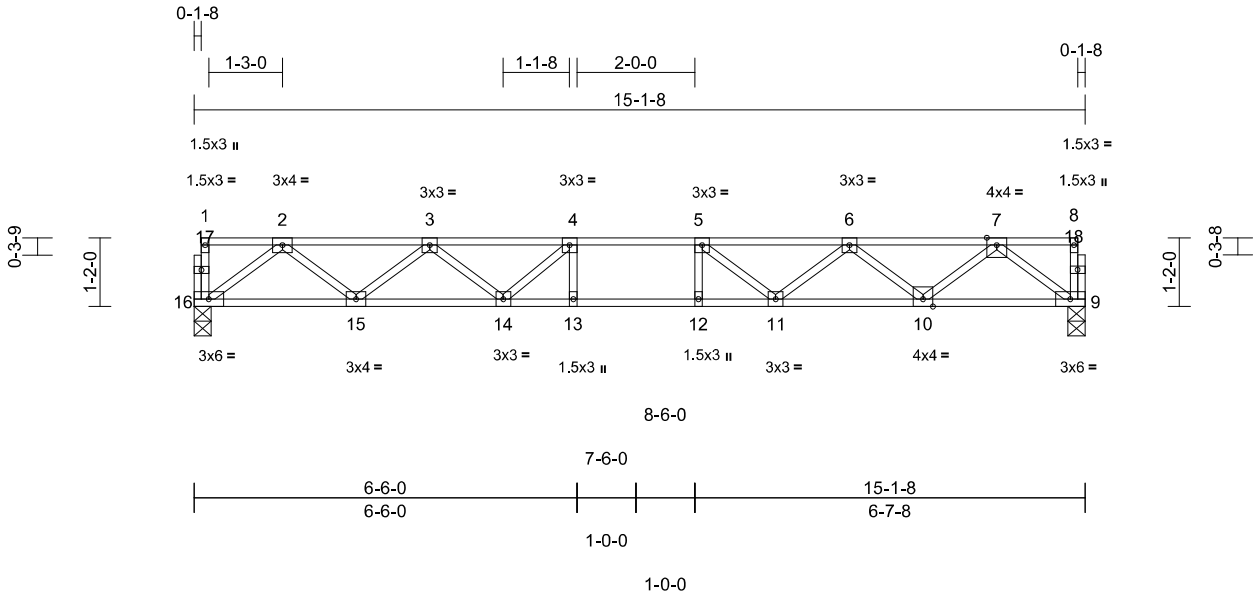
Job	Truss	Truss Type	Qty	Ply	Devon
	2F8	Floor	2	1	I71733925
					Job Reference (optional)



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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	0.45	Vert(LL)	-0.15	11-12	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.50	Vert(CT)	-0.21	11-12	>854	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.41	Horz(CT)	0.04	9	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.

REACTIONS (size) 9=0-3-8, 16=0-3-8
Max Grav 9=812 (LC 1), 16=812 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-16=-40/0, 8-9=-41/0, 1-2=-2/0, 2-3=-1666/0, 3-4=-2602/0, 4-5=-2890/0, 5-6=-2599/0, 6-7=-1667/0, 7-8=-2/0
BOT CHORD 15-16=0/1008, 14-15=0/2288, 13-14=0/2890, 12-13=0/2890, 11-12=0/2890, 10-11=0/2294, 9-10=0/1007
WEBS 4-13=-138/187, 5-12=-144/163, 2-16=-1262/0, 2-15=0/856, 3-15=-810/0, 3-14=0/466, 4-14=-572/0, 7-9=-1260/0, 7-10=0/860, 6-10=-816/0, 6-11=0/451, 5-11=-562/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All bearings are assumed to be SP SS .
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.

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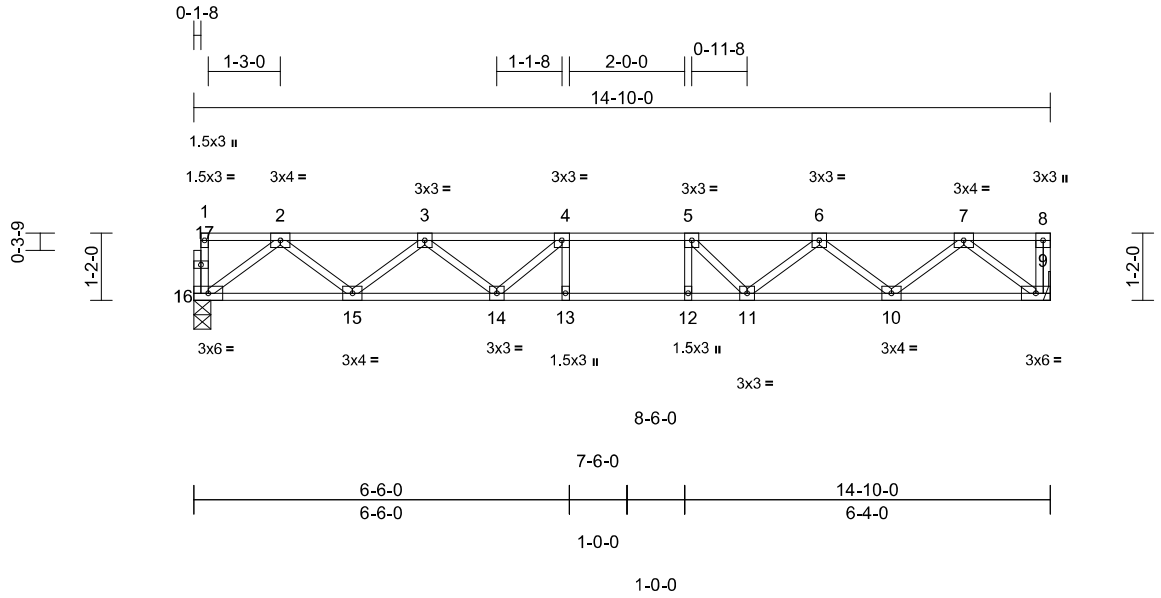
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Devon
	2F9	Floor	5	1	I71733926
					Job Reference (optional)



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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	0.44	Vert(LL)	-0.14	13-14	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.49	Vert(CT)	-0.19	13-14	>902	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.04	9	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 74 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= Mechanical, 16=0-3-8
Max Grav 9=802 (LC 1), 16=796 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-16=-40/0, 8-9=-42/0, 1-2=-2/0, 2-3=-1626/0, 3-4=-2524/0, 4-5=-2774/0, 5-6=-2530/0, 6-7=-1625/0, 7-8=0/0
BOT CHORD 15-16=0/987, 14-15=0/2231, 13-14=0/2774, 12-13=0/2774, 11-12=0/2774, 10-11=0/2225, 9-10=0/989
WEBS 4-13=-149/161, 5-12=-142/196, 2-16=-1235/0, 2-15=0/832, 3-15=-788/0, 3-14=0/442, 4-14=-524/0, 7-9=-1241/0, 7-10=0/827, 6-10=-781/0, 6-11=0/463, 5-11=-542/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Bearings are assumed to be: Joint 16 SP SS .
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

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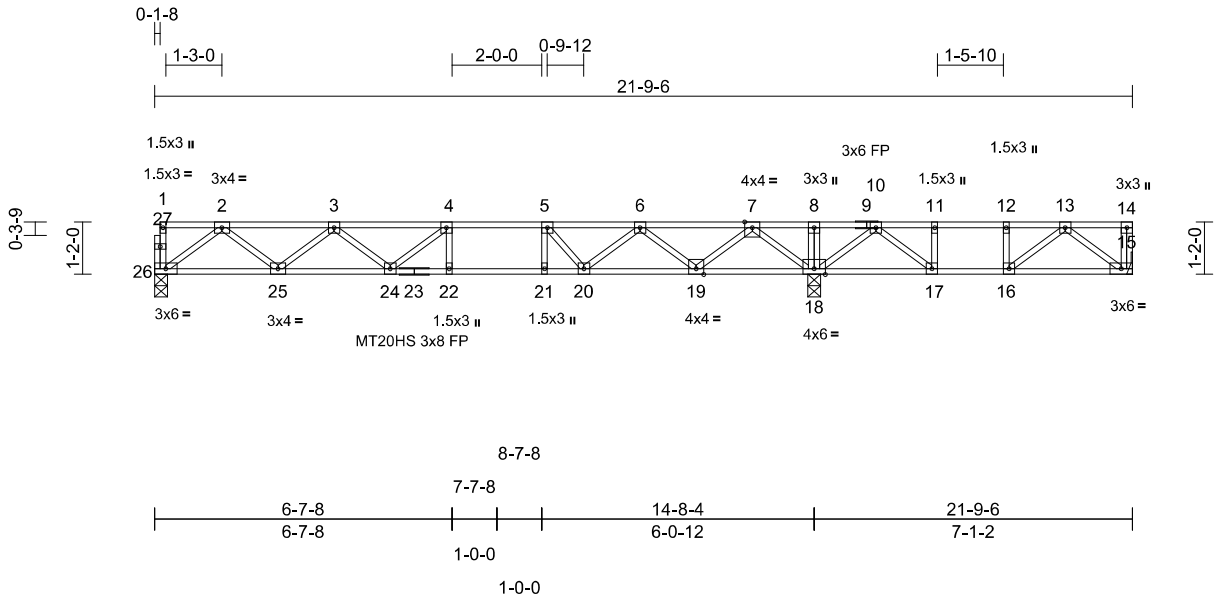
Job	Truss	Truss Type	Qty	Ply	Devon
	2F2	Floor	1	1	I71733927
					Job Reference (optional)



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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	0.57	Vert(LL)	-0.15	22-24	>999	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.75	Vert(CT)	-0.21	22-24	>837	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.45	Horz(CT)	0.03	18	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 No.2(flat)
BOT CHORD 2x4 SP No.2(flat) *Except* 23-15:2x4 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 6-0-0 oc bracing.

REACTIONS (size) 15= Mechanical, 18=0-3-8, 26=0-3-8
Max Uplift 15=-36 (LC 3)
Max Grav 15=331 (LC 4), 18=1409 (LC 1), 26=731 (LC 10)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-26=-42/0, 14-15=-52/0, 1-2=-3/0, 2-3=-1465/0, 3-4=-2202/0, 4-5=-2311/0, 5-6=-1961/0, 6-7=-894/0, 7-8=0/1067, 8-10=0/1067, 10-11=-450/294, 11-12=-450/294, 12-13=-450/294, 13-14=0/0
BOT CHORD 25-26=0/897, 24-25=0/2005, 22-24=0/2311, 21-22=0/2311, 20-21=0/2311, 19-20=0/1558, 18-19=-59/184, 17-18=-640/135, 16-17=-294/450, 15-16=-86/343
WEBS 8-18=-148/0, 10-18=-751/0, 13-15=-430/107, 10-17=0/658, 13-16=-266/137, 11-17=-302/0, 12-16=-90/112, 4-22=-201/48, 5-21=-26/293, 2-26=-1122/0, 2-25=0/739, 3-25=-703/0, 3-24=0/303, 4-24=-309/74, 7-18=-1344/0, 7-19=0/942, 6-19=-887/0, 6-20=0/551, 5-20=-667/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) All plates are 3x3 (=) MT20 unless otherwise indicated.
4) Bearings are assumed to be: Joint 26 SP No.2 , Joint 18 SP SS .
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 15.
7) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
8) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

March 3,2025

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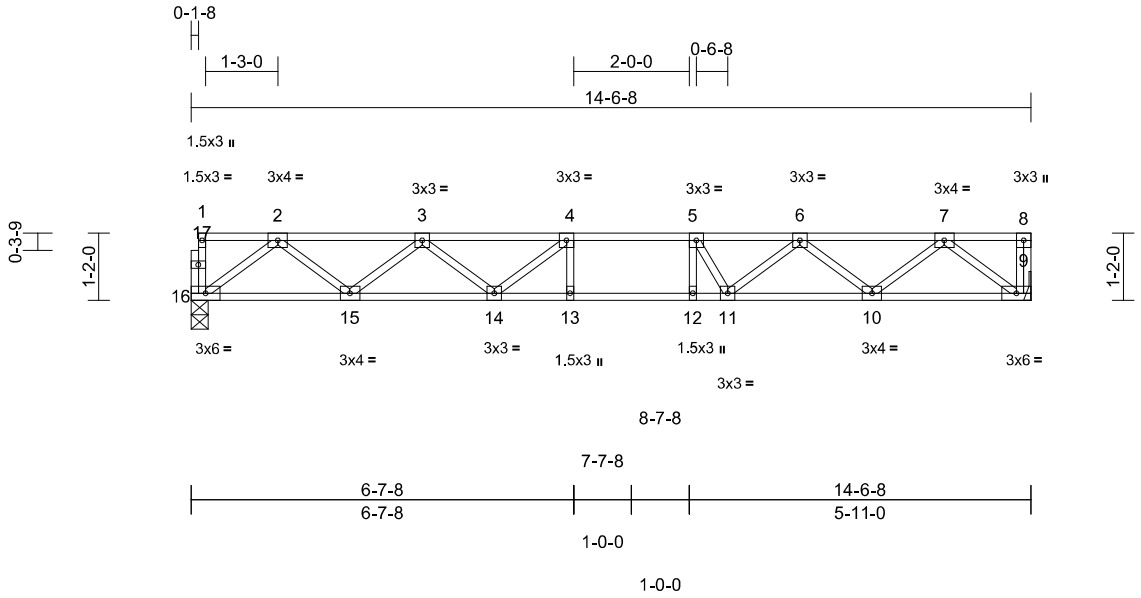
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Devon
	2F3	Floor	4	1	I71733928
					Job Reference (optional)



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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	0.47	Vert(LL)	-0.15	13-14	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.54	Vert(CT)	-0.20	13-14	>866	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.39	Horz(CT)	0.03	9	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 73 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= Mechanical, 16=0-3-8
Max Grav 9=786 (LC 1), 16=780 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-16=-41/0, 8-9=-40/0, 1-2=-2/0, 2-3=-1586/0, 3-4=-2442/0, 4-5=-2658/0, 5-6=-2472/0, 6-7=-1582/0, 7-8=0/0
BOT CHORD 15-16=0/963, 14-15=0/2179, 13-14=0/2658, 12-13=0/2658, 11-12=0/2658, 10-11=0/2155, 9-10=0/972
WEBS 4-13=-164/117, 5-12=-149/305, 2-16=-1205/0, 2-15=0/812, 3-15=-772/0, 3-14=0/403, 4-14=-470/0, 7-9=-1219/0, 7-10=0/794, 6-10=-746/0, 6-11=0/500, 5-11=-587/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Bearings are assumed to be: Joint 16 SP SS .
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.

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Job	Truss	Truss Type	Qty	Ply	Devon
	2F5	Floor	2	1	I71733929 Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Feb 18 2025 Print: 8.830 S Feb 18 2025 MiTek Industries, Inc. Fri Feb 28 12:46:21 Page: 1
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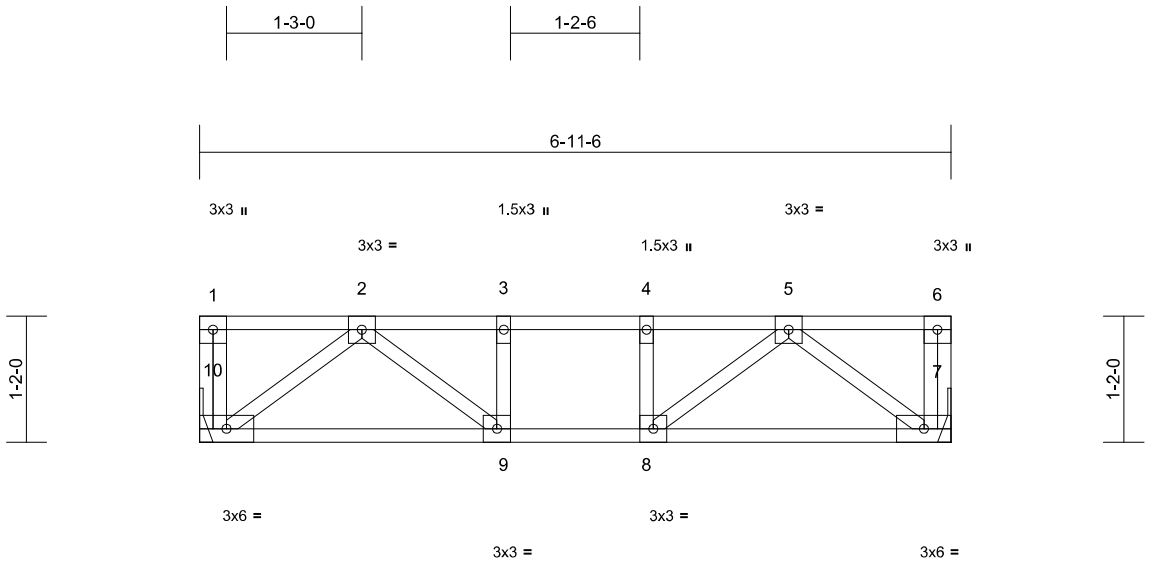

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.16	Vert(LL)	-0.02	9-10	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.21	Vert(CT)	-0.02	9-10	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.00	7	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 38 lb	FT = 20%F, 12%E

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

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= Mechanical, 10= Mechanical
Max Grav 7=368 (LC 1), 10=368 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-10=-56/0, 6-7=-56/0, 1-2=0/0, 2-3=-583/0, 3-4=-583/0, 4-5=-583/0, 5-6=0/0
BOT CHORD 9-10=0/396, 8-9=0/583, 7-8=0/396
WEBS 5-7=-497/0, 2-10=-497/0, 5-8=0/275, 2-9=0/275, 3-9=-128/0, 4-8=-128/0

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

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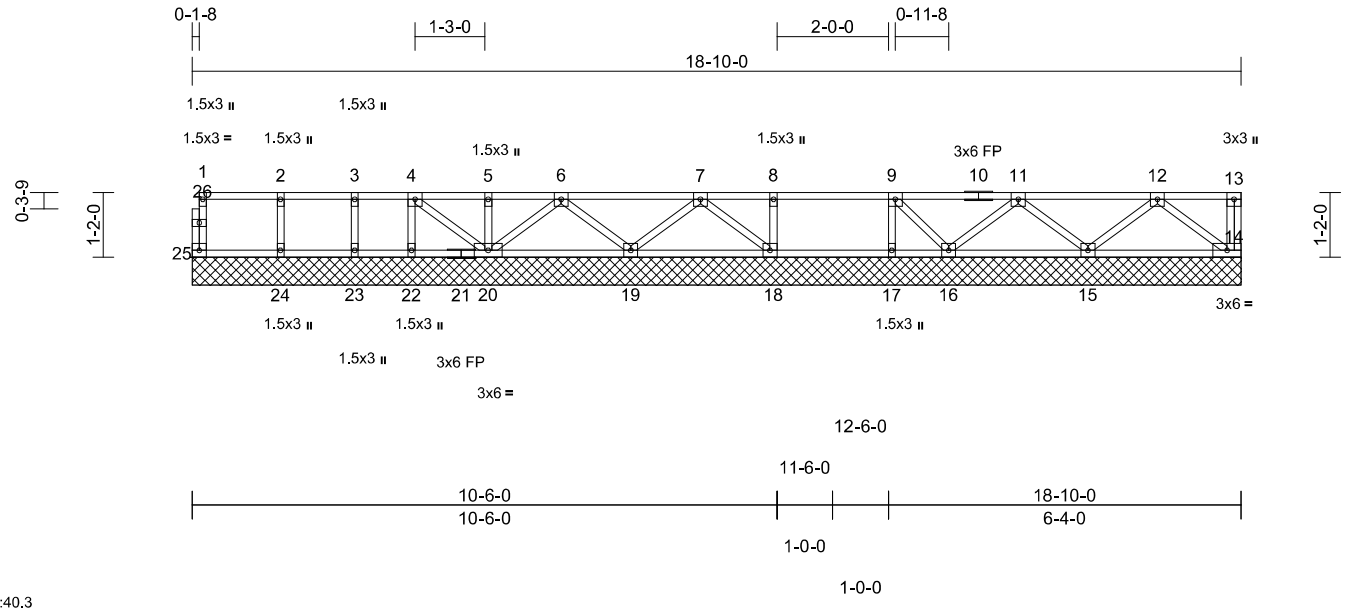
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Devon
	2F10	Floor	1	1	I71733930
					Job Reference (optional)



Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.27	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.07	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	14	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 92 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) 14=18-10-0, 15=18-10-0, 16=18-10-0, 17=18-10-0, 18=18-10-0, 19=18-10-0, 20=18-10-0, 22=18-10-0, 23=18-10-0, 24=18-10-0, 25=18-10-0
Max Grav 14=128 (LC 1), 15=295 (LC 1), 16=189 (LC 1), 17=190 (LC 1), 18=256 (LC 1), 19=268 (LC 1), 20=253 (LC 1), 22=108 (LC 1), 23=115 (LC 1), 24=176 (LC 1), 25=61 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-25=-55/0, 13-14=-38/0, 1-2=-3/0, 2-3=-3/0, 3-4=-3/0, 4-5=0/37, 5-6=0/37, 6-7=0/59, 7-8=0/17, 8-9=0/17, 9-11=0/66, 11-12=0/66, 12-13=0/0
BOT CHORD 24-25=0/3, 23-24=0/3, 22-23=0/3, 20-22=0/3, 19-20=0/86, 18-19=0/86, 17-18=-17/0, 16-17=-17/0, 15-16=0/82, 14-15=0/104
WEBS 8-18=-150/0, 9-17=-176/0, 4-20=-50/0, 5-20=-104/0, 6-20=-157/0, 6-19=-189/0, 7-19=-188/0, 7-18=-132/0, 12-14=-131/0, 12-15=-222/0, 11-15=-192/0, 11-16=-192/0, 9-16=-69/0, 4-22=-99/0, 2-24=-160/0, 3-23=-104/0

NOTES
1) All plates are 3x3 (=) 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) All bearings are assumed to be SP No.2 .
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.

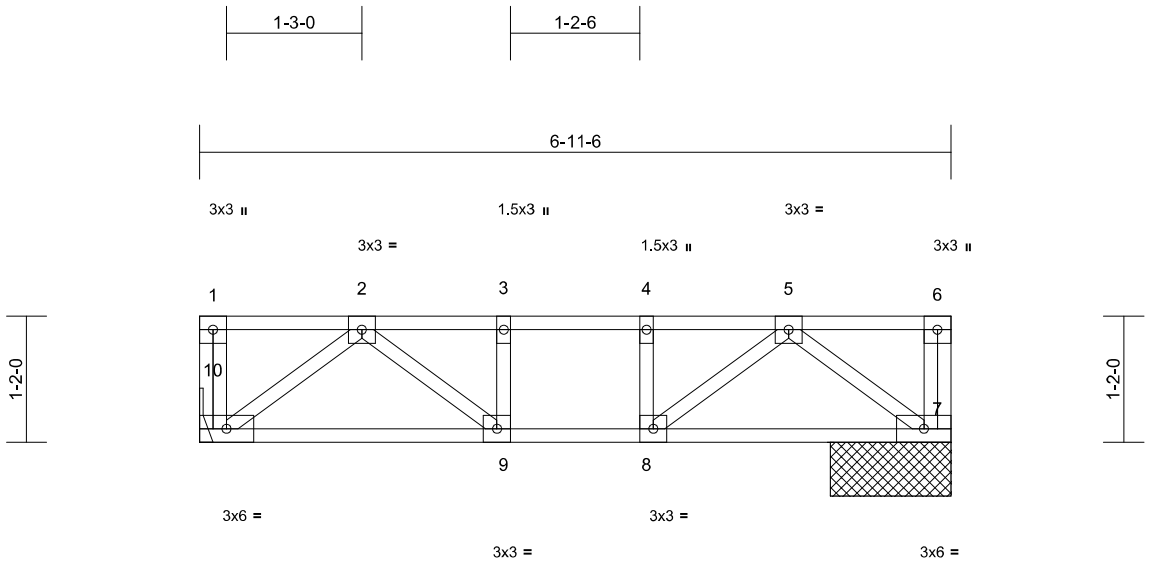
LOAD CASE(S) Standard

March 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Devon
	2F6	Floor	1	1	I71733931 Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Feb 18 2025 Print: 8.830 S Feb 18 2025 MiTek Industries, Inc. Fri Feb 28 12:46:21 Page: 1
ID:?YaBONfVgYsxDI7Q9ZSVa6zhCtY-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:20.7

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	0.16	Vert(LL)	-0.02	9-10	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.21	Vert(CT)	-0.02	9-10	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.00	7	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 38 lb	FT = 20%F, 12%E

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

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=1-1-6, 10= Mechanical
Max Grav 7=368 (LC 1), 10=368 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-10=-56/0, 6-7=-56/0, 1-2=0/0, 2-3=-583/0, 3-4=-583/0, 4-5=-583/0, 5-6=0/0
BOT CHORD 9-10=0/396, 8-9=0/583, 7-8=0/396
WEBS 5-7=-497/0, 2-10=-497/0, 5-8=0/275, 2-9=0/275, 3-9=-128/0, 4-8=-128/0

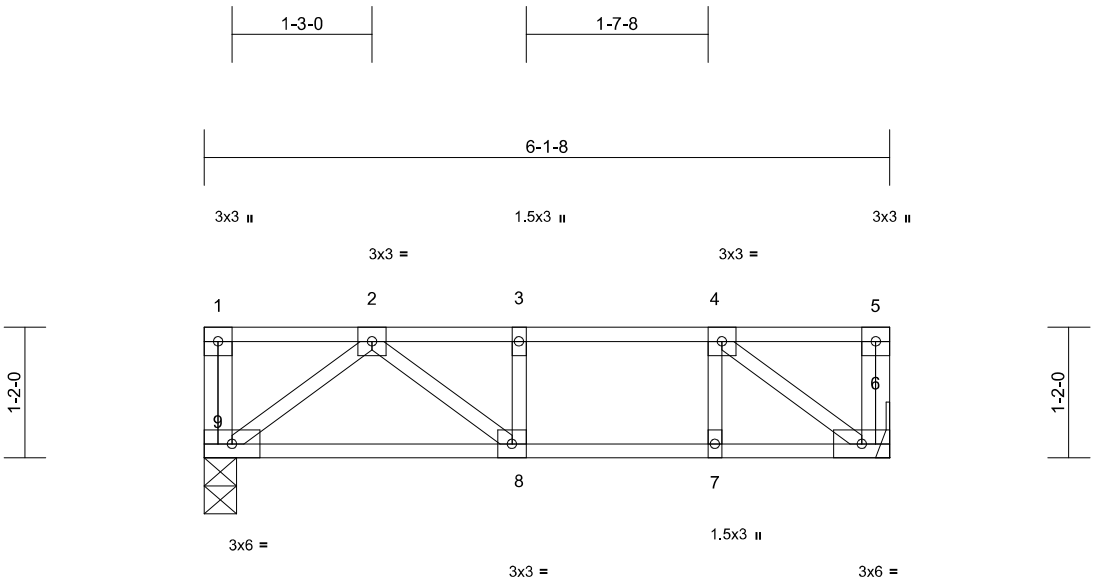
NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Bearings are assumed to be: , Joint 7 SP No.2 .
3) Refer to girder(s) for truss to truss connections.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard

March 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Devon
	2F7	Floor	1	1	I71733932 Job Reference (optional)



Scale = 1:20

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	0.34	Vert(LL)	-0.03	8-9	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.34	Vert(CT)	-0.05	8-9	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.00	9	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 33 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) 6= Mechanical, 9=0-3-8
Max Grav 6=323 (LC 1), 9=323 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 5-6=-48/26, 1-9=-51/0, 1-2=0/0, 2-3=-419/0, 3-4=-419/0, 4-5=0/0
BOT CHORD 8-9=0/333, 7-8=0/419, 6-7=0/419
WEBS 2-9=-418/0, 4-6=-518/0, 2-8=0/171, 4-7=0/78, 3-8=-87/0

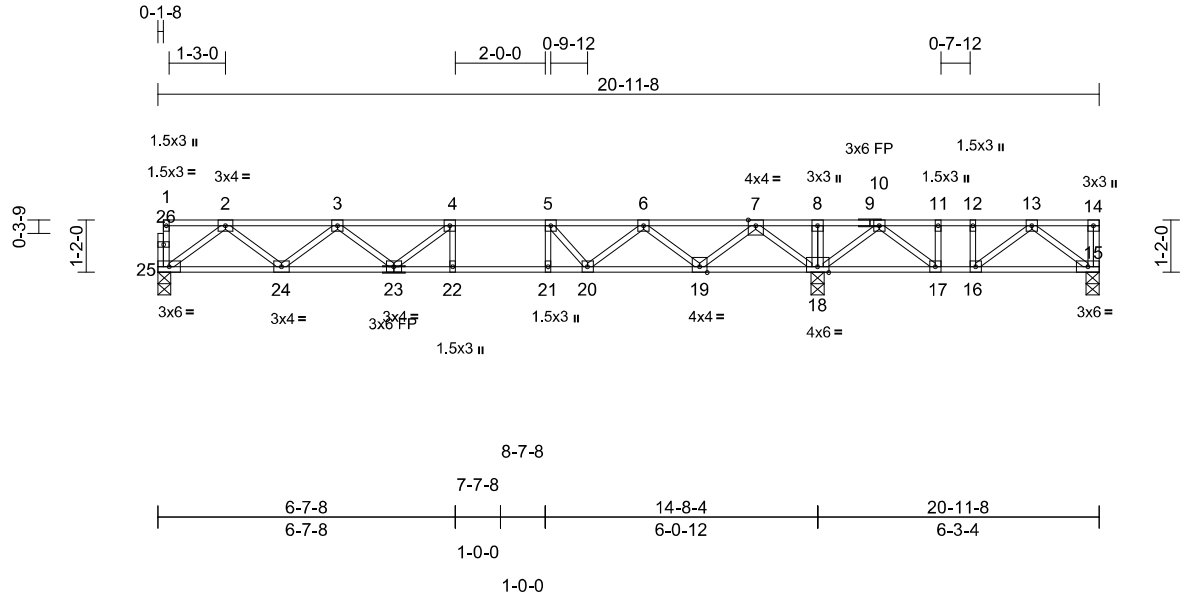
NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Bearings are assumed to be: , Joint 9 SP No.2 .
3) Refer to girder(s) for truss to truss connections.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard

March 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Devon
	2F4	Floor	8	1	I71733933
					Job Reference (optional)



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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	0.56	Vert(LL)	-0.15	22-23	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.59	Vert(CT)	-0.21	22-23	>843	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.03	18	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 107 lb	FT = 20%F, 12%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat) *Except* 23-15:2x4 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 6-0-0 oc bracing.

REACTIONS (size) 15=0-3-8, 18=0-3-8, 25=0-3-8
Max Uplift 15=-120 (LC 3)
Max Grav 15=265 (LC 4), 18=1458 (LC 1), 25=705 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-25=-42/0, 14-15=-52/0, 1-2=-3/0, 2-3=-1400/0, 3-4=-2074/0, 4-5=-2126/0, 5-6=-1730/0, 6-7=-597/0, 7-8=0/1306, 8-10=0/1306, 10-11=-286/483, 11-12=-286/483, 12-13=-286/483, 13-14=0/0
BOT CHORD 24-25=0/862, 22-24=0/2126, 21-22=0/2126, 20-21=0/2126, 19-20=0/1290, 18-19=-326/0, 17-18=-875/25, 16-17=-483/286, 15-16=-192/261
WEBS 8-18=-141/0, 10-18=-792/0, 13-15=-327/241, 10-17=0/652, 13-16=-372/32, 11-17=-284/0, 12-16=-32/155, 4-22=-212/21, 5-21=0/309, 2-25=-1078/0, 2-24=0/701, 3-24=-666/0, 3-23=0/265, 4-23=-249/100, 7-18=-1374/0, 7-19=0/966, 6-19=-912/0, 6-20=0/584, 5-20=-694/0

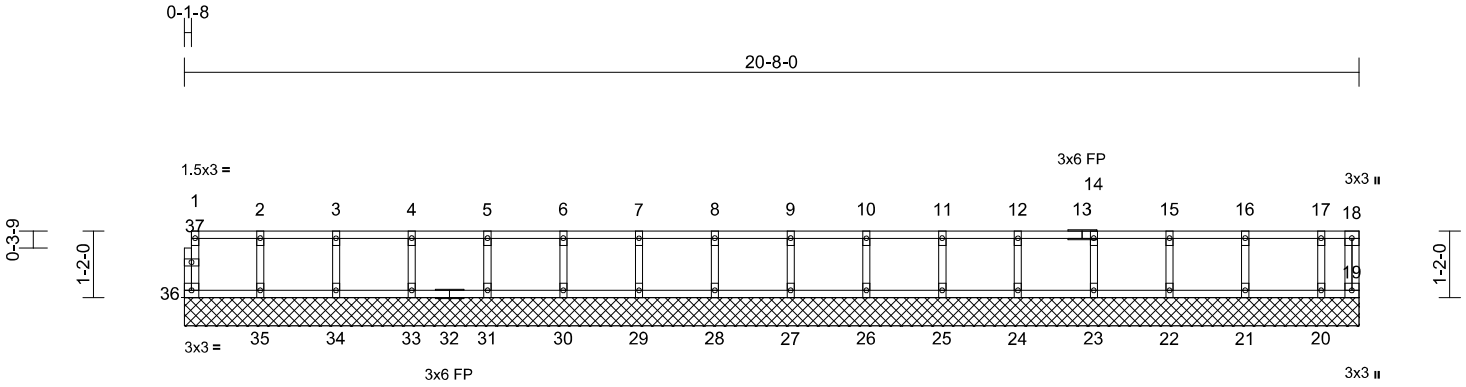
NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x3 (=) MT20 unless otherwise indicated.
3) Bearings are assumed to be: Joint 25 SP No.2 , Joint 18 SP SS , Joint 15 SP SS .
4) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 15. This connection is for uplift only and does not consider lateral forces.
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

March 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Devon
	2F2GE	Floor Supported Gable	1	1	I71733934
					Job Reference (optional)



Scale = 1:39.4

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	NO	WB	0.03	Horiz(TL)	0.00	19	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 87 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) 19=20-8-0, 20=20-8-0, 21=20-8-0, 22=20-8-0, 23=20-8-0, 24=20-8-0, 25=20-8-0, 26=20-8-0, 27=20-8-0, 28=20-8-0, 29=20-8-0, 30=20-8-0, 31=20-8-0, 33=20-8-0, 34=20-8-0, 35=20-8-0, 36=20-8-0
Max Grav 19=23 (LC 1), 20=108 (LC 1), 21=153 (LC 1), 22=145 (LC 1), 23=147 (LC 1), 24=147 (LC 1), 25=147 (LC 1), 26=147 (LC 1), 27=147 (LC 1), 28=147 (LC 1), 29=147 (LC 1), 30=147 (LC 1), 31=147 (LC 1), 33=147 (LC 1), 34=147 (LC 1), 35=148 (LC 1), 36=52 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-36=-49/0, 18-19=-15/0, 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, 8-9=-6/0, 9-10=-6/0, 10-11=-6/0, 11-12=-6/0, 12-14=-6/0, 14-15=-6/0, 15-16=-6/0, 16-17=-6/0, 17-18=-6/0
BOT CHORD 35-36=0/6, 34-35=0/6, 33-34=0/6, 31-33=0/6, 30-31=0/6, 29-30=0/6, 28-29=0/6, 27-28=0/6, 26-27=0/6, 25-26=0/6, 24-25=0/6, 23-24=0/6, 22-23=0/6, 21-22=0/6, 20-21=0/6, 19-20=0/6
WEBS 2-35=-132/0, 3-34=-134/0, 4-33=-133/0, 5-31=-133/0, 6-30=-133/0, 7-29=-133/0, 8-28=-133/0, 9-27=-133/0, 10-26=-133/0, 11-25=-133/0, 12-24=-133/0, 14-23=-134/0, 15-22=-132/0, 16-21=-139/0, 17-20=-105/0

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) All bearings are assumed to be SP No.2 .
6) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
7) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
8) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 19-36=-10, 1-17=-100, 17-18=-106

March 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Devon
	2F1GE	Floor Supported Gable	1	1	I71733935 Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Feb 18 2025 Print: 8.830 S Feb 18 2025 MiTek Industries, Inc. Fri Feb 28 12:46:19 Page: 1
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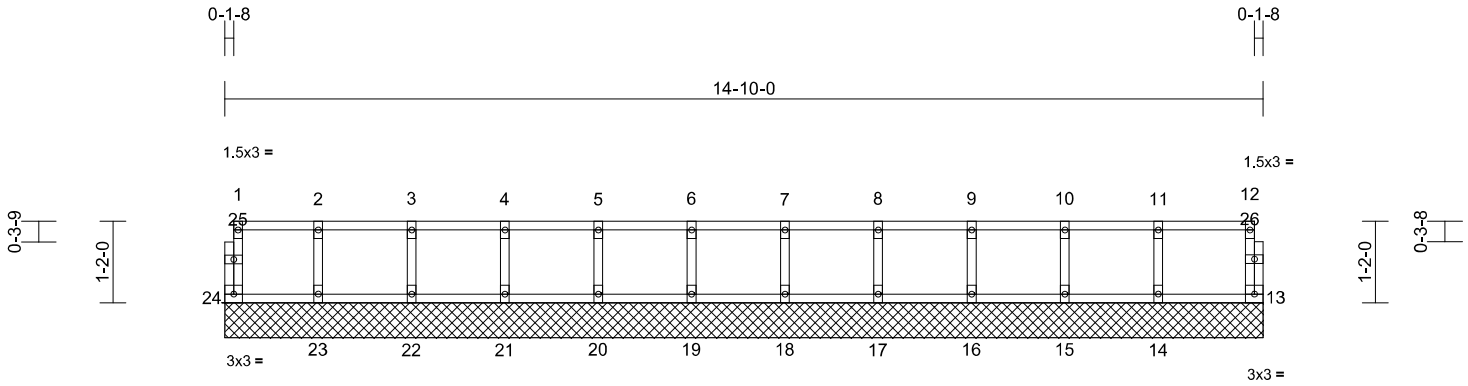


Scale = 1:32

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	13	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 62 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=14-10-0, 14=14-10-0, 15=14-10-0, 16=14-10-0, 17=14-10-0, 18=14-10-0, 19=14-10-0, 20=14-10-0, 21=14-10-0, 22=14-10-0, 23=14-10-0, 24=14-10-0
Max Grav 13=66 (LC 1), 14=154 (LC 1), 15=145 (LC 1), 16=147 (LC 1), 17=147 (LC 1), 18=147 (LC 1), 19=147 (LC 1), 20=147 (LC 1), 21=146 (LC 1), 22=149 (LC 1), 23=140 (LC 1), 24=59 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-24=-52/0, 12-13=-60/0, 1-2=-12/0, 2-3=-12/0, 3-4=-12/0, 4-5=-12/0, 5-6=-12/0, 6-7=-12/0, 7-8=-12/0, 8-9=-12/0, 9-10=-12/0, 10-11=-12/0, 11-12=-12/0
BOT CHORD 23-24=0/12, 22-23=0/12, 21-22=0/12, 20-21=0/12, 19-20=0/12, 18-19=0/12, 17-18=0/12, 16-17=0/12, 15-16=0/12, 14-15=0/12, 13-14=0/12
WEBS 2-23=-129/0, 3-22=-135/0, 4-21=-133/0, 5-20=-133/0, 6-19=-133/0, 7-18=-133/0, 8-17=-133/0, 9-16=-134/0, 10-15=-132/0, 11-14=-140/0

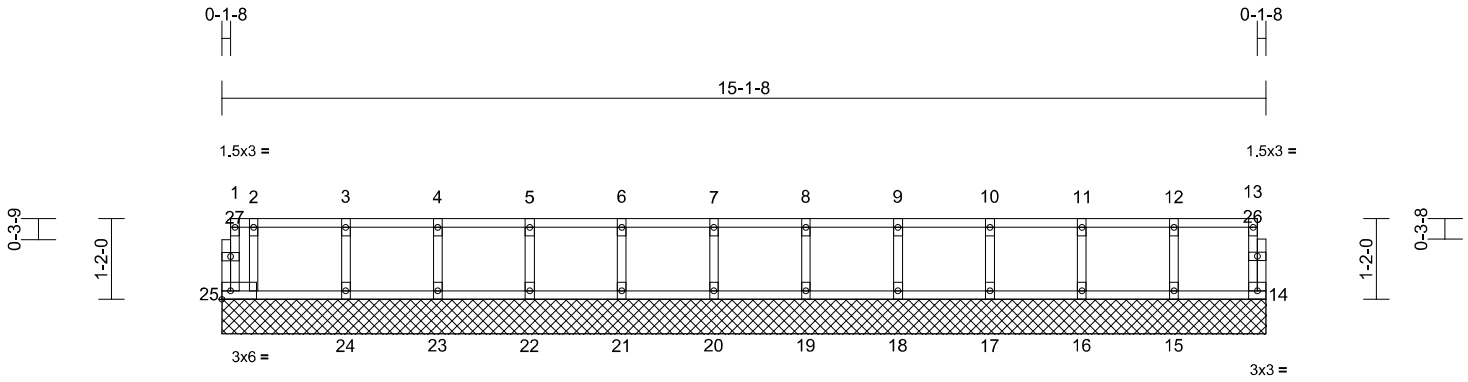
NOTES
1) All plates are 1.5x3 (||) MT20 unless otherwise indicated.
2) Gable requires continuous bottom chord bearing.
3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
4) Gable studs spaced at 1-4-0 oc.
5) All bearings are assumed to be SP No.2 .
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

March 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Devon
	2F3GE	Floor Supported Gable	1	1	I71733936
					Job Reference (optional)



Scale = 1:32.5

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.03	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: 65 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=15-1-8, 15=15-1-8, 16=15-1-8, 17=15-1-8, 18=15-1-8, 19=15-1-8, 20=15-1-8, 21=15-1-8, 22=15-1-8, 23=15-1-8, 24=15-1-8, 25=15-1-8
Max Grav 14=64 (LC 1), 15=133 (LC 1), 16=150 (LC 1), 17=146 (LC 1), 18=147 (LC 1), 19=147 (LC 1), 20=147 (LC 1), 21=146 (LC 1), 22=148 (LC 1), 23=142 (LC 1), 24=163 (LC 1), 25=90 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 13-14=-55/0, 1-25=0/7, 1-2=0/1, 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, 9-10=-17/0, 10-11=-17/0, 11-12=-17/0, 12-13=-17/0
BOT CHORD 24-25=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, 15-16=0/17, 14-15=0/17
WEBS 12-15=-126/0, 11-16=-135/0, 10-17=-133/0, 9-18=-133/0, 8-19=-133/0, 7-20=-133/0, 6-21=-133/0, 5-22=-134/0, 4-23=-130/0, 3-24=-144/0, 2-25=-94/0

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) All bearings are assumed to be SP No.2 .
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

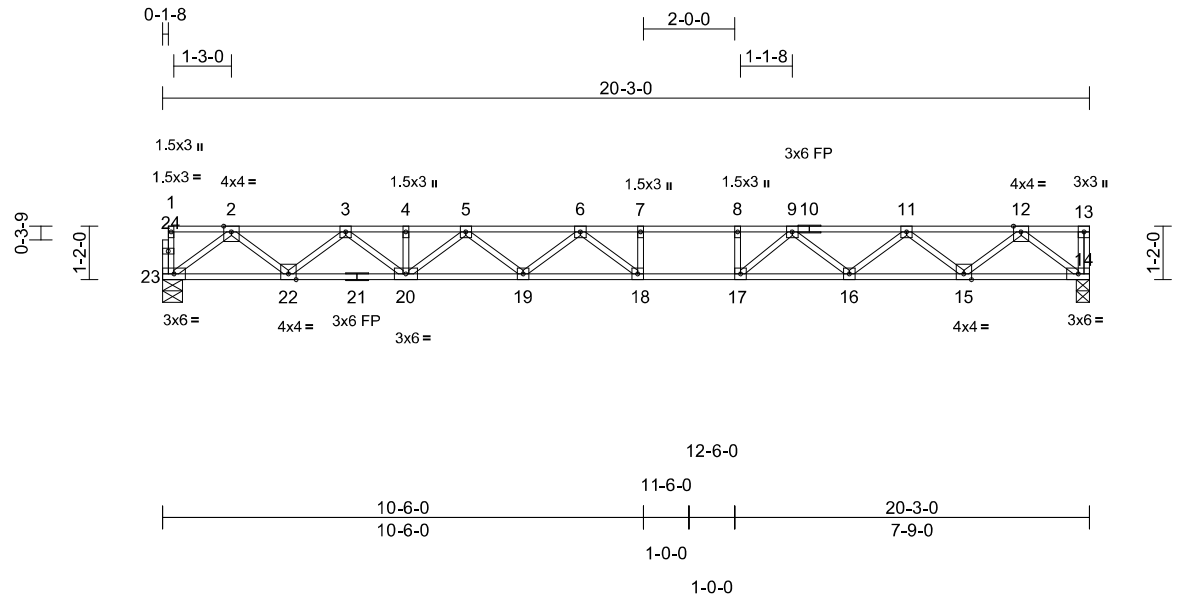
March 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Devon
	2F11	Floor	14	1	I71733937
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Feb 18 2025 Print: 8.830 S Feb 18 2025 MiTek Industries, Inc. Fri Feb 28 12:46:22 Page: 1

ID:39SRzheF8wcD_Rz128Q1VhzhCta-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:48.9

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	0.90	Vert(LL)	-0.36	18-19	>659	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.63	Vert(CT)	-0.50	18-19	>478	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.41	Horz(CT)	0.06	14	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 101 lb	FT = 20%F, 12%E

LUMBER

TOP CHORD 2x4 SP No.2(flat)

BOT CHORD 2x4 SP No.2(flat) *Except* 21-14:2x4 SP SS (flat)

WEBS 2x4 SP No.3(flat)

OTHERS 2x4 SP No.3(flat)

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 14=0-3-8, 23=0-5-4

Max Grav 14=733 (LC 1), 23=729 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-23=-24/0, 13-14=-29/0, 1-2=-1/0, 2-3=-1581/0, 3-4=-2690/0, 4-5=-2690/0, 5-6=-3322/0, 6-7=-3417/0, 7-8=-3417/0, 8-9=-3417/0, 9-11=-2637/0, 11-12=-1586/0, 12-13=0/0

BOT CHORD 22-23=0/921, 20-22=0/2214, 19-20=0/3102, 18-19=0/3484, 17-18=0/3417, 16-17=0/3072, 15-16=0/2223, 14-15=0/919

WEBS 7-18=-132/75, 8-17=-285/0, 2-23=-1154/0, 2-22=0/858, 3-22=-825/0, 3-20=0/607, 4-20=-46/0, 5-20=-527/0, 5-19=0/286, 6-19=-260/0, 6-18=-298/284, 12-14=-1153/0, 12-15=0/869, 11-15=-828/0, 11-16=0/540, 9-16=-566/0, 9-17=0/648

NOTES

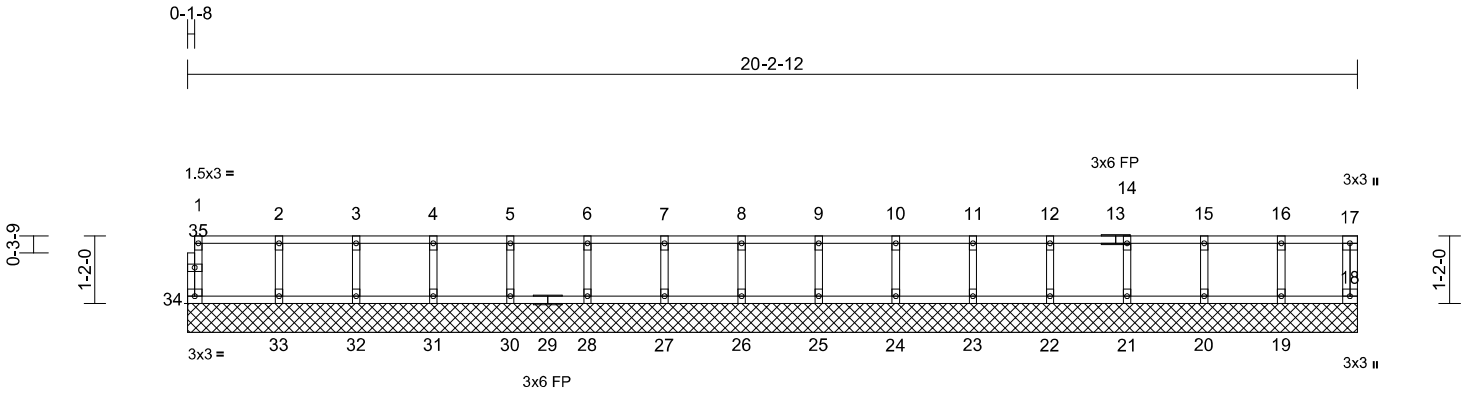
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x3 (=) MT20 unless otherwise indicated.
3) Bearings are assumed to be: Joint 23 SP No.2 , Joint 14 SP SS .
4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" 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

March 3,2025

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

Job	Truss	Truss Type	Qty	Ply	Devon
	2F4GE	Floor Supported Gable	1	1	I71733938
					Job Reference (optional)



Scale = 1:38.8

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	0.07	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	NO	WB	0.02	Horiz(TL)	0.00	18	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 84 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) 18=20-2-12, 19=20-2-12, 20=20-2-12, 21=20-2-12, 22=20-2-12, 23=20-2-12, 24=20-2-12, 25=20-2-12, 26=20-2-12, 27=20-2-12, 28=20-2-12, 30=20-2-12, 31=20-2-12, 32=20-2-12, 33=20-2-12, 34=20-2-12
Max Grav 18=45 (LC 1), 19=96 (LC 1), 20=104 (LC 1), 21=100 (LC 1), 22=98 (LC 1), 23=98 (LC 1), 24=98 (LC 1), 25=98 (LC 1), 26=98 (LC 1), 27=98 (LC 1), 28=98 (LC 1), 30=98 (LC 1), 31=98 (LC 1), 32=95 (LC 1), 33=107 (LC 1), 34=47 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-34=-43/0, 17-18=-40/0, 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, 12-14=-9/0, 14-15=-9/0, 15-16=-9/0, 16-17=-9/0
BOT CHORD 33-34=0/9, 32-33=0/9, 31-32=0/9, 30-31=0/9, 28-30=0/9, 27-28=0/9, 26-27=0/9, 25-26=0/9, 24-25=0/9, 23-24=0/9, 22-23=0/9, 21-22=0/9, 20-21=0/9, 19-20=0/9, 18-19=0/9
WEBS 16-19=-89/0, 15-20=-95/0, 14-21=-92/0, 12-22=-89/0, 11-23=-89/0, 10-24=-89/0, 9-25=-89/0, 8-26=-89/0, 7-27=-89/0, 6-28=-89/0, 5-30=-89/0, 4-31=-89/0, 3-32=-87/0, 2-33=-96/0

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) All bearings are assumed to be SP No.2 .
6) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
7) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
8) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 18-34=-7, 1-13=-67, 13-17=-70

March 3,2025

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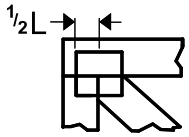
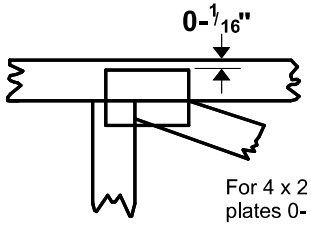
Edenton, NC 27932

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.

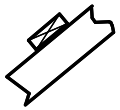
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

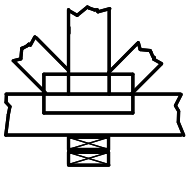
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

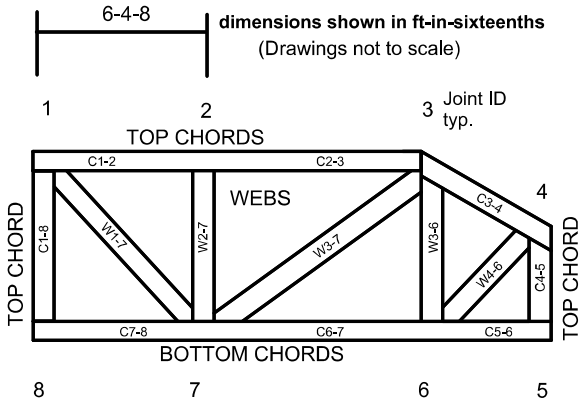


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

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.

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General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative 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.