

RE: 2503-4262-A - Blake Pond Lot 00.0094 OWF

Trenco
 818 Soundside Rd
 Edenton, NC 27932

Site Information:

Project Customer: DRB Raleigh Project Name: Blake Pond Lot 00.0094

Lot/Block: 00.0094 Subdivision: Blake Pond

Model: Stonehaven

Address: 149 Whimbrel Court

City: Lillington State: NC

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

Design Code: IRC2021/TPI2014

Design Program: MiTek 20/20 8.8

Wind Code: ASCE 7-16

Design Method: MWFRS (Directional)/C-C hybrid Wind ASCE 7-16

Wind Speed: 120 mph

Floor Load: N/A psf

Roof Load: 40.0 psf

Mean Roof Height (feet): 25

Exposure Category: B

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I72869749	2F9	4/21/25	35	I72869783	1F9	4/21/25
2	I72869750	2F9A	4/21/25	36	I72869784	1F10	4/21/25
3	I72869751	2F8	4/21/25	37	I72869785	1F12	4/21/25
4	I72869752	2F9B	4/21/25	38	I72869786	1F13	4/21/25
5	I72869753	2F16A	4/21/25	39	I72869787	1F11	4/21/25
6	I72869754	2F4	4/21/25	40	I72869788	1F14	4/21/25
7	I72869755	2F1	4/21/25	41	I72869789	1FGE7	4/21/25
8	I72869756	2F2	4/21/25		I72869790	2F22	4/21/25
9	I72869757	2F1A	4/21/25	43	I72869791	2F22A	4/21/25
10	I72869758	2FGE1	4/21/25	44	I72869792	2F21	4/21/25
11	I72869759	1F5	4/21/25	45	I72869793	1F15	4/21/25
12	I72869760	2F14	4/21/25	46	I72869794	2F18	4/21/25
13	I72869761	2F12	4/21/25	47	I72869795	2F17	4/21/25
14	I72869762	2F23A	4/21/25	48	I72869796	1F16	4/21/25
	I72869763	2FGE3	4/21/25	49	I72869797	2F27	4/21/25
16	I72869764	1F4	4/21/25	50	I72869798	2F20	4/21/25
17	I72869765	1F2	4/21/25		I72869799	1FGE4	4/21/25
18	I72869766	1F1	4/21/25	52	I72869800	1F7	4/21/25
19	I72869767	1FGE1	4/21/25	53	I72869801	2F3	4/21/25
20	I72869768	2F25	4/21/25	54	I72869802	1F17	4/21/25
21	I72869769	2F24A	4/21/25	55	I72869803	1FGE8	4/21/25
22	I72869770	2F24	4/21/25	56	I72869804	1F6	4/21/25
23	I72869771	1FGE6	4/21/25	57	I72869805	1FGE2	4/21/25
	I72869772	2FGE2	4/21/25	58	I72869806	1FGE9	4/21/25
25	I72869773	2F10	4/21/25	59	I72869807	1FGE3	4/21/25
26	I72869774	1F3	4/21/25		I72869808	2FGE6	4/21/25
27	I72869775	2F6	4/21/25	61	I72869809	2FG1	4/21/25
28	I72869776	2F5	4/21/25	62	I72869810	2FG2	4/21/25
29	I72869777	2F26	4/21/25	63	I72869811	1F8	4/21/25
30	I72869778	2F26A	4/21/25	64	I72869812	2F15	4/21/25
31	I72869779	2FGE4	4/21/25	65	I72869813	1FGE5	4/21/25
32	I72869780	2F16	4/21/25	66	I72869814	2FG3	4/21/25
	I72869781	1F14L	4/21/25	67	I72869815	2F7	4/21/25
34	I72869782	1FGR1	4/21/25	68	I72869816	2FGE7	4/21/25

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.



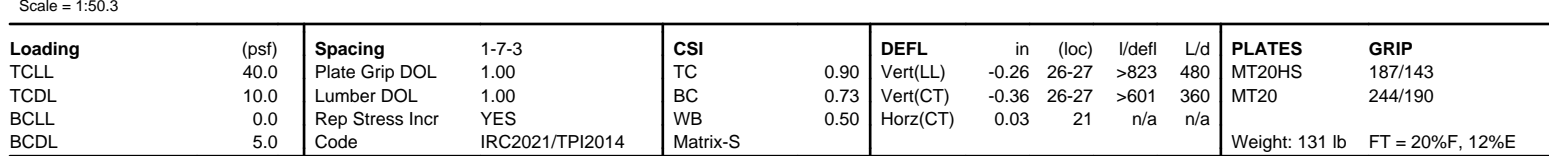
April 21, 2025

RE: 2503-4262-A - Blake Pond Lot 00.0094 OWF

Trenco
818 Soundside Rd
Edenton, NC 27932

No.	Seal#	Truss Name	Date
69	I72869817	1FGE10	4/21/25

Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:27 Page: 1
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NOTES

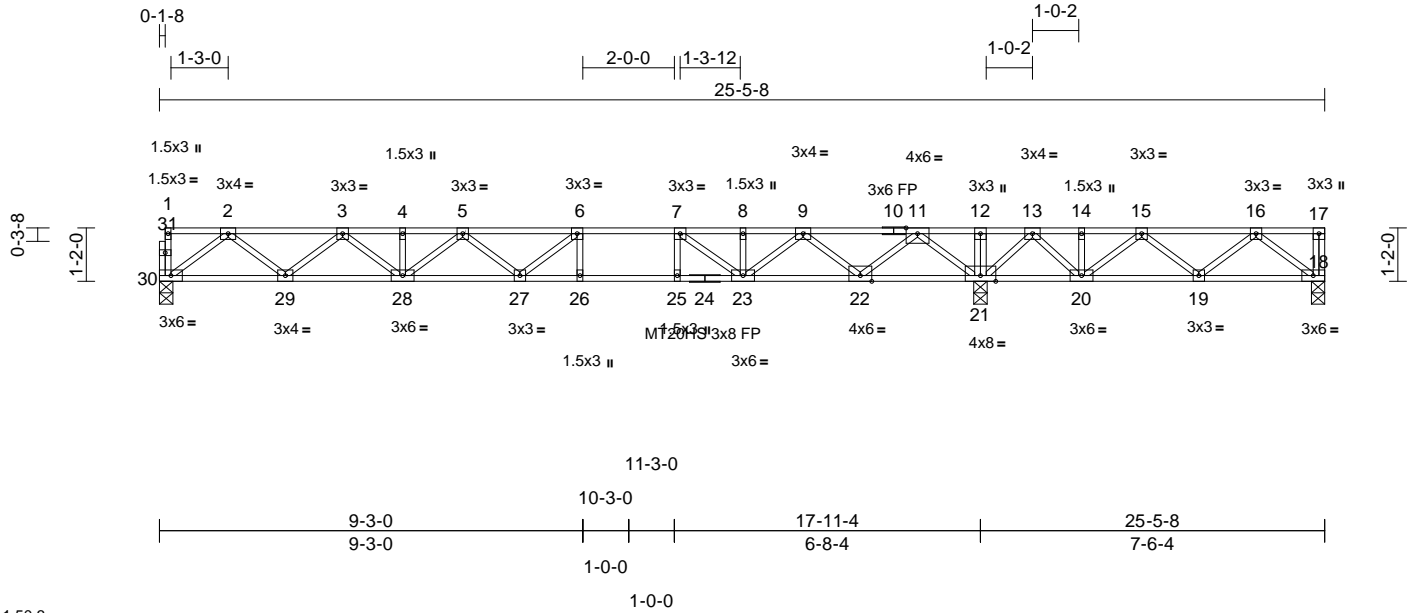
- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.

Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF	172869750
2503-4262-A	2F9A	Floor	2	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:27
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Page: 1



Scale = 1:50.3

Loading	(psf)	Spacing	1-10-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.67	Vert(LL)	-0.27	26-27	>800	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.78	Vert(CT)	-0.37	26-27	>585	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.57	Horz(CT)	0.04	21	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S								
Weight: 131 lb											FT = 20%F, 12%E	

LUMBER

TOP CHORD	2x4 SP SS(flat) *Except* 10-17:2x4 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 6-0-0 oc bracing.

REACTIONS	(size)	18=0-3-8, 21=0-3-8, 30=0-3-8
	Max Uplift	18=165 (LC 3)
	Max Grav	18=278 (LC 4), 21=1674 (LC 1), 30=781 (LC 3)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-30=-33/0, 17-18=-34/0, 1-2=-2/0, 2-3=-1618/0, 3-4=-2591/0, 4-5=-2591/0, 5-6=-2897/0, 6-7=-2663/0, 7-8=-1766/0, 8-9=-1766/0, 9-11=-285/55, 11-12=0/1985, 12-13=0/1984, 13-14=-85/1166, 14-15=-85/1166, 15-16=-339/504, 16-17=0/0
BOT CHORD	29-30=0/975, 28-29=0/2225, 27-28=0/2931, 26-27=0/2663, 25-26=0/2663, 23-25=0/2663, 22-23=0/1153, 21-22=-742/0, 20-21=-1503/0, 19-20=-803/339, 18-19=-238/308
WEBS	6-26=-304/0, 7-25=0/316, 12-21=-119/0, 2-30=-1221/0, 2-29=0/836, 3-29=-790/0, 3-28=0/468, 4-28=-14/2, 5-28=-433/0, 5-27=-142/154, 6-27=-84/452, 11-21=-1562/0, 11-22=0/1197, 9-22=-1142/0, 9-23=0/792, 16-18=-386/298, 16-19=-347/41, 15-19=0/390, 15-20=-625/0, 8-23=-47/174, 7-23=-1200/0, 14-20=-81/0, 13-21=-859/0, 13-20=0/697

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) 18. This connection is for uplift only and does not consider lateral forces.
- 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



April 21, 2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

ENGINEERING BY
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A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

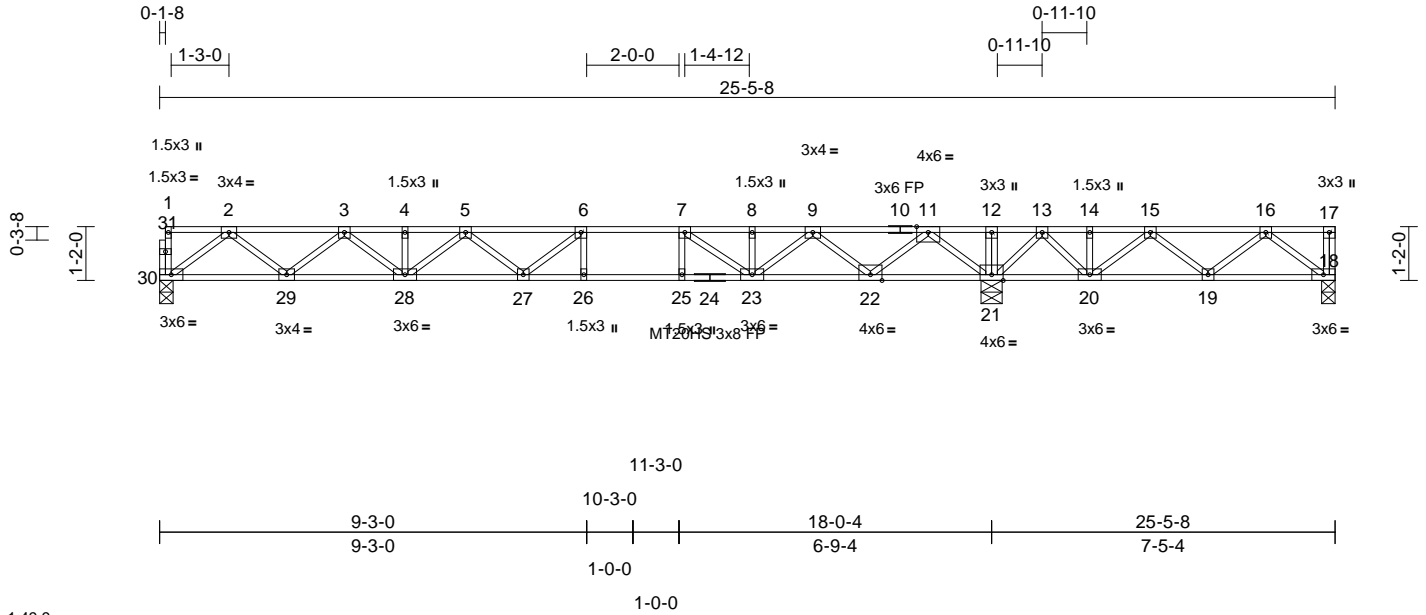
Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF
2503-4262-A	2F8	Floor	2	1	172869751
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:26

Page: 1

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Scale = 1:49.9												
Loading	(psf)	Spacing	1-7-3	CSI		DEFL					PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.89	Vert(LL)	-0.26	26-27	>820	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.74	Vert(CT)	-0.36	26-27	>599	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.03	21	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 131 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 2-2-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
REACTIONS	
(size)	18=0-3-8, 21=0-5-8, 30=0-3-8
Max Uplift	18=165 (LC 3)
Max Grav	18=234 (LC 4), 21=1485 (LC 1), 30=678 (LC 3)
FORCES	
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-30=-28/0, 17-18=-30/0, 1-2=-2/0, 2-3=-1403/0, 3-4=-2243/0, 4-5=-2243/0, 5-6=-2508/0, 6-7=-2289/0, 7-8=-1466/0, 8-9=-1466/0, 9-11=-151/63, 11-12=0/1848, 12-13=0/1847, 13-14=-36/1124, 14-15=-36/1124, 15-16=-277/494, 16-17=0/0
BOT CHORD	29-30=0/847, 28-29=0/1929, 27-28=0/2534, 26-27=0/2289, 25-26=0/2289, 23-25=0/2289, 22-23=0/916, 21-22=-747/0, 20-21=-1427/0, 19-20=-780/267, 18-19=-236/258
WEBS	6-26=-299/0, 7-25=0/300, 12-21=-100/0, 2-30=-1060/0, 2-29=0/725, 3-29=-684/0, 3-28=0/401, 4-28=-14/1, 5-28=-371/0, 5-27=-112/133, 6-27=-66/411, 11-21=-1384/0, 11-22=0/1058, 9-22=-1006/0, 9-23=0/709, 16-18=-324/296, 16-19=-336/24, 15-19=0/374, 15-20=-582/0, 8-23=-51/127, 14-20=-69/0, 7-23=-1065/0, 13-20=0/625, 13-21=-760/0

- NOTES**
- Unbalanced floor live loads have been considered for this design.
 - All plates are MT20 plates unless otherwise indicated.

- All plates are 3x3 (=) MT20 unless otherwise indicated.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 18. This connection is for uplift only and does not consider lateral forces.
 - 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.
 - CAUTION, Do not erect truss backwards.
- LOAD CASE(S)** Standard



April 21, 2025

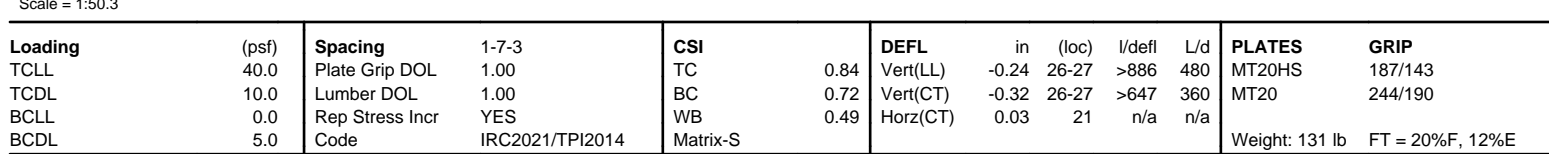
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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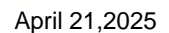
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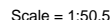
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LOAD CASE(S) Standard

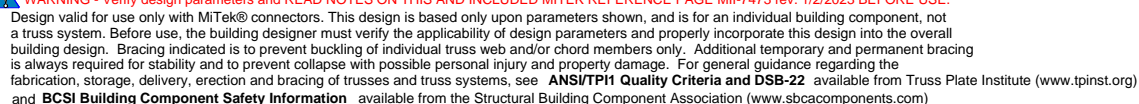
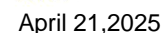


Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:29 Page: 1
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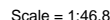


LUMBER		2) One H2.5A Simpson Strong-Tie connectors
TOP CHORD	2x4 SP No.2(flat)	recommended to connect truss to bearing walls due to
BOT CHORD	2x4 SP No.2(flat) *Except* 24-17:2x4 SP SS (flat)	UPLIFT at jt(s) 28. This connection is for uplift only and does not consider lateral forces.
WEBS	2x4 SP No.3(flat)	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.
OTHERS	2x4 SP No.3(flat)	4) CAUTION, Do not erect truss backwards.
BRACING		LOAD CASE(S) Standard
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)	17=0-3-4, 25=0-3-8, 28=0-3-8
	Max Uplift	28=-227 (LC 4)
	Max Grav	17=694 (LC 4), 25=1791 (LC 1), 28=286 (LC 3)
FORCES		(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-28=-37/0, 16-17=-49/0, 1-2=0/0,	
	2-3=-329/668, 3-4=-11/1508, 4-5=-11/1508,	
	5-6=0/2492, 6-7=0/2492, 7-8=0/419,	
	8-9=-1254/0, 9-10=-1254/0, 10-12=-1995/0,	
	12-13=-1996/0, 13-14=-1996/0,	
BOT CHORD	14-15=-1371/0, 15-16=-3/0	
	27-28=-322/314, 26-27=-1052/309,	
	25-26=-1913/0, 23-25=-1270/0, 22-23=0/639,	
	21-22=0/1767, 20-21=0/2128, 19-20=0/1996,	
	18-19=0/1996, 17-18=0/831	
WEBS	6-25=-119/0, 13-20=-141/167, 14-19=-1/213,	
	2-28=-394/403, 2-27=-451/19, 3-27=0/499,	
	3-26=-763/0, 7-25=-1579/0, 7-23=0/1170,	
	8-23=-1132/0, 8-22=0/800, 9-22=-65/0,	
	10-22=-671/0, 10-21=0/310, 12-21=-256/0,	
	12-20=-361/197, 15-17=-1039/0,	
	15-18=0/702, 14-18=-803/0, 4-26=-84/0,	
	5-25=-1001/0 5-26=0/819	

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



Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:25 Page: 1
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LUMBER

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.

FORCES (lb) - Maximum Compression/Maximum Tension

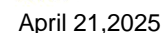
BOT CHORD 25-26=0/1187, 24-25=0/2887, 22-24=0/4084,
21-22=0/4765, 20-21=0/4765, 19-20=0/4751,
18-19=0/4751, 17-18=0/4103, 16-17=0/2887,
15-16=0/1186

WEBS 6-21=-113/252, 7-20=-175/25, 2-26=-1489/0,
2-25=0/1124, 3-25=-1090/0, 3-24=0/840,
4-24=-71/0, 5-24=-688/0, 5-22=0/576,
6-22=-695/0, 13-15=-1489/0, 13-16=0/1124,
12-16=-1090/0, 12-17=0/832, 11-17=-53/0,
9-17=-720/0, 9-18=0/418, 8-18=-418/0,
8-19=-53/126, 8-20=-364/506

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) Required 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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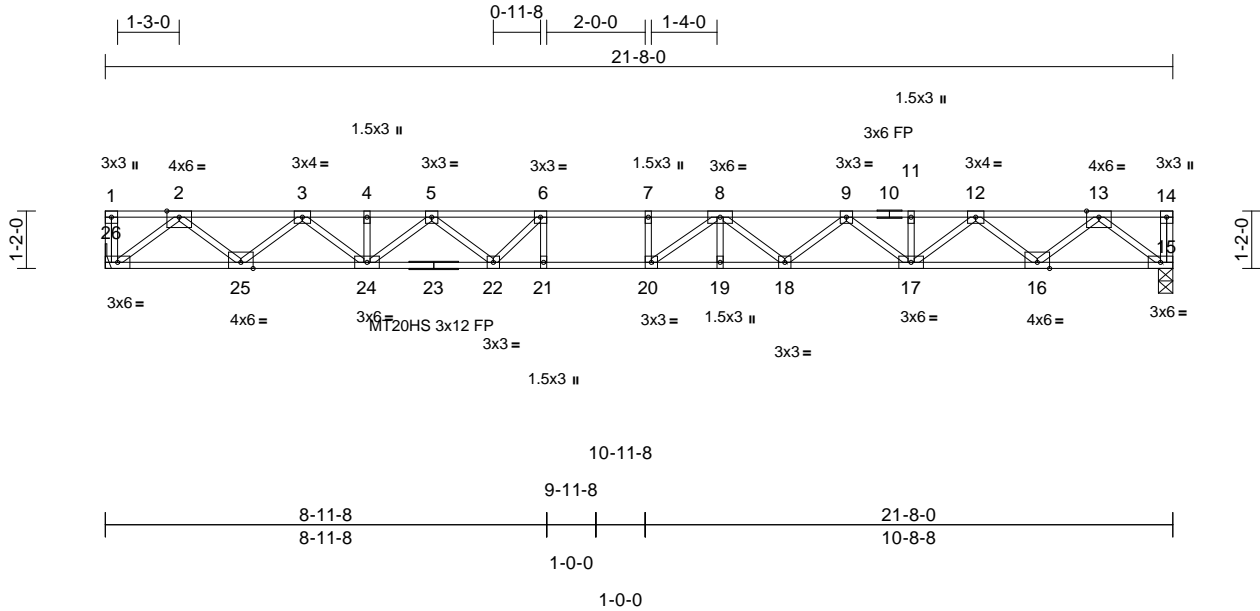
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF	172869755
2503-4262-A	2F1	Floor	2	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:24
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Page: 1



Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.55	Vert(LL)	-0.44	19-20	>582	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.64	Vert(CT)	-0.61	19-20	>423	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.08	15	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S								
											Weight: 111 lb	FT = 20%F, 12%E

LUMBER

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

BRACING

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

REACTIONS (size) 15=0-3-8, 26= Mechanical
Max Grav 15=942 (LC 1), 26=942 (LC 1)

FORCES (lb) - Maximum Compression/Maximum
Tension

TOP CHORD 1-26=-32/0, 14-15=-32/0, 1-2=0/0,
2-3=-2050/0, 3-4=-3545/0, 4-5=-3545/0,
5-6=-4440/0, 6-7=-4765/0, 7-8=-4765/0,
8-9=-4424/0, 9-11=-3539/0, 11-12=-3539/0,
12-13=-2050/0, 13-14=0/0

BOT CHORD 25-26=0/1187, 24-25=0/2887, 22-24=0/4084,
21-22=0/4765, 20-21=0/4765, 19-20=0/4751,
18-19=0/4751, 17-18=0/4103, 16-17=0/2887,
15-16=0/1186

WEBS 6-21=-113/252, 7-20=-175/25, 2-26=-1489/0,
2-25=0/1124, 3-25=-1090/0, 3-24=0/840,
4-24=-71/0, 5-24=-688/0, 5-22=0/576,
6-22=-695/0, 13-15=-1489/0, 13-16=0/1124,
12-16=-1090/0, 12-17=0/832, 11-17=-53/0,
9-17=-720/0, 9-18=0/418, 8-18=-418/0,
8-19=-53/126, 8-20=-364/506

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) Required 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



April 21, 2025

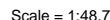
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

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Edenton, NC 27932

Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:24 Page: 1
ID:wFj?X5zSfXicAulp04GKmPy8MUI-RfC?PsB70Hg3NSaPqnL8w3ulTXbGKWCrDci7J4zJC?f



LUMBER

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.

FORCES (lb) - Maximum Compression/Maximum Tension

BOT CHORD 25-26=0/1187, 24-25=0/2887, 22-24=0/4084,
21-22=0/4765, 20-21=0/4765, 19-20=0/4751,
18-19=0/4751, 17-18=0/4103, 16-17=0/2887,
15-16=0/1186

WEBS 6-21=-113/252, 7-20=-175/25, 2-26=-1489/0,
2-25=0/1124, 3-25=-1090/0, 3-24=0/840,
4-24=-71/0, 5-24=-688/0, 5-22=0/576,
6-22=-695/0, 13-15=-1489/0, 13-16=0/1124,
12-16=-1090/0, 12-17=0/832, 11-17=-53/0,
9-17=-720/0, 9-18=0/418, 8-18=-418/0,
8-19=-53/126, 8-20=-364/506

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) Required 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



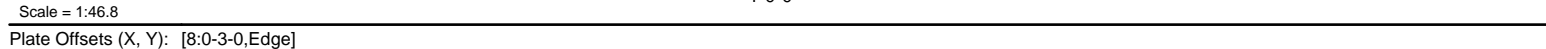
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MIT-7473 (rev. 1/2/2023) BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Components Association (www.sbcacomponents.com)



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Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:24 Page: 1
ID:dvoM3it86VgcqGT66eh_xy8MUP-RfC?PsB70Hg3NSgPqnL8w3uITXbGKWRcDoi7J4Cz?i



LUMBER	LOAD CASE(S)	Standard
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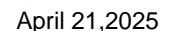
BRACING	
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

FORCES (lb) - Maximum Compression/Maximum Tension

BOT CHORD 12-13=-4307/0, 13-14=-2477/0, 14-15=0/0
26-27=0/1435, 25-26=0/3486, 23-25=0/4925,
22-23=0/5775, 21-22=0/5775, 20-21=0/5736,
19-20=0/5736, 18-19=0/4962, 17-18=0/3486,
16-17=0/1434

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) Required 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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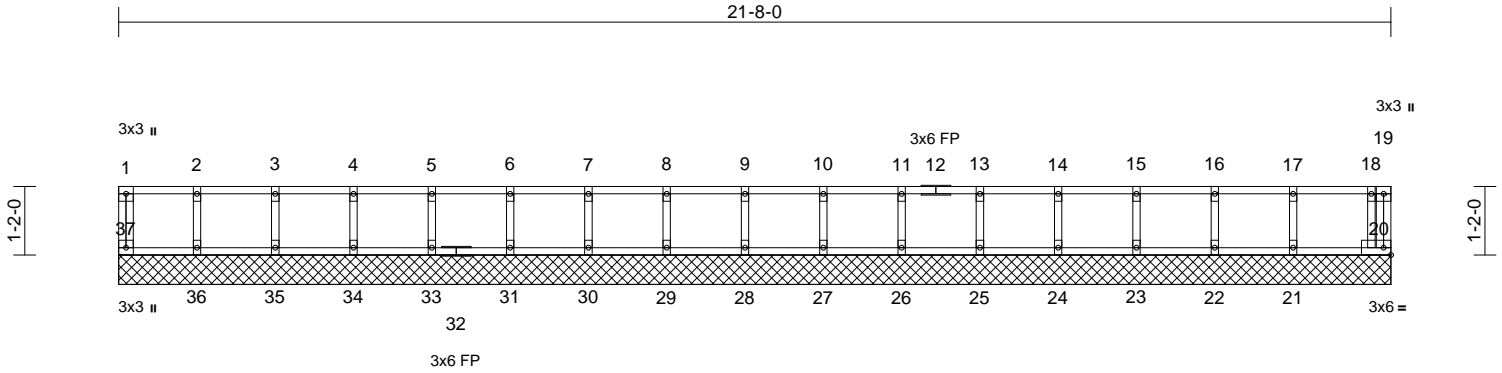
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF
2503-4262-A	2FGE1	Floor Supported Gable	1	1	Job Reference (optional)
					I72869758

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:34
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Page: 1



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	0.07	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	20	n/a	n/a	
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							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)

WEBS	
2-36=-102/0, 3-35=-108/0, 4-34=-106/0,	
5-33=-107/0, 6-31=-107/0, 7-30=-107/0,	
8-29=-107/0, 9-28=-107/0, 10-27=-107/0,	
11-26=-107/0, 13-25=-107/0, 14-24=-106/0,	
15-23=-107/0, 16-22=-105/0, 17-21=-114/0,	
18-20=-74/0	

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

REACTIONS (size)	
20=21-8-0, 21=21-8-0, 22=21-8-0,	
23=21-8-0, 24=21-8-0, 25=21-8-0,	
26=21-8-0, 27=21-8-0, 28=21-8-0,	
29=21-8-0, 30=21-8-0, 31=21-8-0,	
33=21-8-0, 34=21-8-0, 35=21-8-0,	
36=21-8-0, 37=21-8-0	
Max Grav	20=68 (LC 1), 21=128 (LC 1),
	22=114 (LC 1), 23=118 (LC 1),
	24=117 (LC 1), 25=117 (LC 1),
	26=117 (LC 1), 27=117 (LC 1),
	28=117 (LC 1), 29=117 (LC 1),
	30=117 (LC 1), 31=117 (LC 1),
	33=117 (LC 1), 34=117 (LC 1),
	35=119 (LC 1), 36=110 (LC 1),
	37=54 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-37=-47/0, 19-20=0/9, 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, 11-13=-12/0, 13-14=-12/0,
	14-15=-12/0, 15-16=-12/0, 16-17=-12/0,
	17-18=-12/0, 18-19=-2/0
BOT CHORD	36-37=0/12, 35-36=0/12, 34-35=0/12,
	33-34=0/12, 31-33=0/12, 30-31=0/12,
	29-30=0/12, 28-29=0/12, 27-28=0/12,
	26-27=0/12, 25-26=0/12, 24-25=0/12,
	23-24=0/12, 22-23=0/12, 21-22=0/12,
	20-21=0/12

- NOTES**
- 1) All plates are 1.5x3 (II) 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



April 21, 2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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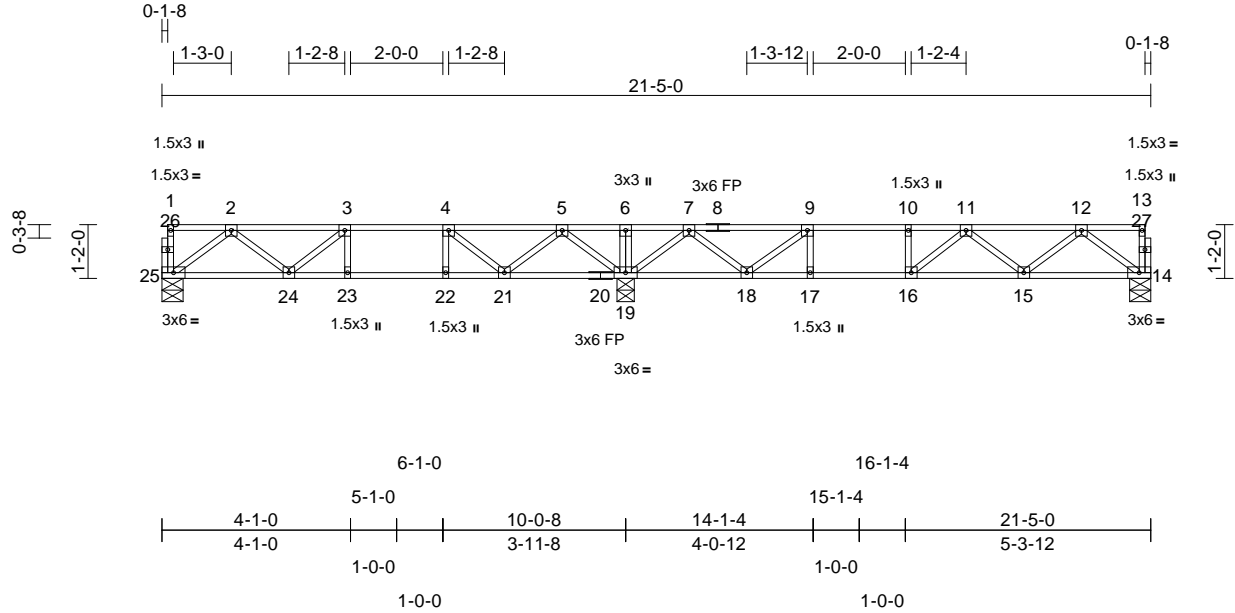
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF	I72869759
2503-4262-A	1F5	Floor	1	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:17
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Page: 1



Scale = 1:49.9											
Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.45	Vert(LL)	-0.09 15-16	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.67	Vert(CT)	-0.12 15-16	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.02 14	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S						Weight: 106 lb	FT = 20%F, 12%E

LUMBER **LOAD CASE(S)** Standard

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: 19-21,18-19.

REACTIONS (size) 14=0-5-8, 19=0-4-8, 25=0-5-8
Max Grav 14=467 (LC 7), 19=1025 (LC 1), 25=405 (LC 10)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-25=-24/0, 13-14=-29/0, 1-2=-1/0, 2-3=-716/0, 3-4=-900/0, 4-5=-598/9, 5-6=0/564, 6-7=0/564, 7-9=-740/0, 9-10=-1165/0, 10-11=-1165/0, 11-12=-880/0, 12-13=-2/0
BOT CHORD 24-25=0/493, 23-24=0/900, 22-23=0/900, 21-22=0/900, 19-21=-131/308, 18-19=-102/377, 17-18=0/1165, 16-17=0/1165, 15-16=0/1142, 14-15=0/572
WEBS 3-23=-88/10, 4-22=0/113, 6-19=-95/0, 9-17=0/128, 10-16=-74/20, 5-19=-718/0, 5-21=0/440, 4-21=-483/0, 7-19=-797/0, 7-18=0/533, 9-18=-622/0, 12-14=-716/0, 12-15=0/401, 11-15=-341/0, 11-16=-105/128, 2-25=-617/0, 2-24=0/290, 3-24=-238/14

- 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.
 - 4) CAUTION, Do not erect truss backwards.



April 21,2025

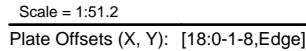
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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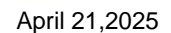
Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:28 Page: 1
ID:Vg1su3wf9KK2JRaELxd8ny8MUL-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWCrD0i7J4zJC?fi



LUMBER			3) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 23.
TOP CHORD	2x4 SP No.2(flat)		4) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 27. This connection is for uplift only and does not consider lateral forces.
BOT CHORD	2x4 SP No.2(flat)		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.
WEBS	2x4 SP No.3(flat)		6) CAUTION. Do not erect truss backwards.
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) 17=0-3-8, 23=0-3-0, 27=0-3-0 Max Uplift 27=-145 (L.C. 4)		
		LOAD CASE(S)	Standard

NOTES

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

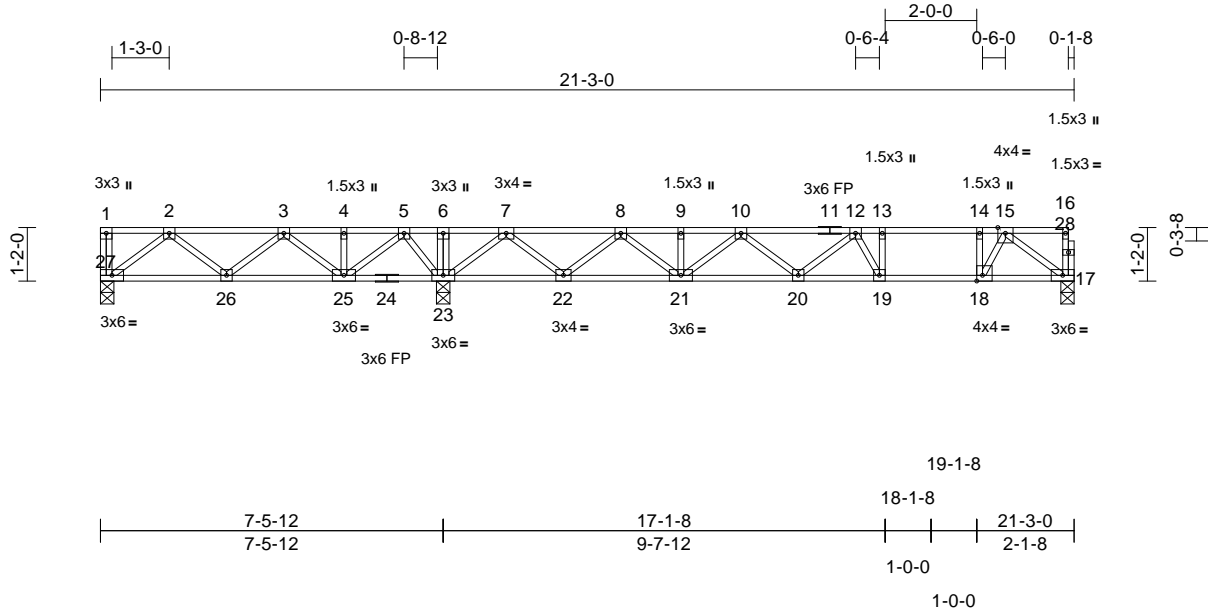


Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF	I72869761
2503-4262-A	2F12	Floor	5	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:28
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Page: 1



Scale = 1:50.3

Plate Offsets (X, Y): [18:0-1-8,Edge]												
Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.82	Vert(LL)	-0.13	19-20	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.66	Vert(CT)	-0.17	19-20	>963	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.33	Horz(CT)	-0.01	23	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 111 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) 17=0-3-8, 23=0-3-8, 27=0-3-8
Max Uplift 27=-145 (LC 4)
Max Grav 17=378 (LC 4), 23=1127 (LC 1), 27=194 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-27=-25/0, 16-17=-50/0, 1-2=0/0, 2-3=-227/428, 3-4=-24/971, 4-5=-24/971, 5-6=0/1615, 6-7=0/1616, 7-8=0/342, 8-9=-580/0, 9-10=-580/0, 10-12=-930/0, 12-13=-759/0, 13-14=-759/0, 14-15=-759/0, 15-16=-3/0
BOT CHORD 26-27=-205/213, 25-26=-675/216, 23-25=-1300/0, 22-23=-860/0, 21-22=-21/245, 20-21=0/846, 19-20=0/938, 18-19=0/759, 17-18=0/469
WEBS 6-23=-64/0, 13-19=-14/232, 14-18=-433/0, 2-27=-268/258, 2-26=-290/17, 3-26=0/322, 3-25=-494/0, 7-23=-956/0, 7-22=0/687, 8-22=-660/0, 8-21=0/438, 9-21=-46/0, 10-21=-351/0, 10-20=0/122, 12-20=-76/0, 12-19=-368/0, 15-17=-585/0, 15-18=0/612, 4-25=-67/0, 5-25=0/620, 5-23=-599/0

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

- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 27. This connection is for uplift only and does not consider lateral forces.
 - 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.
 - CAUTION, Do not erect truss backwards.
- LOAD CASE(S)** Standard



April 21,2025

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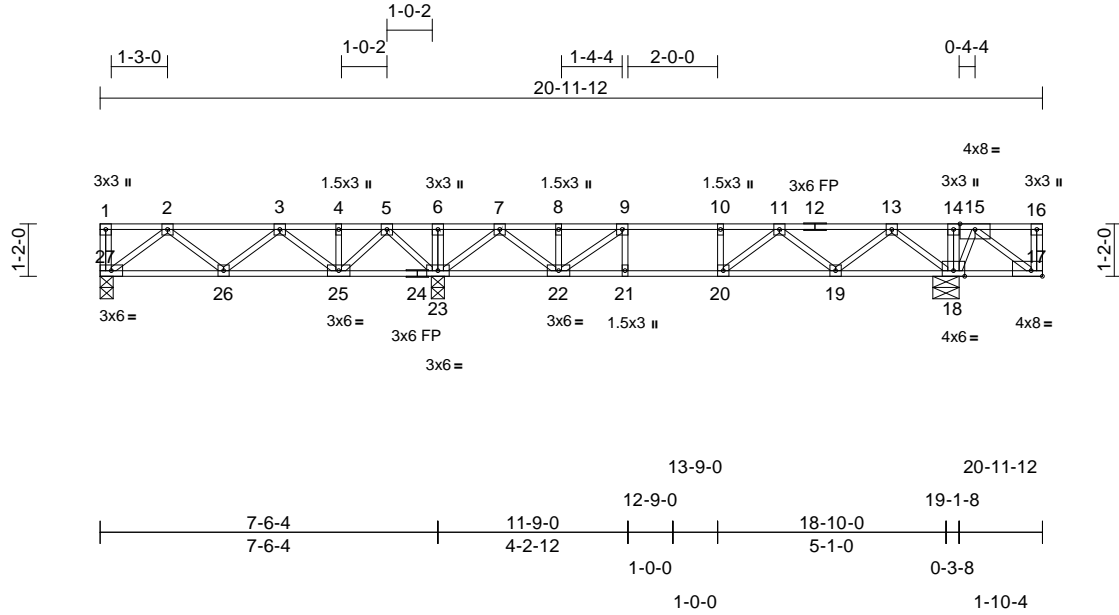
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF	I72869762
2503-4262-A	2F23A	Floor	1	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:31
ID:KqP897?Qla4B1M1OicP1O2y8MUF-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:51.3

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

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	0.89	Vert(LL)	0.08	19-20	>999	480	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.52	Vert(CT)	0.13	19-20	>999	360	
BCLL	0.0	Rep Stress Incr	NO	WB	0.88	Horz(CT)	-0.02	18	n/a	n/a	
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							
Weight: 112 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 6-0-0 oc bracing.

REACTIONS (size) 18=0-7-0, 23=0-3-8, 27=0-3-8
Max Uplift 27=18 (LC 4)
Max Grav 18=1771 (LC 4), 23=733 (LC 3), 27=224 (LC 12)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-27=-25/0, 16-17=-1118/0, 1-2=0/0, 2-3=-303/110, 3-4=-172/340, 4-5=-172/340, 5-6=0/816, 6-7=0/817, 7-8=-199/603, 8-9=-199/603, 9-10=-360/910, 10-11=-360/910, 11-13=0/1509, 13-14=0/2044, 14-15=0/2044, 15-16=0/0, 26-27=-39/253, 25-26=-205/329, 23-25=-481/0, 22-23=-570/0, 21-22=-910/360, 20-21=-910/360, 19-20=-1248/174, 18-19=-1745/0, 17-18=-1471/0
BOT CHORD 6-23=-100/0, 9-21=-111/19, 10-20=-236/0, 14-18=-48/0, 2-27=-318/48, 2-26=-93/65, 3-26=-34/123, 3-25=-311/0, 7-23=-524/81, 7-22=-63/371, 13-18=-821/0, 13-19=0/548, 11-19=-568/0, 11-20=0/557, 15-17=0/1846, 15-18=-1329/0, 4-25=-57/0, 8-22=-170/5, 9-22=-223/375, 5-25=0/382, 5-23=-497/0
WEBS

NOTES

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

- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 27. This connection is for uplift only and does not consider lateral forces.
- 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.
- 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.
- CAUTION, Do not erect truss backwards.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 700 lb down at 20-10-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 17-27=-7, 1-16=-67
Concentrated Loads (lb)
Vert: 16=-1084 (F=-700)



April 21, 2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

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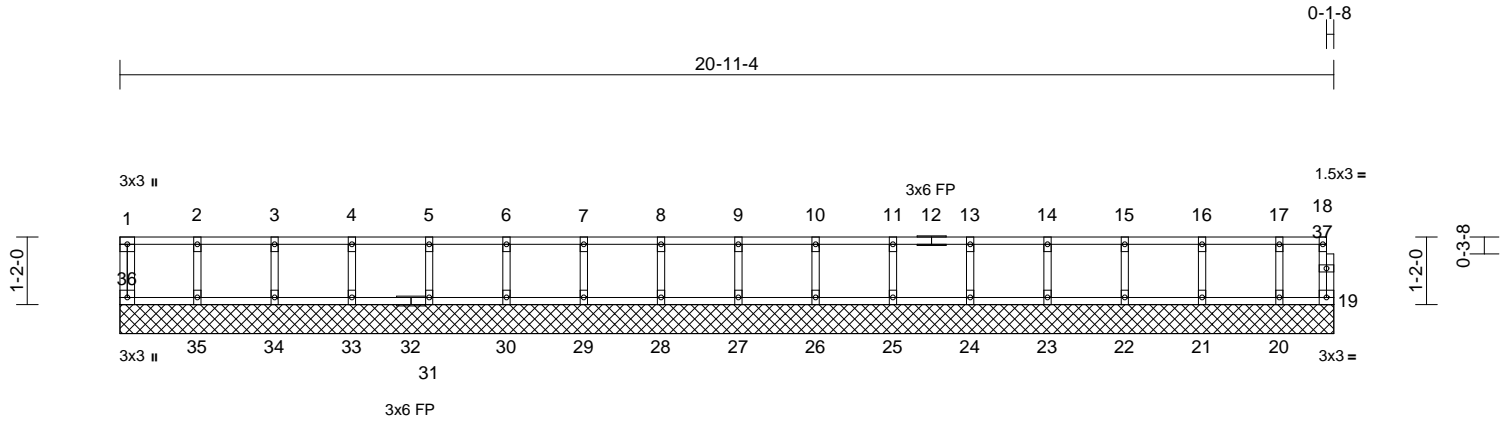
Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF
2503-4262-A	2FGE3	Floor Supported Gable	1	1	Job Reference (optional)
					I72869763

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:35

Page: 1

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Scale = 1:39.7

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	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	19	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R						Weight: 88 lb	FT = 20%F, 12%E

LUMBER		WEBS	2-35=-88/0, 3-34=-89/0, 4-33=-89/0, 5-31=-89/0, 6-30=-89/0, 7-29=-89/0, 8-28=-89/0, 9-27=-89/0, 10-26=-89/0, 11-25=-89/0, 13-24=-89/0, 14-23=-89/0, 15-22=-89/0, 16-21=-92/0, 17-20=-74/0
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		NOTES	1) All plates are 1.5x3 (II) 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.
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=20-11-4, 20=20-11-4, 21=20-11-4, 22=20-11-4, 23=20-11-4, 24=20-11-4, 25=20-11-4, 26=20-11-4, 27=20-11-4, 28=20-11-4, 29=20-11-4, 30=20-11-4, 31=20-11-4, 33=20-11-4, 34=20-11-4, 35=20-11-4, 36=20-11-4	LOAD CASE(S)	Standard

Max Grav	19=22 (LC 1), 20=79 (LC 1), 21=102 (LC 1), 22=97 (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), 29=98 (LC 1), 30=98 (LC 1), 31=98 (LC 1), 33=98 (LC 1), 34=98 (LC 1), 35=98 (LC 1), 36=39 (LC 1)
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FORCES (lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-36=-36/0, 18-19=-18/0, 1-2=-4/0, 2-3=-4/0, 3-4=-4/0, 4-5=-4/0, 5-6=-4/0, 6-7=-4/0, 7-8=-4/0, 8-9=-4/0, 9-10=-4/0, 10-11=-4/0, 11-13=-4/0, 13-14=-4/0, 14-15=-4/0, 15-16=-4/0, 16-17=-4/0, 17-18=-4/0
BOT CHORD	35-36=0/4, 34-35=0/4, 33-34=0/4, 31-33=0/4, 30-31=0/4, 29-30=0/4, 28-29=0/4, 27-28=0/4, 26-27=0/4, 25-26=0/4, 24-25=0/4, 23-24=0/4, 22-23=0/4, 21-22=0/4, 20-21=0/4, 19-20=0/4



April 21, 2025

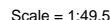
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacompnents.com)

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Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:17 Page: 1
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NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x3 (=) MT20 unless otherwise indicated.
- 3) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 25.

- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 21 lb uplift at joint 26.
- 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



April 21, 2025

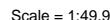


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Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:16 Page: 1
ID:RORMEv9Y5P ?rGp 4FjaMOzemTi-RfC?PsB70Hg3NSqPqnL8w3ulTXbGKWrcD0i7J4zJC?f



LUMBER		5) CAUTION, Do not erect truss backs.
TOP CHORD	2x4 SP No.2(flat)	LOAD CASE(S) Standard
BOT CHORD	2x4 SP No.2(flat)	1) Dead + Floor Live (balanced): Lumber Increase=1.00,
WEBS	2x4 SP No.3(flat)	Plate Increase=1.00
OTHERS	2x4 SP No.3(flat)	Uniform Loads (lb/ft)
BRACING		Vert: 13-24=-7, 1-26=-67, 12-27=-67
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.	Trapezoidal Loads (lb/ft)
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.	Vert: 26=-151-to-7=-149, 7=-149-to-8=-148, 8=-148-to-9=-145, 9=-145-to-10=-141, 10=-141-to-27=-139
REACTIONS	(size) 13=0-4-8, 18=0-4-8, 24=0-5-8	
	Max Grav 13=532 (LC 7), 18=1209 (LC 1), 24=311 (LC 10)	
FORCES	(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-24=-17/1, 12-13=-16/3, 1-2=-1/0, 2-3=-528/0, 3-4=-623/29, 4-5=-313/201, 5-6=0/734, 6-7=0/734, 7-9=-949/0, 9-10=-1456/0, 10-11=-1059/0, 11-12=0/0	
BOT CHORD	23-24=0/381, 22-23=-29/623, 21-22=-29/623, 20-21=-29/623, 18-20=-342/33, 17-18=0/487, 16-17=0/1456, 15-16=0/1456, 14-15=0/1456, 13-14=0/671	
WEBS	3-22=-106/0, 4-21=0/127, 6-18=-74/0, 9-16=-3/81, 10-15=-61/23, 2-24=-476/0, 2-23=-13/192, 3-23=-123/91, 5-18=-640/0, 5-20=0/421, 4-20=-487/0, 7-18=-1220/0, 7-17=0/655, 9-17=-717/0, 11-13=-842/0, 11-14=0/505, 10-14=-498/0	

- 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'-0" oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



April 21, 2025

 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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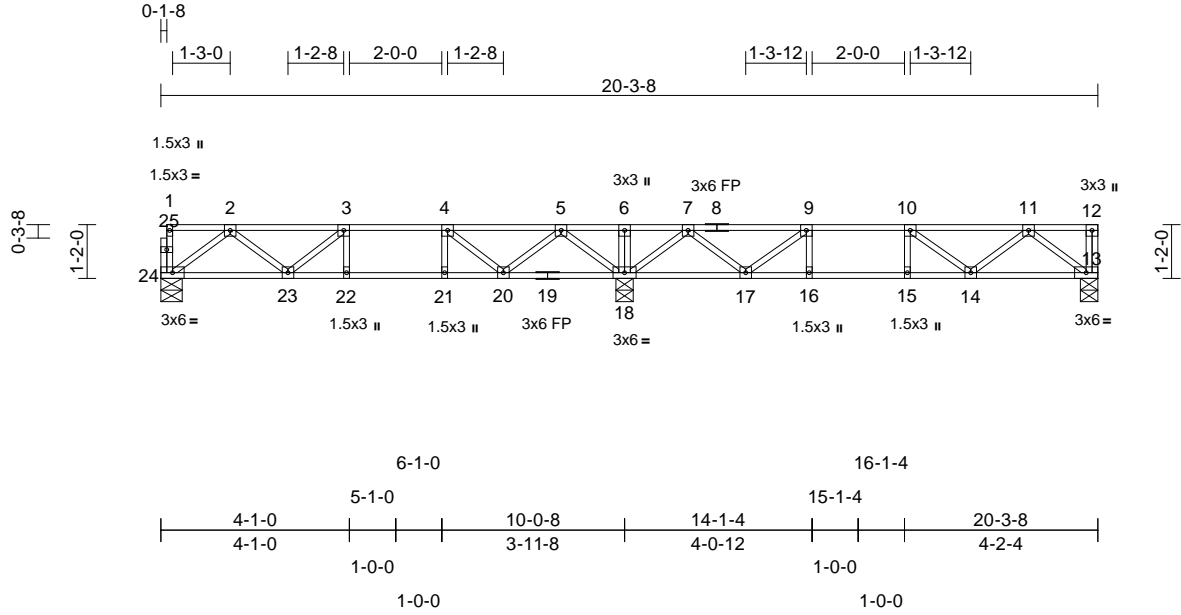
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF	I72869766
2503-4262-A	1F1	Floor	7	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:15
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Page: 1



Scale = 1:49.9

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	0.29	-0.05	14-15	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.45	-0.06	14-15	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.18	0.02	13	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)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

BRACING

TOP CHORD Structural wood sheathing directly applied or 6'-0" oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10'-0" oc bracing, Except: 6'-0" oc bracing: 18-20, 17-18.

REACTIONS (size) 13=0-4-8, 18=0-4-8, 24=0-5-8
Max Grav 13=351 (LC 7), 18=814 (LC 1), 24=340 (LC 10)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-24=-21/0, 12-13=-21/0, 1-2=-1/0, 2-3=-602/0, 3-4=-760/0, 4-5=-514/0, 5-6=0/462, 6-7=0/462, 7-9=-521/0, 9-10=-792/0, 10-11=-617/0, 11-12=0/0
BOT CHORD 23-24=0/413, 22-23=0/760, 21-22=0/760, 20-21=0/760, 18-20=-101/275, 17-18=-91/276, 16-17=0/792, 15-16=0/792, 14-15=0/792, 13-14=0/426
WEBS 3-22=-73/10, 4-21=0/93, 6-18=-71/0, 9-16=0/91, 10-15=-70/14, 2-24=-517/0, 2-23=0/245, 3-23=-204/9, 5-18=-601/0, 5-20=0/369, 4-20=-405/0, 7-18=-614/0, 7-17=0/371, 9-17=-422/0, 11-13=-534/0, 11-14=0/250, 10-14=-219/2

NOTES

- Unbalanced floor live loads have been considered for this design.
- All plates are 3x3 (=) MT20 unless otherwise indicated.
- Recommend 2x6 strongbacks, on edge, spaced at 10'-0" oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



April 21, 2025

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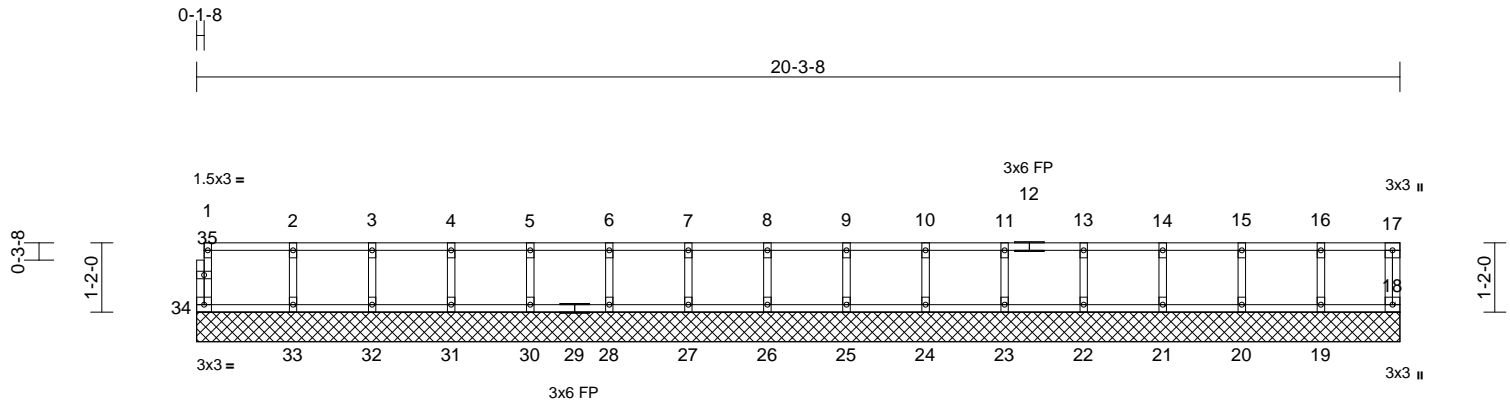
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF
2503-4262-A	1FGE1	Floor Supported Gable	1	1	Job Reference (optional)
					I72869767

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:21
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Page: 1



Scale = 1:38.9

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	0.06	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	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=20-3-8, 19=20-3-8, 20=20-3-8, 21=20-3-8, 22=20-3-8, 23=20-3-8, 24=20-3-8, 25=20-3-8, 26=20-3-8, 27=20-3-8, 28=20-3-8, 30=20-3-8, 31=20-3-8, 32=20-3-8, 33=20-3-8, 34=20-3-8
Max Grav 18=44 (LC 1), 19=92 (LC 1), 20=99 (LC 1), 21=97 (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=99 (LC 1), 32=95 (LC 1), 33=109 (LC 1), 34=48 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-34=-45/0, 17-18=-39/0, 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, 11-13=-9/0, 13-14=-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=-85/0, 15-20=-90/0, 14-21=-89/0, 13-22=-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=-90/0, 3-32=-86/0, 2-33=-98/0

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



April 21,2025

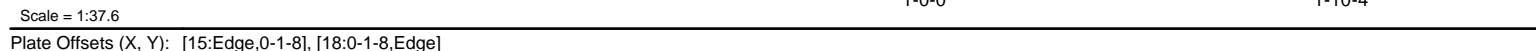
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacompnents.com)

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818 Soundside Road
Edenton, NC 27932

Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:32 Page: 1
ID:8mc0MWOPXz71SZaE1a ZszvBP3-RfC?PsB70Ha3NSaPanL8w3uITxbGKWrCd0i7J4zJC?f



LUMBER		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.
TOP CHORD	2x4 SP SS(flat) *Except* 10-14:2x4 SP No.2 (flat)	4) CAUTION, Do not erect truss backwards.
BOT CHORD	2x4 SP No.2(flat) *Except* 22-15:2x4 SP SS (flat)	5) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 700 lb down at 19-7-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
WEBS	2x4 SP No.3(flat)	6) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
BRACING		LOAD CASE(S) Standard
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.	1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.	Uniform Loads (lb/ft) Vert: 15-24=-8, 1-25=-83, 25-26=-98, 14-26=-83
REACTIONS	(size) 16=0-7-0, 24=0-5-8 Max Grav 16=1904 (LC 1), 24=804 (LC 3)	Concentrated Loads (lb) Vert: 14=-800 (F=-700)
FORCES	(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-24=-33/0, 14-15=-844/0, 1-2=0/0, 2-3=-1694/0, 3-4=-2802/0, 4-5=-2802/0, 5-6=-3333/0, 6-7=-2902/6, 7-8=-2902/6, 8-9=-2902/6, 9-11=-1238/841, 11-12=0/1563, 12-13=0/1563, 13-14=0/0	
BOT CHORD	23-24=0/1005, 21-23=0/2348, 20-21=0/3182, 19-20=0/3363, 18-19=-6/2902, 17-18=-484/2038, 16-17=-1160/513, 15-16=-1110/0	
WEBS	7-19=-17/313, 8-18=-586/0, 12-16=-56/0, 2-24=-1260/0, 2-23=0/897, 3-23=-851/0, 3-21=0/580, 4-21=-66/0, 5-21=-485/0, 5-20=-27/205, 6-20=-129/160, 6-19=-901/0, 11-16=-1413/0, 11-17=0/1025, 9-17=-1152/0, 9-18=0/1386, 13-15=0/1393, 13-16=-1050/0	

- 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.



Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Components Protection Association (www.sbcacomponents.com)



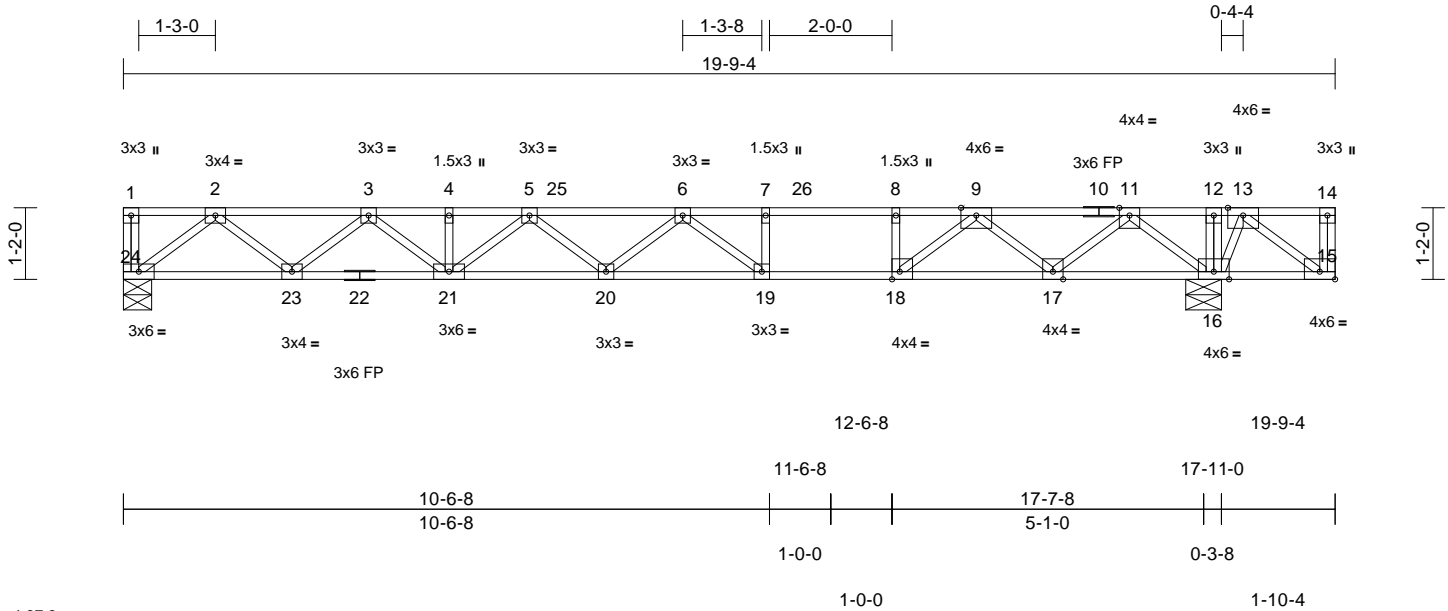
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF	I72869769
2503-4262-A	2F24A	Floor	1	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:32
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Page: 1



Scale = 1:37.6																
Plate Offsets (X, Y): [15:Edge,0-1-8], [18:0-1-8,Edge]																
Loading		(psf)	Spacing		1-8-0	CSI		DEFL			in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL		40.0	Plate Grip DOL		1.00	TC		0.85	Vert(LL)	-0.33	19-20	>641	480	MT20	244/190	
TCDL		10.0	Lumber DOL		1.00	BC		0.85	Vert(CT)	-0.46	19-20	>465	360			
BCLL		0.0	Rep Stress Incr		NO	WB		0.70	Horz(CT)	0.05	16	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) *Except* 10-14:2x4 SP No.2 (flat)
BOT CHORD 2x4 SP No.2(flat) *Except* 22-15:2x4 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 6-0-0 oc bracing.

REACTIONS (size) 16=0-7-0, 24=0-5-8
Max Grav 16=1937 (LC 1), 24=775 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-24=-33/0, 14-15=-896/0, 1-2=0/0, 2-3=-1620/0, 3-4=-2657/0, 4-5=-2657/0, 5-6=-3120/0, 6-7=-2694/214, 7-8=-2694/214, 8-9=-2694/214, 9-11=-1099/980, 11-12=0/1657, 12-13=0/1656, 13-14=0/0
BOT CHORD 23-24=0/966, 21-23=0/2239, 20-21=0/2995, 19-20=0/3129, 18-19=-214/2694, 17-18=-649/1873, 16-17=-1278/395, 15-16=-1179/0
WEBS 7-19=-27/304, 8-18=-564/0, 12-16=-57/0, 2-24=-1212/0, 2-23=0/851, 3-23=-806/0, 3-21=0/534, 4-21=-70/0, 5-21=-431/25, 5-20=-61/170, 6-20=-102/187, 6-19=-867/0, 11-16=-1381/0, 11-17=0/999, 9-17=-1118/0, 9-18=0/1331, 13-15=0/1479, 13-16=-1106/0

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.
5) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 700 lb down at 19-7-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
6) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
- LOAD CASE(S)** Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 15-24=-8, 1-25=-83, 25-26=-86, 14-26=-83
Concentrated Loads (lb)
Vert: 14=-852 (F=700)



April 21, 2025

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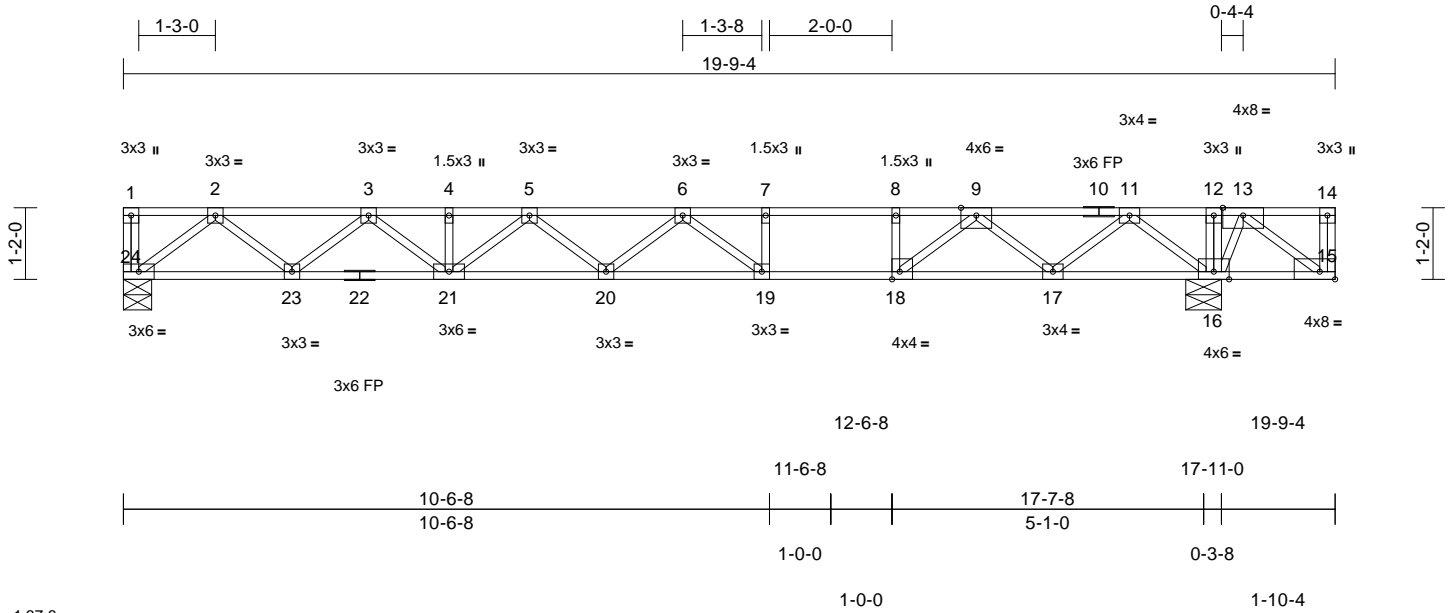
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF	I72869770
2503-4262-A	2F24	Floor	2	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:31
ID:BhD_FilW17SRq8pm9vVfbzvBRI-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:37.6

Plate Offsets (X, Y): [15:Edge,0-1-8], [18:0-1-8,Edge]

Loading	(psf)	Spacing	1-4-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.81	Vert(LL)	-0.26	19-20	>801	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.69	Vert(CT)	-0.36	19-20	>596	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.87	Horz(CT)	0.03	16	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) *Except* 10-14:2x4 SP No.2 (flat)
BOT CHORD	2x4 SP No.2(flat) *Except* 22-15:2x4 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 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 23-24,21-23.

REACTIONS

(size) 16=0-7-0, 24=0-5-8
Max Grav 16=1981 (LC 1), 24=585 (LC 3)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-24=-26/0, 14-15=-1109/0, 1-2=0/0, 2-3=-1209/0, 3-4=-1953/0, 4-5=-1953/0, 5-6=-2245/142, 6-7=-1795/649, 7-8=-1795/649, 8-9=-1795/649, 9-11=-420/1400, 11-12=0/2024, 12-13=0/2023, 13-14=0/0
BOT CHORD	23-24=0/727, 21-23=0/1662, 20-21=-57/2180, 19-20=-303/2207, 18-19=-649/1795, 17-18=-1082/1078, 16-17=-1678/0, 15-16=-1457/0
WEBS	7-19=0/288, 8-18=-494/0, 12-16=-52/0, 2-24=-913/0, 2-23=0/627, 3-23=-590/14, 3-21=-60/372, 4-21=-58/0, 5-21=-289/93, 5-20=-110/90, 6-20=-24/227, 6-19=-806/0, 11-16=-1159/0, 11-17=0/850, 9-17=-964/0, 9-18=0/1173, 13-15=0/1828, 13-16=-1312/0

NOTES

- Unbalanced floor live loads have been considered for this design.
- 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.

- 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.
- CAUTION, Do not erect truss backwards.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 700 lb down at 19-7-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 15-24=-7, 1-14=-67
Concentrated Loads (lb)
Vert: 14=-1075 (F=-700)



April 21, 2025

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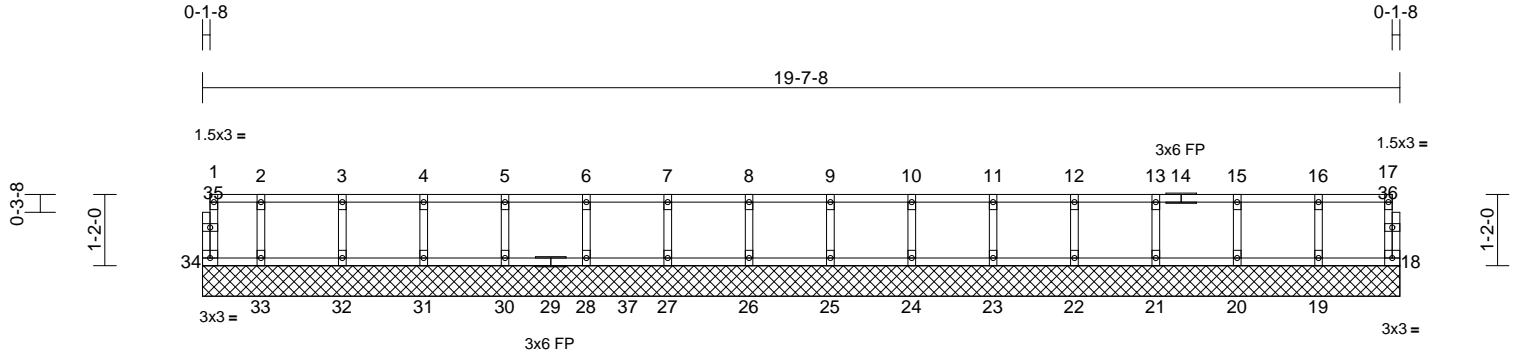
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF	I72869771
2503-4262-A	1FGE6	Floor Supported Gable	1	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:22
ID:aNITxbud2ohdoJUTQTIIm3azew7J-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:37.8

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	0.09	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	18	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 82 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=19-7-8, 19=19-7-8, 20=19-7-8, 21=19-7-8, 22=19-7-8, 23=19-7-8, 24=19-7-8, 25=19-7-8, 26=19-7-8, 27=19-7-8, 28=19-7-8, 30=19-7-8, 31=19-7-8, 32=19-7-8, 33=19-7-8, 34=19-7-8
	Max Grav	18=53 (LC 1), 19=147 (LC 1), 20=147 (LC 1), 21=147 (LC 1), 22=147 (LC 1), 23=147 (LC 1), 24=146 (LC 1), 25=147 (LC 1), 26=144 (LC 1), 27=158 (LC 1), 28=158 (LC 1), 30=145 (LC 1), 31=146 (LC 1), 32=152 (LC 1), 33=120 (LC 1), 34=37 (LC 1)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-34=-32/0, 17-18=-49/0, 1-2=-7/0, 2-3=-7/0, 3-4=-7/0, 4-5=-7/0, 5-6=-7/0, 6-7=-7/0, 7-8=-7/0, 8-9=-7/0, 9-10=-7/0, 10-11=-7/0, 11-12=-7/0, 12-13=-7/0, 13-15=-7/0, 15-16=-7/0, 16-17=-7/0
BOT CHORD	33-34=0/7, 32-33=0/7, 31-32=0/7, 30-31=0/7, 28-30=0/7, 27-28=0/7, 26-27=0/7, 25-26=0/7, 24-25=0/7, 23-24=0/7, 22-23=0/7, 21-22=0/7, 20-21=0/7, 19-20=0/7, 18-19=0/7
WEBS	16-19=-132/0, 15-20=-134/0, 13-21=-133/0, 12-22=-133/0, 11-23=-133/0, 10-24=-133/0, 9-25=-133/0, 8-26=-133/0, 7-27=-133/0, 6-28=-133/0, 5-30=-134/0, 4-31=-132/0, 3-32=-138/0, 2-33=-112/0

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: 18-34=-10, 1-17=-100
Concentrated Loads (lb)
Vert: 1=-3, 37=-19



April 21, 2025

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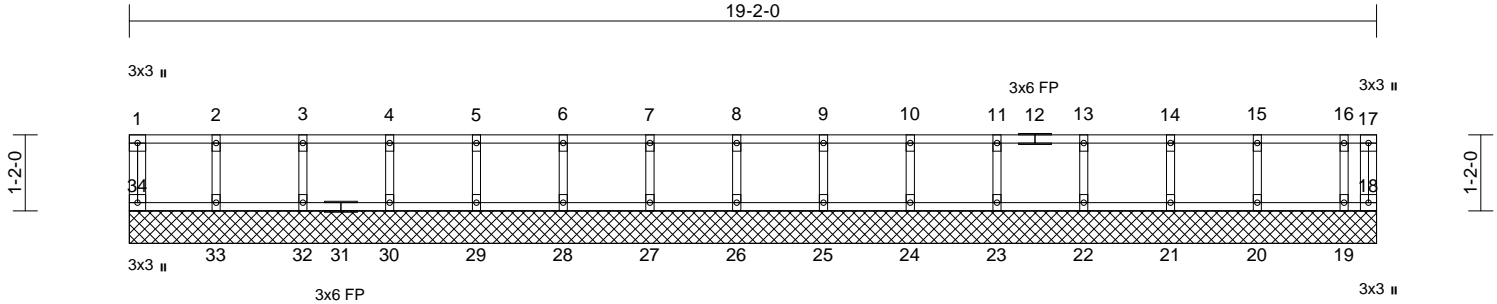
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF
2503-4262-A	2FGE2	Floor Supported Gable	1	1	Job Reference (optional)
					I72869772

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:34
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Page: 1



Scale = 1:35.4

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
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	18	n/a	n/a	
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 82 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=19-2-0, 19=19-2-0, 20=19-2-0, 21=19-2-0, 22=19-2-0, 23=19-2-0, 24=19-2-0, 25=19-2-0, 26=19-2-0, 27=19-2-0, 28=19-2-0, 29=19-2-0, 30=19-2-0, 32=19-2-0, 33=19-2-0, 34=19-2-0
Max Grav	18=7 (LC 1), 19=80 (LC 1), 20=122 (LC 1), 21=116 (LC 1), 22=118 (LC 1), 23=117 (LC 1), 24=117 (LC 1), 25=117 (LC 1), 26=117 (LC 1), 27=117 (LC 1), 28=117 (LC 1), 29=117 (LC 1), 30=117 (LC 1), 32=117 (LC 1), 33=118 (LC 1), 34=47 (LC 1)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-34=-44/0, 17-18=0/0, 1-2=-5/0, 2-3=-5/0, 3-4=-5/0, 4-5=-5/0, 5-6=-5/0, 6-7=-5/0, 7-8=-5/0, 8-9=-5/0, 9-10=-5/0, 10-11=-5/0, 11-13=-5/0, 13-14=-5/0, 14-15=-5/0, 15-16=-5/0, 16-17=-5/0
BOT CHORD	33-34=0/5, 32-33=0/5, 30-32=0/5, 29-30=0/5, 28-29=0/5, 27-28=0/5, 26-27=0/5, 25-26=0/5, 24-25=0/5, 23-24=0/5, 22-23=0/5, 21-22=0/5, 20-21=0/5, 19-20=0/5, 18-19=0/5
WEBS	2-33=-106/0, 3-32=-107/0, 4-30=-107/0, 5-29=-107/0, 6-28=-107/0, 7-27=-107/0, 8-26=-107/0, 9-25=-107/0, 10-24=-107/0, 11-23=-107/0, 13-22=-107/0, 14-21=-106/0, 15-20=-111/0, 16-19=-80/0

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



April 21, 2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacompnents.com)

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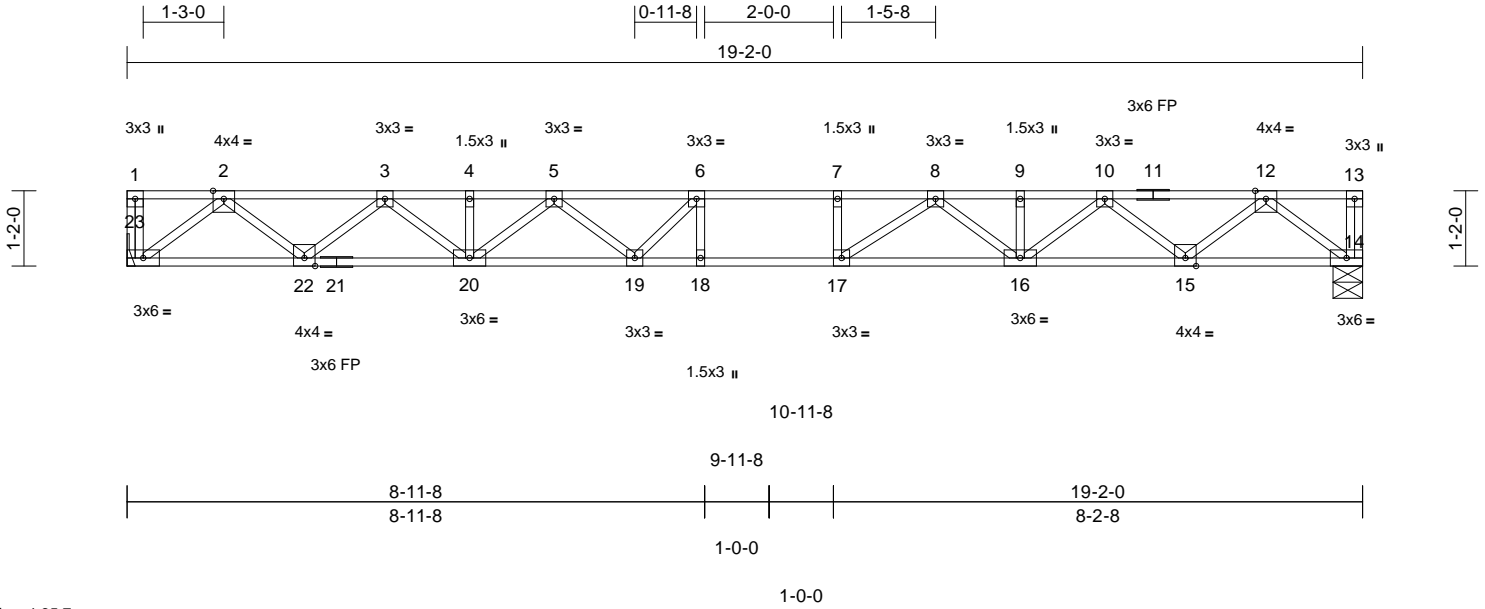
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF	I72869773
2503-4262-A	2F10	Floor	7	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:28
ID:1UUUhjw1OQCBhH?2nEBOBzY8MUM-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:35.7

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	0.61	Vert(LL)	-0.32	18	>715	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.67	Vert(CT)	-0.44	18	>522	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.45	Horz(CT)	0.06	14	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 98 lb	FT = 20%F, 12%E

LUMBER

TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat) *Except* 21-14:2x4 SP SS (flat)
WEBS 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) 14=0-5-8, 23= Mechanical
Max Grav 14=832 (LC 1), 23=832 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-23=-32/0, 13-14=-31/0, 1-2=0/0, 2-3=-1775/0, 3-4=-2992/0, 4-5=-2992/0, 5-6=-3617/0, 6-7=-3732/0, 7-8=-3732/0, 8-9=-2995/0, 9-10=-2995/0, 10-12=-1776/0, 12-13=0/0
BOT CHORD 22-23=0/1042, 20-22=0/2480, 19-20=0/3420, 18-19=0/3732, 17-18=0/3732, 16-17=0/3402, 15-16=0/2478, 14-15=0/1043
WEBS 6-18=-191/144, 7-17=-224/0, 2-23=-1308/0, 2-22=0/954, 3-22=-918/0, 3-20=0/654, 4-20=-50/0, 5-20=-546/0, 5-19=0/397, 6-19=-451/146, 12-14=-1309/0, 12-15=0/953, 10-15=-914/0, 10-16=0/660, 9-16=-77/0, 8-16=-521/0, 8-17=0/642

NOTES

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



April 21, 2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

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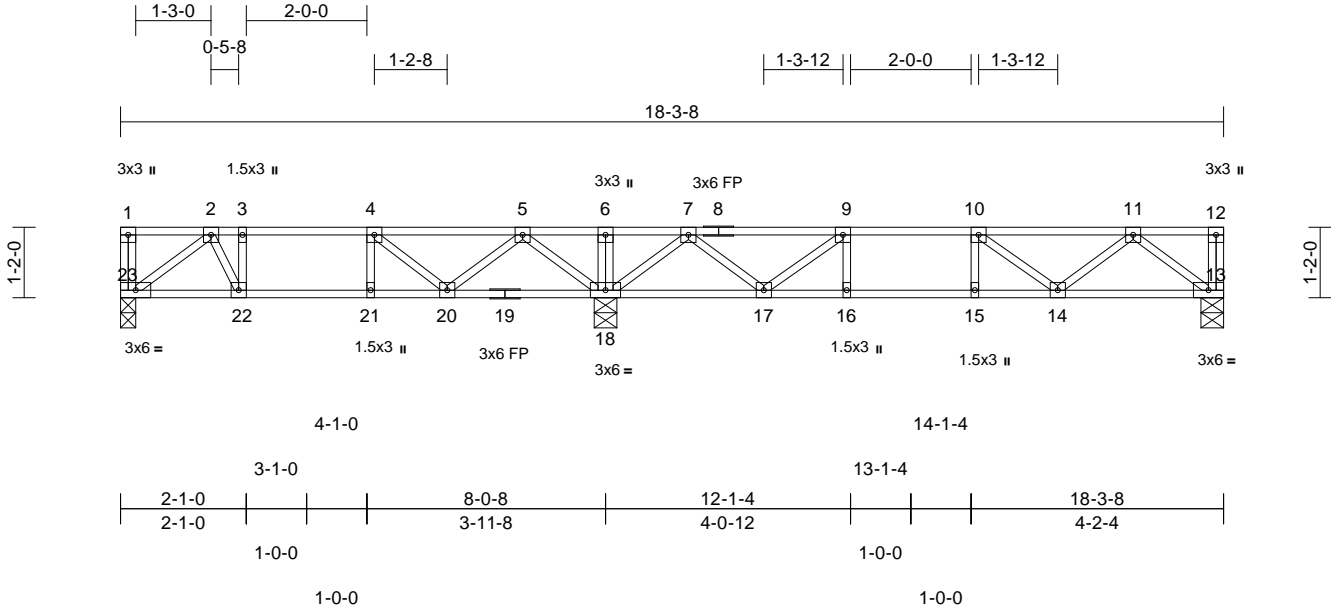
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF	I72869774
2503-4262-A	1F3	Floor	12	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:17
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Page: 1



Scale = 1:38.2												
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	0.39	Vert(LL)	-0.06	14-15	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.64	Vert(CT)	-0.08	14-15	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.22	Horz(CT)	0.01	13	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 93 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" oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10'-0" oc bracing, Except:
6'-0" oc bracing: 18-20,17-18.

REACTIONS (size) 13=0-4-8, 18=0-4-8, 23=0-3-0
Max Grav 13=413 (LC 4), 18=933 (LC 1),
23=299 (LC 10)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-23=-50/0, 12-13=-25/0, 1-2=0/0,
2-3=-463/0, 3-4=-463/0, 4-5=-307/54,
5-6=0/684, 6-7=0/684, 7-9=-567/97,
9-10=-910/0, 10-11=-720/0, 11-12=0/0
BOT CHORD 22-23=0/336, 21-22=0/463, 20-21=0/463,
18-20=-169/108, 17-18=-239/261,
16-17=0/910, 15-16=0/910, 14-15=0/910,
13-14=0/501

WEBS 3-22=-202/11, 4-21=-34/33, 6-18=-78/0,
9-16=0/126, 10-15=-101/2, 2-23=-421/0,
2-22=-4/285, 5-18=-646/0, 5-20=0/341,
4-20=-318/0, 7-18=-747/0, 7-17=0/456,
9-17=-522/0, 11-13=-629/0, 11-14=0/284,
10-14=-239/46

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'-0" oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 4) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



April 21,2025

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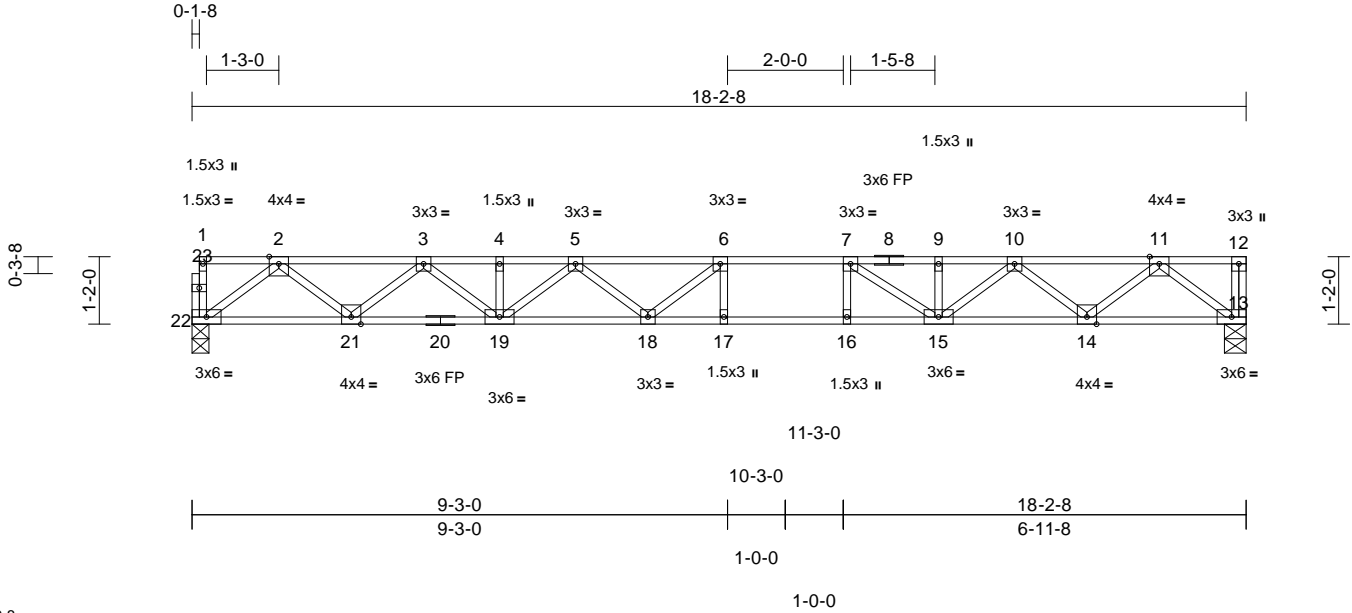
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF	172869775
2503-4262-A	2F6	Floor	5	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:26
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Page: 1



Scale = 1:39.8

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.68	Vert(LL)	-0.29	17-18	>733	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.68	Vert(CT)	-0.40	17-18	>534	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.06	13	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 93 lb	FT = 20%F, 12%E

LUMBER

TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat) *Except* 20-13:2x4 SP SS (flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-7-1 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 13=0-4-8, 22=0-3-8
Max Grav 13=790 (LC 1), 22=785 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-22=-29/0, 12-13=-32/0, 1-2=-2/0, 2-3=-1670/0, 3-4=-2778/0, 4-5=-2778/0, 5-6=-3298/0, 6-7=-3318/0, 7-9=-2765/0, 9-10=-2765/0, 10-11=-1673/0, 11-12=0/0
BOT CHORD 21-22=0/987, 19-21=0/2324, 18-19=0/3178, 17-18=0/3318, 16-17=0/3318, 15-16=0/3318, 14-15=0/2320, 13-14=0/988
WEBS 6-17=-217/72, 7-16=-39/221, 2-22=-1236/0, 2-21=0/890, 3-21=-851/0, 3-19=0/579, 4-19=-30/0, 5-19=-511/0, 5-18=0/301, 6-18=-336/213, 11-13=-1240/0, 11-14=0/891, 10-14=-843/0, 10-15=0/567, 9-15=-100/88, 7-15=-848/0

NOTES

- Unbalanced floor live loads have been considered for this design.
- 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.
- CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



April 21, 2025

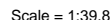
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:25 Page: 1
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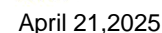


LUMBER

BRACING

NOTES

- LOAD CASE(S) Standard



 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

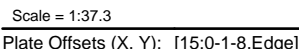
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MIT-7473 Rev. 1/2/2023 BEFORE USE.

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Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:33 Page: 1
ID:ehsevcSoehPMAXWYOkEbQdzvFV4-RfC?PsB70Hg3NSaPanL8w3uITXbGKWRCdOj7J4zJC?f



LUMBER

TOP CHORD	2x4 SP SS(flat) *Except* 10-12:2x4 SP No.2 (flat)
BOT CHORD	2x4 SP No.2(flat) *Except* 19-13:2x4 SP SS (flat)
WEBS	2x4 SP No.3(flat)
OTHERS	2x4 SP No.3(flat)

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: 13-21=-7, 1-23=-67, 23-24=-80, 12-24=-67

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=0-7-0, 21=0-5-8
Max Grav 13=671 (LC 1), 21=674 (LC 1)

FORCES

(1b) Maximum Compression/Maximum Tension

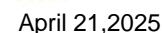
TOP CHORD 1-2=-27/0, 12-13=-23/1, 1-2=0/0,
2-3=-1432/0, 3-4=-2395/0, 4-5=-2395/0,
5-6=-2890/0, 6-7=-2641/0, 7-8=-2641/0,
8-9=-2641/0, 9-11=-1401/0, 11-12=-1/0

BOT CHORD 20-21=0/844, 18-20=0/1993, 17-18=0/2737,
16-17=0/2953, 15-16=0/2641, 14-15=0/2005,
13-14=0/838

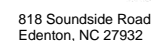
WEBS 7-16=-42/168, 8-15=-387/0, 2-21=-1059/0,
2-20=0/766, 3-20=-729/0, 3-18=0/513,
4-18=-49/0, 5-18=-437/0, 5-17=0/205,
6-17=-154/0, 6-16=-511/39, 11-13=-1050/0,
11-14=0/732, 9-14=-786/0, 9-15=0/901

NOTES

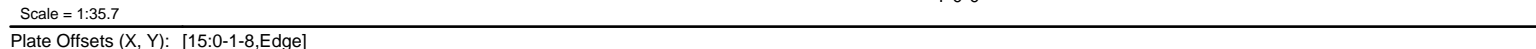
- 1) Unbalanced floor live loads have been considered for this design.
- 2) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- 3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



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Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:33 Page: 1
ID:ehsevcSoehPMAXWYOkEbQdzvFV4-RfC?PsB70Hg3NSaPanL8w3uITXbGKWRCd0i7J4zJC?f



LUMBER		5) CAUTION, Do not erect truss backwards.
TOP CHORD	2x4 SP SS(flat)	LOAD CASE(S) Standard
BOT CHORD	2x4 SP No.2(flat) *Except* 19-13:2x4 SP SS (flat)	
WEBS	2x4 SP No.3(flat)	1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
OTHERS	2x4 SP No.3(flat)	Uniform Loads (lb/ft) Vert: 13-21=8, 1-23=-83, 23-24=-98, 12-24=-83
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=0-7-0, 21=0-5-8 Max Grav 13=834 (LC 1), 21=838 (LC 1)	
FORCES	(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-21=-33/0, 12-13=-26/3, 1-2=0/0, 2-3=-1780/0, 3-4=-2973/0, 4-5=-2973/0, 5-6=-3583/0, 6-7=-3276/0, 7-8=-3276/0, 8-9=-3276/0, 9-11=-1742/0, 11-12=-2/0	
BOT CHORD	20-21=0/1050, 18-20=0/2476, 17-18=0/3395, 16-17=0/3660, 15-16=0/3276, 14-15=0/2489, 13-14=0/1046	
WEBS	7-16=-55/208, 8-15=-480/0, 2-21=-1317/0, 2-20=0/951, 3-20=-906/0, 3-18=0/635, 4-18=-62/0, 5-18=-539/0, 5-17=0/251, 6-17=-190/0, 6-16=-630/58, 11-13=-1311/0, 11-14=0/906, 9-14=-972/0, 9-15=0/1114	

-

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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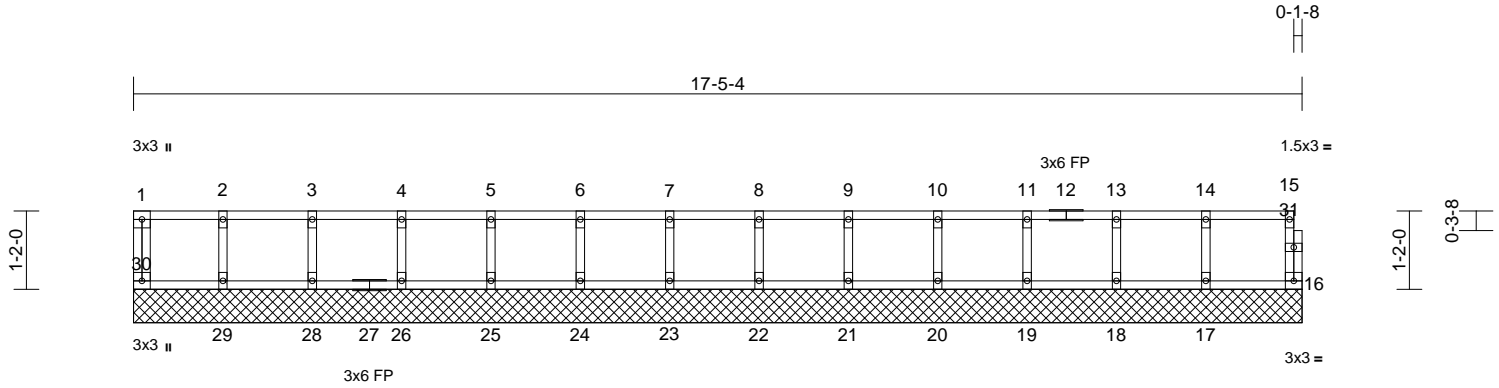


Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF
2503-4262-A	2FGE4	Floor Supported Gable	1	1	Job Reference (optional)
					I72869779

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:35
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Page: 1



Scale = 1:34.4

Loading	(psf)	Spacing	1-4-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.06	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	NO	WB	0.02	0.00	16	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R						Weight: 73 lb	FT = 20%F, 12%E

LUMBER

TOP CHORD	2x4 SP No.2(flat)
BOT CHORD	2x4 SP No.2(flat)
WEBS	2x4 SP No.3(flat)
OTHERS	2x4 SP No.3(flat) *Except* 16-31:2x4 SP No.2(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=17-5-4, 17=17-5-4, 18=17-5-4, 19=17-5-4, 20=17-5-4, 21=17-5-4, 22=17-5-4, 23=17-5-4, 24=17-5-4, 25=17-5-4, 26=17-5-4, 28=17-5-4, 29=17-5-4, 30=17-5-4
Max Grav		16=41 (LC 1), 17=100 (LC 1), 18=97 (LC 1), 19=98 (LC 1), 20=98 (LC 1), 21=99 (LC 1), 22=101 (LC 1), 23=101 (LC 1), 24=99 (LC 1), 25=98 (LC 1), 26=98 (LC 1), 28=99 (LC 1), 29=94 (LC 1), 30=42 (LC 1)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-30=-38/0, 15-16=-38/0, 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, 11-13=-8/0, 13-14=-8/0, 14-15=-8/0
BOT CHORD	29-30=0/8, 28-29=0/8, 26-28=0/8, 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
WEBS	2-29=-86/0, 3-28=-90/0, 4-26=-89/0, 5-25=-89/0, 6-24=-90/0, 7-23=-92/0, 8-22=-92/0, 9-21=-90/0, 10-20=-89/0, 11-19=-89/0, 13-18=-89/0, 14-17=-91/0

NOTES

- All plates are 1.5x3 (||) MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.

- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - Gable studs spaced at 1-4-0 oc.
 - 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.
 - 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.
 - CAUTION, Do not erect truss backwards.
- LOAD CASE(S)** Standard
- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 16-30=-7, 1-6=-67, 6-9=-69, 9-15=-67



April 21, 2025

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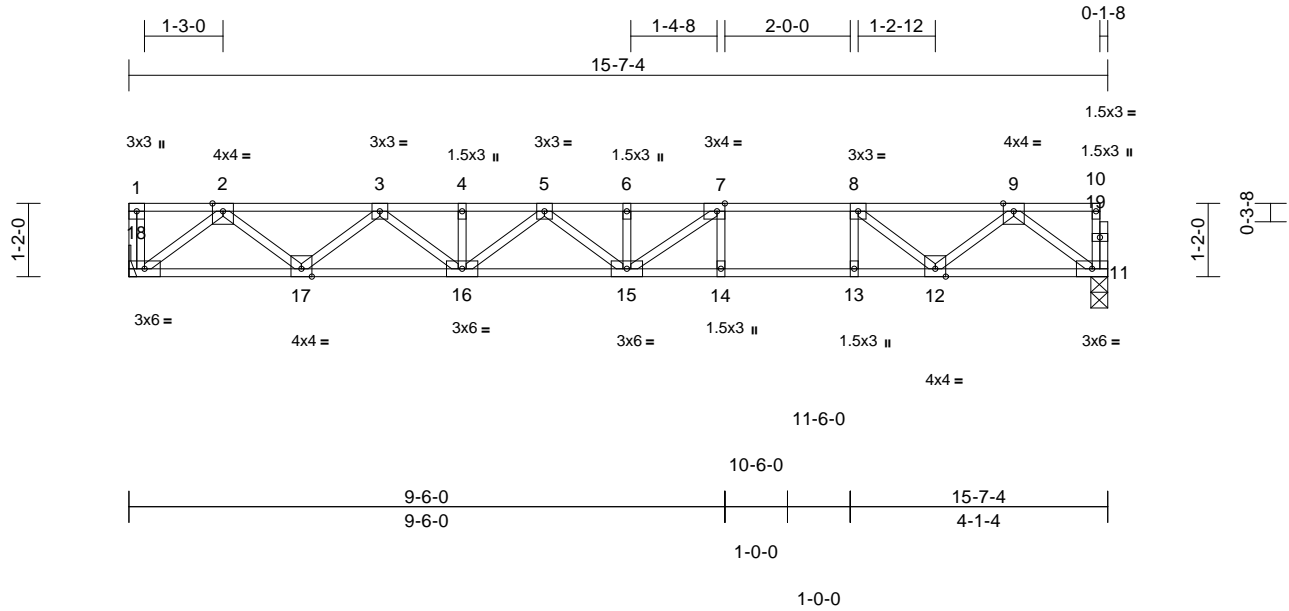
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF	I72869780
2503-4262-A	2F16	Floor	2	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:29
ID:Vg1su3wf9kK2JRaELxjd8ny8MUL-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWRCDoi7J4zJC?f

Page: 1



Scale = 1:36.7

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	0.60	Vert(LL)	-0.28	14-15	>654	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.84	Vert(CT)	-0.38	14-15	>480	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.04	11	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 80 lb	FT = 20%F, 12%E

LUMBER

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

BRACING

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

REACTIONS (size) 11=0-3-4, 18= Mechanical
Max Grav 11=838 (LC 1), 18=844 (LC 1)

FORCES (lb) - Maximum Compression/Maximum
Tension

TOP CHORD 1-18=-39/0, 10-11=-67/0, 1-2=0/0,
2-3=-1730/0, 3-4=-2776/0, 4-5=-2776/0,
5-6=-3178/0, 6-7=-3178/0, 7-8=-2686/0,
8-9=-1743/0, 9-10=-4/0
BOT CHORD 17-18=0/1048, 16-17=0/2372, 15-16=0/3036,
14-15=0/2686, 13-14=0/2686, 12-13=0/2686,
11-12=0/992
WEBS 7-14=-316/0, 8-13=0/373, 2-18=-1315/0,
2-17=0/887, 3-17=-837/0, 3-16=0/516,
4-16=-109/0, 5-16=-332/0, 5-15=0/197,
9-11=-1240/0, 9-12=0/978, 8-12=-1211/0,
6-15=-317/0, 7-15=-55/744

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



April 21,2025

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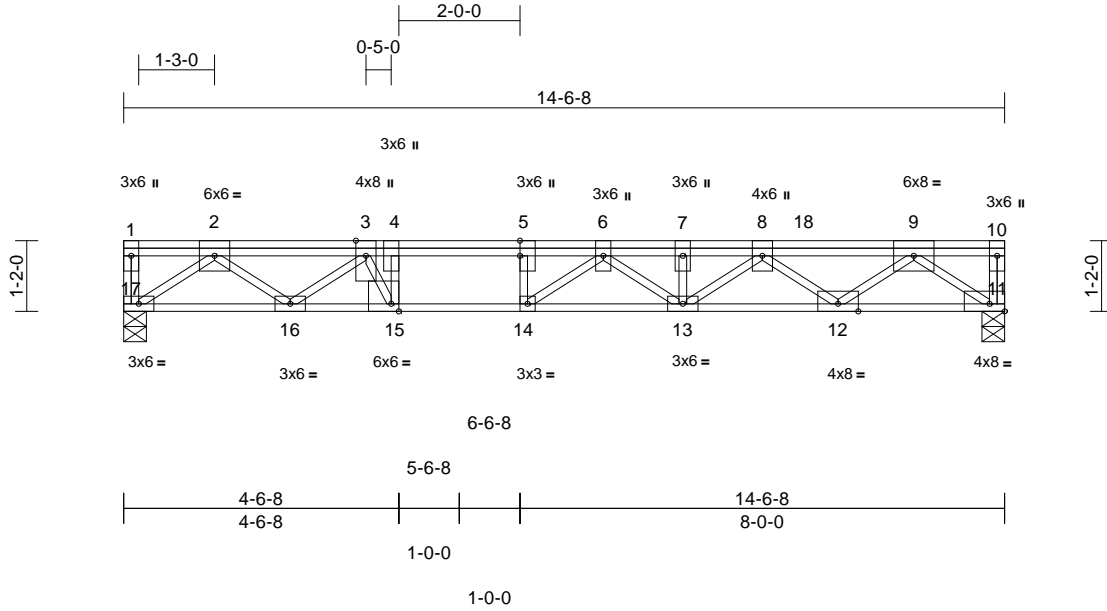
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF	I72869781
2503-4262-A	1F14L	Floor Girder	2	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:20
ID:pRaQhm99XH?vKKF9i7iIXbzQSC4-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:38

Plate Offsets (X, Y): [5:0-3-0,Edge], [11:Edge,0-1-8], [15:0-1-8,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	0.52	Vert(LL)	-0.10	13-14	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.71	Vert(CT)	-0.29	13-14	>590	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.83	Horz(CT)	0.06	11	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 94 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)

Vert: 11-17=-8, 1-10=-80
Concentrated Loads (lb)
Vert: 18=-1201

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=0-4-8, 17=0-4-8
Max Grav 11=1562 (LC 1), 17=897 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-17=-43/0, 10-11=0/89, 1-2=0/0, 2-3=-2033/0, 3-4=-3606/0, 4-5=-3606/0, 5-6=-3606/0, 6-7=-4535/0, 7-8=-4535/0, 8-9=-3587/0, 9-10=0/0
BOT CHORD 16-17=0/1179, 15-16=0/2920, 14-15=0/3606, 13-14=0/4399, 12-13=0/4902, 11-12=0/2258
WEBS 4-15=-1455/0, 5-14=0/604, 2-17=-1447/0, 2-16=0/1085, 3-16=-1126/0, 3-15=0/1750, 9-11=-2772/0, 9-12=0/1688, 8-12=-1671/0, 8-13=-557/0, 7-13=0/274, 6-13=0/228, 6-14=-1122/0

NOTES

- Unbalanced floor live loads have been considered for this design.
- 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.
- 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

- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)



April 21, 2025

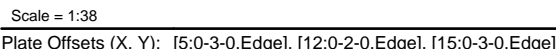
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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Edenton, NC 27932

Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:23 Page: 1
ID:zlpz242xdQ8wBhV8VqWQZzewHO-Rfc?PsB70Ha3NSaPanL8w3uITxbGKWRcdi7J4zJC?f



LUMBER		1)	Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
TOP CHORD	2x4 SP SS(flat)		Uniform Loads (lb/ft)
BOT CHORD	2x4 SP SS(flat)		Vert: 11-17=-7, 1-10=-67
WEBS	2x4 SP No.3(flat) *Except* 12-9:2x4 SP No.2 (flat)		Concentrated Loads (lb)
BRACING			Vert: 3=-696, 18=-1700

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.

Max Gray 11=2034 (LC 1), 17=1410 (LC 1)

Tension

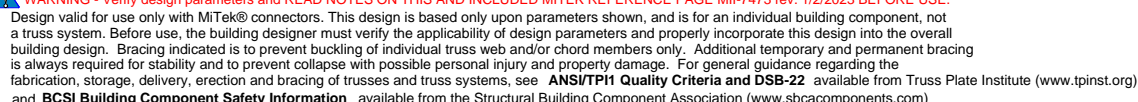
TOP CHORD 1-17=34/0, 10-11=70/0, 1-2=0/0,
2-3=-3641/0, 3-4=-5903/0, 4-5=-5903/0,
5-6=-5903/0, 6-7=-6680/0, 7-8=-5674/0,
8-9=-5674/0, 9-10=0/0

BOT CHORD 16-17=0/2021, 15-16=0/5392, 14-15=0/5903,
13-14=0/6486, 12-13=0/6735, 11-12=0/2891

WEBS 4-15=-848/0, 5-14=0/237, 2-17=-2429/0,
2-16=0/2009, 3-16=-2171/0, 3-15=0/1246,
9-11=-3475/0, 7-13=-137/0, 6-13=0/308,
6-14=-798/0, 8-12=-1162/0, 7-12=-1340/0,
9-12=0/3394

- 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.

April 21, 2025



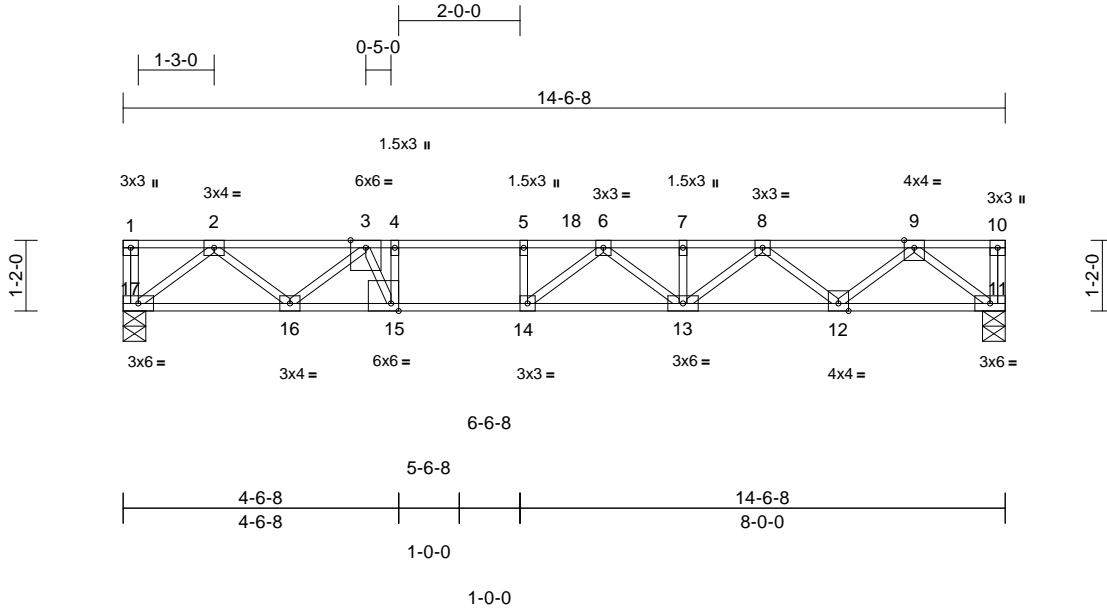
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF	I72869783
2503-4262-A	1F9	Floor	2	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:18
ID:5NHl6gshRC7llyEgOUSRSGzewO7-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:38

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

Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.89	Vert(LL)	-0.15	13-14	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.82	Vert(CT)	-0.34	13-14	>500	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.60	Horz(CT)	0.04	11	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 DSS(flat)
BOT CHORD 2x4 SP SS(flat)
WEBS 2x4 SP No.3(flat)

Vert: 11-17=-8, 1-10=-80
Concentrated Loads (lb)
Vert: 11=-58, 8=-47, 18=-280

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=0-4-8, 17=0-4-8
Max Grav 11=864 (LC 1), 17=779 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-17=-30/0, 10-11=-32/0, 1-2=0/0,
2-3=-1613/0, 3-4=-2807/0, 4-5=-2807/0,
5-6=-2807/0, 6-7=-2823/0, 7-8=-2823/0,
8-9=-1703/0, 9-10=0/0
BOT CHORD 16-17=0/964, 15-16=0/2362, 14-15=0/2807,
13-14=0/3151, 12-13=0/2397, 11-12=0/1004
WEBS 4-15=-886/0, 5-14=-13/166, 2-17=-1210/0,
2-16=0/845, 3-16=-974/0, 3-15=0/1253,
9-11=-1259/0, 9-12=0/910, 8-12=-903/0,
8-13=0/544, 7-13=0/48, 6-13=-432/0,
6-14=-558/0

NOTES

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

- Dead + Floor Live (balanced): Lumber Increase=1.00,
Plate Increase=1.00
Uniform Loads (lb/ft)



April 21, 2025

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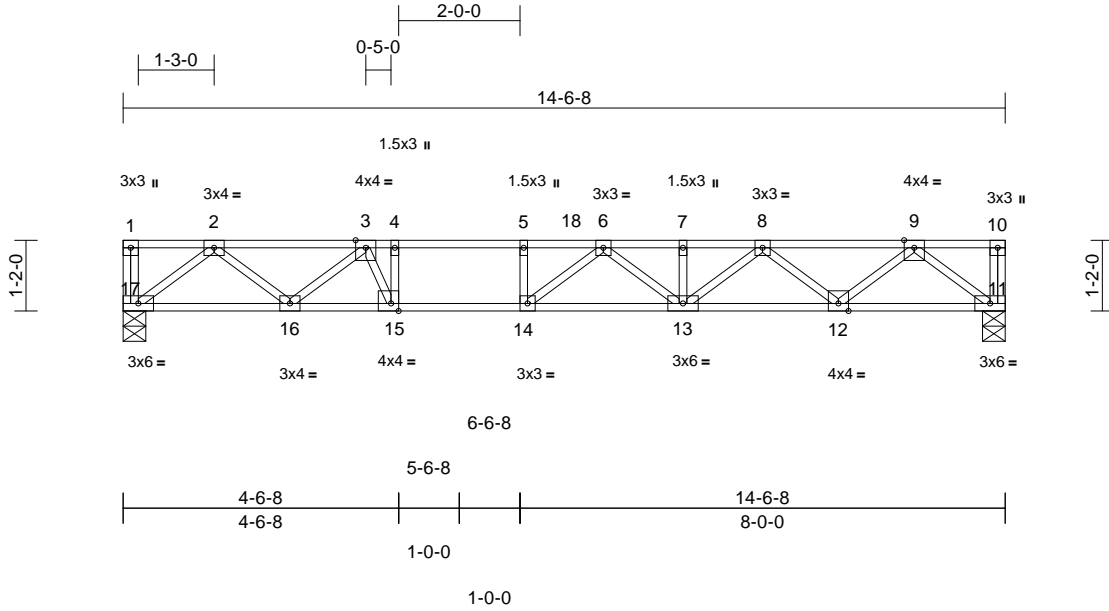
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF	I72869784
2503-4262-A	1F10	Floor	3	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:19
ID:wLDF39ZR0jJD2i5dEyzpGhzewNE-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWRcDoi7J4zJC?i

Page: 1



Scale = 1:38

Plate Offsets (X, Y): [15:0-1-8,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	0.75	Vert(LL)	-0.16	13-14	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.65	Vert(CT)	-0.29	13-14	>602	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.48	Horz(CT)	0.03	11	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 SS(flat)

BOT CHORD 2x4 SP SS(flat)

WEBS 2x4 SP No.3(flat)

Vert: 11-17=-8, 1-10=-80

Concentrated Loads (lb)

Vert: 11=-58, 8=-223, 18=-28

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=0-4-8, 17=0-4-8
Max Grav 11=864 (LC 1), 17=703 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-17=-30/0, 10-11=-32/0, 1-2=0/0,
2-3=-1429/0, 3-4=-2400/0, 4-5=-2400/0,
5-6=-2400/0, 6-7=-2603/0, 7-8=-2603/0,
8-9=-1703/0, 9-10=0/0

BOT CHORD 16-17=0/866, 15-16=0/2060, 14-15=0/2400,
13-14=0/2678, 12-13=0/2391, 11-12=0/1005

WEBS 4-15=-710/0, 5-14=-16/159, 2-17=-1087/0,
2-16=0/733, 3-16=-821/0, 3-15=0/1000,
9-11=-1261/0, 9-12=0/908, 8-12=-895/0,
8-13=0/272, 7-13=-37/0, 6-13=-111/0,
6-14=-474/0

NOTES

- Unbalanced floor live loads have been considered for this design.
- 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.
- 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

- Dead + Floor Live (balanced): Lumber Increase=1.00,
Plate Increase=1.00
Uniform Loads (lb/ft)



April 21,2025

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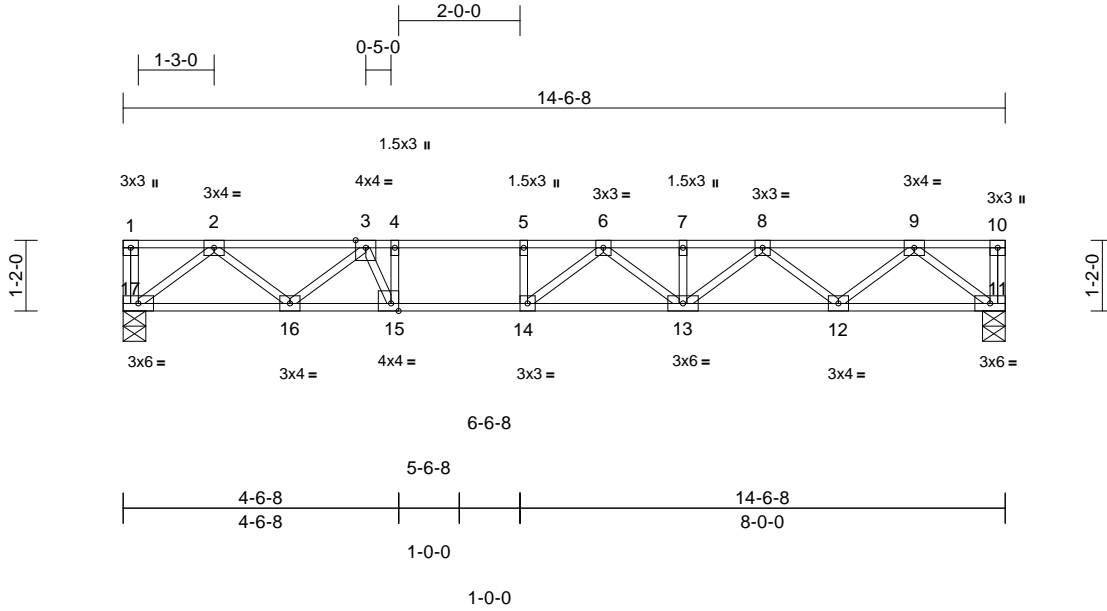
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF	I72869785
2503-4262-A	1F12	Floor	1	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:19
ID:6XV6eAW?P_G?1rdpM2uKzLzewM?-RfC?PsB70Hq3NSgPqnL8w3uITxbGKwRCDoi7J4zJC?f

Page: 1



Scale = 1:38

Plate Offsets (X, Y): [15:0-1-8,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	0.48	Vert(LL)	-0.16	13-14	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.46	Vert(CT)	-0.21	13-14	>820	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.37	Horz(CT)	0.03	11	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 SS(flat)
BOT CHORD 2x4 SP SS(flat)
WEBS 2x4 SP No.3(flat)

Vert: 11-17=-8, 1-10=-80
Concentrated Loads (lb)
Vert: 3=-141

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=0-4-8, 17=0-4-8
Max Grav 11=667 (LC 1), 17=732 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-17=-31/0, 10-11=-31/0, 1-2=0/0, 2-3=-1512/0, 3-4=-2332/0, 4-5=-2332/0, 5-6=-2332/0, 6-7=-2191/0, 7-8=-2191/0, 8-9=-1359/0, 9-10=0/0
BOT CHORD 16-17=0/907, 15-16=0/2138, 14-15=0/2332, 13-14=0/2374, 12-13=0/1874, 11-12=0/825
WEBS 4-15=-470/0, 5-14=-138/37, 2-17=-1138/0, 2-16=0/787, 3-16=-815/0, 3-15=0/650, 9-11=-1035/0, 9-12=0/695, 8-12=-671/0, 8-13=0/405, 7-13=-59/0, 6-13=-250/0, 6-14=-173/275

NOTES

- Unbalanced floor live loads have been considered for this design.
- 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.
- 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

- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)



April 21, 2025

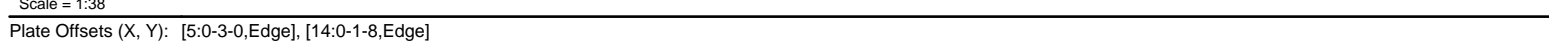
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacompoments.com)

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Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:20 Page: 1
ID:LY3x63qJHzXJ8rdptVMQ0qzewLb-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWCrD0j7J4zJC?f



LUMBER	Vert: 11-17=-8, 1-10=-80
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=0-4-8, 17=0-4-8
	Max Grav 11=926 (LC 1), 17=1429 (LC 1)
FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-17=-39/0, 10-11=-39/0, 1-2=0/0, 2-3=-3450/0, 3-4=-4772/0, 4-5=-4772/0, 5-6=-4772/0, 6-7=-3680/0, 7-8=-3680/0, 8-9=-2124/0, 9-10=0/0
BOT CHORD	16-17=0/1938, 15-16=0/4910, 14-15=0/4772, 13-14=0/4181, 12-13=0/2983, 11-12=0/1233
WEBS	2-17=-2379/0, 2-16=0/1921, 3-16=-1855/0, 3-15=-791/0, 9-11=-1513/0, 9-12=0/1132, 8-12=-1090/0, 8-13=0/870, 7-13=-140/0, 6-13=-625/0, 6-14=0/1092, 4-15=0/638, 5-14=-566/0

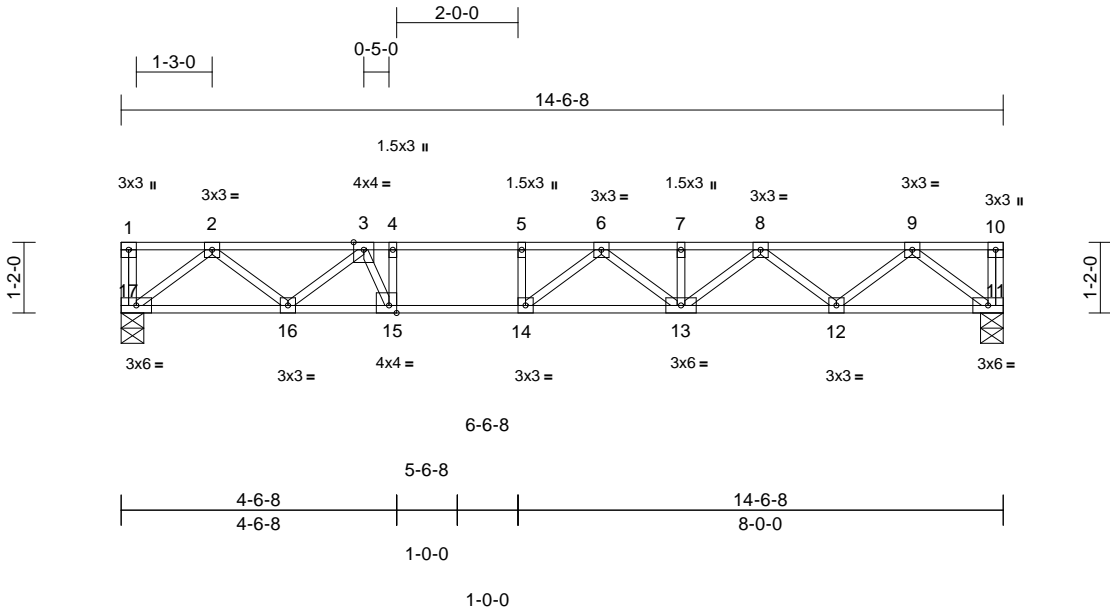
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Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF	I72869787
2503-4262-A	1F11	Floor	4	1	Job Reference (optional)	



Scale = 1:38

Plate Offsets (X, Y): [15:0-1-8,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	0.56	Vert(LL)	-0.16	13-14	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.48	Vert(CT)	-0.21	13-14	>803	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.37	Horz(CT)	0.03	11	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 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.
- REACTIONS** (size) 11=0-4-8, 17=0-4-8
- Max Grav 11=629 (LC 1), 17=629 (LC 1)
- FORCES** (lb) - Maximum Compression/Maximum Tension
- TOP CHORD 1-17=-31/0, 10-11=-31/0, 1-2=0/0, 2-3=-1250/0, 3-4=-2010/0, 4-5=-2010/0, 5-6=-2010/0, 6-7=-2003/0, 7-8=-2003/0, 8-9=-1262/0, 9-10=0/0
- BOT CHORD 16-17=0/771, 15-16=0/1767, 14-15=0/2010, 13-14=0/2137, 12-13=0/1734, 11-12=0/774
- WEBS 4-15=-550/0, 5-14=-93/82, 2-17=-967/0, 2-16=0/624, 3-16=-673/0, 3-15=0/767, 9-11=-971/0, 9-12=0/635, 8-12=-614/0, 8-13=0/344, 7-13=-52/0, 6-13=-186/0, 6-14=-280/168

- NOTES**
- Unbalanced floor live loads have been considered for this design.
 - Recommend 2x6 strongbacks, on edge, spaced at 10'-0"-0" oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard



April 21,2025

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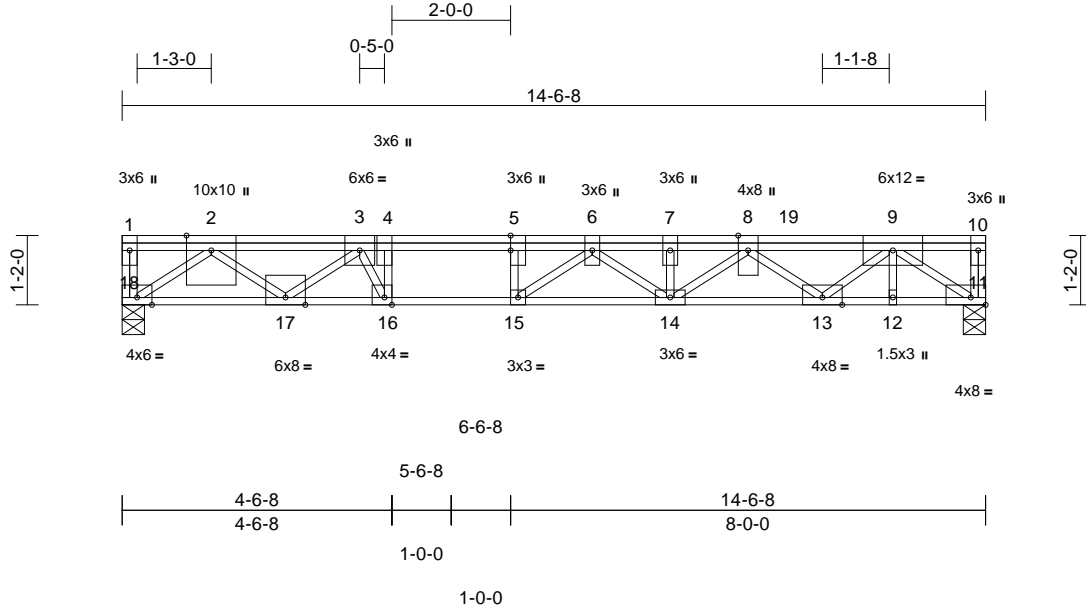
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF	I72869788
2503-4262-A	1F14	Floor	6	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:20
ID:1XsRYElmOL1ywYKj?VTyTezewFq-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWwCDoi7J4zJC?f

Page: 1



Scale = 1:38.8

Plate Offsets (X, Y): [5:0-3-0,Edge], [11:Edge,0-1-8], [16:0-1-8,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	0.42	Vert(LL)	-0.10	14-15	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.72	Vert(CT)	-0.30	14-15	>565	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.86	Horz(CT)	0.08	11	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 95 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) *Except* 17-2:2x4 SP No.2 (flat)

- Dead + Floor Live (balanced): Lumber Increase=1.00,
Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 11-18=-8, 1-10=-80
Concentrated Loads (lb)
Vert: 3=-1062, 19=-875

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=0-4-8, 18=0-4-8
Max Grav 11=1597 (LC 1), 18=1598 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-18=-43/0, 10-11=0/52, 1-2=0/0,
2-3=-3886/0, 3-4=-5766/0, 4-5=-5766/0,
5-6=-5766/0, 6-7=-5399/0, 7-8=-5399/0,
8-9=-3742/0, 9-10=0/0
BOT CHORD 17-18=0/2167, 16-17=0/5585, 15-16=0/5766,
14-15=0/5661, 13-14=0/5179, 12-13=0/2353,
11-12=0/2353
WEBS 2-18=-2660/0, 2-17=0/2184, 3-17=-2158/0,
3-16=-62/600, 9-11=-2847/0, 8-14=0/274,
7-14=0/106, 6-14=-328/0, 6-15=-2/482,
8-13=-1825/0, 9-12=-2/0, 9-13=0/1801,
4-16=-510/43, 5-15=-251/4

NOTES

- Unbalanced floor live loads have been considered for this design.
- 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.
- 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



April 21,2025

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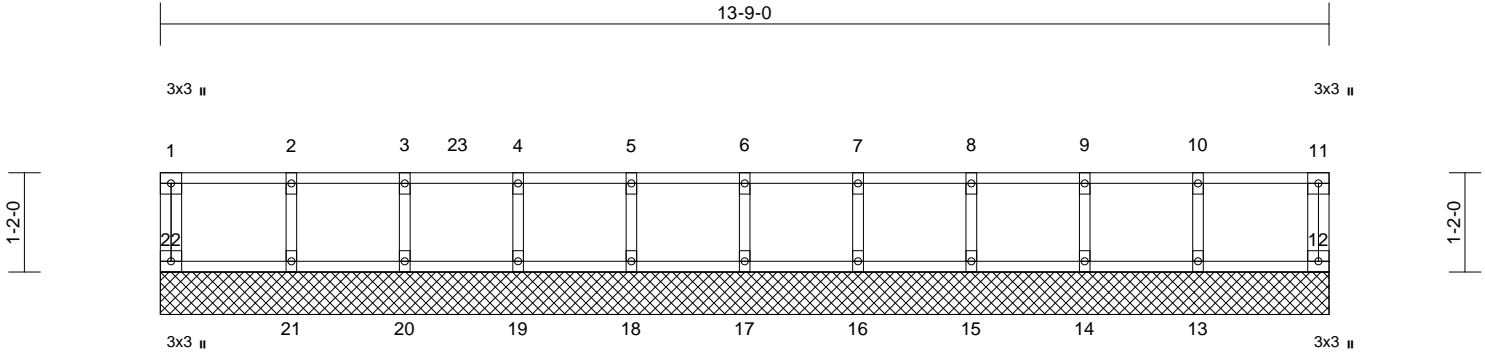
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF
2503-4262-A	1FGE7	Floor Supported Gable	1	1	Job Reference (optional)
					172869789

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:22
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Page: 1



Scale = 1:27.1

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.56	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.03	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	NO	WB	0.16	Horiz(TL)	0.00	12	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R						Weight: 59 lb	FT = 20%F, 12%E

LUMBER

TOP CHORD	2x4 SP SS(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)	12=13-9-0, 13=13-9-0, 14=13-9-0, 15=13-9-0, 16=13-9-0, 17=13-9-0, 18=13-9-0, 19=13-9-0, 20=13-9-0, 21=13-9-0, 22=13-9-0
Max Grav	12=63 (LC 1), 13=123 (LC 1), 14=730 (LC 1), 15=124 (LC 1), 16=109 (LC 1), 17=141 (LC 1), 18=28 (LC 1), 19=538 (LC 1), 20=594 (LC 1), 21=32 (LC 1), 22=78 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-22=-73/0, 11-12=-56/0, 1-2=-16/0, 2-3=-16/0, 3-4=-16/0, 4-5=-16/0, 5-6=-16/0, 6-7=-16/0, 7-8=-16/0, 8-9=-16/0, 9-10=-16/0, 10-11=-16/0
BOT CHORD	21-22=0/16, 20-21=0/16, 19-20=0/16, 18-19=0/16, 17-18=0/16, 16-17=0/16, 15-16=0/16, 14-15=0/16, 13-14=0/16, 12-13=0/16
WEBS	6-17=-130/0, 5-18=-17/0, 4-19=-527/0, 3-20=-584/0, 2-21=-19/0, 7-16=-99/0, 8-15=-113/0, 9-14=-718/0, 10-13=-115/0

NOTES

- All plates are 1.5x3 (||) MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.

- 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.
- 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

- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 12-22=-8, 1-11=-80
Concentrated Loads (lb)
Vert: 9=-620, 23=-753



April 21, 2025

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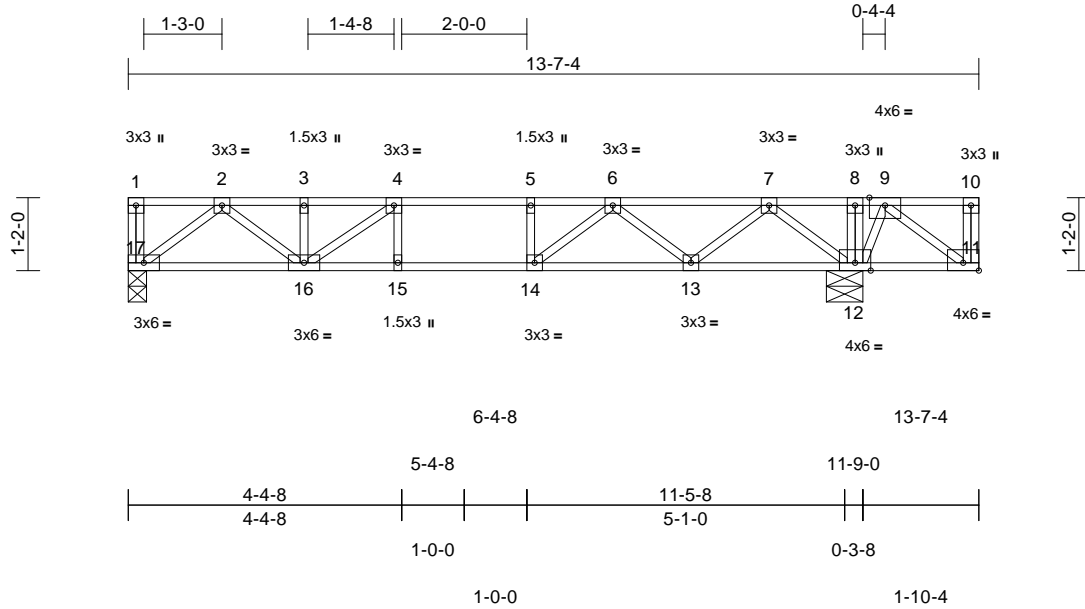
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF	I72869790
2503-4262-A	2F22	Floor	2	1	Job Reference (optional)	

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Page: 1



Scale = 1:36.8

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

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	0.84	Vert(LL)	0.09	13-14	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.66	Vert(CT)	0.11	13-14	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.65	Horz(CT)	0.01	12	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 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 6-0-0 oc bracing.

REACTIONS (size) 12=0-7-0, 17=0-3-8
Max Uplift 17=26 (LC 4)
Max Grav 12=1495 (LC 1), 17=371 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-17=-41/0, 10-11=-830/0, 1-2=0/0, 2-3=-714/101, 3-4=-714/101, 4-5=-876/404, 5-6=-876/404, 6-7=-364/997, 7-8=0/1531, 8-9=0/1531, 9-10=0/0
BOT CHORD 16-17=-53/430, 15-16=-404/876, 14-15=-404/876, 13-14=-738/690, 12-13=-1231/25, 11-12=-1093/0
WEBS 4-15=-136/31, 5-14=-268/0, 8-12=-43/0, 2-17=-539/66, 2-16=-62/362, 7-12=-845/0, 7-13=0/566, 6-13=-590/0, 6-14=0/639, 9-11=0/1371, 9-12=-1014/0, 3-16=-184/17, 4-16=-272/369

NOTES

- Unbalanced floor live loads have been considered for this design.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 17. This connection is for uplift only and does not consider lateral forces.
- 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.

- 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.
- CAUTION, Do not erect truss backwards.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 700 lb down at 13-5-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 11-17=-7, 1-10=-67
Concentrated Loads (lb)
Vert: 10=-796 (F=700)



April 21, 2025

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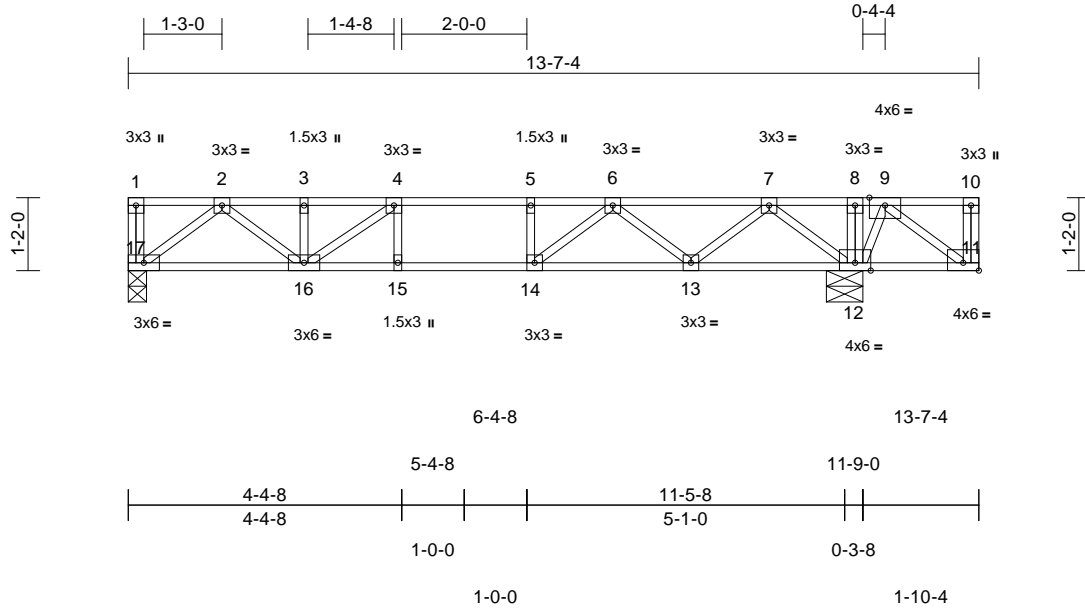
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF	I72869791
2503-4262-A	2F22A	Floor	1	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:31
ID:KgP897?Qla4B1M1OicP1O2y8MUF-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:36.8

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

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	0.87	Vert(LL)	0.09	13-14	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.68	Vert(CT)	0.12	13-14	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.66	Horz(CT)	-0.01	12	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 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 6-0-0 oc bracing.

REACTIONS (size) 12=0-7-0, 17=0-3-8
Max Uplift 17=33 (LC 4)
Max Grav 12=3816 (LC 1), 17=365 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-17=-41/0, 10-11=-840/0, 1-2=0/0, 2-3=-699/116, 3-4=-699/116, 4-5=-845/436, 5-6=-845/436, 6-7=-311/1050, 7-8=0/1608, 8-9=0/1565, 9-10=0/0
BOT CHORD 16-17=-61/422, 15-16=-436/845, 14-15=-436/845, 13-14=-784/644, 12-13=-1289/0, 11-12=-1106/0
WEBS 4-15=-141/26, 5-14=-276/0, 8-12=-2303/0, 2-17=-529/76, 2-16=-70/354, 7-12=-868/0, 7-13=0/572, 6-13=-599/0, 6-14=0/658, 9-11=0/1387, 9-12=-1065/0, 3-16=-188/13, 4-16=-251/389

NOTES

- Unbalanced floor live loads have been considered for this design.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 17. This connection is for uplift only and does not consider lateral forces.
- 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.

- 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.
- CAUTION, Do not erect truss backwards.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 700 lb down at 13-5-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 11-17=-7, 1-10=-67
Concentrated Loads (lb)
Vert: 10=-810 (F=-700), 8=-2300



April 21, 2025

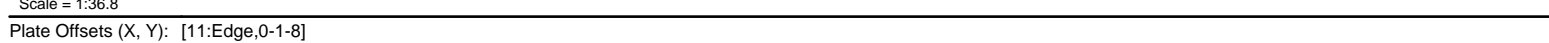
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

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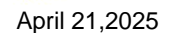
818 Soundside Road
Edenton, NC 27932

Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:30 Page: 1
ID:serlxn_o_GyKPCSC8Vlorqy8MUG-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrcD0J74jzJC?f



LUMBER		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.
TOP CHORD	2x4 SP No.2(flat)	
BOT CHORD	2x4 SP No.2(flat)	
WEBS	2x4 SP No.3(flat)	
BRACING		5) CAUTION, Do not erect truss backwards.
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.	6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 700 lb down at 13-5-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.	7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
REACTIONS		LOAD CASE(S) Standard
	(size) 12=0-7-0, 17=0-3-8	1) Dead + Floor Live (balanced): Lumber Increase=1.00,
	Max Uplift 17=-24 (LC 4)	Plate Increase=1.00
	Max Grav 12=1476 (LC 1), 17=374 (LC 3)	Uniform Loads (lb/ft)
FORCES		Vert: 11-17=-7, 1-10=-67
	(lb) - Maximum Compression/Maximum Tension	Concentrated Loads (lb)
TOP CHORD	1-17=-41/0, 10-11=-814/0, 1-2=0/0, 2-3=-720/95, 3-4=-720/95, 4-5=-890/390, 5-6=-890/390, 6-7=-388/973, 7-8=0/1501, 8-9=0/1501, 9-10=0/0	Vert: 10=-779 (F=-700)
BOT CHORD	16-17=-49/433, 15-16=-390/890, 14-15=-390/890, 13-14=-718/710, 12-13=-1204/51, 11-12=-1071/0	
WEBS	4-15=-133/34, 5-14=-265/0, 8-12=-43/0, 2-17=-544/62, 2-16=-58/366, 7-12=-840/0, 7-13=0/562, 6-13=-585/0, 6-14=0/632, 9-11=0/1344, 9-12=-996/0, 3-16=-183/19, 4-16=-281/360	

- 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) 17. 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.



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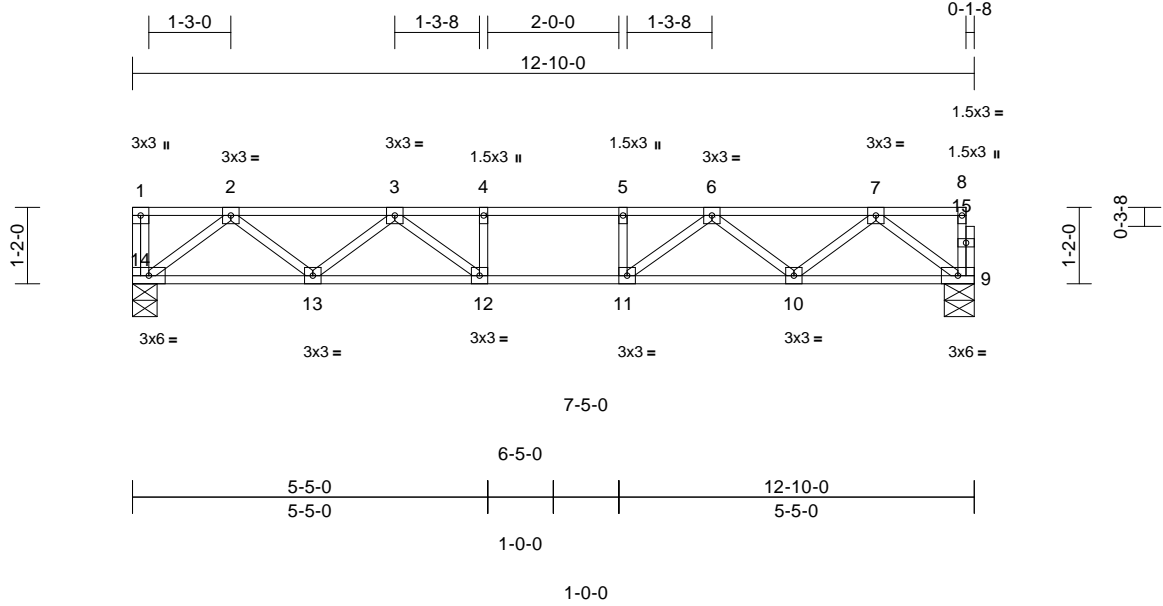
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF	I72869793
2503-4262-A	1F15	Floor	10	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

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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)	-0.11	12-13	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.71	Vert(CT)	-0.14	12-13	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.31	Horz(CT)	0.03	9	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)

Concentrated Loads (lb)
Vert: 14=-58

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=0-5-8, 14=0-4-8
Max Grav 9=686 (LC 1), 14=750 (LC 1)

FORCES

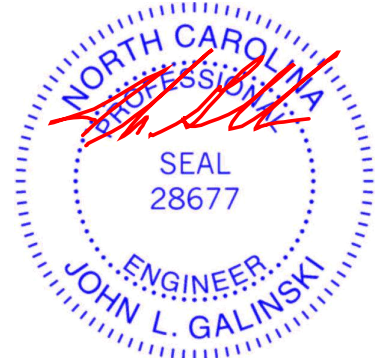
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-14=-40/0, 8-9=-36/0, 1-2=0/0, 2-3=-1345/0, 3-4=-2050/0, 4-5=-2050/0, 5-6=-2050/0, 6-7=-1345/0, 7-8=-2/0
BOT CHORD 13-14=0/848, 12-13=0/1807, 11-12=0/2050, 10-11=0/1807, 9-10=0/848
WEBS 4-12=-235/0, 5-11=-235/0, 2-14=-1064/0, 2-13=0/647, 3-13=-601/0, 3-12=0/509, 7-9=-1061/0, 7-10=0/648, 6-10=-602/0, 6-11=0/509

NOTES

- Unbalanced floor live loads have been considered for this design.
- 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.
- 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.
- CAUTION, Do not erect truss backwards.

LOAD CASE(S)

- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 9-14=-10, 1-8=-100



April 21, 2025

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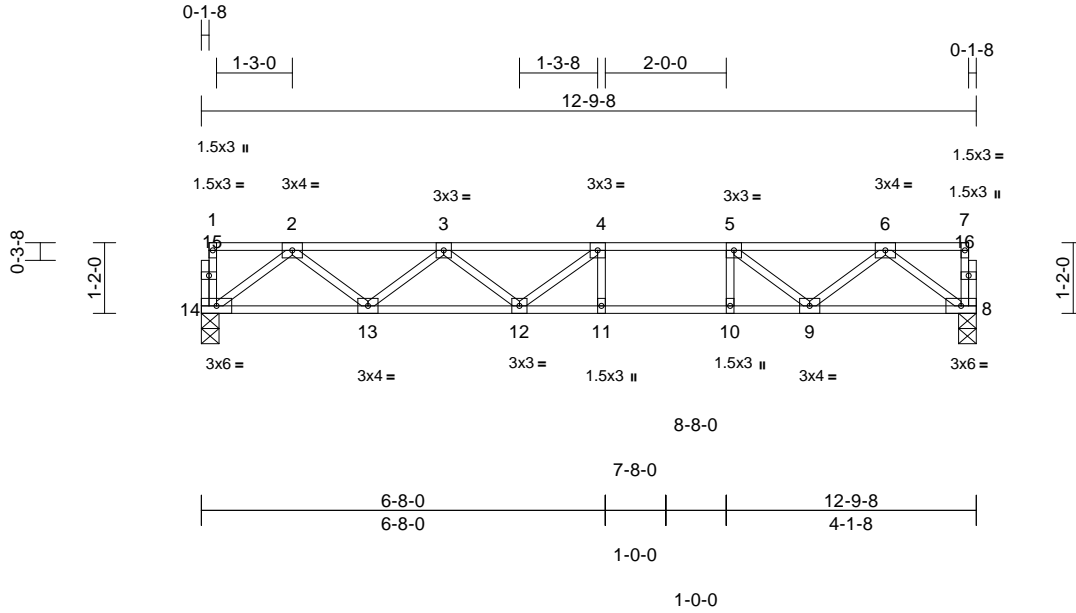
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF	I72869794
2503-4262-A	2F18	Floor	3	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

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Page: 1



Scale = 1:38

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	0.39	Vert(LL)	-0.14	11-12	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.62	Vert(CT)	-0.19	11-12	>790	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.33	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 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.

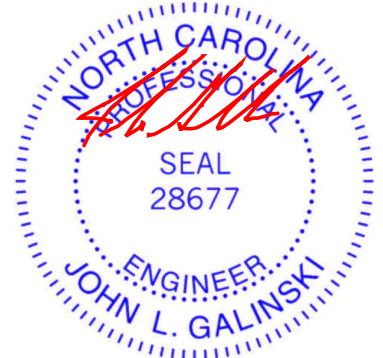
REACTIONS (size) 8=0-3-8, 14=0-3-8
Max Grav 8=684 (LC 1), 14=684 (LC 1)

FORCES (lb) - Maximum Compression/Maximum
Tension
TOP CHORD 1-14=-44/0, 7-8=-49/0, 1-2=-3/0, 2-3=-1347/0,
3-4=-1964/0, 4-5=-1968/0, 5-6=-1344/0,
6-7=-3/0
BOT CHORD 13-14=0/831, 12-13=0/1840, 11-12=0/1968,
10-11=0/1968, 9-10=0/1968, 8-9=0/818
WEBS 4-11=-211/28, 5-10=0/243, 2-14=-1039/0,
2-13=0/672, 3-13=-642/0, 3-12=0/259,
4-12=-252/151, 6-8=1022/0, 6-9=0/685,
5-9=800/0

NOTES

- Unbalanced floor live loads have been considered for this design.
- 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



April 21, 2025

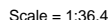
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacompnents.com)

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Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:29 Page: 1
ID: tbF6PxHw1Suwa9RvfEsh y8MUK-RfC?PsB70Hq3NSqPqnL8w3uITXhGKwRCDoi7J4zJC?F



LUMBER

BRACING

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

REACTIONS (size) 8=0-3-8, 14= Mechanical
Max Gray 8=668 (LC 1), 14=674 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-14=-44/0, 7-8=-44/0, 1-2=0/0, 2-3=-1304/0,
3-4=-1893/0, 4-5=-1885/0, 5-6=-1300/0,
6-7=-3/0

BOT CHORD 13-14=0/815, 12-13=0/1768, 11-12=0/1885,
10-11=0/1885, 9-10=0/1885, 8-9=0/803

WEBS 4-11=-243/41, 5-10=-8/241, 2-14=-1022/0,
2-13=0/637, 3-13=-604/0, 3-12=0/264,
4-12=-239/169, 6-8=-1004/0, 6-9=0/647,
5-9=-755/0

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.
- 4) CAUTION. Do not erect truss backwards.

LOAD CASE(S) Standard



Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Components Association (www.sbcacomponents.com)



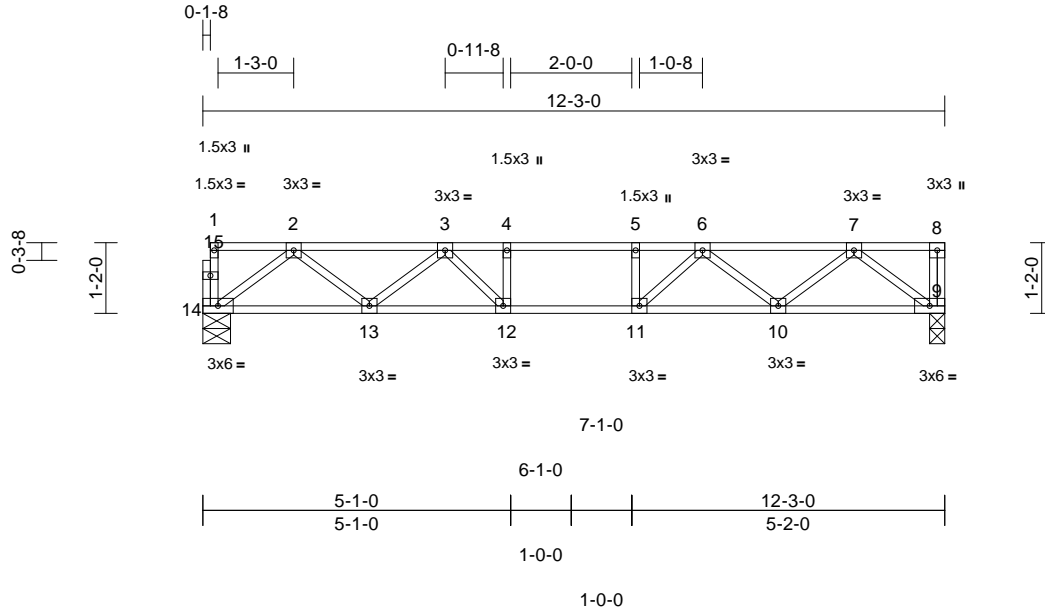
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF	I72869796
2503-4262-A	1F16	Floor	10	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:21
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Scale = 1:38

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)	-0.09	10-11	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.65	Vert(CT)	-0.12	10-11	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.28	Horz(CT)	0.03	9	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							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" oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10'-0" oc bracing.

REACTIONS (size) 9=0-3-0, 14=0-5-8
Max Grav 9=660 (LC 1), 14=654 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-14=-35/0, 8-9=-39/0, 1-2=-2/0, 2-3=-1263/0, 3-4=-1860/0, 4-5=-1860/0, 5-6=-1860/0, 6-7=-1265/0, 7-8=0/0
BOT CHORD 13-14=0/805, 12-13=0/1690, 11-12=0/1860, 10-11=0/1689, 9-10=0/806
WEBS 4-12=-252/0, 5-11=-237/0, 2-14=-1008/0, 2-13=0/596, 3-13=-555/0, 3-12=0/453, 7-9=-1011/0, 7-10=0/597, 6-10=-552/0, 6-11=0/444

NOTES

- Unbalanced floor live loads have been considered for this design.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 9.
- Recommend 2x6 strongbacks, on edge, spaced at 10'-0" oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION. Do not erect truss backwards.

LOAD CASE(S) Standard



April 21, 2025

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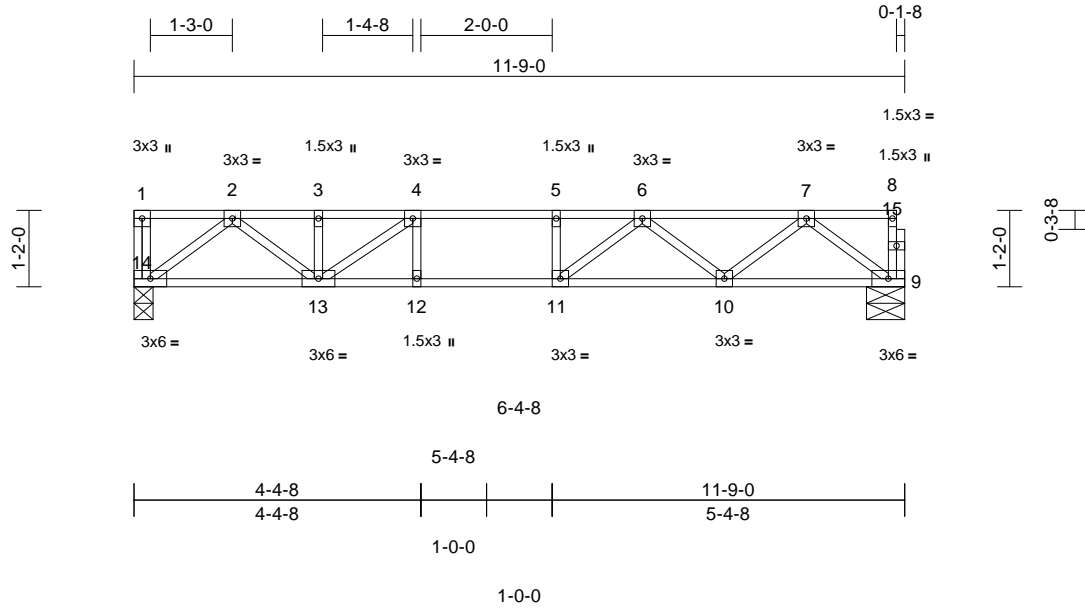
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF	I72869797
2503-4262-A	2F27	Floor	1	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:33
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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	0.37	Vert(LL)	-0.07	10-11	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.48	Vert(CT)	-0.09	10-11	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.02	9	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 60 lb	FT = 20%F, 12%E

LUMBER

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

BRACING

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

REACTIONS (size) 9=0-7-0, 14=0-3-8
Max Grav 9=418 (LC 1), 14=422 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-14=-38/0, 8-9=-24/0, 1-2=0/0, 2-3=-832/0, 3-4=-832/0, 4-5=-1131/0, 5-6=-1131/0, 6-7=-802/0, 7-8=-1/0
BOT CHORD 13-14=0/496, 12-13=0/1131, 11-12=0/1131, 10-11=0/1057, 9-10=0/513
WEBS 4-12=-15/74, 5-11=-116/0, 2-14=-622/0, 2-13=0/429, 7-9=-642/0, 7-10=0/375, 6-10=-332/0, 6-11=-20/242, 3-13=-96/48, 4-13=-438/0

NOTES

- Unbalanced floor live loads have been considered for this design.
- 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.
- CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



April 21, 2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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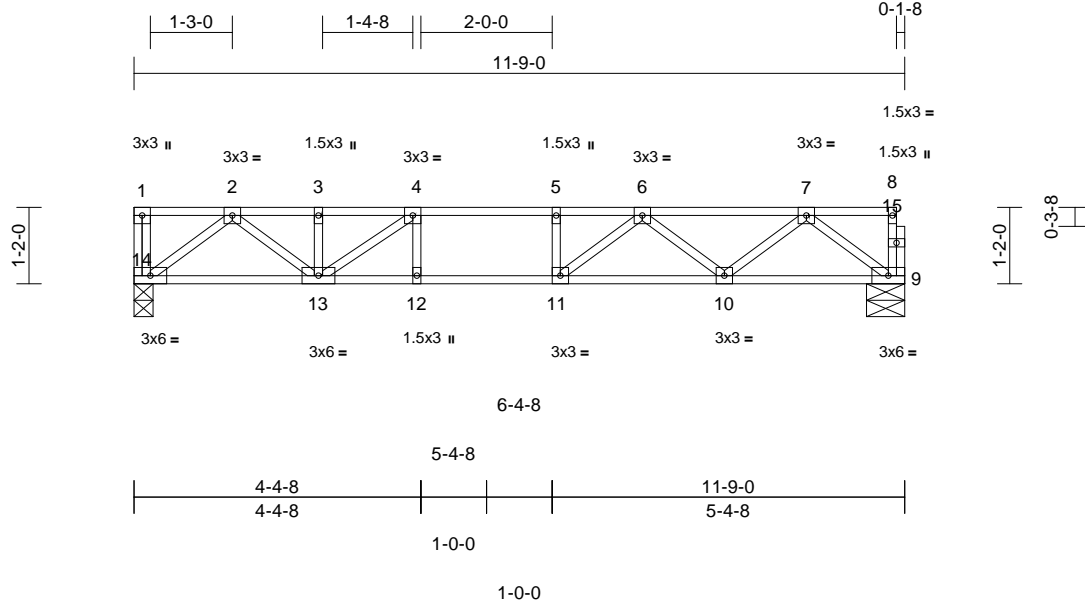
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF	I72869798
2503-4262-A	2F20	Floor	3	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:30
ID:OSHnkRz9DyqTn2t0annZldy8MUH-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:35.1

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	0.39	Vert(LL)	-0.06	10-11	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.25	Vert(CT)	-0.08	10-11	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.20	Horz(CT)	0.01	9	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 60 lb	FT = 20%F, 12%E

LUMBER

TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP 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=0-7-0, 14=0-3-8
Max Grav 9=418 (LC 1), 14=422 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-14=-38/0, 8-9=-24/0, 1-2=0/0, 2-3=-832/0, 3-4=-832/0, 4-5=-1131/0, 5-6=-1131/0, 6-7=-802/0, 7-8=-1/0
BOT CHORD 13-14=0/496, 12-13=0/1131, 11-12=0/1131, 10-11=0/1056, 9-10=0/514
WEBS 4-12=-19/83, 5-11=-113/0, 2-14=-622/0, 2-13=0/429, 7-9=-643/0, 7-10=0/375, 6-10=-330/0, 6-11=-16/240, 3-13=-93/43, 4-13=-438/0

NOTES

- Unbalanced floor live loads have been considered for this design.
- 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.
- CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



April 21, 2025

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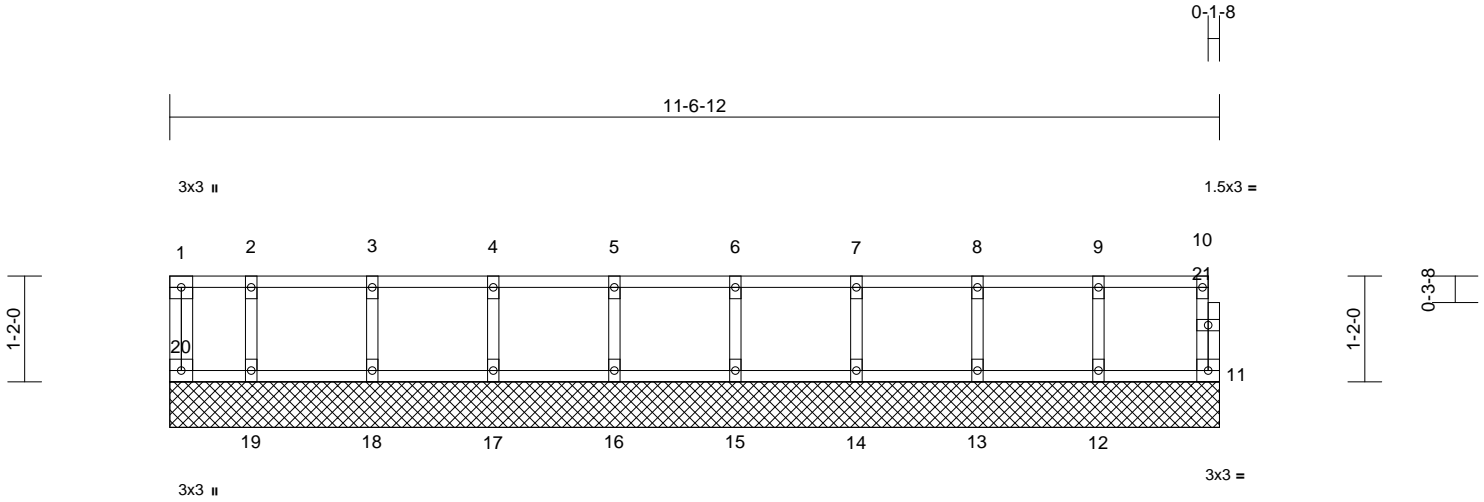
Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF	172869799
2503-4262-A	1FGE4	Floor Supported Gable	1	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:22

Page: 1

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Scale = 1:25.4

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	0.01	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	11	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 50 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)

- Recommend 2x6 strongbacks, on edge, spaced at 10'-0"-0" oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

BRACING

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

REACTIONS

(size)	11=11'-6"-12, 12=11'-6"-12, 13=11'-6"-12, 14=11'-6"-12, 15=11'-6"-12, 16=11'-6"-12, 17=11'-6"-12, 18=11'-6"-12, 19=11'-6"-12, 20=11'-6"-12
Max Grav	11=42 (LC 1), 12=118 (LC 1), 13=117 (LC 1), 14=117 (LC 1), 15=117 (LC 1), 16=118 (LC 1), 17=116 (LC 1), 18=122 (LC 1), 19=93 (LC 1), 20=30 (LC 1)

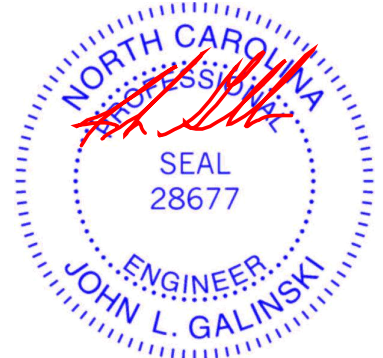
FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-20=-24/0, 10-11=-39/0, 1-2=-5/0, 2-3=-5/0, 3-4=-5/0, 4-5=-5/0, 5-6=-5/0, 6-7=-5/0, 7-8=-5/0, 8-9=-5/0, 9-10=-5/0
BOT CHORD	19-20=0/5, 18-19=0/5, 17-18=0/5, 16-17=0/5, 15-16=0/5, 14-15=0/5, 13-14=0/5, 12-13=0/5, 11-12=0/5
WEBS	9-12=-106/0, 8-13=-107/0, 7-14=-107/0, 6-15=-107/0, 5-16=-107/0, 4-17=-106/0, 3-18=-110/0, 2-19=-88/0

NOTES

- All plates are 1.5x3 (||) MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1'-4" oc.



April 21, 2025

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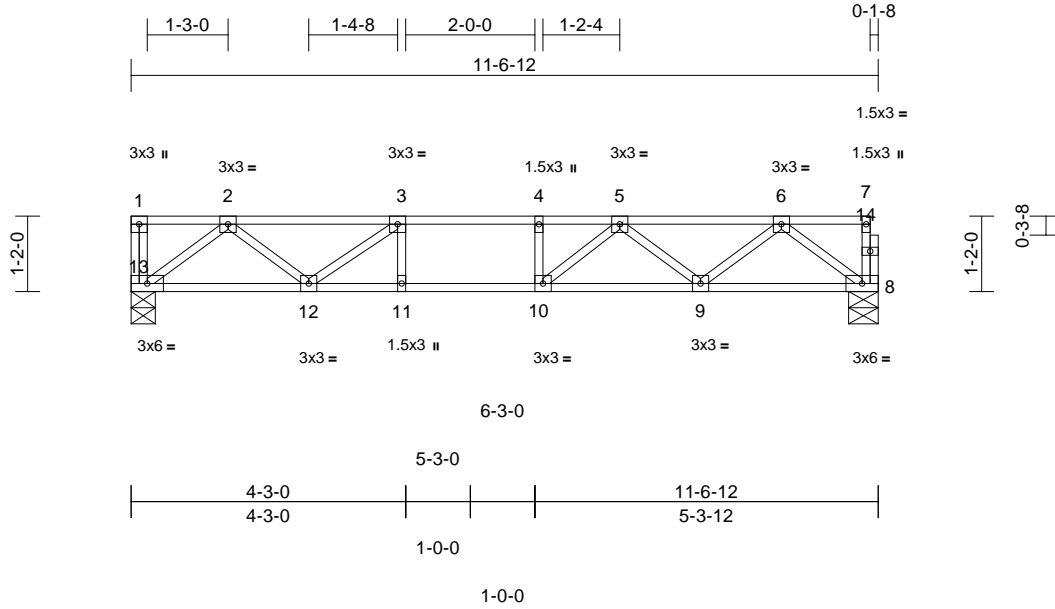
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF	I72869800
2503-4262-A	1F7	Floor	8	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

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Page: 1



Scale = 1:35.7

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	0.36	Vert(LL)	-0.08	9-10	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.50	Vert(CT)	-0.10	9-10	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.01	8	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 58 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=0-5-8, 13=0-4-8
Max Grav 8=411 (LC 1), 13=415 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-13=-27/0, 7-8=-24/0, 1-2=0/0, 2-3=-780/0, 3-4=-1096/0, 4-5=-1096/0, 5-6=-784/0, 6-7=-1/0
BOT CHORD 12-13=0/500, 11-12=0/1096, 10-11=0/1096, 9-10=0/1032, 8-9=0/504
WEBS 3-11=-25/83, 4-10=-109/0, 2-13=-628/0, 2-12=0/364, 3-12=-401/0, 6-8=-631/0, 6-9=0/364, 5-9=-323/0, 5-10=-32/234

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



April 21, 2025

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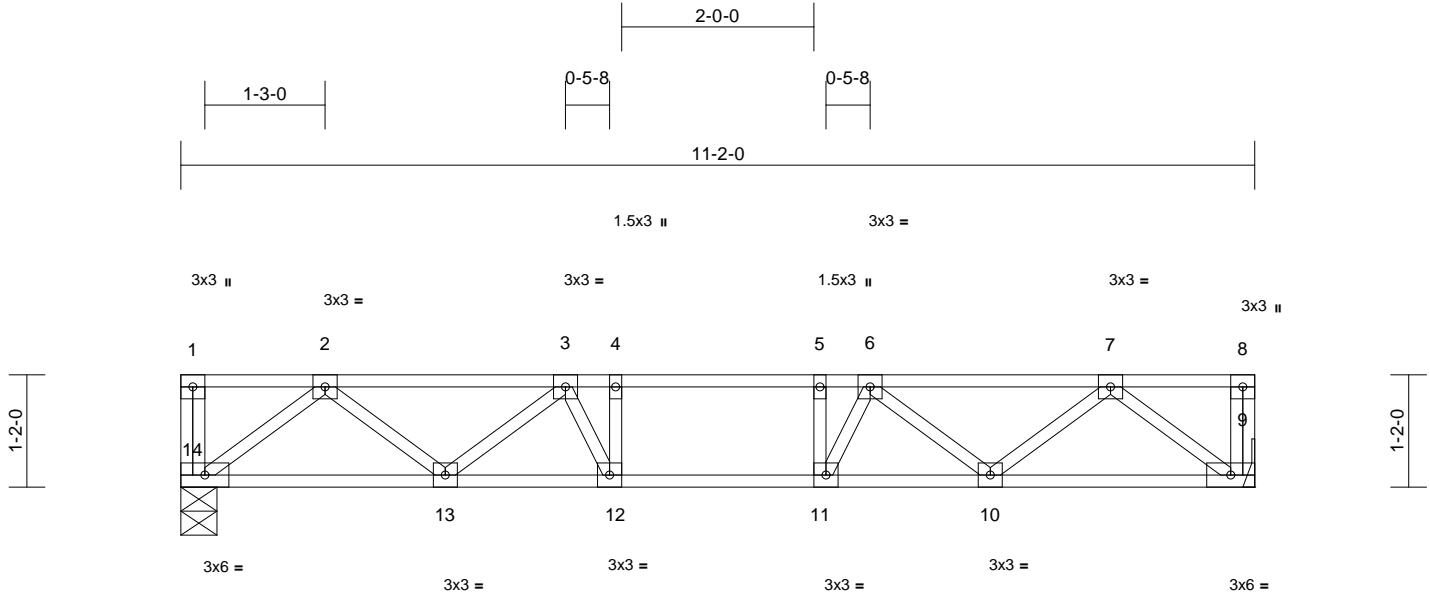
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF	I72869801
2503-4262-A	2F3	Floor	1	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

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Page: 1



Scale = 1:24

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	0.40	-0.06	12-13	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.49	Vert(CT)	-0.08	12-13	>999	360	
BCLL	0.0	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.02	9	n/a	n/a	
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							
										Weight: 58 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" oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10'-0" oc
bracing.

REACTIONS (size) 9= Mechanical, 14=0-4-8
Max Grav 9=600 (LC 1), 14=600 (LC 1)

FORCES (lb) - Maximum Compression/Maximum
Tension
TOP CHORD 1-14=-39/0, 8-9=-39/0, 1-2=0/0, 2-3=-1116/0,
3-4=-1536/0, 4-5=-1536/0, 5-6=-1536/0,
6-7=-1116/0, 7-8=0/0
BOT CHORD 13-14=0/726, 12-13=0/1476, 11-12=0/1536,
10-11=0/1476, 9-10=0/726
WEBS 2-14=-910/0, 7-9=-910/0, 2-13=0/508,
7-10=0/508, 3-13=-468/0, 6-10=-468/0,
3-12=-72/402, 6-11=-72/402, 4-12=-298/37,
5-11=-298/37

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'-0" oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard



April 21, 2025

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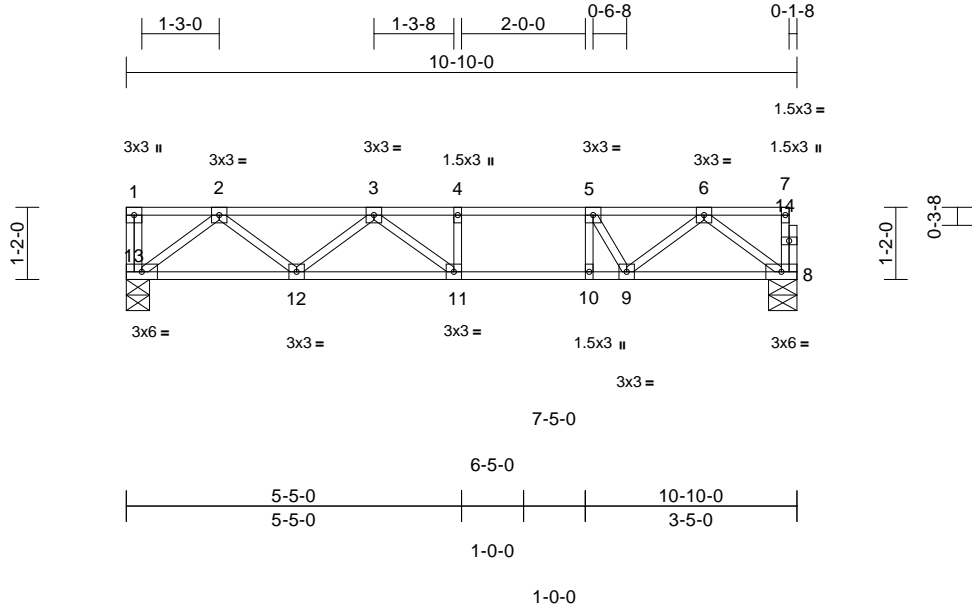
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF
2503-4262-A	1F17	Floor	5	1	Job Reference (optional)
					I72869802

Structural, LLC, Thurmont, MD - 21788,

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Page: 1



Scale = 1:37.2

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	0.65	Vert(LL)	-0.10	11-12	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.49	Vert(CT)	-0.14	11-12	>931	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.28	Horz(CT)	0.01	8	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 55 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" oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10'-0" oc bracing.

REACTIONS (size) 8=0-5-8, 13=0-4-8
Max Grav 8=576 (LC 1), 13=582 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-13=-40/0, 7-8=-60/0, 1-2=0/0, 2-3=-1085/0, 3-4=-1400/0, 4-5=-1400/0, 5-6=-1118/0, 6-7=-4/0
BOT CHORD 12-13=0/707, 11-12=0/1392, 10-11=0/1400, 9-10=0/1400, 8-9=0/665
WEBS 4-11=-125/0, 5-10=0/282, 2-13=-887/0, 2-12=0/492, 3-12=-401/0, 3-11=-99/242, 6-8=-830/0, 6-9=0/589, 5-9=-614/0

NOTES

- Unbalanced floor live loads have been considered for this design.
- Recommend 2x6 strongbacks, on edge, spaced at 10'-0" oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



April 21, 2025

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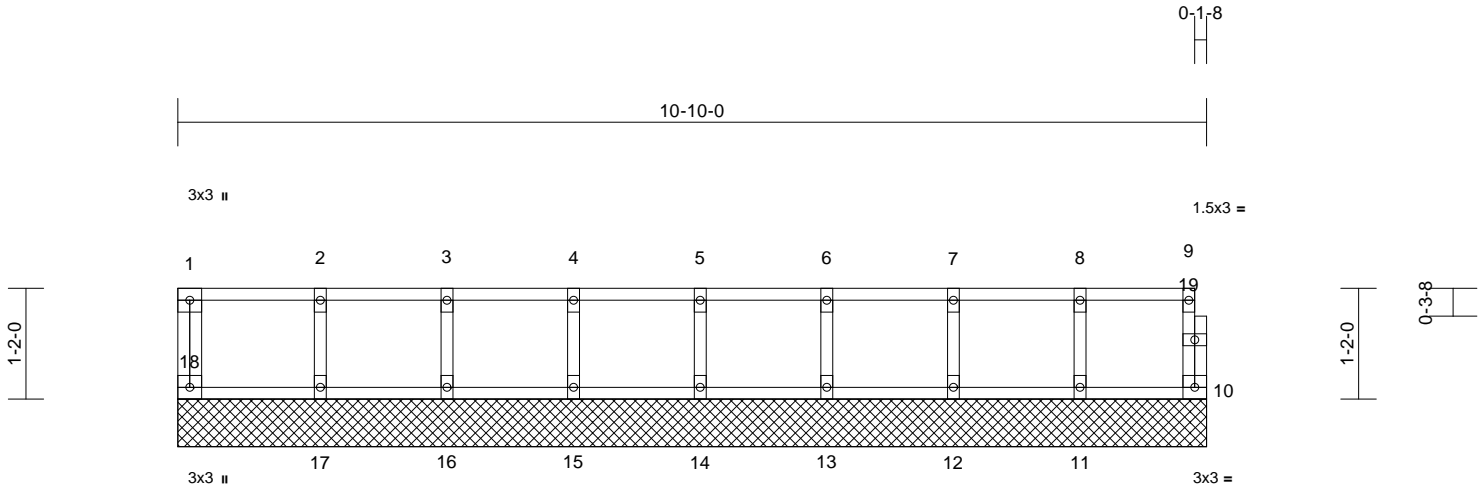
Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF
2503-4262-A	1FGE8	Floor Supported Gable	1	1	Job Reference (optional)

172869803

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:23
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Page: 1



Scale = 1:24.3

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	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.02	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	10	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R						Weight: 47 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)

- 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.

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.

LOAD CASE(S) Standard

REACTIONS

(size) 10=10-10-0, 11=10-10-0,
12=10-10-0, 13=10-10-0,
14=10-10-0, 15=10-10-0,
16=10-10-0, 17=10-10-0,
18=10-10-0
Max Grav 10=59 (LC 1), 11=139 (LC 1),
12=149 (LC 1), 13=146 (LC 1),
14=147 (LC 1), 15=147 (LC 1),
16=145 (LC 1), 17=154 (LC 1),
18=72 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-18=-66/0, 9-10=-53/0, 1-2=-13/0, 2-3=-13/0,
3-4=-13/0, 4-5=-13/0, 5-6=-13/0, 6-7=-13/0,
7-8=-13/0, 8-9=-13/0
BOT CHORD 17-18=0/13, 16-17=0/13, 15-16=0/13,
14-15=0/13, 13-14=0/13, 12-13=0/13,
11-12=0/13, 10-11=0/13
WEBS 8-11=-128/0, 7-12=-135/0, 6-13=-133/0,
5-14=-133/0, 4-15=-134/0, 3-16=-132/0,
2-17=-139/0

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.



April 21,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

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818 Soundside Road
Edenton, NC 27932

Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:18 Page: 1
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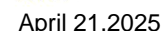


LUMBER

BRACING

NOTES

- LOAD CASE(S) Standard

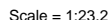


WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MIT-7473 (rev. 1/2/2023) BEFORE USE.

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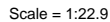
818 Soundside Road
Edenton, NC 27932

Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:21 Page: 1
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April 21, 2025

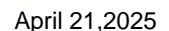
Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:23 Page: 1
ID:YRnvN8NP9taFvV6nowsGWDzUiSa-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCDOI7J4zJC?f



LUMBER	LOAD CASE(S)	Standard
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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.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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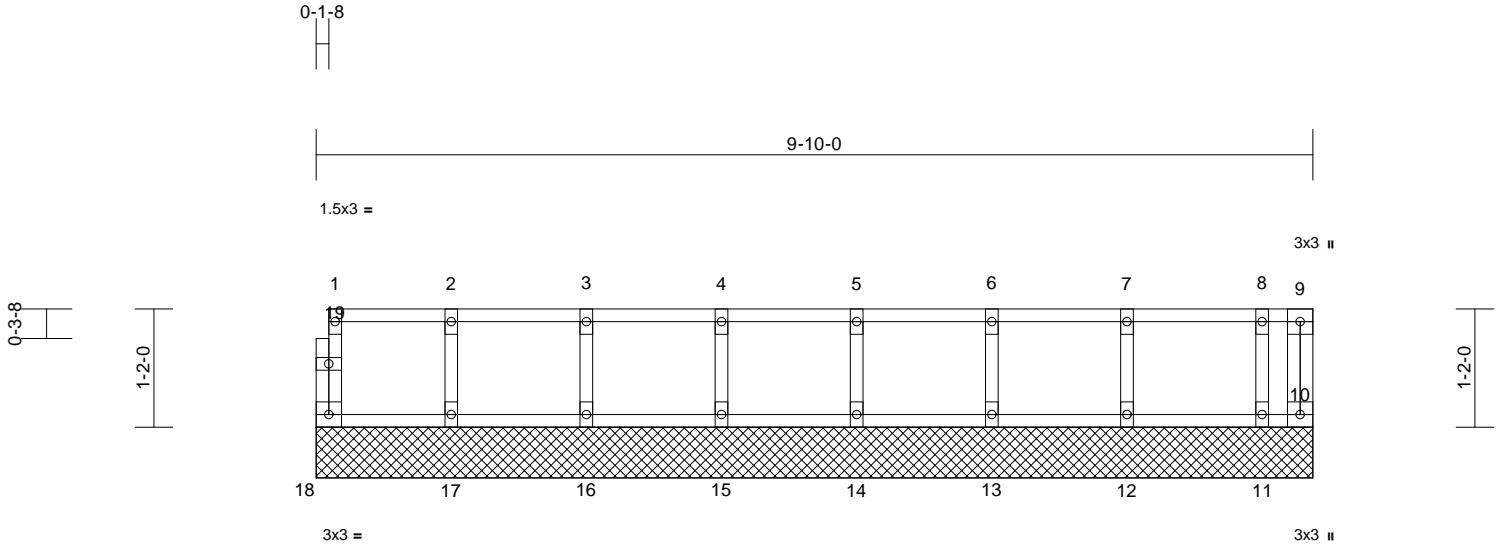
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF	I72869807
2503-4262-A	1FGE3	Floor Supported Gable	1	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:22
ID:FOIH7q5nAjdoeHPS5h0RRyzew4T-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?i

Page: 1



Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.06	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	10	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 44 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=9-10-0, 11=9-10-0, 12=9-10-0, 13=9-10-0, 14=9-10-0, 15=9-10-0, 16=9-10-0, 17=9-10-0, 18=9-10-0
Max Grav 10=8 (LC 1), 11=80 (LC 1), 12=122 (LC 1), 13=116 (LC 1), 14=118 (LC 1), 15=117 (LC 1), 16=118 (LC 1), 17=117 (LC 1), 18=43 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-18=-39/0, 9-10=0/0, 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
BOT CHORD 17-18=0/6, 16-17=0/6, 15-16=0/6, 14-15=0/6, 13-14=0/6, 12-13=0/6, 11-12=0/6, 10-11=0/6
WEBS 2-17=-105/0, 3-16=-107/0, 4-15=-106/0, 5-14=-107/0, 6-13=-106/0, 7-12=-111/0, 8-11=-80/0

NOTES

- All plates are 1.5x3 (||) MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1'-4" oc.
- Recommend 2x6 strongbacks, on edge, spaced at 10'-0"-0" oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.



April 21, 2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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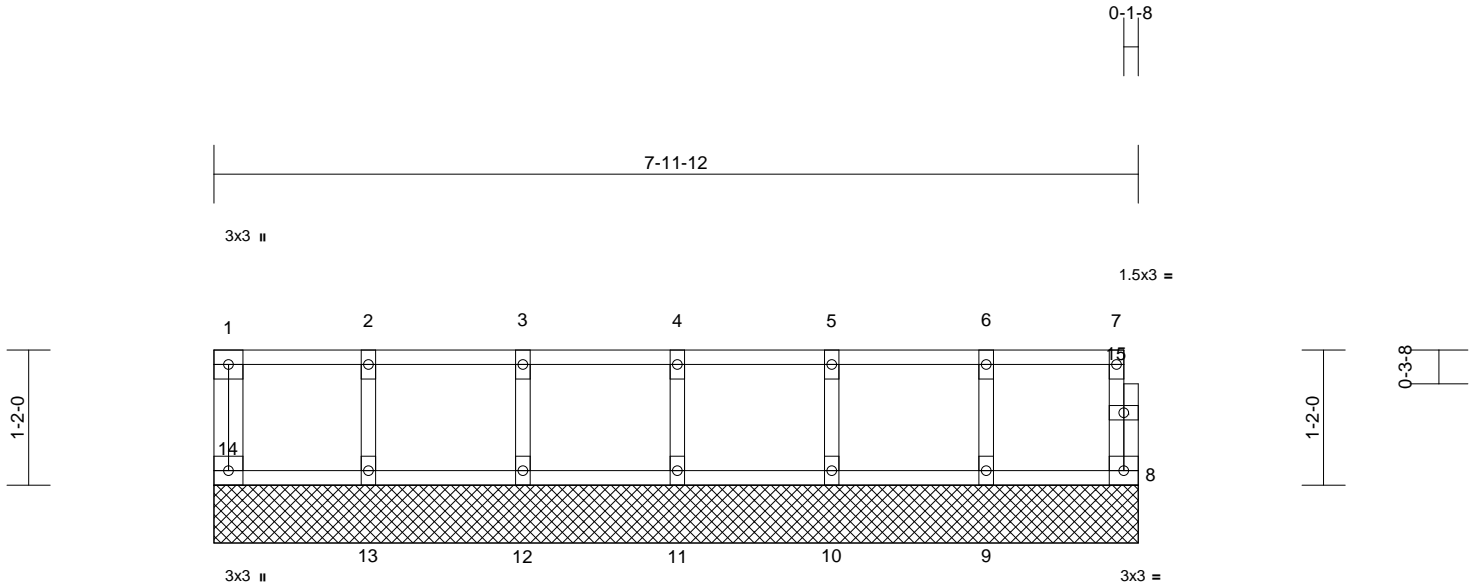
Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF
2503-4262-A	2FGE6	Floor Supported Gable	1	1	Job Reference (optional)
					I72869808

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:35

Page: 1

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.09	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	0.03	Horiz(TL)	0.00	8	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 36 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=7-11-12, 9=7-11-12, 10=7-11-12, 11=7-11-12, 12=7-11-12, 13=7-11-12, 14=7-11-12
 Max Grav 8=56 (LC 1), 9=141 (LC 1), 10=148 (LC 1), 11=146 (LC 1), 12=148 (LC 1), 13=143 (LC 1), 14=63 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-14=-57/0, 7-8=-50/0, 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 2-13=-130/0, 3-12=-134/0, 4-11=-133/0, 5-10=-135/0, 6-9=-129/0

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



April 21, 2025

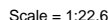
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

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Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:34 Page: 1
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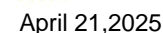
LUMBER

BRACING

NOTES

- 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: 3=-379 (F)



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MIT-7473 Rev. 1/2/2023 BEFORE USE.

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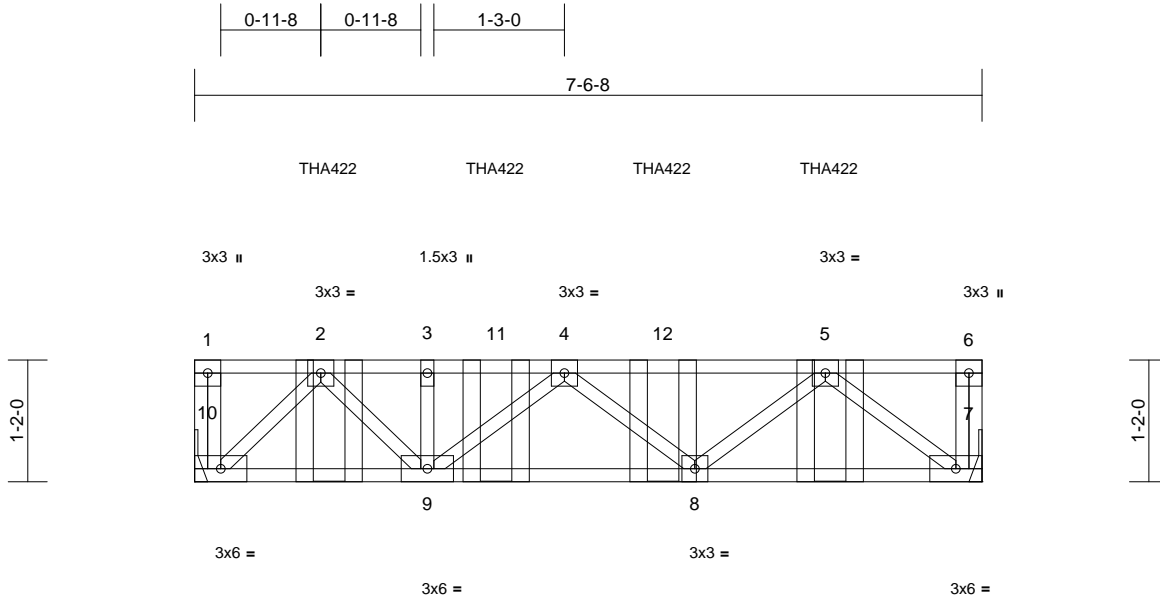
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF	I72869810
2503-4262-A	2FG2	Floor Girder	1	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:34
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Page: 1



Scale = 1:22.1

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)	-0.01	8-9	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.28	Vert(CT)	-0.02	8-9	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.17	Horz(CT)	0.01	7	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 42 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=459 (LC 1), 10=463 (LC 1)

FORCES (lb) - Maximum Compression/Maximum
Tension
TOP CHORD 1-10=-44/0, 6-7=-35/0, 1-2=0/0, 2-3=-676/0,
3-4=-676/0, 4-5=-720/0, 5-6=0/0
BOT CHORD 9-10=0/426, 8-9=0/860, 7-8=0/545
WEBS 5-7=-684/0, 5-8=0/227, 4-8=-183/0,
4-9=-235/0, 3-9=-85/0, 2-9=0/358,
2-10=-591/0

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.
- 3) Use Simpson Strong-Tie THA422 (Single Chord Girder) or equivalent spaced at 1-7-3 oc max. starting at 1-3-7 from the left end to 6-1-1 to connect truss(es) to back face of top chord.
- 4) Fill all nail holes where hanger is in contact with lumber.
- 5) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Floor Live (balanced): Lumber Increase=1.00,
Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 7-10=-10, 1-6=-100
Concentrated Loads (lb)
Vert: 5=-30 (B), 2=-30 (B), 11=-30 (B), 12=-30 (B)



April 21, 2025

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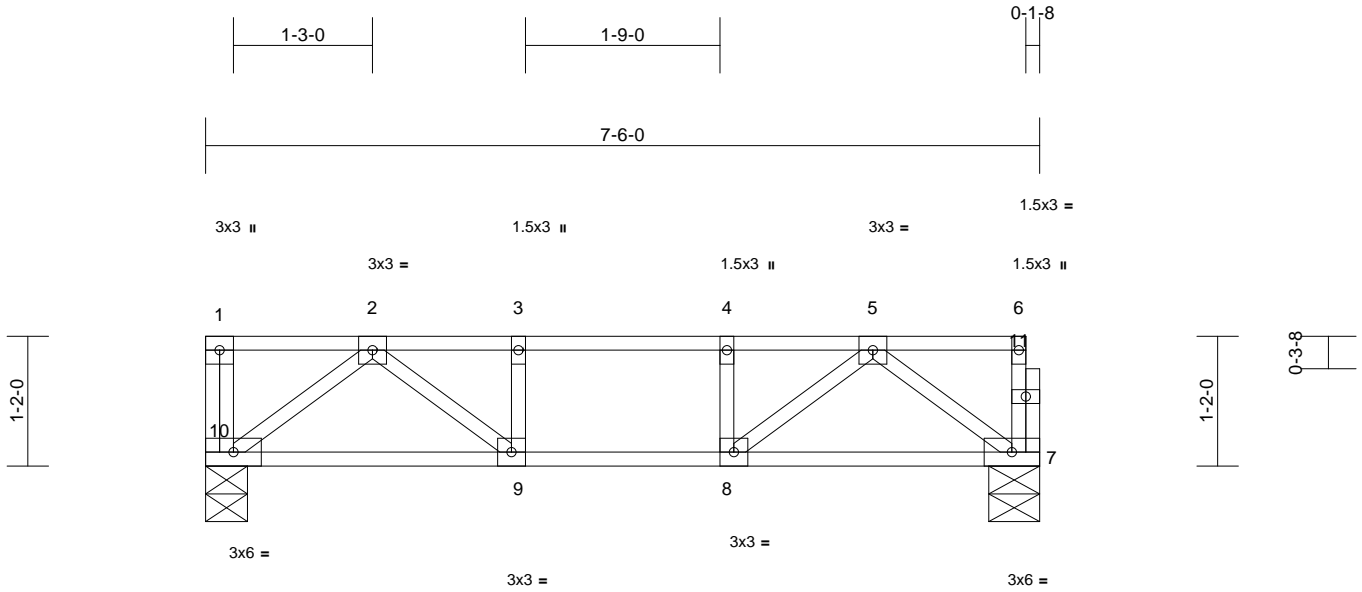
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF	I72869811
2503-4262-A	1F8	Floor	5	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:18
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Page: 1



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	0.26	-0.03	7-8	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.26	Vert(CT)	-0.03	7-8	>999	360	
BCLL	0.0	Rep Stress Incr	YES	WB	0.16	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)
OTHERS 2x4 SP No.3(flat)

BRACING

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

REACTIONS (size) 7=0-5-8, 10=0-4-8
Max Grav 7=393 (LC 1), 10=399 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-10=-58/0, 6-7=-55/0, 1-2=0/0, 2-3=-672/0, 3-4=-672/0, 4-5=-672/0, 5-6=-3/0
BOT CHORD 9-10=0/434, 8-9=0/672, 7-8=0/433
WEBS 2-10=-545/0, 5-7=-539/0, 2-9=0/345, 5-8=0/346, 3-9=-169/0, 4-8=-169/0

NOTES

- Unbalanced floor live loads have been considered for this design.
- Recommend 2x6 strongbacks, on edge, spaced at 10'-0" oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



April 21, 2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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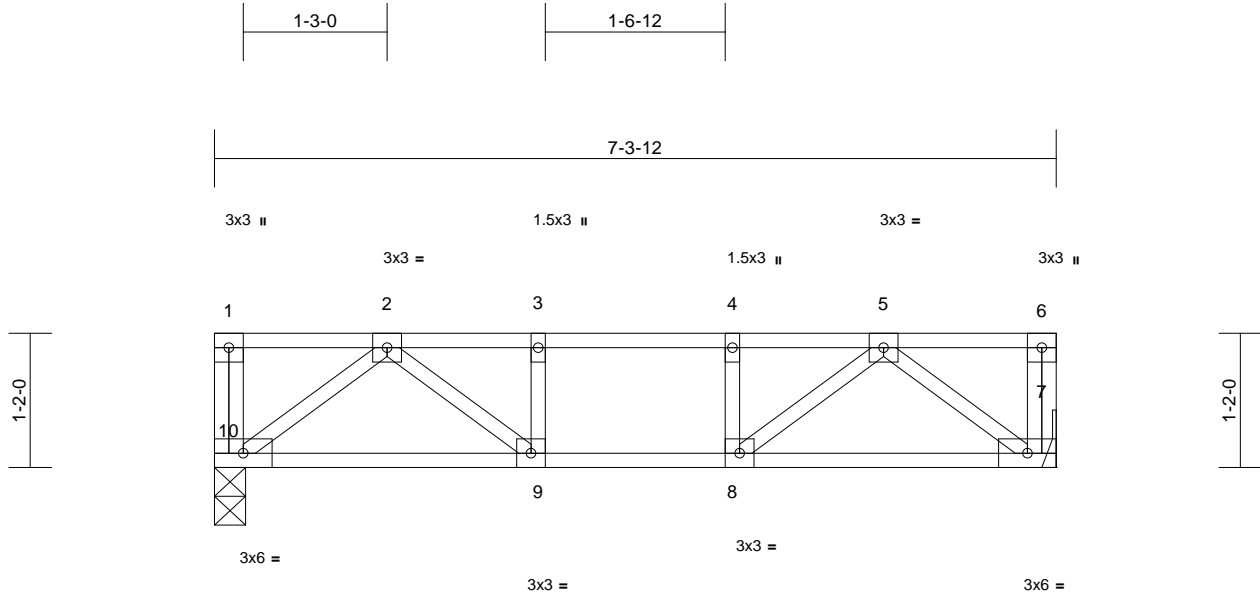
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF	
2503-4262-A	2F15	Floor	2	1	Job Reference (optional)	I72869812

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:29
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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	0.22	Vert(LL)	-0.02	9-10	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.24	Vert(CT)	-0.03	9-10	>999	360		
BCLL	0.0	Rep Stress Incr	YES	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= Mechanical, 10=0-3-4
Max Grav 7=388 (LC 1), 10=388 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-10=-57/0, 6-7=-57/0, 1-2=0/0, 2-3=-641/0, 3-4=-641/0, 4-5=-641/0, 5-6=0/0

BOT CHORD 9-10=0/421, 8-9=0/641, 7-8=0/421

WEBS 5-7=-529/0, 2-10=-529/0, 5-8=0/321, 2-9=0/321, 3-9=-155/0, 4-8=-155/0

NOTES

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



April 21, 2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacompnents.com)

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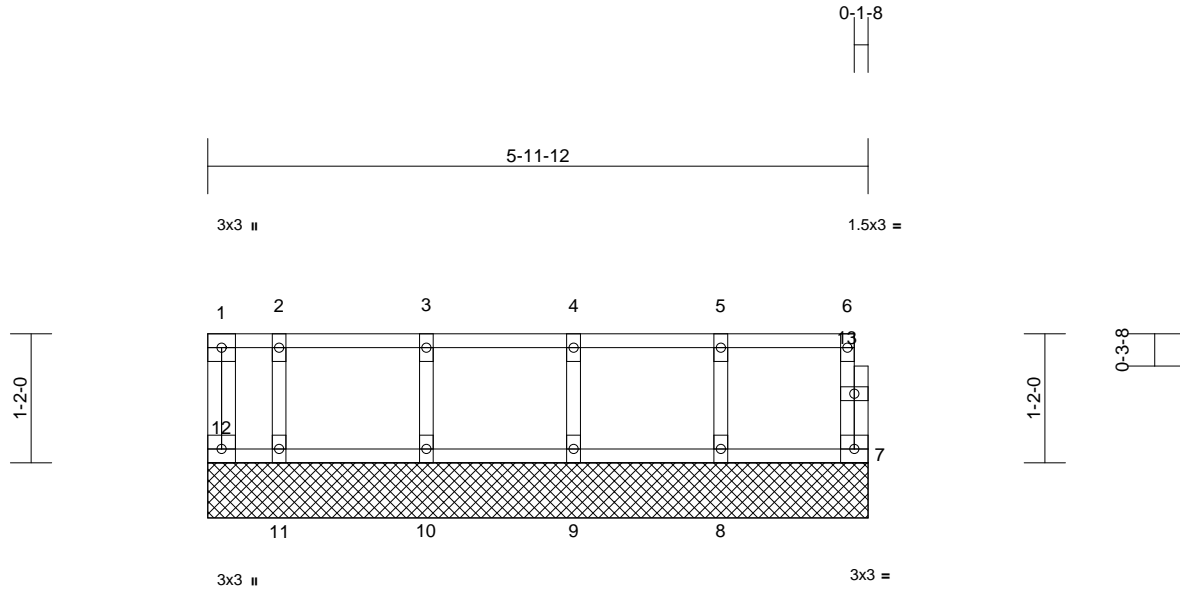
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF
2503-4262-A	1FGE5	Floor Supported Gable	1	1	Job Reference (optional)
					I72869813

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:22
ID:zsyvMtdOpE9Zv1mvgwomDEzew3n-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWwCDoi7J4zJC?f

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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
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	n/a	999	244/190
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 5-11-12 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size)	7=5-11-12, 8=5-11-12, 9=5-11-12, 10=5-11-12, 11=5-11-12, 12=5-11-12
Max Grav	7=53 (LC 1), 8=147 (LC 1), 9=145 (LC 1), 10=153 (LC 1), 11=104 (LC 1), 12=21 (LC 1)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-12=-13/0, 6-7=-49/0, 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=-132/0, 4-9=-133/0, 3-10=-138/0, 2-11=-102/0

NOTES

- All plates are 1.5x3 (||) MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.
- 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.
- CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



April 21, 2025

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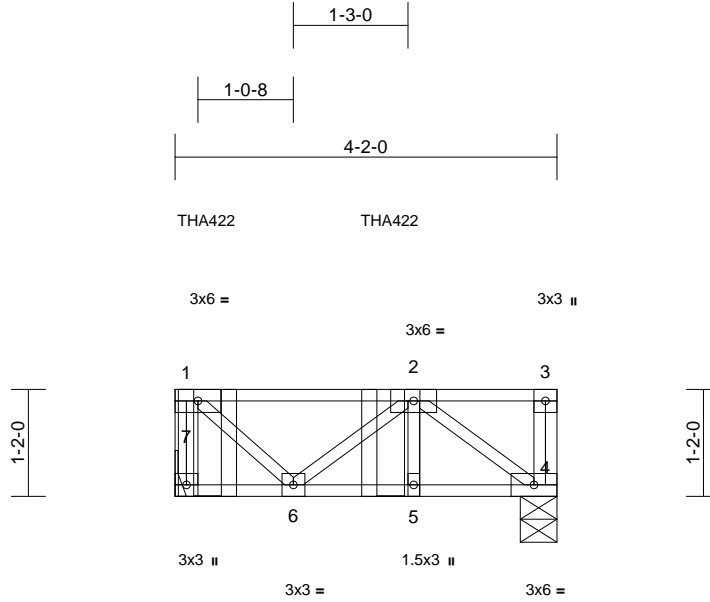
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF
2503-4262-A	2FG3	Floor Girder	1	1	Job Reference (optional)
					I72869814

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 18 09:53:34
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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	0.41	Vert(LL)	-0.01	5	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.25	Vert(CT)	-0.01	5-6	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.23	Horz(CT)	0.00	4	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 26 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 4-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4=0-4-13, 7= Mechanical
Max Grav 4=579 (LC 1), 7=1038 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-7=-1033/0, 3-4=-35/0, 1-2=-357/0, 2-3=0/0
BOT CHORD 6-7=0/0, 5-6=0/735, 4-5=0/735
WEBS 2-4=-908/0, 2-5=0/5, 2-6=-483/0, 1-6=0/478

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.
- 3) Use Simpson Strong-Tie THA422 (Single Chord Girder) or equivalent spaced at 2-0-0 oc max. starting at 0-4-4 from the left end to 2-4-4 to connect truss(es) to front face of top chord.
- 4) Fill all nail holes where hanger is in contact with lumber.
- 5) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 4-7=-10, 1-3=-100
Concentrated Loads (lb)
Vert: 2=-574 (F), 1=-612 (F)



April 21, 2025

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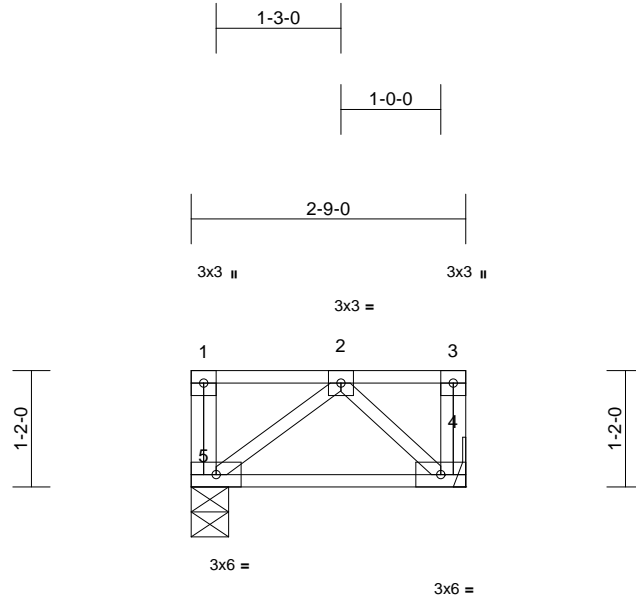
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF
2503-4262-A	2F7	Floor	4	1	Job Reference (optional)
					I72869815

Structural, LLC, Thurmont, MD - 21788,

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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	0.08	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.06	Vert(CT)	-0.01	4-5	>999	360	
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	4	n/a	n/a	
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-P						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)

BRACING

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

REACTIONS (size) 4= Mechanical, 5=0-4-8
Max Grav 4=110 (LC 1), 5=110 (LC 1)

FORCES (lb) - Maximum Compression/Maximum
Tension

TOP CHORD 1-5=-44/0, 3-4=-31/0, 1-2=0/0, 2-3=0/0
BOT CHORD 4-5=0/74
WEBS 2-5=-93/0, 2-4=-101/0

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



April 21, 2025

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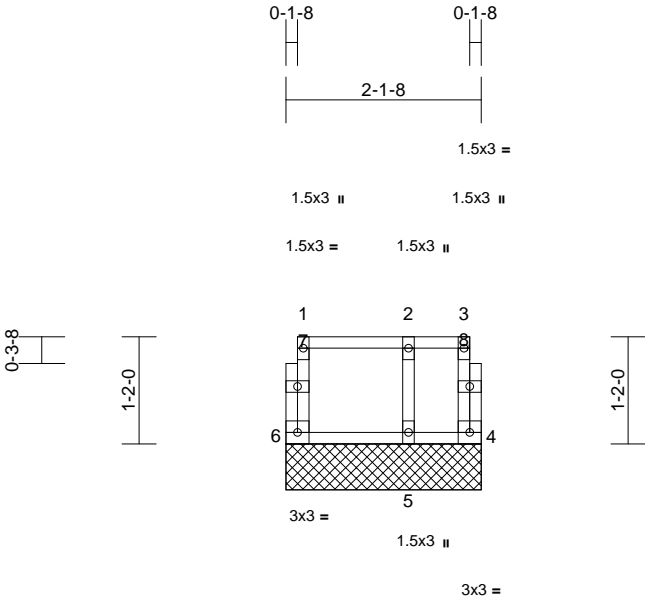
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF
2503-4262-A	2FGE7	Floor Supported Gable	1	1	Job Reference (optional)
					I72869816

Structural, LLC, Thurmont, MD - 21788,

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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	0.04	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	0.02	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 12 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 2-1-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS	(size)	4=2-1-8, 5=2-1-8, 6=2-1-8
	Max Grav	4=19 (LC 1), 5=70 (LC 1), 6=40 (LC 1)

FORCES	(lb) - Maximum Compression/Maximum Tension
--------	--

TOP CHORD	1-6=-37/0, 3-4=-14/0, 1-2=-6/0, 2-3=-6/0
BOT CHORD	5-6=0/6, 4-5=0/6
WEBS	2-5=-66/0

NOTES

- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.
- 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



April 21,2025

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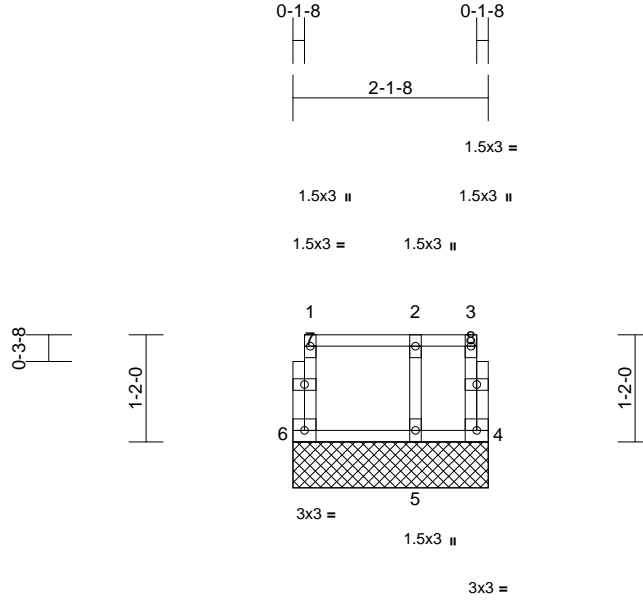
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Blake Pond Lot 00.0094 OWF
2503-4262-A	1FGE10	Floor Supported Gable	1	1	Job Reference (optional)
					I72869817

Structural, LLC, Thurmont, MD - 21788,

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Page: 1



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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.05	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	0.02	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 12 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 2-1-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS	(size) 4=2-1-8, 5=2-1-8, 6=2-1-8
	Max Grav 4=29 (LC 1), 5=105 (LC 1), 6=60 (LC 1)

FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-6=-55/0, 3-4=-22/0, 1-2=-9/0, 2-3=-9/0
BOT CHORD	5-6=0/9, 4-5=0/9
WEBS	2-5=-100/0

NOTES

- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.
- 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



April 21, 2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

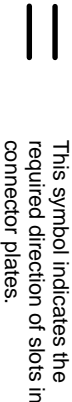
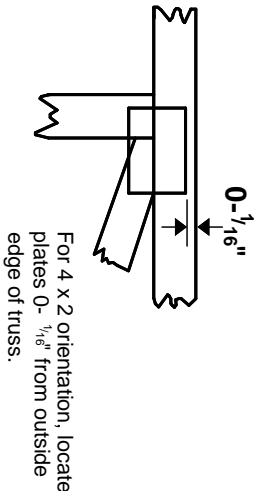
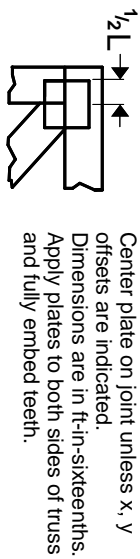
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

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Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



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

PLATE SIZE

4 X 4

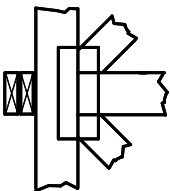
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

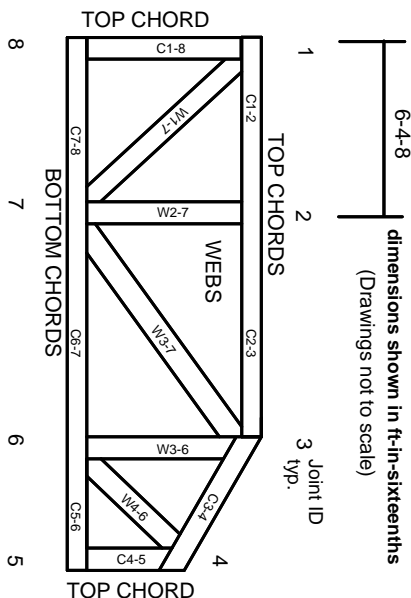


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: 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/TP1 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/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 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/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.

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