

RE: 2412-1161-F - Stonefield Rev 3-Elev 4 w/crawl-Floor

Trenco

818 Soundside Rd
 Edenton, NC 27932

Site Information:

Project Customer: DRB Raleigh Project Name: DRB Raleigh Model Track

Lot/Block: Subdivision: DRB Raleigh

Model: Stonefield Rev 3

Address:

City: 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 25.2

Wind Code: ASCE 7-16

Design Method: MWFRS (Envelope)/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	I74175404	1FGE1	6/13/25	35	I74175438	2F4	6/13/25
2	I74175405	1F5	6/13/25	36	I74175439	2F5	6/13/25
3	I74175406	1F4	6/13/25	37	I74175440	2FGE4	6/13/25
4	I74175407	1F3	6/13/25	38	I74175441	2F8	6/13/25
5	I74175408	1F2	6/13/25	39	I74175442	2F7A	6/13/25
6	I74175409	1FGE2	6/13/25	40	I74175443	2FGE5	6/13/25
7		1FGE8	6/13/25	41	I74175444	2F7	6/13/25
8	I74175411	1FGE6	6/13/25		I74175445	2FGR2	6/13/25
9	I74175412	1FGE3	6/13/25	43	I74175446	2F14	6/13/25
10	I74175413	1FGE4	6/13/25	44	I74175447	2F15	6/13/25
11	I74175414	1FGR1	6/13/25	45	I74175448	2F16A	6/13/25
12	I74175415	1F17	6/13/25	46	I74175449	2FGR1	6/13/25
13	I74175416	1F18	6/13/25	47	I74175450	2F13	6/13/25
14	I74175417	1F19	6/13/25	48	I74175451	2F17	6/13/25
	I74175418	1F20	6/13/25	49	I74175452	2F3	6/13/25
16	I74175419	1FGE9	6/13/25	50	I74175453	2F6	6/13/25
17	I74175420	1F6	6/13/25		I74175454	2FGE3	6/13/25
18	I74175421	1F7	6/13/25	52	I74175455	2F11	6/13/25
19	I74175422	1F8	6/13/25	53	I74175456	2F12	6/13/25
20	I74175423	1F9	6/13/25	54	I74175457	2FGE6	6/13/25
21	I74175424	1F10	6/13/25	55	I74175458	2F12A	6/13/25
22	I74175425	1F16	6/13/25	56	I74175459	2F9	6/13/25
23	I74175426	1F15	6/13/25	57	I74175460	2F10	6/13/25
	I74175427	1F14	6/13/25	58	I74175461	2F18	6/13/25
25	I74175428	1F13	6/13/25	59	I74175462	2F1A	6/13/25
26	I74175429	1F12	6/13/25		I74175463	2F19	6/13/25
27	I74175430	1F11	6/13/25	61	I74175464	2FGE2	6/13/25
28	I74175431	1FGE5	6/13/25				
29	I74175432	1F1	6/13/25				
30	I74175433	1FGE7	6/13/25				
31	I74175434	2FGE1	6/13/25				
32	I74175435	2F1	6/13/25				
	I74175436	2F2	6/13/25				
34	I74175437	2F20	6/13/25				

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

Truss Design Engineer's Name: Gilbert, Eric

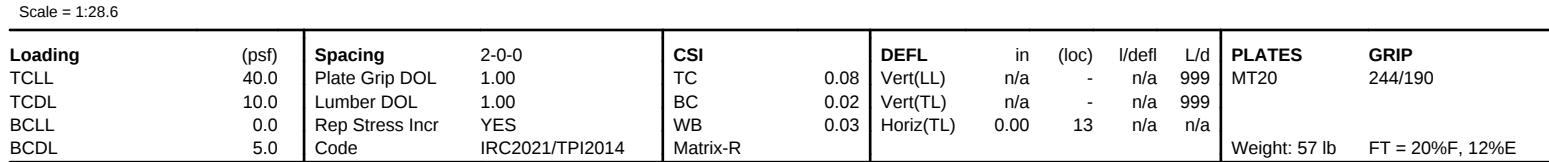
My license renewal date for the state of North Carolina is December 31, 2025.

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



June 13, 2025

Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:54 Page: 1
ID:UfyupGnY1SjZTMxb7A0z1Nz85nL-RfC?PsB70Hq3NSgPqnL8w3uITxbGKwRCD0i7J4JC?i



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

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-24=-49/0, 12-13=-18/0, 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

BOT CHORD 23-24=0/7, 22-23=0/7, 21-22=0/7, 20-21=0/7, 19-20=0/7, 18-19=0/7, 17-18=0/7, 16-17=0/7, 15-16=0/7, 14-15=0/7, 13-14=0/7

WEBS 2-23=-132/0, 3-22=-134/0, 4-21=-133/0, 5-20=-133/0, 6-19=-133/0, 7-18=-133/0, 8-17=-134/0, 9-16=-132/0, 10-15=-138/0, 11-14=-106/0

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.tpinet.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

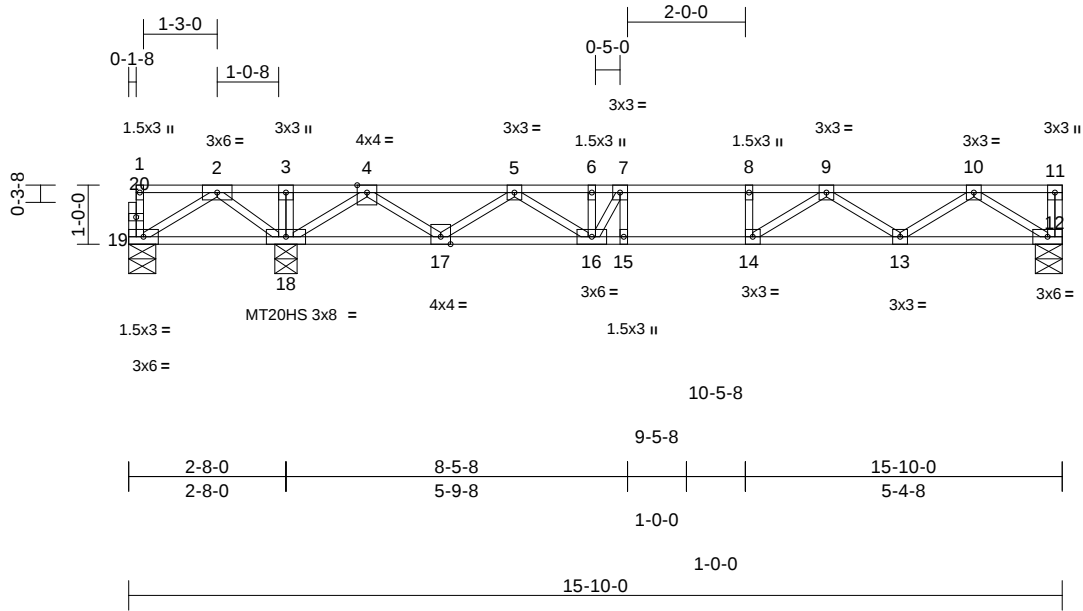
ENGINEERING BY
TRENCO
A Mi Tek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Stonefield Rev 3-Elev 4 w/crawl-Floor	174175405
	1F5	Floor	1	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	0.63	Vert(LL)	-0.12	13-14	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.83	Vert(CT)	-0.16	13-14	>975	360	MT20HS	187/143
BCLL	0.0	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.02	12	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 79 lb	FT = 20%F, 12%E

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 18-19,17-18.

REACTIONS (size) 12=0-5-8, 18=0-4-8, 19=0-5-8
Max Uplift 19=533 (LC 4)
Max Grav 12=605 (LC 4), 18=1543 (LC 1), 19=25 (LC 3)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-19=-53/0, 11-12=-41/0, 1-2=-4/0, 2-3=0/1627, 3-4=0/1628, 4-5=-349/0, 5-6=-1534/0, 6-7=-1534/0, 7-8=-1835/0, 8-9=-1835/0, 9-10=-1351/0, 10-11=0/0
BOT CHORD 18-19=-862/0, 17-18=-482/0, 16-17=0/1100, 15-16=0/1835, 14-15=0/1835, 13-14=0/1763, 12-13=0/874
WEBS 3-18=-116/0, 7-15=-11/202, 8-14=-139/0, 2-19=0/1023, 2-18=-1058/0, 4-18=-1409/0, 4-17=0/959, 5-17=-918/0, 10-12=-1036/0, 10-13=0/583, 9-13=-503/0, 9-14=-53/305, 5-16=0/522, 6-16=0/238, 7-16=-732/0

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 533 lb uplift at joint 19.

- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



June 13,2025

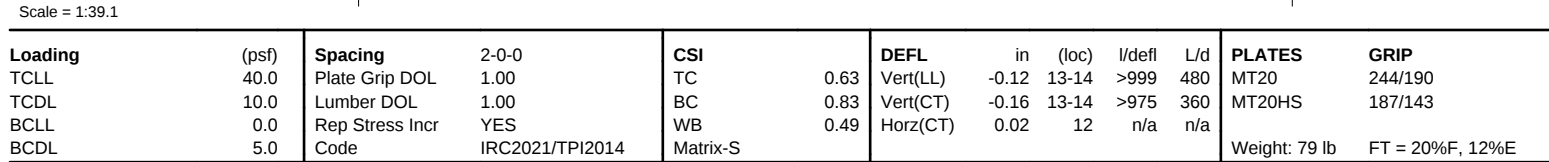
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:52 Page: 1
ID:m7DQKKWR50x2m3xK1zwKhSz867e-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWRCDoi7J4zJC?f



4) Recommend 2x6 strongbacks, on edge, spaced at 10'-00"-00" oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

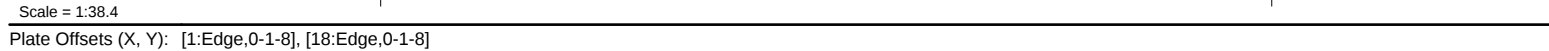
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LUMBER		3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
TOP CHORD	2x4 SP No.2(flat)	
BOT CHORD	2x4 SP No.2(flat)	
WEBS	2x4 SP No.3(flat)	
OTHERS	2x4 SP No.3(flat)	
BRACING		4) CAUTION, Do not erect truss backwards.
LOAD CASE(S)		Standard

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 876 lb uplift at joint 18.

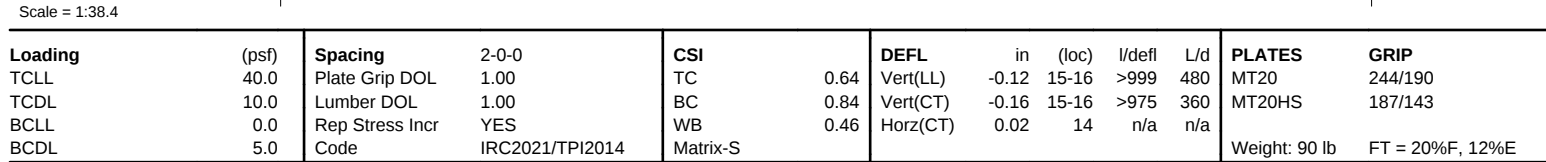
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Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:51 Page: 1
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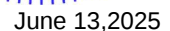
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION, Do not erect truss backwards.

6) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-23=-33/0, 13-14=-37/0, 1-2=-2/0, 2-3=-67/748, 3-4=0/1616, 4-5=0/1617, 5-7=-404/0, 7-8=-1575/0, 8-9=-1575/0, 9-10=-1866/0, 10-11=-1866/0, 11-12=-1363/0, 12-13=-3/0
BOT CHORD	22-23=-357/203, 21-22=-1174/0, 19-21=-469/0, 18-19=0/1148, 17-18=0/1866, 16-17=0/1866, 15-16=0/1783, 14-15=0/880
WEBS	2-12=-65/0, 9-17=-12/205, 10-16=-140/0, 2-23=-238/424, 2-22=-521/0, 3-22=0/562, 3-21=-810/0, 5-21=-1414/0, 5-19=0/957, 7-19=-914/0, 12-14=-1040/0, 12-15=0/590, 11-15=-513/0, 11-16=-59/308, 7-18=0/520, 8-18=0/240, 9-18=-738/0

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) All plates are 3x3 (≡) MT20 unless otherwise indicated.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 212 lb uplift at joint 23.



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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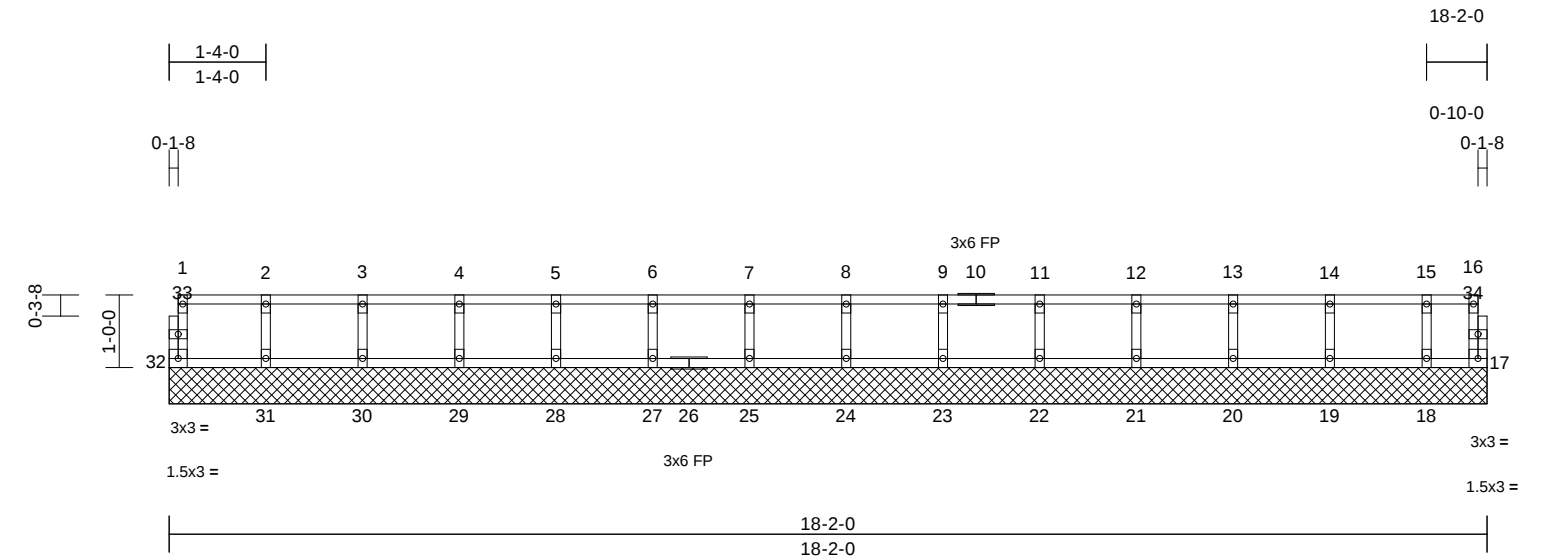
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Job	Truss	Truss Type	Qty	Ply	Stonefield Rev 3-Elev 4 w/crawl-Floor
	1FGE2	Floor Supported Gable	1	1	174175409
Job Reference (optional)					

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	0.08	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	17	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R						Weight: 72 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.

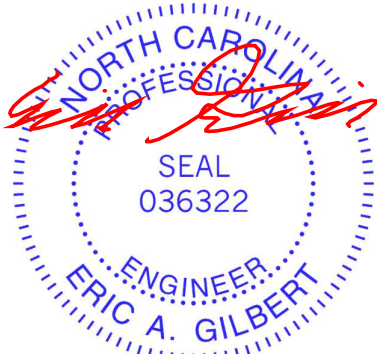
REACTIONS (size) 17=18-2-0, 18=18-2-0, 19=18-2-0, 20=18-2-0, 21=18-2-0, 22=18-2-0, 23=18-2-0, 24=18-2-0, 25=18-2-0, 27=18-2-0, 28=18-2-0, 29=18-2-0, 30=18-2-0, 31=18-2-0, 32=18-2-0
Max Grav 17=26 (LC 1), 18=114 (LC 1), 19=153 (LC 1), 20=145 (LC 1), 21=147 (LC 1), 22=147 (LC 1), 23=147 (LC 1), 24=147 (LC 1), 25=147 (LC 1), 27=147 (LC 1), 28=147 (LC 1), 29=147 (LC 1), 30=147 (LC 1), 31=148 (LC 1), 32=52 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-32=-49/0, 16-17=-20/0, 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, 9-11=-7/0, 11-12=-7/0, 12-13=-7/0, 13-14=-7/0, 14-15=-7/0, 15-16=-7/0
BOT CHORD 31-32=0/7, 30-31=0/7, 29-30=0/7, 28-29=0/7, 27-28=0/7, 25-27=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, 17-18=0/7
WEBS 2-31=-132/0, 3-30=-134/0, 4-29=-133/0, 5-28=-133/0, 6-27=-133/0, 7-25=-133/0, 8-24=-133/0, 9-23=-133/0, 11-22=-133/0, 12-21=-134/0, 13-20=-132/0, 14-19=-138/0, 15-18=-108/0

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.

LOAD CASE(S) Standard



June 13,2025

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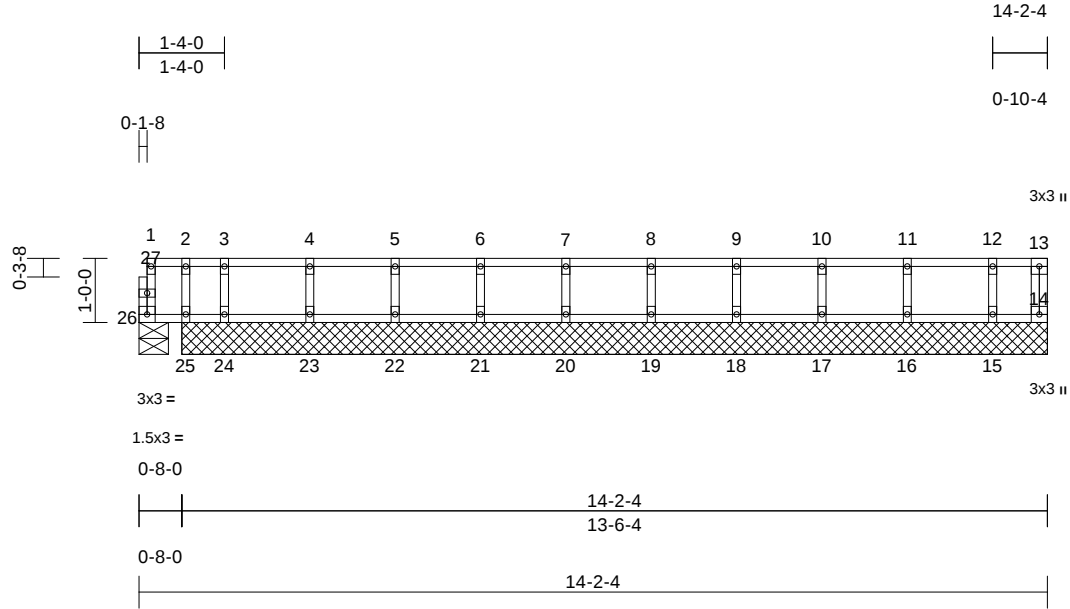
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Job	Truss	Truss Type	Qty	Ply	Stonefield Rev 3-Elev 4 w/crawl-Floor	174175410
	1FGE8	Floor Supported Gable	1	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:55
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Page: 1



Scale = 1:36

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)	0.00	15	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(CT)	0.00	15-16	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.03	Horz(CT)	0.00	14	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							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)	14=13-6-4, 15=13-6-4, 16=13-6-4, 17=13-6-4, 18=13-6-4, 19=13-6-4, 20=13-6-4, 21=13-6-4, 22=13-6-4, 23=13-6-4, 24=13-6-4, 25=13-6-4, 26=0-5-8
------------------	--

Max Grav	14=27 (LC 1), 15=123 (LC 1), 16=152 (LC 1), 17=145 (LC 1), 18=147 (LC 1), 19=147 (LC 1), 20=147 (LC 1), 21=147 (LC 1), 22=145 (LC 1), 23=152 (LC 1), 24=120 (LC 1), 25=48 (LC 1), 26=29 (LC 1)
----------	--

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

TOP CHORD	1-26=-27/0, 13-14=-24/0, 1-2=-3/0, 2-3=-3/0, 3-4=-3/0, 4-5=-3/0, 5-6=-3/0, 6-7=-3/0, 7-8=-3/0, 8-9=-3/0, 9-10=-3/0, 10-11=-3/0, 11-12=-3/0, 12-13=-3/0
BOT CHORD	25-26=0/3, 24-25=0/3, 23-24=0/3, 22-23=0/3, 21-22=0/3, 20-21=0/3, 19-20=0/3, 18-19=0/3, 17-18=0/3, 16-17=0/3, 15-16=0/3, 14-15=0/3
WEBS	2-25=-42/0, 3-24=-109/0, 4-23=-138/0, 5-22=-132/0, 6-21=-134/0, 7-20=-133/0, 8-19=-133/0, 9-18=-134/0, 10-17=-132/0, 11-16=-138/0, 12-15=-112/0

NOTES

- 1) All plates are 1.5x3 (II) MT20 unless otherwise indicated.
- 2) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).

- 3) Gable studs spaced at 1-4-0 oc.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



June 13, 2025

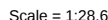
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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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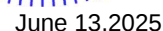
818 Soundside Road
Edenton, NC 27932

Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:54 Page: 1
ID:OhRW0UnUayGL0chemE1Watz85oe-RfC?PsB70Ha3NSaPqnL8w3uITXBGKWRcD0i7J4zJC?i

LOAD CASE(S) Standard

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" oc.



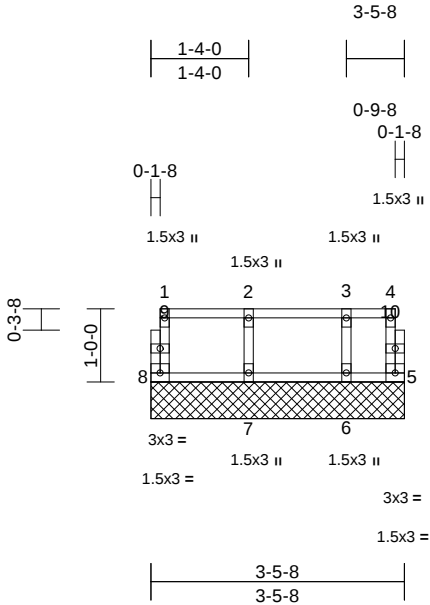
Job	Truss	Truss Type	Qty	Ply	Stonefield Rev 3-Elev 4 w/crawl-Floor
	1FGE3	Floor Supported Gable	1	1	Job Reference (optional)

I74175412

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:54
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Page: 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	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 16 lb	FT = 20%F, 12%E

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-5-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 5=3-5-8, 6=3-5-8, 7=3-5-8, 8=3-5-8
Max Grav 5=24 (LC 1), 6=111 (LC 1), 7=153 (LC 1), 8=51 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

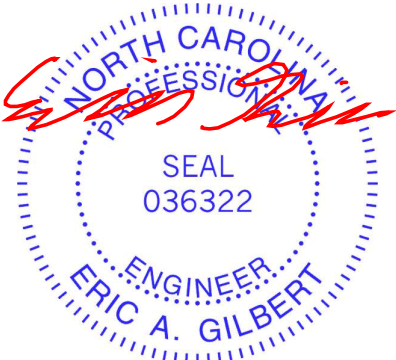
TOP CHORD 1-8=-48/0, 4-5=-18/0, 1-2=-8/0, 2-3=-8/0, 3-4=-8/0

BOT CHORD 7-8=0/8, 6-7=0/8, 5-6=0/8
WEBS 2-7=-137/0, 3-6=-106/0

NOTES

- 1) Gable requires continuous bottom chord bearing.
- 2) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 3) Gable studs spaced at 1-4-0 oc.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard



June 13,2025

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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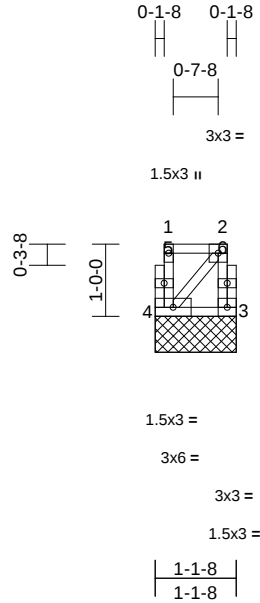
818 Soundside Road
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Job	Truss	Truss Type	Qty	Ply	Stonefield Rev 3-Elev 4 w/crawl-Floor
	1FGE4	Floor Supported Gable	3	1	Job Reference (optional)
					I74175413

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:54
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Page: 1



Scale = 1:32

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.04	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	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 8 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 1-1-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 3=1-1-8, 4=1-1-8
Max Grav 3=42 (LC 1), 4=42 (LC 1)

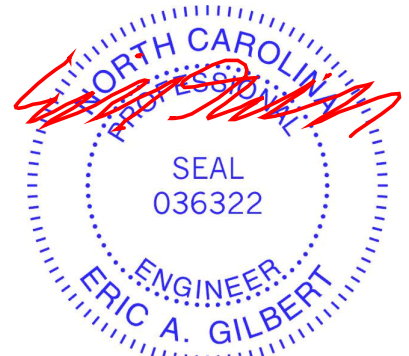
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-4=-38/0, 2-3=-38/0, 1-2=-3/0
BOT CHORD 3-4=0/3
WEBS 2-4=0/0

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 4-0-0 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



June 13, 2025

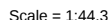
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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ID:G340TLE3RWPzTzmkb0u7TTz85Qo-RfC?PsB70Hg3NSaPqnL8w3uITxbGKWCrD0i7J4zJC?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)	
OTHERS	2x4 SP No.3(flat)	5) 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 6-0-0 oc bracing.

(size)	18=0-4-8, 22=0-4-8, 29=0-5-8
Max Grav	18=703 (LC 4), 22=2532 (LC 1), 29=329 (LC 3)

(Ib) - Maximum Compression/Maximum Tension

TOP CHORD 1-29=-27/0, 17-18=-21/0, 1-2=-2/0,
2-3=-700/31, 3-4=-733/357, 4-5=-733/357,
5-6=-384/620, 6-7=-384/620, 7-9=0/1110,
9-10=0/2380, 10-11=0/2380, 11-12=-3120/0,
12-13=-3120/0, 13-14=-2529/0,
14-15=-1433/0, 15-16=-1433/0, 16-17=0/0

BOT CHORD 28-29=0/473, 27-28=-126/861,
26-27=-357/733, 25-26=-357/733,
24-25=-840/0, 22-24=-1500/0, 21-22=0/980,
20-21=0/2928, 19-20=0/2100, 18-19=0/646

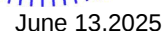
WEBS 4-27=-2/97, 5-26=0/284, 10-22=-104/0,
2-29=-559/0, 2-28=37/277, 3-28=-197/116,
3-27=-322/0, 11-22=-3342/0, 13-21=0/369,
13-20=-488/0, 14-20=0/523, 14-19=-802/0,
16-19=0/946, 16-18=-893/0, 12-21=-1788/0,
11-21=0/2806, 15-19=-64/0, 9-22=-1086/0,
9-24=0/793, 7-24=-765/0, 7-25=0/491,
6-25=0/291 5-25=-871/0

- 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 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION. Do not erect truss backwards.

LOAD CASE(S) Standard

- 1) Dead + Floor Live (balanced): Lumber Increase=1.00,
Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 18-29=-7, 1-17=-67
Concentrated Loads (lb)
Vert: 14=-2, 18=-58, 12=-1751

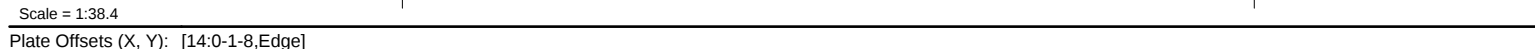


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LUMBER		Uniform Loads (lb/ft)
TOP CHORD	2x4 SP No.2(flat)	Vert: 10-16=-10, 1-9=-100
BOT CHORD	2x4 SP SS(flat)	Concentrated Loads (lb)
WEBS	2x4 SP No.3(flat)	Vert: 10=-58
OTHERS	2x4 SP No.3(flat)	

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.

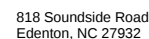
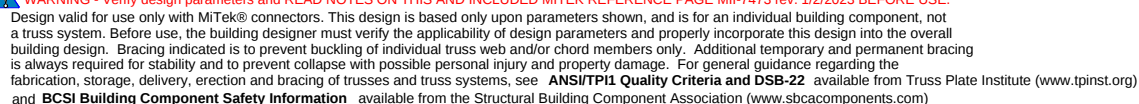
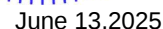
Max Grav 10=825 (LC 1), 16=760 (LC 1)

TOP CHORD 1-16=-36/0, 9-10=-39/0, 1-2=-3/0,
2-3=-1810/0, 3-4=-2976/0, 4-5=-2976/0,
5-6=-2848/0, 6-7=-2848/0, 7-8=-1820/0,
8-9=0/0

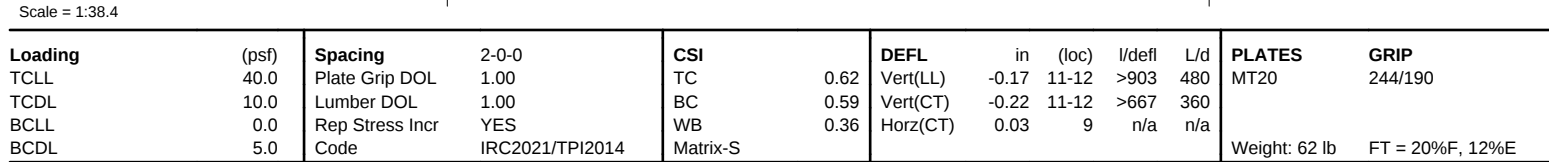
WEBS 4-14=-251/0, 5-13=-144/83, 2-16=-1325/0,
2-15=0/842, 3-15=-817/0, 3-14=0/764,
8-10=-1329/0, 8-11=0/852, 7-11=-807/0,
7-12=0/441. 6-12=-153/57. 5-12=-506/148

- 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'-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.

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



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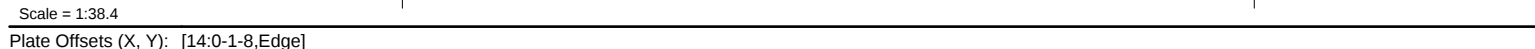
NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 3) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

June 13, 2025

Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:54 Page: 1
ID: rzOvi2t? q63oGBQOuO3e4qMz85lx-RfC?PsB70Hg3NSqPnL8w3uITXbGKWwCdDoi7J4zJC?f



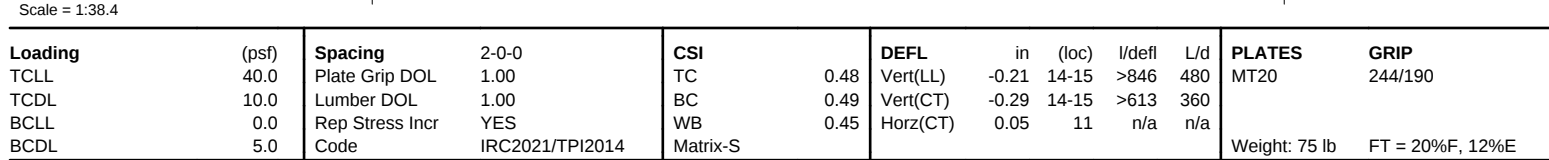
LUMBER	
TOP CHORD	2x4 SP No.2(flat)
BOT CHORD	2x4 SP SS(flat)
WEBS	2x4 SP No.3(flat)
OTHERS	2x4 SP No.3(flat)
BRACING	
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
REACTIONS	
(size)	10=0-4-8, 16=0-5-8
Max Grav	10=767 (LC 1), 16=760 (LC 1)
FORCES	
	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-16=-36/0, 9-10=-39/0, 1-2=-3/0, 2-3=-1810/0, 3-4=-2976/0, 4-5=-2976/0, 5-6=-2848/0, 6-7=-2848/0, 7-8=-1820/0, 8-9=0/0
BOT CHORD	15-16=0/1120, 14-15=0/2480, 13-14=0/2976, 12-13=0/2976, 11-12=0/2481, 10-11=0/1121
WEBS	4-14=-251/0, 5-13=-144/83, 2-16=-1325/0, 2-15=0/842, 3-15=-817/0, 3-14=0/764, 8-10=-1329/0, 8-11=0/852, 7-11=-807/0, 7-12=0/441, 6-12=-153/57, 5-12=-506/148

- 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.

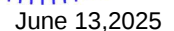
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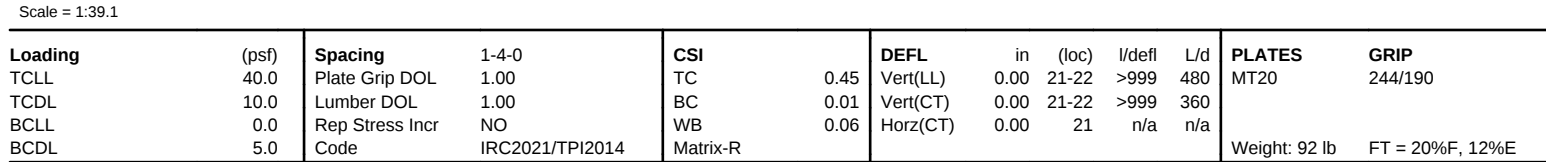
Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:54 Page: 1
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LOAD CASE(S) Standard



Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:55 Page: 1
ID:aSzXsat3?Dyr7E1QQhi9AGz85po-RfC?PsB70Hq3NSgPqnL8w3ulTXhGKWRcdJ7i4zJC?f



WEBS 2-39=23/0, 3-38=72/0, 4-37=92/0,
5-36=88/0, 6-35=89/0, 7-34=89/0,
8-32=89/0, 9-31=89/0, 10-30=87/0,
11-29=97/0, 12-28=56/0, 13-27=243/0,
15-26=265/0, 16-25=54/0, 17-24=98/0,
18-23=86/0, 19-22=93/0

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.

24=22-1-8, 25=22-1-8, 26=22-1-8,
27=22-1-8, 28=22-1-8, 29=22-1-8,
30=22-1-8, 31=22-1-8, 32=22-1-8,
34=22-1-8, 35=22-1-8, 36=22-1-8,
37=22-1-8, 38=22-1-8, 39=22-1-8,
40=0-5-8

Max Grav 21=44 (LC 1), 22=104 (LC 1),
23=94 (LC 1), 24=107 (LC 1),
25=62 (LC 1), 26=274 (LC 1),
27=252 (LC 1), 28=65 (LC 1),
29=106 (LC 1), 30=96 (LC 1),
31=98 (LC 1), 32=98 (LC 1), 34=98
(LC 1), 35=98 (LC 1), 36=97 (LC
1), 37=101 (LC 1), 38=81 (LC 1),
39=21 (LC 1), 40=29 (LC 1)

Tension

TOP CHORD

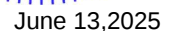
1-40=-24/0, 20-21=-41/0, 1-2=-7/0, 2-3=-7/0,
3-4=-7/0, 4-5=-7/0, 5-6=-7/0, 6-7=-7/0,
7-8=-7/0, 8-9=-7/0, 9-10=-7/0, 10-11=-7/0,
11-12=-7/0, 12-13=-7/0, 13-15=-7/0,
15-16=-7/0, 16-17=-7/0, 17-18=-7/0,
18-19=-7/0, 19-20=-7/0

BOT CHORD

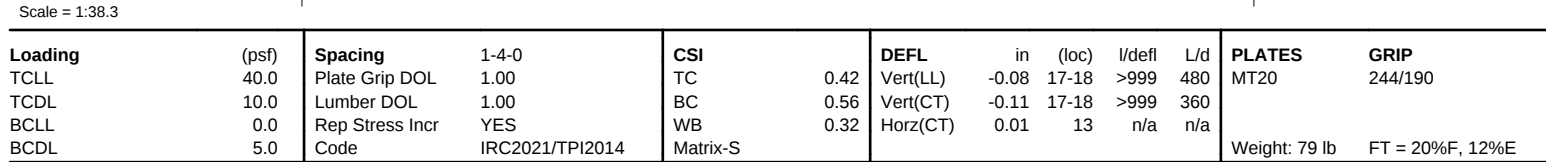
39-40=0/7, 38-39=0/7, 37-38=0/7, 36-37=0/7
35-36=0/7, 34-35=0/7, 32-34=0/7, 31-32=0/7
30-31=0/7, 29-30=0/7, 28-29=0/7, 27-28=0/7
26-27=0/7, 25-26=0/7, 24-25=0/7, 23-24=0/7
22-23=0/7, 21-22=0/7

- 1) All plates are 1.5x3 (||) MT20 unless otherwise indicated.
- 2) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 3) Gable studs spaced at 1'-4" oc.
- 4) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10'-0" oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION. Do not erect truss backwards.

1) Dead + Floor Live (balanced): Lumber Increase=1.00,
Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: $21 \cdot 40 = -7$, $1 \cdot 20 = -67$
Concentrated Loads (lb)
Vert: $14 = -275$



Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:52 Page: 1
ID:Ym8aKYHZRY?AoQ2Fhq?1Vz8AZe-RfC?PsB70Hg3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



4) CAUTION, Do not erect truss backwards.
LOAD CASE(S) Standard

June 13, 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.tpinet.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

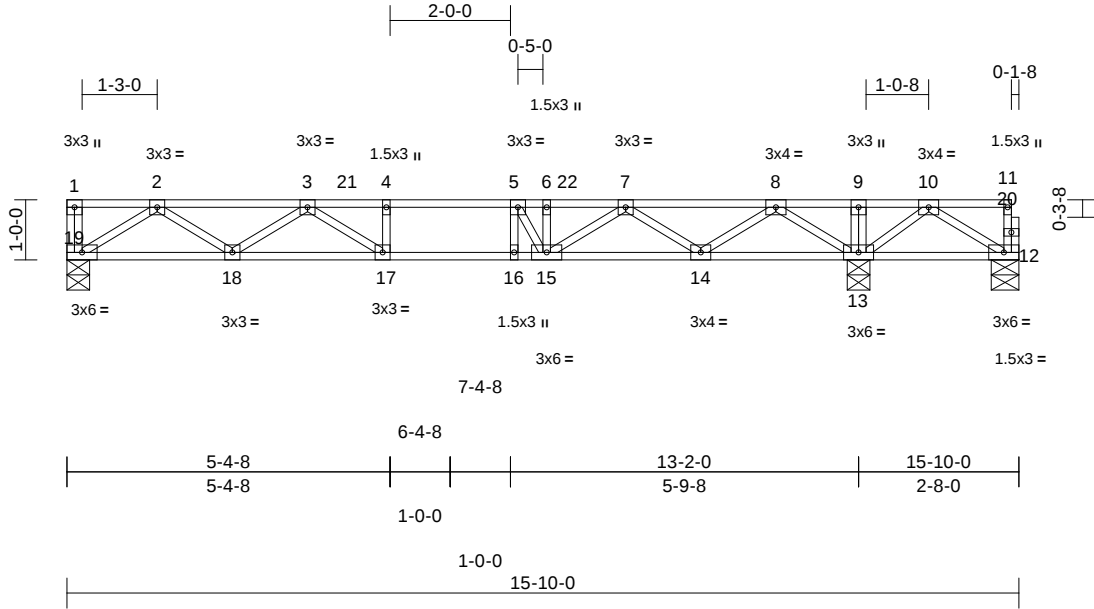
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Stonefield Rev 3-Elev 4 w/crawl-Floor	I74175421
	1F7	Floor	3	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:52
ID: yMy8aKYHZRy?AoQ2Fhq?1Vz8AZe-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:38.3

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.49	Vert(LL)	-0.08	17-18	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.65	Vert(CT)	-0.11	17-18	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.35	Horz(CT)	0.02	13	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 79 lb	FT = 20%F, 12%E

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 13-14,12-13.

REACTIONS (size) 12=0-5-8, 13=0-4-8, 19=0-4-8
Max Uplift 12=-383 (LC 3)
Max Grav 12=-44 (LC 4), 13=1085 (LC 1), 19=423 (LC 3)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-19=-27/0, 11-12=-35/0, 1-2=0/0, 2-3=-958/0, 3-4=-1332/0, 4-5=-1332/0, 5-6=-1109/0, 6-7=-1109/0, 7-8=-238/0, 8-9=0/1165, 9-10=0/1164, 10-11=-2/0
BOT CHORD 18-19=0/612, 17-18=0/1259, 16-17=0/1332, 15-16=0/1332, 14-15=0/779, 13-14=-357/0, 12-13=-618/0
WEBS 4-17=-112/0, 5-16=-2/140, 9-13=-78/0, 2-19=-726/0, 2-18=0/422, 3-18=-367/0, 3-17=-4/235, 8-13=-991/0, 8-14=0/689, 7-14=-662/0, 10-12=0/733, 10-13=-751/0, 7-15=0/397, 6-15=0/165, 5-15=-532/0

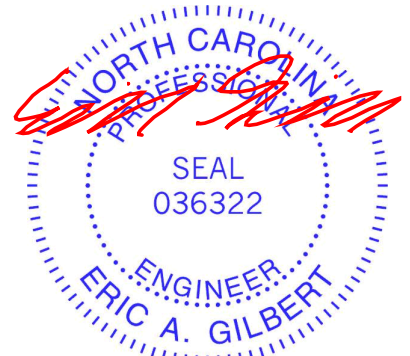
NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 383 lb uplift at joint 12.
- 3) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.

- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

- 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 12-19=-7, 1-21=-67, 11-22=-67
Trapezoidal Loads (lb/ft)
Vert: 21=-80-to-4=-80, 4=-80-to-5=-79, 5=-79-to-6=-79, 6=-79-to-22=-79



June 13,2025

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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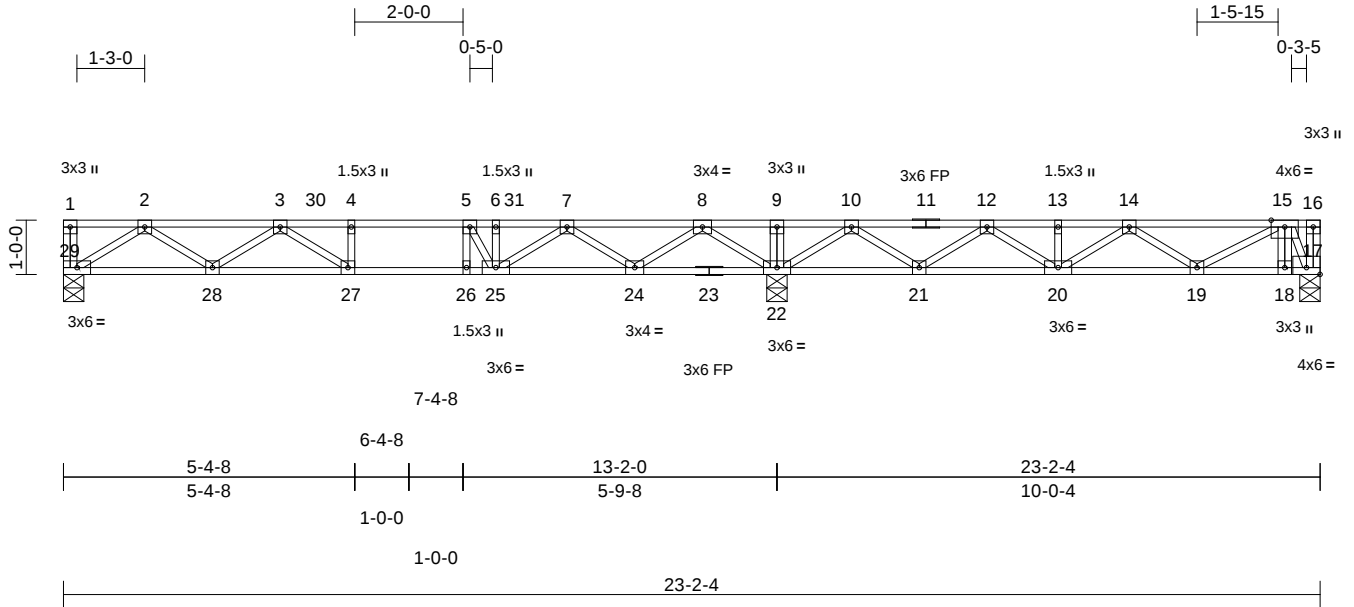
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Stonefield Rev 3-Elev 4 w/crawl-Floor
	1F8	Floor	2	1	174175422
Job Reference (optional)					

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:52
ID:kn79EI4xfSy_vJeSBscnhHz8AXf-RfC?PsB70Hq3NSgPqnL8w3uITXbGKwRCDoi7J4zJC?f

Page: 1



Scale = 1:42.5									
Plate Offsets (X, Y): [17:Edge,0-1-8]									
Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in (loc)	l/defl	L/d
TCLL	40.0	Plate Grip DOL	1.00	TC	0.67	Vert(LL)	-0.08 27-28	>999	480
TCDL	10.0	Lumber DOL	1.00	BC	0.82	Vert(CT)	-0.14 27-28	>999	360
BCLL	0.0	Rep Stress Incr	NO	WB	0.41	Horz(CT)	0.02 22	n/a	n/a
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S					
Weight: 118 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, Except:
6-0-0 oc bracing: 22-24,21-22,20-21.

REACTIONS (size) 17=0-4-8, 22=0-4-8, 29=0-4-8
Max Grav 17=936 (LC 4), 22=1230 (LC 1), 29=494 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-29=-28/0, 16-17=0/46, 1-2=0/0, 2-3=-1170/0, 3-4=-1755/0, 4-5=-1755/0, 5-6=-1476/0, 6-7=-1476/0, 7-8=-356/150, 8-9=0/1566, 9-10=0/1566, 10-12=-190/643, 12-13=-798/118, 13-14=-798/118, 14-15=-806/0, 15-16=0/0
BOT CHORD 28-29=0/724, 27-28=0/1572, 26-27=0/1755, 25-26=0/1755, 24-25=0/1021, 22-24=-603/0, 21-22=-944/0, 20-21=-363/598, 19-20=0/924, 18-19=0/623, 17-18=0/623
WEBS 4-27=-168/0, 5-26=0/179, 9-22=-73/0, 2-29=-858/0, 2-28=0/545, 3-28=-490/0, 3-27=0/313, 10-22=-922/0, 10-21=0/622, 12-21=-597/0, 12-20=0/342, 14-20=-256/0, 14-19=-145/185, 15-19=-180/209, 8-22=-1185/0, 8-24=0/871, 7-24=-843/0, 13-20=-32/0, 15-18=-9/0, 15-17=-1152/0, 7-25=0/575, 6-25=0/205, 5-25=-736/0

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

- 3) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
 - 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
 - 5) CAUTION, Do not erect truss backwards.
- LOAD CASE(S)** Standard
- 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 17-29=-7, 1-30=-67, 30-31=-123, 16-31=-67
Concentrated Loads (lb)
Vert: 15=-697



June 13,2025

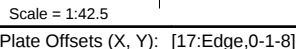
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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818 Soundside Road
Edenton, NC 27932

Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:52 Page: 1
ID:kn79EI4xfSv vJeSBscnhHz8AXf-RfC?PsB70Hq3NSaPqnL8w3ulTXbGKWRcD0i7J4zJC?f



NUMBER
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, Except:
 6-0-0 oc bracing: 22-24,21-22,20-21.

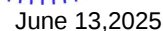
REACTIONS (size) 17=0-4-8, 22=0-4-8, 29=0-4-8
 Max Grav 17=1089 (LC 4), 22=1269 (LC 1),
 29=509 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-29= -28/0, 16-17=0/44, 1-2=0/0,
 2-3= -1215/0, 3-4= -1840/0, 4-5= -1840/0,
 5-6= -1542/0, 6-7= -1542/0, 7-8= -356/150,
 8-9=0/1635, 9-10=0/1635, 10-12= -167/666,
 12-13= -821/94, 13-14= -821/94,
 14-15= -876/0, 15-16=0/0
BOT CHORD 28-29=0/747, 27-28=0/1636, 26-27=0/1840,
 25-26=0/1840, 24-25=0/1054, 22-24= -637/0,
 21-22= -989/0, 20-21= -363/598, 19-20=0/972
 18-19=0/719, 17-18=0/719
WEBS 4-27= -183/0, 5-26=0/183, 9-22= -74/0,
 2-29= -886/0, 2-28=0/571, 3-28= -515/0,
 3-27=0/337, 10-22= -951/0, 10-21=0/649,
 12-21= -625/0, 12-20=0/370, 14-20= -285/0,
 14-19= -118/212, 8-22= -1228/0, 8-24=0/911,
 7-24= -883/0, 13-20= -32/0, 15-18= -12/0,
 15-19= -211/179, 15-17= -1329/0, 7-25=0/615
 6-25=0/210, 5-25= -772/0

- 3) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
 - 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
 - 5) CAUTION, Do not erect truss backwards.
- LOAD CASE(S)** Standard
- 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
- Uniform Loads (lb/ft)
- Vert: 17-29=-7, 1-30=-67, 30-31=-133, 16-31=-67
- Concentrated Loads (lb)
- Vert: 15=-867

LOAD CASE(S) Standard

- 1) Dead + Floor Live (balanced): Lumber Increase=1.00,
Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 17-29=-7, 1-30=-67, 30-31=-133, 16-31=-67
Concentrated Loads (lb)
Vert: 15=-867

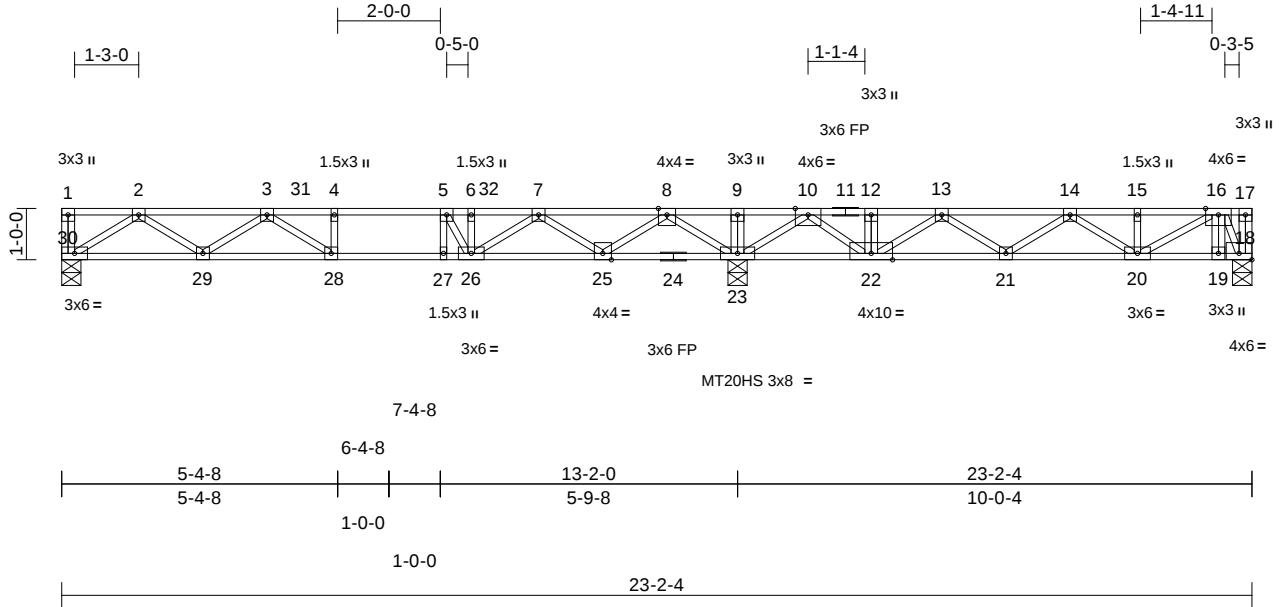


Job	Truss	Truss Type	Qty	Ply	Stonefield Rev 3-Elev 4 w/crawl-Floor
	1F10	Floor	4	1	174175424
Job Reference (optional)					

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:53
ID:kn79EI4xfSy_vJeSBscnhHz8AXf-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:44.9

Plate Offsets (X, Y): [18: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	0.77	Vert(LL)	-0.08	28-29	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.90	Vert(CT)	-0.15	28-29	>999	360	MT20HS	187/143
BCLL	0.0	Rep Stress Incr	NO	WB	0.63	Horz(CT)	0.02	18	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 120 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, Except:
6-0-0 oc bracing: 23-25,22-23.

REACTIONS (size) 18=0-4-8, 23=0-4-8, 30=0-4-8
Max Grav 18=1182 (LC 4), 23=1649 (LC 1), 30=489 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-30=-28/0, 17-18=-11/0, 1-2=0/0, 2-3=-1157/0, 3-4=-1699/0, 4-5=-1699/0, 5-6=-1358/0, 6-7=-1358/0, 7-8=-115/392, 8-9=0/1926, 9-10=0/1926, 10-12=-950/0, 12-13=-947/0, 13-14=-1291/0, 14-15=-1130/0, 15-16=-1130/0, 16-17=0/0, 29-30=0/716, 28-29=0/1546, 27-28=0/1699, 26-27=0/1699, 25-26=0/843, 23-25=-907/0, 22-23=-734/0, 21-22=0/1240, 20-21=0/1315, 19-20=0/742, 18-19=0/742
WEBS 4-28=-162/0, 5-27=0/215, 9-23=-101/0, 2-30=-849/0, 2-29=0/539, 3-29=-475/0, 3-28=0/276, 10-23=-1578/0, 13-21=0/161, 14-21=-128/0, 14-20=-223/70, 8-23=-1251/0, 8-25=0/947, 7-25=-920/0, 16-19=-10/0, 12-22=-510/0, 13-22=-451/0, 10-22=0/1318, 16-18=-1379/0, 15-20=-80/0, 16-20=0/445, 7-26=0/648, 6-26=0/238, 5-26=-854/0

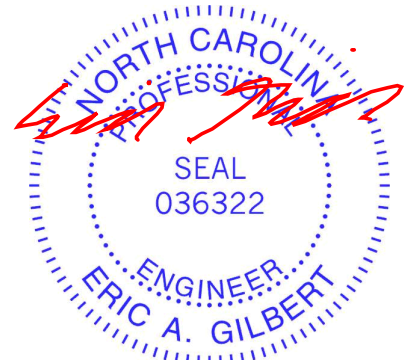
NOTES

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

- 4) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

- 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 18-30=-7, 1-31=-67, 31-32=-133, 17-32=-67
Concentrated Loads (lb)
Vert: 12=-452, 16=-867



June 13,2025

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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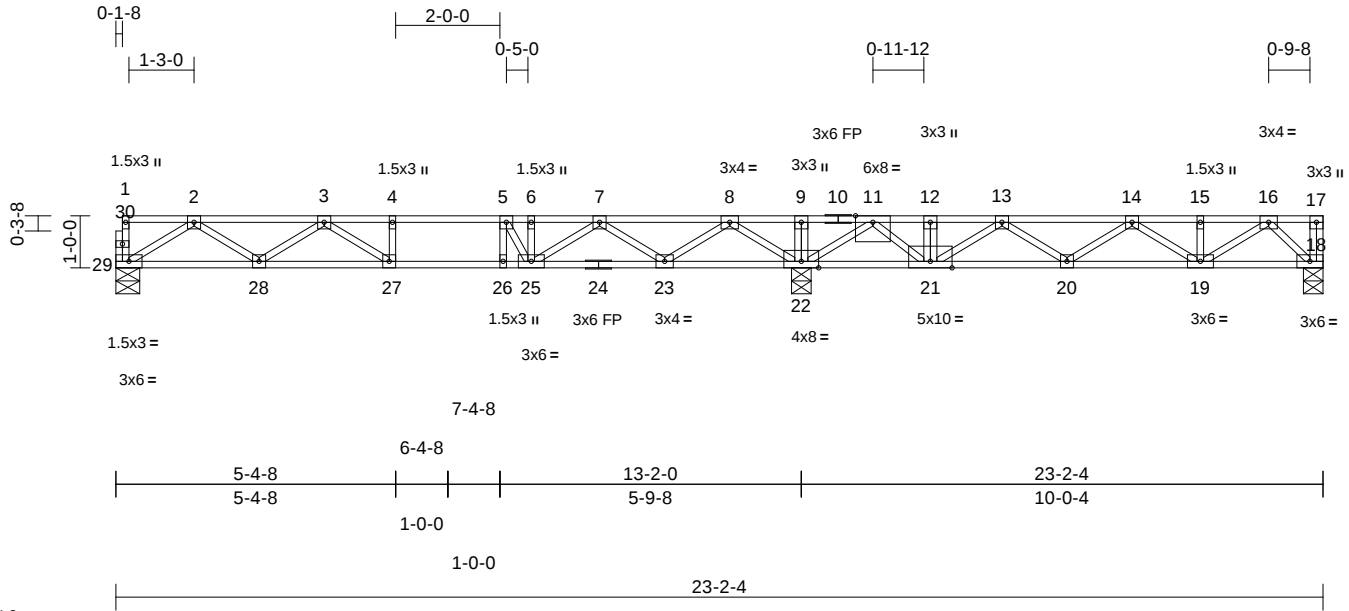
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Stonefield Rev 3-Elev 4 w/crawl-Floor
	1F16	Floor	2	1	I74175425
Job Reference (optional)					

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:53
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Page: 1



Scale = 1:44.3

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.84	Vert(LL)	-0.08	27-28	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.76	Vert(CT)	-0.11	27-28	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.95	Horz(CT)	0.02	18	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 117 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)	18=0-4-8, 22=0-4-8, 29=0-5-8
	Max Grav	18=588 (LC 4), 22=2005 (LC 1), 29=358 (LC 3)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-29=-26/0, 17-18=-21/0, 1-2=-2/0, 2-3=-784/0, 3-4=-937/152, 4-5=-937/152, 5-6=-650/352, 6-7=-650/352, 7-8=0/760, 8-9=0/1935, 9-11=0/1935, 11-12=-2172/0, 12-13=-2160/0, 13-14=-1906/0, 14-15=-1142/0, 15-16=-1142/0, 16-17=0/0
BOT CHORD	28-29=0/518, 27-28=0/992, 26-27=-152/937, 25-26=-152/937, 23-25=-531/305, 22-23=-1107/0, 21-22=-11/678, 20-21=0/2144, 19-20=0/1637, 18-19=0/525
WEBS	4-27=-32/66, 5-26=0/237, 9-22=-108/0, 2-29=-612/0, 2-28=0/324, 3-28=-255/58, 3-27=-233/26, 11-22=-2446/0, 13-21=-86/160, 13-20=-291/0, 14-20=0/327, 14-19=-596/0, 16-19=0/741, 16-18=-726/0, 8-22=-1026/0, 8-23=0/740, 7-23=-715/0, 12-21=-1182/0, 11-21=0/1992, 15-19=-65/0, 7-25=0/443, 6-25=0/250, 5-25=-751/0

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x3 (=) MT20 unless otherwise indicated.
- 3) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.

- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
 - 5) CAUTION, Do not erect truss backwards.
- LOAD CASE(S)** Standard
- 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 18-29=-7, 1-17=-67
Concentrated Loads (lb)
Vert: 18=-58, 12=-1141



June 13,2025

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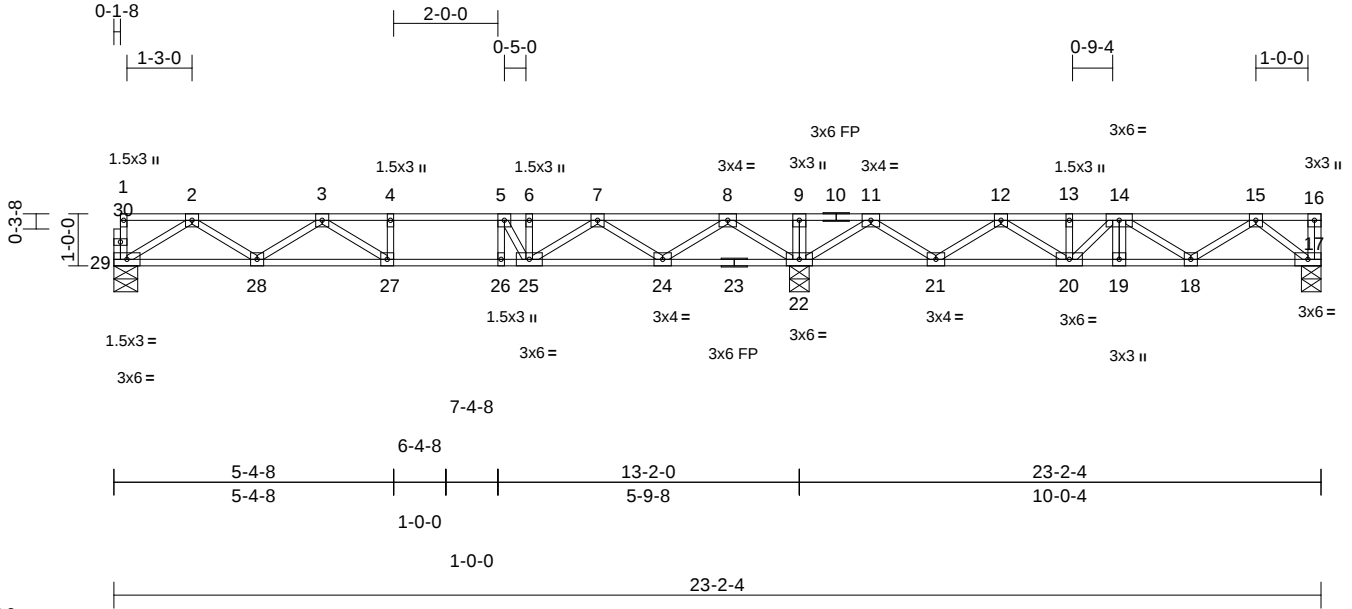
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Stonefield Rev 3-Elev 4 w/crawl-Floor
	1F15	Floor	6	1	I74175426
Job Reference (optional)					

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:53
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Page: 1



Loading		Spacing		CSI		DEFL		PLATES		GRIP	
TCLL	(psf) 40.0	Plate Grip DOL	1-4-0 1.00	TC	0.54	Vert(LL)	-0.08 27-28 >999 480	MT20		244/190	
TCDL	10.0	Lumber DOL	1.00	BC	0.67	Vert(CT)	-0.11 27-28 >999 360				
BCLL	0.0	Rep Stress Incr	NO	WB	0.32	Horz(CT)	0.02 17 n/a n/a				
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							
										Weight: 117 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=0-4-8, 22=0-4-8, 29=0-5-8
Max Grav 17=482 (LC 4), 22=1130 (LC 1), 29=400 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-29=-25/0, 16-17=-11/0, 1-2=-2/0, 2-3=-901/0, 3-4=-1225/0, 4-5=-1225/0, 5-6=-1024/0, 6-7=-1024/0, 7-8=-236/269, 8-9=0/1340, 9-11=0/1340, 11-12=-465/368, 12-13=-1117/0, 13-14=-1117/0, 14-15=-882/0, 15-16=0/0

BOT CHORD 28-29=0/582, 27-28=0/1176, 26-27=0/1225, 25-26=0/1225, 24-25=-101/736, 22-24=-557/0, 21-22=-693/13, 20-21=-67/896, 19-20=0/1246, 18-19=0/1246, 17-18=0/521

WEBS 4-27=-75/24, 5-26=0/173, 9-22=-71/0, 2-29=-688/0, 2-28=0/389, 3-28=-336/0, 3-27=-109/150, 11-22=-953/0, 11-21=0/650, 12-21=-625/0, 12-20=0/368, 14-18=-433/0, 15-18=0/441, 15-17=-660/0, 8-22=-972/0, 8-24=0/669, 7-24=-641/0, 7-25=0/375, 14-19=-5/0, 13-20=-14/0, 14-20=-258/0, 6-25=0/192, 5-25=-586/0

NOTES

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

- 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: 17-29=-7, 1-16=-67
Concentrated Loads (lb)
Vert: 14=-201, 17=-58



June 13, 2025

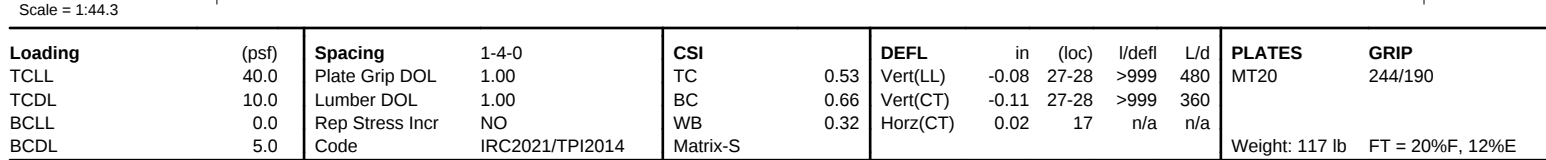
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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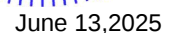
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BRACING		LOAD CASE(S)	Standard
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.	1)	Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.		Uniform Loads (lb/ft) Vert: 17-29=-7, 1-16=-67
REACTIONS	(size) 17=0-4-8, 22=0-4-8, 29=0-5-8 Max Grav 17=385 (LC 4), 22=1097 (LC 1).		Concentrated Loads (lb) Vert: 14=-133

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x3 ($\approx$) 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.



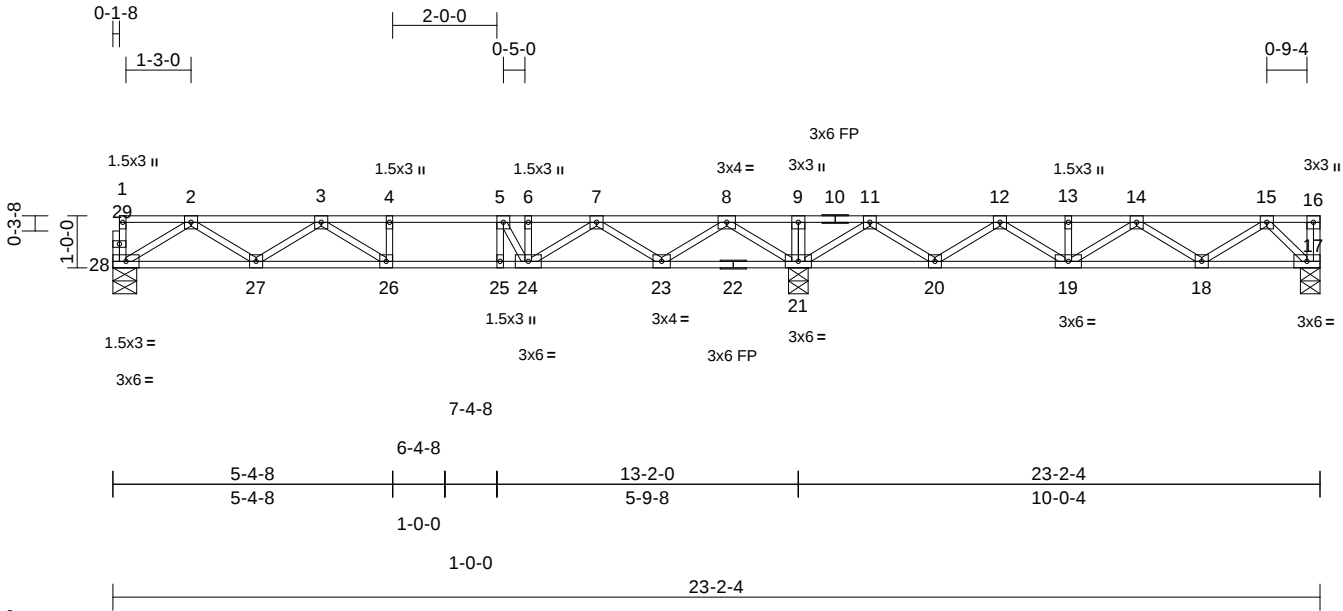
Job	Truss	Truss Type	Qty	Ply	Stonefield Rev 3-Elev 4 w/crawl-Floor
	1F13	Floor	2	1	Job Reference (optional)

I74175428

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.20 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:53
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Page: 1



Scale = 1:44.3

Loading	(psf)	Spacing	1-4-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.46	Vert(LL)	-0.08	26-27	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.59	Vert(CT)	-0.11	26-27	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.02	21	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 115 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 10-00-00 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

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=0-4-8, 21=0-4-8, 28=0-5-8
Max Grav 17=310 (LC 4), 21=1034 (LC 1), 28=408 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-28=-25/0, 16-17=0/2, 1-2=-2/0, 2-3=-926/0, 3-4=-1285/0, 4-5=-1285/0, 5-6=-1103/0, 6-7=-1103/0, 7-8=-339/165, 8-9=0/1212, 9-11=0/1212, 11-12=-335/500, 12-13=-737/181, 13-14=-737/181, 14-15=-541/23, 15-16=0/0
BOT CHORD 27-28=0/596, 26-27=0/1215, 25-26=0/1285, 24-25=0/1285, 23-24=-9/827, 21-23=-441/0, 20-21=-700/7, 19-20=-322/641, 18-19=-78/746, 17-18=0/312
WEBS 4-26=-84/15, 5-25=0/159, 9-21=-69/0, 2-28=-704/0, 2-27=0/403, 3-27=-353/0, 3-26=-83/176, 11-21=-794/0, 11-20=0/498, 12-20=-473/0, 12-19=0/217, 14-19=-124/0, 14-18=-250/67, 15-18=-37/279, 15-17=-437/0, 8-21=-958/0, 8-23=0/654, 7-23=-626/0, 13-19=-42/0, 7-24=0/361, 6-24=0/180, 5-24=-550/0

NOTES

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



June 13, 2025

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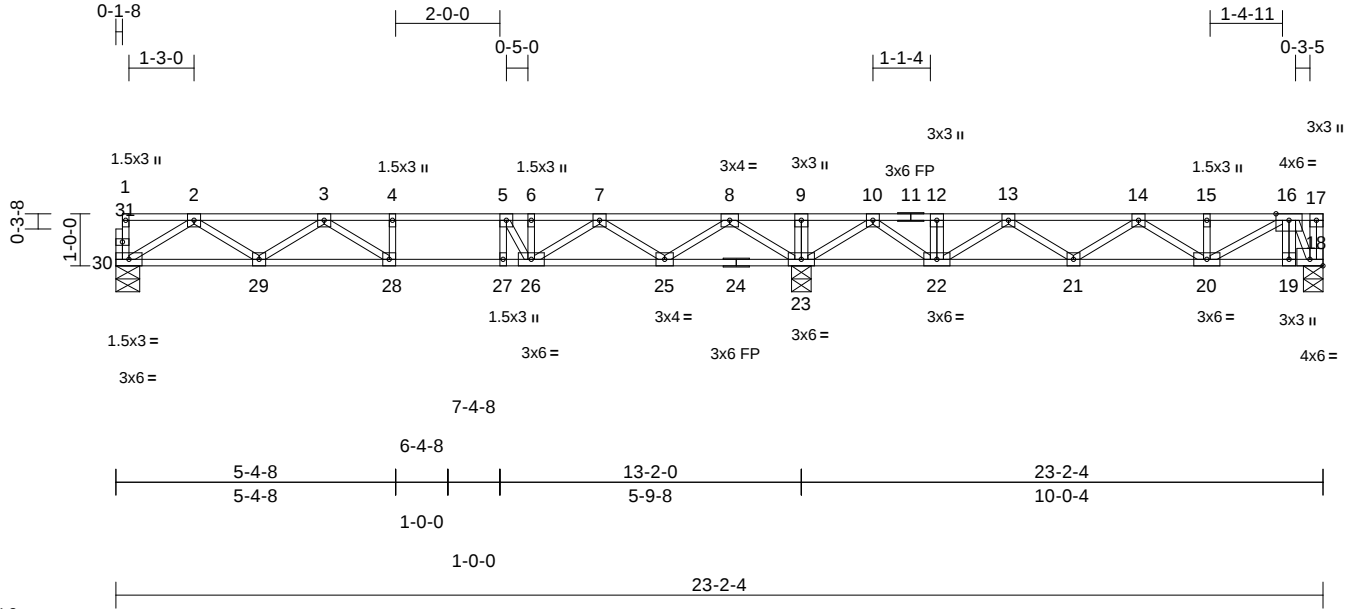
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Stonefield Rev 3-Elev 4 w/crawl-Floor
	1F12	Floor	1	1	174175429
Job Reference (optional)					

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:53
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Page: 1



Scale = 1:44.3									
Plate Offsets (X, Y): [18:Edge,0-1-8]									
Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in (loc)	l/defl	L/d
TCLL	40.0	Plate Grip DOL	1.00	TC	0.51	Vert(LL)	-0.08 28-29	>999	480
TCDL	10.0	Lumber DOL	1.00	BC	0.66	Vert(CT)	-0.11 28-29	>999	360
BCLL	0.0	Rep Stress Incr	NO	WB	0.31	Horz(CT)	0.02 23	n/a	n/a
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S					
Weight: 119 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) 18=0-4-8, 23=0-4-8, 30=0-5-8
Max Grav 18=336 (LC 4), 23=1095 (LC 1), 30=405 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-30=-25/0, 17-18=0/5, 1-2=-2/0, 2-3=-916/0, 3-4=-1262/0, 4-5=-1262/0, 5-6=-1074/0, 6-7=-1074/0, 7-8=-300/206, 8-9=0/1256, 9-10=0/1256, 10-12=-481/374, 12-13=-480/375, 13-14=-793/101, 14-15=-605/0, 15-16=-605/0, 16-17=0/0
BOT CHORD 29-30=0/591, 28-29=0/1201, 27-28=0/1262, 26-27=0/1262, 25-26=-45/792, 23-25=-487/0, 22-23=-663/25, 21-22=-210/754, 20-21=-19/806, 19-20=0/217, 18-19=0/218
WEBS 4-28=-80/19, 5-27=0/164, 9-23=-91/0, 2-30=-698/0, 2-29=0/398, 3-29=-347/0, 3-28=-93/166, 10-23=-868/0, 13-21=0/146, 14-21=-114/0, 14-20=-241/53, 8-23=-956/0, 8-25=0/660, 7-25=-632/0, 12-22=-135/0, 10-22=0/656, 13-22=-429/0, 16-19=0/9, 15-20=-74/0, 16-20=0/446, 16-18=-405/0, 7-26=0/366, 6-26=0/186, 5-26=-564/0

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

- 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: 18-30=-7, 1-17=-67
Concentrated Loads (lb)
Vert: 12=-71, 16=-13



June 13,2025

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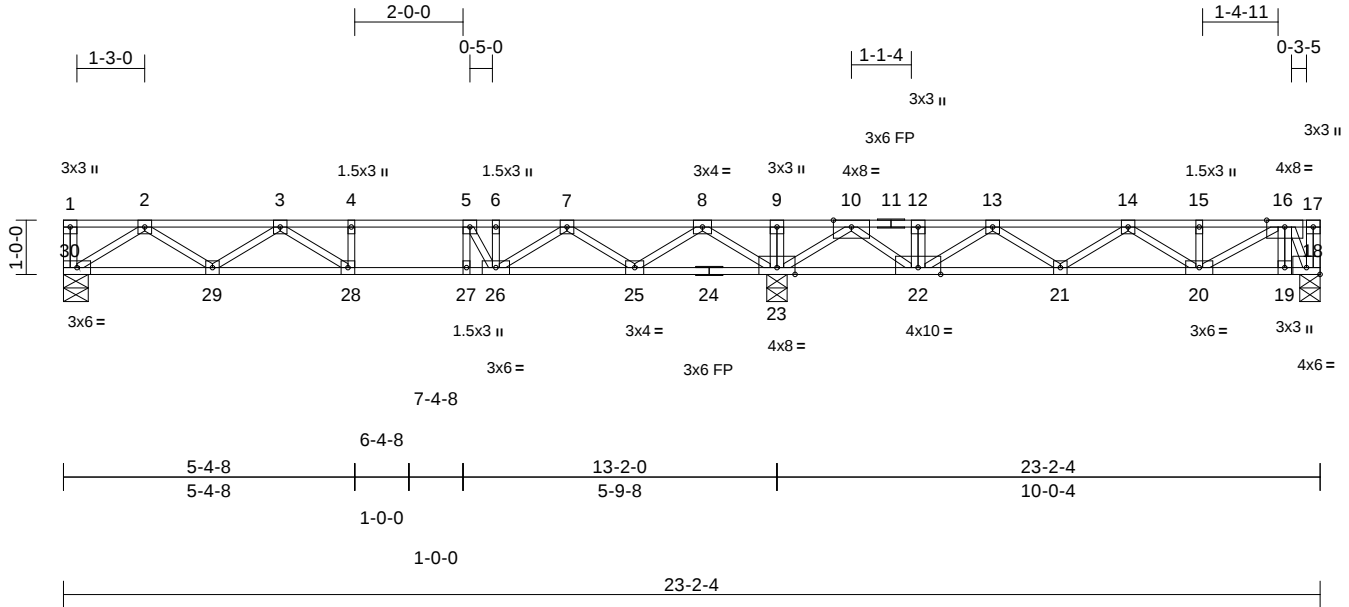
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Stonefield Rev 3-Elev 4 w/crawl-Floor
	1F11	Floor	1	1	174175430
Job Reference (optional)					

Structural, LLC, Thurmont, MD - 21788,

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Page: 1



Scale = 1:42.5

Plate Offsets (X, Y): [18: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	0.79	Vert(LL)	-0.08	28-29	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.74	Vert(CT)	-0.11	28-29	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.79	Horz(CT)	0.02	18	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 120 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=0-4-8, 23=0-4-8, 30=0-5-8
Max Grav 18=997 (LC 4), 23=1715 (LC 1), 30=374 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-30=-28/0, 17-18=-6/0, 1-2=0/0, 2-3=-817/0, 3-4=-1019/70, 4-5=-1019/70, 5-6=-757/246, 6-7=-757/246, 7-8=0/621, 8-9=0/1765, 9-10=0/1765, 10-12=-1685/0, 12-13=-1680/0, 13-14=-1697/0, 14-15=-1207/0, 15-16=-1207/0, 16-17=0/0
BOT CHORD 29-30=0/537, 28-29=0/1045, 27-28=-70/1019, 26-27=-70/1019, 25-26=-409/428, 23-25=-951/0, 22-23=-269/420, 21-22=0/1804, 20-21=0/1561, 19-20=0/631, 18-19=0/631
WEBS 4-28=-44/54, 5-27=0/219, 9-23=-101/0, 2-30=-637/0, 2-29=0/342, 3-29=-277/35, 3-28=-198/61, 10-23=-1939/0, 13-21=-130/0, 14-21=0/166, 14-20=-425/0, 8-23=-1010/0, 8-25=0/720, 7-25=-694/0, 12-22=-812/0, 13-22=-251/0, 10-22=0/1649, 15-20=-77/0, 16-19=-2/1, 16-20=0/662, 16-18=-1172/0, 7-26=0/423, 6-26=0/234, 5-26=-705/0

NOTES

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

- 3) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

- 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 18-30=-7, 1-17=-67
Concentrated Loads (lb)
Vert: 12=-760, 16=-570



June 13, 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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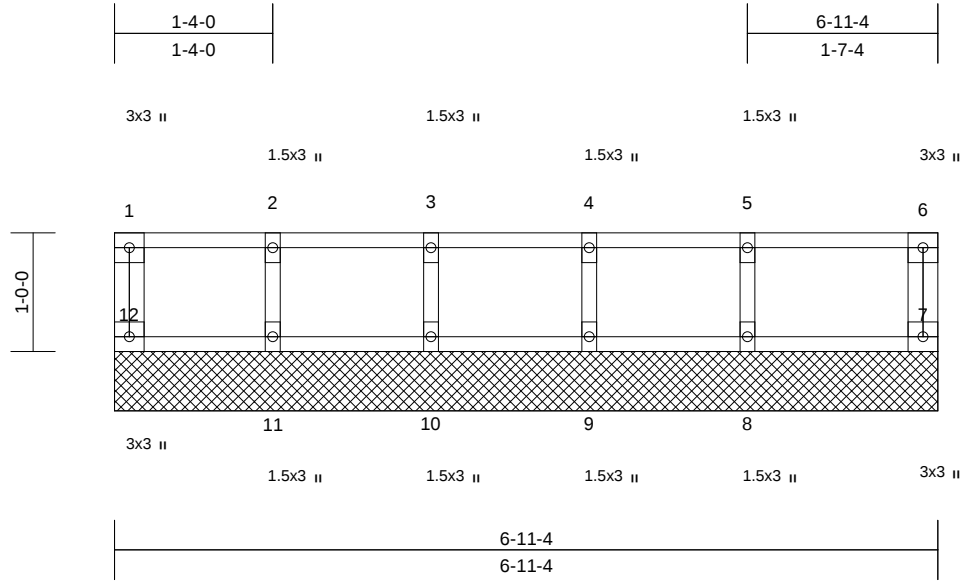
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Stonefield Rev 3-Elev 4 w/crawl-Floor	I74175431
	1FGE5	Floor Supported Gable	1	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:54
ID:fPTvHzu7SJp3b_tNndhd1nz85oV-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKwRCDoi7J4zJC?f

Page: 1



Scale = 1:19.4

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	0.07	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	n/a	999	
BCLL	0.0	Rep Stress Incr	NO	WB	0.02	Horiz(TL)	0.00	7	n/a	n/a	
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R						Weight: 30 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: 6=-156

BRACING

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

REACTIONS

(size) 7=6-11-4, 8=6-11-4, 9=6-11-4,
10=6-11-4, 11=6-11-4, 12=6-11-4
Max Grav 7=208 (LC 1), 8=107 (LC 1), 9=95 (LC 1), 10=100 (LC 1), 11=91 (LC 1), 12=45 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

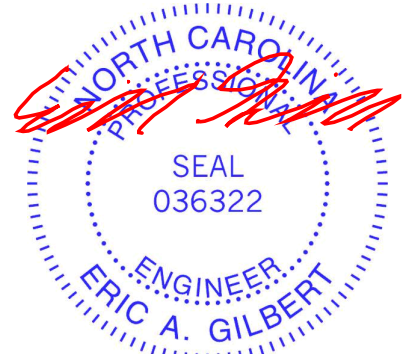
TOP CHORD 1-12=-39/0, 6-7=-204/0, 1-2=-12/0, 2-3=-12/0,
3-4=-12/0, 4-5=-12/0, 5-6=-12/0
BOT CHORD 11-12=0/12, 10-11=0/12, 9-10=0/12,
8-9=0/12, 7-8=0/12
WEBS 2-11=-85/0, 3-10=-91/0, 4-9=-86/0, 5-8=-97/0

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.
- 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)
Vert: 7-12=-7, 1-6=-67



June 13, 2025

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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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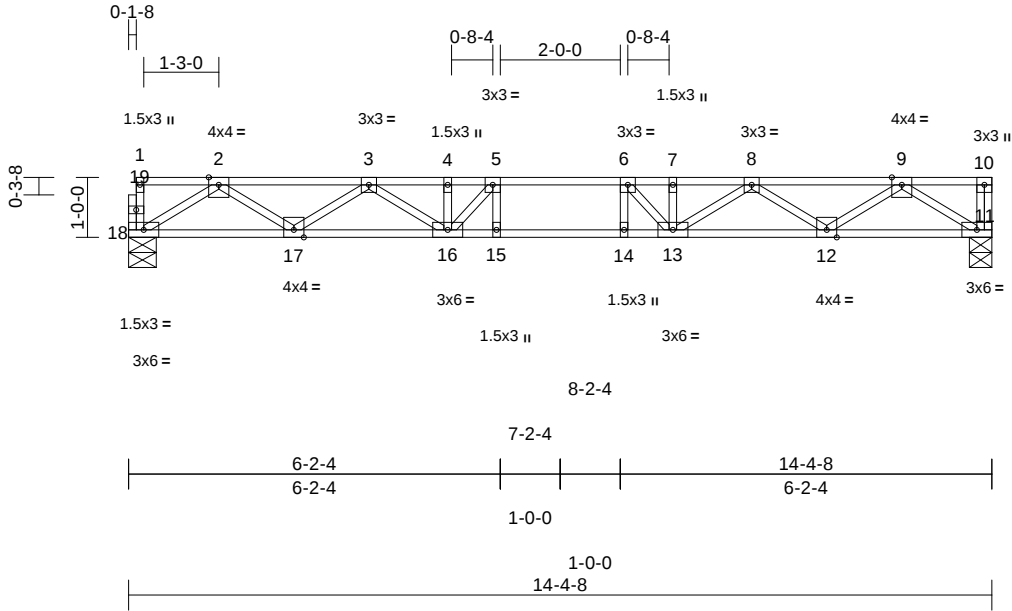
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Stonefield Rev 3-Elev 4 w/crawl-Floor	174175432
	1F1	Floor	8	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:50
ID:GKioSA?XOvPBzVmb13jKxlz86CA-RfC?PsB70Hq3NSgPqnL8w3uTXbGKWrCDoi7J4zJC?i

Page: 1



Scale = 1:38.4

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.47	Vert(LL)	-0.19	14-15	>886	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.97	Vert(CT)	-0.26	14-15	>641	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.05	11	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 72 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: 2'-2" oc bracing: 14-15.

REACTIONS (size) 11=0-4-8, 18=0-5-8
Max Grav 11=777 (LC 1), 18=771 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-18=-36/0, 10-11=-40/0, 1-2=-3/0, 2-3=-1852/0, 3-4=-2892/0, 4-5=-2892/0, 5-6=-3082/0, 6-7=-2892/0, 7-8=-2892/0, 8-9=-1853/0, 9-10=0/0

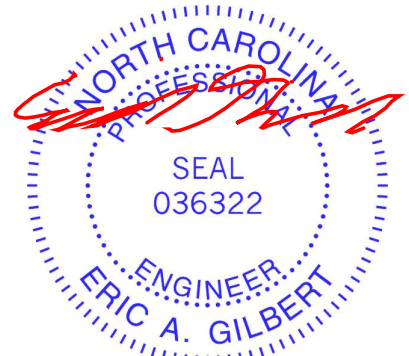
BOT CHORD 17-18=0/1137, 16-17=0/2526, 15-16=0/3082, 14-15=0/3082, 13-14=0/3082, 12-13=0/2526, 11-12=0/1138

WEBS 5-15=-111/138, 6-14=-111/138, 2-18=-1345/0, 2-17=0/873, 3-17=-823/0, 3-16=0/440, 4-16=-113/123, 9-11=-1349/0, 9-12=0/873, 8-12=-822/0, 8-13=0/440, 7-13=-113/123, 6-13=-581/69, 5-16=-581/69

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



June 13, 2025

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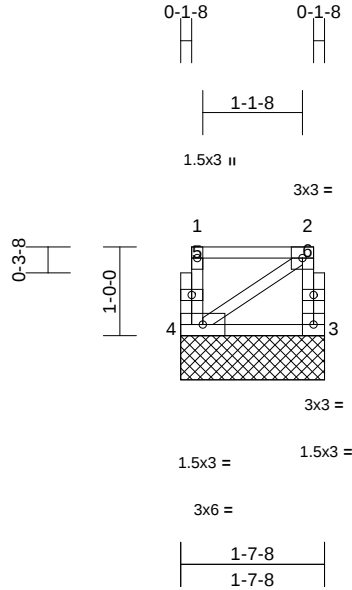
Job	Truss	Truss Type	Qty	Ply	Stonefield Rev 3-Elev 4 w/crawl-Floor
	1FGE7	Floor Supported Gable	2	1	Job Reference (optional)

I74175433

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:54
ID:ALHlFTR8IUHTTfpmSwpbzn8?xM-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?i

Page: 1



Scale = 1:26

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	0.11	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	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 10 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
 1-7-8 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc
 bracing.

REACTIONS (size) 3=1-7-8, 4=1-7-8
 Max Grav 3=69 (LC 1), 4=69 (LC 1)

FORCES (lb) - Maximum Compression/Maximum
 Tension

TOP CHORD 1-4=-63/0, 2-3=-63/0, 1-2=-4/0
 BOT CHORD 3-4=0/4
 WEBS 2-4=0/0

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



June 13, 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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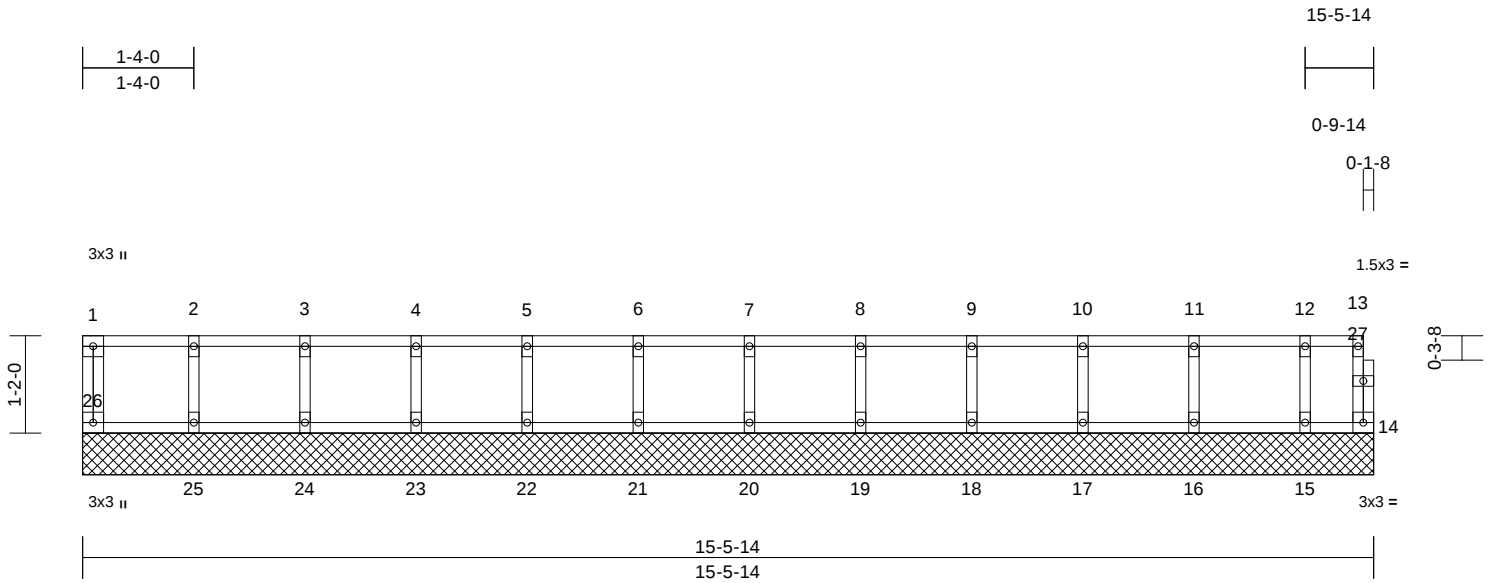
818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Stonefield Rev 3-Elev 4 w/crawl-Floor
	2FGE1	Floor Supported Gable	1	1	174175434
Job Reference (optional)					

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:57
ID:Az1?SZea?Mkr2mx8ZltoWFzuzO8-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 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	0.08	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	14	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R						Weight: 66 lb	FT = 20%F, 12%E

LUMBER

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

BRACING

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

REACTIONS (size) 14=15-5-14, 15=15-5-14, 16=15-5-14, 17=15-5-14, 18=15-5-14, 19=15-5-14, 20=15-5-14, 21=15-5-14, 22=15-5-14, 23=15-5-14, 24=15-5-14, 25=15-5-14, 26=15-5-14
Max Grav 14=26 (LC 1), 15=113 (LC 1), 16=153 (LC 1), 17=145 (LC 1), 18=147 (LC 1), 19=147 (LC 1), 20=147 (LC 1), 21=147 (LC 1), 22=147 (LC 1), 23=147 (LC 1), 24=147 (LC 1), 25=148 (LC 1), 26=59 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-26=-55/0, 13-14=-20/0, 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
BOT CHORD 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, 17-18=0/7, 16-17=0/7, 15-16=0/7, 14-15=0/7
WEBS 2-25=-133/0, 3-24=-134/0, 4-23=-133/0, 5-22=-133/0, 6-21=-133/0, 7-20=-133/0, 8-19=-133/0, 9-18=-134/0, 10-17=-132/0, 11-16=-138/0, 12-15=-107/0

NOTES

1) All plates are 1.5x3 (I) 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



June 13, 2025

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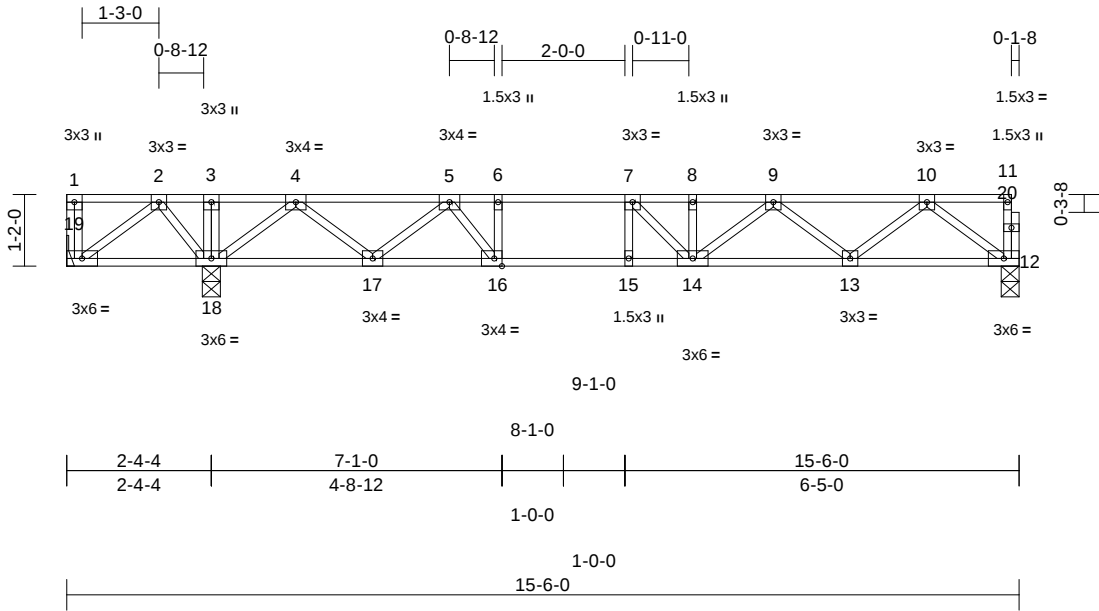
Job	Truss	Truss Type	Qty	Ply	Stonefield Rev 3-Elev 4 w/crawl-Floor
	2F1	Floor	1	1	Job Reference (optional)

I74175435

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:55
ID:ia2uyfFxEj1l2SmlVonXYnzuzNM-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:37.5

Plate Offsets (X, Y): [16:0-1-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.70	Vert(LL)	-0.12	14-15	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.50	Vert(CT)	-0.17	14-15	>916	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.37	Horz(CT)	0.02	12	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 82 lb	FT = 20%F, 12%E

LUMBER

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

- 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

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: 18-19,17-18.

REACTIONS

(size) 12=0-3-8, 18=0-3-8, 19= Mechanical
Max Uplift 19=-379 (LC 4)
Max Grav 12=638 (LC 4), 18=1326 (LC 1), 19=6 (LC 3)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-19=-56/0, 11-12=-34/0, 1-2=0/0, 2-3=0/894,
3-4=0/895, 4-5=-667/0, 5-6=-1660/0,
6-7=-1660/0, 7-8=-1808/0, 8-9=-1808/0,
9-10=-1223/0, 10-11=-2/0
BOT CHORD 18-19=-519/0, 17-18=-102/143,
16-17=0/1301, 15-16=0/1660, 14-15=0/1660,
13-14=0/1637, 12-13=0/783
WEBS 3-18=-79/0, 6-16=-376/0, 7-15=-200/0,
2-19=0/651, 2-18=-645/0, 4-18=-1183/0,
4-17=0/767, 5-17=-826/0, 5-16=0/686,
10-12=-979/0, 10-13=0/573, 9-13=-539/0,
9-14=0/218, 8-14=-177/0, 7-14=-103/296

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Refer to girder(s) for truss to truss connections.
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 379 lb uplift at joint 19.



June 13,2025

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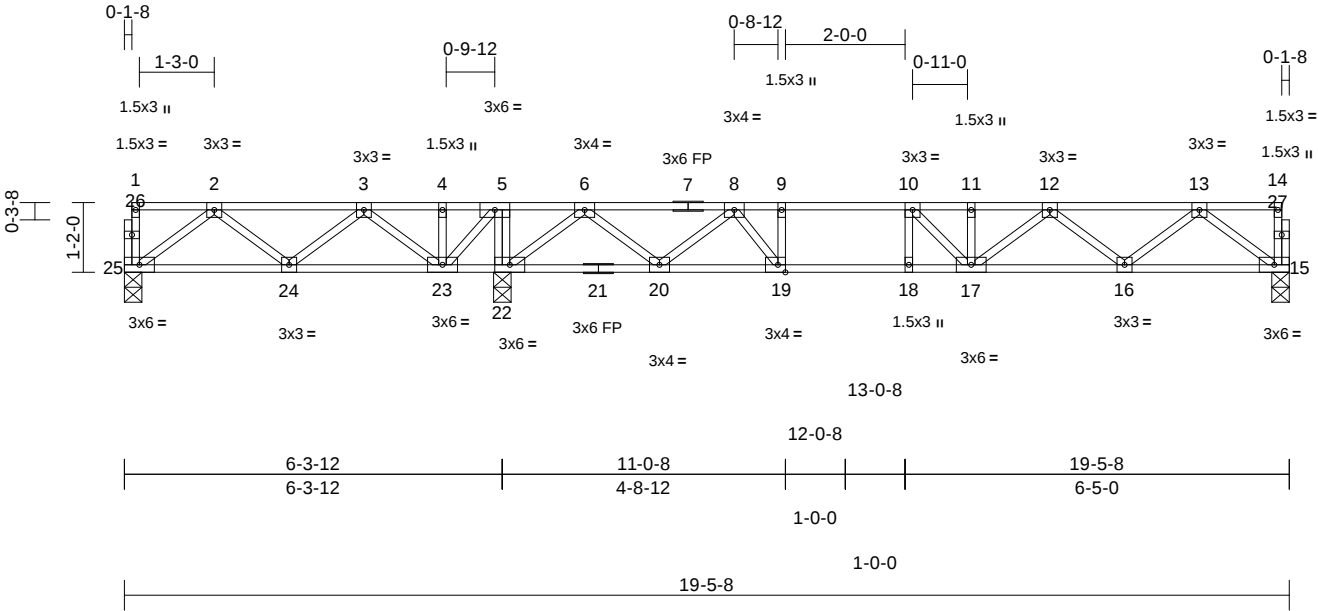
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Stonefield Rev 3-Elev 4 w/crawl-Floor
	2F2	Floor	1	1	I74175436
Job Reference (optional)					

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:55
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Page: 1



Scale = 1:38.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.72	Vert(LL)	-0.13	17-18	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.50	Vert(CT)	-0.17	17-18	>913	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.37	Horz(CT)	0.02	15	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 101 lb	FT = 20%F, 12%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat) *Except* 21-15:2x4 SP SS (flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

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

REACTIONS (size) 15=0-3-8, 22=0-3-8, 25=0-3-8
Max Uplift 25=-49 (LC 4)
Max Grav 15=643 (LC 4), 22=1287 (LC 1), 25=276 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-25=-33/0, 14-15=-34/0, 1-2=-2/0, 2-3=-318/218, 3-4=0/622, 4-5=0/622, 5-6=0/918, 6-8=-718/0, 8-9=-1695/0, 9-10=-1695/0, 10-11=-1832/0, 11-12=-1832/0, 12-13=-1235/0, 13-14=-2/0
BOT CHORD 24-25=-86/308, 23-24=-387/292, 22-23=-918/0, 20-22=-119/133, 19-20=0/1344, 18-19=0/1695, 17-18=0/1695, 16-17=0/1655, 15-16=0/789
WEBS 5-22=-531/0, 9-19=-383/0, 10-18=-207/0, 2-25=-384/108, 2-24=-172/13, 3-24=0/221, 3-23=-551/0, 6-22=-1188/0, 6-20=0/771, 8-20=-830/0, 8-19=0/701, 13-15=-987/0, 13-16=0/581, 12-16=-547/0, 12-17=0/225, 4-23=-81/0, 5-23=0/586, 11-17=-182/0, 10-17=-99/315

NOTES
1) 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) 25. 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



June 13,2025

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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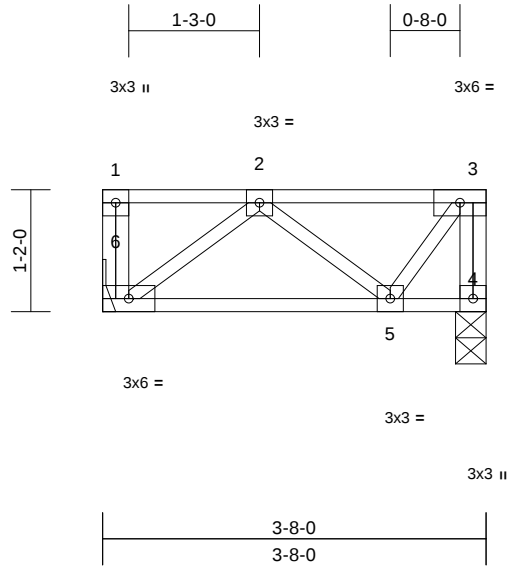
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Stonefield Rev 3-Elev 4 w/crawl-Floor
	2F20	Floor	1	1	Job Reference (optional)
					I74175437

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.20 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:57
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Page: 1



Scale = 1:22

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	0.25	Vert(LL)	0.00	5-6	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.10	Vert(CT)	-0.01	5-6	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.06	Horz(CT)	0.00	4	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 23 lb	FT = 20%F, 12%E

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or
3-8-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc
bracing.

REACTIONS (size) 4=0-3-8, 6= Mechanical
Max Grav 4=188 (LC 1), 6=188 (LC 1)

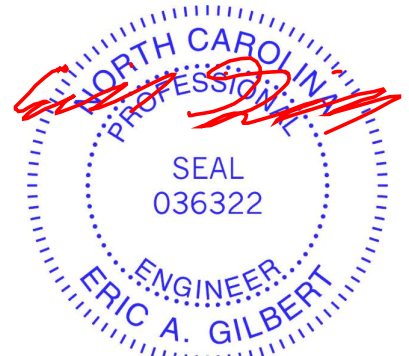
FORCES (lb) - Maximum Compression/Maximum
Tension

TOP CHORD 1-6=-40/0, 3-4=-191/0, 1-2=0/0, 2-3=-82/0
BOT CHORD 5-6=0/180, 4-5=0/0
WEBS 2-6=-226/0, 2-5=-128/0, 3-5=0/136

NOTES

- 1) Refer to girder(s) for truss to truss connections.
- 2) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard



June 13,2025

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Job	Truss	Truss Type	Qty	Ply	Stonefield Rev 3-Elev 4 w/crawl-Floor
	2F4	Floor	2	1	Job Reference (optional)

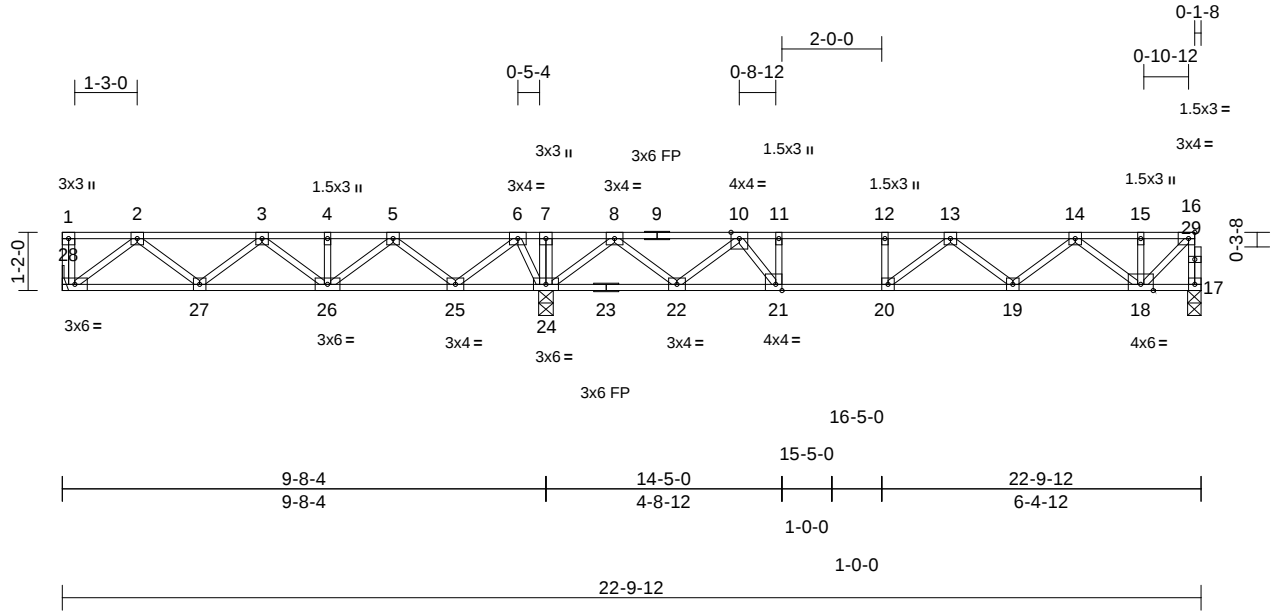
I74175438

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:55

Page: 1

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Scale = 1:46.2									
Plate Offsets (X, Y): [16:0-1-8,Edge], [21:0-1-8,Edge]									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl
TCLL	40.0	Plate Grip DOL	1.00	TC	0.54	Vert(LL)	-0.14	19-20	>999
TCDL	10.0	Lumber DOL	1.00	BC	0.88	Vert(CT)	-0.19	19-20	>809
BCLL	0.0	Rep Stress Incr	YES	WB	0.39	Horz(CT)	0.03	17	n/a
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S					n/a
					Weight: 118 lb FT = 20%F, 12%E				

LUMBER	
TOP CHORD	2x4 SP No.2(flat) *Except* 9-16:2x4 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, Except: 6-0-0 oc bracing: 25-26,24-25,22-24.
REACTIONS (size)	
17=0-3-4, 24=0-3-8, 28= Mechanical	
Max Grav 17=644 (LC 4), 24=1447 (LC 1), 28=463 (LC 3)	
FORCES (lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-28=-38/0, 16-17=-637/0, 1-2=0/0, 2-3=-771/0, 3-4=-883/97, 4-5=-883/97, 5-6=-240/442, 6-7=0/1110, 7-8=0/1110, 8-10=-738/94, 10-11=-1715/0, 11-12=-1715/0, 12-13=-1715/0, 13-14=-1555/0, 14-15=-616/0, 15-16=-616/0
BOT CHORD	27-28=0/545, 26-27=0/963, 25-26=-246/690, 24-25=-734/0, 22-24=-296/155, 21-22=0/1346, 20-21=0/1715, 19-20=0/1815, 18-19=0/1223, 17-18=0/38
WEBS	11-21=-498/0, 12-20=-63/99, 2-28=-684/0, 2-27=-9/294, 3-27=-250/54, 3-26=-196/0, 8-24=-1210/0, 8-22=0/792, 10-22=-834/0, 10-21=0/797, 4-26=-64/0, 5-26=0/340, 5-25=-677/0, 13-20=-293/91, 13-19=-339/0, 14-19=0/432, 14-18=-775/0, 15-18=-103/0, 16-18=0/826, 7-24=-47/47, 6-25=0/702, 6-24=-773/0

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x3 (=) MT20 unless otherwise indicated.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



June 13,2025

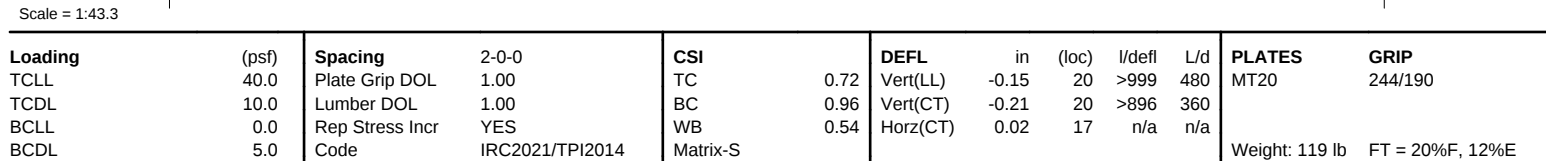
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:56 Page: 1
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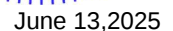
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 190 lb uplift at joint 28.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10'-00" oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION. Do not erect truss backwards.

LOAD CASE(S) Standard

FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-28=-37/0, 16-17=-34/0, 1-2=0/0, 2-3=-314/574, 3-4=0/1325, 4-5=0/1325, 5-6=0/2017, 6-8=-144/71, 8-9=-1551/0, 9-10=-1551/0, 10-11=-2256/0, 11-12=-2256/0, 12-13=-2212/0, 13-14=-2212/0, 14-15=-1437/0, 15-16=-2/0
BOT CHORD	27-28=-272/307, 26-27=-913/285, 25-26=-2017/0, 24-25=-808/0, 22-24=0/963, 21-22=0/1993, 20-21=0/2256, 19-20=0/2256, 18-19=0/1949, 17-18=0/894
WEBS	5-25=-739/0, 11-21=-375/0, 12-20=-138/46, 2-28=-386/341, 2-27=-393/9, 3-27=0/441, 3-26=-714/0, 6-25=-1529/0, 6-24=0/1121, 8-24=-1079/0, 8-22=0/761, 4-26=-128/0, 5-26=0/1127, 9-22=-114/0, 10-22=-578/0, 10-21=0/626, 15-17=-1119/0, 15-18=0/707, 14-18=-666/0, 14-19=0/336, 13-19=-167/48, 12-19=-329/186

NOTES

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



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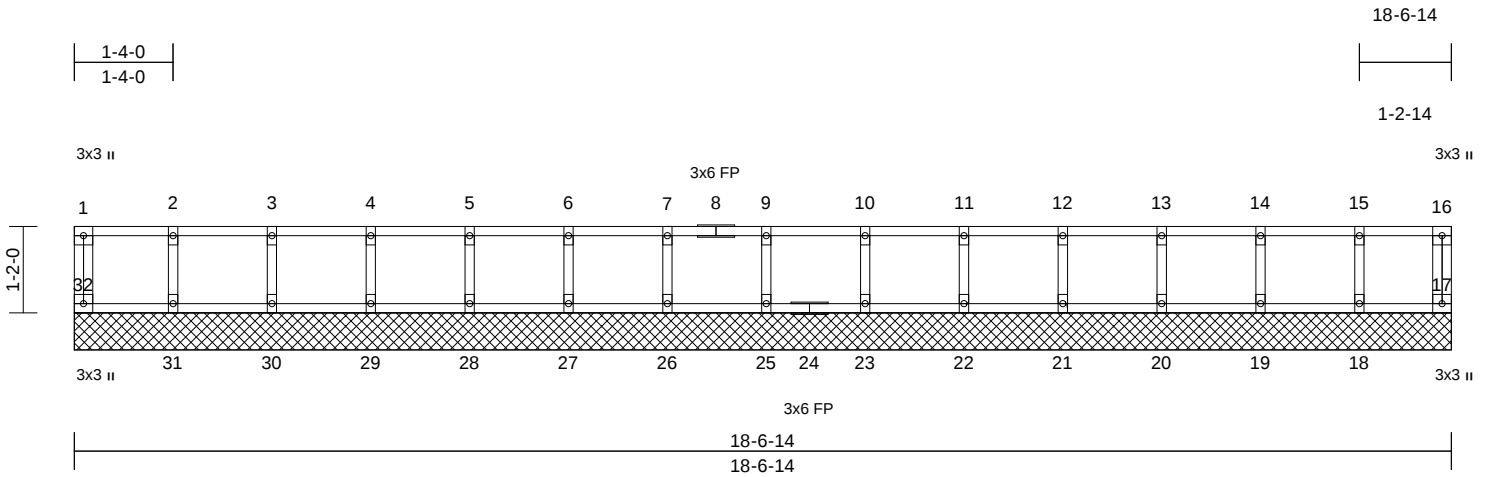
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Stonefield Rev 3-Elev 4 w/crawl-Floor
	2FGE4	Floor Supported Gable	1	1	174175440
Job Reference (optional)					

Structural, LLC, Thurmont, MD - 21788,

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Page: 1



Scale = 1:31.1

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	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	17	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R						Weight: 78 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

2-31=-105/0, 3-30=-107/0, 4-29=-106/0,
5-28=-107/0, 6-27=-107/0, 7-26=-107/0,
9-25=-107/0, 10-23=-107/0, 11-22=-107/0,
12-21=-107/0, 13-20=-106/0, 14-19=-108/0,
15-18=-100/0

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

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)	17=18-6-14, 18=18-6-14, 19=18-6-14, 20=18-6-14, 21=18-6-14, 22=18-6-14, 23=18-6-14, 25=18-6-14, 26=18-6-14, 27=18-6-14, 28=18-6-14, 29=18-6-14, 30=18-6-14, 31=18-6-14, 32=18-6-14
Max Grav	17=46 (LC 1), 18=109 (LC 1), 19=119 (LC 1), 20=117 (LC 1), 21=117 (LC 1), 22=117 (LC 1), 23=117 (LC 1), 25=117 (LC 1), 26=117 (LC 1), 27=117 (LC 1), 28=117 (LC 1), 29=117 (LC 1), 30=118 (LC 1), 31=115 (LC 1), 32=49 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-32=-45/0, 16-17=-41/0, 1-2=-7/0, 2-3=-7/0, 3-4=-7/0, 4-5=-7/0, 5-6=-7/0, 6-7=-7/0, 7-9=-7/0, 9-10=-7/0, 10-11=-7/0, 11-12=-7/0, 12-13=-7/0, 13-14=-7/0, 14-15=-7/0, 15-16=-7/0
BOT CHORD	31-32=0/7, 30-31=0/7, 29-30=0/7, 28-29=0/7, 27-28=0/7, 26-27=0/7, 25-26=0/7, 23-25=0/7, 22-23=0/7, 21-22=0/7, 20-21=0/7, 19-20=0/7, 18-19=0/7, 17-18=0/7



June 13, 2025

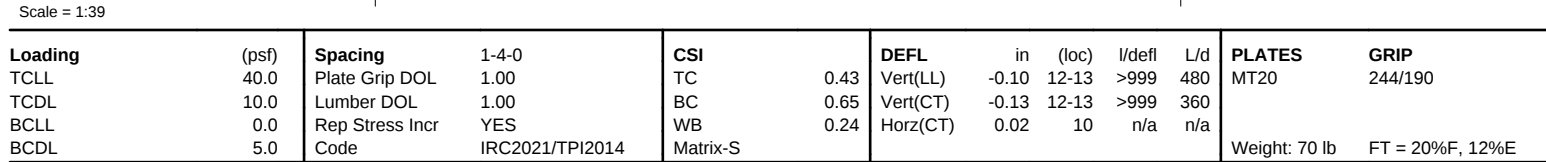
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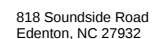
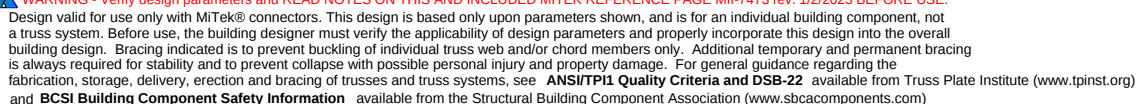
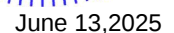
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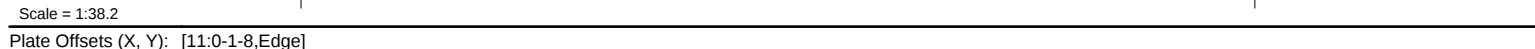
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LOAD CASE(S) Standard



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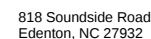
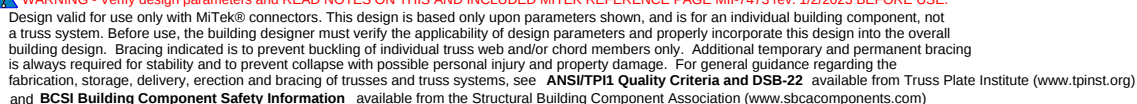
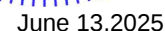
LUMBER	
TOP CHORD	2x4 SP No.2(flat)
BOT CHORD	2x4 SP No.2(flat)
WEBS	2x4 SP No.3(flat)
OTHERS	2x4 SP No.3(flat)

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
TOP CHORD	1-19=-26/0, 11-12=-567/0, 1-2=0/0, 2-3=-1173/0, 3-4=-1899/0, 4-5=-1899/0, 5-6=-2097/0, 6-7=-2097/0, 7-8=-2097/0, 8-9=-1505/0, 9-10=-567/0, 10-11=-567/0
BOT CHORD	18-19=0/709, 17-18=0/1616, 16-17=0/2068, 15-16=0/2097, 14-15=0/1861, 13-14=0/1140, 12-13=0/34
WEBS	6-16=-196/59, 7-15=-208/0, 2-19=-889/0, 2-18=0/604, 3-18=-577/0, 3-17=0/362, 4-17=-65/0, 5-17=-256/0, 5-16=-140/296, 8-15=0/458, 8-14=-463/0, 9-14=0/475, 9-13=-732/0, 10-13=-65/0, 11-13=0/753

- 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.

LOAD CASE(S) Standard

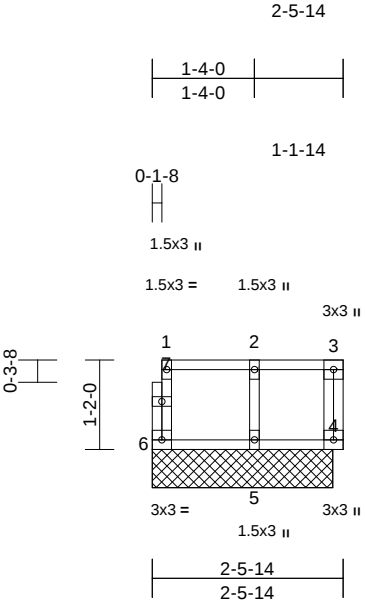


Job	Truss	Truss Type	Qty	Ply	Stonefield Rev 3-Elev 4 w/crawl-Floor
	2FGE5	Floor Supported Gable	1	1	Job Reference (optional)
					I74175443

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:58
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Page: 1



Scale = 1:30.1

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	0.04	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a	999	244/190
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: 14 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 2-5-14 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

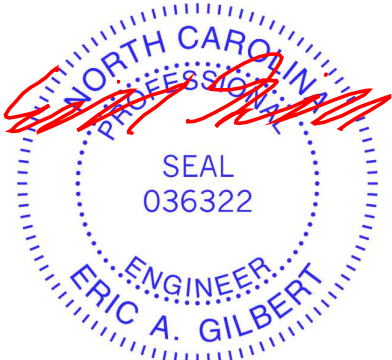
REACTIONS	(size)	4=2-4-4, 5=2-4-4, 6=2-4-4
	Max Grav	4=37 (LC 1), 5=84 (LC 1), 6=39 (LC 1)

FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-6=-36/0, 3-4=-32/0, 1-2=-7/0, 2-3=-7/0
BOT CHORD	5-6=0/7, 4-5=0/7
WEBS	2-5=-77/0

NOTES

- 1) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 2) Gable studs spaced at 1-4-0 oc.
- 3) Non Standard bearing condition. Review required.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



June 13,2025

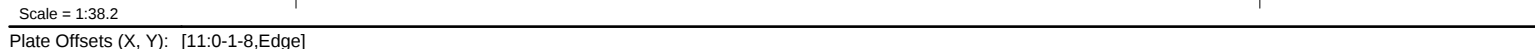
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:56 Page: 1
ID:asOO o893r9UH5Rjo3G2ATzuvza-RfC?PsB70Hq3NSaPqnL8w3uITXbGKWrcDOI7J4zJC?f



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)

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
TOP CHORD	1-19=-26/0, 11-12=-573/0, 1-2=0/0, 2-3=-1188/0, 3-4=-1930/0, 4-5=-1930/0, 5-6=-2139/0, 6-7=-2139/0, 7-8=-2139/0, 8-9=-1526/0, 9-10=-573/0, 10-11=-573/0
BOT CHORD	18-19=0/717, 17-18=0/1639, 16-17=0/2106, 15-16=0/2139, 14-15=0/1890, 13-14=0/1154, 12-13=0/34
WEBS	6-16=-176/45, 7-15=-214/0, 2-19=-899/0, 2-18=0/613, 3-18=-587/0, 3-17=0/371, 4-17=-63/0, 5-17=-252/0, 5-16=-134/291, 8-15=0/476, 8-14=-474/0, 9-14=0/484, 9-13=-742/0, 10-13=-65/0, 11-13=0/762

- 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.

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

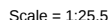
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MIT-1473 (rev. 1/2/2023) BEFORE USE.

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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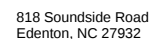
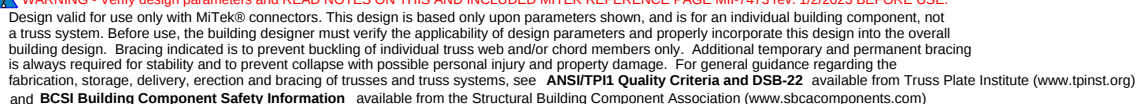
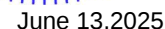
Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:58 Page: 1
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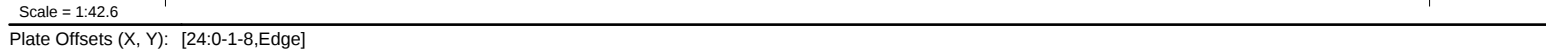
Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.75	Vert(LL)	-0.03	7-8	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.83	Vert(CT)	-0.05	7-8	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.61	Horz(CT)	0.02	6	n/a	n/a		
BCDL	5.0	Code	IRC2021/TP12014	Matrix-P							Weight: 38 lb	FT = 20%F, 12%E

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 3) Gable studs spaced at 2-0-0 oc.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) Use Simpson Strong-Tie THA422 (Single Chord Girder) or equivalent spaced at 2-0-0 oc max. starting at 1-9-4 from the left end to 5-9-4 to connect truss(es) to front face of top chord.
- 6) Use Simpson Strong-Tie THA422 (Single Chord Girder) or equivalent spaced at 2-3-8 oc max. starting at 0-1-12 from the left end to 4-5-4 to connect truss(es) to back face of top chord.
- 7) Fill all nail holes where hanger is in contact with lumber.

- 1) Dead + Floor Live (balanced): Lumber Increase=1.00,
Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 6-9=-7, 1-5=-67
Concentrated Loads (lb)
Vert: 1=-154 (B), 2=-599 (F), 3=-599 (F), 5=-246 (B),
10=-396 (B), 11=-396 (B), 12=-609 (F)



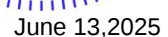
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LUMBER		3) Refer to girder(s) for truss to truss connections.
TOP CHORD	2x4 SP No.2(flat)	4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
BOT CHORD	2x4 SP SS(flat) *Except* 23-17:2x4 SP No.2 (flat)	
WEBS	2x4 SP No.3(flat)	5) CAUTION, Do not erect truss backwards.
BRACING		LOAD CASE(S) Standard
TOP CHORD	Structural wood sheathing directly applied or	

NOTES

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

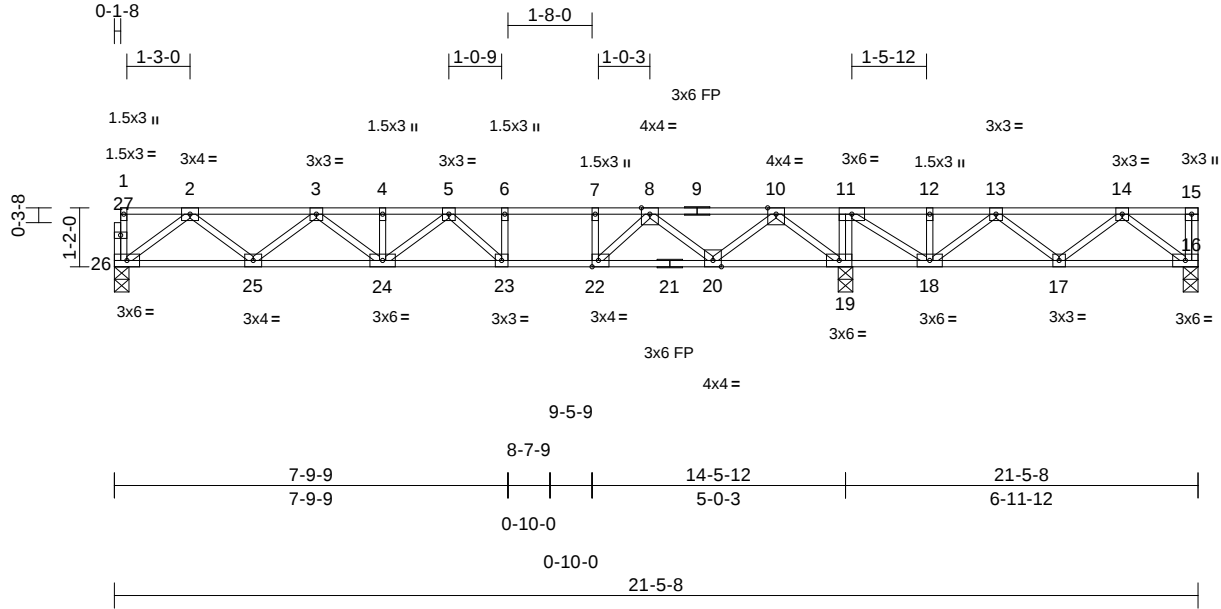


Job	Truss	Truss Type	Qty	Ply	Stonefield Rev 3-Elev 4 w/crawl-Floor	174175447
	2F15	Floor	1	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:57
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Page: 1



Scale = 1:45.6

Plate Offsets (X, Y): [22:0-1-8,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)	-0.16	23-24	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.56	Vert(CT)	-0.22	23-24	>793	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.43	Horz(CT)	0.02	19	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) *Except* 9-15:2x4 SP No.2 (flat)
BOT CHORD	2x4 SP SS(flat) *Except* 21-16:2x4 SP No.2 (flat)
WEBS	2x4 SP No.3(flat)
OTHERS	2x4 SP No.3(flat)

BRACING

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

REACTIONS	(size)	16=0-3-8, 19=0-3-8, 26=0-3-8
	Max Uplift	16=-68 (LC 3)
	Max Grav	16=306 (LC 4), 19=1446 (LC 1), 26=702 (LC 3)

FORCES

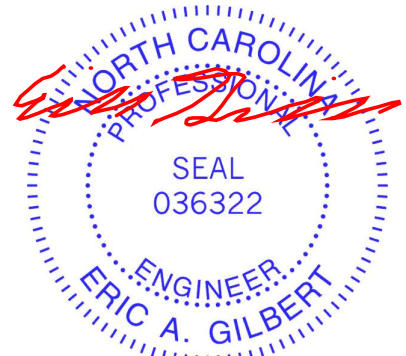
	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-26=-35/0, 15-16=-37/0, 1-2=-2/0, 2-3=-1381/0, 3-4=-2117/0, 4-5=-2117/0, 5-6=-1930/0, 6-7=-1930/0, 7-8=-1930/0, 8-10=-650/0, 10-11=0/1203, 11-12=-118/722, 12-13=-118/722, 13-14=-380/268, 14-15=0/0
BOT CHORD	25-26=0/864, 24-25=0/1878, 23-24=0/2179, 22-23=0/1930, 20-22=0/1371, 19-20=-197/0, 18-19=-1203/0, 17-18=-462/381, 16-17=-112/342
WEBS	6-23=-44/178, 7-22=-433/0, 11-19=-602/0, 2-26=-1081/0, 2-25=0/673, 3-25=-647/0, 3-24=0/305, 4-24=-65/0, 5-24=-123/5, 5-23=-459/40, 14-16=-428/141, 14-17=-203/50, 13-17=-2/253, 13-18=-530/0, 10-19=-1328/0, 10-20=0/908, 8-20=-957/0, 8-22=0/879, 12-18=-123/0, 11-18=0/858

NOTES

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

- 2) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 16. This connection is for uplift only and does not consider lateral forces.
- 3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 4) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



June 13,2025

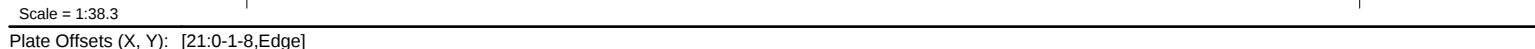
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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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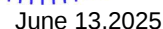
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LUMBER	LOAD CASE(S)	Standard
--------	--------------	----------

FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-23=-37/0, 13-14=-39/0, 1-2=0/0, 2-3=-2088/0, 3-4=-3724/0, 4-5=-3724/0, 5-6=-3724/0, 6-7=-4395/0, 7-9=-4246/0, 9-10=-3568/0, 10-11=-3568/0, 11-12=-2131/0, 12-13=0/0
BOT CHORD	22-23=0/1249, 21-22=0/3022, 20-21=0/3724, 19-20=0/4395, 17-19=0/4424, 16-17=0/4059, 15-16=0/2972, 14-15=0/1257
WEBS	4-21=-721/0, 2-23=-1568/0, 2-22=0/1091, 3-22=-1215/0, 3-21=0/1300, 12-14=-1577/0, 12-15=0/1138, 11-15=-1095/0, 11-16=0/762, 10-16=-57/0, 9-16=-626/0, 9-17=0/244, 7-17=-232/0, 7-19=-103/144, 6-19=-29/278, 5-20=-43/268, 6-20=-1001/0

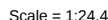
- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at X' X' or otherwise or restrained by other means.



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LUMBER

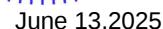
BRACING

WEBS 2-9=-1220/0, 3-7=-535/0, 2-8=0/316,
3-8=-260/0, 4-7=0/912, 4-6=-918/0

NOTES

- LOAD CASE(S) Standard

- 1) Dead + Floor Live (balanced): Lumber Increase=1.00,
Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 6-9=-10, 1-3=250, 3-5=-100
Concentrated Loads (lb)
Vert: 3=-310



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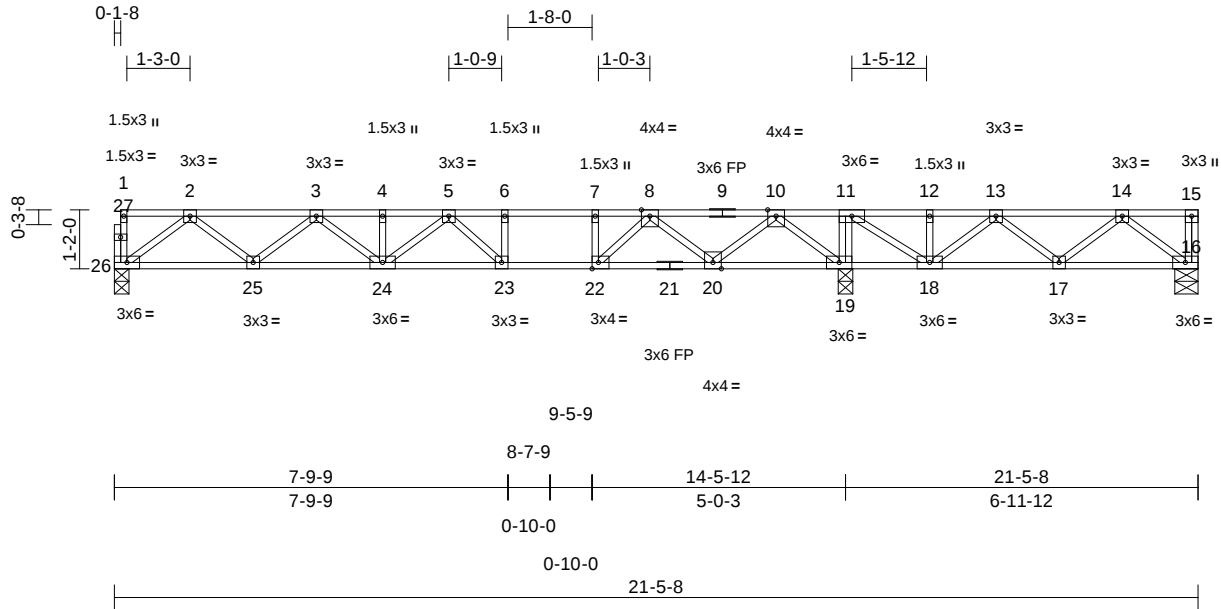
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Stonefield Rev 3-Elev 4 w/crawl-Floor
	2F13	Floor	1	1	174175450
Job Reference (optional)					

Structural, LLC, Thurmont, MD - 21788,

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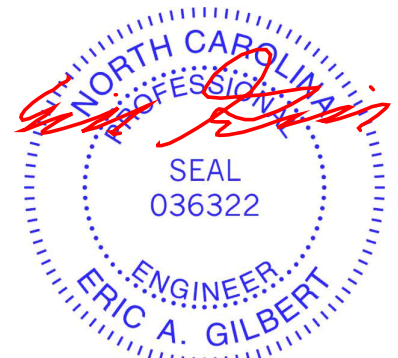
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Plate Offsets (X, Y): [22:0-1-8, Edge]									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in (loc)	l/defl	L/d
TCLL	40.0	Plate Grip DOL	1.00	TC	0.95	Vert(LL)	-0.18 23-24	>967	480
TCDL	10.0	Lumber DOL	1.00	BC	0.55	Vert(CT)	-0.25 23-24	>701	360
BCLL	0.0	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.02 19	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 SS(flat) *Except* 21-16:2x4 SP No.2 (flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)
BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
REACTIONS (size) 16=0-5-8, 19=0-3-8, 26=0-3-8
Max Uplift 16=-75 (LC 3)
Max Grav 16=306 (LC 4), 19=1455 (LC 1), 26=698 (LC 3)
FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-26=-34/0, 15-16=-37/0, 1-2=-2/0, 2-3=-1372/0, 3-4=-2104/0, 4-5=-2104/0, 5-6=-1904/0, 6-7=-1904/0, 7-8=-1904/0, 8-10=-611/0, 10-11=0/1240, 11-12=-115/755, 12-13=-115/755, 13-14=-378/285, 14-15=0/0
BOT CHORD 25-26=0/859, 24-25=0/1868, 23-24=0/2152, 22-23=0/1904, 20-22=0/1342, 19-20=-228/0, 18-19=-1240/0, 17-18=-488/379, 16-17=-121/341
WEBS 6-23=-48/148, 7-22=-404/0, 11-19=-606/0, 2-26=-1076/0, 2-25=0/668, 3-25=-645/0, 3-24=0/301, 4-24=-65/0, 5-24=-116/14, 5-23=-451/35, 14-16=-427/152, 14-17=-214/49, 13-17=-1/264, 13-18=-539/0, 10-19=-1333/0, 10-20=0/907, 8-20=-970/0, 8-22=0/873, 12-18=-123/0, 11-18=0/868

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

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 75 lb uplift at joint 16.
- 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



June 13, 2025

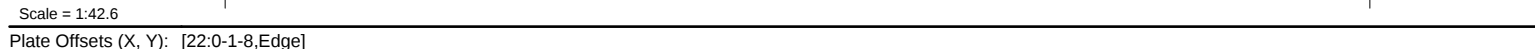
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:57 Page: 1
ID:kHCJpA1iZ RsSv8TGRiThBzrLT2-RfC?PsB70Hg3NSqPantL8w3ulTXbGKWCrDcoi7J4zJC?r



LUMBER		3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 71 lb uplift at joint 16.
TOP CHORD	2x4 SP No.2(flat)	
BOT CHORD	2x4 SP SS(flat) *Except* 21-16:2x4 SP No.2 (flat)	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.
WEBS	2x4 SP No.3(flat)	5) CAUTION, Do not erect truss backwards.
BRACING		LOAD CASE(S) Standard
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) 16=0-5-8, 19=0-3-8, 26= Mechanical	
	Max Uplift 16=-71 (LC 3)	
	Max Grav 16=307 (LC 4), 19=1436 (LC 1), 26=689 (LC 3)	
FORCES	(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-26=-38/0, 15-16=-37/0, 1-2=0/0, 2-3=-1333/0, 3-4=-2022/0, 4-5=-2022/0, 5-6=-1830/0, 6-7=-1830/0, 7-8=-1830/0, 8-10=-595/0, 10-11=0/1219, 11-12=-118/738, 12-13=-118/738, 13-14=-380/276, 14-15=0/0	
BOT CHORD	25-26=0/840, 24-25=0/1806, 23-24=0/2041, 22-23=0/1830, 20-22=0/1302, 19-20=-225/0, 18-19=-1219/0, 17-18=-475/381, 16-17=-116/342	
WEBS	6-23=-48/199, 7-22=-389/0, 11-19=-603/0, 2-26=-1053/0, 2-25=0/642, 3-25=-616/0, 3-24=0/276, 4-24=-73/0, 5-24=-111/58, 5-23=-453/31, 14-16=-429/146, 14-17=-208/50, 13-17=-2/258, 13-18=-534/0, 10-19=-1307/0, 10-20=0/885, 8-20=-938/0, 8-22=0/829, 12-18=-123/0, 11-18=0/863	

 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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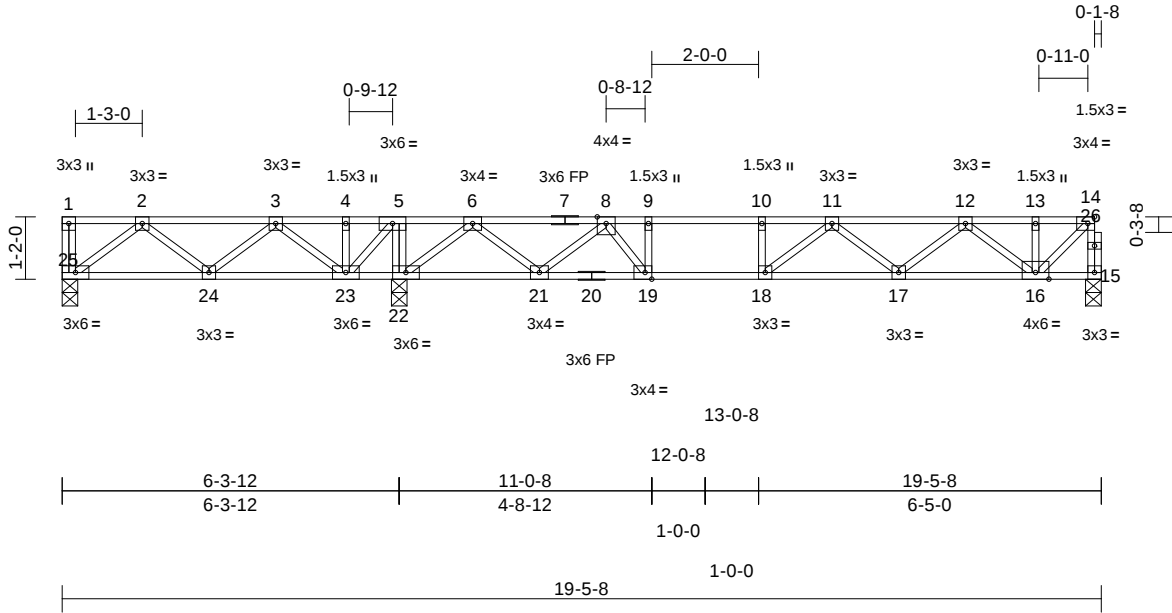
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Stonefield Rev 3-Elev 4 w/crawl-Floor
	2F3	Floor	1	1	Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:55
ID:1taZBACv1B?DQ0UD7CgpEkzrLf-RfC?PsB70Hq3NSgPqnL8w3uITXbGKwRCDoi7J4zJC?f

Page: 1



Scale = 1:43.1									
Plate Offsets (X, Y): [14:0-1-8,Edge], [19:0-1-8,Edge]									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl
TCLL	40.0	Plate Grip DOL	1.00	TC	0.99	Vert(LL)	-0.16	17-18	>993
TCDL	10.0	Lumber DOL	1.00	BC	0.94	Vert(CT)	-0.22	17-18	>724
BCLL	0.0	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.02	15	n/a
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S					n/a
									PLATES
									MT20
									GRIP
									244/190
									Weight: 102 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, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
REACTIONS	
(size)	15=0-3-8, 22=0-3-8, 25=0-3-8
Max Uplift	25=-45 (LC 4)
Max Grav	15=645 (LC 4), 22=1280 (LC 1), 25=285 (LC 3)
FORCES	
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-25=-37/0, 14-15=-636/0, 1-2=0/0, 2-3=-327/210, 3-4=-4/607, 4-5=-4/607, 5-6=0/933, 6-8=-733/0, 8-9=-1716/0, 9-10=-1716/0, 10-11=-1716/0, 11-12=-1564/0, 12-13=-627/0, 13-14=-627/0
BOT CHORD	24-25=-82/313, 23-24=-376/304, 22-23=-933/0, 21-22=-132/152, 19-21=0/1349, 18-19=0/1716, 17-18=0/1816, 16-17=0/1234, 15-16=0/38
WEBS	9-19=-436/0, 10-18=-86/53, 2-25=-393/103, 2-24=-167/18, 3-24=0/216, 3-23=-555/0, 6-22=-1188/0, 6-21=0/766, 8-21=-815/0, 8-19=0/727, 4-23=-81/0, 5-23=0/590, 11-18=-228/133, 11-17=-328/0, 12-17=0/430, 12-16=-775/0, 13-16=-102/0, 14-16=0/832, 5-22=-533/0

NOTES
1) 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) 25. 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



June 13,2025

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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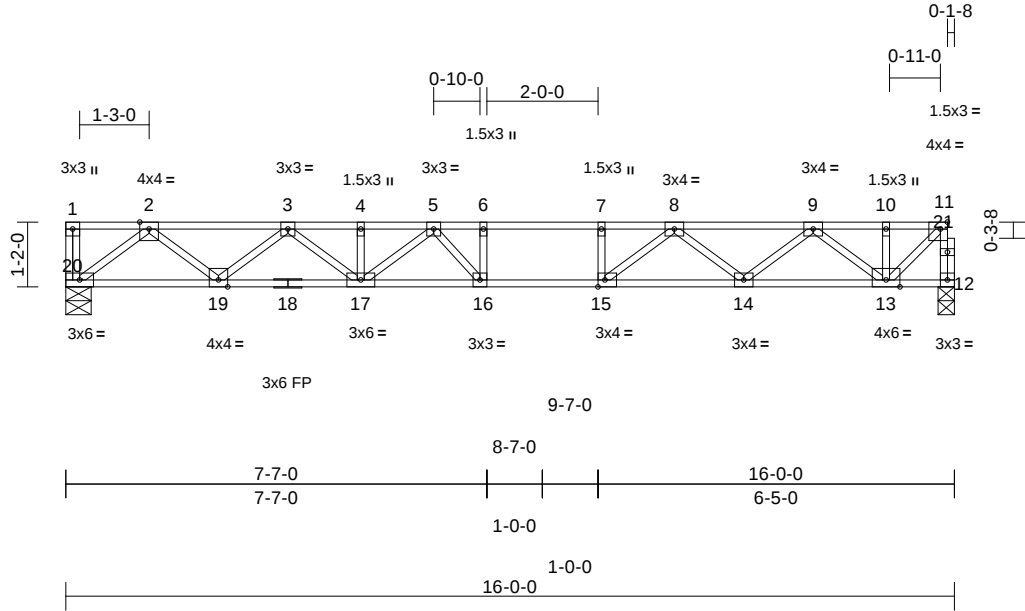
Job	Truss	Truss Type	Qty	Ply	Stonefield Rev 3-Elev 4 w/crawl-Floor
	2F6	Floor	2	1	Job Reference (optional)

I74175453

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:56
ID:BRmHQpR0vXmBaC_kqUUg5FzrLbZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:41.5									
Plate Offsets (X, Y): [11:0-1-8,Edge], [15:0-1-8,Edge]									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in (loc)	l/defl	L/d
TCLL	40.0	Plate Grip DOL	1.00	TC	0.72	Vert(LL)	-0.21 16-17	>883	480
TCDL	10.0	Lumber DOL	1.00	BC	0.68	Vert(CT)	-0.29 16-17	>643	360
BCLL	0.0	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.05 12	n/a	n/a
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S					
								Weight: 83 lb	FT = 20%F, 12%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat) *Except* 18-12:2x4 SP SS (flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

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

REACTIONS (size) 12=0-3-8, 20=0-5-8
Max Grav 12=860 (LC 1), 20=866 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-20=-39/0, 11-12=-859/0, 1-2=0/0, 2-3=-1782/0, 3-4=-2893/0, 4-5=-2893/0, 5-6=-3208/0, 6-7=-3208/0, 7-8=-3208/0, 8-9=-2288/0, 9-10=-860/0, 10-11=-860/0
BOT CHORD 19-20=0/1075, 17-19=0/2459, 16-17=0/3158, 15-16=0/3208, 14-15=0/2837, 13-14=0/1731, 12-13=0/51
WEBS 6-16=-251/45, 7-15=-302/0, 2-20=-1348/0, 2-19=0/921, 3-19=-881/0, 3-17=0/555, 4-17=-91/0, 5-17=-387/0, 5-16=-192/429, 8-15=0/706, 8-14=-715/0, 9-14=0/725, 9-13=-1112/0, 10-13=-96/0, 11-13=0/1143

- NOTES**
- 1) Unbalanced floor live loads have been considered for this design.
 - 2) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
 - 3) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



June 13,2025

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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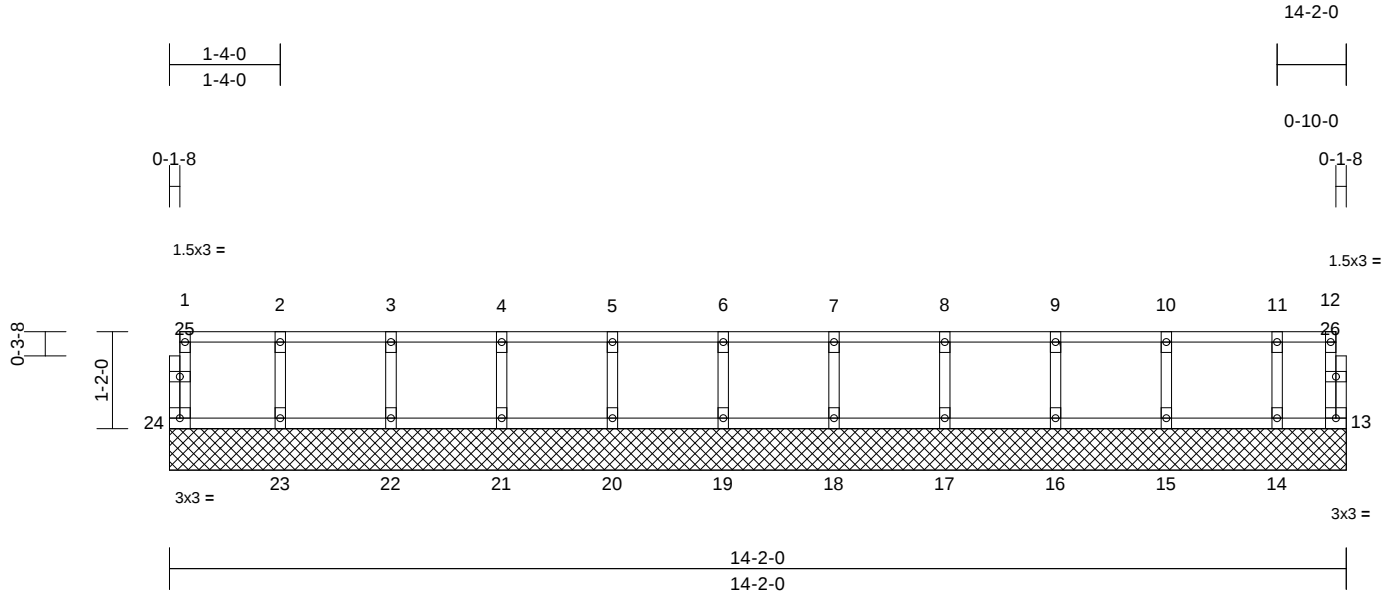
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Stonefield Rev 3-Elev 4 w/crawl-Floor	174175454
	2FGE3	Floor Supported Gable	1	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:58
ID:64cvPTB4XM5b?0Yq?Gfkwwzr?FL-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC?f

Page: 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	0.08	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	0.00	13	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R						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)

- 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

BRACING

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

REACTIONS (size) 13=14-2-0, 14=14-2-0, 15=14-2-0, 16=14-2-0, 17=14-2-0, 18=14-2-0, 19=14-2-0, 20=14-2-0, 21=14-2-0, 22=14-2-0, 23=14-2-0, 24=14-2-0
Max Grav 13=27 (LC 1), 14=113 (LC 1), 15=153 (LC 1), 16=145 (LC 1), 17=147 (LC 1), 18=147 (LC 1), 19=147 (LC 1), 20=147 (LC 1), 21=147 (LC 1), 22=147 (LC 1), 23=147 (LC 1), 24=53 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-24=-49/0, 12-13=-21/0, 1-2=-6/0, 2-3=-6/0, 3-4=-6/0, 4-5=-6/0, 5-6=-6/0, 6-7=-6/0, 7-8=-6/0, 8-9=-6/0, 9-10=-6/0, 10-11=-6/0, 11-12=-6/0
BOT CHORD 23-24=0/6, 22-23=0/6, 21-22=0/6, 20-21=0/6, 19-20=0/6, 18-19=0/6, 17-18=0/6, 16-17=0/6, 15-16=0/6, 14-15=0/6, 13-14=0/6
WEBS 2-23=-132/0, 3-22=-134/0, 4-21=-133/0, 5-20=-133/0, 6-19=-133/0, 7-18=-133/0, 8-17=-134/0, 9-16=-132/0, 10-15=-138/0, 11-14=-107/0

NOTES

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



June 13, 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	Stonefield Rev 3-Elev 4 w/crawl-Floor
	2F11	Floor	6	1	Job Reference (optional)

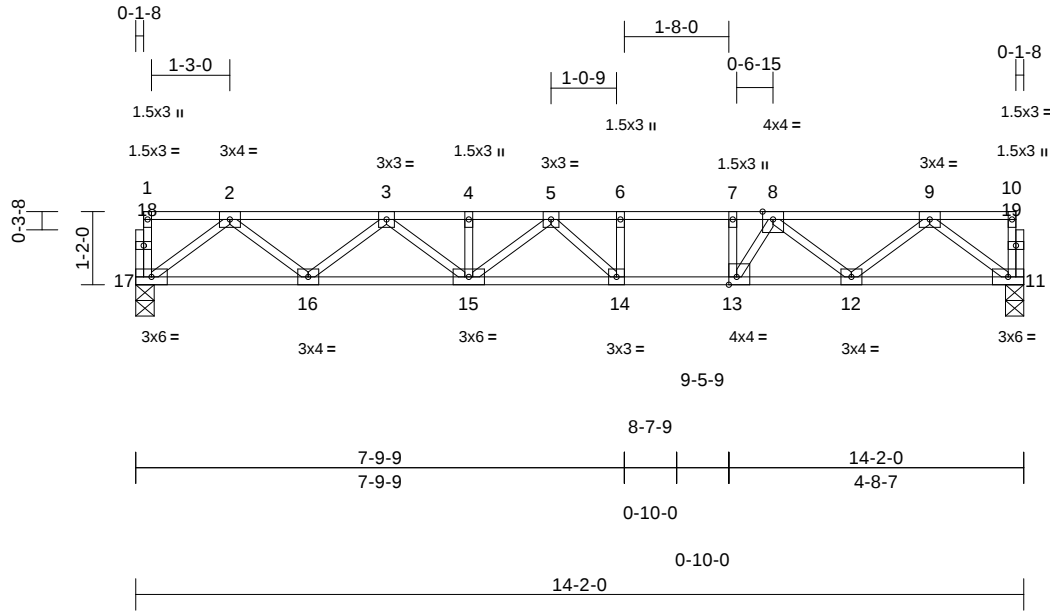
I74175455

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.20 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:56

Page: 1

ID:pS9qNFu1A_3_7KjDbDE5xsZr?Fj-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:36.8

Plate Offsets (X, Y): [13:0-1-8,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	0.89	Vert(LL)	-0.17	14-15	>985	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.51	Vert(CT)	-0.23	14-15	>713	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.36	Horz(CT)	0.03	11	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 73 lb	FT = 20%F, 12%E

LUMBER

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

BRACING

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

REACTIONS (size) 11=0-3-8, 17=0-3-8
 Max Grav 11=759 (LC 1), 17=759 (LC 1)

FORCES (lb) - Maximum Compression/Maximum
 Tension

TOP CHORD 1-17=-35/0, 10-11=-34/0, 1-2=-2/0,
 2-3=-1526/0, 3-4=-2399/0, 4-5=-2399/0,
 5-6=-2404/0, 6-7=-2404/0, 7-8=-2404/0,
 8-9=-1512/0, 9-10=-2/0

BOT CHORD 16-17=0/940, 15-16=0/2090, 14-15=0/2534,
 13-14=0/2404, 12-13=0/2116, 11-12=0/938

WEBS 6-14=-113/98, 7-13=-451/0, 2-17=-1177/0,
 2-16=0/763, 3-16=-734/0, 3-15=0/395,
 4-15=-73/0, 5-15=-224/0, 5-14=-324/190,
 9-11=-1174/0, 9-12=0/748, 8-12=-787/0,
 8-13=0/736

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



June 13,2025

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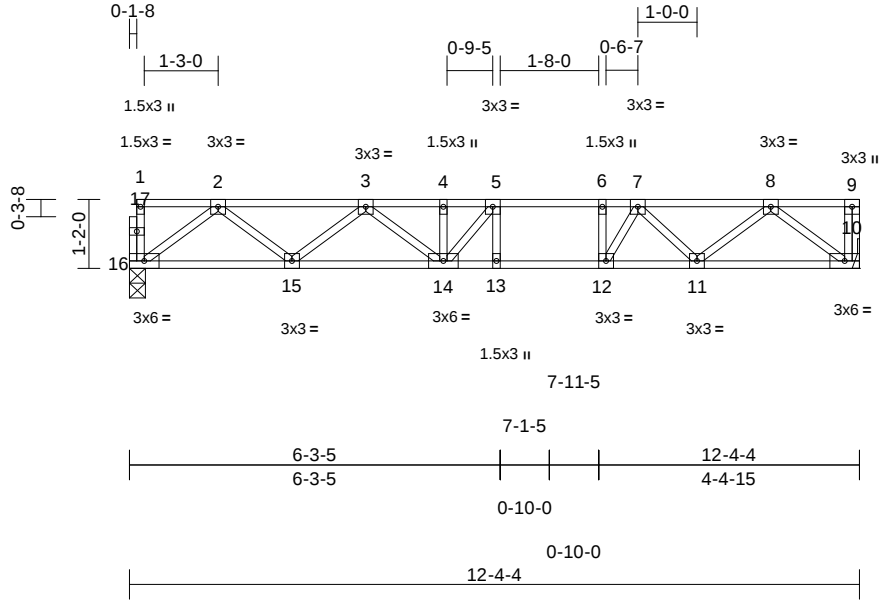
818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Stonefield Rev 3-Elev 4 w/crawl-Floor	174175456
	2F12	Floor	3	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:56
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Page: 1



Scale = 1:39

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)	-0.10	13-14	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.84	Vert(CT)	-0.14	13-14	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.03	10	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 65 lb	FT = 20%F, 12%E

LUMBER

TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP 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= Mechanical, 16=0-3-4
Max Grav 10=666 (LC 1), 16=659 (LC 1)

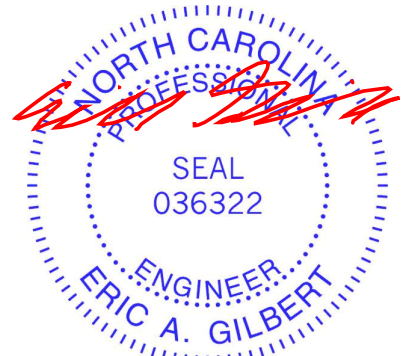
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-16=-34/0, 9-10=-44/0, 1-2=-2/0,
2-3=-1279/0, 3-4=-1901/0, 4-5=-1901/0,
5-6=-1857/0, 6-7=-1857/0, 7-8=-1277/0,
8-9=0/0
BOT CHORD 15-16=0/811, 14-15=0/1715, 13-14=0/1857,
12-13=0/1857, 11-12=0/1662, 10-11=0/803
WEBS 5-13=-147/29, 6-12=-362/0, 2-16=-1015/0,
2-15=0/608, 3-15=-568/0, 3-14=0/252,
4-14=-166/30, 5-14=-236/236, 8-10=-1007/0,
8-11=0/617, 7-11=-557/0, 7-12=0/568

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.
- CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



June 13, 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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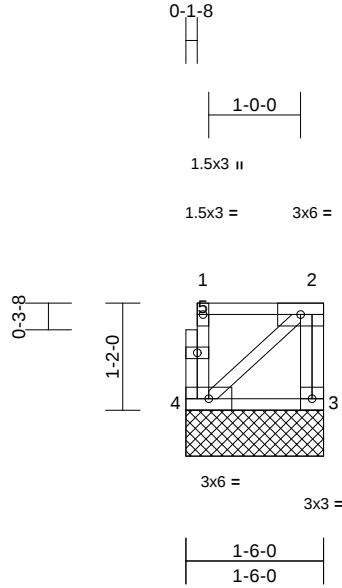
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Stonefield Rev 3-Elev 4 w/crawl-Floor
	2FGE6	Floor Supported Gable	2	1	Job Reference (optional)
					I74175457

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:58
ID:Pexhm6GzlbKMD9xJPhgSGnr?7V-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:25.1

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	0.10	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	0.00	Horiz(TL)	n/a	-	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 11 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
1-6-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc
bracing.

REACTIONS (size) 3=1-6-0, 4=1-6-0
Max Grav 3=69 (LC 1), 4=63 (LC 1)

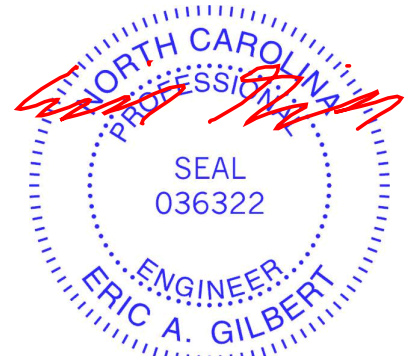
FORCES (lb) - Maximum Compression/Maximum
Tension

TOP CHORD 1-4=-59/0, 2-3=-62/0, 1-2=-4/0
BOT CHORD 3-4=0/0
WEBS 2-4=0/5

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 4-0-0 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



June 13,2025

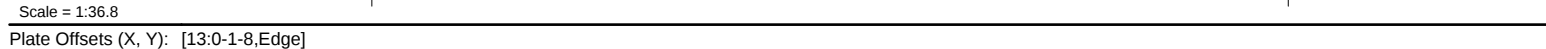
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:56 Page: 1
ID: xm01o8gA6e7vo9cWlfn6XMzr?Ej-RfC?PsB70Hg3NSgPqnL8w3uITxbGKWRcDoi7J4Cz?!



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)

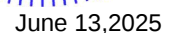
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

Max Grav 11=791 (LC 1), 17=784 (LC 1)

TOP CHORD 1-17=-35/0, 10-11=-38/0, 1-2=-2/0,
2-3=-1590/0, 3-4=-2523/0, 4-5=-2523/0,
5-6=-2601/0, 6-7=-2601/0, 7-8=-2601/0,
8-9=-1575/0, 9-10=0/0

NOTES

- LOAD CASE(S) Standard



WARNING – Verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MIT-17-15169: 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/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 Component Association (www.sbcacomponents.com)

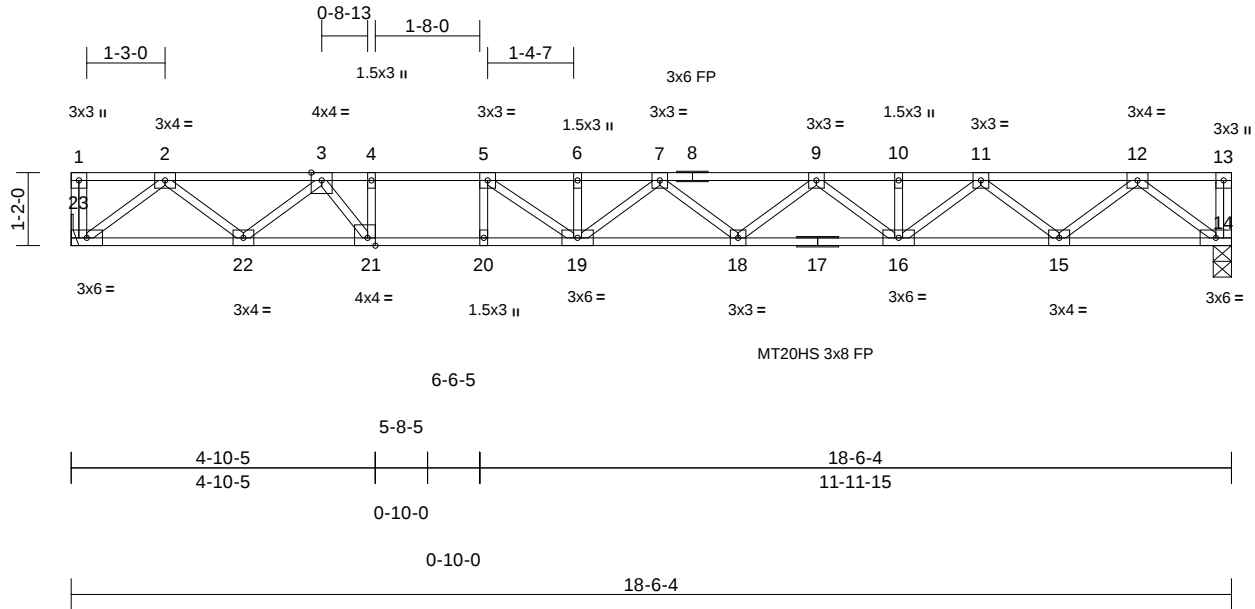
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Stonefield Rev 3-Elev 4 w/crawl-Floor
	2F9	Floor	14	1	I74175459
Job Reference (optional)					

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:56
ID:FkWJITKmLZ8GhXGGfyNTyZz85F3-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDol7J4zJC?f

Page: 1



Scale = 1:36.8																
Plate Offsets (X, Y): [21:0-1-8,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		0.98	Vert(LL)		-0.30	19-20	>727	480	MT20HS	187/143
TCDL		10.0	Lumber DOL		1.00	BC		0.77	Vert(CT)		-0.41	19-20	>529	360	MT20	244/190
BCLL		0.0	Rep Stress Incr		YES	WB		0.39	Horz(CT)		0.05	14	n/a	n/a		
BCDL		5.0	Code		IRC2021/TPI2014	Matrix-S									Weight: 96 lb	FT = 20%F, 12%E

LUMBER

TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP SS(flat) *Except* 17-14:2x4 SP No.2 (flat)
WEBS 2x4 SP No.3(flat)

BRACING

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

REACTIONS (size) 14=0-3-8, 23= Mechanical
Max Grav 14=670 (LC 1), 23=670 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-23=-24/0, 13-14=-26/0, 1-2=0/0, 2-3=-1391/0, 3-4=-2466/0, 4-5=-2466/0, 5-6=-2929/0, 6-7=-2929/0, 7-9=-2830/0, 9-10=-2381/0, 10-11=-2381/0, 11-12=-1420/0, 12-13=0/0

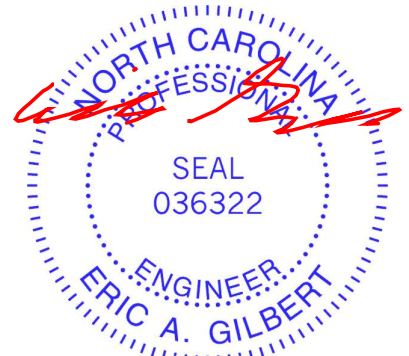
BOT CHORD 22-23=0/831, 21-22=0/2021, 20-21=0/2466, 19-20=0/2466, 18-19=0/2951, 16-18=0/2706, 15-16=0/1981, 14-15=0/838

WEBS 4-21=-421/0, 5-20=-248/0, 2-23=-1043/0, 2-22=0/729, 3-22=-821/0, 3-21=0/824, 12-14=-1051/0, 12-15=0/758, 11-15=-730/0, 11-16=0/510, 9-16=-415/0, 9-18=0/162, 7-18=-157/0, 7-19=-71/89, 5-19=0/658, 10-16=-39/0, 6-19=-196/0

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard



June 13, 2025

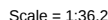
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:56 Page: 1
ID: RqGllq4fkcyT73?AHZV0T7z85E5-RfC?PsB70Hq3NSqPqnL8w3ulTXbGKWrCDoi7J4Cz?i



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)	
OTHERS	2x4 SP No.3(flat)	
BRACING		5) CAUTION, Do not erect truss backwards.
		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 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 18-19,17-18.

Max Uplift 19=82 (LC 4)
Max Grav 11=413 (LC 4), 17=723 (LC 1),
19=90 (LC 8)

Tension

TOP CHORD 10-11=-22/0, 1-19=-32/0, 1-2=0/0, 2-3=0/304,
3-4=0/440, 4-5=-579/0, 5-6=-1020/0,
6-7=-1146/0, 7-8=-1146/0, 8-9=-783/0,
9-10=-1/0

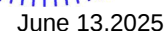
BOT CHORD 18-19=-127/67, 17-18=-440/0, 16-17=0/225,
15-16=0/1020, 14-15=0/1020, 13-14=0/1020,
12-13=0/1044, 11-12=0/505

WEBS 6-14=-143/0, 5-15=0/149, 3-17=-305/0,
9-11=-632/0, 9-12=0/362, 8-12=-340/0,
8-13=0/130, 2-19=-84/159, 2-18=-292/0,
3-18=0/237, 4-17=-690/0, 4-16=0/495,
5-16=-578/0, 7-13=-128/0, 6-13=-31/220

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x3 (=) MT20 unless otherwise indicated.
- 3) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 19. 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



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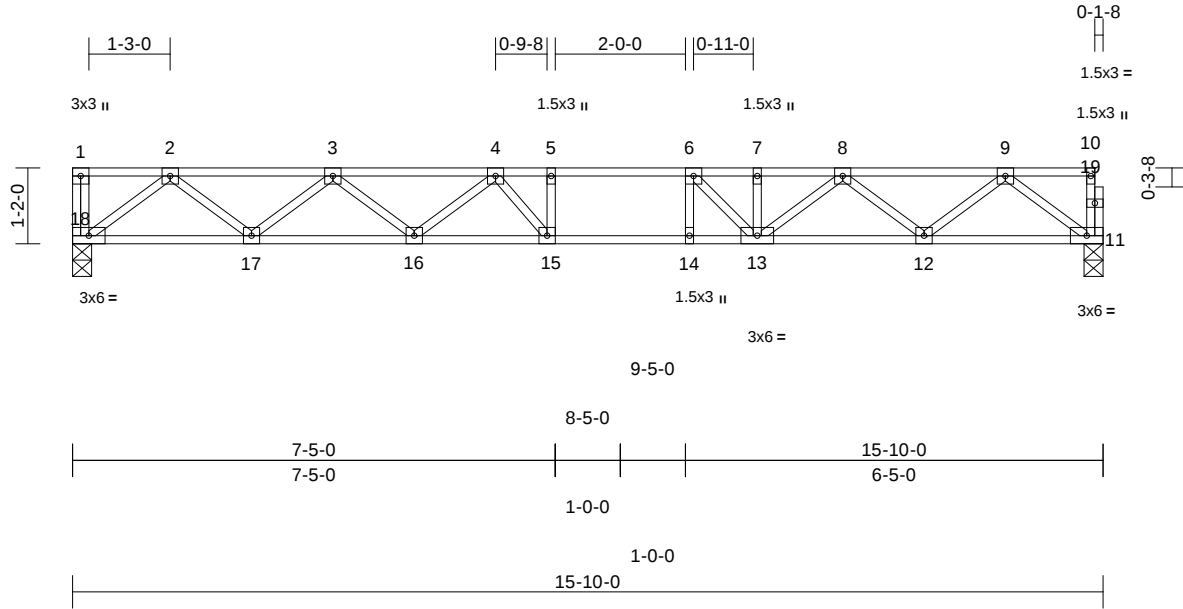
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Stonefield Rev 3-Elev 4 w/crawl-Floor	174175461
	2F18	Floor	7	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.20 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:57
ID:V2czvtSEdXMhr2nSf8SbKGz855s-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?

Page: 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	0.45	Vert(LL)	-0.14	15-16	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.73	Vert(CT)	-0.20	15-16	>940	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.04	11	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 81 lb	FT = 20%F, 12%E

LUMBER

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

BRACING

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

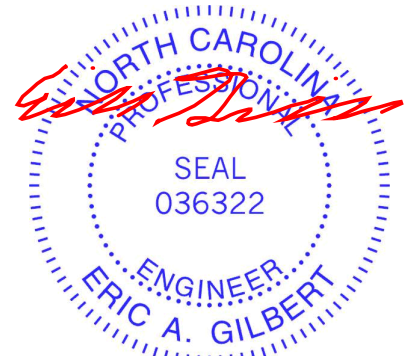
REACTIONS (size) 11=0-3-8, 18=0-3-8
Max Grav 11=567 (LC 1), 18=571 (LC 1)

FORCES (lb) - Maximum Compression/Maximum
Tension
TOP CHORD 1-18=-28/0, 10-11=-24/0, 1-2=0/0,
2-3=-1176/0, 3-4=-1864/0, 4-5=-2100/0,
5-6=-2100/0, 6-7=-1882/0, 7-8=-1882/0,
8-9=-1175/0, 9-10=-1/0
BOT CHORD 17-18=0/706, 16-17=0/1626, 15-16=0/2073,
14-15=0/2100, 13-14=0/2100, 12-13=0/1615,
11-12=0/709
WEBS 5-15=-166/47, 6-14=-45/112, 2-18=-885/0,
2-17=0/612, 3-17=-586/0, 3-16=0/310,
4-16=-272/0, 4-15=-133/281, 9-11=-887/0,
9-12=0/607, 8-12=-574/0, 8-13=0/341,
7-13=-75/96, 6-13=-480/0

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 10-00-00 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



June 13, 2025

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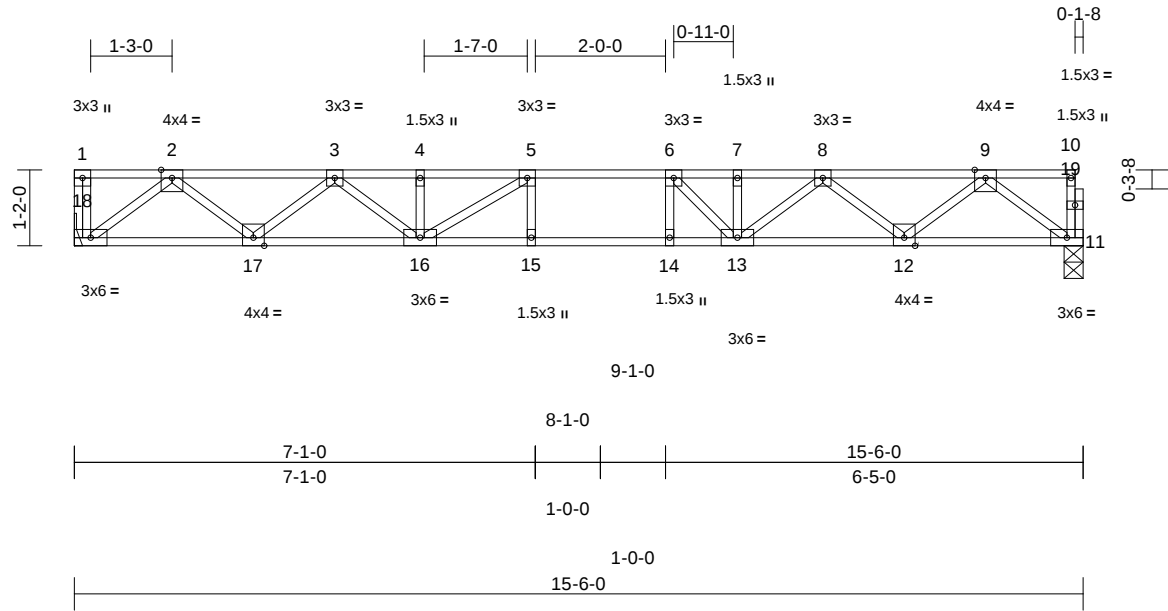
Job	Truss	Truss Type	Qty	Ply	Stonefield Rev 3-Elev 4 w/crawl-Floor
	2F1A	Floor	1	1	Job Reference (optional)

I74175462

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:55
ID:Az1?SZea?Mkr2mx8ZltoWFzuzO8-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 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	0.57	Vert(LL)	-0.18	15	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.50	Vert(CT)	-0.24	15	>759	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.42	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 No.2(flat)
 BOT CHORD 2x4 SP SS(flat)
 WEBS 2x4 SP No.3(flat)
 OTHERS 2x4 SP No.3(flat)

BRACING

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

REACTIONS (size) 11=0-3-8, 18= Mechanical
 Max Grav 11=833 (LC 1), 18=839 (LC 1)

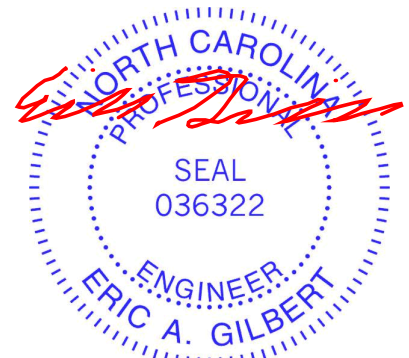
FORCES (lb) - Maximum Compression/Maximum
 Tension

TOP CHORD 1-18=-38/0, 10-11=-35/0, 1-2=0/0,
 2-3=-1713/0, 3-4=-2762/0, 4-5=-2762/0,
 5-6=-3027/0, 6-7=-2734/0, 7-8=-2734/0,
 8-9=-1716/0, 9-10=-2/0
 BOT CHORD 17-18=0/1040, 16-17=0/2354, 15-16=0/3027,
 14-15=0/3027, 13-14=0/3027, 12-13=0/2355,
 11-12=0/1039
 WEBS 5-15=-116/105, 6-14=-98/193, 2-18=-1304/0,
 2-17=0/876, 3-17=-835/0, 3-16=0/521,
 4-16=-171/37, 5-16=-599/27, 9-11=-1300/0,
 9-12=0/881, 8-12=-832/0, 8-13=0/484,
 7-13=-107/118, 6-13=-683/0

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



June 13, 2025

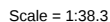
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:57 Page: 1
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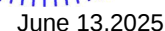


LUMBER

BRACING

NOTES

- LOAD CASE(S) Standard

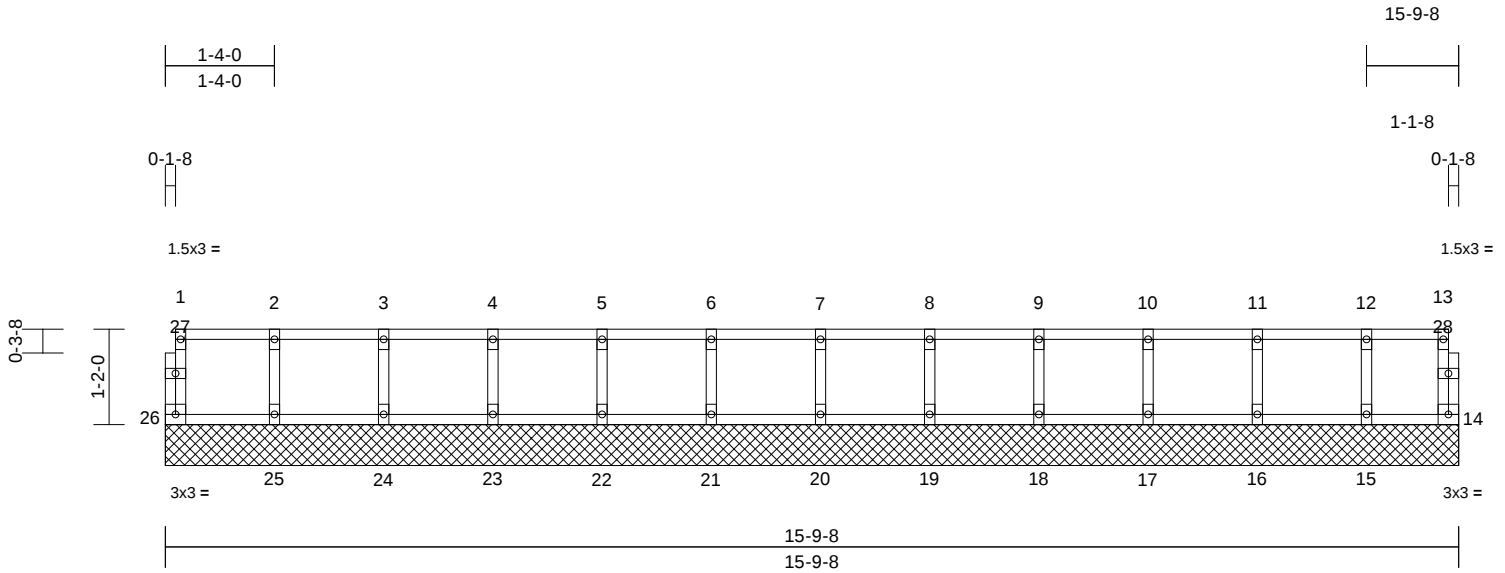


Job	Truss	Truss Type	Qty	Ply	Stonefield Rev 3-Elev 4 w/crawl-Floor	174175464
	2FGE2	Floor Supported Gable	1	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Thu Jun 12 12:56:58
ID:Az1?SZea?Mkr2mx8ZltoWFuzO8-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:28.1

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	0.08	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	0.03	Horiz(TL)	0.00	14	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R						Weight: 67 lb	FT = 20%F, 12%E

LUMBER

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

BRACING

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

REACTIONS (size) 14=15-9-8, 15=15-9-8, 16=15-9-8, 17=15-9-8, 18=15-9-8, 19=15-9-8, 20=15-9-8, 21=15-9-8, 22=15-9-8, 23=15-9-8, 24=15-9-8, 25=15-9-8, 26=15-9-8
Max Grav 14=44 (LC 1), 15=130 (LC 1), 16=151 (LC 1), 17=146 (LC 1), 18=147 (LC 1), 19=147 (LC 1), 20=147 (LC 1), 21=147 (LC 1), 22=147 (LC 1), 23=147 (LC 1), 24=147 (LC 1), 25=145 (LC 1), 26=54 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

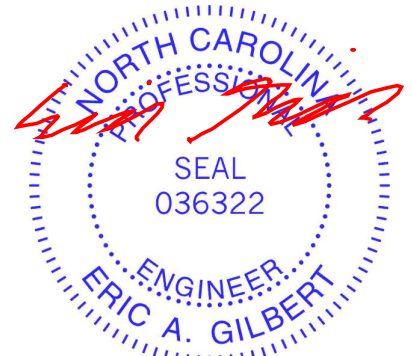
TOP CHORD 1-26=-50/0, 13-14=-39/0, 1-2=-8/0, 2-3=-8/0, 3-4=-8/0, 4-5=-8/0, 5-6=-8/0, 6-7=-8/0, 7-8=-8/0, 8-9=-8/0, 9-10=-8/0, 10-11=-8/0, 11-12=-8/0, 12-13=-8/0
BOT CHORD 25-26=0/8, 24-25=0/8, 23-24=0/8, 22-23=0/8, 21-22=0/8, 20-21=0/8, 19-20=0/8, 18-19=0/8, 17-18=0/8, 16-17=0/8, 15-16=0/8, 14-15=0/8
WEBS 2-25=-131/0, 3-24=-134/0, 4-23=-133/0, 5-22=-133/0, 6-21=-133/0, 7-20=-133/0, 8-19=-133/0, 9-18=-134/0, 10-17=-132/0, 11-16=-137/0, 12-15=-119/0

NOTES

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

- 3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 4) Gable studs spaced at 1-4-0 oc.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard



June 13, 2025

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

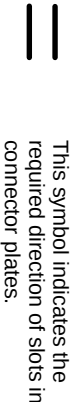
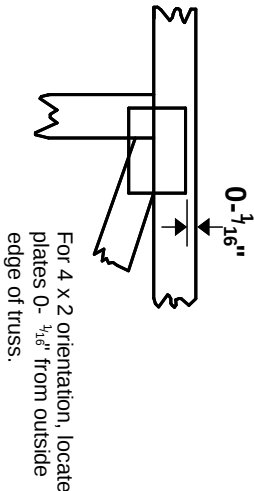
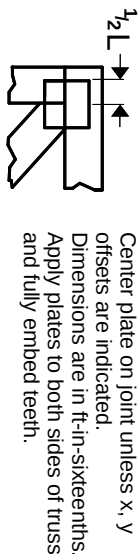
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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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Symbols

PLATE LOCATION AND ORIENTATION



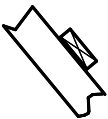
* Plate location details available in MITek software or upon request.

PLATE SIZE

4 X 4

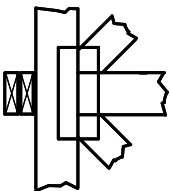
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

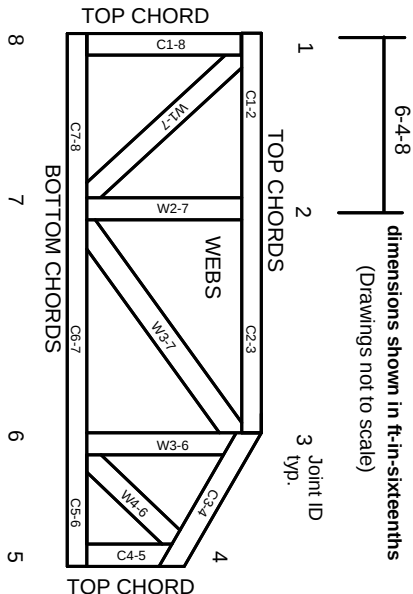


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TP1.1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

Product Code Approvals

ICC-ES Reports:

ESR-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

Design General Notes

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/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