

RE: 2411-0122-E - Stonehaven Rev 2-EL-6,7-Floor

Trenco  
 818 Soundside Rd  
 Edenton, NC 27932

**Site Information:**

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

Lot/Block: Subdivision:

Model:

Address:

City: State:

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

Design Code: IRC2021/TPI2014

Design Program: MiTek 20/20 25.2

Wind Code: ASCE 7-16

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

Wind Speed: 120 mph

Floor Load: N/A psf

Roof Load: 40.0 psf

Mean Roof Height (feet): 25

Exposure Category: B

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I74557669	1FGE9	7/1/25	35	I74557703	1F10	7/1/25
2	I74557670		7/1/25	36	I74557704	1F9	7/1/25
3	I74557671	2FGE7	7/1/25	37	I74557705	1FGR1	7/1/25
4	I74557672	2F7	7/1/25	38	I74557706	2F16	7/1/25
5	I74557673	2FG3	7/1/25	39	I74557707	2FGE4	7/1/25
6	I74557674	1FGE5	7/1/25	40	I74557708	2F26A	7/1/25
7	I74557675	2F15	7/1/25	41	I74557709	2F26	7/1/25
8	I74557676	1F8	7/1/25		I74557710	2F5	7/1/25
9	I74557677	2FG2	7/1/25	43	I74557711	2F6	7/1/25
10	I74557678	2FG1	7/1/25	44	I74557712	1F3	7/1/25
11	I74557679	2FGE6	7/1/25	45	I74557713	1F3A	7/1/25
12	I74557680	1FGE3	7/1/25	46	I74557714	2F10	7/1/25
13	I74557681	1FGE11	7/1/25	47	I74557715	2FGE2	7/1/25
14	I74557682	1FGE10	7/1/25	48	I74557716	1FGE6	7/1/25
	I74557683	1F6	7/1/25	49	I74557717	2F24	7/1/25
16	I74557684	1FGE8	7/1/25	50	I74557718	2F24A	7/1/25
17	I74557685	1F17	7/1/25		I74557719	2F25	7/1/25
18	I74557686	2F3	7/1/25	52	I74557720	1FGE1	7/1/25
19	I74557687	1F7	7/1/25	53	I74557721	1F1	7/1/25
20	I74557688	1FGE4	7/1/25	54	I74557722	1F2	7/1/25
21	I74557689	2F20	7/1/25	55	I74557723	1F4	7/1/25
22	I74557690	2F27	7/1/25	56	I74557724	1F4A	7/1/25
23	I74557691	1F16	7/1/25	57	I74557725	2FGE3	7/1/25
	I74557692	2F17	7/1/25	58	I74557726	2F23A	7/1/25
25	I74557693	2F18	7/1/25	59	I74557727	2F12	7/1/25
26	I74557694	1F15	7/1/25		I74557728	2F14	7/1/25
27	I74557695	2F21	7/1/25	61	I74557729	1F5	7/1/25
28	I74557696	2F22A	7/1/25	62	I74557730	2FGE1	7/1/25
29	I74557697	2F22	7/1/25	63	I74557731	2F1A	7/1/25
30	I74557698	1FGE7	7/1/25	64	I74557732	2F2	7/1/25
31	I74557699	1F14	7/1/25	65	I74557733	2F1	7/1/25
32	I74557700	1F11	7/1/25	66	I74557734	2F4	7/1/25
	I74557701	1F13	7/1/25	67	I74557735	2F16A	7/1/25
34	I74557702	1F12	7/1/25	68	I74557736	2F9B	7/1/25

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

Truss Design Engineer's Name: Tony Miller

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.



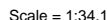
July 1, 2025

RE: 2411-0122-E - Stonehaven Rev 2-EL-6,7-Floor

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818 Soundside Rd  
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No.	Seal#	Truss Name	Date
69	I74557737	2F8	7/1/25
70	I74557738	2F9A	7/1/25
71	I74557739	2F9	7/1/25

Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 30 05:28:14 Page: 1  
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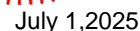
**LUMBER**

## BRACING

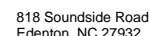
<b>FORCES</b>	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-6=-55/0, 3-4=-22/0, 1-2=-9/0, 2-3=-9/0
BOT CHORD	5-6=0/9, 4-5=0/9
WEBS	2-5=-100/0

## NOTES

- LOAD CASE(S) Standard



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

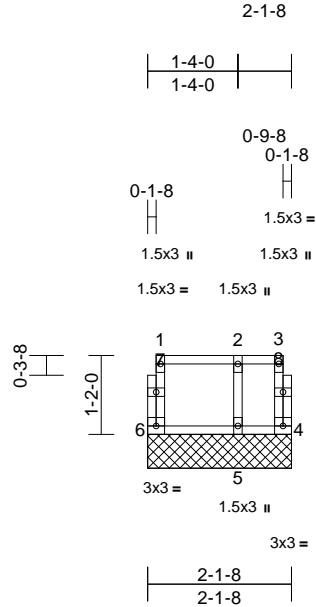


Job	Truss	Truss Type	Qty	Ply	Stonehaven Rev 2-EL-6,7-Floor	174557671
2411-0122-E	2FGE7	Floor Supported Gable	2	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

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Page: 1



Scale = 1:34.1

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	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 12 lb	FT = 20%F, 12%E

#### LUMBER

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

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 2-1-8 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 4=2-1-8, 5=2-1-8, 6=2-1-8  
Max Grav 4=20 (LC 1), 5=70 (LC 1), 6=40 (LC 1)

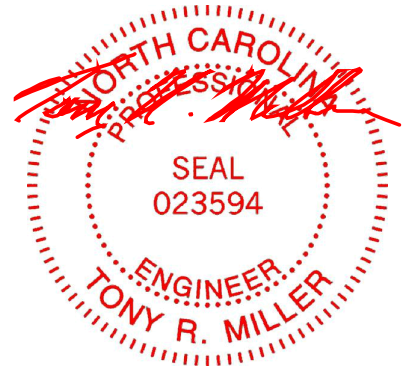
**FORCES** (lb) - Maximum Compression/Maximum Tension

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

#### NOTES

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

**LOAD CASE(S)** Standard



July 1, 2025

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Job	Truss	Truss Type	Qty	Ply	Stonehaven Rev 2-EL-6,7-Floor
2411-0122-E	2F7	Floor	8	1	Job Reference (optional)

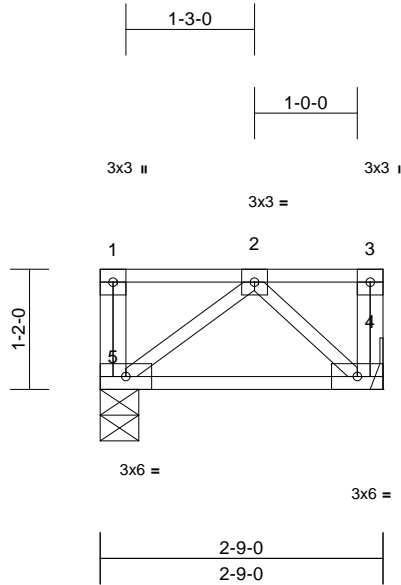
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Structural, LLC, Thurmont, MD - 21788,

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Scale = 1:22.4

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.08	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.06	Vert(CT)	-0.01	4-5	>999	360	
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	4	n/a	n/a	
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-P							
										Weight: 18 lb	FT = 20%F, 12%E

#### LUMBER

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

#### BRACING

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

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

FORCES (lb) - Maximum Compression/Maximum  
Tension

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

#### NOTES

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

LOAD CASE(S) Standard



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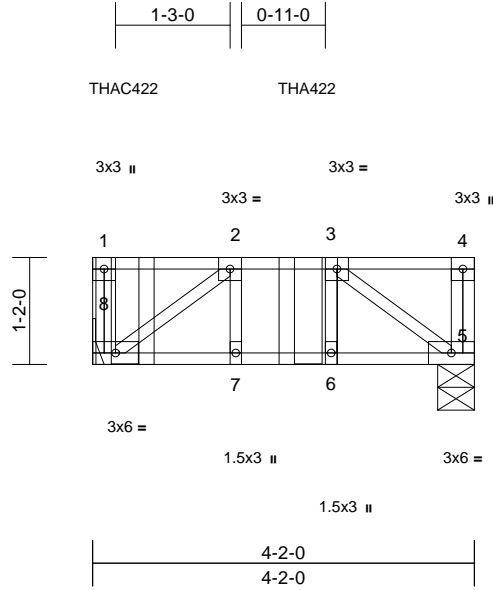
Job	Truss	Truss Type	Qty	Ply	Stonehaven Rev 2-EL-6,7-Floor
2411-0122-E	2FG3	Floor Girder	2	1	Job Reference (optional)
					I74557673

Structural, LLC, Thurmont, MD - 21788,

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Scale = 1:25.2

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.50	Vert(LL)	-0.03	5-6	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.67	Vert(CT)	-0.03	5-6	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.18	Horz(CT)	0.00	5	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 25 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)

Vert: 5-8=-10, 1-4=-100  
Concentrated Loads (lb)  
Vert: 1=-612 (F), 3=-574 (F)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
4-2-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
bracing.

**REACTIONS** (size) 5=0-4-13, 8= Mechanical  
Max Grav 5=608 (LC 4), 8=1096 (LC 3)

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

TOP CHORD 1-8=-685/0, 4-5=-111/0, 1-2=0/0, 2-3=-605/0,  
3-4=0/0

BOT CHORD 7-8=0/605, 6-7=0/605, 5-6=0/605

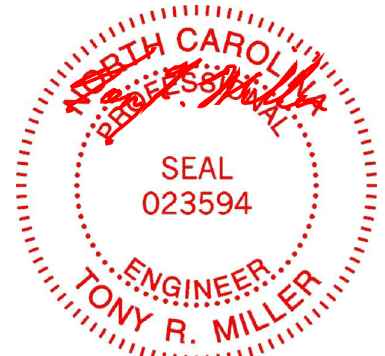
WEBS 3-5=-747/0, 2-8=-747/0, 2-7=0/197,  
3-6=-176/0

#### NOTES

- Unbalanced floor live loads have been considered for this design.
- Refer to girder(s) for truss to truss connections.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- Use Simpson Strong-Tie THAC422 (Single Chord Girder) or equivalent at 0-4-4 from the left end to connect truss(es) to front face of top chord.
- Use Simpson Strong-Tie THA422 (Single Chord Girder) or equivalent at 2-4-4 from the left end to connect truss(es) to front face of top chord.
- Fill all nail holes where hanger is in contact with lumber.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

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



July 1, 2025

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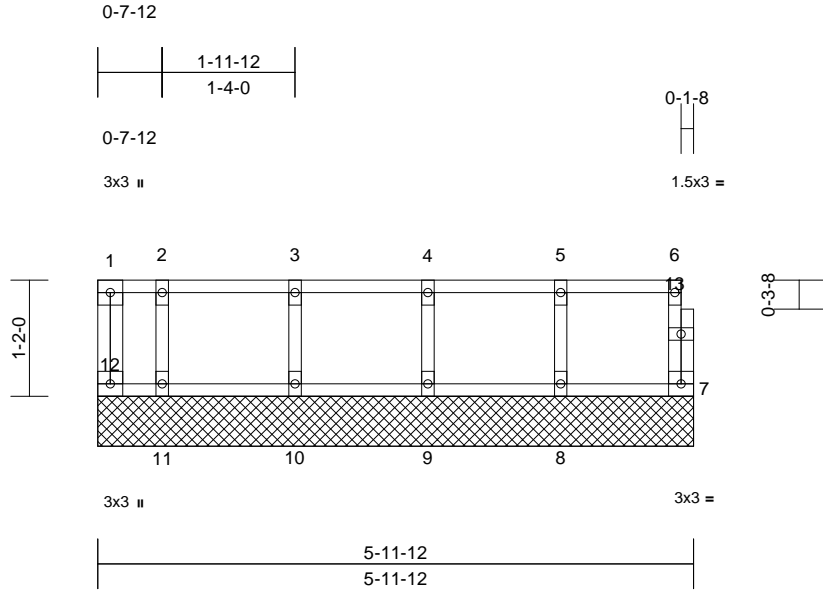
818 Soundside Road  
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Job	Truss	Truss Type	Qty	Ply	Stonehaven Rev 2-EL-6,7-Floor	174557674
2411-0122-E	1FGE5	Floor Supported Gable	2	1	Job Reference (optional)	

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	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	7	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 28 lb	FT = 20%F, 12%E

#### LUMBER

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

#### BRACING

TOP CHORD	Structural wood sheathing directly applied or 5-11-12 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

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

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

TOP CHORD	1-12=-13/0, 6-7=-49/0, 1-2=-7/0, 2-3=-7/0, 3-4=-7/0, 4-5=-7/0, 5-6=-7/0
BOT CHORD	11-12=0/7, 10-11=0/7, 9-10=0/7, 8-9=0/7, 7-8=0/7
WEBS	5-8=-132/0, 4-9=-133/0, 3-10=-138/0, 2-11=-102/0

#### NOTES

- All plates are 1.5x3 (||) MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



July 1, 2025

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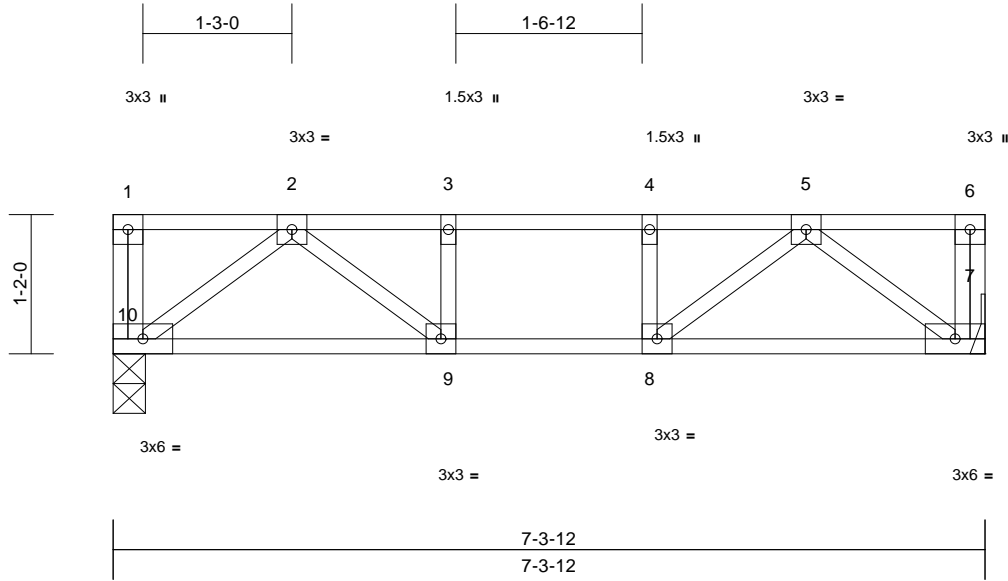


Job	Truss	Truss Type	Qty	Ply	Stonehaven Rev 2-EL-6,7-Floor	174557675
2411-0122-E	2F15	Floor	4	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

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Scale = 1:19.3

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.22	Vert(LL)	-0.02	9-10	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.24	Vert(CT)	-0.03	9-10	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.01	7	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 39 lb	FT = 20%F, 12%E

#### LUMBER

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

#### BRACING

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

REACTIONS (size) 7= Mechanical, 10=0-3-4  
Max Grav 7=388 (LC 1), 10=388 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

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

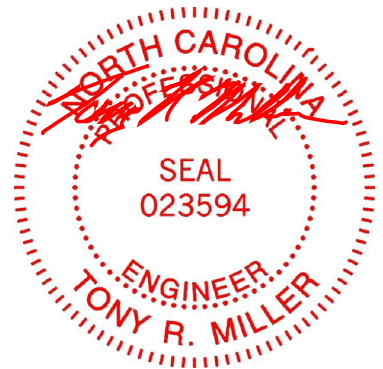
BOT CHORD 9-10=0/421, 8-9=0/641, 7-8=0/421

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

#### NOTES

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

LOAD CASE(S) Standard



July 1, 2025

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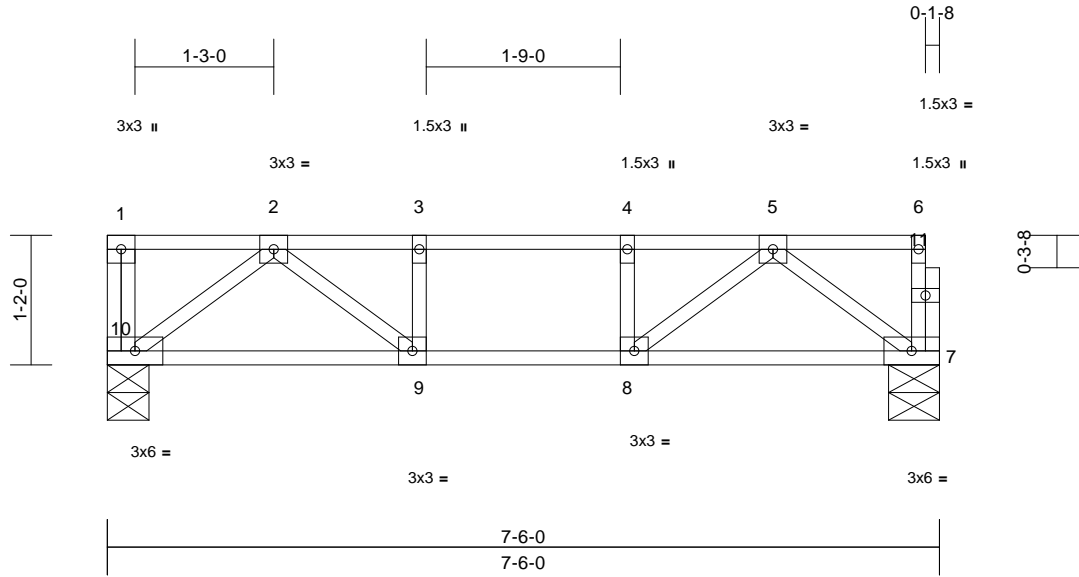


Job	Truss	Truss Type	Qty	Ply	Stonehaven Rev 2-EL-6,7-Floor	174557676
2411-0122-E	1F8	Floor	10	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 30 05:28:12  
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Page: 1



Scale = 1:20.8

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.26	Vert(LL)	-0.03	7-8	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.26	Vert(CT)	-0.03	7-8	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.01	7	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 39 lb	FT = 20%F, 12%E

#### LUMBER

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

#### BRACING

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

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

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

#### NOTES

- Unbalanced floor live loads have been considered for this design.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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



July 1, 2025

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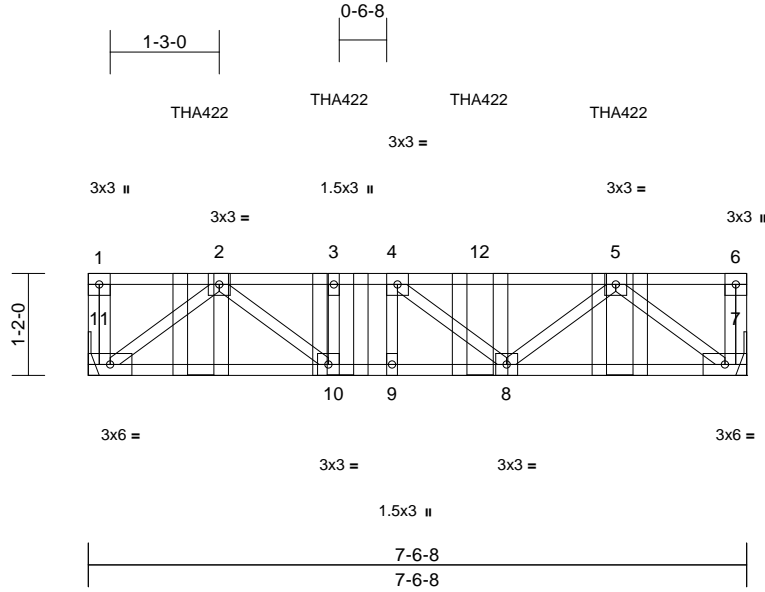
Job	Truss	Truss Type	Qty	Ply	Stonehaven Rev 2-EL-6,7-Floor
2411-0122-E	2FG2	Floor Girder	2	1	Job Reference (optional)
					I74557677

Structural, LLC, Thurmont, MD - 21788,

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Page: 1

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Scale = 1:26.4

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	0.68	Vert(LL)	-0.03	8-9	>999	480	MT20
TCDL	10.0	Lumber DOL	1.00	BC	0.61	Vert(CT)	-0.04	8-9	>999	360	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.25	Horz(CT)	0.01	7	n/a	n/a	
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							
										Weight: 42 lb	FT = 20%F, 12%E

#### LUMBER

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

Vert: 7-11=-10, 1-6=-100  
Concentrated Loads (lb)  
Vert: 5=-30 (B), 2=-30 (B), 3=-30 (B), 12=-30 (B)

#### BRACING

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

**REACTIONS** (size) 7= Mechanical, 11= Mechanical  
Max Grav 7=531 (LC 4), 11=462 (LC 1)

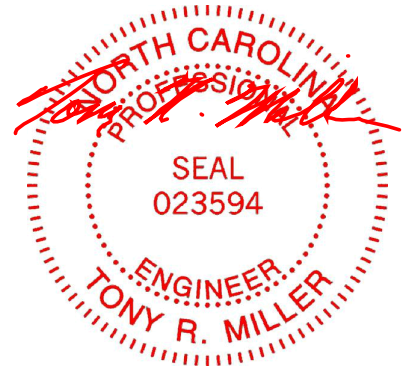
<b>FORCES</b>	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-11=-59/0, 6-7=-29/0, 1-2=0/0, 2-3=-855/0, 3-4=-855/0, 4-5=-804/0, 5-6=0/0
BOT CHORD	10-11=0/525, 9-10=0/855, 8-9=0/855, 7-8=0/666
WEBS	5-7=-836/0, 2-11=-659/0, 5-8=0/256, 2-10=0/530, 4-8=-235/0, 3-10=-167/0, 4-9=-173/28

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

#### LOAD CASE(S) Standard

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



July 1, 2025

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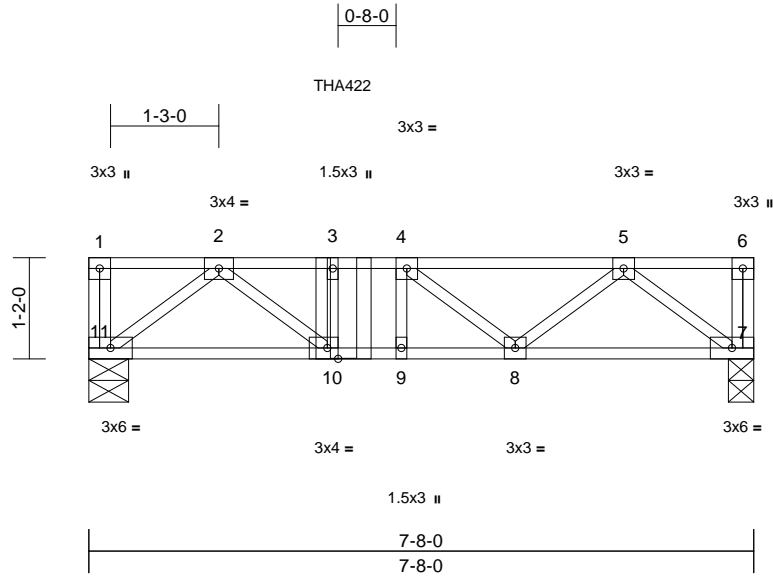
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Stonehaven Rev 2-EL-6,7-Floor
2411-0122-E	2FG1	Floor Girder	2	1	Job Reference (optional)
					I74557678

Structural, LLC, Thurmont, MD - 21788,

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Page: 1



Scale = 1:26.6

Plate Offsets (X, Y): [10:0-1-8,Edge]

Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.36	Vert(LL)	-0.03	10-11	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.59	Vert(CT)	-0.04	10-11	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.34	Horz(CT)	0.01	7	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 42 lb	FT = 20%F, 12%E

#### LUMBER

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

Concentrated Loads (lb)  
Vert: 3=-451 (F)

#### BRACING

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

REACTIONS (size) 7=0-3-8, 11=0-5-8  
Max Grav 7=490 (LC 1), 11=614 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
Tension

TOP CHORD 1-11=-40/0, 6-7=-32/0, 1-2=0/0, 2-3=-1249/0,  
3-4=-1249/0, 4-5=-917/0, 5-6=0/0

BOT CHORD 10-11=0/739, 9-10=0/1249, 8-9=0/1249,  
7-8=0/590

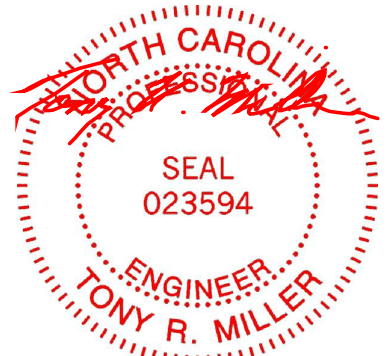
WEBS 5-7=-741/0, 2-11=-928/0, 5-8=0/454,  
2-10=0/714, 4-8=-498/0, 3-10=-447/0,  
4-9=0/127

#### 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) Use Simpson Strong-Tie THA422 (Single Chord Girder) or equivalent at 2-11-4 from the left end to connect truss (es) to front face of top chord.
- 4) Fill all nail holes where hanger is in contact with lumber.
- 5) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

- 1) Dead + Floor Live (balanced): Lumber Increase=1.00,  
Plate Increase=1.00  
Uniform Loads (lb/ft)  
Vert: 7-11=-8, 1-6=-80



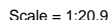
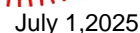
July 1, 2025

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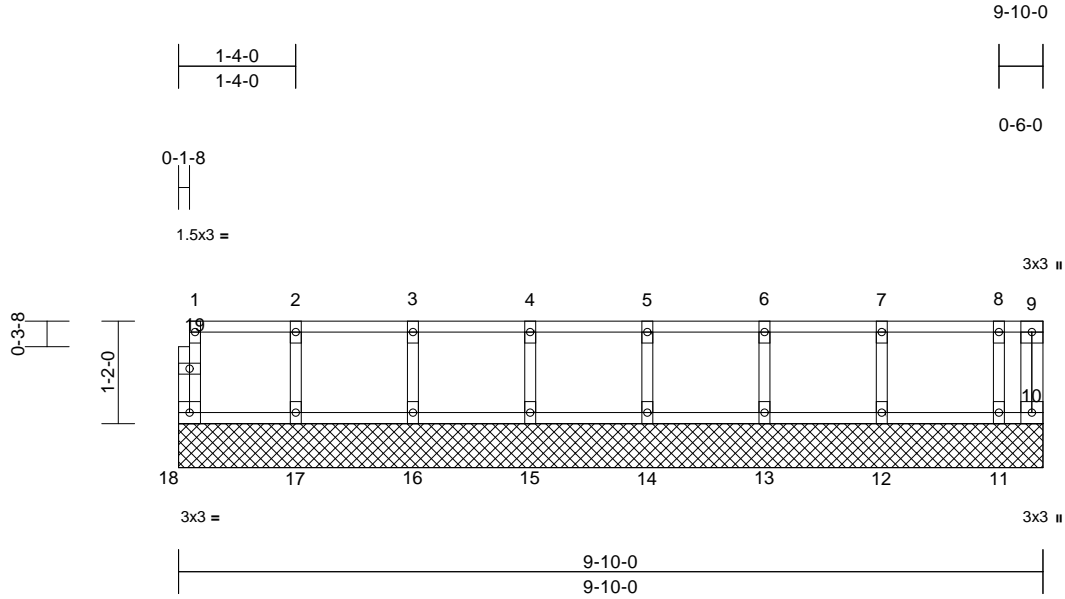
Page: 1LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Stonehaven Rev 2-EL-6,7-Floor	174557680
2411-0122-E	1FGE3	Floor Supported Gable	2	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 30 05:28:13  
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Page: 1



Scale = 1:26.2

Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	10	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 44 lb	FT = 20%F, 12%E

#### LUMBER

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

#### BRACING

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

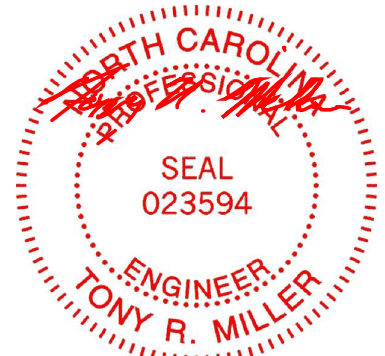
REACTIONS (size)	10=9-10-0, 11=9-10-0, 12=9-10-0, 13=9-10-0, 14=9-10-0, 15=9-10-0, 16=9-10-0, 17=9-10-0, 18=9-10-0
Max Grav	10=8 (LC 1), 11=80 (LC 1), 12=122 (LC 1), 13=116 (LC 1), 14=118 (LC 1), 15=117 (LC 1), 16=118 (LC 1), 17=117 (LC 1), 18=43 (LC 1)

#### FORCES

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

#### NOTES

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



July 1, 2025

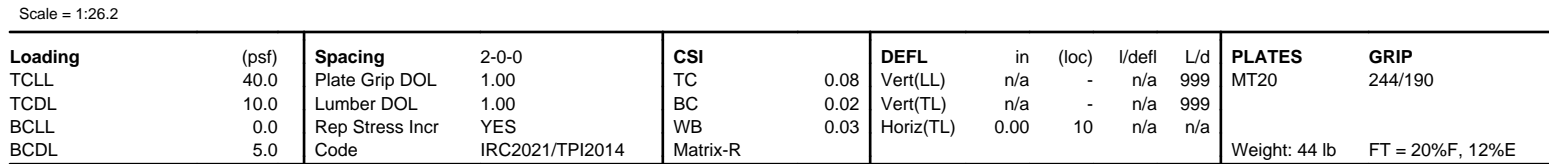
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

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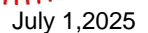
818 Soundside Road  
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Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 30 05:28:13 Page: 1  
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## NOTES

- 1) All plates are 1.5x3 (||) MT20 unless otherwise indicated.
- 2) Gable requires continuous bottom chord bearing.
- 3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 4) Gable studs spaced at 1-4-0 oc.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION, Do not erect truss backwards.



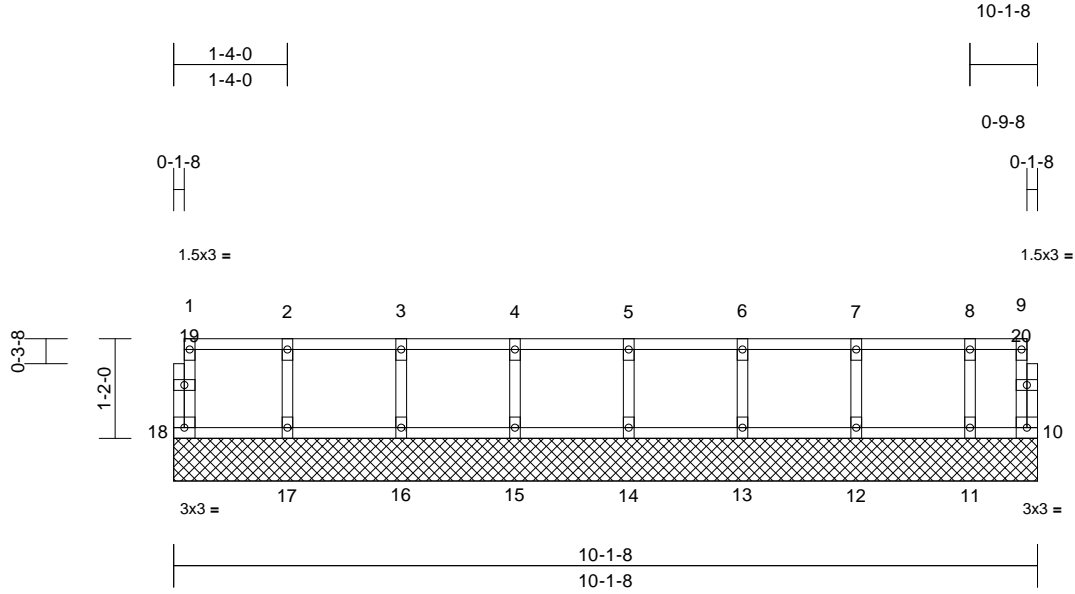


Job	Truss	Truss Type	Qty	Ply	Stonehaven Rev 2-EL-6,7-Floor	I74557682
2411-0122-E	1FGE10	Floor Supported Gable	1	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

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Page: 1



Scale = 1:27

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	10	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 44 lb	FT = 20%F, 12%E

#### LUMBER

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

#### BRACING

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

**REACTIONS** (size) 10=10-1-8, 11=10-1-8, 12=10-1-8, 13=10-1-8, 14=10-1-8, 15=10-1-8, 16=10-1-8, 17=10-1-8, 18=10-1-8  
Max Grav 10=25 (LC 1), 11=111 (LC 1), 12=153 (LC 1), 13=145 (LC 1), 14=147 (LC 1), 15=147 (LC 1), 16=147 (LC 1), 17=147 (LC 1), 18=53 (LC 1)

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

TOP CHORD 1-18=-49/0, 9-10=-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  
BOT CHORD 17-18=0/7, 16-17=0/7, 15-16=0/7, 14-15=0/7, 13-14=0/7, 12-13=0/7, 11-12=0/7, 10-11=0/7  
WEBS 2-17=-132/0, 3-16=-134/0, 4-15=-133/0, 5-14=-134/0, 6-13=-132/0, 7-12=-139/0, 8-11=-106/0

#### 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



July 1, 2025

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

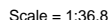
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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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ID:Jtvz6U rutuFPG4GwPjTlBzewVj-RfC?PsB70Hq3NSaPqnL8w3uITXbGKwRCDoi7J4zJC?f

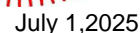


**LUMBER**

## BRACING

## NOTES

- LOAD CASE(S) Standard



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

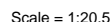
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MIT-7473 (rev. 1/2/2023) BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only on 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](http://www.tpinet.org)) and **BCSI Building Component Safety Information** available from the Structural Building Components Association ([www.sbcacompnents.com](http://www.sbcacompnents.com))

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<b>LUMBER</b>		5) 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.
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)	
<b>BRACING</b>		6) CAUTION. Do not erect truss backwards.
		<b>LOAD CASE(S)</b> Standard

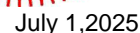
LOAD CASE(S) Standard

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

<b>FORCES</b>	(lb) - Maximum Compression/Maximum Tension
<b>TOP CHORD</b>	1-18=66/0, 9-10=53/0, 1-2=13/0, 2-3=13/0, 3-4=13/0, 4-5=13/0, 5-6=13/0, 6-7=13/0, 7-8=13/0, 8-9=13/0
<b>BOT CHORD</b>	17-18=0/13, 16-17=0/13, 15-16=0/13, 14-15=0/13, 13-14=0/13, 12-13=0/13, 11-12=0/13, 10-11=0/13
<b>WEBS</b>	8-11=128/0, 7-12=135/0, 6-13=133/0, 5-14=133/0, 4-15=134/0, 3-16=132/0, 2-17=139/0

## NOTES

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



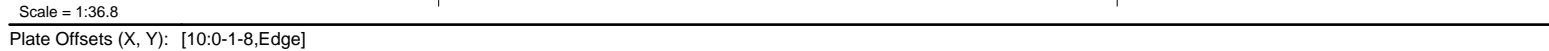
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MIT-141.5 Rev. 1/2/2023 BEFORE USE.**

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ID:6wCg9RgKHGQBBeY60NhQYKzwe7b-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWCDoi7J4zJC?f



<b>LUMBER</b>	
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)
<b>BRACING</b>	
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.
<b>REACTIONS</b>	
(size)	8=0-5-8, 13=0-4-8
Max Grav	8=576 (LC 1), 13=582 (LC 1)
<b>FORCES</b>	
	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-13=-41/0, 7-8=-83/0, 1-2=0/0, 2-3=-1084/0, 3-4=-1394/0, 4-5=-1394/0, 5-6=-1394/0, 6-7=-5/0
BOT CHORD	12-13=0/706, 11-12=0/1396, 10-11=0/1394, 9-10=0/835, 8-9=0/835
WEBS	4-11=-127/0, 5-10=-296/0, 2-13=-885/0, 2-12=0/493, 3-12=-405/0, 3-11=-114/241, 6-10=0/754, 6-9=-59/13, 6-8=-957/0

- LOAD CASE(S) Standard



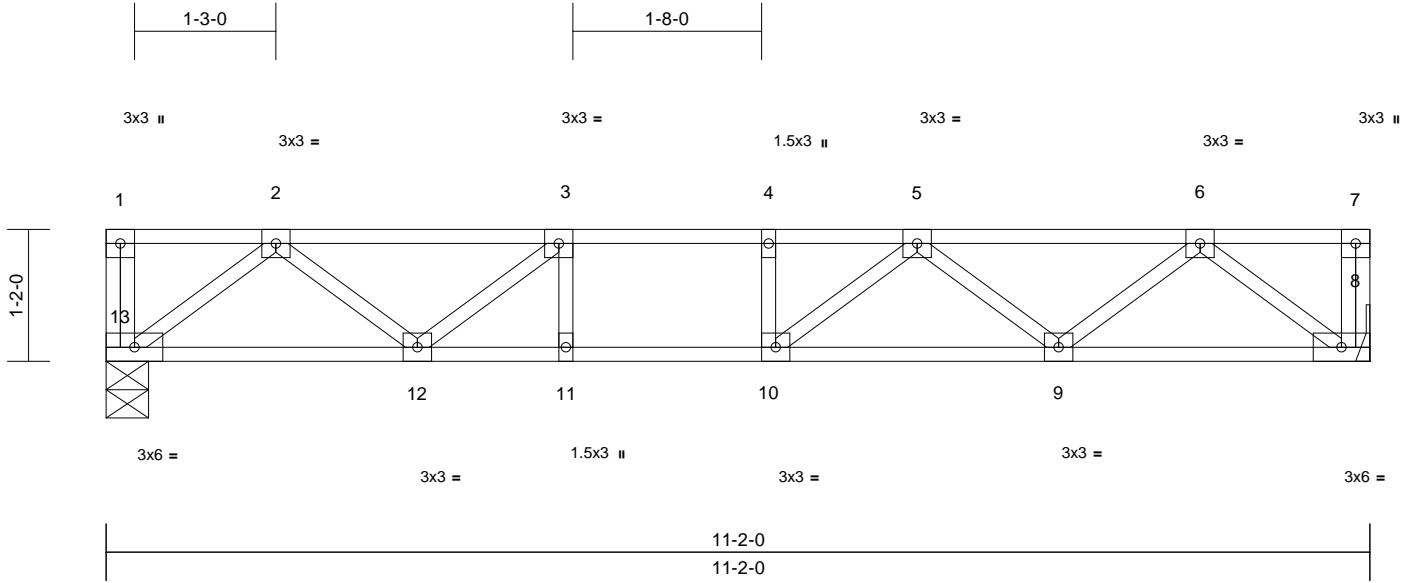
Job	Truss	Truss Type	Qty	Ply	Stonehaven Rev 2-EL-6,7-Floor	174557686
2411-0122-E	2F3	Floor	2	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 30 05:28:14

Page: 1

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<b>Loading</b>	(psf)	<b>Spacing</b>	2-0-0	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL	40.0	Plate Grip DOL	1.00	TC	0.45	Vert(LL)	-0.09	9-10	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.69	Vert(CT)	-0.12	9-10	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.02	8	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 58 lb	FT = 20%F, 12%E

#### LUMBER

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

#### BRACING

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

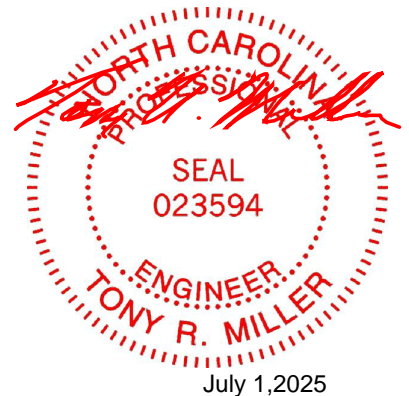
**REACTIONS** (size) 8= Mechanical, 13=0-4-8  
Max Grav 8=600 (LC 1), 13=600 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-13=-42/0, 7-8=-40/0, 1-2=0/0, 2-3=-1118/0, 3-4=-1532/0, 4-5=-1532/0, 5-6=-1122/0, 6-7=0/0  
BOT CHORD 12-13=0/719, 11-12=0/1532, 10-11=0/1532, 9-10=0/1469, 8-9=0/728  
WEBS 6-8=-913/0, 2-13=-902/0, 6-9=0/513, 2-12=0/519, 5-9=-451/0, 3-12=-542/0, 5-10=-78/298, 3-11=-39/125, 4-10=-129/0

#### NOTES

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

**LOAD CASE(S)** Standard



July 1, 2025

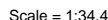
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

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](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcacompnents.com](http://www.sbcacompnents.com))

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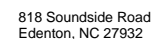
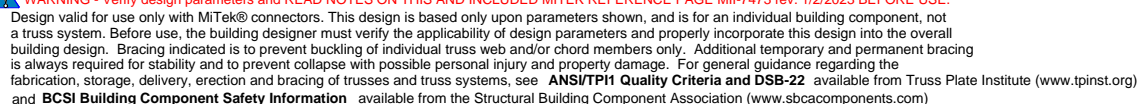
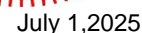


**LUMBER**

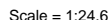
## BRACING

## NOTES

- LOAD CASE(S) Standard

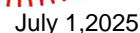


Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 30 05:28:13 Page: 1  
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LOAD CASE(S) Standard

**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" 0c.



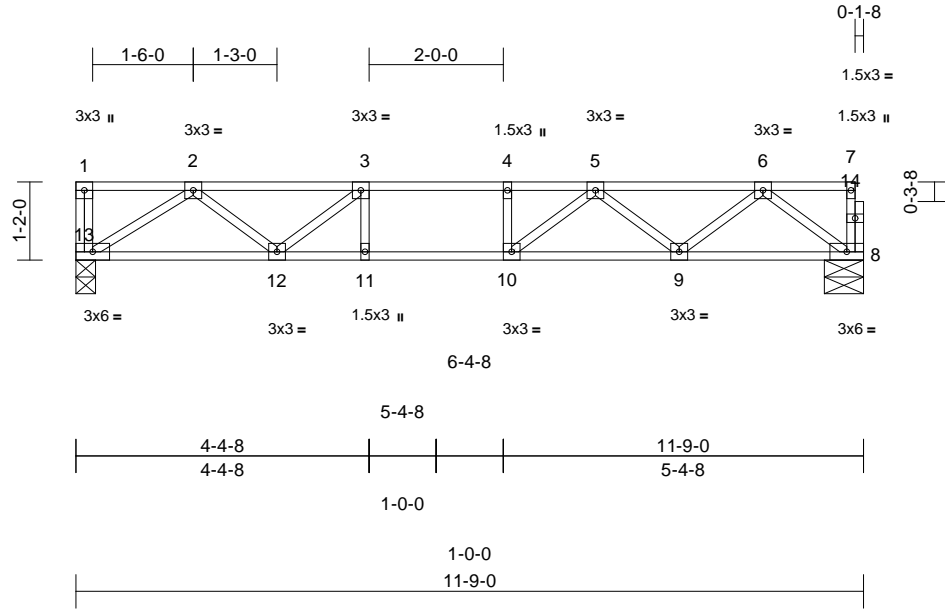


Job	Truss	Truss Type	Qty	Ply	Stonehaven Rev 2-EL-6,7-Floor	174557689
2411-0122-E	2F20	Floor	6	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.20 S May 13 2025 MiTek Industries, Inc. Mon Jun 30 05:28:16  
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Page: 1



Scale = 1:34.4

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.37	Vert(LL)	-0.07	9-10	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.27	Vert(CT)	-0.09	9-10	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.18	Horz(CT)	0.01	8	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 59 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) 8=0-7-0, 13=0-3-8  
Max Grav 8=418 (LC 1), 13=422 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-13=-38/0, 7-8=-24/0, 1-2=0/0, 2-3=-853/0, 3-4=-1134/0, 4-5=-1134/0, 5-6=-801/0, 6-7=-1/0  
BOT CHORD 12-13=0/582, 11-12=0/1134, 10-11=0/1134, 9-10=0/1057, 8-9=0/513  
WEBS 3-11=-33/95, 4-10=-107/0, 6-8=-642/0, 6-9=0/375, 5-9=-332/0, 5-10=-17/244, 2-13=-692/0, 2-12=0/352, 3-12=-386/0

#### NOTES

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

**LOAD CASE(S)** Standard



July 1, 2025

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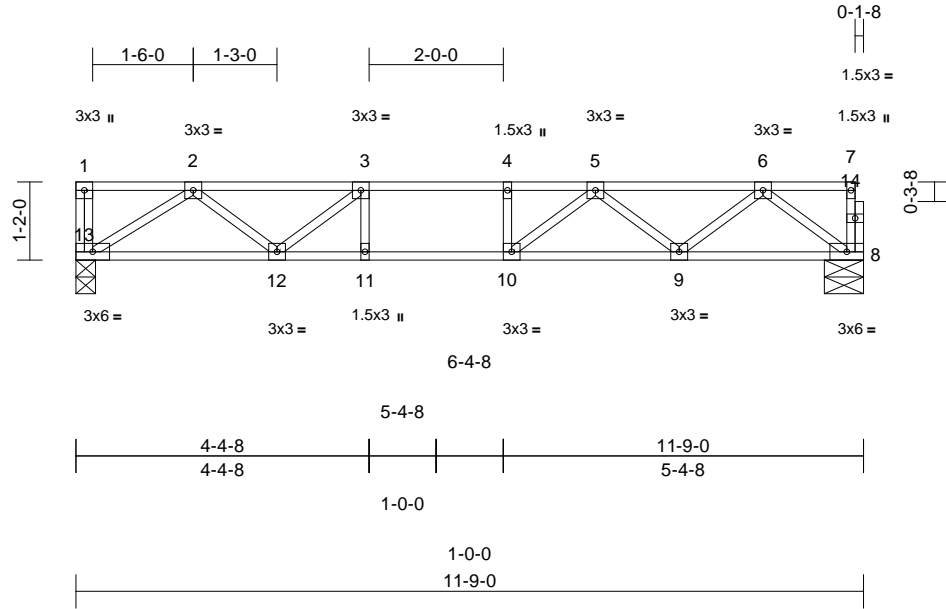
Job	Truss	Truss Type	Qty	Ply	Stonehaven Rev 2-EL-6,7-Floor	174557690
2411-0122-E	2F27	Floor	2	1	Job Reference (optional)	

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Run: 25.20 S May 13 2025 Print: 25.20 S May 13 2025 MiTek Industries, Inc. Mon Jun 30 05:28:17

Page: 1

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Scale = 1:34.4

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.35	Vert(LL)	-0.08	9-10	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.52	Vert(CT)	-0.10	9-10	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.02	8	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 59 lb	FT = 20%F, 12%E

#### LUMBER

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

#### BRACING

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

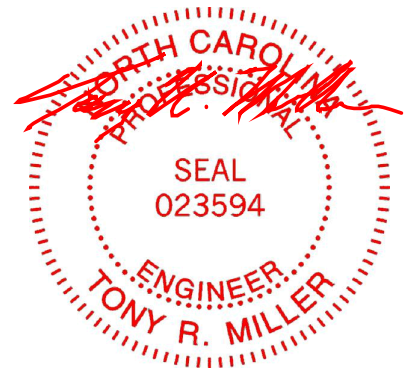
**REACTIONS** (size) 8=0-7-0, 13=0-3-8  
 Max Grav 8=418 (LC 1), 13=422 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-13=-39/0, 7-8=-24/0, 1-2=0/0, 2-3=-854/0, 3-4=-1134/0, 4-5=-1134/0, 5-6=-801/0, 6-7=-1/0  
 BOT CHORD 12-13=0/582, 11-12=0/1134, 10-11=0/1134, 9-10=0/1057, 8-9=0/513  
 WEBS 3-11=-29/85, 4-10=-111/0, 6-8=-642/0, 6-9=0/375, 5-9=-334/0, 5-10=-22/246, 2-13=-691/0, 2-12=0/354, 3-12=-382/0

#### NOTES

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

**LOAD CASE(S)** Standard



July 1, 2025

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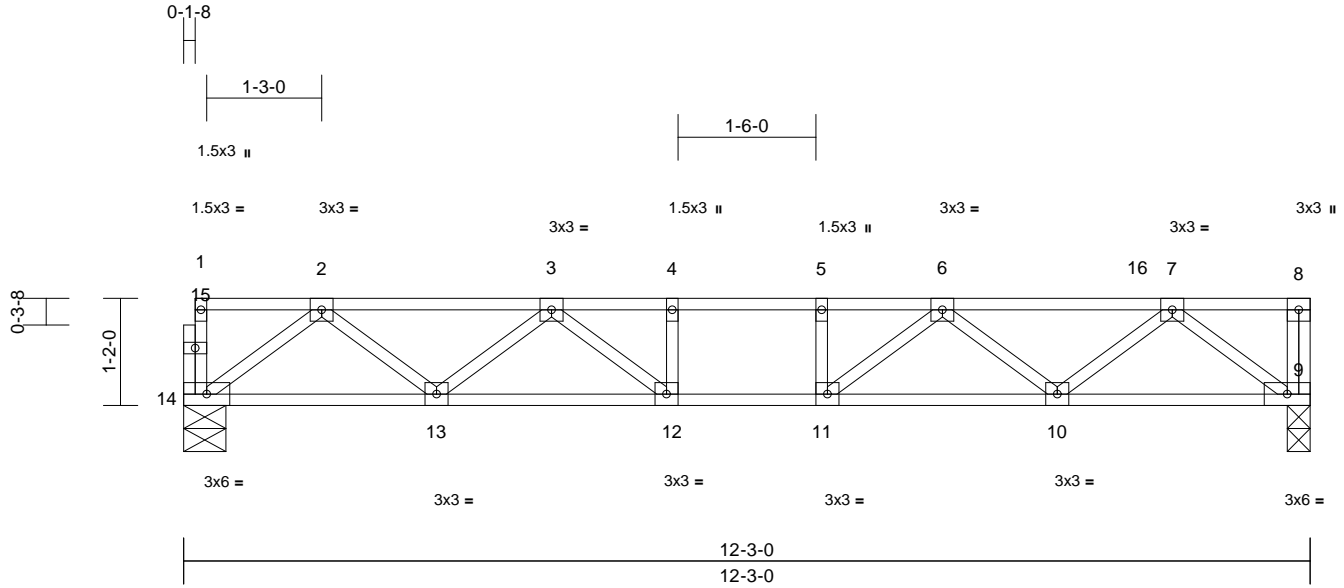
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Stonehaven Rev 2-EL-6,7-Floor	174557691
2411-0122-E	1F16	Floor	10	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 30 05:28:13  
ID:NhPnCQEUdRVYgGeVbW7pcbz7IOO-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	0.43	Vert(LL)	-0.08	10-11	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.65	Vert(CT)	-0.11	10-11	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.29	Horz(CT)	0.03	9	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 63 lb	FT = 20%F, 12%E

#### LUMBER

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

Concentrated Loads (lb)  
Vert: 8=10

#### BRACING

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

**REACTIONS** (size) 9=0-3-0, 14=0-5-8  
Max Grav 9=805 (LC 1), 14=664 (LC 1)

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

TOP CHORD 1-14=-35/0, 8-9=-100/0, 1-2=-2/0,  
2-3=-1291/0, 3-4=-1934/0, 4-5=-1934/0,  
5-6=-1934/0, 6-7=-1363/0, 7-8=0/0

BOT CHORD 13-14=0/819, 12-13=0/1730, 11-12=0/1934,  
10-11=0/1771, 9-10=0/917

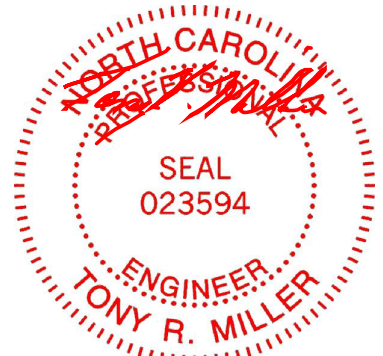
WEBS 7-9=-1151/0, 2-14=-1025/0, 7-10=0/580,  
2-13=0/615, 6-10=-531/0, 3-13=-572/0,  
6-11=-21/396, 3-12=0/448, 4-12=-204/0,  
5-11=-183/0

#### NOTES

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

#### LOAD CASE(S) Standard

- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (lb/ft)  
Vert: 9-14=-10, 1-16=-100, 8-16=-183



July 1, 2025

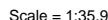
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

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. Mon Jun 30 05:28:16 Page: 1  
ID: tbF6PxHw1Suwa9RvfEsh y8MUK-RfC?PsB70Hq3NSqPqnL8w3uITXhGKWRCDoi7J4zJC?i



**LUMBER**

## BRACING

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

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

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

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

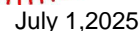
BOT CHORD 13-14=0/815, 12-13=0/1768, 11-12=0/1885,  
10-11=0/1885, 9-10=0/1885, 8-9=0/803

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

## NOTES

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

LOAD CASE(S) Standard



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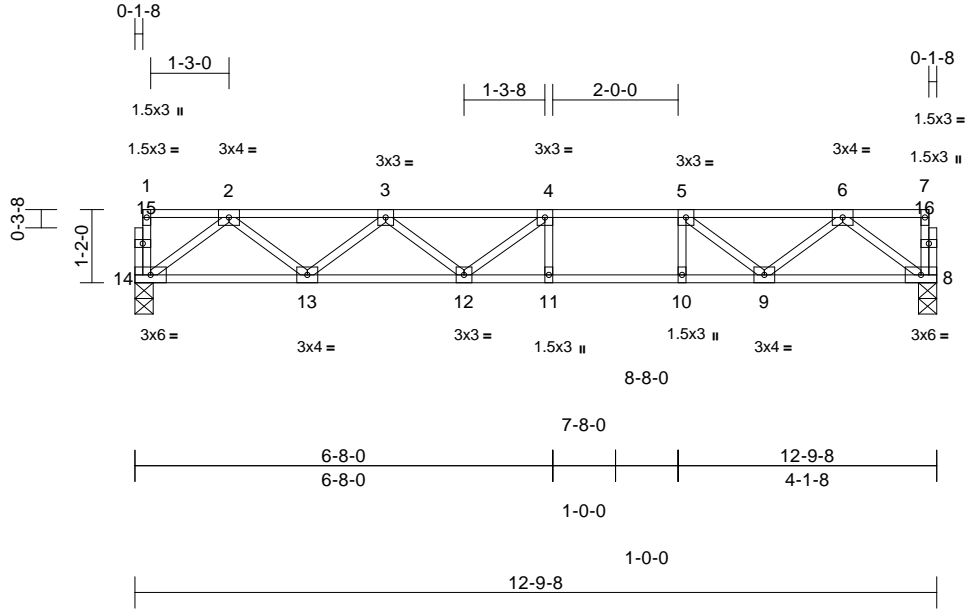
Job	Truss	Truss Type	Qty	Ply	Stonehaven Rev 2-EL-6,7-Floor	174557693
2411-0122-E	2F18	Floor	6	1	Job Reference (optional)	

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Run: 25.20 S May 13 2025 Print: 25.20 S May 13 2025 MiTek Industries, Inc. Mon Jun 30 05:28:16

Page: 1

ID: \_tbF6PxHw1Suwa9RvfEsh\_y8MUK-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f



Scale = 1:36.8

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.39	Vert(LL)	-0.14	11-12	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.62	Vert(CT)	-0.19	11-12	>790	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.33	Horz(CT)	0.02	8	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 64 lb	FT = 20%F, 12%E

#### LUMBER

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

#### BRACING

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

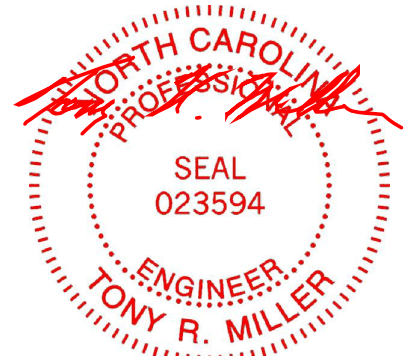
**REACTIONS** (size) 8=0-3-8, 14=0-3-8  
 Max Grav 8=684 (LC 1), 14=684 (LC 1)

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

#### NOTES

- Unbalanced floor live loads have been considered for this design.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

**LOAD CASE(S)** Standard



July 1, 2025

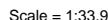
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

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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LUMBER		Concentrated Loads (lb)
TOP CHORD	2x4 SP No.2(flat)	Vert: 14=-58
BOT CHORD	2x4 SP No.2(flat)	
WEBS	2x4 SP No.3(flat)	
OTHERS	2x4 SP No.3(flat)	

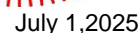
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 9=0-5-8, 14=0-4-8  
Max Gray 9=686 (LC 1), 14=750 (LC 1)

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

- 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  
Uniform Loads (lb/ft)  
Vert: 9-14=-10, 1-8=-100



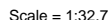
 **WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE**

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

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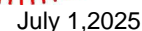
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Page: 1

- 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) 15. This connection is for uplift only and does not consider lateral forces.
- 3) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10'-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.

- 1) Dead + Floor Live (balanced): Lumber Increase=1.00,  
Plate Increase=1.00  
Uniform Loads (lb/ft)  
Vert: 9-15=-7, 1-8=-67  
Concentrated Loads (lb)  
Vert: 8=-779 (F=-700)



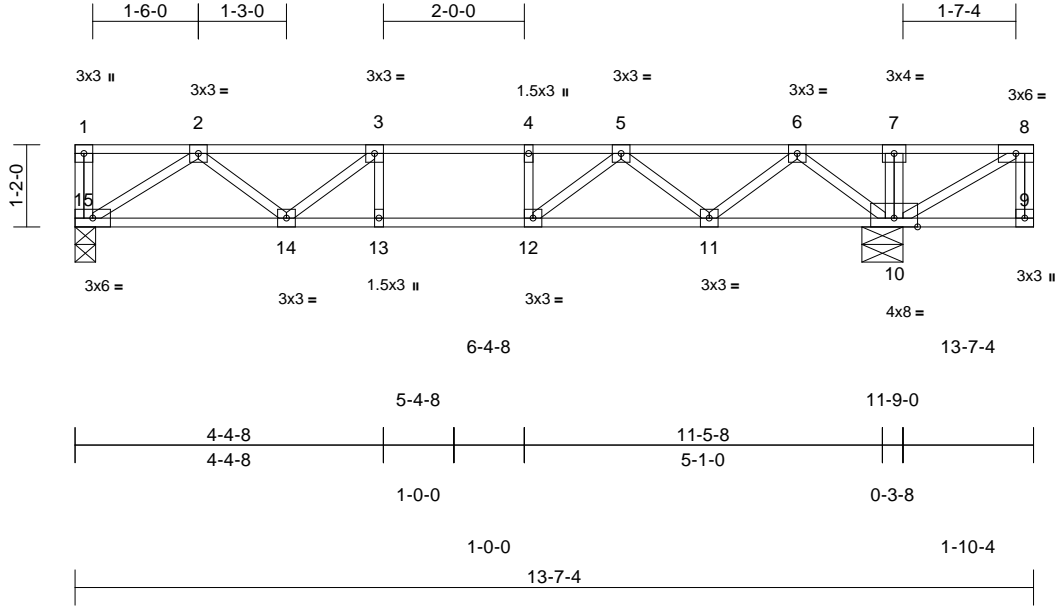


Job	Truss	Truss Type	Qty	Ply	Stonehaven Rev 2-EL-6,7-Floor	174557696
2411-0122-E	2F22A	Floor	2	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.20 S May 13 2025 MiTek Industries, Inc. Mon Jun 30 05:28:16  
ID:KqP897?Qla4B1M1OicP1O2y8MUF-RfC?PsB70Hq3NSgPqnL8w3uTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:32.7

Loading	(psf)	Spacing	1-4-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.82	0.09	11-12	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.77	0.12	11-12	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.42	0.01	10	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S						Weight: 71 lb	FT = 20%F, 12%E

#### LUMBER

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

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except:  
10-0-0 oc bracing: 9-10.

REACTIONS (size) 10=0-7-0, 15=0-3-8

Max Uplift 15=24 (LC 4)

Max Grav 10=3806 (LC 1), 15=373 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-15=-34/4, 8-9=-5/2, 1-2=0/0, 2-3=-716/152, 3-4=-889/386, 4-5=-889/386, 5-6=-378/976, 6-7=0/1490, 7-8=0/1514

BOT CHORD 14-15=-36/515, 13-14=-386/889, 12-13=-386/889, 11-12=-716/704, 10-11=-1206/42, 9-10=0/0

WEBS 3-13=-168/36, 4-12=-252/0, 7-10=-2419/0, 6-10=-828/0, 6-11=0/560, 5-11=-591/0, 5-12=0/638, 2-15=-612/42, 2-14=-151/262, 3-14=-245/298, 8-10=-1738/0

#### NOTES

- Unbalanced floor live loads have been considered for this design.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 15. This connection is for uplift only and does not consider lateral forces.
- Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

5) CAUTION, Do not erect truss backwards.

6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 700 lb down at 13-5-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.

7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (lb/ft)  
Vert: 9-15=-7, 1-8=-67  
Concentrated Loads (lb)  
Vert: 7=-2300, 8=-810 (F=-700)



July 1, 2025

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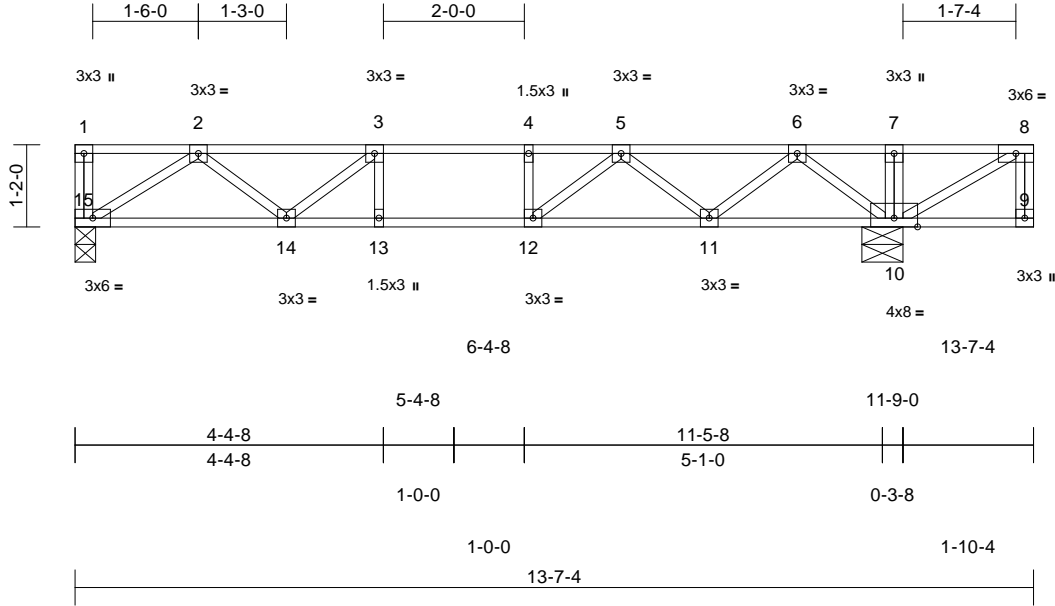


Job	Truss	Truss Type	Qty	Ply	Stonehaven Rev 2-EL-6,7-Floor	174557697
2411-0122-E	2F22	Floor	4	1	Job Reference (optional)	

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Page: 1



Scale = 1:32.7

Loading	(psf)	Spacing	1-4-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.82	0.09	11-12	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.77	0.12	11-12	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.41	0.01	10	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S						Weight: 71 lb	FT = 20%F, 12%E

#### LUMBER

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

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except:  
10-0-0 oc bracing: 9-10.

REACTIONS (size) 10=0-7-0, 15=0-3-8

Max Uplift 15=23 (LC 4)  
Max Grav 10=1491 (LC 1), 15=373 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-15=-34/4, 8-9=-4/3, 1-2=0/0, 2-3=-717/151,  
3-4=-891/384, 4-5=-891/384, 5-6=-380/973,  
6-7=0/1485, 7-8=0/1486

BOT CHORD 14-15=-35/516, 13-14=-384/891,  
12-13=-384/891, 11-12=-713/707,  
10-11=-1205/44, 9-10=0/0

WEBS 3-13=-168/36, 4-12=-252/0, 7-10=-123/0,  
6-10=-823/0, 6-11=0/561, 5-11=-592/0,  
5-12=0/636, 8-10=-1707/0, 2-15=-613/42,  
2-14=-151/262, 3-14=-245/298

#### NOTES

- Unbalanced floor live loads have been considered for this design.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 15. This connection is for uplift only and does not consider lateral forces.
- Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

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

#### LOAD CASE(S) Standard

- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (lb/ft)  
Vert: 9-15=-7, 1-8=-67  
Concentrated Loads (lb)  
Vert: 8=-796 (F=-700)



July 1, 2025

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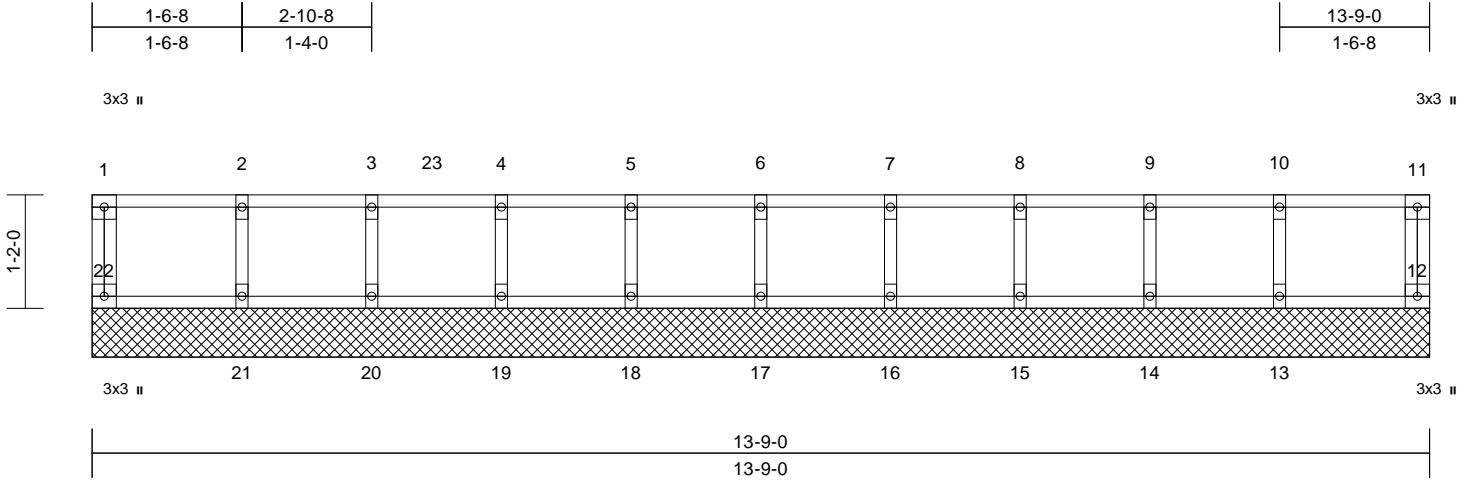
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Stonehaven Rev 2-EL-6,7-Floor	174557698
2411-0122-E	1FGE7	Floor Supported Gable	2	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 30 05:28:13  
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Page: 1



Scale = 1:23.7

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

#### LUMBER

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

#### BRACING

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

#### REACTIONS

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

#### FORCES

(lb) - Maximum Compression/Maximum Tension

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

#### NOTES

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

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

#### LOAD CASE(S) Standard

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



July 1, 2025

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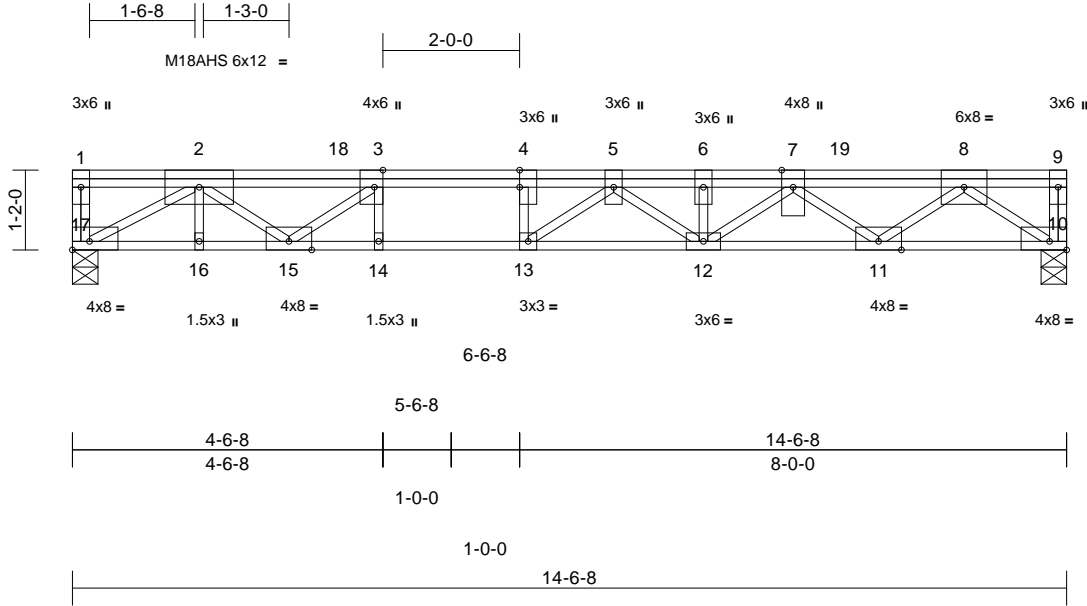
Job	Truss	Truss Type	Qty	Ply	Stonehaven Rev 2-EL-6,7-Floor	I74557699
2411-0122-E	1F14	Floor	16	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 30 05:28:12

Page: 1

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Scale = 1:33.7

Plate Offsets (X, Y): [3:0-3-0,Edge], [4:0-3-0,Edge], [10:Edge,0-1-8], [17:Edge,0-1-8]

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.58	Vert(LL)	-0.10	12-13	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.78	Vert(CT)	-0.28	13-14	>608	360	M18AHS	186/179
BCLL	0.0	Rep Stress Incr	NO	WB	0.90	Horz(CT)	0.08	10	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 94 lb	FT = 20%F, 12%E

#### LUMBER

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

Uniform Loads (lb/ft)

Vert: 10-17=-8, 1-9=-80

Concentrated Loads (lb)

Vert: 18=-1062, 19=-875

#### BRACING

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

REACTIONS (size) 10=0-4-8, 17=0-4-8  
Max Grav 10=1589 (LC 1), 17=1606 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
Tension

TOP CHORD 1-17=-2/31, 9-10=0/60, 1-2=0/0, 2-3=-4324/0,  
3-4=-5771/0, 4-5=-5771/0, 5-6=-5354/0,  
6-7=-5354/0, 7-8=-3719/0, 8-9=0/0

BOT CHORD 16-17=0/2804, 15-16=0/2804, 14-15=0/5771,  
13-14=0/5771, 12-13=0/5608, 11-12=0/5152,  
10-11=0/2258

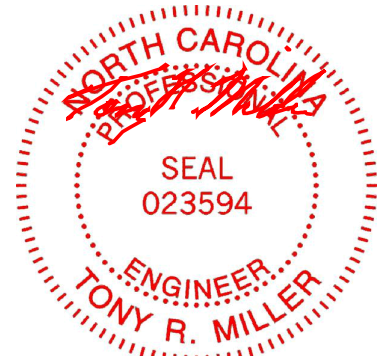
WEBS 8-10=-2772/0, 7-12=0/252, 6-12=0/96,  
5-12=-317/0, 7-11=-1821/0, 3-14=-82/0,  
4-13=-271/0, 8-11=0/1855, 5-13=0/581,  
2-15=0/1896, 3-15=-1806/0, 2-16=-20/0,  
2-17=-3223/0

#### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

#### LOAD CASE(S) Standard

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



July 1, 2025

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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. Mon Jun 30 05:28:12 Page: 1  
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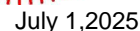
## LUMBER

## BRACING

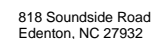
WEBS 3-14=0/221, 4-13=-90/59, 8-10=-971/0,  
8-11=0/635, 7-11=-616/0, 7-12=0/346,  
6-12=-53/0, 5-12=-189/0, 5-13=-293/173,  
2-15=0/614, 3-15=-766/0, 2-16=0/44,  
2-17=-1091/0

## NOTES

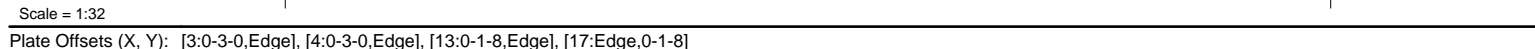
- LOAD CASE(S) Standard



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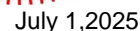
Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 30 05:28:12 Page: 1  
ID:LY3x63qJHzXJ8dptVMQ0qzewLb-RfC?PsB70Hg3NSqPanL8w3ulTXbGKWrCDoI7J4zJC?f



<b>LUMBER</b>	Vert: 10-17=-8, 1-9=-80
TOP CHORD	2x4 SP SS(flat)
BOT CHORD	2x4 SP SS(flat)
WEBS	2x4 SP No.3(flat)
<b>BRACING</b>	
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.
<b>REACTIONS</b>	(size) 10=0-4-8, 17=0-4-8
	Max Grav 10=918 (LC 1), 17=1437 (LC 1)
<b>FORCES</b>	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-17=0/62, 9-10=-40/0, 1-2=0/0, 2-3=-3750/0, 3-4=-4802/0, 4-5=-4802/0, 5-6=-3639/0, 6-7=-3639/0, 7-8=-2099/0, 8-9=0/0
BOT CHORD	16-17=0/2558, 15-16=0/2558, 14-15=0/4802, 13-14=0/4802, 12-13=0/4107, 11-12=0/2941, 10-11=0/1221
WEBS	2-15=0/1487, 3-15=-1313/0, 8-10=-1498/0, 8-11=0/1116, 7-11=-1069/0, 7-12=0/871, 6-12=-179/0, 5-12=-585/0, 5-13=0/1244, 3-14=-159/0, 4-13=-614/0, 2-16=-31/0, 2-17=-2940/0

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

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



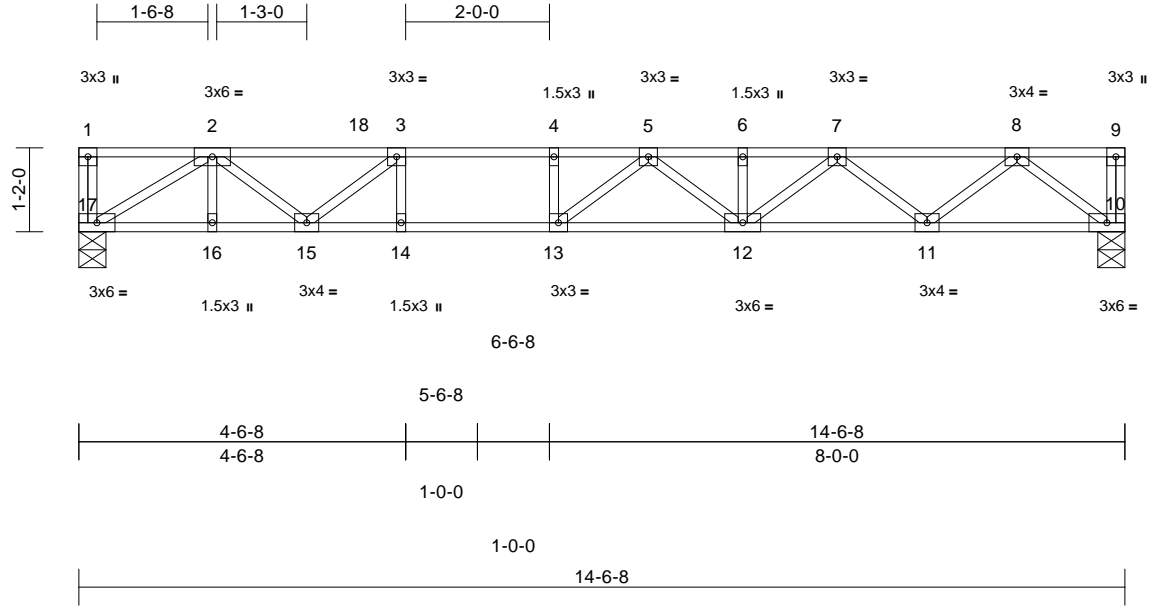
Job	Truss	Truss Type	Qty	Ply	Stonehaven Rev 2-EL-6,7-Floor	174557702
2411-0122-E	1F12	Floor	2	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 30 05:28:12

Page: 1

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Scale = 1:32

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.42	Vert(LL)	-0.17	12-13	>984	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.50	Vert(CT)	-0.22	12-13	>792	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.35	Horz(CT)	0.03	10	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 75 lb	FT = 20%F, 12%E

#### LUMBER

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

Vert: 10-17=-8, 1-9=-80

Concentrated Loads (lb)

Vert: 18=-141

#### BRACING

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

REACTIONS (size) 10=0-4-8, 17=0-4-8  
Max Grav 10=666 (LC 1), 17=733 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-17=-47/0, 9-10=-31/0, 1-2=0/0,  
2-3=-1698/0, 3-4=-2330/0, 4-5=-2330/0,  
5-6=-2185/0, 6-7=-2185/0, 7-8=-1356/0,  
8-9=0/0

BOT CHORD 16-17=0/1126, 15-16=0/1126, 14-15=0/2330,  
13-14=0/2330, 12-13=0/2369, 11-12=0/1870,  
10-11=0/823

WEBS 3-14=-45/162, 4-13=-121/27, 8-10=-1033/0,  
8-11=0/694, 7-11=-668/0, 7-12=0/402,  
6-12=-60/0, 5-12=-259/0, 5-13=-177/288,  
2-15=0/731, 3-15=-820/0, 2-16=0/34,  
2-17=-1314/0

#### NOTES

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

#### LOAD CASE(S) Standard

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



July 1, 2025

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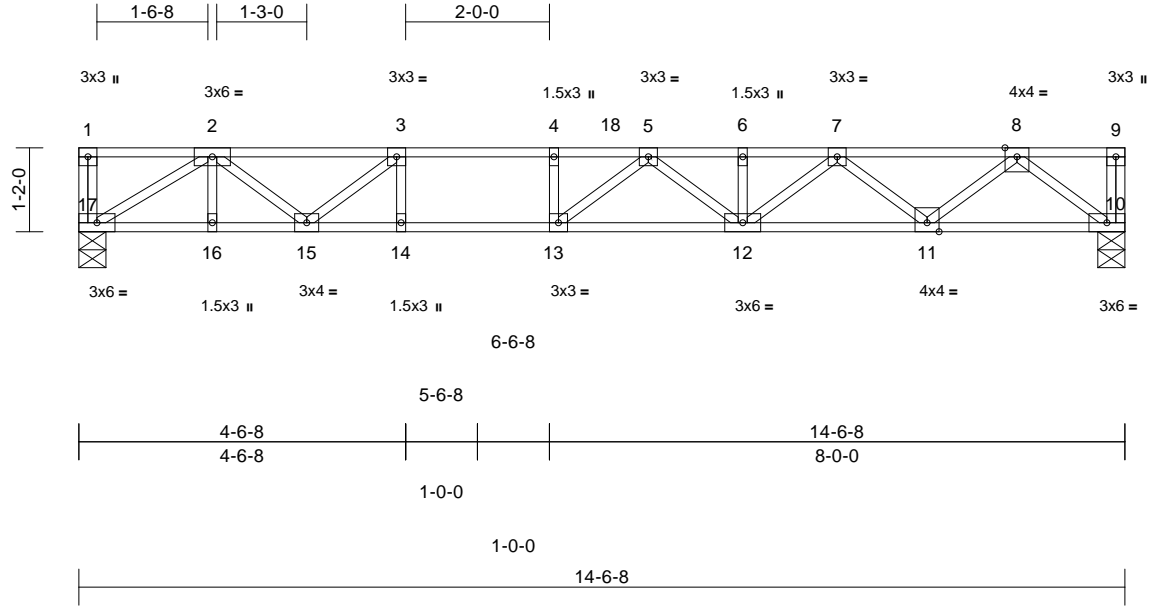
Job	Truss	Truss Type	Qty	Ply	Stonehaven Rev 2-EL-6,7-Floor	174557703
2411-0122-E	1F10	Floor	6	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 30 05:28:12

Page: 1

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Scale = 1:32

Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.62	Vert(LL)	-0.17	12-13	>984	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.77	Vert(CT)	-0.31	12-13	>545	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.43	Horz(CT)	0.03	10	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 75 lb	FT = 20%F, 12%E

#### LUMBER

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

Vert: 10-17=-8, 1-9=-80  
Concentrated Loads (lb)  
Vert: 10=-58, 7=-223, 18=-28

#### BRACING

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

**REACTIONS** (size) 10=0-4-8, 17=0-4-8  
Max Grav 10=864 (LC 1), 17=703 (LC 1)

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

TOP CHORD 1-17=-66/0, 9-10=-32/0, 1-2=0/0,  
2-3=-1632/0, 3-4=-2389/0, 4-5=-2389/0,  
5-6=-2607/0, 6-7=-2607/0, 7-8=-1702/0,  
8-9=0/0

BOT CHORD 16-17=0/1049, 15-16=0/1049, 14-15=0/2389,  
13-14=0/2389, 12-13=0/2673, 11-12=0/2392,  
10-11=0/1005

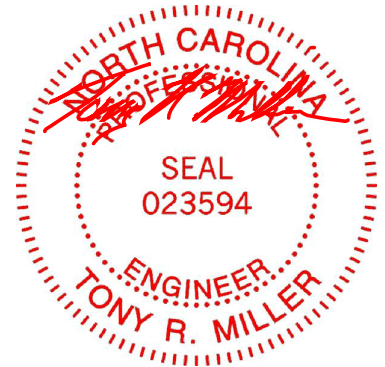
WEBS 3-14=0/301, 4-13=-21/128, 8-10=-1261/0,  
8-11=0/908, 7-11=-898/0, 7-12=0/275,  
6-12=-37/0, 5-12=-109/0, 5-13=-490/0,  
2-15=0/744, 3-15=-981/0, 2-16=0/55,  
2-17=-1225/0

#### NOTES

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

#### LOAD CASE(S) Standard

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



July 1, 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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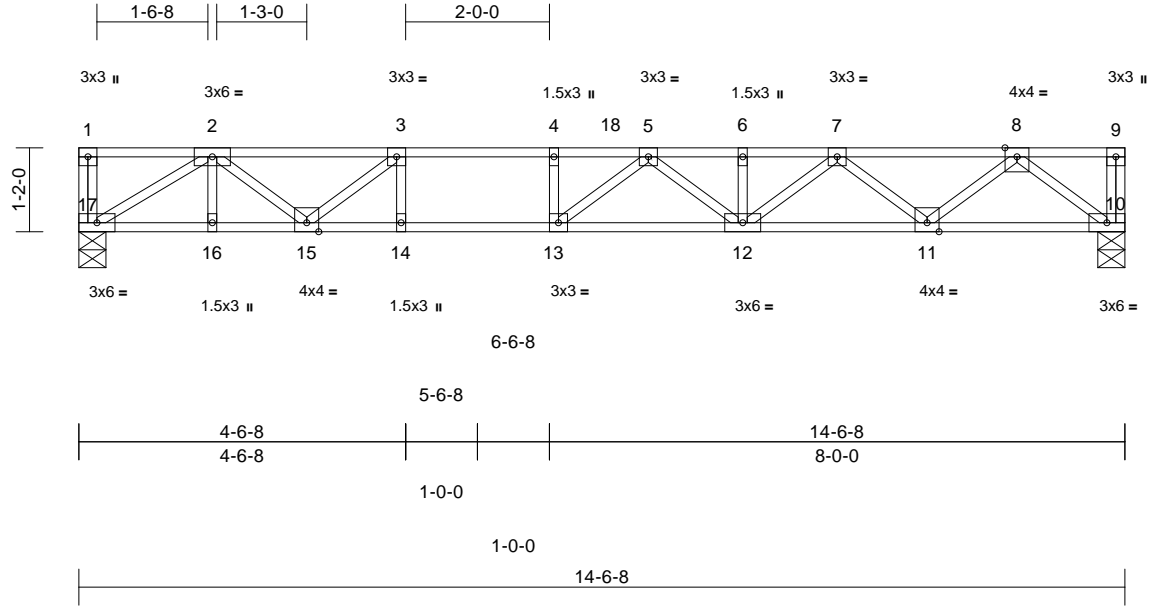
Job	Truss	Truss Type	Qty	Ply	Stonehaven Rev 2-EL-6,7-Floor	174557704
2411-0122-E	1F9	Floor	4	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 30 05:28:12

Page: 1

ID:5NH6gshRC7IjyEgOUSRSGzewO7-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f



Scale = 1:32

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	0.79	Vert(LL)	-0.17	12-13	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.87	Vert(CT)	-0.38	12-13	>452	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.43	Horz(CT)	0.04	10	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 75 lb	FT = 20%F, 12%E

#### LUMBER

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

Vert: 10-17=-8, 1-9=-80  
Concentrated Loads (lb)  
Vert: 10=-58, 7=-47, 18=-280

#### BRACING

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

**REACTIONS** (size) 10=0-4-8, 17=0-4-8  
Max Grav 10=864 (LC 1), 17=779 (LC 1)

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

TOP CHORD 1-17=-72/0, 9-10=-32/0, 1-2=0/0,  
2-3=-1852/0, 3-4=-2792/0, 4-5=-2792/0,  
5-6=-2830/0, 6-7=-2830/0, 7-8=-1702/0,  
8-9=0/0

BOT CHORD 16-17=0/1169, 15-16=0/1169, 14-15=0/2792,  
13-14=0/2792, 12-13=0/3140, 11-12=0/2400,  
10-11=0/1003

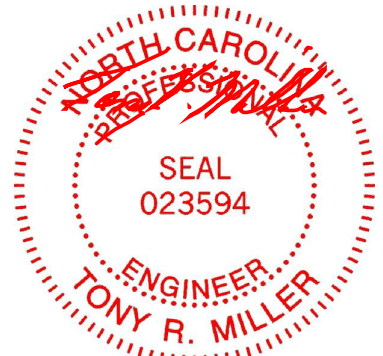
WEBS 3-14=0/402, 4-13=-35/108, 8-10=-1258/0,  
8-11=0/909, 7-11=-909/0, 7-12=0/549,  
6-12=0/47, 5-12=-422/0, 5-13=-572/0,  
2-15=0/872, 3-15=-1214/0, 2-16=0/70,  
2-17=-1365/0

#### NOTES

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

#### LOAD CASE(S) Standard

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



July 1, 2025

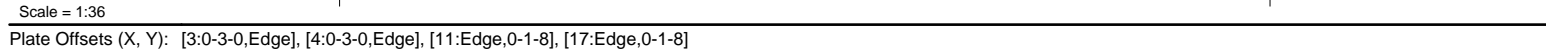
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

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

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818 Soundside Road  
Edenton, NC 27932

Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 30 05:28:14 Page: 1  
ID:zIpeZ242xdQ8wBhV8VgWQZzewHO-Rfc?PsB70Hq3NSgPqnL8w3uITXbGKWkrDcof7J4zJC?f



<b>LUMBER</b>		1) Dead + Floor Live (balanced): Lumber Increase=1.00,
TOP CHORD	2x4 SP No.2(flat)	Plate Increase=1.00
BOT CHORD	2x4 SP SS(flat)	Uniform Loads (lb/ft)
WEBS	2x4 SP No.3(flat) *Except* 9-12:2x4 SP No.2 (flat)	Vert: 11-17=-7, 1-10=-67
		Concentrated Loads (lb)
		Vert: 18=-696, 19=-1725
<b>BRACING</b>		
TOP CHORD	Structural wood sheathing directly applied or 5-4-10 oc purlins, except end verticals.	
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.	
<b>REACTIONS</b>	(size)	11=0-4-8, 17=0-4-8
	Max Grav	11=2048 (LC 1), 17=1421 (LC 1)
<b>FORCES</b>	(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-17=-50/0, 10-11=-80/0, 1-2=0/0, 2-3=-3958/0, 3-4=-5551/0, 4-5=-5551/0, 5-6=-6266/0, 6-7=-6266/0, 7-8=-5646/0, 8-9=-5646/0, 9-10=0/0	
BOT CHORD	16-17=0/2482, 15-16=0/5551, 14-15=0/5551, 13-14=0/6140, 12-13=0/6353, 11-12=0/3011	
WEBS	3-15=0/120, 4-14=0/445, 2-17=-2828/0, 2-16=0/1875, 3-16=-1987/0, 7-13=-213/0, 6-13=0/69, 5-13=0/207, 5-14=-859/0, 9-11=-3588/0, 9-12=0/3287, 8-12=-1306/0, 7-12=-965/0	

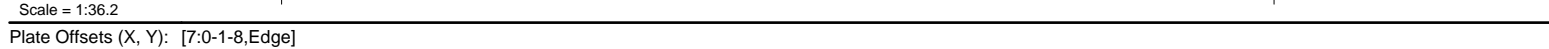
- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10'-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.

**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. Mon Jun 30 05:28:16 Page: 1  
ID:Vg1su3wf9kK2JRaELxd8ny8MUL-RfC?Psb70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?fi



<b>LUMBER</b>	
TOP CHORD	2x4 SP SS(flat)
BOT CHORD	2x4 SP SS(flat)
WEBS	2x4 SP No.3(flat)
OTHERS	2x4 SP No.3(flat)
<b>BRACING</b>	
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.
<b>REACTIONS</b>	(size) 11=0-3-4, 18= Mechanical Max Grav 11=838 (LC 1), 18=844 (LC 1)
<b>FORCES</b>	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-18=-39/0, 10-11=-67/0, 1-2=0/0, 2-3=-1730/0, 3-4=-2776/0, 4-5=-2776/0, 5-6=-3178/0, 6-7=-3178/0, 7-8=-2686/0, 8-9=-1743/0, 9-10=-4/0
BOT CHORD	17-18=0/1048, 16-17=0/2372, 15-16=0/3036, 14-15=0/2686, 13-14=0/2686, 12-13=0/2686, 11-12=0/992
WEBS	7-14=-316/0, 8-13=0/373, 2-18=-1315/0, 2-17=0/887, 3-17=-837/0, 3-16=0/516, 4-16=-109/0, 5-16=-332/0, 5-15=0/197, 9-11=-1240/0, 9-12=0/978, 8-12=-1211/0, 6-15=-317/0, 7-15=-55/744

- 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.

July 1, 2025

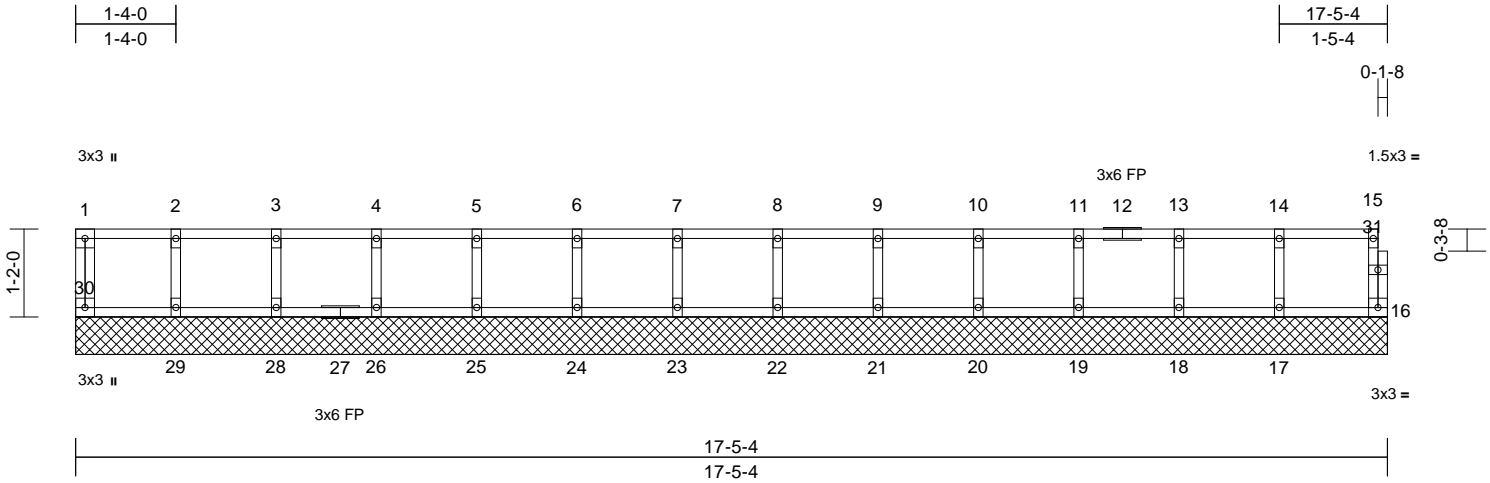
Job	Truss	Truss Type	Qty	Ply	Stonehaven Rev 2-EL-6,7-Floor	174557707
2411-0122-E	2FGE4	Floor Supported Gable	2	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.20 S May 13 2025 MiTek Industries, Inc. Mon Jun 30 05:28:18

Page: 1

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Scale = 1:30.6

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

#### LUMBER

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

#### BRACING

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

#### REACTIONS

(size)	16=17-5-4, 17=17-5-4, 18=17-5-4, 19=17-5-4, 20=17-5-4, 21=17-5-4, 22=17-5-4, 23=17-5-4, 24=17-5-4, 25=17-5-4, 26=17-5-4, 28=17-5-4, 29=17-5-4, 30=17-5-4
Max Grav	16=41 (LC 1), 17=100 (LC 1), 18=97 (LC 1), 19=98 (LC 1), 20=98 (LC 1), 21=99 (LC 1), 22=101 (LC 1), 23=101 (LC 1), 24=99 (LC 1), 25=98 (LC 1), 26=98 (LC 1), 28=99 (LC 1), 29=94 (LC 1), 30=42 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

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

#### NOTES

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

- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.
- Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.

#### LOAD CASE(S) Standard

- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (lb/ft)  
Vert: 16-30=-7, 1-6=-67, 6-9=-69, 9-15=-67



July 1, 2025

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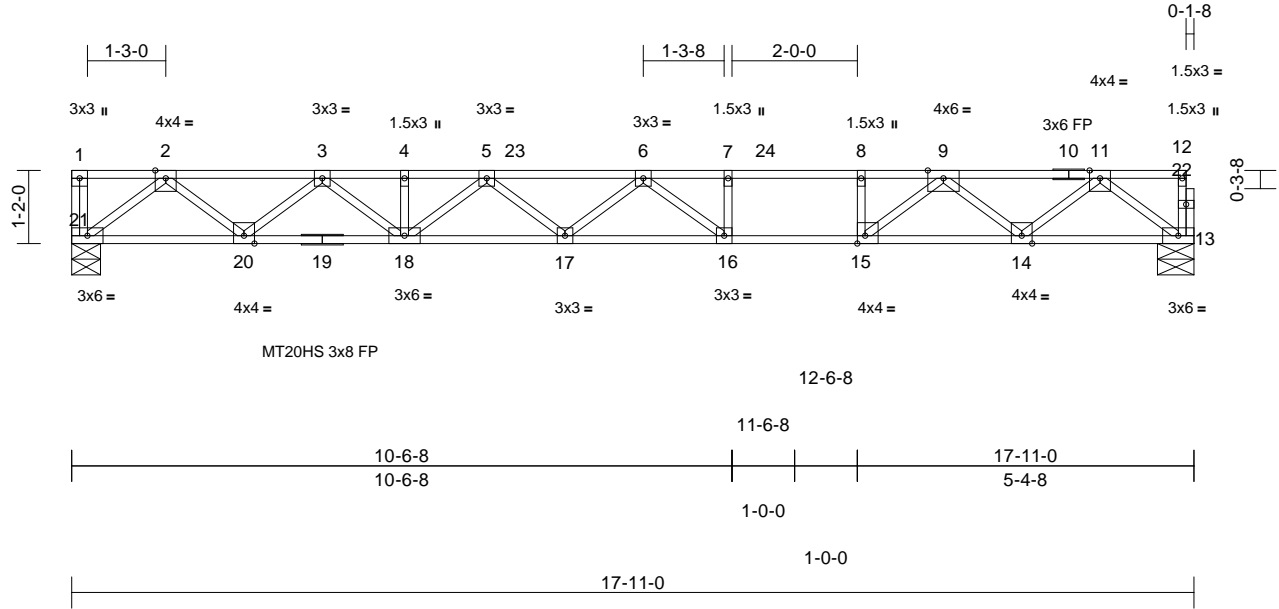
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Stonehaven Rev 2-EL-6,7-Floor	174557708
2411-0122-E	2F26A	Floor	2	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. Mon Jun 30 05:28:17  
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Page: 1



Scale = 1:36.8

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

Loading	(psf)	Spacing	1-8-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.79	Vert(LL)	-0.33	16-17	>641	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.87	Vert(CT)	-0.49	16-17	>431	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.53	Horz(CT)	0.06	13	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 90 lb	FT = 20%F, 12%E

#### LUMBER

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

#### BRACING

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

REACTIONS	(size) 13=0-7-0, 21=0-5-8
	Max Grav 13=834 (LC 1), 21=838 (LC 1)

FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-21=-33/0, 12-13=-26/3, 1-2=0/0, 2-3=-1780/0, 3-4=-2973/0, 4-5=-2973/0, 5-6=-3583/0, 6-7=-3276/0, 7-8=-3276/0, 8-9=-3276/0, 9-11=-1742/0, 11-12=-2/0
BOT CHORD	20-21=0/1050, 18-20=0/2476, 17-18=0/3395, 16-17=0/3660, 15-16=0/3276, 14-15=0/2489, 13-14=0/1046
WEBS	7-16=-55/208, 8-15=-480/0, 2-21=-1317/0, 2-20=0/951, 3-20=-906/0, 3-18=0/635, 4-18=-62/0, 5-18=-539/0, 5-17=0/251, 6-17=-190/0, 6-16=-630/58, 11-13=-1311/0, 11-14=0/906, 9-14=-972/0, 9-15=0/1114

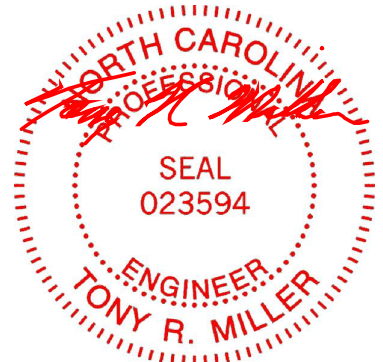
#### NOTES

- Unbalanced floor live loads have been considered for this design.
- All plates are MT20 plates 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.

5) 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: 13-21=-8, 1-23=-83, 23-24=-98, 12-24=-83



July 1, 2025

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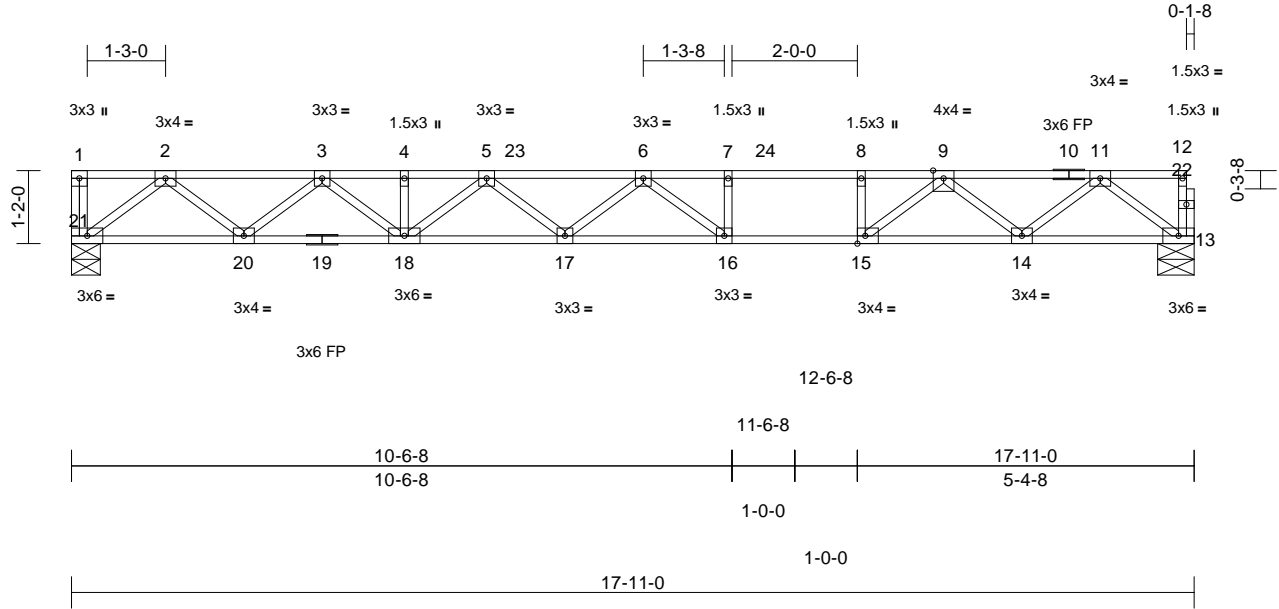
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Stonehaven Rev 2-EL-6,7-Floor	174557709
2411-0122-E	2F26	Floor	4	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. Mon Jun 30 05:28:17  
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Page: 1



Scale = 1:36.8

Plate Offsets (X, Y): [15:0-1-8,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	0.59	Vert(LL)	-0.26	16-17	>800	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.70	Vert(CT)	-0.40	16-17	>532	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.43	Horz(CT)	0.05	13	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 90 lb	FT = 20%F, 12%E

#### LUMBER

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

#### BRACING

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

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

FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-21=-27/0, 12-13=-23/1, 1-2=0/0, 2-3=-1432/0, 3-4=-2395/0, 4-5=-2395/0, 5-6=-2890/0, 6-7=-2641/0, 7-8=-2641/0, 8-9=-2641/0, 9-11=-1401/0, 11-12=-1/0
BOT CHORD	20-21=0/844, 18-20=0/1993, 17-18=0/2737, 16-17=0/2953, 15-16=0/2641, 14-15=0/2005, 13-14=0/838
WEBS	7-16=-42/168, 8-15=-387/0, 2-21=-1059/0, 2-20=0/766, 3-20=-729/0, 3-18=0/513, 4-18=-49/0, 5-18=-437/0, 5-17=0/205, 6-17=-154/0, 6-16=-511/39, 11-13=-1050/0, 11-14=0/732, 9-14=-786/0, 9-15=0/901

#### NOTES

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

4) 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: 13-21=-7, 1-23=-67, 23-24=-80, 12-24=-67



July 1, 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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**TRENCO**  
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Edenton, NC 27932

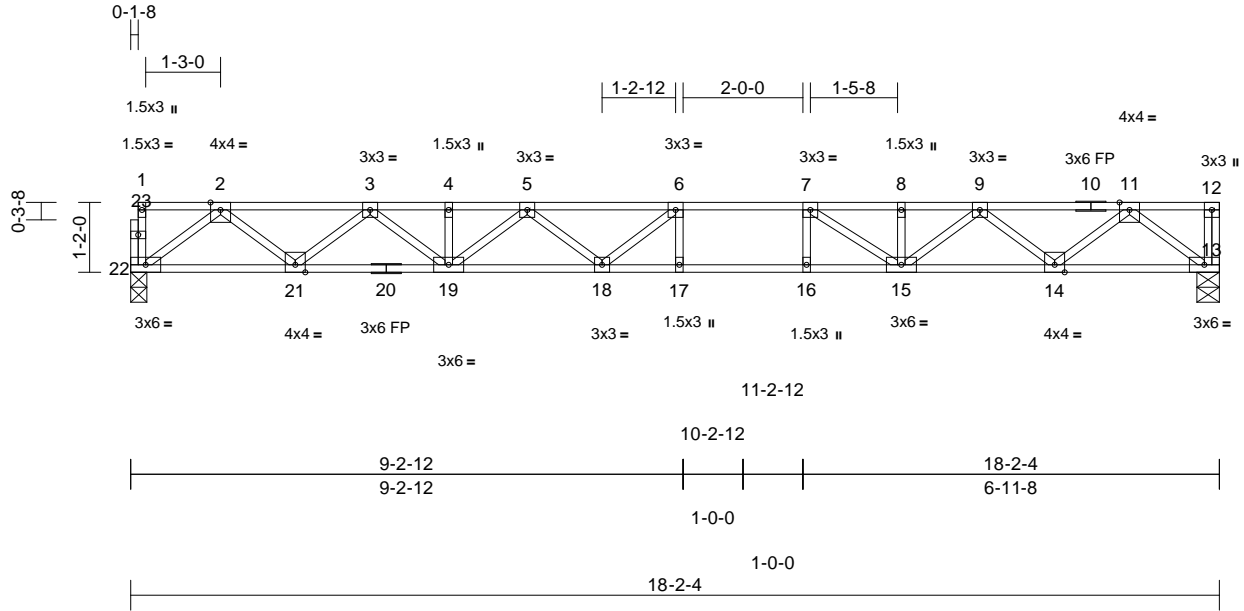


Job	Truss	Truss Type	Qty	Ply	Stonehaven Rev 2-EL-6,7-Floor	174557710
2411-0122-E	2F5	Floor	2	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

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Page: 1



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Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.67	Vert(LL)	-0.29	17-18	>736	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.67	Vert(CT)	-0.40	17-18	>537	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.06	13	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 92 lb	FT = 20%F, 12%E

#### LUMBER

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

#### BRACING

TOP CHORD	Structural wood sheathing directly applied or 5-7-14 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

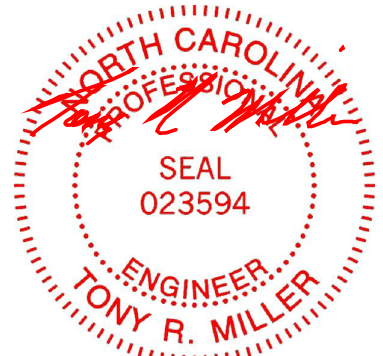
REACTIONS	(size) 13=0-4-8, 22=0-3-4
	Max Grav 13=789 (LC 1), 22=784 (LC 1)

FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-22=-29/0, 12-13=-32/0, 1-2=-2/0, 2-3=-1668/0, 3-4=-2773/0, 4-5=-2773/0, 5-6=-3292/0, 6-7=-3311/0, 7-8=-2761/0, 8-9=-2761/0, 9-11=-1671/0, 11-12=0/0
BOT CHORD	21-22=0/985, 19-21=0/2321, 18-19=0/3171, 17-18=0/3311, 16-17=0/3311, 15-16=0/3311, 14-15=0/2317, 13-14=0/987
WEBS	6-17=-218/73, 7-16=-39/220, 2-22=-1234/0, 2-21=0/889, 3-21=-849/0, 3-19=0/578, 4-19=-31/0, 5-19=-508/0, 5-18=0/301, 6-18=-335/213, 11-13=-1239/0, 11-14=0/890, 9-14=-841/0, 9-15=0/566, 8-15=-101/88, 7-15=-845/0

#### NOTES

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

LOAD CASE(S) Standard



July 1, 2025

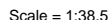
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

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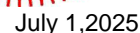
Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 30 05:28:14 Page: 1  
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## LUMBER

## NOTES

- LOAD CASE(S) Standard



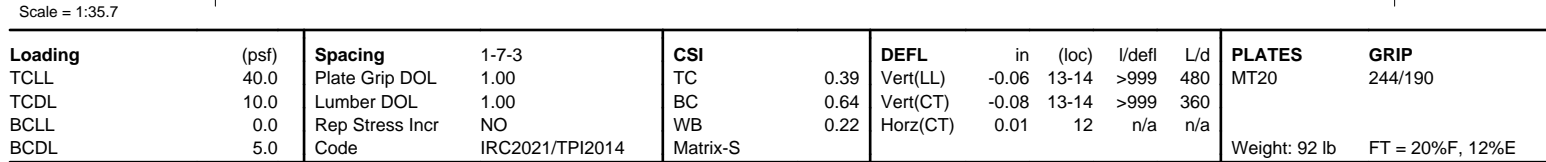
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MIT-141.5 Rev. 1/2/2023 BEFORE USE.**

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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.

**LOAD CASE(S)**      Standard

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

A red circular professional engineer seal for the State of North Carolina. The outer ring contains the text "NORTH CAROLINA" at the top and "ENGINEER" at the bottom. Inside the ring, the word "PROFESSIONAL" is at the top and "SEAL" is at the bottom. In the center, the number "023594" is printed. A signature, "Tony R. Miller", is written across the seal in red ink.

**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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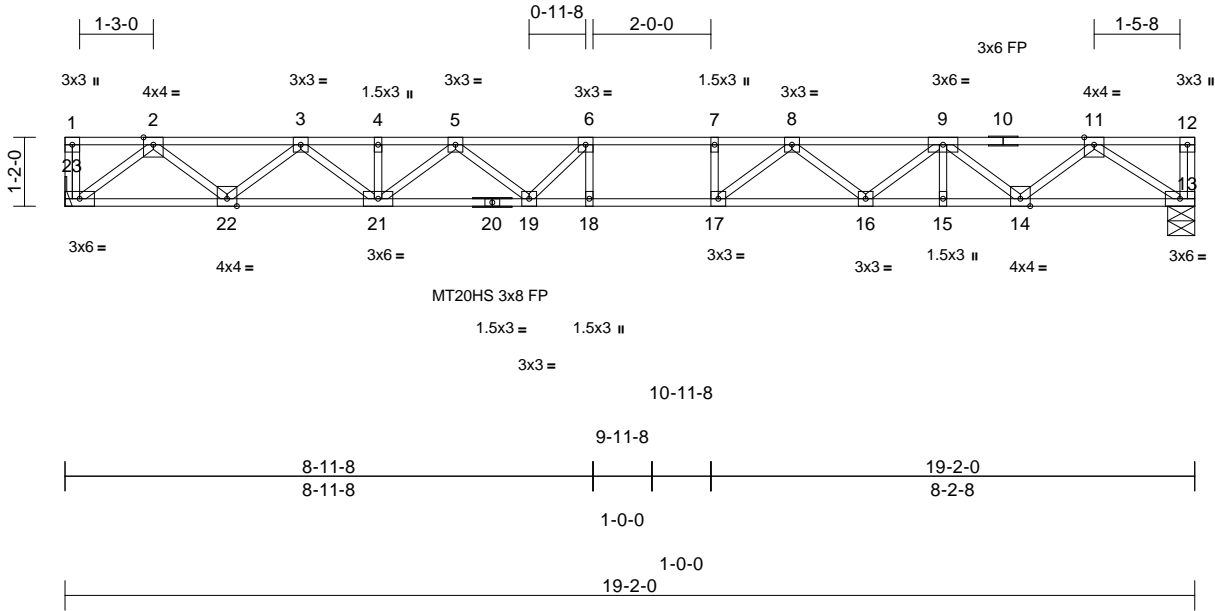
Job	Truss	Truss Type	Qty	Ply	Stonehaven Rev 2-EL-6,7-Floor	174557714
2411-0122-E	2F10	Floor	14	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 30 05:28:15

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<b>Loading</b>	(psf)	<b>Spacing</b>	1-7-3	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL	40.0	Plate Grip DOL	1.00	TC	0.61	Vert(LL)	-0.33	18	>695	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.95	Vert(CT)	-0.45	18	>507	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.45	Horz(CT)	0.07	13	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 98 lb	FT = 20%F, 12%E

**LUMBER**

TOP CHORD 2x4 SP No.2(flat)

BOT CHORD 2x4 SP No.2(flat) \*Except\* 20-13:2x4 SP SS (flat)

WEBS 2x4 SP No.3(flat)

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 5-11-5 oc purlins, except end verticals.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 19-21.

**REACTIONS** (size) 13=0-5-8, 23= Mechanical Max Grav 13=832 (LC 1), 23=832 (LC 1)

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

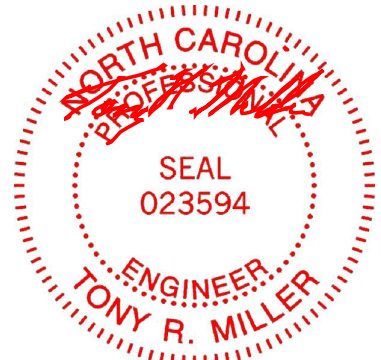
TOP CHORD 1-23=-32/0, 12-13=-44/0, 1-2=0/0, 2-3=-1775/0, 3-4=-2995/0, 4-5=-2995/0, 5-6=-3616/0, 6-7=-3731/0, 7-8=-3731/0, 8-9=-3055/0, 9-11=-1895/0, 11-12=0/0

BOT CHORD 22-23=0/1043, 21-22=0/2480, 19-21=0/3419, 18-19=0/3731, 17-18=0/3731, 16-17=0/3469, 15-16=0/2622, 14-15=0/2622, 13-14=0/1180

WEBS 6-18=-189/138, 7-17=-225/0, 2-23=-1308/0, 2-22=0/953, 3-22=-918/0, 3-21=0/658, 4-21=-54/0, 5-21=-542/0, 5-19=0/397, 6-19=-444/141, 11-13=-1412/0, 11-14=0/931, 9-14=-927/0, 9-15=-17/35, 9-16=0/553, 8-16=-540/0, 8-17=-28/598

- NOTES**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are MT20 plates unless otherwise indicated.
  - 3) The Fabrication Tolerance at joint 20 = 12%
  - 4) Refer to girder(s) for truss to truss connections.
  - 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



July 1,2025

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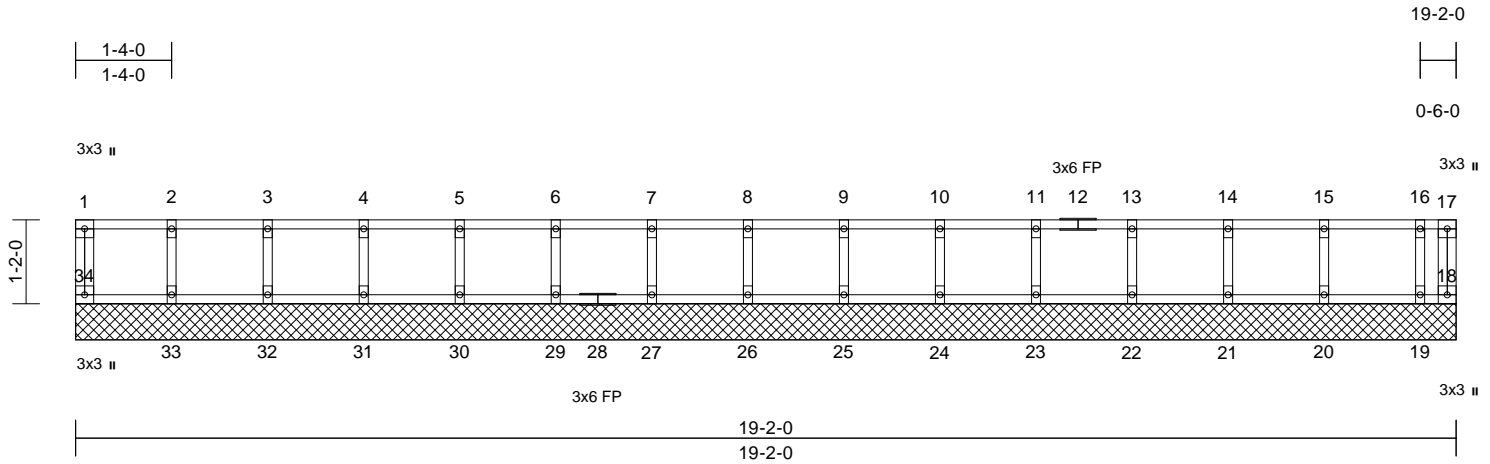
Job	Truss	Truss Type	Qty	Ply	Stonehaven Rev 2-EL-6,7-Floor	174557715
2411-0122-E	2FGE2	Floor Supported Gable	2	1	Job Reference (optional)	

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Scale = 1:32

Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	18	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 82 lb	FT = 20%F, 12%E

#### LUMBER

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

#### BRACING

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

REACTIONS	(size)	18=19-2-0, 19=19-2-0, 20=19-2-0, 21=19-2-0, 22=19-2-0, 23=19-2-0, 24=19-2-0, 25=19-2-0, 26=19-2-0, 27=19-2-0, 29=19-2-0, 30=19-2-0, 31=19-2-0, 32=19-2-0, 33=19-2-0, 34=19-2-0
Max Grav		18=7 (LC 1), 19=80 (LC 1), 20=122 (LC 1), 21=116 (LC 1), 22=118 (LC 1), 23=117 (LC 1), 24=117 (LC 1), 25=117 (LC 1), 26=117 (LC 1), 27=117 (LC 1), 29=117 (LC 1), 30=117 (LC 1), 31=117 (LC 1), 32=117 (LC 1), 33=118 (LC 1), 34=47 (LC 1)

#### FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-34=-44/0, 17-18=0/0, 1-2=-5/0, 2-3=-5/0, 3-4=-5/0, 4-5=-5/0, 5-6=-5/0, 6-7=-5/0, 7-8=-5/0, 8-9=-5/0, 9-10=-5/0, 10-11=-5/0, 11-13=-5/0, 13-14=-5/0, 14-15=-5/0, 15-16=-5/0, 16-17=-5/0
BOT CHORD	33-34=0/5, 32-33=0/5, 31-32=0/5, 30-31=0/5, 29-30=0/5, 27-29=0/5, 26-27=0/5, 25-26=0/5, 24-25=0/5, 23-24=0/5, 22-23=0/5, 21-22=0/5, 20-21=0/5, 19-20=0/5, 18-19=0/5
WEBS	2-33=-106/0, 3-32=-107/0, 4-31=-107/0, 5-30=-107/0, 6-29=-107/0, 7-27=-107/0, 8-26=-107/0, 9-25=-107/0, 10-24=-107/0, 11-23=-107/0, 13-22=-107/0, 14-21=-106/0, 15-20=-111/0, 16-19=-80/0

#### NOTES

- 1) All plates are 1.5x3 (||) MT20 unless otherwise indicated.
- 2) Gable requires continuous bottom chord bearing.
- 3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 4) Gable studs spaced at 1-4-0 oc.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

#### LOAD CASE(S)

Standard



July 1, 2025

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July 1, 2025

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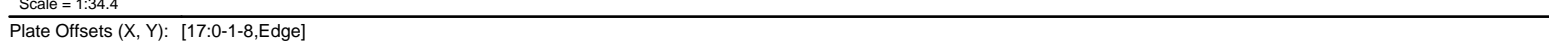
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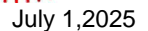


<b>LUMBER</b>		3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
TOP CHORD	2x4 SP SS(flat) *Except* 10-13:2x4 SP No.2 (flat)	4) CAUTION, Do not erect truss backwards.
BOT CHORD	2x4 SP No.2(flat) *Except* 21-14:2x4 SP SS (flat)	5) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 700 lb down at 19-7-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
WEBS	2x4 SP No.3(flat)	6) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
<b>BRACING</b>		<b>LOAD CASE(S)</b> 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: 14-23=-7, 1-13=-67
<b>REACTIONS</b>	(size) 15=0-7-0, 23=0-5-8	Concentrated Loads (lb) Vert: 13=-1075 (F=-700)
	Max Grav 15=1978 (LC 1), 23=587 (LC 3)	
<b>FORCES</b>		
TOP CHORD	(lb) - Maximum Compression/Maximum Tension	
	1-23=-26/0, 13-14=-11/0, 1-2=0/0,	
	2-3=-1215/0, 3-4=-1964/0, 4-5=-1964/0,	
	5-6=-2261/124, 6-7=-1819/622,	
	7-8=-1819/622, 8-9=-1819/622,	
BOT CHORD	9-11=-452/1365, 11-12=0/1969,	
	12-13=0/1970	
	22-23=0/730, 20-22=0/1671, 19-20=-42/2194,	
	18-19=-281/2226, 17-18=-622/1819,	
	16-17=-1048/1106, 15-16=-1641/0, 14-15=0/0	
WEBS	7-18=0/285, 8-17=-489/0, 12-15=-126/0,	
	2-23=-916/0, 2-22=0/630, 3-22=-594/10,	
	3-20=-56/375, 4-20=-58/0, 5-20=-293/89,	
	5-19=-107/92, 6-19=-27/221, 6-18=-797/0,	
	11-15=-1143/0, 11-16=0/847, 9-16=-962/0,	
	9-17=0/1164, 13-15=-2263/0	

- 3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 4) CAUTION, Do not erect truss backwards.
- 5) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 700 lb down at 19-7-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 6) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

- 1) Dead + Floor Live (balanced): Lumber Increase=1.00,  
Plate Increase=1.00  
Uniform Loads (lb/ft)  
Vert: 14-23=-7, 1-13=-67  
Concentrated Loads (lb)  
Vert: 13=-1075 (F=-700)

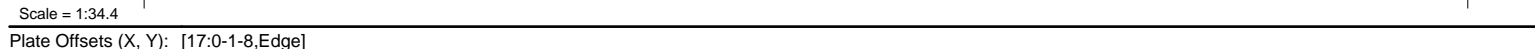


**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

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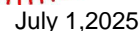


Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 30 05:28:17 Page: 1  
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<b>LUMBER</b>		3)	Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
TOP CHORD	2x4 SP SS(flat) *Except* 10-13:2x4 SP No.2 (flat)	4)	CAUTION, Do not erect truss backwards.
BOT CHORD	2x4 SP No.2(flat) *Except* 21-14:2x4 SP SS (flat)	5)	Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 700 lb down at 19-7-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
WEBS	2x4 SP No.3(flat)	6)	In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
<b>BRACING</b>		<b>LOAD CASE(S)</b> 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: 14-23=-8, 1-24=-83, 24-25=-86, 13-25=-83
<b>REACTIONS</b> (size) 15=0-7-0, 23=0-5-8			Concentrated Loads (lb) Vert: 13=-852 (F=-700)
<b>FORCES</b> (lb) - Maximum Compression/Maximum Tension			
TOP CHORD	1-23=-33/0, 13-14=-10/0, 1-2=0/0, 2-3=-1625/0, 3-4=-2667/0, 4-5=-2667/0, 5-6=-3135/0, 6-7=-2717/189, 7-8=-2717/189, 8-9=-2717/189, 9-11=-1129/949, 11-12=0/1604, 12-13=0/1605		
BOT CHORD	22-23=0/969, 20-22=0/2247, 19-20=0/3008, 18-19=0/3147, 17-18=-189/2717, 16-17=-618/1901, 15-16=-1246/427, 14-15=0/0		
WEBS	7-18=-29/301, 8-17=-559/0, 12-15=-151/0, 2-23=-1215/0, 2-22=0/854, 3-22=-809/0, 3-20=0/537, 4-20=-70/0, 5-20=-435/21, 5-19=-58/173, 6-19=-106/182, 6-18=-859/0, 11-15=-1364/0, 11-16=0/996, 9-16=-1116/0, 9-17=0/1322, 13-15=-1843/0		

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



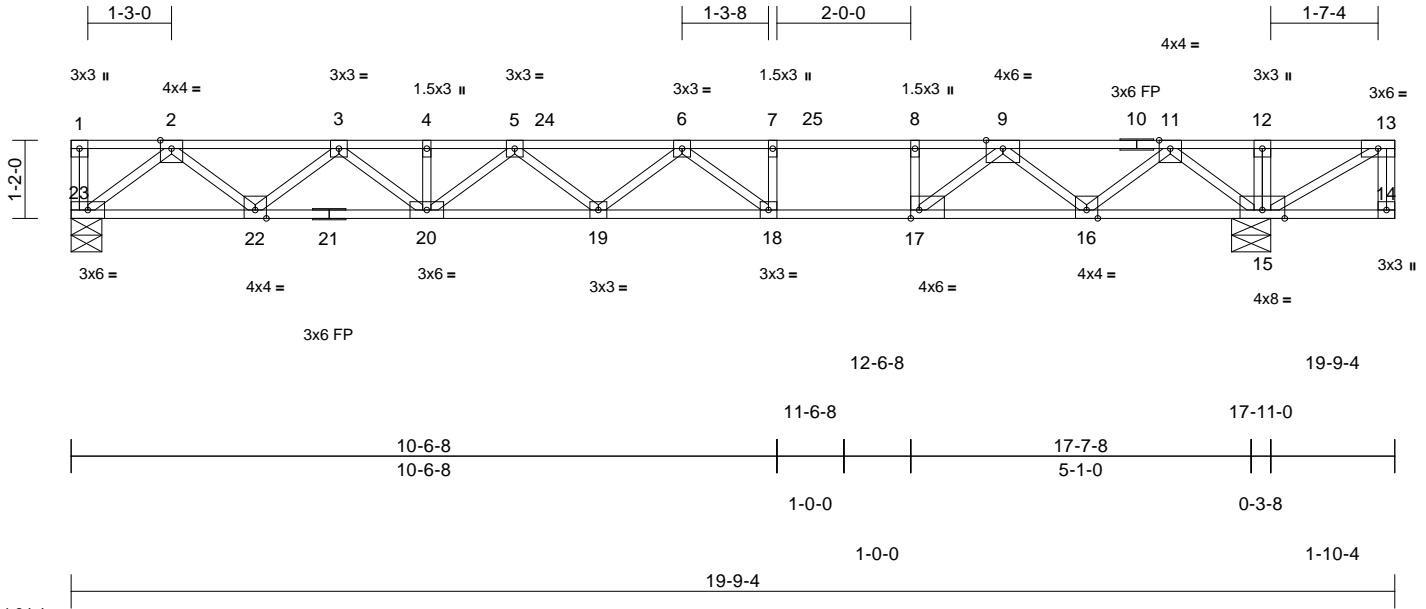
Job	Truss	Truss Type	Qty	Ply	Stonehaven Rev 2-EL-6,7-Floor	I74557719
2411-0122-E	2F25	Floor Girder	2	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.20 S May 13 2025 MiTek Industries, Inc. Mon Jun 30 05:28:17

Page: 1

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Scale = 1:34.4

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

Loading	(psf)	Spacing	1-8-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.89	Vert(LL)	-0.33	18-19	>641	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.91	Vert(CT)	-0.49	18-19	>435	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.66	Horz(CT)	0.05	15	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 102 lb	FT = 20%F, 12%E

#### LUMBER

TOP CHORD 2x4 SP SS(flat) \*Except\* 10-13:2x4 SP No.2 (flat)  
BOT CHORD 2x4 SP No.2(flat) \*Except\* 21-14:2x4 SP SS (flat)  
WEBS 2x4 SP No.3(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 16-17,15-16.

REACTIONS (size) 15=0-7-0, 23=0-5-8  
Max Grav 15=1901 (LC 1), 23=806 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-23=-33/0, 13-14=-10/0, 1-2=0/0, 2-3=-1699/0, 3-4=-2812/0, 4-5=-2812/0, 5-6=-3348/0, 6-7=-2924/0, 7-8=-2924/0, 8-9=-2924/0, 9-11=-1267/812, 11-12=0/1512, 12-13=0/1513

BOT CHORD 22-23=0/1007, 20-22=0/2356, 19-20=0/3194, 18-19=0/3380, 17-18=0/2924, 16-17=-454/2064, 15-16=-1129/544, 14-15=0/0

WEBS 7-18=-19/310, 8-17=-581/0, 12-15=-150/0, 2-23=-1264/0, 2-22=0/900, 3-22=-855/0, 3-20=0/583, 4-20=-66/0, 5-20=-488/0, 5-19=-24/207, 6-19=-132/155, 6-18=-893/0, 11-15=-1396/0, 11-16=0/1023, 9-16=-1151/0, 9-17=0/1376, 13-15=-1738/0

#### NOTES

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

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

- 4) CAUTION, Do not erect truss backwards.

- 5) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 700 lb down at 19-7-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.

- 6) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

- 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (lb/ft)  
Vert: 14-23=-8, 1-24=-83, 24-25=-98, 13-25=-83  
Concentrated Loads (lb)  
Vert: 13=-800 (F=700)



July 1,2025

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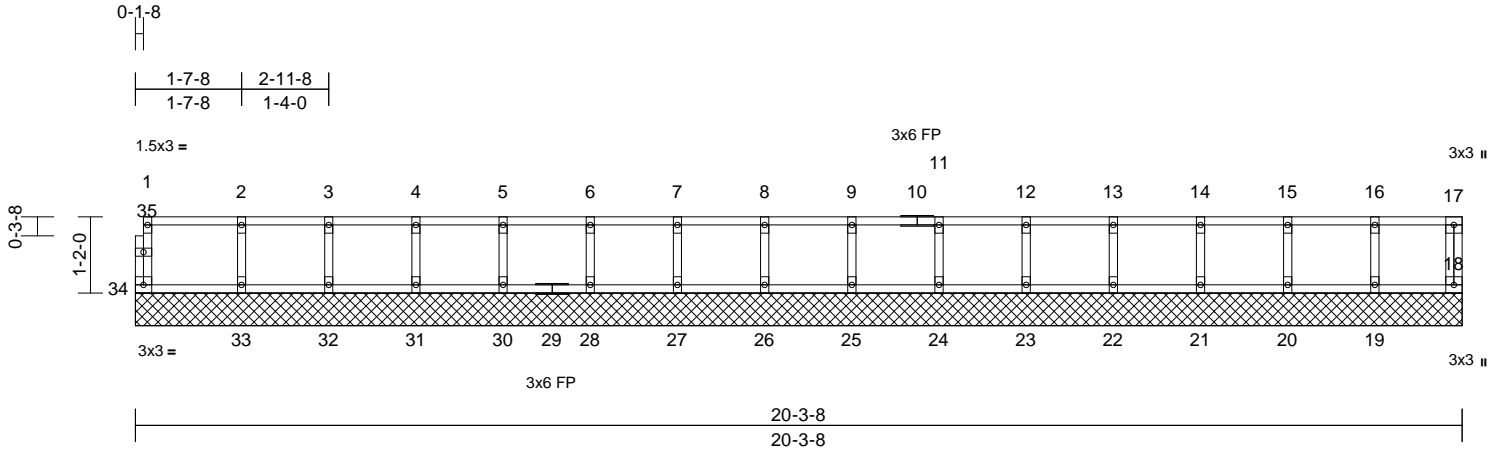
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Stonehaven Rev 2-EL-6,7-Floor
2411-0122-E	1FGE1	Floor Supported Gable	2	1	Job Reference (optional)
					I74557720

Structural, LLC, Thurmont, MD - 21788,

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Loading	(psf)	Spacing	1-4-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.06	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	0.00	18	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R						Weight: 84 lb	FT = 20%F, 12%E

#### LUMBER

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

#### BRACING

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

#### REACTIONS

(size)	18=20-3-8, 19=20-3-8, 20=20-3-8, 21=20-3-8, 22=20-3-8, 23=20-3-8, 24=20-3-8, 25=20-3-8, 26=20-3-8, 27=20-3-8, 28=20-3-8, 30=20-3-8, 31=20-3-8, 32=20-3-8, 33=20-3-8, 34=20-3-8
Max Grav	18=44 (LC 1), 19=92 (LC 1), 20=99 (LC 1), 21=97 (LC 1), 22=98 (LC 1), 23=98 (LC 1), 24=98 (LC 1), 25=98 (LC 1), 26=98 (LC 1), 27=98 (LC 1), 28=98 (LC 1), 30=98 (LC 1), 31=99 (LC 1), 32=95 (LC 1), 33=109 (LC 1), 34=48 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-34=-45/0, 17-18=-39/0, 1-2=-9/0, 2-3=-9/0, 3-4=-9/0, 4-5=-9/0, 5-6=-9/0, 6-7=-9/0, 7-8=-9/0, 8-9=-9/0, 9-11=-9/0, 11-12=-9/0, 12-13=-9/0, 13-14=-9/0, 14-15=-9/0, 15-16=-9/0, 16-17=-9/0
BOT CHORD	33-34=0/9, 32-33=0/9, 31-32=0/9, 30-31=0/9, 28-30=0/9, 27-28=0/9, 26-27=0/9, 25-26=0/9, 24-25=0/9, 23-24=0/9, 22-23=0/9, 21-22=0/9, 20-21=0/9, 19-20=0/9, 18-19=0/9
WEBS	16-19=-85/0, 15-20=-90/0, 14-21=-89/0, 13-22=-89/0, 12-23=-89/0, 11-24=-89/0, 9-25=-89/0, 8-26=-89/0, 7-27=-89/0, 6-28=-89/0, 5-30=-89/0, 4-31=-90/0, 3-32=-86/0, 2-33=-98/0

#### NOTES

- 1) All plates are 1.5x3 (||) MT20 unless otherwise indicated.
  - 2) Gable requires continuous bottom chord bearing.
  - 3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - 4) Gable studs spaced at 1-4-0 oc.
  - 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 6) CAUTION, Do not erect truss backwards.
- LOAD CASE(S)** Standard



July 1, 2025

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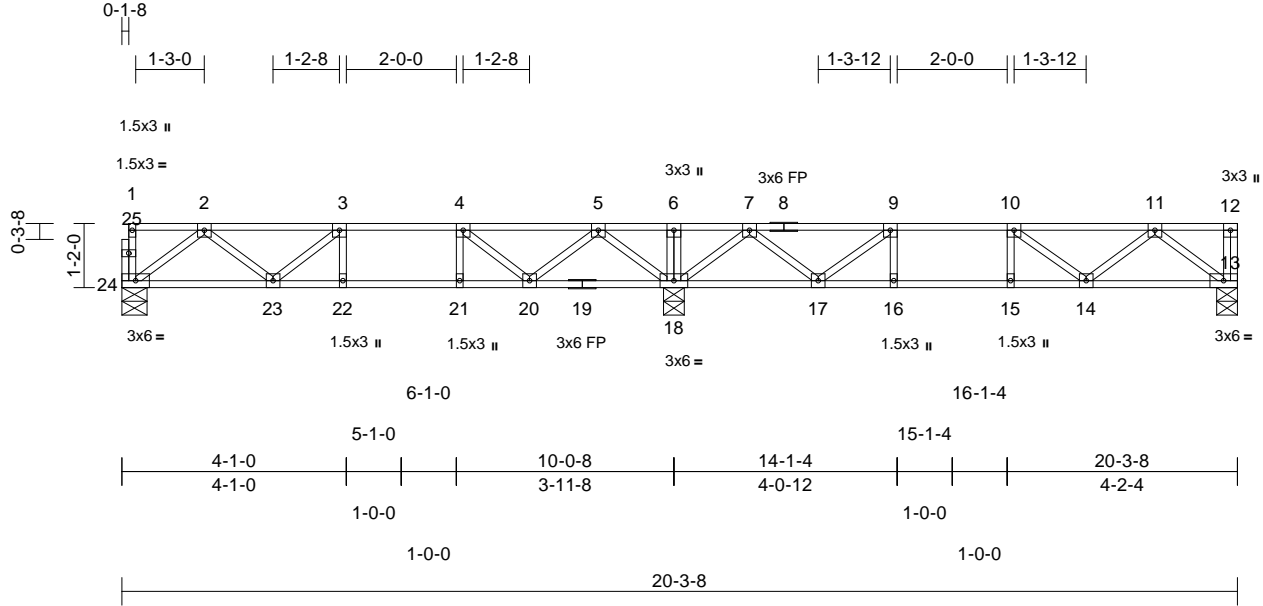
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Stonehaven Rev 2-EL-6,7-Floor	174557721
2411-0122-E	1F1	Floor	14	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

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<b>Loading</b>	(psf)	<b>Spacing</b>	1-4-0	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL	40.0	Plate Grip DOL	1.00	TC	0.29	Vert(LL)	-0.05	14-15	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.45	Vert(CT)	-0.06	14-15	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.02	13	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 101 lb	FT = 20%F, 12%E

#### LUMBER

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

#### BRACING

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

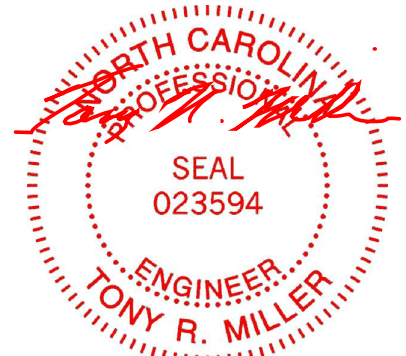
**REACTIONS** (size) 13=0-4-8, 18=0-4-8, 24=0-5-8  
Max Grav 13=351 (LC 7), 18=814 (LC 1), 24=340 (LC 10)

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

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

#### NOTES

- Unbalanced floor live loads have been considered for this design.
- All plates are 3x3 (=) MT20 unless otherwise indicated.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.



July 1,2025

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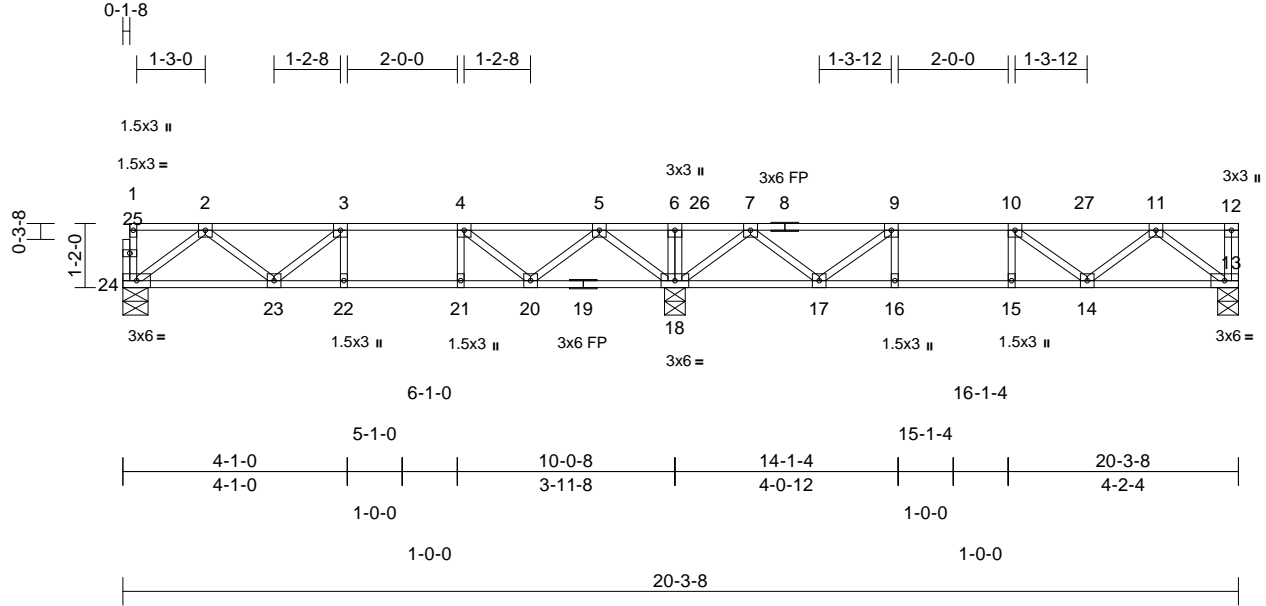
Job	Truss	Truss Type	Qty	Ply	Stonehaven Rev 2-EL-6,7-Floor
2411-0122-E	1F2	Floor	8	1	Job Reference (optional)
					I74557722

Structural, LLC, Thurmont, MD - 21788,

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Scale = 1:41.9

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.54	Vert(LL)	-0.05	14-15	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.65	Vert(CT)	-0.08	14-15	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.29	Horz(CT)	0.02	13	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 101 lb	FT = 20%F, 12%E

#### LUMBER

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

5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00,  
Plate Increase=1.00  
Uniform Loads (lb/ft)  
Vert: 13-24=-7, 1-26=-67, 26-27=-134, 12-27=-67

#### BRACING

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

REACTIONS (size) 13=0-4-8, 18=0-4-8, 24=0-5-8  
Max Grav 13=512 (LC 7), 18=1148 (LC 1),  
24=316 (LC 10)

FORCES (lb) - Maximum Compression/Maximum  
Tension

TOP CHORD 1-24=-18/1, 12-13=-16/3, 1-2=-1/0,  
2-3=-541/0, 3-4=-647/4, 4-5=-349/165,  
5-6=0/685, 6-7=0/685, 7-9=-897/0,  
9-10=-1376/0, 10-11=-1009/0, 11-12=0/0  
BOT CHORD 23-24=0/387, 22-23=-4/647, 21-22=-4/647,  
20-21=-4/647, 18-20=-299/77, 17-18=0/462,  
16-17=0/1376, 15-16=0/1376, 14-15=0/1376,  
13-14=0/644  
WEBS 3-22=-100/0, 4-21=0/121, 6-18=-74/0,  
9-16=0/86, 10-15=-66/18, 2-24=-484/0,  
2-23=-4/201, 3-23=-137/76, 5-18=-633/0,  
5-20=0/412, 4-20=-473/0, 7-18=-1126/0,  
7-17=0/619, 9-17=-683/0, 11-13=-808/0,  
11-14=0/475, 10-14=-461/0

#### 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.



July 1, 2025

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

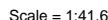
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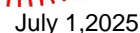


Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 30 05:28:11 Page: 1  
ID:8nuj2ry3wunhW4 YCX3Ps?zUhi3-RfC?PsB70Hq3NSqPqnL8w3ulTXbGKWRcDoi7J4zJC?f



<b>LUMBER</b>		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.
TOP CHORD	2x4 SP No.2(flat)	
BOT CHORD	2x4 SP No.2(flat)	
WEBS	2x4 SP No.3(flat)	
<b>BRACING</b>		6) CAUTION, Do not erect truss backwards.
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.	<b>LOAD CASE(S)</b> Standard
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.	
<b>REACTIONS</b>	(size)	13=0-4-8, 18=0-4-8, 23=0-3-0, 24=0-5-8
	Max Uplift	24=-10 (LC 11)
	Max Grav	13=410 (LC 5), 18=936 (LC 12), 23=444 (LC 11), 24=141 (LC 14)
<b>FORCES</b>		(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-24=-71/0, 12-13=-24/0, 1-2=0/0,	
	2-3=-128/149, 3-4=-530/23, 4-5=-352/105,	
	5-6=0/711, 6-7=0/711, 7-9=-544/91,	
	9-10=-895/0, 10-11=-712/0, 11-12=0/0	
BOT CHORD	23-24=-149/128, 22-23=-23/530,	
	21-22=-23/530, 20-21=-23/530,	
	18-20=-202/137, 17-18=-232/233,	
	16-17=0/895, 15-16=0/895, 14-15=0/895,	
WEBS	13-14=0/498	
	3-22=0/47, 4-21=-27/20, 6-18=-78/0,	
	9-16=0/124, 10-15=-99/0, 2-24=-145/168,	
	3-23=-466/0, 5-18=-638/0, 5-20=0/328,	
	4-20=-300/0, 7-18=-747/0, 7-17=0/457,	
	9-17=-523/0, 11-13=-624/0, 11-14=0/278,	
	10-14=-230/44, 2-23=-256/0	

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x3 ( $\approx$ ) MT20 unless otherwise indicated.
- 3) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 23.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 10 lb uplift at joint 24.



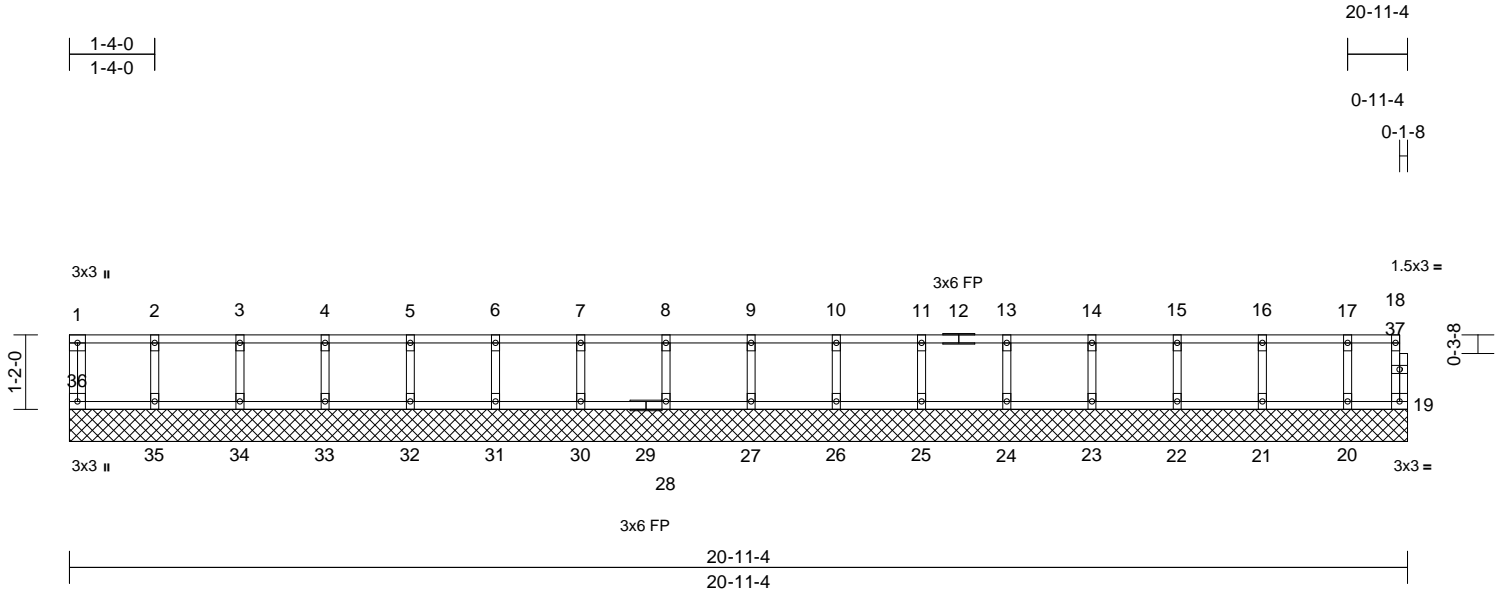
Job	Truss	Truss Type	Qty	Ply	Stonehaven Rev 2-EL-6,7-Floor	174557725
2411-0122-E	2FGE3	Floor Supported Gable	2	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 30 05:28:18

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Loading	(psf)	Spacing	1-4-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.05	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	0.00	19	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R						Weight: 88 lb	FT = 20%F, 12%E

<b>LUMBER</b>		<b>WEBS</b>	2-35=-88/0, 3-34=-89/0, 4-33=-89/0, 5-32=-89/0, 6-31=-89/0, 7-30=-89/0, 8-28=-89/0, 9-27=-89/0, 10-26=-89/0, 11-25=-89/0, 13-24=-89/0, 14-23=-89/0, 15-22=-89/0, 16-21=-92/0, 17-20=-74/0
TOP CHORD	2x4 SP No.2(flat)		
BOT CHORD	2x4 SP No.2(flat)		
WEBS	2x4 SP No.3(flat)		
OTHERS	2x4 SP No.3(flat)		
<b>BRACING</b>		<b>NOTES</b>	1) All plates are 1.5x3 (  ) MT20 unless otherwise indicated. 2) Gable requires continuous bottom chord bearing. 3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web). 4) Gable studs spaced at 1-4-0 oc. 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means. 6) CAUTION, Do not erect truss backwards.
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.	<b>LOAD CASE(S)</b>	Standard
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.		
<b>REACTIONS</b>	(size)		
	19=20-11-4, 20=20-11-4, 21=20-11-4, 22=20-11-4, 23=20-11-4, 24=20-11-4, 25=20-11-4, 26=20-11-4, 27=20-11-4, 28=20-11-4, 30=20-11-4, 31=20-11-4, 32=20-11-4, 33=20-11-4, 34=20-11-4, 35=20-11-4, 36=20-11-4		
Max Grav	19=22 (LC 1), 20=79 (LC 1), 21=102 (LC 1), 22=97 (LC 1), 23=98 (LC 1), 24=98 (LC 1), 25=98 (LC 1), 26=98 (LC 1), 27=98 (LC 1), 28=98 (LC 1), 30=98 (LC 1), 31=98 (LC 1), 32=98 (LC 1), 33=98 (LC 1), 34=98 (LC 1), 35=98 (LC 1), 36=39 (LC 1)		
<b>FORCES</b>	(lb) - Maximum Compression/Maximum Tension		
TOP CHORD	1-36=-36/0, 18-19=-18/0, 1-2=-4/0, 2-3=-4/0, 3-4=-4/0, 4-5=-4/0, 5-6=-4/0, 6-7=-4/0, 7-8=-4/0, 8-9=-4/0, 9-10=-4/0, 10-11=-4/0, 11-13=-4/0, 13-14=-4/0, 14-15=-4/0, 15-16=-4/0, 16-17=-4/0, 17-18=-4/0		
BOT CHORD	35-36=0/4, 34-35=0/4, 33-34=0/4, 32-33=0/4, 31-32=0/4, 30-31=0/4, 28-30=0/4, 27-28=0/4, 26-27=0/4, 25-26=0/4, 24-25=0/4, 23-24=0/4, 22-23=0/4, 21-22=0/4, 20-21=0/4, 19-20=0/4		



July 1,2025

**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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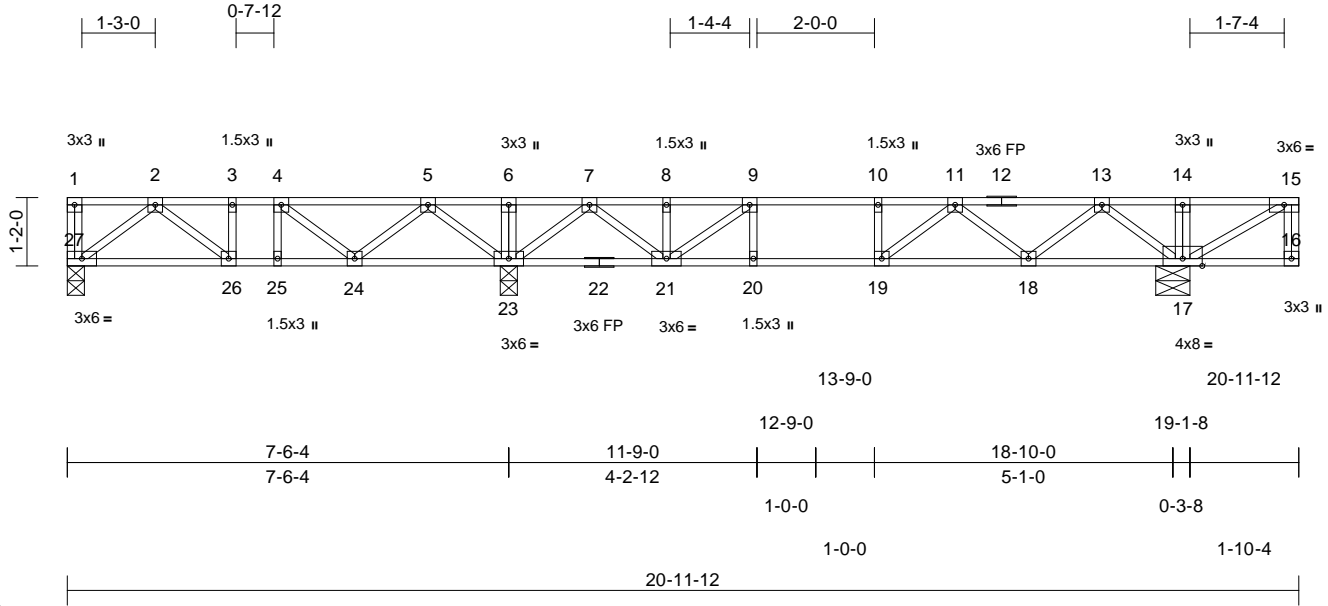
Job	Truss	Truss Type	Qty	Ply	Stonehaven Rev 2-EL-6,7-Floor	174557726
2411-0122-E	2F23A	Floor	2	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.20 S May 13 2025 MiTek Industries, Inc. Mon Jun 30 05:28:16

Page: 1

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Scale = 1:39.2

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.87	Vert(LL)	-0.08	18-19	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.51	Vert(CT)	0.13	18-19	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.55	Horz(CT)	-0.02	17	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S								
											Weight: 111 lb	FT = 20%F, 12%E

#### LUMBER

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

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except:  
10-0-0 oc bracing: 16-17.

**REACTIONS** (size) 17=0-7-0, 23=0-3-8, 27=0-3-8  
Max Uplift 27=11 (LC 4)  
Max Grav 17=1772 (LC 4), 23=734 (LC 3), 27=222 (LC 14)

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

TOP CHORD 1-27=-37/0, 15-16=-5/1, 1-2=0/0,  
2-3=-333/117, 3-4=-333/117, 4-5=-194/267,  
5-6=0/786, 6-7=0/786, 7-8=-235/590,  
8-9=-235/590, 9-10=-394/887,  
10-11=-394/887, 11-13=0/1477,  
13-14=0/1990, 14-15=0/1991  
BOT CHORD 26-27=-34/237, 25-26=-117/333,  
24-25=-117/333, 23-24=-410/38,  
21-23=-542/0, 20-21=-887/394,  
19-20=-887/394, 18-19=-1217/207,  
17-18=-1710/0, 16-17=0/0  
WEBS 6-23=-86/0, 9-20=-110/22, 10-19=-234/0,  
14-17=-127/0, 7-23=-534/72, 7-21=-61/372,  
13-17=-807/0, 13-18=0/550, 11-18=-571/0,  
11-19=0/553, 8-21=-168/8, 9-21=-230/364,  
15-17=-2287/0, 5-23=-562/0, 2-27=-297/42,  
5-24=0/314, 2-26=-107/123, 4-24=-309/0,  
3-26=-40/50, 4-25=-24/53

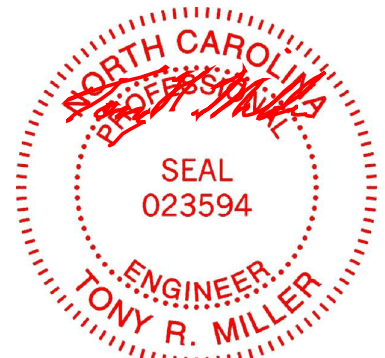
#### NOTES

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

- 3) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 27. This connection is for uplift only and does not consider lateral forces.
- 4) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION, Do not erect truss backwards.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 700 lb down at 20-10-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

- 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (lb/ft)  
Vert: 16-27=-7, 1-15=-67  
Concentrated Loads (lb)  
Vert: 15=-1084 (F=-700)



July 1, 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](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcacompnents.com](http://www.sbcacompnents.com))

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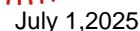


<b>LUMBER</b>		3) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 27. This connection is for uplift only and does not consider lateral forces.
TOP CHORD	2x4 SP No.2(flat)	4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened 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 No.2(flat)	
WEBS	2x4 SP No.3(flat)	
OTHERS	2x4 SP No.3(flat)	
<b>BRACING</b>		5) CAUTION, Do not erect truss backwards.
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.	<b>LOAD CASE(S)</b> Standard
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing	

FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-27=-36/1, 15-16=-37/40, 1-2=0/0, 2-3=-243/492, 3-4=-243/492, 4-5=-59/848, 5-6=0/1617, 6-7=0/1617, 7-8=0/345, 8-9=-605/0, 9-10=-605/0, 10-12=-951/0, 12-13=-756/0, 13-14=-756/0, 14-15=-2/2
BOT CHORD	26-27=-206/195, 25-26=-492/243, 24-25=-492/243, 23-24=-1152/0, 21-23=-863/0, 20-21=-30/275, 19-20=0/869, 18-19=0/946, 17-18=0/756, 16-17=0/756
WEBS	6-23=-74/0, 13-18=-14/233, 14-17=0/123, 5-23=-743/0, 2-27=-245/258, 5-24=0/505, 2-26=-366/61, 4-24=-550/0, 3-26=-16/144, 4-25=-6/151, 7-23=-957/0, 7-21=0/683, 8-21=-658/0, 8-20=0/436, 9-20=-46/0, 10-20=-350/0, 10-19=0/122, 12-19=-75/7, 12-18=-390/0, 14-16=-858/0



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

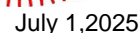


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LOAD CASE(S) Standard

### NOTES

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



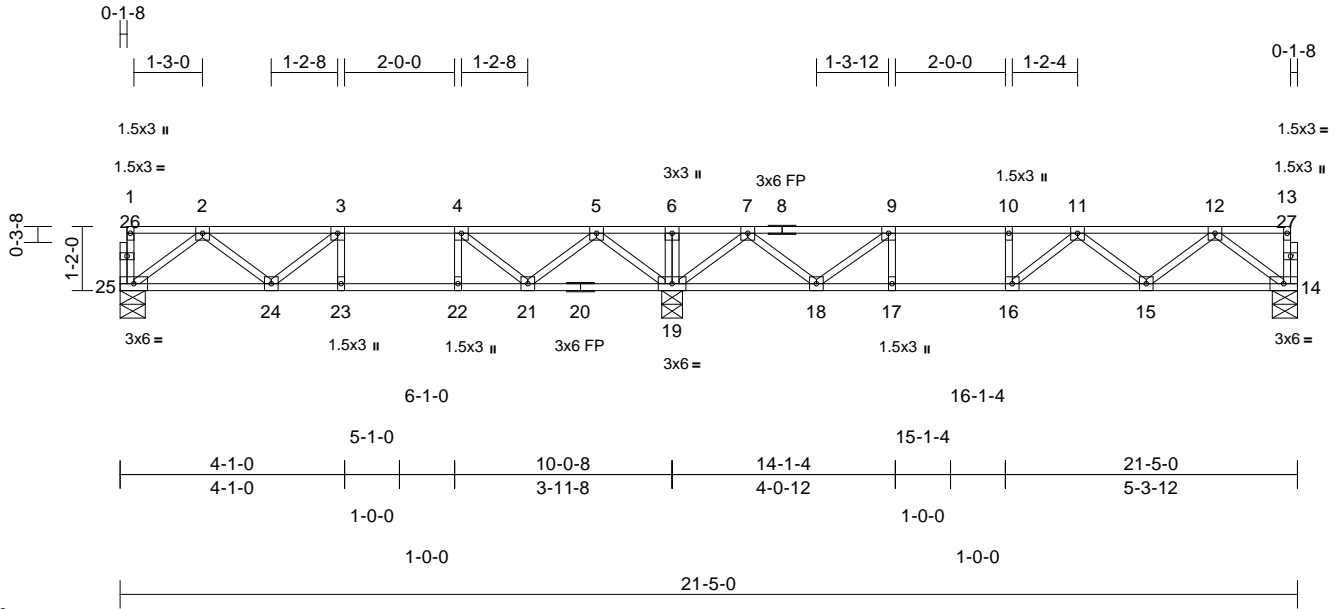


Job	Truss	Truss Type	Qty	Ply	Stonehaven Rev 2-EL-6,7-Floor	174557729
2411-0122-E	1F5	Floor	2	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 30 05:28:12  
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Page: 1



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

#### LUMBER

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

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 19-21,18-19.

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

#### FORCES

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

#### NOTES

- 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



July 1, 2025

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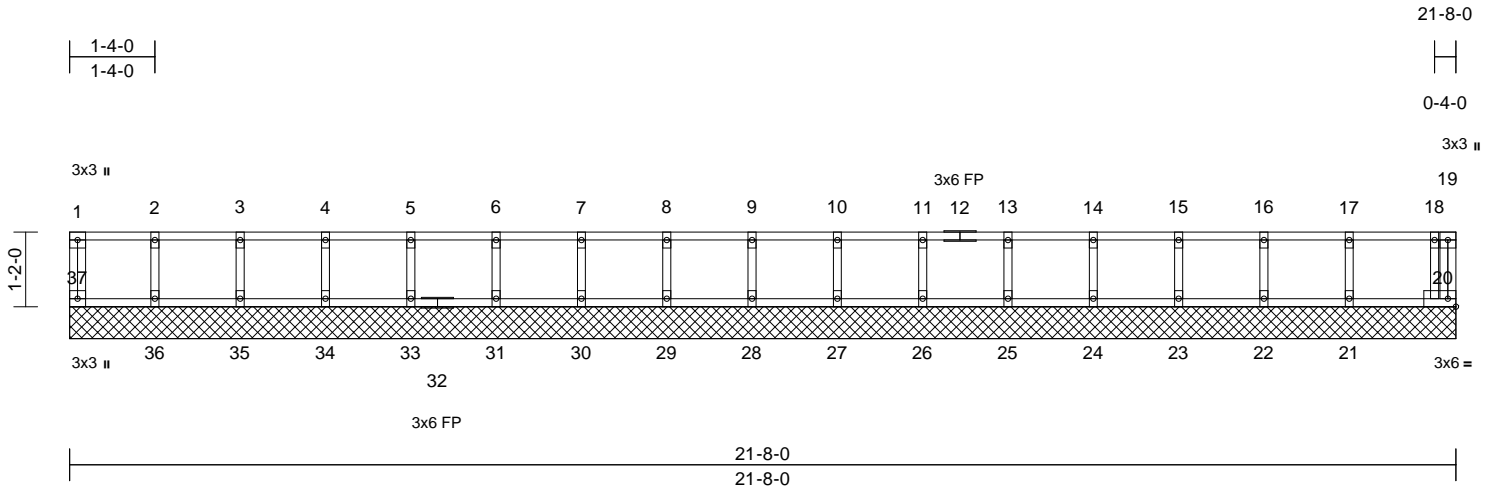


Job	Truss	Truss Type	Qty	Ply	Stonehaven Rev 2-EL-6,7-Floor	174557730
2411-0122-E	2FGE1	Floor Supported Gable	2	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 30 05:28:17  
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Page: 1



Scale = 1:36

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.07	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	20	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R						Weight: 92 lb	FT = 20%F, 12%E

#### LUMBER

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

#### WEBS

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

#### BRACING

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

#### 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

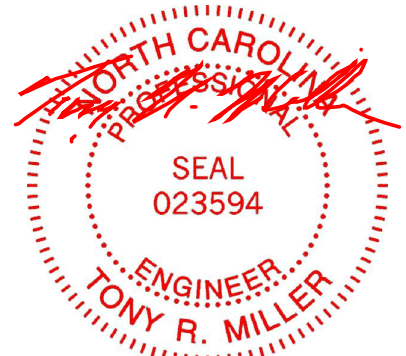
#### REACTIONS

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

#### FORCES

(lb) - Maximum Compression/Maximum  
Tension

TOP CHORD 1-37=-47/0, 19-20=0/9, 1-2=-12/0, 2-3=-12/0,  
3-4=-12/0, 4-5=-12/0, 5-6=-12/0, 6-7=-12/0,  
7-8=-12/0, 8-9=-12/0, 9-10=-12/0,  
10-11=-12/0, 11-13=-12/0, 13-14=-12/0,  
14-15=-12/0, 15-16=-12/0, 16-17=-12/0,  
17-18=-12/0, 18-19=-2/0  
BOT CHORD 36-37=0/12, 35-36=0/12, 34-35=0/12,  
33-34=0/12, 31-33=0/12, 30-31=0/12,  
29-30=0/12, 28-29=0/12, 27-28=0/12,  
26-27=0/12, 25-26=0/12, 24-25=0/12,  
23-24=0/12, 22-23=0/12, 21-22=0/12,  
20-21=0/12



July 1, 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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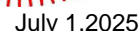
818 Soundside Road  
Edenton, NC 27932

Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 30 05:28:14 Page: 1  
ID: dvoM3it86VcacGT66eh xy8MUP-RfC?PsB70Hg3NSqPanL8w3uITXbGKWrCDoi7J4zJC?f



<b>LUMBER</b>	
TOP CHORD	2x4 SP SS(flat)
BOT CHORD	2x4 SP DSS(flat)
WEBS	2x4 SP No.3(flat)
<b>BRACING</b>	
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.
<b>REACTIONS</b>	(size) 16=0-3-8, 27= Mechanical
	Max Grav 16=1080 (LC 1), 27=1080 (LC 1)
<b>FORCES</b>	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-27=-46/0, 15-16=-46/0, 1-2=0/0, 2-3=-2477/0, 3-4=-4315/0, 4-6=-4315/0, 6-7=-5393/0, 7-8=-5775/0, 8-9=-5775/0, 9-11=-5357/0, 11-12=-4307/0, 12-13=-4307/0, 13-14=-2477/0, 14-15=0/0
BOT CHORD	26-27=0/1435, 25-26=0/3486, 23-25=0/4926, 22-23=0/5775, 21-22=0/5775, 20-21=0/5736, 19-20=0/5736, 18-19=0/4962, 17-18=0/3486, 16-17=0/1434
WEBS	7-22=-47/112, 8-21=-272/166, 2-27=-1761/0, 2-26=0/1324, 3-26=-1282/0, 3-25=0/1034, 4-25=-139/0, 6-25=-762/0, 6-23=0/772, 7-23=-747/0, 14-16=-1761/0, 14-17=0/1325, 13-17=-1282/0, 13-18=0/1023, 12-18=-102/0, 11-18=-818/0, 11-19=0/501, 9-19=-473/0, 9-20=-25/45, 9-21=-407/610

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



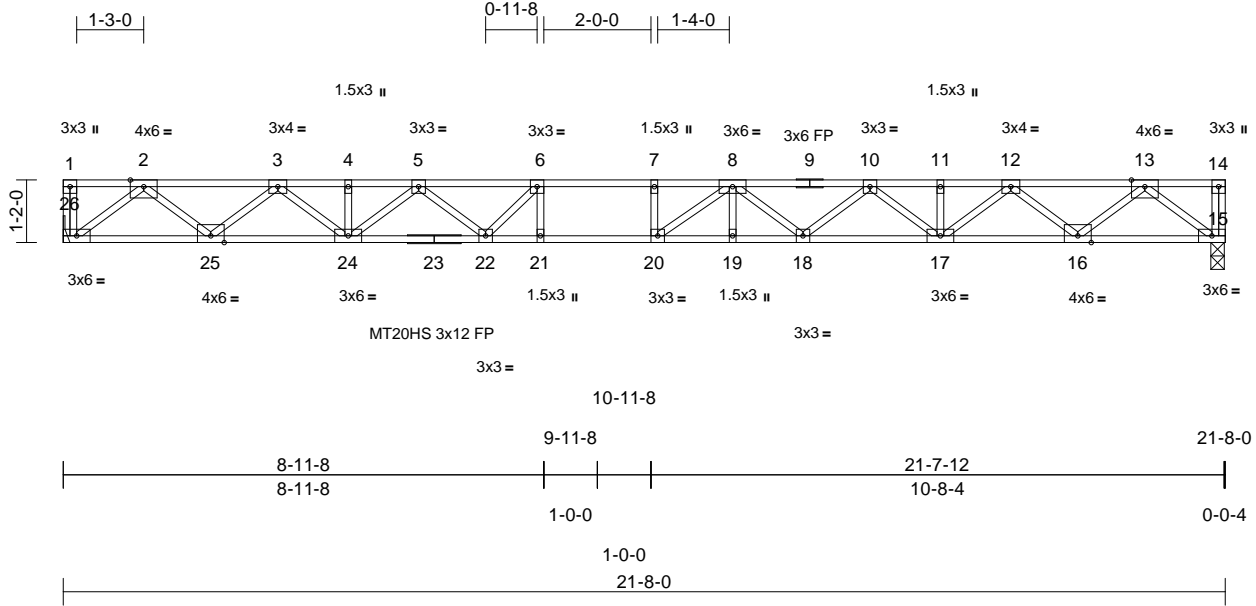
Job	Truss	Truss Type	Qty	Ply	Stonehaven Rev 2-EL-6,7-Floor	174557732
2411-0122-E	2F2	Floor	6	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 30 05:28:14

Page: 1

ID:wFj?X5zXSficAulp04GKmPy8MUI-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f



Scale = 1:43

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

#### LUMBER

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

#### BRACING

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

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

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

TOP CHORD 1-26=-32/0, 14-15=-32/0, 1-2=0/0,  
2-3=-2050/0, 3-4=-3545/0, 4-5=-3545/0,  
5-6=-4440/0, 6-7=-4765/0, 7-8=-4765/0,  
8-10=-4424/0, 10-11=-3539/0, 11-12=-3539/0,  
12-13=-2050/0, 13-14=0/0

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

WEBS 6-21=-113/252, 7-20=-175/25, 2-26=-1489/0,  
2-25=0/1124, 3-25=-1090/0, 3-24=0/840,  
4-24=-71/0, 5-24=-688/0, 5-22=0/576,  
6-22=-695/0, 13-15=-1489/0, 13-16=0/1124,  
12-16=-1090/0, 12-17=0/832, 11-17=-53/0,  
10-17=-720/0, 10-18=0/418, 8-18=-418/0,  
8-19=-53/126, 8-20=-364/506

#### NOTES

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

**LOAD CASE(S)** Standard



July 1, 2025

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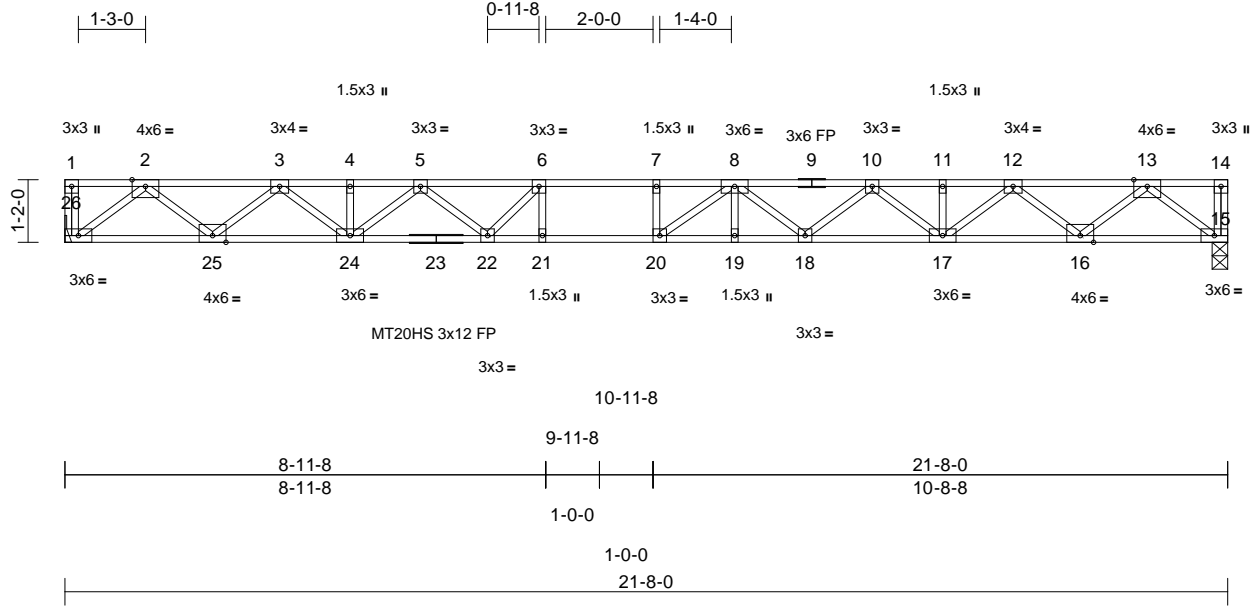
Job	Truss	Truss Type	Qty	Ply	Stonehaven Rev 2-EL-6,7-Floor	174557733
2411-0122-E	2F1	Floor	4	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.20 S May 13 2025 MiTek Industries, Inc. Mon Jun 30 05:28:14

Page: 1

ID:dvoM3it86VqcqpGT66eh\_xy8MUP-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC?f



Scale = 1:42.9

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

#### LUMBER

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

#### BRACING

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

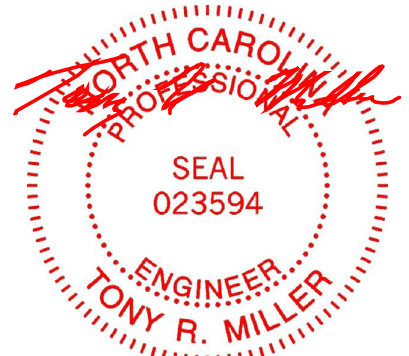
**REACTIONS** (size) 15=0-3-8, 26= Mechanical  
Max Grav 15=942 (LC 1), 26=942 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum  
Tension  
TOP CHORD 1-26=-32/0, 14-15=-32/0, 1-2=0/0,  
2-3=-2050/0, 3-4=-3545/0, 4-5=-3545/0,  
5-6=-4440/0, 6-7=-4765/0, 7-8=-4765/0,  
8-10=-4424/0, 10-11=-3539/0, 11-12=-3539/0,  
12-13=-2050/0, 13-14=0/0  
BOT CHORD 25-26=0/1187, 24-25=0/2887, 22-24=0/4084,  
21-22=0/4765, 20-21=0/4765, 19-20=0/4751,  
18-19=0/4751, 17-18=0/4103, 16-17=0/2887,  
15-16=0/1186  
WEBS 6-21=-113/252, 7-20=-175/25, 2-26=-1489/0,  
2-25=0/1124, 3-25=-1090/0, 3-24=0/840,  
4-24=-71/0, 5-24=-688/0, 5-22=0/576,  
6-22=-695/0, 13-15=-1489/0, 13-16=0/1124,  
12-16=-1090/0, 12-17=0/832, 11-17=-53/0,  
10-17=-720/0, 10-18=0/418, 8-18=-418/0,  
8-19=-53/126, 8-20=-364/506

#### NOTES

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

**LOAD CASE(S)** Standard



July 1, 2025

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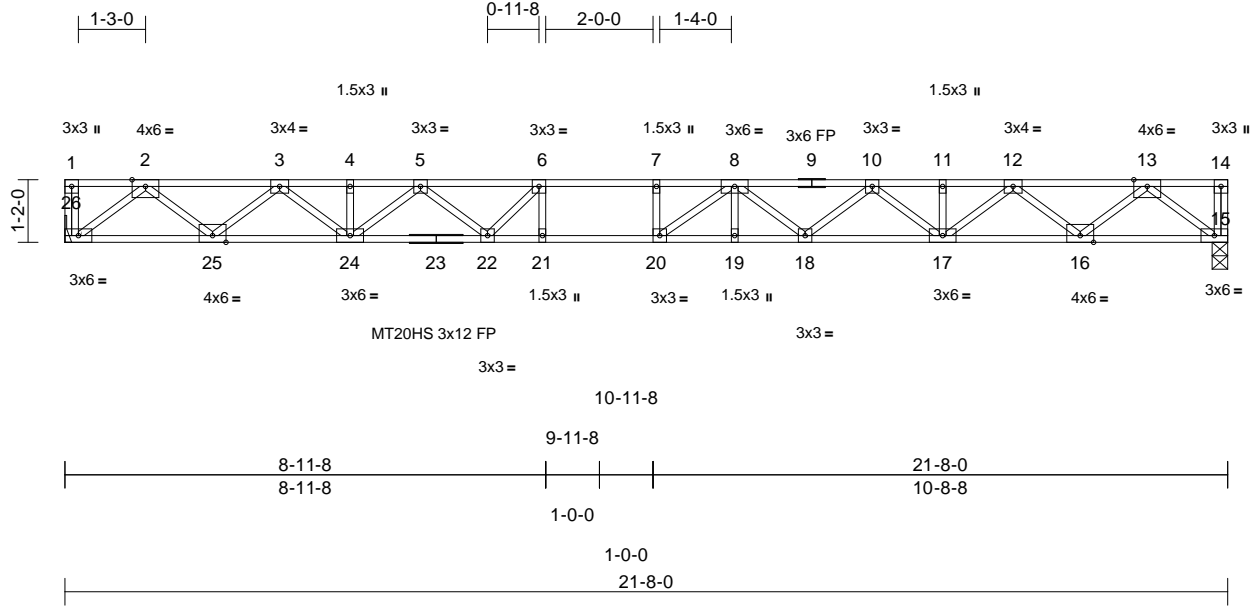
Job	Truss	Truss Type	Qty	Ply	Stonehaven Rev 2-EL-6,7-Floor	174557734
2411-0122-E	2F4	Floor	2	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 30 05:28:14

Page: 1

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Scale = 1:42.9

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.55	Vert(LL)	-0.45	19-20	>567	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.73	Vert(CT)	-0.62	19-20	>412	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.09	15	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S								
											Weight: 111 lb	FT = 20%F, 12%E

#### LUMBER

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

#### BRACING

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

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

FORCES (lb) - Maximum Compression/Maximum  
Tension

TOP CHORD 1-26=-32/0, 14-15=-32/0, 1-2=0/0,  
2-3=-2050/0, 3-4=-3545/0, 4-5=-3545/0,  
5-6=-4440/0, 6-7=-4765/0, 7-8=-4765/0,  
8-10=-4424/0, 10-11=-3540/0, 11-12=-3540/0,  
12-13=-2050/0, 13-14=0/0

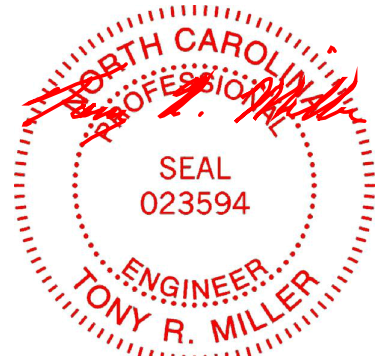
BOT CHORD 25-26=0/1187, 24-25=0/2887, 22-24=0/4083,  
21-22=0/4765, 20-21=0/4765, 19-20=0/4751,  
18-19=0/4751, 17-18=0/4103, 16-17=0/2887,  
15-16=0/1187

WEBS 6-21=-110/246, 7-20=-178/30, 2-26=-1489/0,  
2-25=0/1123, 3-25=-1090/0, 3-24=0/841,  
4-24=-72/0, 5-24=-687/0, 5-22=0/579,  
6-22=-692/0, 13-15=-1489/0, 13-16=0/1124,  
12-16=-1089/0, 12-17=0/833, 11-17=-54/0,  
10-17=-720/0, 10-18=0/418, 8-18=-417/0,  
8-19=-52/123, 8-20=-363/507

#### NOTES

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

LOAD CASE(S) Standard



July 1, 2025

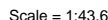
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

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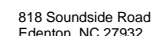
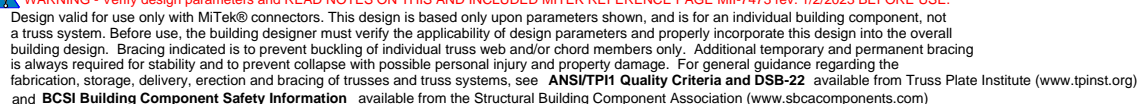
818 Soundside Road  
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Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 30 05:28:16 Page: 1  
ID:Vq1su3w9KK2JRaELxjd8ny8MUL-RfC?PsB70Hq3NSqPqnL8w3ulTXbGKWRcDoi7J4zJC?f

Weight: 120 lb FT = 20%F, 12%E

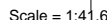
## LOAD CASE(S) Standard

July 1, 2025

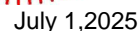




Structural, LLC, Thurmont, MD - 21788, Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 30 05:28:15 Page: 1  
ID:1?wFX7hOeLmEu0JHl?Nn9v8MU5-RfC?PsB70Hq3NSqPnL8w3uITXbGKWRCDoI7J4zJC?f

Weight: 130 lb FT = 20%F, 12%E

## LOAD CASE(S) Standard



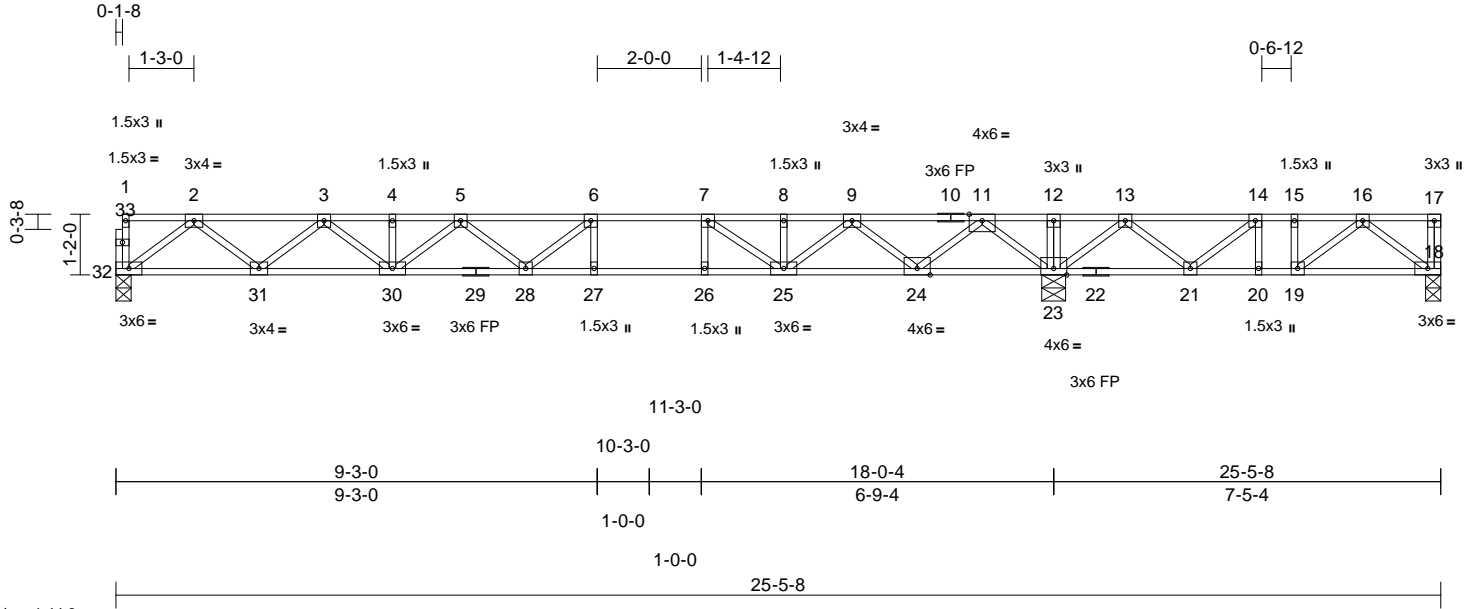
Job	Truss	Truss Type	Qty	Ply	Stonehaven Rev 2-EL-6,7-Floor
2411-0122-E	2F8	Floor	4	1	Job Reference (optional)
					I74557737

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 30 05:28:15

Page: 1

ID:ZZRX2C63dLDvckD7jbU8Fxy8MU6-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWCrCDoi7J4zJC?f



Scale = 1:44.3

Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.89	Vert(LL)	-0.27	27-28	>796	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.74	Vert(CT)	-0.37	27-28	>581	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.04	23	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 131 lb	FT = 20%F, 12%E

#### LUMBER

TOP CHORD	2x4 SP No.2(flat)
BOT CHORD	2x4 SP SS(flat) *Except* 32-29:2x4 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)	18=0-3-8, 23=0-5-8, 32=0-3-8
	Max Uplift	18=155 (LC 3)
	Max Grav	18=233 (LC 4), 23=1476 (LC 1), 32=683 (LC 3)

#### FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-32=-28/0, 17-18=-43/0, 1-2=-2/0, 2-3=-1415/0, 3-4=-2268/0, 4-5=-2268/0, 5-6=-2541/0, 6-7=-2333/0, 7-8=-1523/0, 8-9=-1523/0, 9-11=-217/69, 11-12=0/1800, 12-13=0/1800, 13-14=-94/951, 14-15=-303/547, 15-16=-303/547, 16-17=0/0
BOT CHORD	31-32=0/853, 30-31=0/1946, 28-30=0/2561, 27-28=0/2333, 26-27=0/2333, 25-26=0/2333, 24-25=0/978, 23-24=-697/0, 21-23=-1295/0, 20-21=-547/303, 19-20=-547/303, 18-19=-232/239
WEBS	6-27=-297/0, 7-26=0/299, 12-23=-91/0, 2-32=-1068/0, 2-31=0/731, 3-31=-691/0, 3-30=0/411, 4-30=-17/1, 5-30=-374/0, 5-28=-113/138, 6-28=-75/408, 11-23=-1385/0, 11-24=0/1051, 9-24=-1001/0, 9-25=0/706, 8-25=-52/126, 7-25=-1063/0, 13-23=-859/0, 16-18=-300/292, 13-21=0/570, 16-19=-401/81, 14-21=-619/0, 14-20=-14/190, 15-19=-19/143

#### NOTES

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

- All plates are 3x3 (=) MT20 unless otherwise indicated.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 18. This connection is for uplift only and does not consider lateral forces.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



July 1, 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](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcacomponents.com](http://www.sbcacomponents.com))

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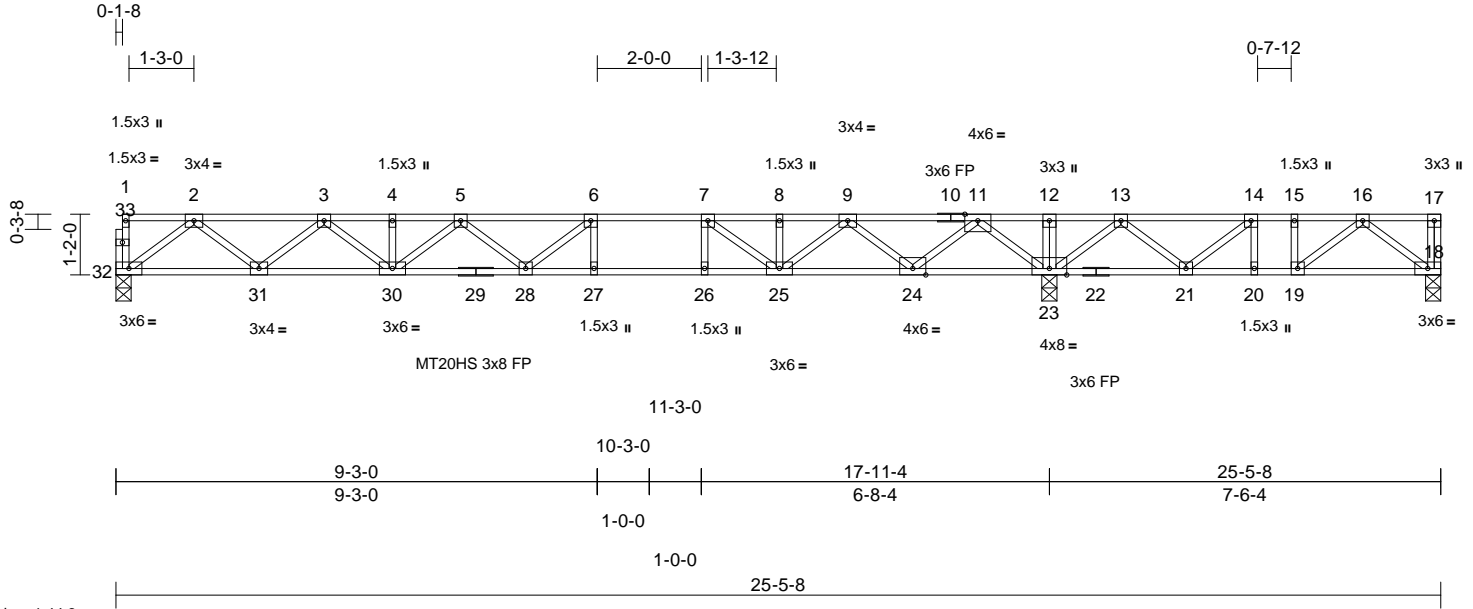
Job	Truss	Truss Type	Qty	Ply	Stonehaven Rev 2-EL-6,7-Floor	174557738
2411-0122-E	2F9A	Floor	4	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

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Scale = 1:44.3

Loading	(psf)	Spacing	1-10-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.66	Vert(LL)	-0.28	27-28	>771	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.80	Vert(CT)	-0.38	27-28	>564	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.56	Horz(CT)	0.04	23	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S								
											Weight: 131 lb	FT = 20%F, 12%E

#### LUMBER

TOP CHORD	2x4 SP SS(flat) *Except* 10-17:2x4 SP No.2 (flat)
BOT CHORD	2x4 SP No.2(flat) *Except* 22-29:2x4 SP SS (flat)
WEBS	2x4 SP No.3(flat)
OTHERS	2x4 SP No.3(flat)

#### BRACING

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

#### REACTIONS

(size)	18=0-3-8, 23=0-3-8, 32=0-3-8
Max Uplift	18=144 (LC 3)
Max Grav	18=275 (LC 4), 23=1654 (LC 1), 32=790 (LC 3)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-32=-33/0, 17-18=-50/0, 1-2=-2/0, 2-3=-1641/0, 3-4=-2640/0, 4-5=-2640/0, 5-6=-2964/0, 6-7=-2752/0, 7-8=-1879/0, 8-9=-1879/0, 9-11=-417/67, 11-12=0/1885, 12-13=0/1885, 13-14=-127/957, 14-15=-367/540, 15-16=-367/540, 16-17=0/0
BOT CHORD	31-32=0/988, 30-31=0/2259, 28-30=0/2985, 27-28=0/2752, 26-27=0/2752, 25-26=0/2752, 24-25=0/1275, 23-24=-643/0, 21-23=-1316/0, 20-21=-540/367, 19-20=-540/367, 18-19=-218/284
WEBS	6-27=-302/0, 7-26=0/314, 12-23=-107/0, 2-32=-1236/0, 2-31=0/850, 3-31=-804/0, 3-30=0/487, 4-30=-20/1, 5-30=-440/0, 5-28=-140/164, 6-28=-99/445, 11-23=-1559/0, 11-24=0/1184, 9-24=-1133/0, 9-25=0/784, 8-25=-51/173, 7-25=-1195/0, 13-23=-943/0, 16-18=-357/274, 13-21=0/617, 16-19=-410/106, 14-21=-666/0, 14-20=-12/179, 15-19=-33/164

#### NOTES

- Unbalanced floor live loads have been considered for this design.
  - All plates are MT20 plates unless otherwise indicated.
  - All plates are 3x3 (=) MT20 unless otherwise indicated.
  - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 18. This connection is for uplift only and does not consider lateral forces.
  - Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - CAUTION, Do not erect truss backwards.
- LOAD CASE(S)** Standard



July 1, 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](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcacompnents.com](http://www.sbcacompnents.com))

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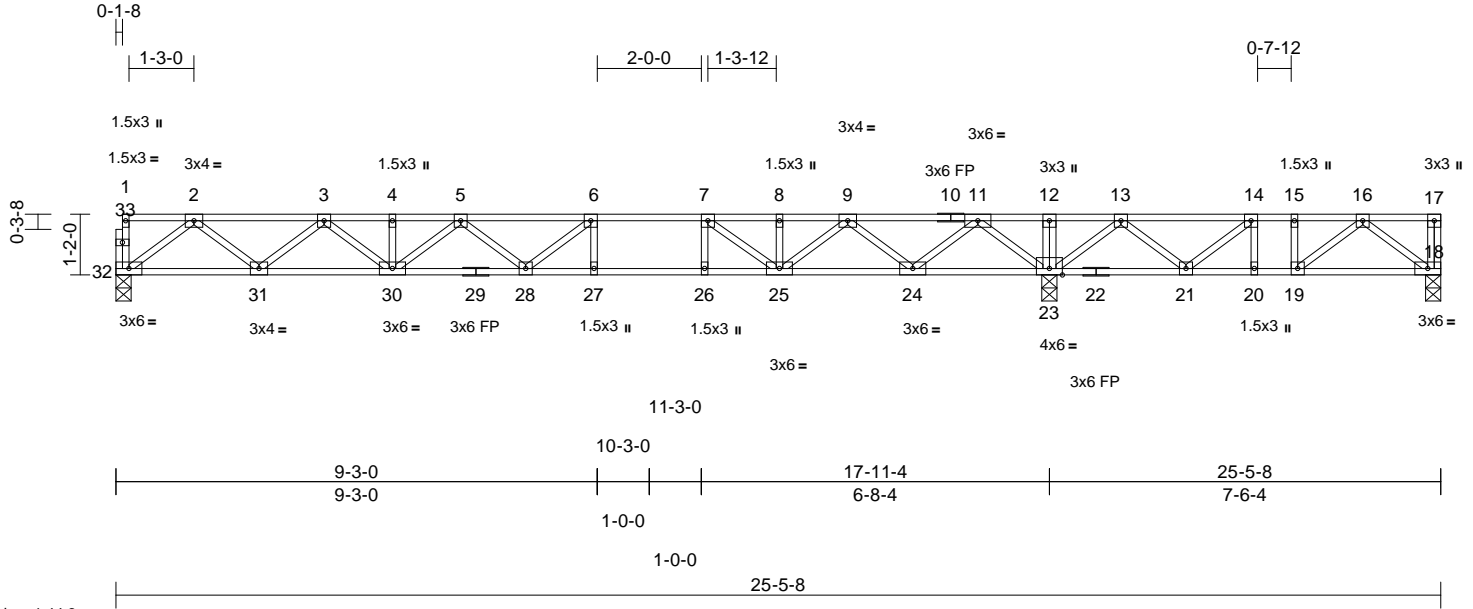
Job	Truss	Truss Type	Qty	Ply	Stonehaven Rev 2-EL-6,7-Floor
2411-0122-E	2F9	Floor	4	1	Job Reference (optional)
					I74557739

Structural, LLC, Thurmont, MD - 21788,

Run: 25.20 S May 13 2025 Print: 25.2.0 S May 13 2025 MiTek Industries, Inc. Mon Jun 30 05:28:15

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Scale = 1:44.3

Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.90	Vert(LL)	-0.27	27-28	>798	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.73	Vert(CT)	-0.37	27-28	>583	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.04	23	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 131 lb	FT = 20%F, 12%E

#### LUMBER

TOP CHORD	2x4 SP No.2(flat)
BOT CHORD	2x4 SP SS(flat) *Except* 32-29:2x4 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)	18=0-3-8, 23=0-3-8, 32=0-3-8
	Max Uplift	18=144 (LC 3)
	Max Grav	18=238 (LC 4), 23=1465 (LC 1), 32=681 (LC 3)

#### FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-32=-28/0, 17-18=-43/0, 1-2=-2/0, 2-3=-1412/0, 3-4=-2262/0, 4-5=-2262/0, 5-6=-2532/0, 6-7=-2324/0, 7-8=-1542/0, 8-9=-1542/0, 9-11=-252/68, 11-12=0/1757, 12-13=0/1757, 13-14=-103/922, 14-15=-315/524, 15-16=-315/524, 16-17=0/0
BOT CHORD	31-32=0/851, 30-31=0/1941, 28-30=0/2554, 27-28=0/2324, 26-27=0/2324, 25-26=0/2324, 24-25=0/1006, 23-24=-662/0, 21-23=-1257/0, 20-21=-524/315, 19-20=-524/315, 18-19=-219/246
WEBS	6-27=-298/0, 7-26=0/308, 12-23=-91/0, 2-32=-1066/0, 2-31=0/730, 3-31=-689/0, 3-30=0/410, 4-30=-17/1, 5-30=-372/0, 5-28=-115/136, 6-28=-71/409, 11-23=-1376/0, 11-24=0/1042, 9-24=-993/0, 9-25=0/695, 8-25=-45/134, 7-25=-1052/0, 13-23=-849/0, 16-18=-309/274, 13-21=0/562, 16-19=-390/88, 14-21=-617/0, 14-20=-10/189, 15-19=-26/139

#### NOTES

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

- All plates are 3x3 (=) MT20 unless otherwise indicated.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 18. This connection is for uplift only and does not consider lateral forces.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



July 1, 2025

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

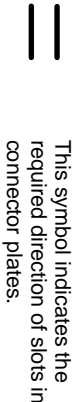
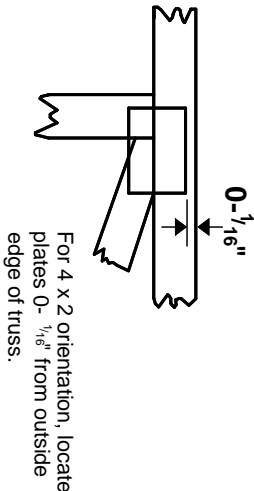
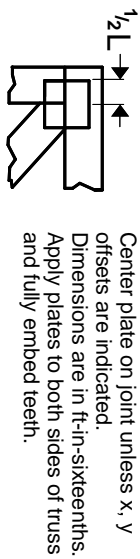
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcacompnents.com](http://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**

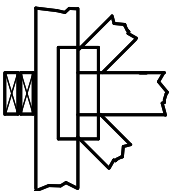
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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

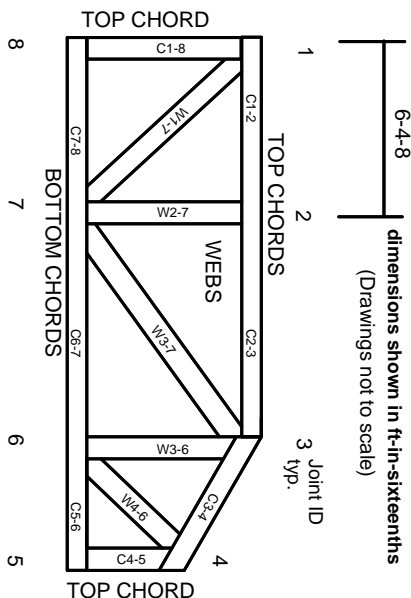


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

## Industry Standards:

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

# Numbering System



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

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

# Product Code Approvals

ICC-ES Reports:

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

# Design General Notes

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

Lumber design values are in accordance with ANSI/TP1 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