

RE: P06018-31625
908 Serenity

Trenco
818 Soundside Rd
Edenton, NC 27932

Site Information:

Customer: David Weekly Project Name: P06018-31625
Lot/Block: Model: A670 MADISON / ELEV A / RH
Address: 74 Rainbrook Cove Subdivision:
City: FUQUAY VARINA State: NC

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

Design Code: IRC2015/TPI2014 Design Program: MiTek 20/20 8.8
Wind Code: ASCE 7-10 Wind Speed: 115 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 32 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I74684722	A01E	7/7/2025	21	I74684742	J01	7/7/2025
2	I74684723	A02SE	7/7/2025	22	I74684743	J02	7/7/2025
3	I74684724	A03	7/7/2025	23	I74684744	J03	7/7/2025
4	I74684725	A04	7/7/2025	24	I74684745	P01E	7/7/2025
5	I74684726	A05	7/7/2025	25	I74684746	P02	7/7/2025
6	I74684727	A06	7/7/2025	26	I74684747	P03	7/7/2025
7	I74684728	A07	7/7/2025	27	I74684748	P04	7/7/2025
8	I74684729	A08	7/7/2025	28	I74684749	P05E	7/7/2025
9	I74684730	A09	7/7/2025	29	I74684750	V01	7/7/2025
10	I74684731	A10	7/7/2025	30	I74684751	V02	7/7/2025
11	I74684732	A11	7/7/2025	31	I74684752	V03	7/7/2025
12	I74684733	A12	7/7/2025	32	I74684753	V04	7/7/2025
13	I74684734	A13	7/7/2025				
14	I74684735	A14G	7/7/2025				
15	I74684736	B01G	7/7/2025				
16	I74684737	B02	7/7/2025				
17	I74684738	B03	7/7/2025				
18	I74684739	B04E	7/7/2025				
19	I74684740	G01	7/7/2025				
20	I74684741	G01E	7/7/2025				

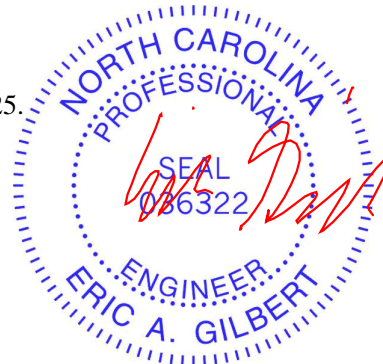
The truss drawing(s) referenced above have been prepared by
Truss Engineering Co. under my direct supervision
based on the parameters provided by 84 Lumber 2383 (Dunn, NC).

Truss Design Engineer's Name: Gilbert, Eric

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

North Carolina COA: C-0844

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 TRENCO. Any project specific information included is for TRENCO customers file reference purpose only, and was not taken into account in the preparation of these designs. 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 07, 2025

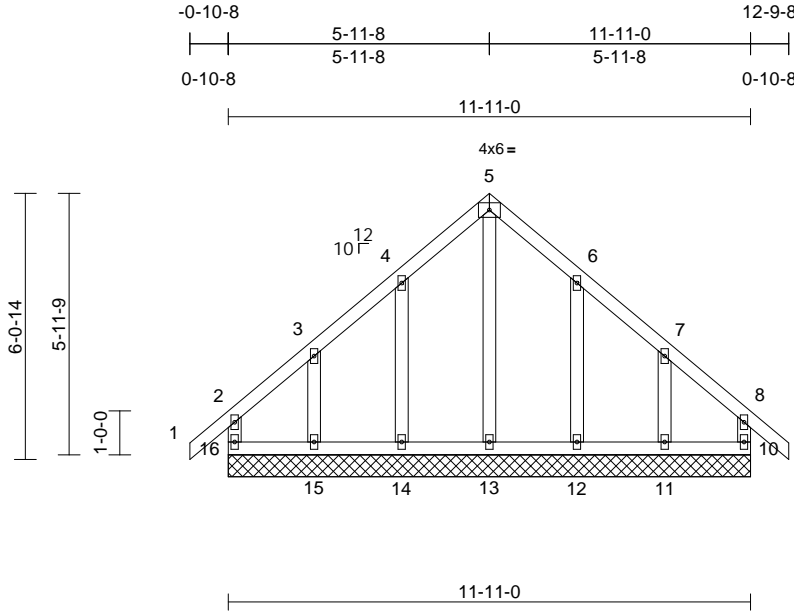
Job	Truss	Truss Type	Qty	Ply	908 Serenity	174684722
P06018-31625	A01E	Common Supported Gable	1	1	Job Reference (optional)	

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Fri Jul 04 14:24:13

Page: 1

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Scale = 1:52.6

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.08	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.05	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	NO	WB	0.08	Horz(CT)	0.00	10	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MR							
BCDL	10.0										
										Weight: 72 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2
OTHERS 2x4 SP No.2

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)
10=11-11-0, 11=11-11-0,
12=11-11-0, 13=11-11-0,
14=11-11-0, 15=11-11-0,
16=11-11-0
Max Horiz 16=132 (LC 12)
Max Uplift 10=36 (LC 11), 11=99 (LC 15),
12=65 (LC 15), 14=63 (LC 14),
15=97 (LC 14), 16=48 (LC 10)
Max Grav 10=158 (LC 26), 11=209 (LC 27),
12=195 (LC 27), 13=192 (LC 29),
14=185 (LC 26), 15=189 (LC 26),
16=156 (LC 27)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-16=-127/64, 1-2=0/39, 2-3=-86/80,
3-4=-80/95, 4-5=-134/157, 5-6=-134/157,
6-7=-80/94, 7-8=-74/67, 8-9=0/39,
8-10=-122/62
BOT CHORD 15-16=-61/67, 14-15=-61/67, 13-14=-61/67,
12-13=-61/67, 11-12=-61/67, 10-11=-61/67
WEBS 5-13=-154/69, 4-14=-136/77, 3-15=-129/93,
6-12=-136/77, 7-11=-129/91

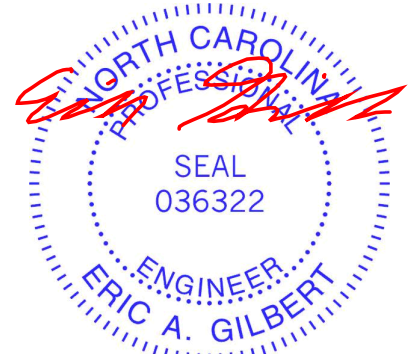
NOTES
1) Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) -0-10-8 to 1-11-8, Exterior (2) 1-11-8 to 5-11-8, Corner (3) 5-11-8 to 8-11-8, Exterior (2) 8-11-8 to 12-9-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-10; Pr=20.0 psf (roof LL); Lum DOL=1.15 Plate DOL=1.15; Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow); Lum DOL=1.15 Plate DOL=1.15; Category II; Exp B; Partially Exp.; Ct=1.10
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- All plates are 2x4 (||) 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 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 48 lb uplift at joint 16, 36 lb uplift at joint 10, 63 lb uplift at joint 14, 97 lb uplift at joint 15, 65 lb uplift at joint 12 and 99 lb uplift at joint 11.

- 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-51, 2-5=-51, 5-8=-51, 8-9=-51
Trapezoidal Loads (lb/ft)
Vert: 16=-20-to-15=-22 (F=-2), 15=-22 (F=-2)-to-14=-25 (F=-5), 14=-25 (F=-5)-to-13=-28 (F=-8), 13=-28 (F=-8)-to-12=-30 (F=-10), 12=-30 (F=-10)-to-11=-33 (F=-13), 11=-33 (F=-13)-to-10=-35 (F=-15)



July 7, 2025

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

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

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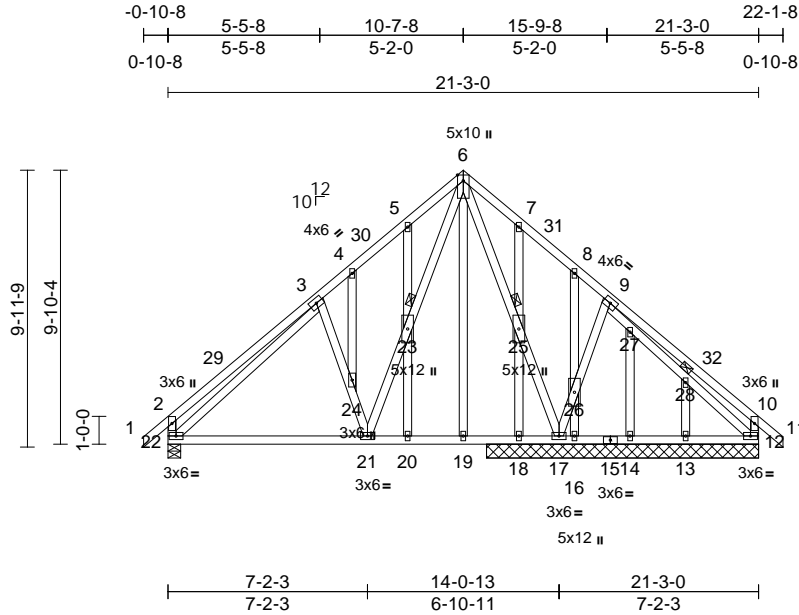
Job	Truss	Truss Type	Qty	Ply	908 Serenity	174684723
P06018-31625	A02SE	Common Structural Gable	1	1	Job Reference (optional)	

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Fri Jul 04 14:24:14

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Job	Truss	Truss Type	Qty	Ply	908 Serenity
P06018-31625	A02SE	Common Structural Gable	1	1	174684723
					Job Reference (optional)

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

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Vert: 22=-20-to-21=-25 (F=-5), 21=-25 (F=-5)-
to-20=-26 (F=-6), 20=-26 (F=-6)-to-19=-28 (F=-8),
19=-28 (F=-8)-to-18=-29 (F=-9), 18=-29 (F=-9)-
to-17=-30 (F=-10), 17=-30 (F=-10)-to-16=-30
(F=-10), 16=-30 (F=-10)-to-15=-31 (F=-11), 15=-31
(F=-11)-to-14=-32 (F=-12), 14=-32 (F=-12)-to-13=-33
(F=-13), 13=-33 (F=-13)-to-12=-35 (F=-15)



July 7, 2025

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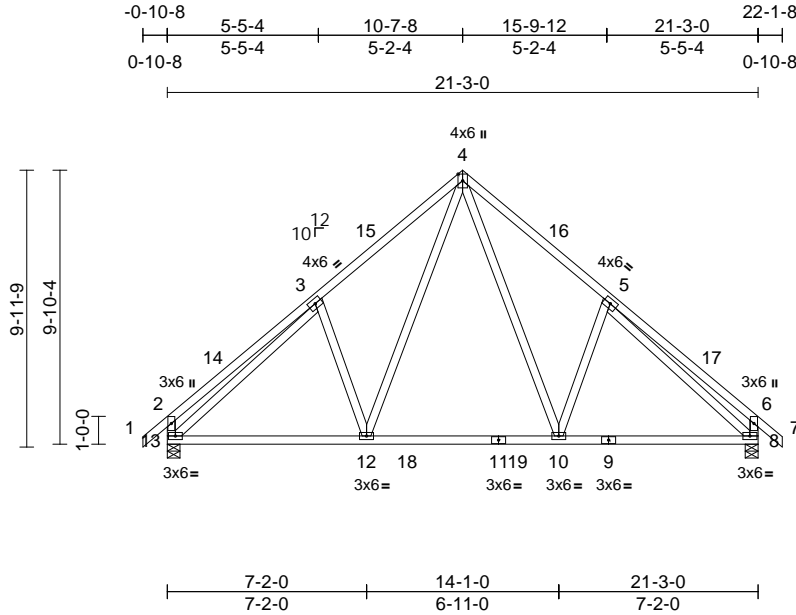
Job	Truss	Truss Type	Qty	Ply	908 Serenity	174684724
P06018-31625	A03	Common	5	1	Job Reference (optional)	

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

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Scale = 1:82.9

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	-0.12	10-12	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.16	10-12	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.66	Horz(CT)	0.02	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0											
											Weight: 144 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2

BRACING

TOP CHORD	Structural wood sheathing directly applied or 5-10-6 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size)

8=0-5-8, 13=0-5-8
Max Horiz 13=208 (LC 13)
Max Uplift 8=-81 (LC 15), 13=-81 (LC 2)
Max Grav 8=900 (LC 2), 13=900 (LC 2)

FORCES (lb)

TOP CHORD	1-2=0/39, 2-3=-342/161, 3-4=-882/207, 4-5=-882/207, 5-6=-342/161, 6-7=0/39, 2-13=-365/147, 6-8=-365/147
BOT CHORD	12-13=-95/772, 10-12=0/532, 8-10=-14/680
WEBS	4-10=-146/462, 5-10=-236/193, 4-12=-146/461, 3-12=-236/193, 3-13=-742/12, 5-8=-742/11

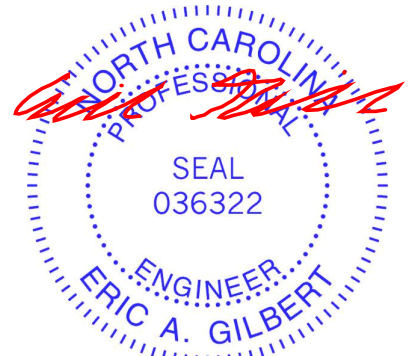
NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 10-7-8, Exterior (2) 10-7-8 to 13-7-8, Interior (1) 13-7-8 to 22-1-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10

- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 81 lb uplift at joint 13 and 81 lb uplift at joint 8.

LOAD CASE(S)

Standard



July 7, 2025

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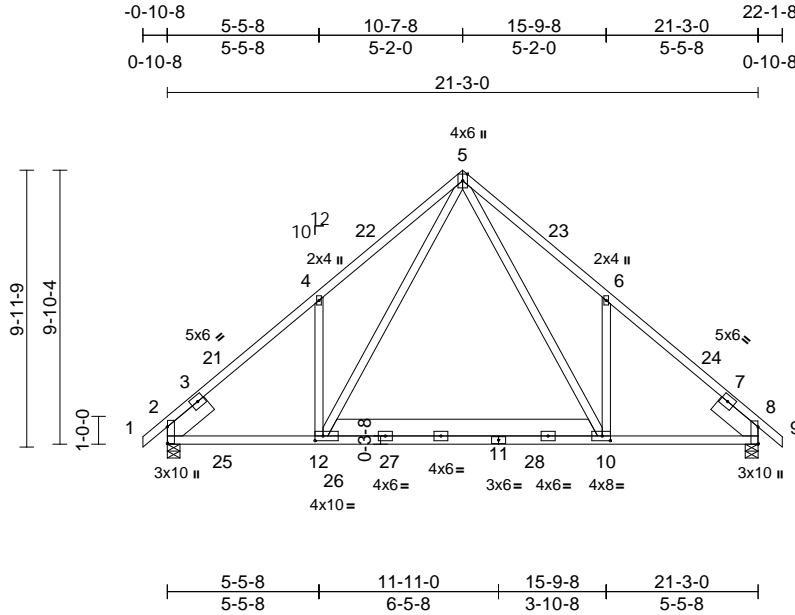
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	908 Serenity	174684725
P06018-31625	A04	Common	3	1	Job Reference (optional)	

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

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Page: 1



Scale = 1:82.9

Plate Offsets (X, Y): [2:0-7-3,0-0-1], [8:0-7-7,Edge], [10:0-3-8,0-2-0], [12:0-3-8,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.50	Vert(LL)	-0.07	10-12	>999	240	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.14	10-12	>999	180	
TCDL	10.0	Rep Stress Incr	NO	WB	0.47	Horz(CT)	0.03	8	n/a	n/a	
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS							
BCDL	10.0										
Weight: 165 lb FT = 20%											

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 12-10:2x8 SP DSS
WEBS 2x4 SP No.2
SLIDER Left 2x8 SP DSS -- 1-11-0, Right 2x8 SP DSS -- 1-11-0

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-0-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 2=0-5-8, 8=0-5-8
Max Horiz 2=185 (LC 13)
Max Uplift 8=61 (LC 15)
Max Grav 2=984 (LC 2), 8=921 (LC 2)

FORCES

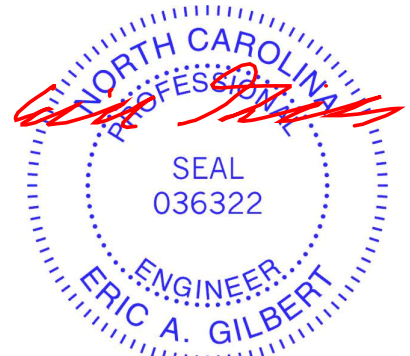
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/34, 2-4=-1044/56, 4-5=-1095/218, 5-6=-1047/267, 6-8=-998/102, 8-9=0/34
BOT CHORD 2-12=-147/856, 10-12=0/534, 8-10=-41/724
WEBS 5-10=-231/596, 6-10=-304/230, 5-12=-153/673, 4-12=-308/226

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-10-8 to 2-1-8, Interior (1) 2-1-8 to 10-7-8, Exterior (2) 10-7-8 to 13-7-8, Interior (1) 13-7-8 to 22-1-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 100.0lb AC unit load placed on the bottom chord, 4-0-0 from left end, supported at two points, 4-0-0 apart.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 61 lb uplift at joint 8.

LOAD CASE(S) Standard



July 7, 2025

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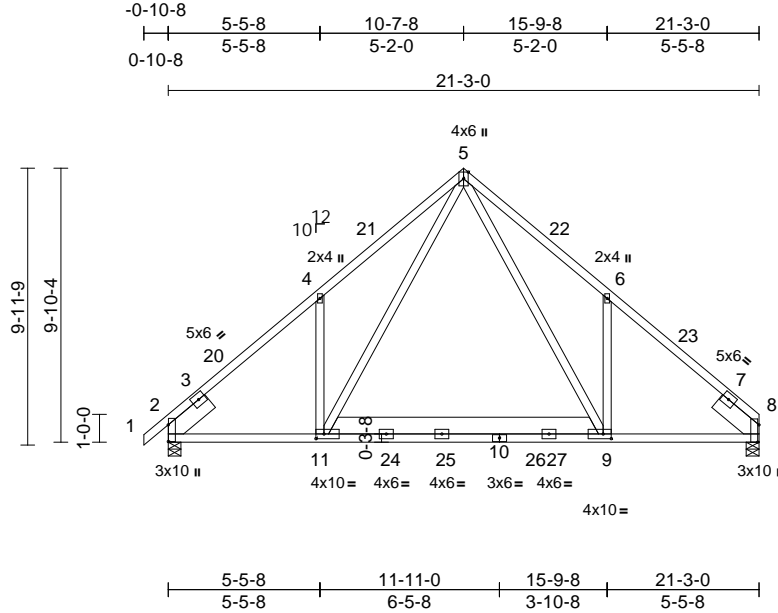
Job	Truss	Truss Type	Qty	Ply	908 Serenity	174684726
P06018-31625	A05	Common	1	1	Job Reference (optional)	

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Fri Jul 04 14:24:15

Page: 1

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Scale = 1:82.9

Plate Offsets (X, Y): [2:0-7-3,0-0-1], [8:0-7-7,Edge], [9:0-3-8,0-2-0], [11:0-3-8,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	-0.07	9-11	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.16	9-11	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.40	Horz(CT)	0.03	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0											
											Weight: 163 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2 *Except* 11-9:2x8 SP DSS
 WEBS 2x4 SP No.2
 SLIDER Left 2x8 SP DSS -- 1-11-0, Right 2x8 SP DSS -- 1-11-0

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-10-3 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 2=0-5-8, 8=0-5-8
 Max Horiz 2=181 (LC 13)
 Max Uplift 2=-36 (LC 14), 8=-11 (LC 15)
 Max Grav 2=947 (LC 2), 8=905 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/34, 2-4=-1035/65, 4-5=-1081/233, 5-6=-1103/216, 6-8=-1056/52
 BOT CHORD 2-11=-150/839, 9-11=0/537, 8-9=-40/761
 WEBS 5-9=-166/666, 6-9=-301/235, 5-11=-194/632, 4-11=-300/234

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-10-8 to 2-1-8, Interior (1) 2-1-8 to 10-7-8, Exterior (2) 10-7-8 to 13-7-8, Interior (1) 13-7-8 to 21-3-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 100.0lb AC unit load placed on the bottom chord, 12-0-0 from left end, supported at two points, 4-0-0 apart.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 11 lb uplift at joint 8 and 36 lb uplift at joint 2.

LOAD CASE(S) Standard



July 7, 2025

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

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

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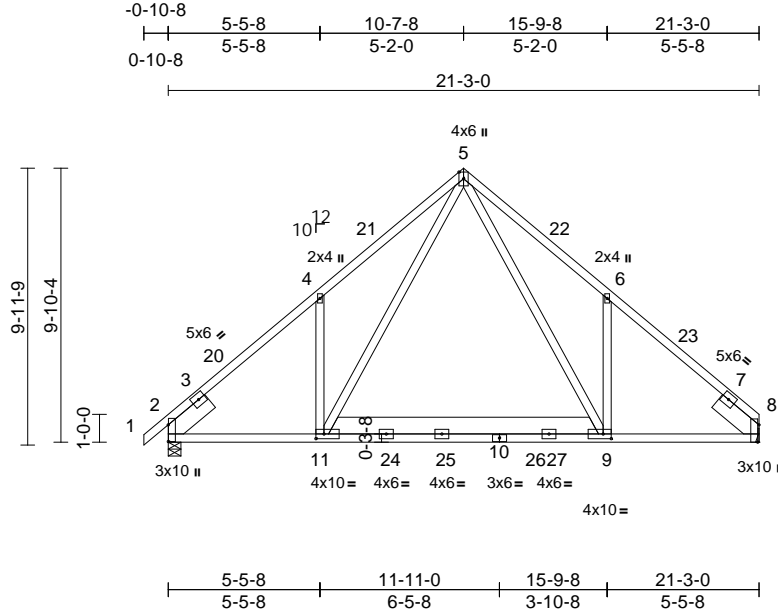
818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	908 Serenity	
P06018-31625	A06	Common	2	1	Job Reference (optional)	I74684727

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Fri Jul 04 14:24:15
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Page: 1



Scale = 1:82.9

Plate Offsets (X, Y): [2:0-7-3,0-0-1], [8:0-7-7,Edge], [9:0-3-8,0-2-0], [11:0-3-8,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	-0.07	9-11	>999	240	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.16	9-11	>999	180	
TCDL	10.0	Rep Stress Incr	NO	WB	0.40	Horz(CT)	0.03	8	n/a	n/a	
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS							
BCDL	10.0										
Weight: 163 lb FT = 20%											

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 11-9:2x8 SP DSS
WEBS 2x4 SP No.2
SLIDER Left 2x8 SP DSS -- 1-11-0, Right 2x8 SP DSS -- 1-11-0

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-10-3 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 2=0-5-8, 8= Mechanical
Max Horiz 2=181 (LC 13)
Max Uplift 2=-36 (LC 14), 8=-11 (LC 15)
Max Grav 2=947 (LC 2), 8=905 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension

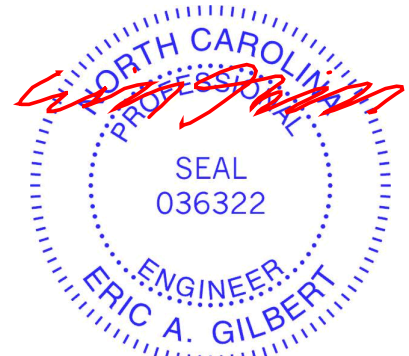
TOP CHORD 1-2=0/34, 2-4=-1035/65, 4-5=-1081/233, 5-6=-1103/216, 6-8=-1056/52
BOT CHORD 2-11=-150/839, 9-11=0/537, 8-9=-40/761
WEBS 5-9=-166/666, 6-9=-301/235, 5-11=-194/632, 4-11=-300/234

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-10-8 to 2-1-8, Interior (1) 2-1-8 to 10-7-8, Exterior (2) 10-7-8 to 13-7-8, Interior (1) 13-7-8 to 21-3-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 100.0lb AC unit load placed on the bottom chord, 12-0-0 from left end, supported at two points, 4-0-0 apart.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 11 lb uplift at joint 8 and 36 lb uplift at joint 2.

LOAD CASE(S) Standard



July 7, 2025

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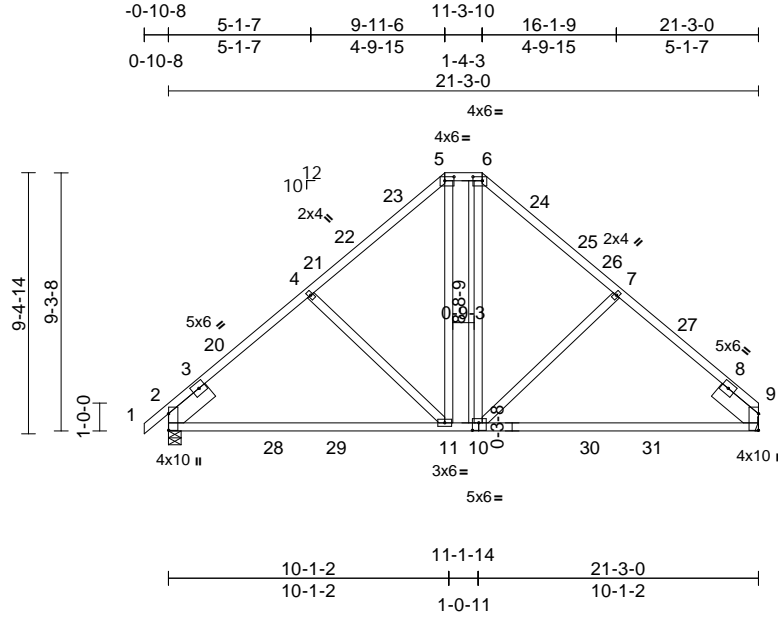
Job	Truss	Truss Type	Qty	Ply	908 Serenity	I74684728
P06018-31625	A07	Hip	1	1	Job Reference (optional)	

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Fri Jul 04 14:24:16

Page: 1

ID:BT?kYY1DyOl2TcWModwWYNzxR4-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWRCDoi7J4zJC?f



Scale = 1:83

Plate Offsets (X, Y): [2:0-7-3,0-0-1], [5:0-4-0,0-1-12], [6:0-4-0,0-1-12], [9:0-7-3,0-0-1], [10:0-2-12,0-3-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.15	11-18	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.30	11-18	>857	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.32	Horz(CT)	0.04	9	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0											
											Weight: 132 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
SLIDER	Left 2x8 SP DSS -- 1-11-0, Right 2x8 SP DSS -- 1-11-0

BRACING

TOP CHORD	Structural wood sheathing directly applied or 4-5-4 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size)	2=0-5-8, 9= Mechanical
Max Horiz	2=171 (LC 15)
Max Uplift	2=-78 (LC 16), 9=-66 (LC 17)
Max Grav	2=1201 (LC 39), 9=1155 (LC 39)

FORCES

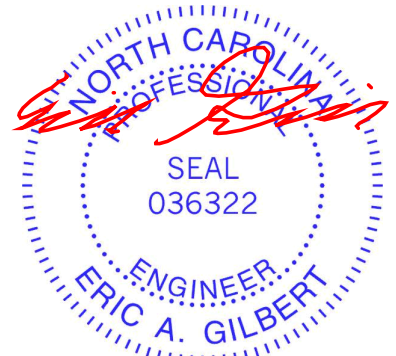
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/34, 2-4=-1364/145, 4-5=-1079/171, 5-6=-704/165, 6-7=-1081/174, 7-9=-1365/148
BOT CHORD	2-11=-156/955, 9-11=-81/957
WEBS	4-11=-371/170, 5-11=-62/349, 6-10=-66/352, 7-10=-374/170

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-10-8 to 2-1-8, Interior (1) 2-1-8 to 9-11-6, Exterior (2) 9-11-6 to 15-6-8, Interior (1) 15-6-8 to 21-3-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=20.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 66 lb uplift at joint 9 and 78 lb uplift at joint 2.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



July 7, 2025

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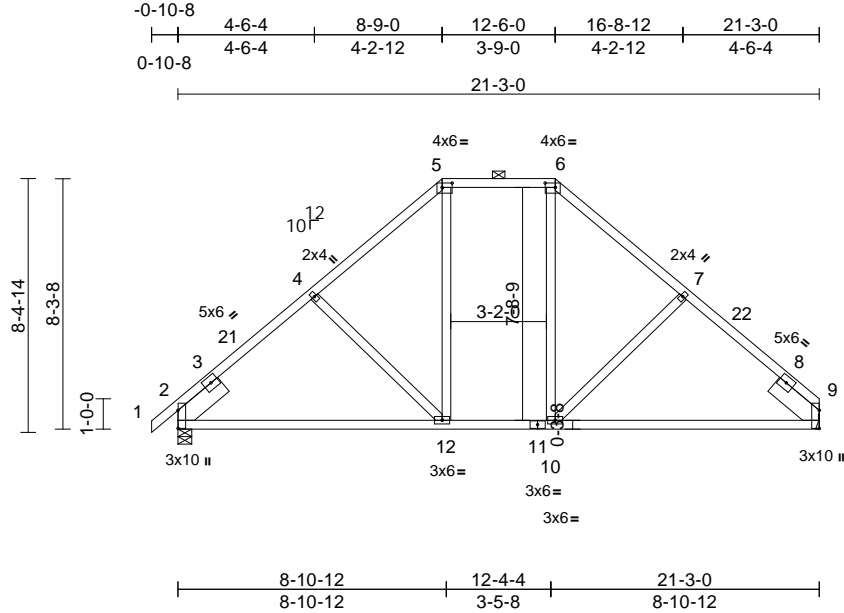
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	908 Serenity	174684729
P06018-31625	A08	Hip	1	1	Job Reference (optional)	

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Fri Jul 04 14:24:16
ID:ffZ6mu2rjtv5m5ZMLS14azxXR3-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWCrDci7J4zJC?f

Page: 1



Scale = 1:76.3

Plate Offsets (X, Y): [2:0-7-3,0-0-1], [5:0-4-0,0-1-12], [6:0-4-0,0-1-12], [9:0-7-3,0-0-1]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.13	10-15	>999	240	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.22	10-15	>999	180	
TCDL	10.0	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.03	9	n/a	n/a	
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS							
BCDL	10.0										
										Weight: 126 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2
SLIDER Left 2x8 SP DSS -- 1-11-0, Right 2x8 SP DSS -- 1-11-0

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-6-4 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 2=0-5-8, 9= Mechanical
Max Horiz 2=151 (LC 13)
Max Uplift 2=-75 (LC 14), 9=-63 (LC 15)
Max Grav 2=904 (LC 2), 9=849 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension

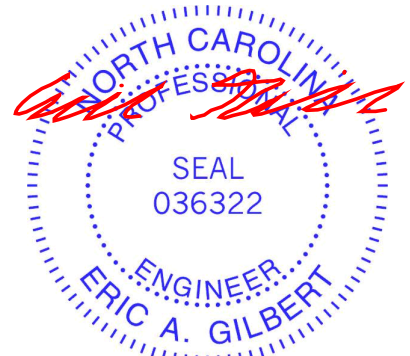
TOP CHORD 1-2=0/34, 2-4=-957/152, 4-5=-812/176, 5-6=-560/166, 6-7=-813/179, 7-9=-959/156
BOT CHORD 2-12=-125/721, 10-12=-19/571, 9-10=-80/684
WEBS 4-12=-215/158, 5-12=-42/286, 6-10=-45/287, 7-10=-220/158

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-10-8 to 2-1-8, Interior (1) 2-1-8 to 8-9-0, Exterior (2) 8-9-0 to 16-10-0, Interior (1) 16-10-0 to 21-3-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=20.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 63 lb uplift at joint 9 and 75 lb uplift at joint 2.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



July 7, 2025

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Edenton, NC 27932

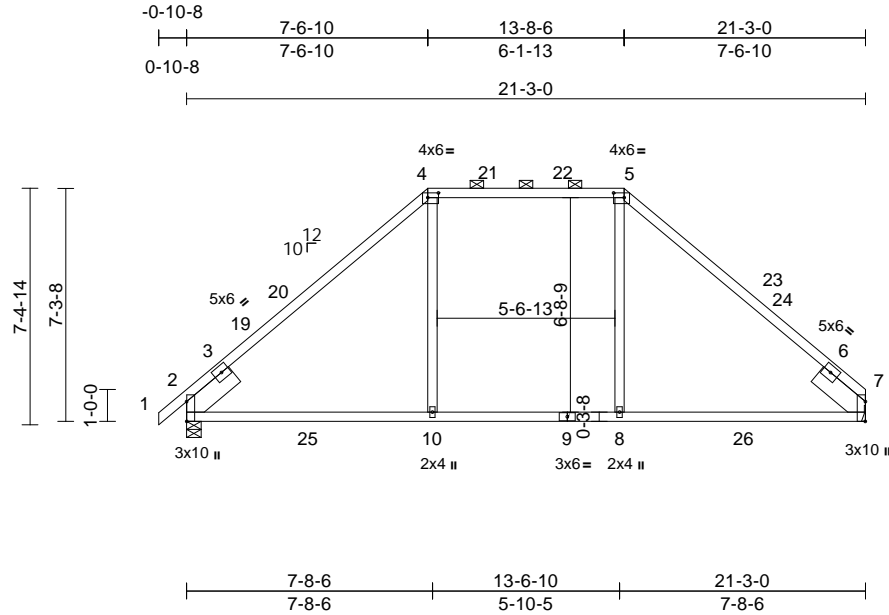
Job	Truss	Truss Type	Qty	Ply	908 Serenity	174684730
P06018-31625	A09	Hip	1	1	Job Reference (optional)	

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Fri Jul 04 14:24:16

Page: 1

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Scale = 1:72.1

Plate Offsets (X, Y): [2:0-7-7,Edge], [4:0-4-0,0-1-12], [5:0-4-0,0-1-12], [7:0-7-7,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.79	Vert(LL)	-0.35	8-13	>719	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.42	8-13	>611	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.09	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0											
											Weight: 104 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
SLIDER	Left 2x8 SP DSS -- 1-11-0, Right 2x8 SP DSS -- 1-11-0

BRACING

TOP CHORD	Structural wood sheathing directly applied or 3-4-5 oc purlins, except 2-0-0 oc purlins (5-10-6 max.): 4-5.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size)	2=0-5-8, 7= Mechanical
Max Horiz	2=132 (LC 13)
Max Uplift	2=-70 (LC 14), 7=-58 (LC 15)
Max Grav	2=993 (LC 3), 7=947 (LC 3)

FORCES

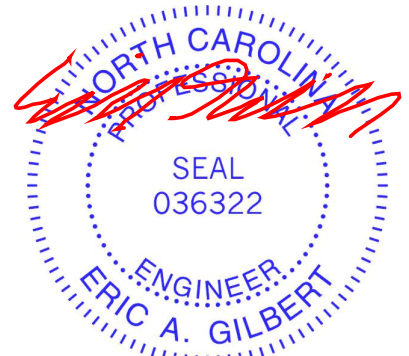
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/34, 2-4=-1077/159, 4-5=-749/172, 5-7=-1076/161
BOT CHORD	2-10=-207/742, 8-10=-36/749, 7-8=-138/742
WEBS	4-10=-14/365, 5-8=-14/365

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 7-6-10, Exterior (2) 7-6-10 to 11-9-8, Interior (1) 11-9-8 to 13-8-6, Exterior (2) 13-8-6 to 17-11-5, Interior (1) 17-11-5 to 21-3-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=20.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 58 lb uplift at joint 7 and 70 lb uplift at joint 2.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



July 7, 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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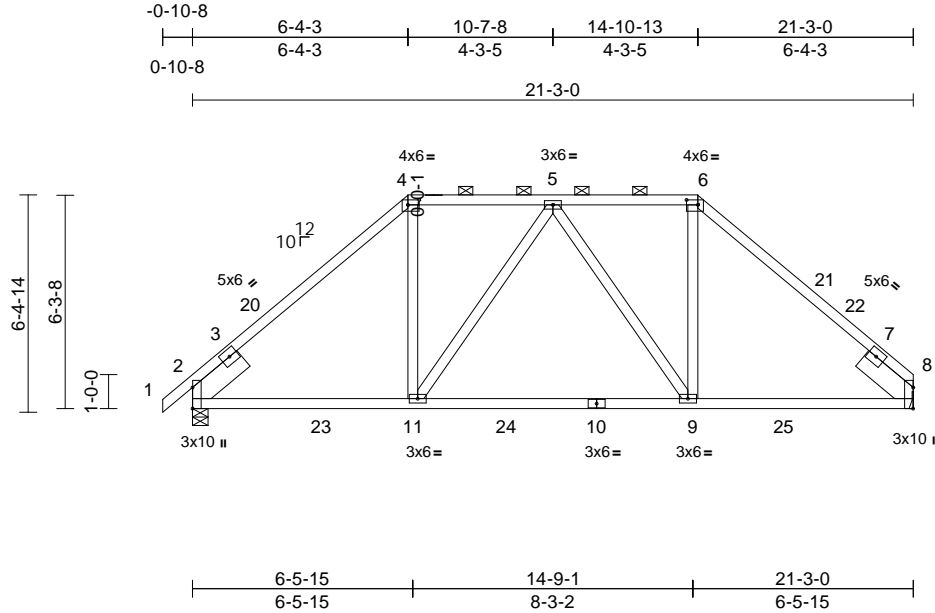
Job	Truss	Truss Type	Qty	Ply	908 Serenity	174684731
P06018-31625	A10	Hip	1	1	Job Reference (optional)	

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Fri Jul 04 14:24:16

Page: 1

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Scale = 1:67.9

Plate Offsets (X, Y): [2:0-7-7,Edge], [4:0-4-0,0-1-12], [6:0-4-0,0-1-12], [8:0-7-7,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.12	9-11	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.23	9-11	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.04	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0											
											Weight: 121 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x4 SP No.2
 SLIDER Left 2x8 SP DSS -- 1-11-0, Right 2x8 SP DSS -- 1-11-0

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-8-9 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-6.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 2=0-5-8, 8= Mechanical
 Max Horiz 2=113 (LC 13)
 Max Uplift 2=63 (LC 14), 8=51 (LC 15)
 Max Grav 2=909 (LC 3), 8=863 (LC 3)

FORCES

(lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/34, 2-4=-1003/150, 4-5=-701/163, 5-6=-703/162, 6-8=-1004/152
 BOT CHORD 2-11=-160/692, 9-11=-82/781, 8-9=-105/694
 WEBS 4-11=-27/400, 5-11=-235/112, 5-9=-232/112, 6-9=-27/399

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-10-8 to 2-1-8, Interior (1) 2-1-8 to 6-4-3, Exterior (2) 6-4-3 to 10-7-8, Interior (1) 10-7-8 to 14-10-13, Exterior (2) 14-10-13 to 19-1-11, Interior (1) 19-1-11 to 21-3-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=20.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 51 lb uplift at joint 8 and 63 lb uplift at joint 2.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



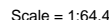
July 7, 2025

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

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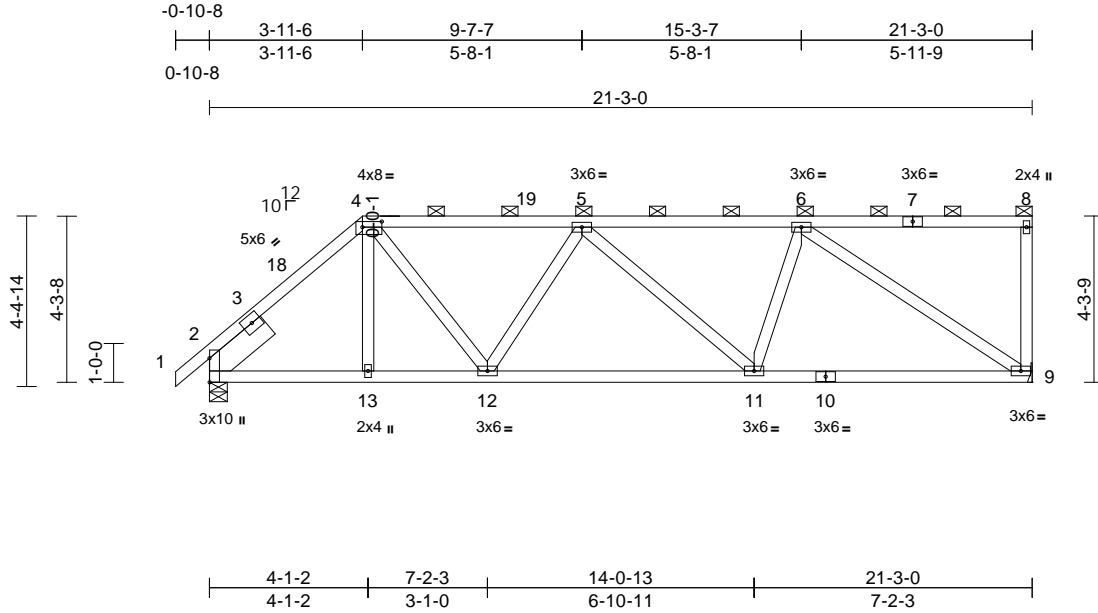
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	908 Serenity	I74684733
P06018-31625	A12	Half Hip	1	1	Job Reference (optional)	

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Fri Jul 04 14:24:17
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Page: 1



Scale = 1:59.5

Plate Offsets (X, Y): [2'-0"-7'-7",Edge], [4'-0"-6'-0",0'-1'-12"]

Loading	(psf)	Spacing	2'-0"-0"	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.43	Vert(LL)	-0.07	9-11	>999	240	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.14	9-11	>999	180	
TCDL	10.0	Rep Stress Incr	YES	WB	0.98	Horz(CT)	0.03	9	n/a	n/a	
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS							
BCDL	10.0										
Weight: 122 lb FT = 20%											

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2
SLIDER Left 2x8 SP DSS -- 1-11-10

BRACING

TOP CHORD Structural wood sheathing directly applied or 5'-4"-14 oc purlins, except end verticals, and 2'-0"-0 oc purlins (5'-3"-8 max.): 4-8.
BOT CHORD Rigid ceiling directly applied or 10'-0"-0 oc bracing.

REACTIONS (size) 2=0-5-8, 9= Mechanical
Max Horiz 2=120 (LC 14)
Max Uplift 2=-77 (LC 11), 9=-131 (LC 11)
Max Grav 2=898 (LC 2), 9=848 (LC 1)

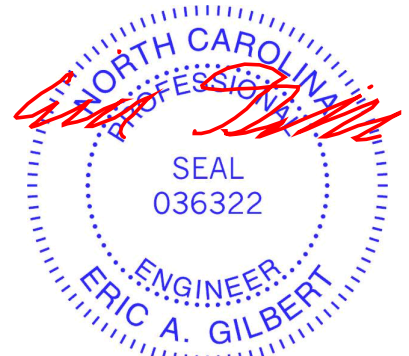
FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/34, 2-4=-957/135, 4-5=-980/146, 5-6=-1016/148, 6-8=-25/3, 8-9=-156/46
BOT CHORD 2-13=-147/674, 12-13=-129/673, 11-12=-190/1136, 9-11=-151/938
WEBS 6-9=-1108/180, 4-13=-25/56, 4-12=-81/514, 5-12=-317/103, 5-11=-164/66, 6-11=0/355

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-10-8 to 2-1-8, Interior (1) 2-1-8 to 3-11-6, Exterior (2) 3-11-6 to 8-2-5, Interior (1) 8-2-5 to 21-1-4 zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=20.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-0"-0 tall by 2'-0"-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 131 lb uplift at joint 9 and 77 lb uplift at joint 2.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



July 7, 2025

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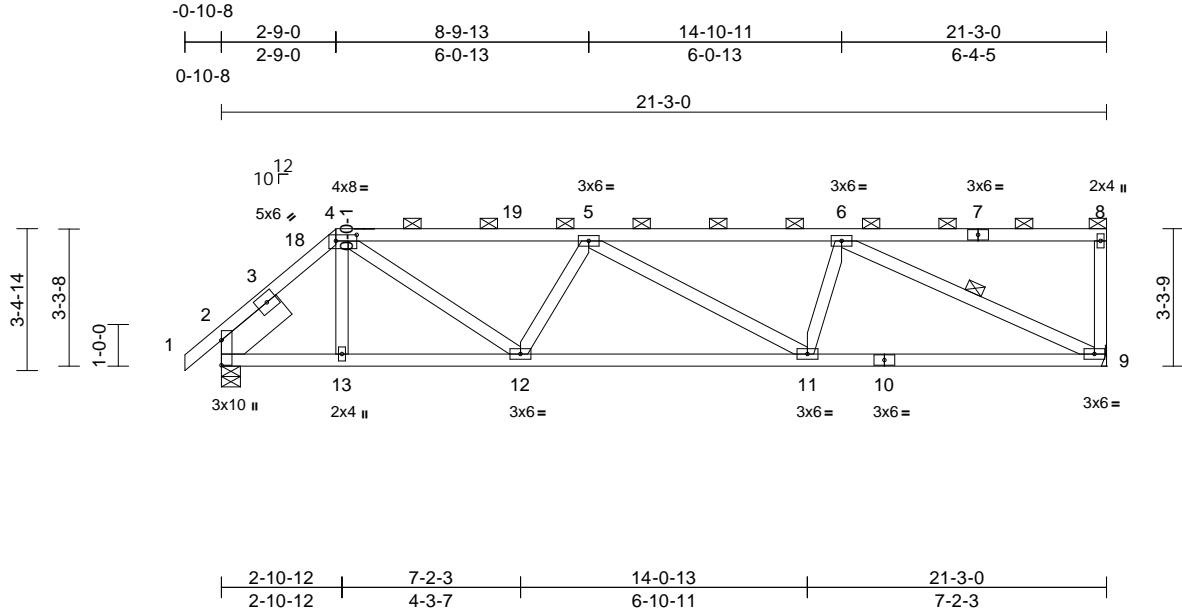
Job	Truss	Truss Type	Qty	Ply	908 Serenity	174684734
P06018-31625	A13	Half Hip	1	1	Job Reference (optional)	

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Fri Jul 04 14:24:17

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Scale = 1:55.3

Plate Offsets (X, Y): [2:0-7-3,0-0-1], [4:0-6-0,0-1-12]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.49	Vert(LL)	-0.07	9-11	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.15	9-11	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.34	Horz(CT)	0.04	9	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0											
											Weight: 115 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2
SLIDER Left 2x8 SP DSS -- 1-11-10

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-5-7 oc purlins, except end verticals, and 2-0-0 oc purlins (4-4-0 max.): 4-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-9

REACTIONS

(size) 2=0-5-8, 9= Mechanical
Max Horiz 2=90 (LC 14)
Max Uplift 2=-93 (LC 11), 9=-130 (LC 11)
Max Grav 2=898 (LC 2), 9=850 (LC 1)

FORCES

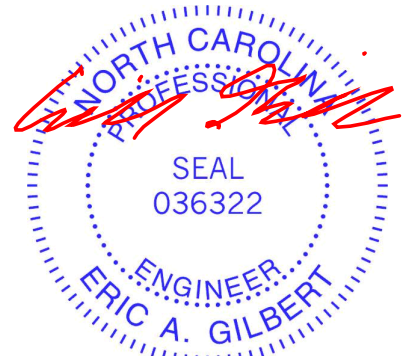
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/34, 2-4=-955/139, 4-5=-1331/198, 5-6=-1374/202, 6-8=-42/5, 8-9=-170/50
BOT CHORD 2-13=-123/676, 12-13=-122/675, 11-12=-248/1505, 9-11=-207/1314
WEBS 6-9=-1412/224, 4-13=-25/67, 4-12=-120/799, 5-12=-365/113, 5-11=-152/63, 6-11=0/337

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 2-9-0, Exterior (2) 2-9-0 to 6-11-15, Interior (1) 6-11-15 to 21-1-4 zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=20.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 130 lb uplift at joint 9 and 93 lb uplift at joint 2.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



July 7, 2025

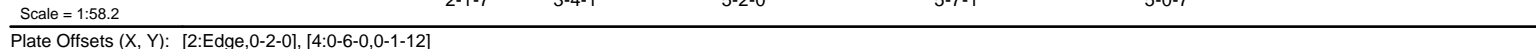
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84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334, Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Fri Jul 04 14:24:18 Page: 1
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LUMBER			3) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.	15) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
TOP CHORD	2x4 SP No.2			
BOT CHORD	2x6 SP No.2			
WEBS	2x4 SP No.2			
BRACING				LOAD CASE(S) Standard
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-9.	3) Unbalanced roof live loads have been considered for this design.		1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.	4) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60		Uniform Loads (lb/ft) Vert: 1-2=-51, 2-4=-51, 4-9=-61, 10-16=-20
REACTIONS (size) 10= Mechanical, 16=0-5-8		5) T CLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=20.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0		Concentrated Loads (lb) Vert: 4=-38 (B), 7=-27 (B), 12=-21 (B), 15=-35 (B), 11=-21 (B), 8=-27 (B), 17=-27 (B), 18=-27 (B), 19=-27 (B), 20=-27 (B), 21=-27 (B), 22=-27 (B), 23=-27 (B), 24=-21 (B), 25=-21 (B), 26=-21 (B), 27=-21 (B), 28=-21 (B), 29=-21 (B), 30=-21 (B)
	Max Horiz 16=62 (LC 10)			
	Max Uplift 10=-234 (LC 7), 16=-214 (LC 7)			
	Max Grav 10=1158 (LC 2), 16=1203 (LC 2)			
FORCES (lb) - Maximum Compression/Maximum Tension		6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.		
TOP CHORD	1-2=0/39, 2-3=-227/70, 3-4=-1155/249, 4-5=-1990/402, 5-6=-2673/531, 6-8=-1981/398, 8-9=-57/15, 9-10=-176/67, 2-16=-295/72	7) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.		
BOT CHORD	15-16=-158/651, 14-15=-204/894, 13-14=-500/2325, 11-13=-555/2682, 10-11=-398/1981	8) Provide adequate drainage to prevent water ponding.		
WEBS	3-16=-1043/187, 4-15=-247/92, 3-15=-109/441, 4-14=-243/1309, 5-14=-692/205, 5-13=-42/404, 6-13=-26/121, 6-11=-778/174, 8-11=-17/544, 8-10=-2122/423	9) All plates are 3x6 (=) MT20 unless otherwise indicated.		
NOTES		10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.		
1)	2-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc. Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc. Web connected as follows: 2x4 - 1 row at 0-9-0 oc.	11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.		
		12) Refer to girder(s) for truss to truss connections.		
		13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 234 lb uplift at joint 10 and 214 lb uplift at joint 16.		
		14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.		

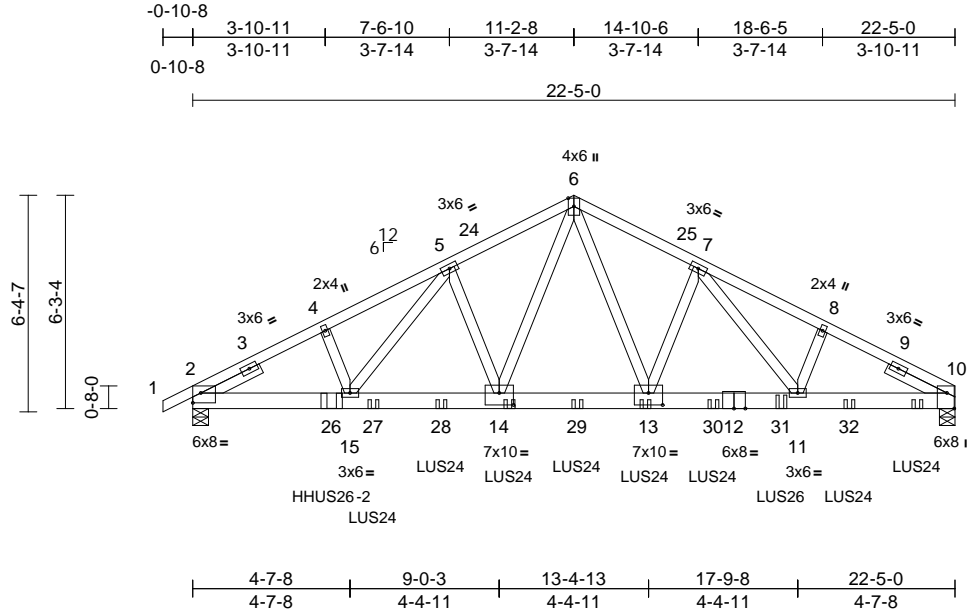
Job	Truss	Truss Type	Qty	Ply	908 Serenity	174684736
P06018-31625	B01G	Common Girder	1	2	Job Reference (optional)	

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Fri Jul 04 14:24:18

Page: 1

ID:Ma9usJA6Mn8UIJsUxRd6UhzxXQv-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f



Scale = 1:67.8

Plate Offsets (X, Y): [2:Edge,0-3-8], [10:0-5-8,Edge], [13:0-5-0,0-4-4], [14:0-5-0,0-4-4]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.13	14-15	>999	240	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.25	14-15	>999	180	
TCDL	10.0	Rep Stress Incr	NO	WB	0.41	Horz(CT)	0.05	10	n/a	n/a	
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS							
BCDL	10.0										
Weight: 293 lb FT = 20%											

LUMBER

TOP CHORD 2x4 SP No.1 *Except* 6-10:2x4 SP No.2
 BOT CHORD 2x6 SP DSS
 WEBS 2x4 SP No.2
 SLIDER Left 2x4 SP No.2 -- 1-11-0, Right 2x4 SP No.2 -- 1-11-0

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-10-13 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 2=0-5-8, 10=0-5-8
 Max Horiz 2=86 (LC 36)
 Max Uplift 2=-675 (LC 12), 10=-463 (LC 13)
 Max Grav 2=4896 (LC 2), 10=5621 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/30, 2-4=-8390/1157, 4-5=-8297/1178, 5-6=-7057/907, 6-7=-6979/791, 7-8=-8175/819, 8-10=-8263/794
 BOT CHORD 2-15=-1046/7320, 14-15=-828/6594, 13-14=-534/5097, 11-13=-614/6510, 10-11=-658/7247
 WEBS 6-13=-271/3141, 7-13=-1010/136, 7-11=-72/1529, 8-11=-35/291, 6-14=-569/3335, 5-14=-1003/279, 5-15=-365/1453, 4-15=-58/403

NOTES

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-8-0 oc.
 Web connected as follows: 2x4 - 1 row at 0-9-0 oc.

- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 463 lb uplift at joint 10 and 675 lb uplift at joint 2.
- Use Simpson Strong-Tie HHUS26-2 (14-10d Girder, 4-10d Truss) or equivalent at 4-1-0 from the left end to connect truss(es) to front face of bottom chord.

- Use Simpson Strong-Tie LUS24 (4-SD9112 Girder, 2-SD9212 Truss, Single Ply Girder) or equivalent spaced at 4-0-0 oc max. starting at 5-3-12 from the left end to 21-3-12 to connect truss(es) to front face of bottom chord.
 - Use Simpson Strong-Tie LUS26 (4-SD9112 Girder, 4-SD9212 Truss, Single Ply Girder) or equivalent at 17-3-12 from the left end to connect truss(es) to front face of bottom chord.
 - Fill all nail holes where hanger is in contact with lumber.
- LOAD CASE(S)** Standard
- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (lb/ft)
 Vert: 1-6=-51, 6-10=-51, 16-20=-20
 Concentrated Loads (lb)
 Vert: 13=-762 (F), 14=-825 (F), 18=-789 (F), 26=-1076 (F), 27=-830 (F), 28=-828 (F), 29=-774 (F), 30=-750 (F), 31=-1135 (F), 32=-788 (F)



July 7, 2025

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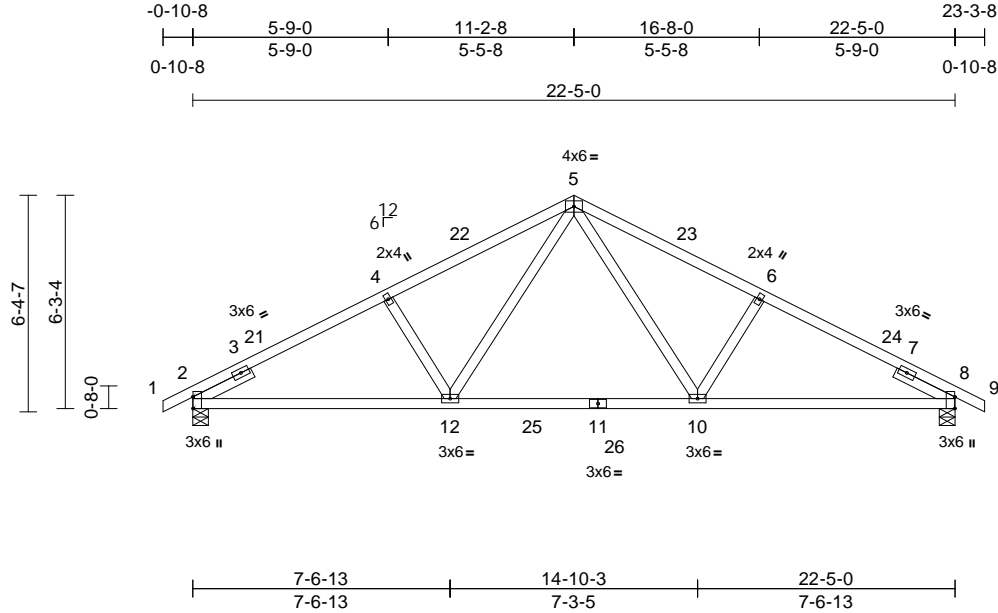
818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	908 Serenity	174684737
P06018-31625	B02	Common	3	1	Job Reference (optional)	

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Fri Jul 04 14:24:19
ID:XulmTdh1nU6AV9oob1vjfFzxRXR-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDdi7J4zJC?f

Page: 1



Scale = 1:67.8

Plate Offsets (X, Y): [2:0-4-1,Edge], [8:0-4-1,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.45	Vert(LL)	-0.12	10-12	>999	240	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.21	10-12	>999	180	
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.04	8	n/a	n/a	
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS							
BCDL	10.0										
Weight: 110 lb FT = 20%											

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
SLIDER	Left 2x4 SP No.2 -- 1-11-0, Right 2x4 SP No.2 -- 1-11-0

BRACING

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

REACTIONS

(size)	2=0-5-8, 8=0-5-8
Max Horiz	2=79 (LC 16)
Max Uplift	2=-103 (LC 16), 8=-103 (LC 17)
Max Grav	2=949 (LC 2), 8=949 (LC 2)

FORCES

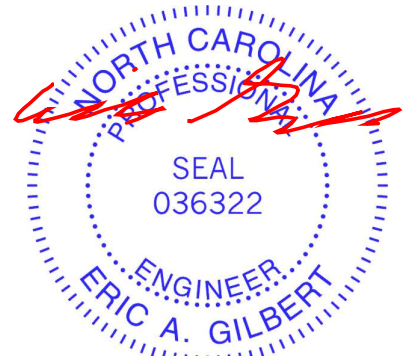
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/23, 2-4=-1410/169, 4-5=-1278/193, 5-6=-1278/193, 6-8=-1410/169, 8-9=0/23
BOT CHORD	2-12=-152/1216, 10-12=-35/845, 8-10=-90/1216
WEBS	5-10=-90/465, 6-10=-295/137, 5-12=-90/465, 4-12=-295/137

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-10-8 to 2-1-8, Interior (1) 2-1-8 to 11-2-8, Exterior (2) 11-2-8 to 14-2-8, Interior (1) 14-2-8 to 23-3-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 103 lb uplift at joint 2 and 103 lb uplift at joint 8.

LOAD CASE(S) Standard



July 7, 2025

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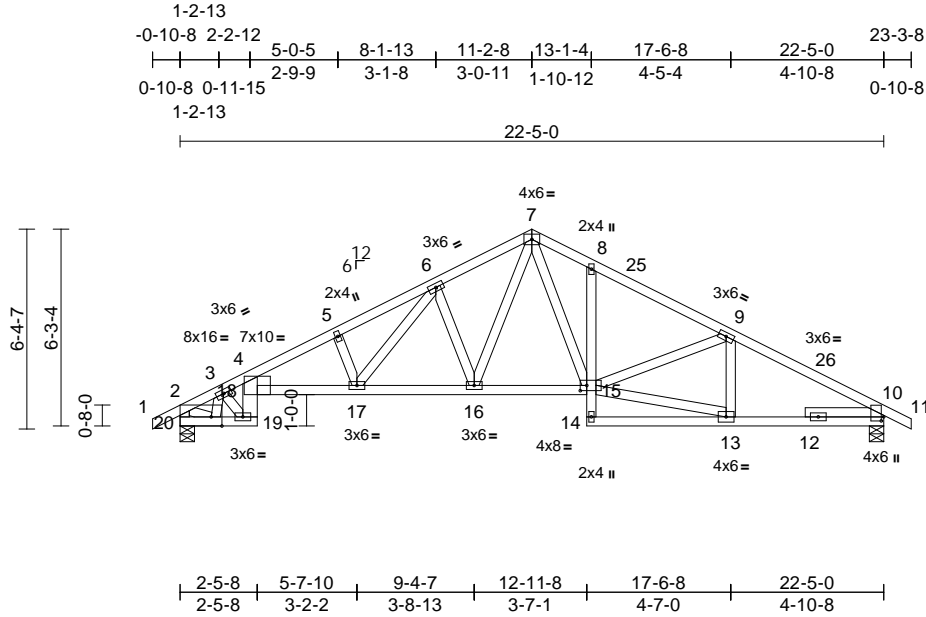
Job	Truss	Truss Type	Qty	Ply	908 Serenity	174684738
P06018-31625	B03	Roof Special	5	1	Job Reference (optional)	

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Fri Jul 04 14:24:19

Page: 1

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Scale = 1:73.4

Plate Offsets (X, Y): [2:0-4-1,Edge], [10:0-1-9,0-0-15], [15:0-2-8,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	-0.13	17-18	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.26	17-18	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.16	10	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0											
											Weight: 137 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.1
 BOT CHORD 2x4 SP No.2 *Except* 19-4:2x6 SP No.2,
 18-15:2x4 SP No.1
 WEBS 2x4 SP No.2
 SLIDER Right 2x4 SP No.2 -- 2-6-0

BRACING

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

REACTIONS (size) 10=0-5-8, 20=0-5-8
 Max Horiz 20=-76 (LC 21)
 Max Uplift 10=-102 (LC 17), 20=-104 (LC 16)
 Max Grav 10=943 (LC 2), 20=952 (LC 2)

FORCES

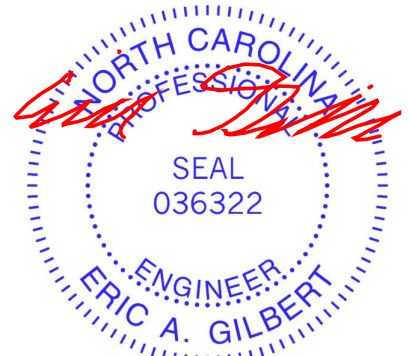
(lb) - Maximum Compression/Maximum
 Tension
 TOP CHORD 1-2=0/27, 2-3=-157/31, 3-4=-1197/130,
 4-5=-2075/233, 5-6=-2051/264,
 6-7=-1341/192, 7-8=-1376/213,
 8-9=-1407/171, 9-10=-1434/159, 10-11=0/23,
 2-20=-194/75
 BOT CHORD 19-20=-157/956, 18-19=-25/86,
 4-18=-12/175, 17-18=-232/1918,
 16-17=-112/1327, 15-16=-35/993,
 14-15=0/92, 8-15=-209/85, 13-14=-2/77,
 10-13=-93/1225
 WEBS 7-15=-121/590, 9-15=-95/92, 7-16=-98/518,
 5-17=-430/116, 6-17=-137/755,
 6-16=-457/129, 3-20=-1131/114, 3-19=-73/39,
 9-13=-236/49, 13-15=-83/1177

NOTES

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

- Wind: ASCE 7-10; Vult=115mph (3-second gust)
 Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat.
 II; Exp B; Enclosed; MWFRS (envelope) exterior zone
 and C-C Exterior (2) -0-10-8 to 2-1-15, Interior (1) 2-1-15
 to 11-2-8, Exterior (2) 11-2-8 to 14-2-8, Interior (1) 14-2-8
 to 23-3-8 zone; cantilever left and right exposed ; end
 vertical left and right exposed; C-C for members and
 forces & MWFRS for reactions shown; Lumber
 DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15
 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4
 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15);
 Category II; Exp B; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this
 design.
- This truss has been designed for greater of min roof live
 load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on
 overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for
 verifying Rain Load = 5.0 (psf) covers rain loading
 requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom
 chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf
 on the bottom chord in all areas where a rectangle
 3-06-00 tall by 2-00-00 wide will fit between the bottom
 chord and any other members.
- Provide mechanical connection (by others) of truss to
 bearing plate capable of withstanding 102 lb uplift at joint
 10 and 104 lb uplift at joint 20.

LOAD CASE(S) Standard



July 7, 2025

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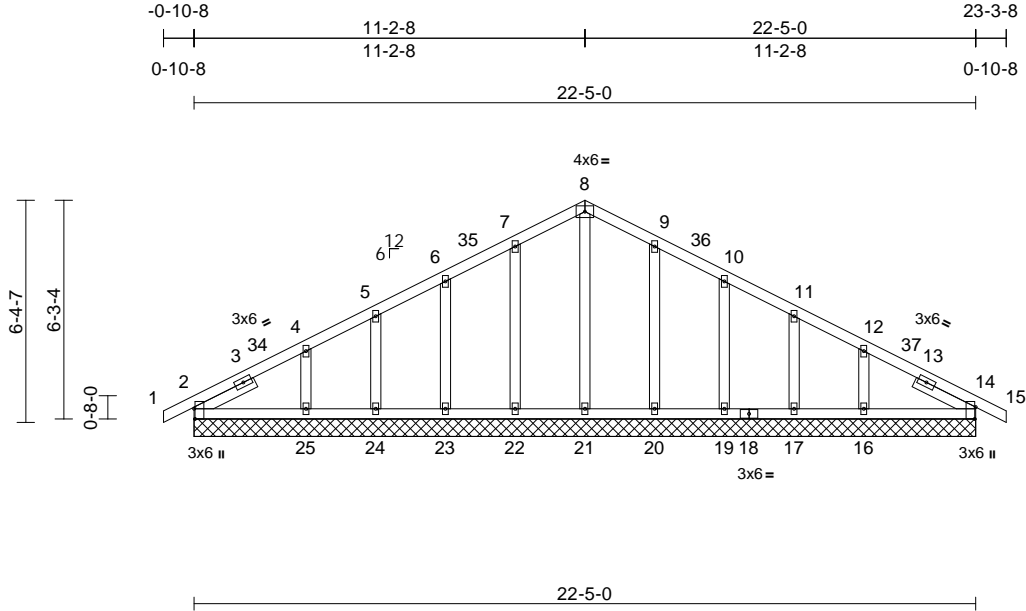
818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	908 Serenity	174684739
P06018-31625	B04E	Common Supported Gable	1	1	Job Reference (optional)	

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Fri Jul 04 14:24:19
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Page: 1



Scale = 1:66.1

Plate Offsets (X, Y): [2:0-3-8,Edge], [14:0-4-1,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	n/a	-	n/a	999	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999	
TCDL	10.0	Rep Stress Incr	NO	WB	0.06	Horz(CT)	0.00	14	n/a	n/a	
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS							
BCDL	10.0										
Weight: 126 lb FT = 20%											

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
OTHERS	2x4 SP No.2
SLIDER	Left 2x4 SP No.2 -- 1-11-0, Right 2x4 SP No.2 -- 1-11-0

BRACING

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

REACTIONS

(size)	2=22-5-0, 14=22-5-0, 16=22-5-0, 17=22-5-0, 19=22-5-0, 20=22-5-0, 21=22-5-0, 22=22-5-0, 23=22-5-0, 24=22-5-0, 25=22-5-0
Max Horiz	2=-79 (LC 21)
Max Uplift	2=-18 (LC 17), 14=-9 (LC 17), 16=-81 (LC 17), 17=-30 (LC 17), 19=-47 (LC 17), 20=-42 (LC 17), 22=-42 (LC 16), 23=-45 (LC 16), 24=-26 (LC 16), 25=-79 (LC 16)
Max Grav	2=199 (LC 2), 14=219 (LC 2), 16=289 (LC 35), 17=151 (LC 2), 19=191 (LC 2), 20=202 (LC 24), 21=143 (LC 33), 22=197 (LC 23), 23=177 (LC 2), 24=139 (LC 2), 25=247 (LC 34)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/23, 2-4=-93/49, 4-5=-89/76, 5-6=-79/107, 6-7=-81/146, 7-8=-90/182, 8-9=-90/183, 9-10=-81/148, 10-11=-79/108, 11-12=-87/78, 12-14=-114/48, 14-15=0/23
BOT CHORD	2-25=0/77, 24-25=0/77, 23-24=0/77, 22-23=0/77, 21-22=0/77, 20-21=0/77, 19-20=0/77, 17-19=0/77, 16-17=0/77, 14-16=0/77

WEBS

8-21=-92/11, 7-22=-145/105, 6-23=-123/68, 5-24=-104/49, 4-25=-168/102, 9-20=-145/105, 10-19=-124/68, 11-17=-102/48, 12-16=-175/105

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) -0-10-8 to 2-1-8, Exterior (2) 2-1-8 to 11-2-8, Corner (3) 11-2-8 to 14-2-8, Exterior (2) 14-2-8 to 23-3-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- All plates are 2x4 (||) MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 18 lb uplift at joint 2, 9 lb uplift at joint 14, 42 lb uplift at joint 22, 45 lb uplift at joint 23, 26 lb uplift at joint 24, 79 lb uplift at joint 25, 42 lb uplift at joint 20, 47 lb uplift at joint 19, 30 lb uplift at joint 17, 81 lb uplift at joint 16, 18 lb uplift at joint 2 and 9 lb uplift at joint 14.
- 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-8=-51, 8-15=-51
Trapezoidal Loads (lb/ft)



July 7, 2025

Continued on page 2

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	908 Serenity
P06018-31625	B04E	Common Supported Gable	1	1	Job Reference (optional)
					I74684739

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Fri Jul 04 14:24:19
ID:yTQv5fjv4PUkMdXMHATQUuzxXRU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?fi

Page: 2

Vert: 26=-20-to-28=-20 (F=0), 28=-20 (F=0)-
to-25=-22 (F=-2), 25=-22 (F=-2)-to-24=-23 (F=-3),
24=-23 (F=-3)-to-23=-25 (F=-5), 23=-25 (F=-5)-
to-22=-26 (F=-6), 22=-26 (F=-6)-to-21=-27 (F=-7),
21=-27 (F=-7)-to-20=-29 (F=-9), 20=-29 (F=-9)-
to-19=-30 (F=-10), 19=-30 (F=-10)-to-18=-31
(F=-11), 18=-31 (F=-11)-to-17=-32 (F=-12), 17=-32
(F=-12)-to-16=-33 (F=-13), 16=-33 (F=-13)-to-32=-35
(F=-15), 32=-35 (F=-15)-to-30=-35 (F=-15)



July 7, 2025

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

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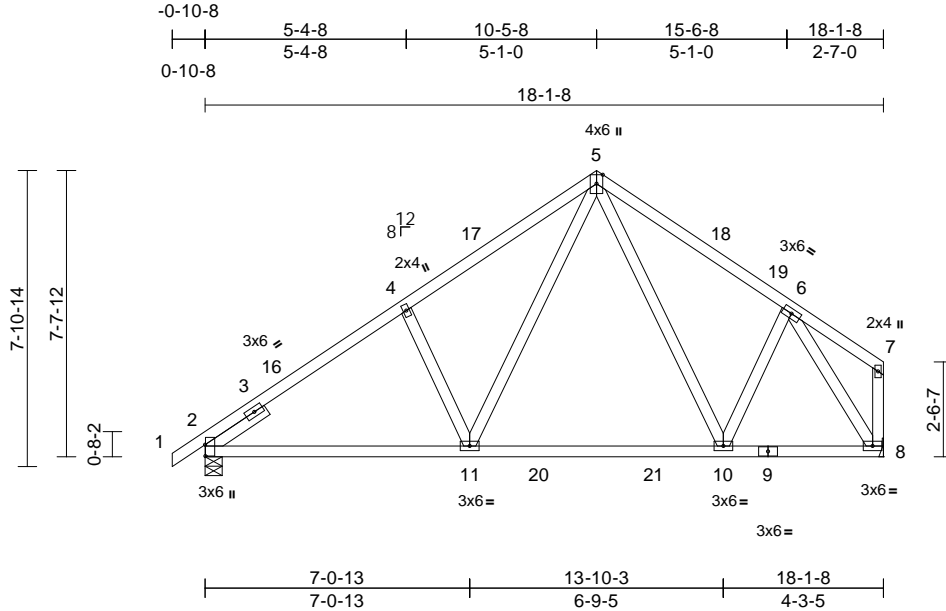
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	908 Serenity	174684740
P06018-31625	G01	Common	11	1	Job Reference (optional)	

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Fri Jul 04 14:24:20
ID:bVd02xfmFtrSFrePUdtFnqzxXRZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:61.6

Plate Offsets (X, Y): [2:0-3-10,0-0-2]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	-0.09	10-11	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.13	10-11	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.02	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0											
											Weight: 109 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 1-11-10

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) 2=0-5-8, 8= Mechanical
Max Horiz 2=140 (LC 14)
Max Uplift 2=-80 (LC 14), 8=-55 (LC 15)
Max Grav 2=773 (LC 2), 8=718 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

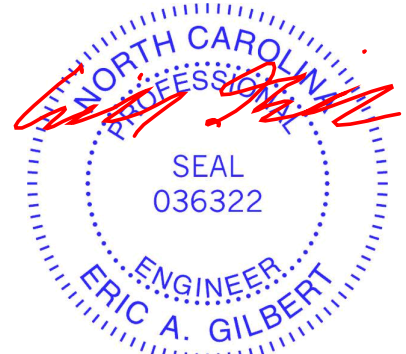
TOP CHORD 1-2=0/29, 2-4=-886/108, 4-5=-825/164,
5-6=-629/142, 6-7=-20/64, 7-8=-28/15
BOT CHORD 2-11=-165/779, 10-11=-35/461, 8-10=-42/408
WEBS 5-10=-64/123, 6-10=-25/177, 5-11=-113/489,
4-11=-275/152, 6-8=-773/81

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 10-5-8, Exterior (2) 10-5-8 to 13-5-8, Interior (1) 13-5-8 to 17-11-12 zone; cantilever left and right exposed ; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10

- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 80 lb uplift at joint 2 and 55 lb uplift at joint 8.

LOAD CASE(S) Standard



July 7, 2025

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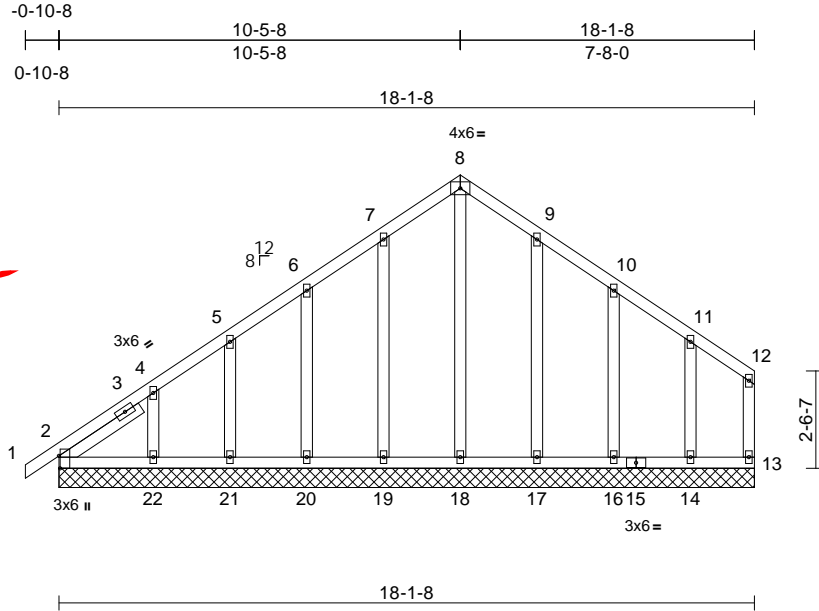
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	908 Serenity	174684741
P06018-31625	G01E	Common Supported Gable	1	1	Job Reference (optional)	

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Fri Jul 04 14:24:20
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Page: 1



Scale = 1:60

Plate Offsets (X, Y): [2:0-3-14,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999	
TCDL	10.0	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.00	2	n/a	n/a	
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS							
BCDL	10.0										
Weight: 121 lb FT = 20%											

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
OTHERS	2x4 SP No.2
SLIDER	Left 2x4 SP No.2 -- 2-6-0

BRACING

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

REACTIONS

(size)	2=18-1-8, 13=18-1-8, 14=18-1-8, 16=18-1-8, 17=18-1-8, 18=18-1-8, 19=18-1-8, 20=18-1-8, 21=18-1-8, 22=18-1-8
Max Horiz	2=140 (LC 14)
Max Uplift	2=-55 (LC 10), 13=-4 (LC 15), 14=-64 (LC 15), 16=-57 (LC 15), 17=-52 (LC 15), 19=-54 (LC 14), 20=-56 (LC 14), 21=-44 (LC 14), 22=-89 (LC 14)
Max Grav	2=177 (LC 27), 13=63 (LC 2), 14=187 (LC 27), 16=191 (LC 27), 17=192 (LC 27), 18=215 (LC 29), 19=188 (LC 26), 20=176 (LC 26), 21=160 (LC 2), 22=218 (LC 26)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/29, 2-4=-143/151, 4-5=-122/115, 5-6=-109/114, 6-7=-97/142, 7-8=-135/167, 8-9=-135/159, 9-10=-97/112, 10-11=-58/62, 11-12=-25/27, 12-13=-40/12
BOT CHORD	2-22=-2/5, 21-22=-2/5, 20-21=-2/5, 19-20=-2/5, 18-19=-2/5, 17-18=-2/5, 16-17=-2/5, 14-16=-2/5, 13-14=-2/5

WEBS

8-18=-157/52, 7-19=-133/63, 6-20=-123/66, 5-21=-117/58, 4-22=-156/90, 9-17=-129/61, 10-16=-125/66, 11-14=-119/65

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) -0-10-8 to 2-1-8, Exterior (2) 2-1-8 to 10-5-8, Corner (3) 10-5-8 to 13-5-8, Exterior (2) 13-5-8 to 17-11-12 zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- All plates are 2x4 (||) MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 4 lb uplift at joint 13, 55 lb uplift at joint 2, 54 lb uplift at joint 19, 56 lb uplift at joint 20, 44 lb uplift at joint 21, 89 lb uplift at joint 22, 52 lb uplift at joint 17, 57 lb uplift at joint 16, 64 lb uplift at joint 14 and 55 lb uplift at joint 2.

- 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-8=-51, 8-12=-51
Trapezoidal Loads (lb/ft)
Vert: 23=-20-to-25=-20 (F=0), 25=-20 (F=0)-to-22=-22 (F=-2), 22=-22 (F=-2)-to-21=-24 (F=-4), 21=-24 (F=-4)-to-20=-25 (F=-5), 20=-25 (F=-5)-to-19=-27 (F=-7), 19=-27 (F=-7)-to-18=-29 (F=-9), 18=-29 (F=-9)-to-17=-30 (F=-10), 17=-30 (F=-10)-to-16=-32 (F=-12), 16=-32 (F=-12)-to-15=-32 (F=-12), 15=-32 (F=-12)-to-14=-33 (F=-13), 14=-33 (F=-13)-to-13=-35 (F=-15)

July 7, 2025

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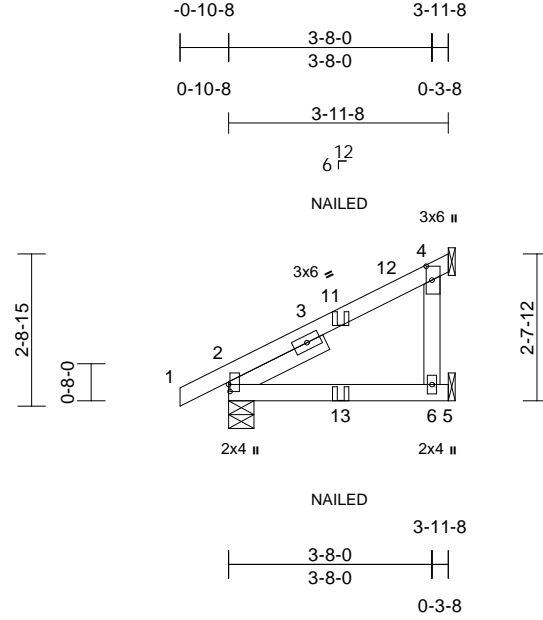
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	908 Serenity
P06018-31625	J01	Jack-Open Girder	1	1	174684742
Job Reference (optional)					

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

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Page: 1



Scale = 1:41.5

Plate Offsets (X, Y): [2:0-1-8,0-0-5], [4:0-3-0,0-1-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	0.01	6-9	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.02	6-9	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.01	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 20 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 1-11-10

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-11-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-5-8, 4= Mechanical, 6= Mechanical
Max Horiz 2=67 (LC 12)
Max Uplift 2=-19 (LC 12), 4=-41 (LC 12), 6=-2 (LC 12)
Max Grav 2=206 (LC 2), 4=95 (LC 2), 6=77 (LC 7)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/23, 2-4=-134/35
BOT CHORD 2-6=-57/62, 5-6=0/0
WEBS 4-6=0/0

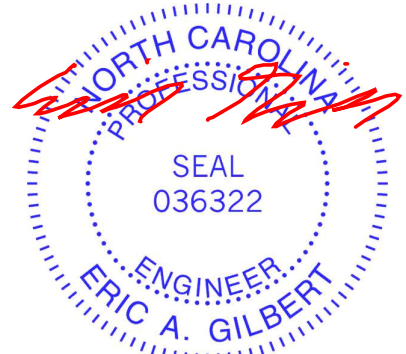
NOTES

- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.

- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 19 lb uplift at joint 2, 41 lb uplift at joint 4 and 2 lb uplift at joint 6.
- Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-4=-51, 5-7=-20
Concentrated Loads (lb)
Vert: 11=-26 (F), 13=-3 (F)



July 7, 2025

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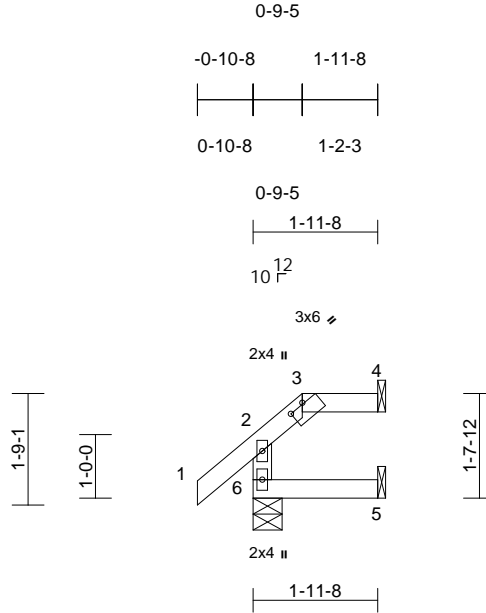
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	908 Serenity	174684743
P06018-31625	J02	Jack-Open	1	1	Job Reference (optional)	

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Fri Jul 04 14:24:20
ID:3zjpp5t30P7uPc0sXPBTWdzXRH-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:36.2

Plate Offsets (X, Y): [3:0-3-0,0-0-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	0.00	5-6	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	5-6	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MR								
BCDL	10.0											
											Weight: 9 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 1-11-8 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4= Mechanical, 5= Mechanical, 6=0-5-8
Max Horiz 6=33 (LC 13)
Max Uplift 4=-18 (LC 13), 5=-2 (LC 13), 6=-11 (LC 16)
Max Grav 4=71 (LC 35), 5=33 (LC 7), 6=209 (LC 36)

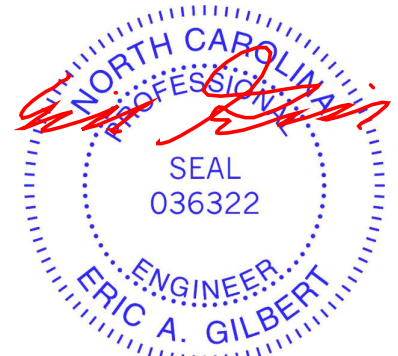
FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-6=-183/64, 1-2=0/64, 2-3=-56/9, 3-4=0/0
BOT CHORD 5-6=0/0

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-10-8 to 1-11-6 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=20.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0

- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 11 lb uplift at joint 6, 18 lb uplift at joint 4 and 2 lb uplift at joint 5.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



July 7, 2025

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

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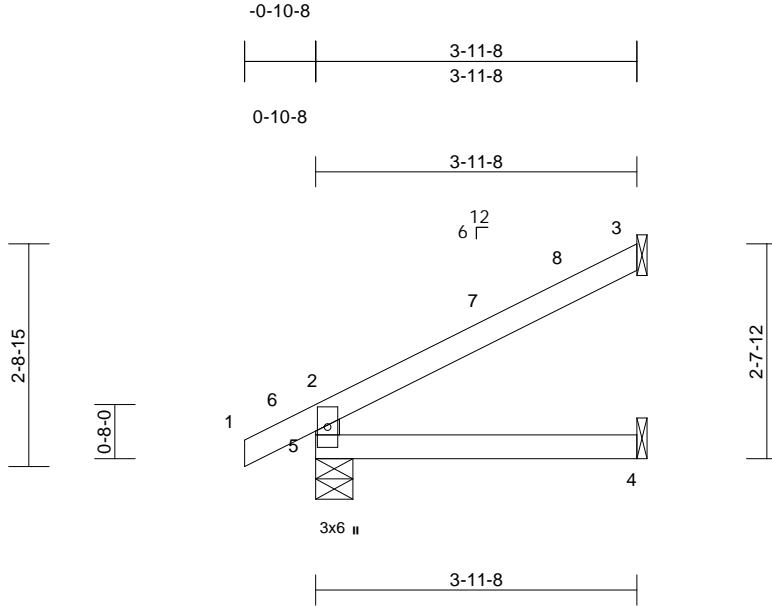
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	908 Serenity	I74684744
P06018-31625	J03	Jack-Open	9	1	Job Reference (optional)	

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Fri Jul 04 14:24:20
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Page: 1



Scale = 1:28.4

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	0.01	4-5	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.02	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MR								
BCDL	10.0											
											Weight: 14 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-11-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 3= Mechanical, 4= Mechanical,
5=0-5-8
Max Horiz 5=65 (LC 16)
Max Uplift 3=-44 (LC 16), 5=-18 (LC 16)
Max Grav 3=99 (LC 2), 4=70 (LC 7), 5=220 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

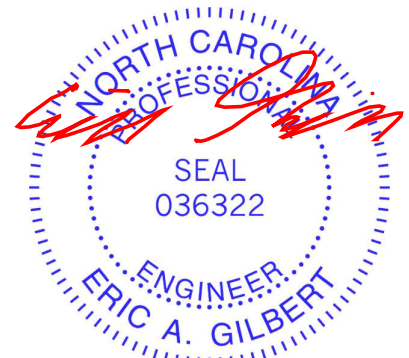
TOP CHORD 2-5=-187/90, 1-2=0/27, 2-3=-62/34
BOT CHORD 4-5=0/0

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 3-10-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.

- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 18 lb uplift at joint 5 and 44 lb uplift at joint 3.

LOAD CASE(S) Standard



July 7, 2025

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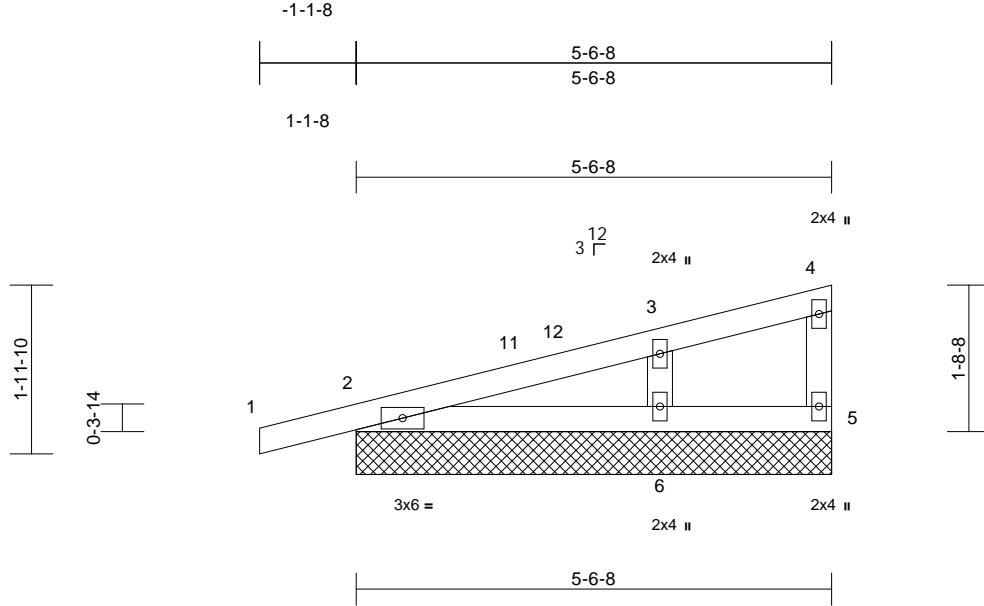
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	908 Serenity	174684745
P06018-31625	P01E	Monopitch Supported Gable	1	1	Job Reference (optional)	

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Fri Jul 04 14:24:21
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Page: 1



Scale = 1:26.9

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.28	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.51	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	NO	WB	0.03	Horz(CT)	0.00	2	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP							
BCDL	10.0										
										Weight: 21 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
OTHERS	2x4 SP No.2

BRACING

TOP CHORD	Structural wood sheathing directly applied or 5-6-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size)	2=5-6-8, 5=5-6-8, 6=5-6-8
Max Horiz	2=52 (LC 12)
Max Uplift	2=50 (LC 12), 5=2 (LC 12), 6=42 (LC 16)
Max Grav	2=207 (LC 2), 5=148 (LC 7), 6=348 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/16, 2-3=-61/34, 3-4=-23/1, 4-5=-16/34
BOT CHORD	2-6=-21/56, 5-6=0/0
WEBS	3-6=-235/159

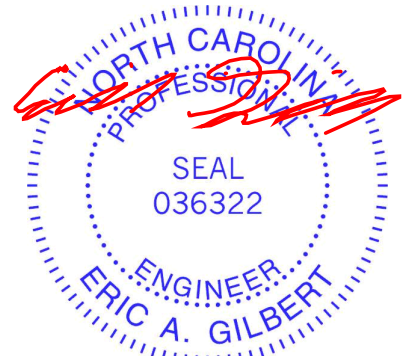
NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) -1-1-8 to 1-10-8, Exterior (2) 1-10-8 to 5-4-12 zone; cantilever left and right exposed; end vertical left exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 50 lb uplift at joint 2, 2 lb uplift at joint 5, 42 lb uplift at joint 6 and 50 lb uplift at joint 2.
- 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-4=51
Trapezoidal Loads (lb/ft)
Vert: 7=-20-to-9=-23 (F=-3), 9=-23 (F=-3)-to-10=-35 (F=-15), 10=-35 (F=-15)-to-6=30 (F=10), 6=30 (F=-10)-to-5=-35 (F=-15)



July 7, 2025

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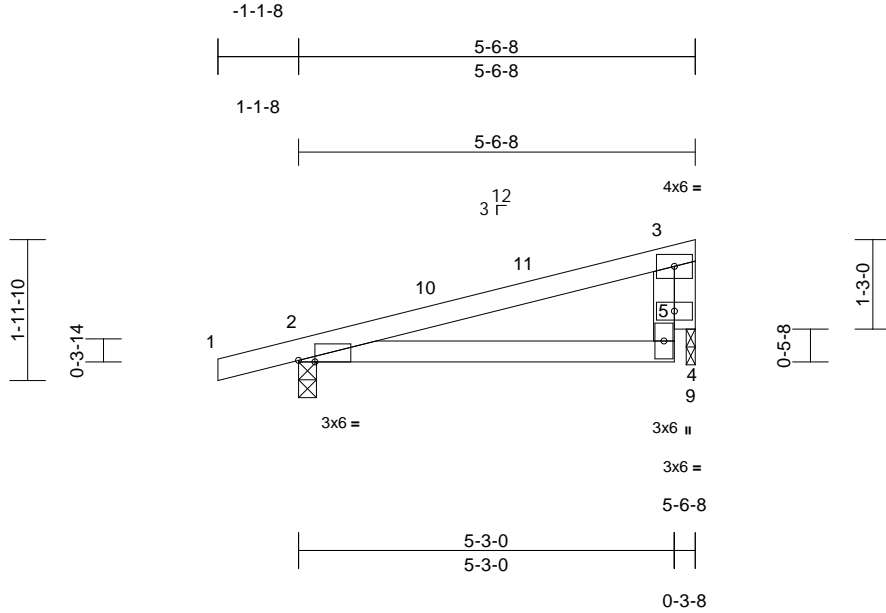
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	908 Serenity	I74684746
P06018-31625	P02	Monopitch	5	1	Job Reference (optional)	

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Fri Jul 04 14:24:21
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Page: 1



Scale = 1:32.2

Plate Offsets (X, Y): [2:0-2-12,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	0.02	4-8	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.03	4-8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	9	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MR								
BCDL	10.0											
											Weight: 21 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
OTHERS	2x4 SP No.2

BRACING

TOP CHORD	Structural wood sheathing directly applied or 5-6-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS	(size)	2=0-3-0, 9=0-1-8
	Max Horiz	2=45 (LC 12)
	Max Uplift	2=-103 (LC 12), 9=-64 (LC 12)
	Max Grav	2=293 (LC 2), 9=183 (LC 2)

FORCES

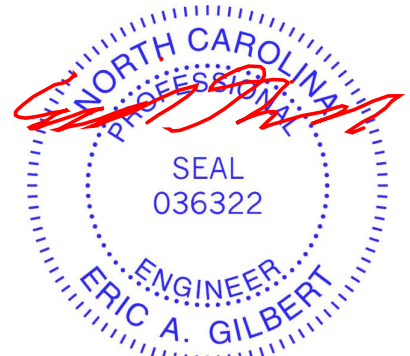
	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/16, 2-3=-234/136, 4-5=-96/109, 3-5=-56/59
BOT CHORD	2-4=-146/214
WEBS	3-9=-114/102

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-1-8 to 1-10-8, Interior (1) 1-10-8 to 5-1-4 zone; cantilever left and right exposed; end vertical left and right exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10

- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 2, 9.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 103 lb uplift at joint 2 and 64 lb uplift at joint 9.

LOAD CASE(S) Standard



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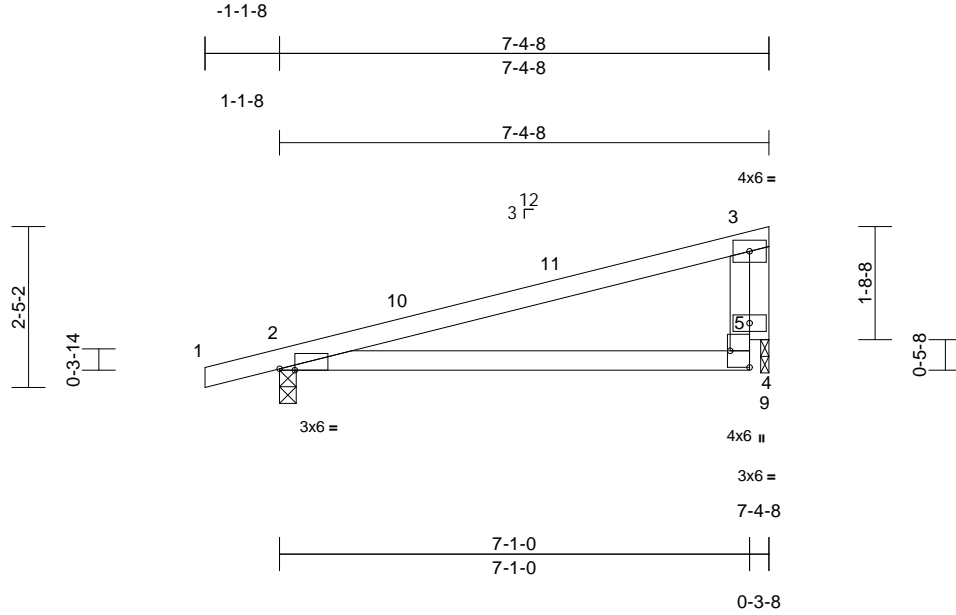
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	908 Serenity	I74684747
P06018-31625	P03	Monopitch	4	1	Job Reference (optional)	

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

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Page: 1



Scale = 1:34.7

Plate Offsets (X, Y): [2:0-2-12,Edge], [4:Edge,0-3-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.54	Vert(LL)	0.08	4-8	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.11	4-8	>802	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MR								
BCDL	10.0											
											Weight: 28 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
OTHERS	2x4 SP No.2

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) 2=0-3-0, 9=0-1-8
	Max Horiz 2=64 (LC 12)
	Max Uplift 2=-125 (LC 12), 9=-91 (LC 12)
	Max Grav 2=364 (LC 2), 9=258 (LC 2)

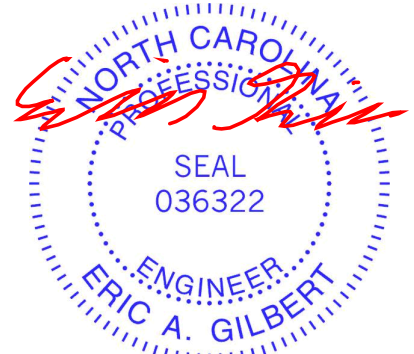
FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/16, 2-3=-321/172, 4-5=-131/152, 3-5=-127/140
BOT CHORD	2-4=-186/290
WEBS	3-9=-206/179

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-1-8 to 1-10-8, Interior (1) 1-10-8 to 6-11-4 zone; cantilever left and right exposed; end vertical left exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.

- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 9.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 125 lb uplift at joint 2 and 91 lb uplift at joint 9.

LOAD CASE(S) Standard



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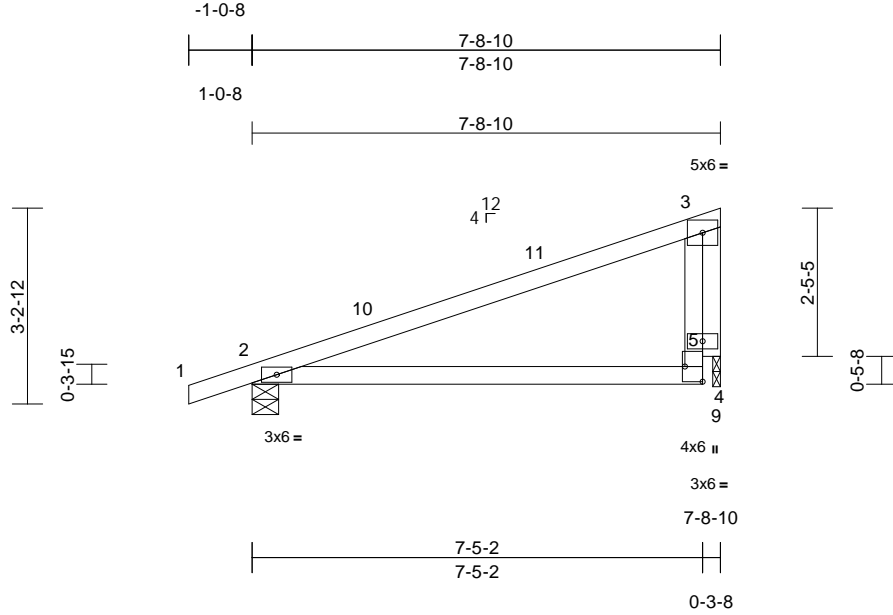
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	908 Serenity	174684748
P06018-31625	P04	Monopitch	9	1	Job Reference (optional)	

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Fri Jul 04 14:24:21
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Page: 1



Scale = 1:38

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.60	Vert(LL)	0.10	4-8	>884	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.13	4-8	>689	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MR								
BCDL	10.0											
											Weight: 31 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
OTHERS	2x4 SP No.2

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) 2=0-5-4, 9=0-1-8
	Max Horiz 2=87 (LC 12)
	Max Uplift 2=-122 (LC 12), 9=-102 (LC 12)
	Max Grav 2=372 (LC 2), 9=273 (LC 2)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/20, 2-3=-276/130, 4-5=-140/162, 3-5=-173/197
BOT CHORD	2-4=-149/228
WEBS	3-9=-254/220

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-0-8 to 1-11-8, Interior (1) 1-11-8 to 7-3-6 zone; cantilever left and right exposed; end vertical left exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.

- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 9.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 122 lb uplift at joint 2 and 102 lb uplift at joint 9.

LOAD CASE(S) Standard



July 7, 2025

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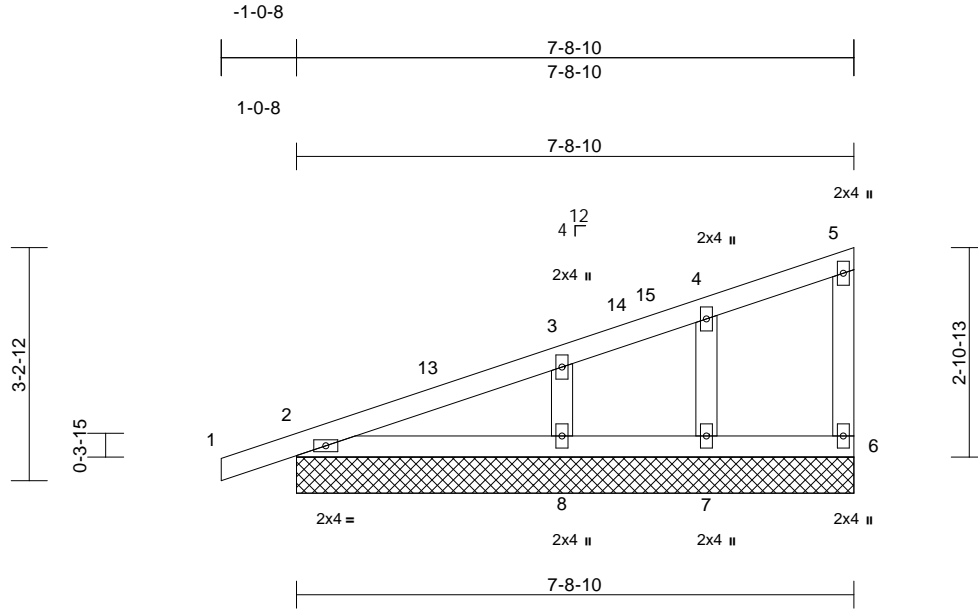
Job	Truss	Truss Type	Qty	Ply	908 Serenity	174684749
P06018-31625	P05E	Monopitch Structural Gable	2	1	Job Reference (optional)	

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

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Scale = 1:31.9

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.14	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.11	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	NO	WB	0.02	Horz(CT)	0.00	6	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP							
BCDL	10.0										
										Weight: 33 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
OTHERS	2x4 SP No.2

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)	2=7-8-10, 6=7-8-10, 7=7-8-10, 8=7-8-10
	Max Horiz	2=90 (LC 15)
	Max Uplift	2=-41 (LC 12), 6=-10 (LC 13), 7=-31 (LC 12), 8=-57 (LC 16)
	Max Grav	2=198 (LC 2), 6=80 (LC 2), 7=156 (LC 23), 8=300 (LC 2)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/20, 2-3=-96/71, 3-4=-70/45, 4-5=-41/37, 5-6=-50/35
BOT CHORD	2-8=-35/45, 7-8=-35/38, 6-7=-35/38
WEBS	4-7=-107/69, 3-8=-189/61

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-0-8 to 1-11-8, Interior (1) 1-11-8 to 7-6-14 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 41 lb uplift at joint 2, 10 lb uplift at joint 6, 31 lb uplift at joint 7, 57 lb uplift at joint 8 and 41 lb uplift at joint 2.
- 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-5=-51
Trapezoidal Loads (lb/ft)
Vert: 9=-20-to-11=-22 (F=-2), 11=-22 (F=-2)-to-8=-27 (F=-7), 8=-27 (F=-7)-to-7=-31 (F=-11), 7=-31 (F=-11)-to-6=-35 (F=-15)



July 7, 2025

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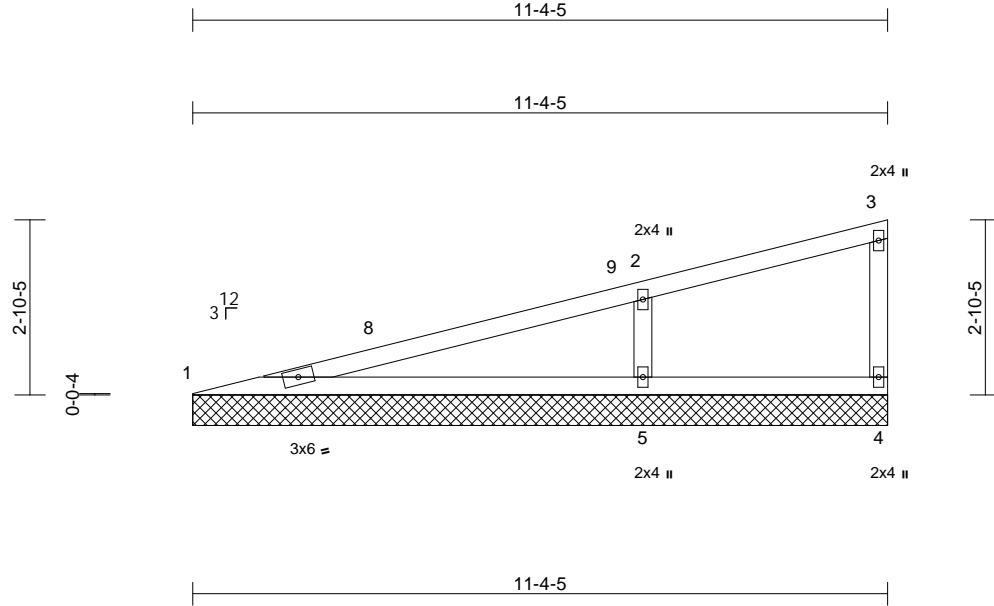
Job	Truss	Truss Type	Qty	Ply	908 Serenity	174684750
P06018-31625	V01	Valley	1	1	Job Reference (optional)	

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

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Scale = 1:37.7

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.51	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.59	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.01	4	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS							
BCDL	10.0										
										Weight: 38 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
OTHERS	2x4 SP No.2

BRACING

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

REACTIONS

(size)	1=11-4-5, 4=11-4-5, 5=11-4-5
Max Horiz	1=81 (LC 12)
Max Uplift	1=-23 (LC 12), 4=-10 (LC 12), 5=-104 (LC 12)
Max Grav	1=241 (LC 2), 4=68 (LC 22), 5=604 (LC 2)

FORCES

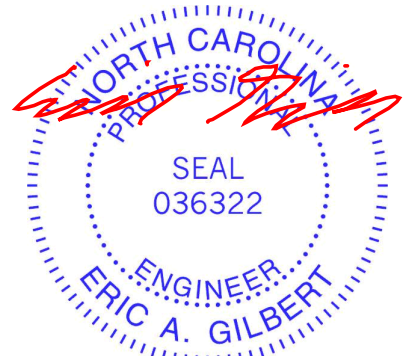
(lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-675/82, 2-3=-43/10
BOT CHORD	1-5=-143/648, 4-5=0/0
WEBS	2-5=-400/117, 3-4=-67/41

NOTES

- 1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-1-0 to 3-1-0, Interior (1) 3-1-0 to 11-3-9 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10

- 4) Unbalanced snow loads have been considered for this design.
 - 5) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
 - 6) Gable requires continuous bottom chord bearing.
 - 7) Gable studs spaced at 4-0-0 oc.
 - 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 10 lb uplift at joint 4, 23 lb uplift at joint 1 and 104 lb uplift at joint 5.
- LOAD CASE(S)** Standard



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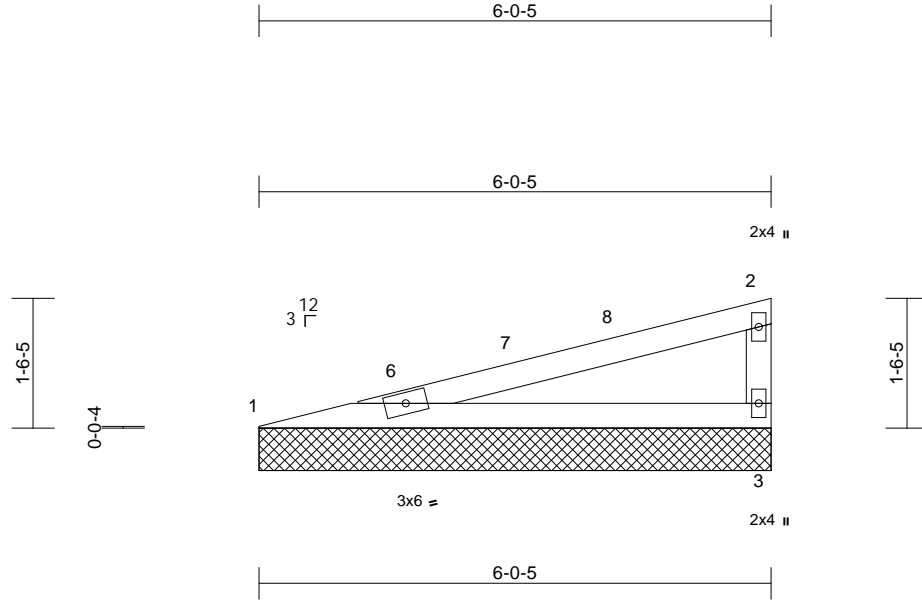
Job	Truss	Truss Type	Qty	Ply	908 Serenity	I74684751
P06018-31625	V02	Valley	1	1	Job Reference (optional)	

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

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Scale = 1:27.1

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.43	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.51	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.01	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 18 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2

BRACING

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

REACTIONS (size)

Max Horiz	1=41 (LC 12)
Max Uplift	1=-31 (LC 12), 3=-41 (LC 12)
Max Grav	1=235 (LC 2), 3=235 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension

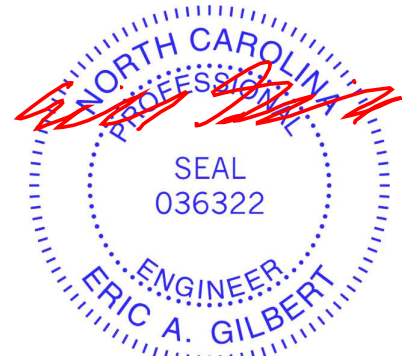
TOP CHORD	1-2=-653/148
BOT CHORD	1-3=-190/627
WEBS	2-3=-144/68

NOTES

- 1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-1-0 to 3-1-0, Interior (1) 3-1-0 to 5-11-9 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.

- 5) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 4'-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-06-00 tall by 2'-00-00 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 41 lb uplift at joint 3 and 31 lb uplift at joint 1.

LOAD CASE(S) Standard



July 7, 2025

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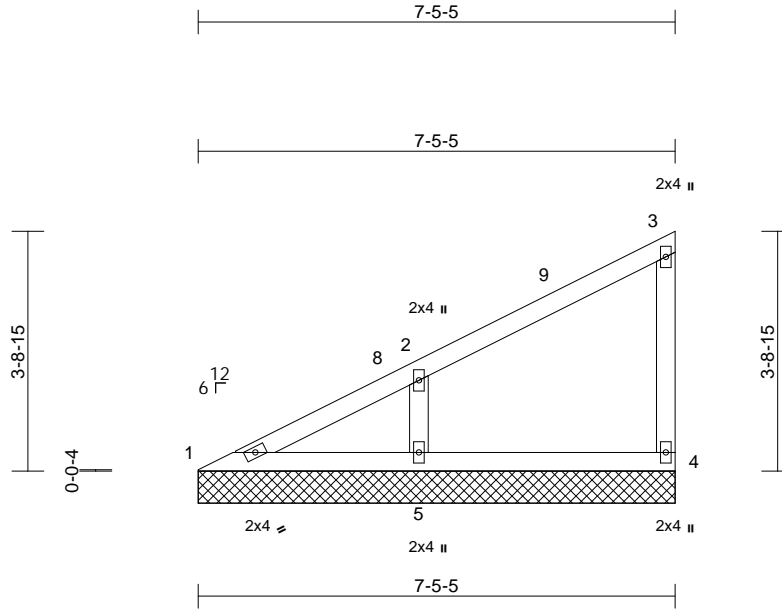
Job	Truss	Truss Type	Qty	Ply	908 Serenity	I74684752
P06018-31625	V03	Valley	1	1	Job Reference (optional)	

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

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Scale = 1:36

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.21	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.13	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	5	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP							
BCDL	10.0									Weight: 29 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
OTHERS	2x4 SP No.2

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)	1=7-5-5, 4=7-5-5, 5=7-5-5
Max Horiz	1=106 (LC 13)
Max Uplift	4=-19 (LC 13), 5=-84 (LC 16)
Max Grav	1=101 (LC 30), 4=120 (LC 2), 5=365 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension

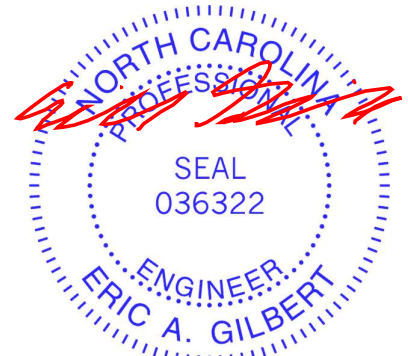
TOP CHORD	1-2=-163/108, 2-3=-88/63, 3-4=-91/81
BOT CHORD	1-5=-56/129, 4-5=-46/50
WEBS	2-5=-262/147

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-8 to 3-0-8, Interior (1) 3-0-8 to 7-4-1 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 19 lb uplift at joint 4 and 84 lb uplift at joint 5.

LOAD CASE(S) Standard



July 7, 2025

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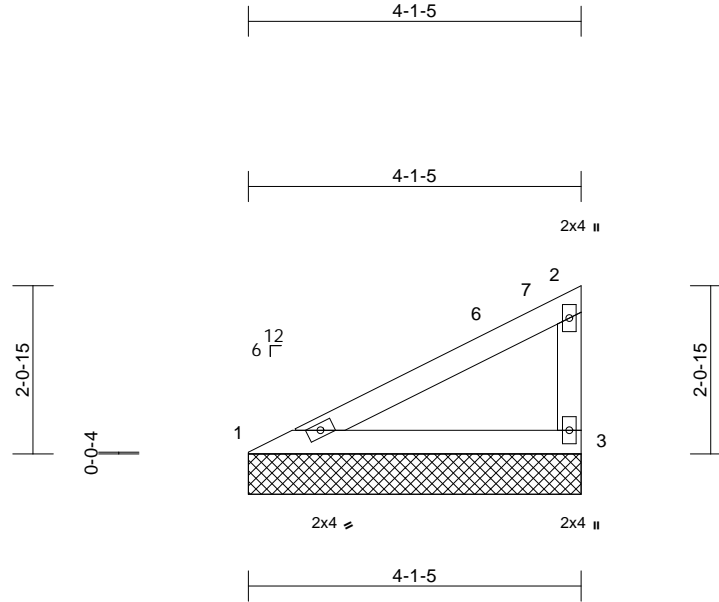
Job	Truss	Truss Type	Qty	Ply	908 Serenity	I74684753
P06018-31625	V04	Valley	1	1	Job Reference (optional)	

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

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Scale = 1:28.5

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.22	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 14 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2

BRACING

TOP CHORD	Structural wood sheathing directly applied or 4-1-5 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size)

1=4-1-5, 3=4-1-5
Max Horiz 1=55 (LC 13)
Max Uplift 1=-18 (LC 16), 3=-31 (LC 16)
Max Grav 1=159 (LC 2), 3=159 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension
--

TOP CHORD	1-2=-260/77, 2-3=-99/72
BOT CHORD	1-3=-131/226

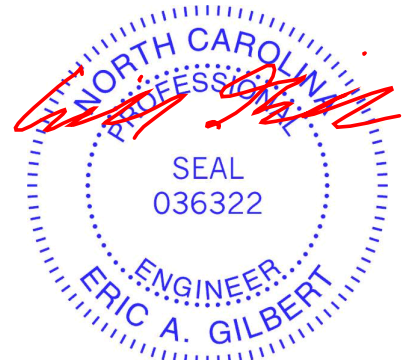
NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-8 to 3-0-8, Interior (1) 3-0-8 to 4-0-1 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.

- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 3 and 18 lb uplift at joint 1.

LOAD CASE(S)

Standard



July 7, 2025

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

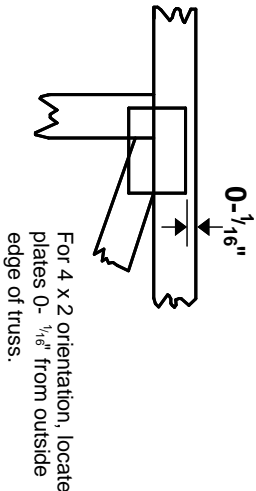
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

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818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



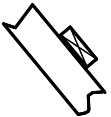
* Plate location details available in MITek software or upon request.

PLATE SIZE

4 X 4

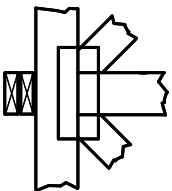
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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.

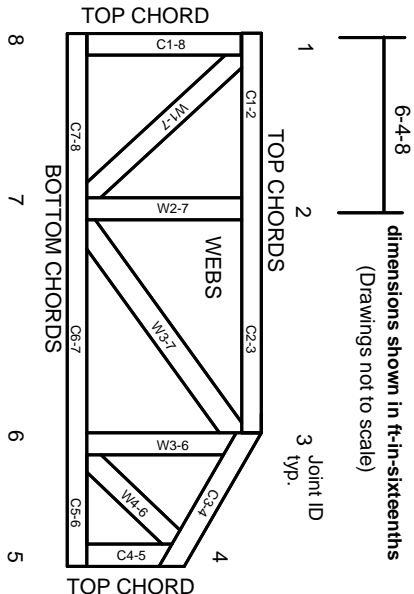
BEARING



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