

RE: 4939038
JSJ Builders

Trenco
818 Soundside Rd
Edenton, NC 27932

Site Information:

Customer: JSJ Builders Project Name: 4939038
Lot/Block: 27 Model: PRESTWICK PRIME
Address: 19 BAXLEY DR Subdivision: ILA'S WAY
City: DUNN 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: 130 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 29 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I73037087	A01	4/29/2025	21	I73037107	E01	4/29/2025
2	I73037088	A02	4/29/2025	22	I73037108	E02	4/29/2025
3	I73037089	A03	4/29/2025	23	I73037109	E03	4/29/2025
4	I73037090	A04	4/29/2025	24	I73037110	JA1	4/29/2025
5	I73037091	A05	4/29/2025	25	I73037111	JA2	4/29/2025
6	I73037092	A06	4/29/2025	26	I73037112	JA3	4/29/2025
7	I73037093	A07	4/29/2025	27	I73037113	JA4	4/29/2025
8	I73037094	A08	4/29/2025	28	I73037114	JD1	4/29/2025
9	I73037095	A09	4/29/2025	29	I73037115	JD2	4/29/2025
10	I73037096	B01	4/29/2025				
11	I73037097	B02	4/29/2025				
12	I73037098	C01	4/29/2025				
13	I73037099	CJ1	4/29/2025				
14	I73037100	CJ2	4/29/2025				
15	I73037101	D01	4/29/2025				
16	I73037102	D02	4/29/2025				
17	I73037103	D03	4/29/2025				
18	I73037104	D04	4/29/2025				
19	I73037105	D05	4/29/2025				
20	I73037106	D06	4/29/2025				

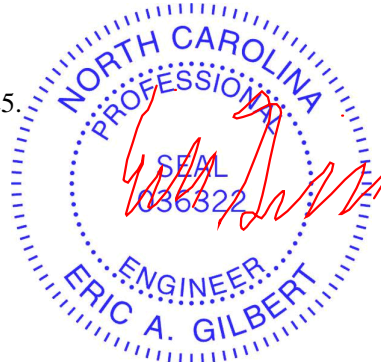
The truss drawing(s) referenced above have been prepared by
Truss Engineering Co. under my direct supervision
based on the parameters provided by Builders FirstSource-Sumter,SC.

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.



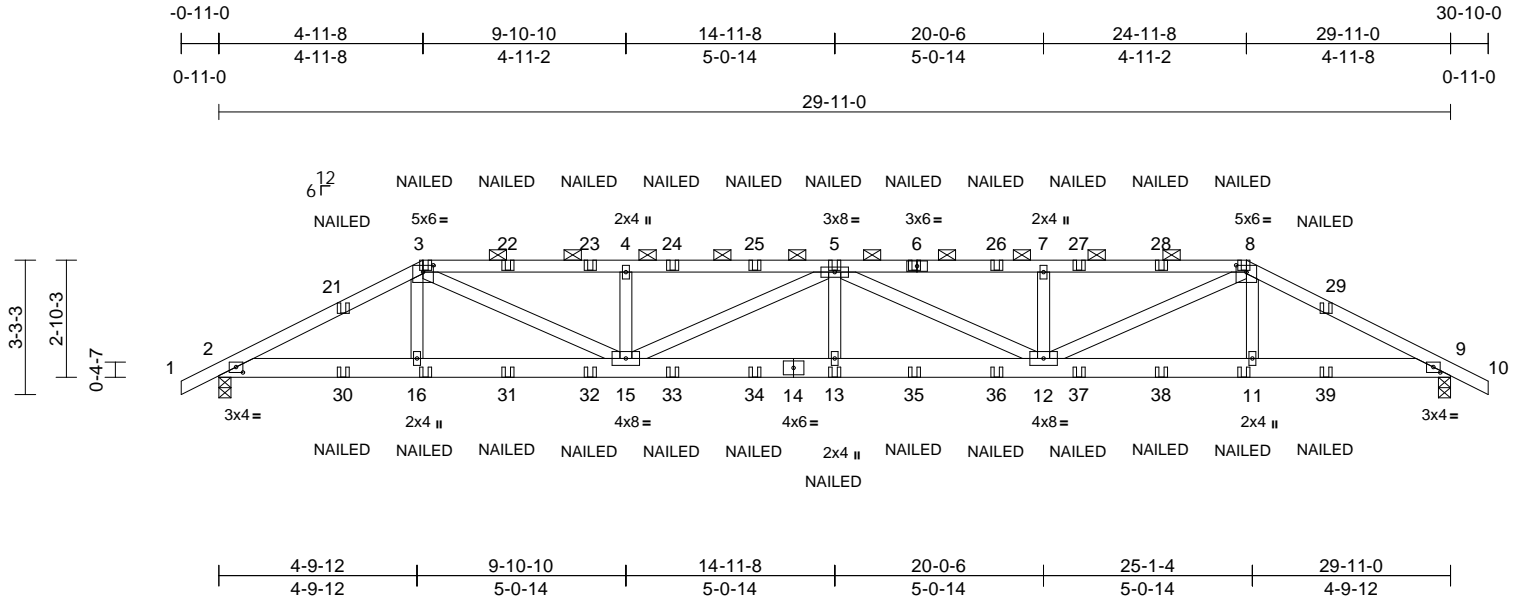
Job	Truss	Truss Type	Qty	Ply	JSJ Builders	I73037087
4939038	A01	Hip Girder	1	2	Job Reference (optional)	

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 25 12:59:53

Page: 1

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Scale = 1:56

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

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	0.48	Vert(LL)	-0.19	13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.38	13	>937	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.28	Horz(CT)	0.07	9	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.26	13	>999	240	Weight: 332 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (4-11-5 max.): 3-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 2=0-3-8, 9=0-3-8
Max Horiz 2=-67 (LC 9)
Max Uplift 2=-689 (LC 5), 9=-690 (LC 4)
Max Grav 2=1990 (LC 1), 9=1990 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/25, 2-3=-3909/1423, 3-4=-5427/2038, 4-5=-5427/2038, 5-7=-5428/2038, 7-8=-5428/2038, 8-9=-3910/1424, 9-10=0/25
BOT CHORD 2-16=-1248/3457, 15-16=-1247/3436, 13-15=-2261/6188, 12-13=-2261/6188, 11-12=-1211/3436, 9-11=-1211/3457
WEBS 3-16=-28/421, 3-15=-859/2264, 4-15=-487/379, 5-15=-862/332, 5-13=0/366, 5-12=-861/330, 7-12=-488/380, 8-12=-861/2265, 8-11=-29/421

NOTES

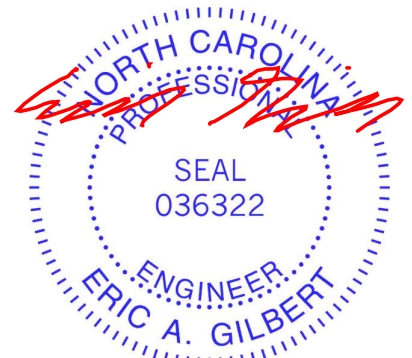
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.

- 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=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; 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
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 689 lb uplift at joint 2 and 690 lb uplift at joint 9.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.

LOAD CASE(S)

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-60, 3-8=-60, 8-10=-60, 2-9=-20
Concentrated Loads (lb)

Vert: 6=-67 (B), 16=-44 (B), 3=-67 (B), 13=-44 (B), 5=-67 (B), 8=-67 (B), 11=-44 (B), 22=-67 (B), 23=-67 (B), 24=-67 (B), 25=-67 (B), 26=-67 (B), 27=-67 (B), 28=-67 (B), 30=-129 (B), 31=-44 (B), 32=-44 (B), 33=-44 (B), 34=-44 (B), 35=-44 (B), 36=-44 (B), 37=-44 (B), 38=-44 (B), 39=-129 (B)



April 29,2025

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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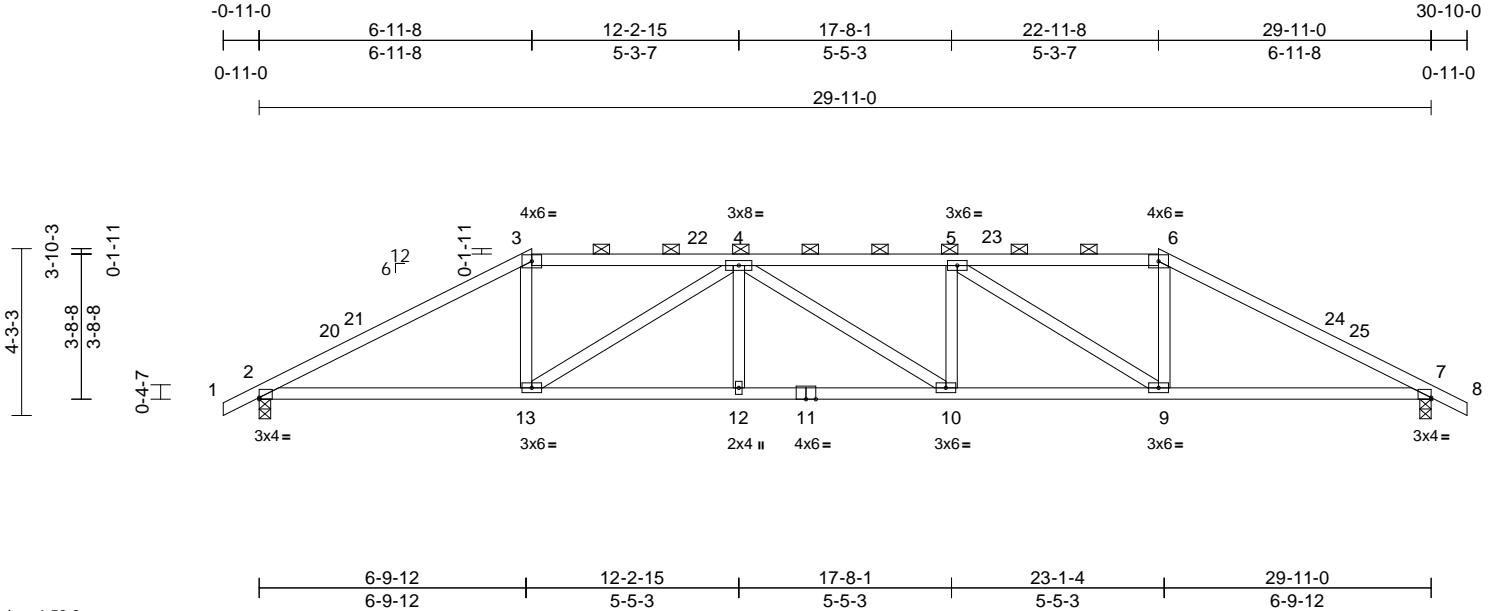
Job	Truss	Truss Type	Qty	Ply	JSJ Builders	173037088
4939038	A02	Hip	1	1	Job Reference (optional)	

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

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Page: 1

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Scale = 1:58.8

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

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	0.90	Vert(LL)	-0.16	10-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.34	10-12	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.10	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.18	10-12	>999	240	Weight: 141 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (3-4-10 max.): 3-6.
BOT CHORD Rigid ceiling directly applied or 7-1-5 oc bracing.

REACTIONS

(size) 2=0-3-8, 7=0-3-8
Max Horiz 2=-87 (LC 13)
Max Uplift 2=-275 (LC 9), 7=-275 (LC 8)
Max Grav 2=1252 (LC 1), 7=1252 (LC 1)

FORCES

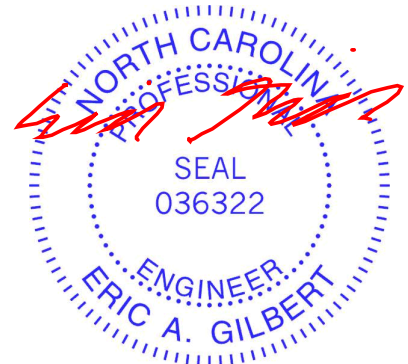
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/25, 2-3=-2201/662, 3-4=-1877/661, 4-5=-2573/829, 5-6=-1877/661, 6-7=-2201/663, 7-8=0/25
BOT CHORD 2-13=-466/1900, 12-13=-693/2573, 10-12=-693/2573, 9-10=-671/2573, 7-9=-475/1900
WEBS 3-13=-110/620, 6-9=-110/620, 4-13=-921/358, 5-9=-921/358, 4-12=0/205, 4-10=-49/49, 5-10=0/205

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-11-0 to 2-1-0, Interior (1) 2-1-0 to 6-11-8, Exterior (2) 6-11-8 to 11-2-7, Interior (1) 11-2-7 to 22-11-8, Exterior (2) 22-11-8 to 27-2-7, Interior (1) 27-2-7 to 30-10-0 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

- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 275 lb uplift at joint 2 and 275 lb uplift at joint 7.
- 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



April 29, 2025

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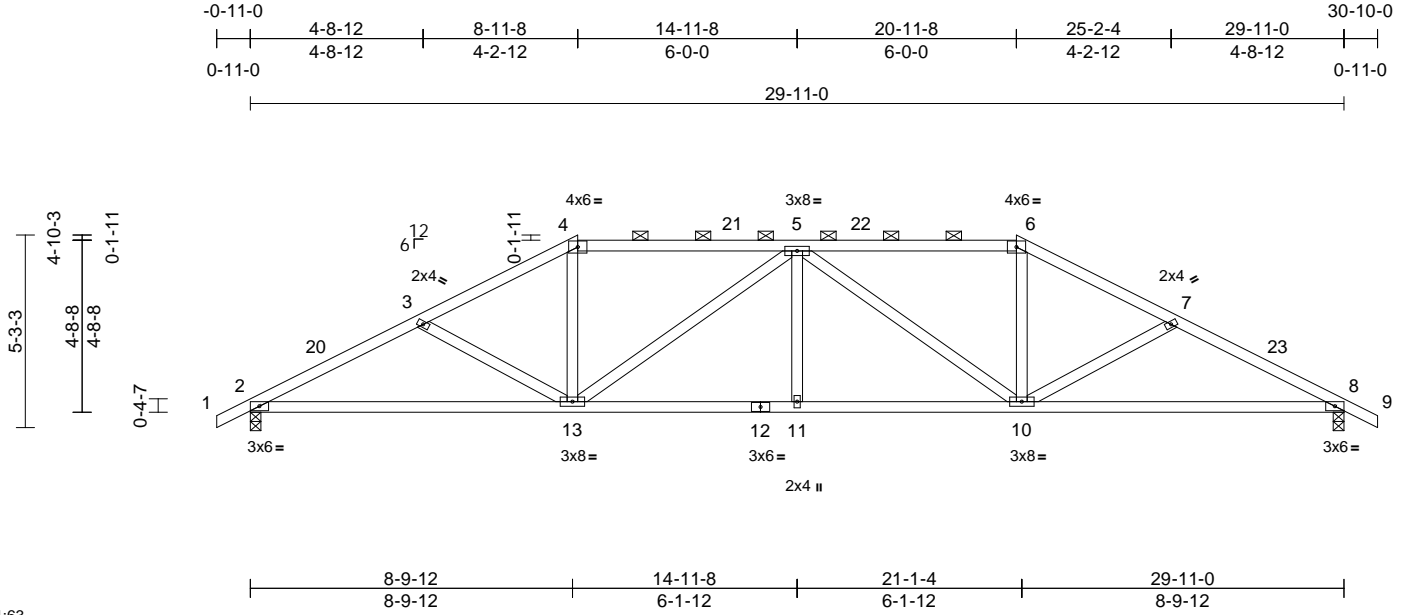
Job	Truss	Truss Type	Qty	Ply	JSJ Builders	173037089
4939038	A03	Hip	1	1	Job Reference (optional)	

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 25 12:59:55

Page: 1

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Scale = 1:63

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	Vert(LL)	-0.14	10-19	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.31	10-19	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.09	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.12	11	>999	240	Weight: 149 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-7-11 oc purlins, except 2-0-0 oc purlins (3-11-11 max.); 4-6.
BOT CHORD Rigid ceiling directly applied or 7-8-2 oc bracing.

REACTIONS

(size) 2=0-3-8, 8=0-3-8
Max Horiz 2=-110 (LC 13)
Max Uplift 2=-278 (LC 12), 8=-278 (LC 13)
Max Grav 2=1252 (LC 1), 8=1252 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/25, 2-3=-2231/732, 3-4=-1973/629, 4-5=-1706/612, 5-6=-1706/612, 6-7=-1973/629, 7-8=-2231/732, 8-9=0/25

BOT CHORD 2-13=-568/1967, 11-13=-494/2077, 10-11=-494/2077, 8-10=-576/1967

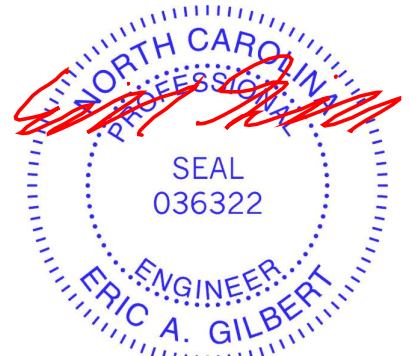
WEBS 3-13=-284/251, 4-13=-91/566, 5-13=-554/241, 5-11=0/200, 5-10=-554/241, 6-10=-91/566, 7-10=-284/252

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-11-0 to 2-1-0, Interior (1) 2-1-0 to 8-11-8, Exterior (2) 8-11-8 to 13-2-7, Interior (1) 13-2-7 to 20-11-8, Exterior (2) 20-11-8 to 25-4-2, Interior (1) 25-4-2 to 30-10-0 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
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 278 lb uplift at joint 2 and 278 lb uplift at joint 8.
- 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



April 29, 2025

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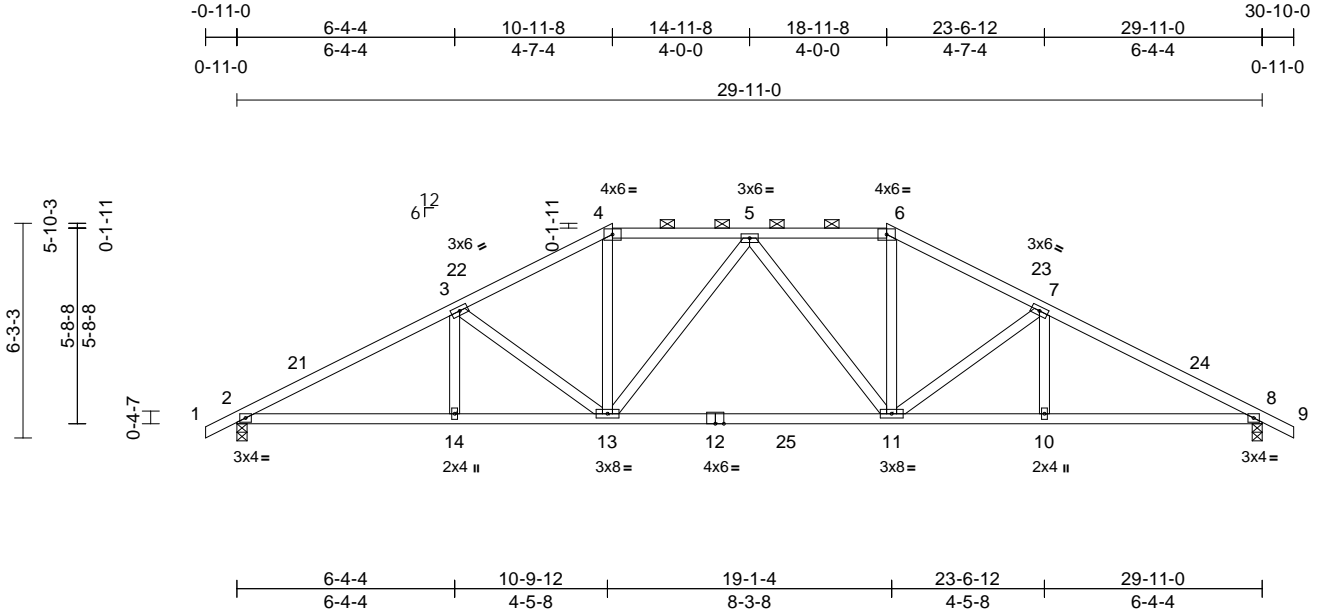
Job	Truss	Truss Type	Qty	Ply	JSJ Builders	173037090
4939038	A04	Hip	2	1	Job Reference (optional)	

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 25 12:59:55

Page: 1

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Scale = 1:67.2

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	0.47	Vert(LL)	-0.15	11-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.35	11-13	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.08	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.10	11-13	>999	240	Weight: 155 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-5-2 oc purlins, except 2-0-0 oc purlins (4-7-5 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 8-3-10 oc bracing.

REACTIONS

(size) 2=0-3-8, 8=0-3-8
Max Horiz 2=132 (LC 12)
Max Uplift 2=-305 (LC 12), 8=-305 (LC 13)
Max Grav 2=1252 (LC 1), 8=1252 (LC 1)

FORCES

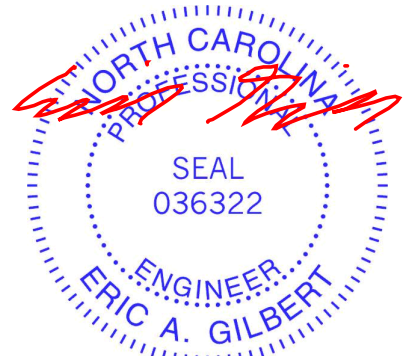
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/25, 2-3=-2205/658, 3-4=-1792/597, 4-5=-1535/579, 5-6=-1535/579, 6-7=-1792/597, 7-8=-2205/658, 8-9=0/25
BOT CHORD 2-14=-483/1908, 13-14=-483/1908, 11-13=-360/1648, 10-11=-492/1908, 8-10=-492/1908
WEBS 3-14=0/189, 3-13=-453/282, 4-13=-127/549, 6-11=-127/549, 7-11=-453/283, 7-10=0/189, 5-13=-291/173, 5-11=-291/173

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-11-0 to 2-1-0, Interior (1) 2-1-0 to 10-11-8, Exterior (2) 10-11-8 to 14-11-8, Interior (1) 14-11-8 to 18-11-8, Exterior (2) 18-11-8 to 23-2-7, Interior (1) 23-2-7 to 30-10-0 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
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 305 lb uplift at joint 2 and 305 lb uplift at joint 8.
- 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



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Edenton, NC 27932

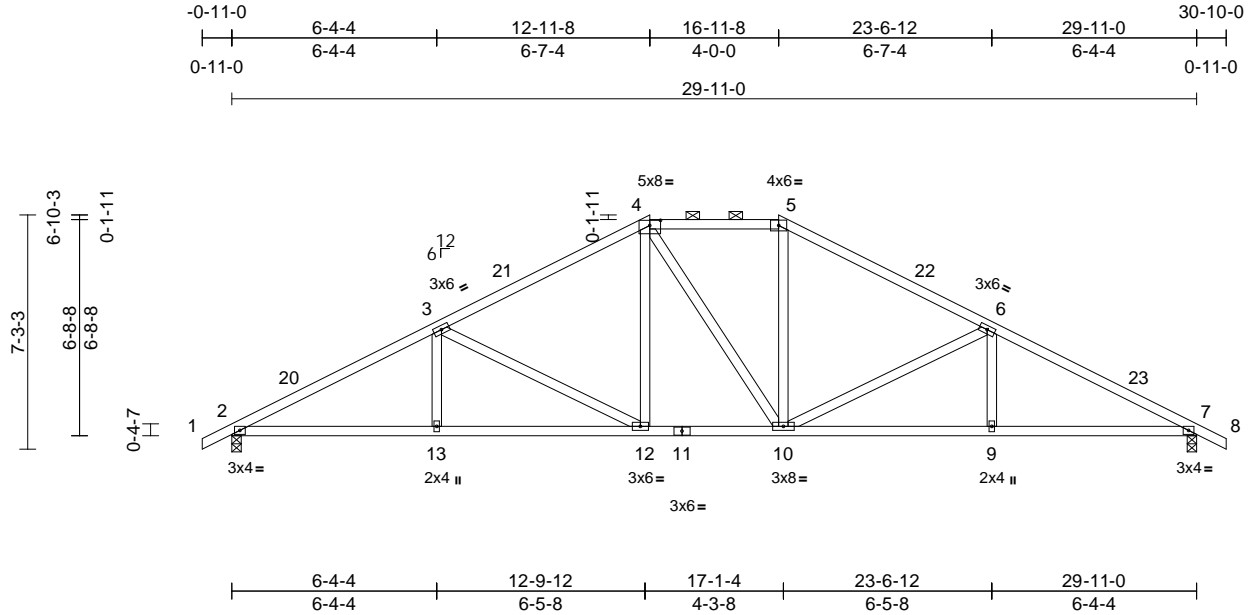
Job	Truss	Truss Type	Qty	Ply	JSJ Builders	173037091
4939038	A05	Hip	2	1	Job Reference (optional)	

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 25 12:59:55

Page: 1

ID:CsXIKWK5P?0muGCF8toLpFyzCiv-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC?f



Scale = 1:71.4

Plate Offsets (X, Y): [4:0-4-0,0-1-15]

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	0.57	Vert(LL)	-0.09	10-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.22	12-13	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.62	Horz(CT)	0.08	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.10	10-12	>999	240	Weight: 156 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-7-6 oc purlins, except 2-0-0 oc purlins (4-10-13 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 8-0-14 oc bracing.

REACTIONS

(size) 2=0-3-8, 7=0-3-8
Max Horiz 2=155 (LC 16)
Max Uplift 2=-327 (LC 12), 7=-327 (LC 13)
Max Grav 2=1252 (LC 1), 7=1252 (LC 1)

FORCES

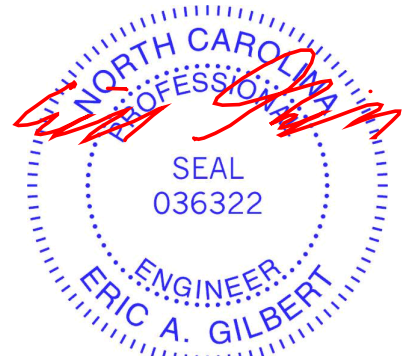
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/25, 2-3=-2232/637, 3-4=-1637/551, 4-5=-1376/562, 5-6=-1638/551, 6-7=-2231/637, 7-8=0/25
BOT CHORD 2-13=-513/1938, 12-13=-513/1938, 10-12=-240/1375, 9-10=-479/1937, 7-9=-479/1937
WEBS 3-13=0/272, 3-12=-626/345, 4-12=-89/412, 4-10=-146/149, 5-10=-75/413, 6-10=-625/346, 6-9=0/272

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-11-0 to 2-1-0, Interior (1) 2-1-0 to 12-11-8, Exterior (2) 12-11-8 to 21-2-7, Interior (1) 21-2-7 to 30-10-0 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
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 327 lb uplift at joint 2 and 327 lb uplift at joint 7.
- 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



April 29, 2025

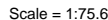
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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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Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 25 12:59:56 Page: 1
ID:7R4E2mkMxxriWkyEn4QrkvvzCjq-RfC?PsB70Hg3NSaPanL8w3ulTXbGKWRcDoi7J4zJC?f



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	0.71	Vert(LL)	-0.10	10-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.25	10-16	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.41	Horz(CT)	0.05	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.14	12-14	>999	240	Weight: 182 lb	FT = 20%

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-11-0 to 2-1-0, Interior (1) 2-1-0 to 14-11-8, Exterior (2) 14-11-8 to 17-11-8, Interior (1) 17-11-8 to 30-10-0 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
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 4) * 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.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 346 lb uplift at joint 2 and 346 lb uplift at joint 8.

LOAD CASE(S) Standard



April 29, 2025



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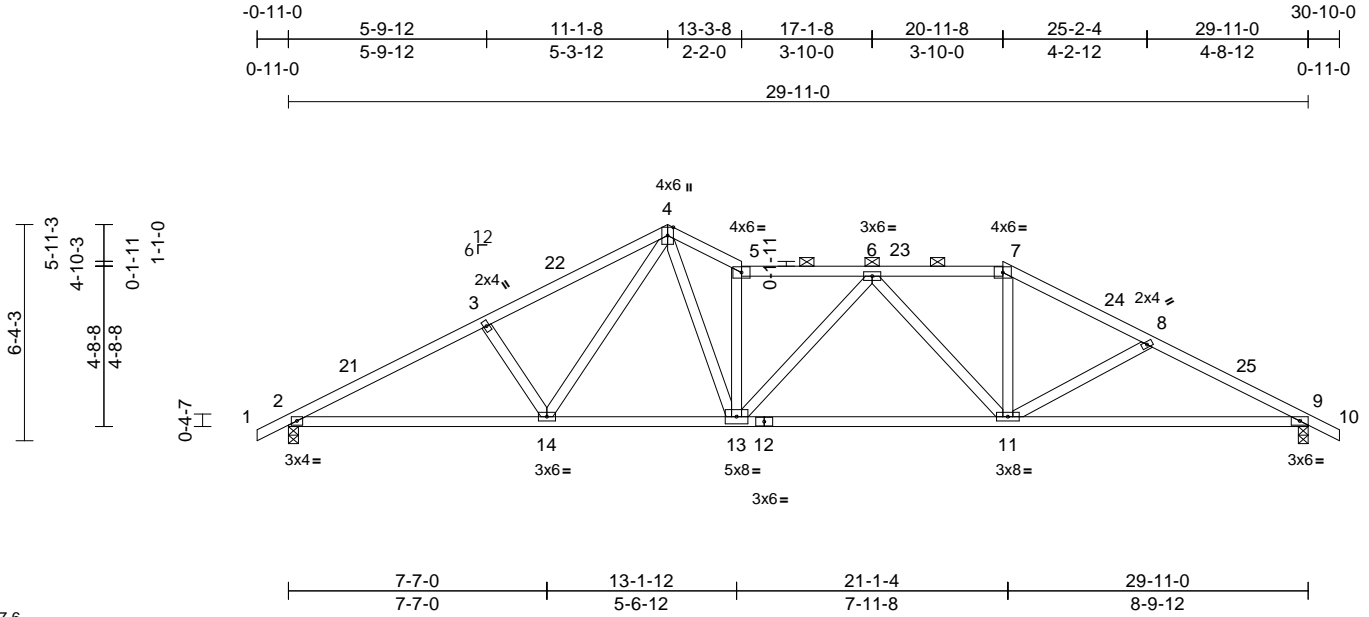
Job	Truss	Truss Type	Qty	Ply	JSJ Builders	173037093
4939038	A07	Roof Special	1	1	Job Reference (optional)	

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 25 12:59:56

Page: 1

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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	0.40	Vert(LL)	-0.13	11-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.31	11-13	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.09	9	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.14	11-13	>999	240	Weight: 156 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-7-9 oc purlins, except 2-0-0 oc purlins (3-11-12 max.); 5-7.
BOT CHORD Rigid ceiling directly applied or 7-11-2 oc bracing.

REACTIONS

(size) 2=0-3-8, 9=0-3-8
Max Horiz 2=136 (LC 16)
Max Uplift 2=-306 (LC 12), 9=-393 (LC 13)
Max Grav 2=1252 (LC 1), 9=1252 (LC 1)

FORCES

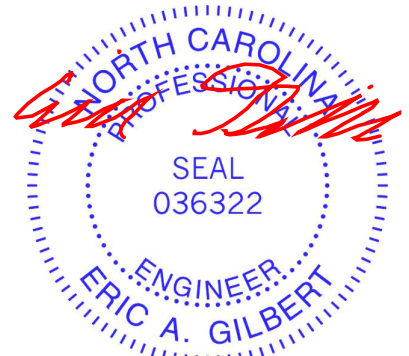
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/25, 2-3=-2203/629, 3-4=-2044/637, 4-5=-2213/732, 5-6=-1985/639, 6-7=-1702/577, 7-8=-1975/600, 8-9=-2237/716, 9-10=0/25
BOT CHORD 2-14=-476/1931, 13-14=-263/1494, 11-13=-448/1984, 9-11=-544/1972
WEBS 3-14=-335/283, 4-14=-204/501, 4-13=-447/1335, 5-13=-1131/422, 7-11=-120/634, 8-11=-294/244, 6-13=-104/125, 6-11=-424/191

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-11-0 to 2-1-0, Interior (1) 2-1-0 to 11-1-8, Exterior (2) 11-1-8 to 13-3-8, Interior (1) 13-3-8 to 20-11-8, Exterior (2) 20-11-8 to 23-11-8, Interior (1) 23-11-8 to 30-10-0 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

- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 306 lb uplift at joint 2 and 393 lb uplift at joint 9.
- 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



April 29, 2025

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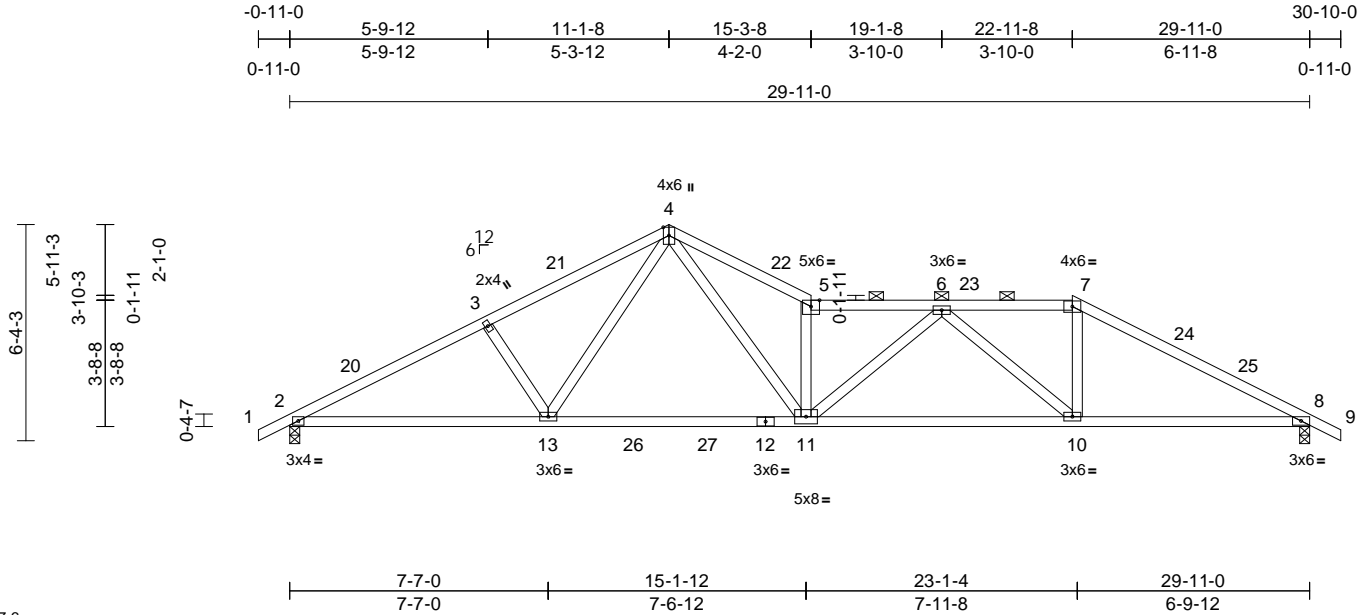
Job	Truss	Truss Type	Qty	Ply	JSJ Builders	173037094
4939038	A08	Roof Special	1	1	Job Reference (optional)	

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 25 12:59:56

Page: 1

ID: B0qAyXVrBpBcuLj2yTdlzCcE-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:67.6

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	0.89	Vert(LL)	-0.20	11-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.38	11-13	>935	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.09	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.19	11-13	>999	240	Weight: 145 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (3-4-13 max.): 5-7.
BOT CHORD Rigid ceiling directly applied or 7-6-12 oc bracing.

REACTIONS (size) 2=0-3-8, 8=0-3-8
Max Horiz 2=-136 (LC 13)
Max Uplift 2=-306 (LC 12), 8=-393 (LC 13)
Max Grav 2=1252 (LC 1), 8=1252 (LC 1)

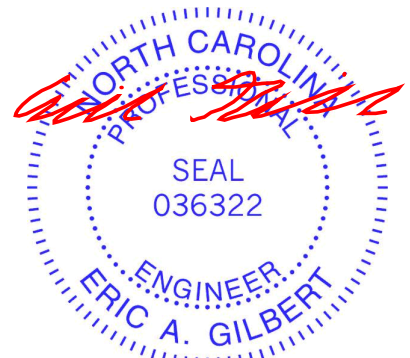
FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/25, 2-3=-2224/630, 3-4=-2051/638,
4-5=-2911/917, 5-6=-2605/775,
6-7=-1880/631, 7-8=-2207/635, 8-9=0/25
BOT CHORD 2-13=-473/1936, 11-13=-261/1488,
10-11=-594/2411, 8-10=-443/1905
WEBS 3-13=-334/285, 4-13=-189/529,
4-11=-586/1810, 5-11=-1494/545,
7-10=-88/642, 6-11=-55/289, 6-10=-702/240

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-11-0 to 2-1-0, Interior (1) 2-1-0 to 11-1-8, Exterior (2) 11-1-8 to 14-1-8, Interior (1) 14-1-8 to 22-11-8, Exterior (2) 22-11-8 to 25-11-8, Interior (1) 25-11-8 to 30-10-0 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
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 306 lb uplift at joint 2 and 393 lb uplift at joint 8.
- 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



April 29, 2025

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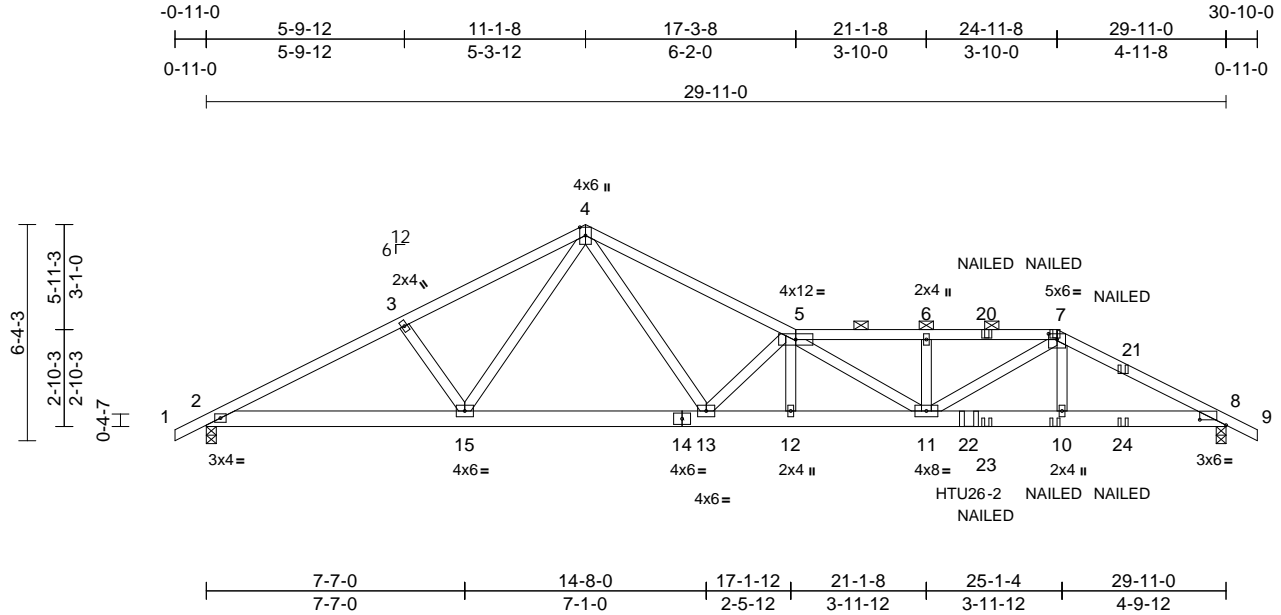
Job	Truss	Truss Type	Qty	Ply	JSJ Builders	173037095
4939038	A09	Roof Special Girder	1	2	Job Reference (optional)	

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 25 12:59:56

Page: 1

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Scale = 1:67.6

Plate Offsets (X, Y): [7:0-3-0,0-2-0], [8:0-9-4,0-1-15]

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	0.67	Vert(LL)	-0.17	12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.34	12	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.38	Horz(CT)	0.06	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.20	11-12	>999	240	Weight: 344 lb	FT = 20%

LUMBER		
TOP CHORD	2x4 SP No.2	
BOT CHORD	2x6 SP No.2 *Except* 14-8:2x6 SP 2400F	
	2.0E or 2x6 SP DSS	
WEBS	2x4 SP No.2	
BRACING		
TOP CHORD	Structural wood sheathing directly applied or 4-9-13 oc purlins, except 2-0-0 oc purlins (4-4-4 max.): 5-7.	
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.	
REACTIONS		
(size)	2=0-3-8, 8=0-3-8	
Max Horiz	2=136 (LC 12)	
Max Uplift	2=-473 (LC 8), 8=-921 (LC 9)	
Max Grav	2=1708 (LC 1), 8=2730 (LC 1)	
FORCES		
(lb) - Maximum Compression/Maximum Tension		
TOP CHORD	1-2=0/25, 2-3=-3282/877, 3-4=-3116/875, 4-5=-4636/1407, 5-6=-6999/2257, 6-7=-6999/2257, 7-8=-5676/1859, 8-9=0/25	
BOT CHORD	2-15=-809/2886, 13-15=-557/2429, 12-13=-1929/6624, 11-12=-1934/6634, 10-11=-1540/4967, 8-10=-1553/5019	
WEBS	5-12=-175/79, 5-11=-384/672, 6-11=-246/211, 7-11=-673/2418, 7-10=-216/877, 4-15=-190/553, 3-15=-317/278, 4-13=-966/3065, 5-13=-3494/1257	

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 0-6-0 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=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; 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
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 473 lb uplift at joint 2 and 921 lb uplift at joint 8.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Use Simpson Strong-Tie HTU26-2 (20-10d Girder, 14-10d Truss) or equivalent at 22-4-8 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.
- "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-4=-60, 4-5=-60, 5-7=-60, 7-9=-60, 2-8=-20
Concentrated Loads (lb)

Vert: 7=-67 (F), 10=-44 (F), 20=-67 (F), 22=-1583 (F), 23=-44 (F), 24=-129 (F)



April 29, 2025

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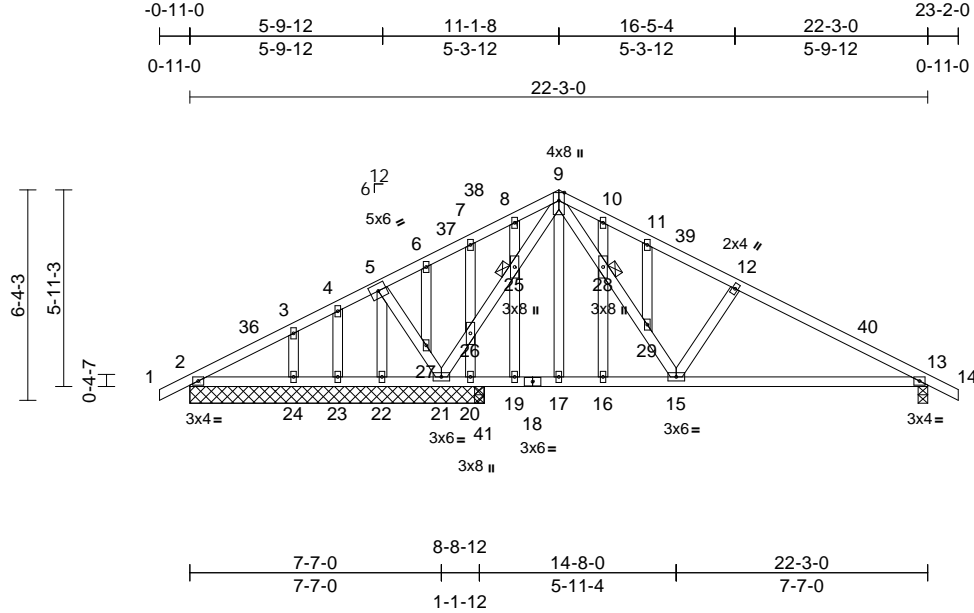
Job	Truss	Truss Type	Qty	Ply	JSJ Builders	173037096
4939038	B01	Common Structural Gable	1	1	Job Reference (optional)	

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 25 12:59:57

Page: 1

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Scale = 1:69.5

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	0.42	Vert(LL)	-0.07	15-35	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.16	15-35	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.41	Horz(CT)	0.01	13	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.06	15-35	>999	240	Weight: 146 lb	FT = 20%

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

BRACING	
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
JOINTS	1 Brace at Jt(s): 25, 28

REACTIONS	(size)	2=8-10-8, 13=0-3-8, 20=8-10-8, 21=8-10-8, 22=8-10-8, 23=8-10-8, 24=8-10-8
	Max Horiz	2=-135 (LC 17)
	Max Uplift	2=-24 (LC 8), 13=-191 (LC 13), 20=93 (LC 12), 21=-171 (LC 13), 22=-31 (LC 24), 23=-11 (LC 12), 24=-128 (LC 12)
	Max Grav	2=156 (LC 23), 13=602 (LC 1), 20=286 (LC 1), 21=636 (LC 1), 22=64 (LC 13), 23=29 (LC 23), 24=247 (LC 1)

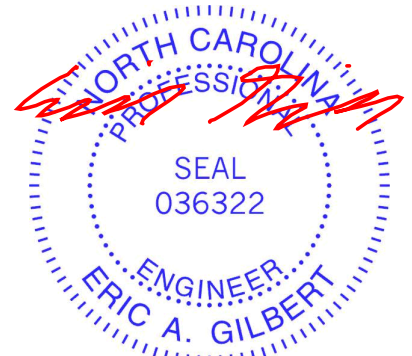
FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/25, 2-3=-98/126, 3-4=-24/98, 4-5=-2/121, 5-6=-12/171, 6-7=0/195, 7-8=0/169, 8-9=0/194, 9-10=-555/292, 10-11=-558/260, 11-12=-626/232, 12-13=-783/242, 13-14=0/25
BOT CHORD	2-24=-88/154, 23-24=-88/154, 22-23=-88/154, 21-22=-87/153, 20-21=0/218, 19-20=0/218, 17-19=0/218, 16-17=0/220, 15-16=0/220, 13-15=-105/663

WEBS	9-28=-211/544, 28-29=-233/574, 15-29=-199/552, 12-15=-309/241, 21-26=-633/112, 25-26=-628/101, 9-25=-661/116, 5-27=-135/92, 21-27=-165/132, 9-17=-43/143, 8-25=-31/53, 19-25=-61/53, 7-26=-151/91, 20-26=-152/93, 6-27=-39/48, 5-22=-44/76, 4-23=-33/33, 3-24=-164/134, 10-28=-74/52, 16-28=-110/76, 11-29=-26/44
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NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-11-0 to 2-1-0, Interior (1) 2-1-0 to 11-0-6, Exterior (2) 11-0-6 to 13-9-8, Interior (1) 13-9-8 to 23-2-0 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
- 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.
- All plates are 2x4 (||) MT20 unless otherwise indicated.
- Gable studs spaced at 1'-4" 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 24 lb uplift at joint 2, 171 lb uplift at joint 21, 191 lb uplift at joint 13, 93 lb uplift at joint 20, 31 lb uplift at joint 22, 11 lb uplift at joint 23, 128 lb uplift at joint 24 and 24 lb uplift at joint 2.

- Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
 - 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 + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-38=-60, 9-38=-64 (F=-4), 9-39=-64 (F=-4), 14-39=-60, 30-41=-20, 15-41=-24 (F=-4), 15-33=-20



April 29, 2025

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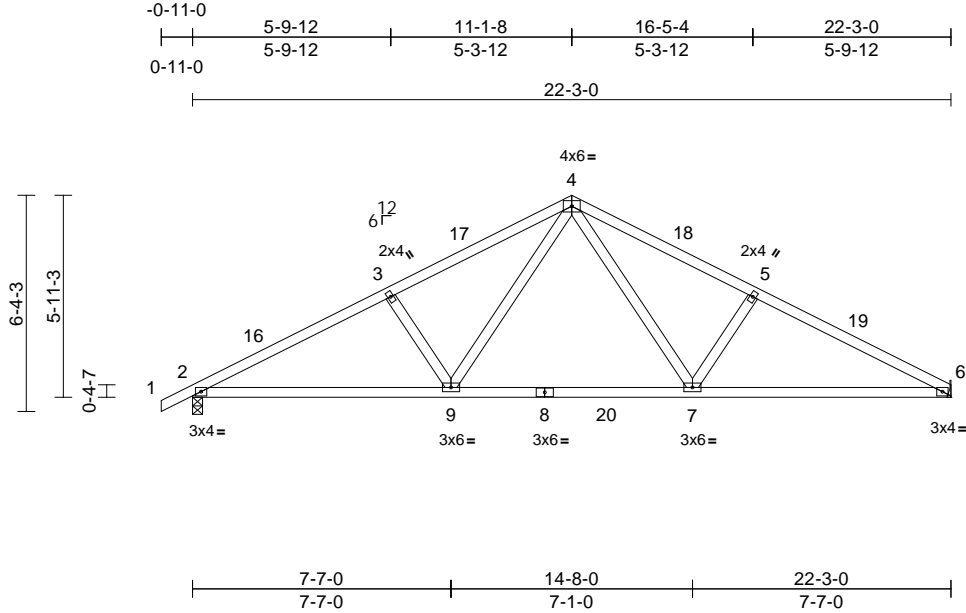
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	JSJ Builders	173037097
4939038	B02	Common	3	1	Job Reference (optional)	

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 25 12:59:57
ID:VbDqJXfzIPOYayhTXptpAryzCox-RfC?PsB70Hq3NsgPqnL8w3ulTXbGKWrcDoi7J4zJC?f

Page: 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	0.41	Vert(LL)	-0.09	7-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.18	7-12	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.04	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.08	7-12	>999	240	Weight: 101 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 234 lb uplift at joint 6 and 265 lb uplift at joint 2.

LOAD CASE(S) Standard

BRACING

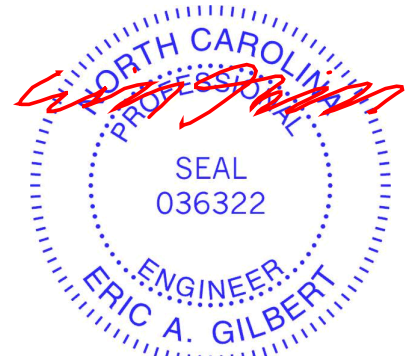
TOP CHORD Structural wood sheathing directly applied or 4-3-10 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-1-10 oc bracing.

REACTIONS (size) 2=0-3-8, 6= Mechanical
Max Horiz 2=146 (LC 12)
Max Uplift 2=-265 (LC 12), 6=-234 (LC 13)
Max Grav 2=946 (LC 1), 6=889 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/25, 2-3=-1539/426, 3-4=-1379/434, 4-5=-1384/456, 5-6=-1544/448
BOT CHORD 2-9=-403/1339, 7-9=-148/886, 6-7=-309/1345
WEBS 4-7=-196/535, 5-7=-345/288, 4-9=-192/529, 3-9=-342/286

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-11-0 to 2-1-0, Interior (1) 2-1-0 to 11-1-8, Exterior (2) 11-1-8 to 14-1-8, Interior (1) 14-1-8 to 22-3-0 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
- 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.



April 29, 2025

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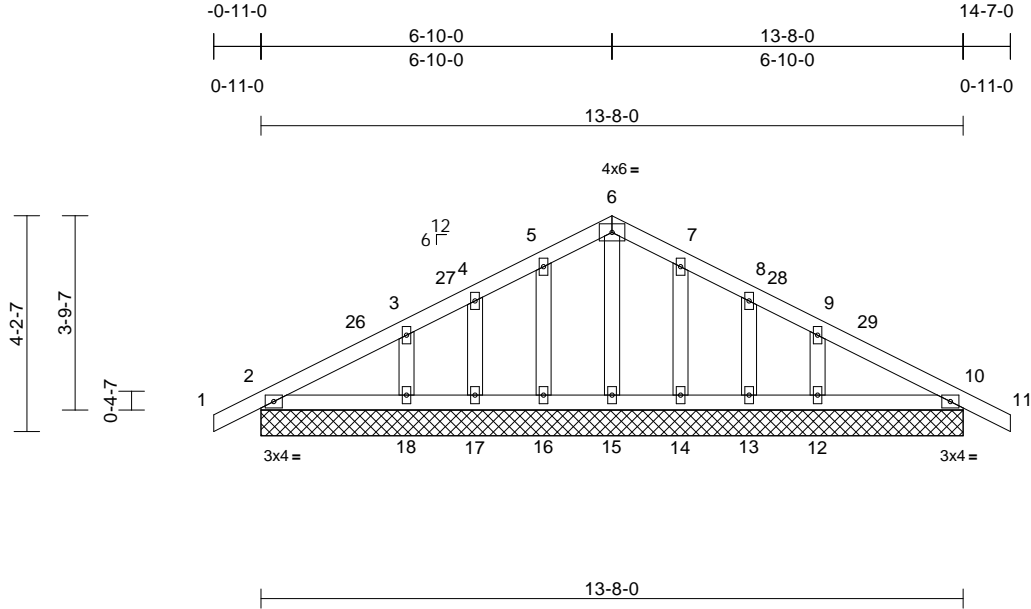
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	JSJ Builders	173037098
4939038	C01	Common Supported Gable	1	1	Job Reference (optional)	

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 25 12:59:57
ID:wXX5ndjAaRU28TQNhHSSkPyZCnZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:44.8

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	0.08	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	10	n/a	n/a	
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 68 lb FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3

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=13-8-0, 10=13-8-0, 12=13-8-0, 13=13-8-0, 14=13-8-0, 15=13-8-0, 16=13-8-0, 17=13-8-0, 18=13-8-0
Max Horiz 2=-87 (LC 17)
Max Uplift 2=-36 (LC 12), 10=-53 (LC 13), 12=-107 (LC 13), 13=-36 (LC 13), 14=-56 (LC 13), 16=-58 (LC 12), 17=-34 (LC 12), 18=-109 (LC 12)
Max Grav 2=167 (LC 1), 10=167 (LC 1), 12=211 (LC 24), 13=63 (LC 24), 14=121 (LC 24), 15=101 (LC 22), 16=121 (LC 23), 17=63 (LC 23), 18=211 (LC 23)

FORCES

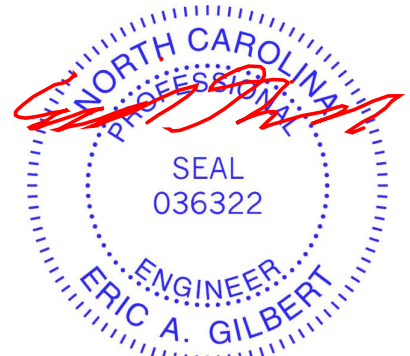
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/25, 2-3=-70/58, 3-4=-49/111, 4-5=-50/145, 5-6=-68/190, 6-7=-68/195, 7-8=-50/150, 8-9=-43/116, 9-10=-42/32, 10-11=0/25
BOT CHORD 2-18=-19/106, 17-18=-19/106, 16-17=-19/106, 15-16=-19/106, 14-15=-19/106, 13-14=-19/106, 12-13=-19/106, 10-12=-19/106
WEBS 6-15=-77/1, 5-16=-89/147, 4-17=-56/112, 3-18=-141/173, 7-14=-89/147, 8-13=-56/112, 9-12=-141/173

NOTES

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

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) -0-11-0 to 2-1-0, Exterior (2) 2-1-0 to 6-10-0, Corner (3) 6-10-0 to 9-10-0, Exterior (2) 9-10-0 to 14-7-0 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
- 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.
- All plates are 2x4 (||) MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 1-4-0 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 36 lb uplift at joint 2, 53 lb uplift at joint 10, 58 lb uplift at joint 16, 34 lb uplift at joint 17, 109 lb uplift at joint 18, 56 lb uplift at joint 14, 36 lb uplift at joint 13, 107 lb uplift at joint 12, 36 lb uplift at joint 2 and 53 lb uplift at joint 10.

LOAD CASE(S) Standard



April 29, 2025

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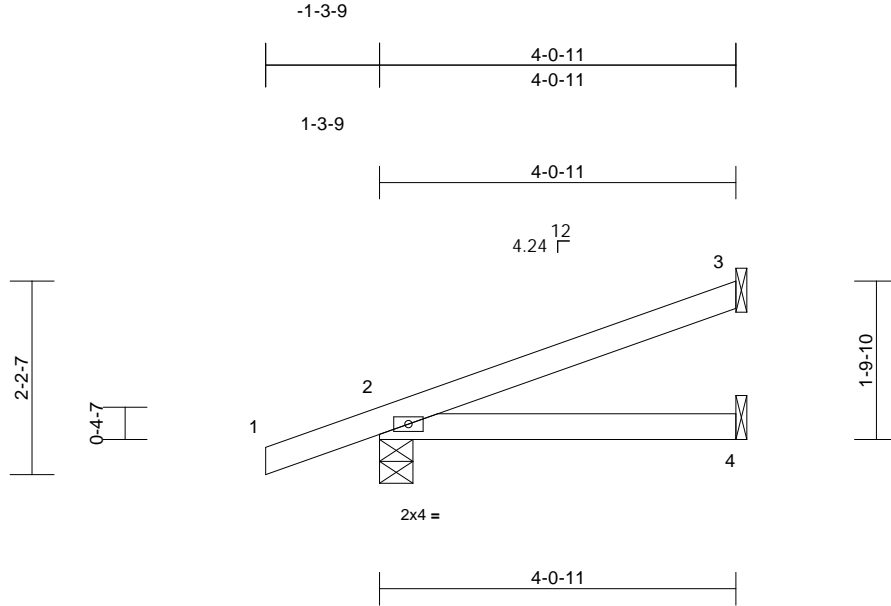
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	JSJ Builders	173037099
4939038	CJ1	Diagonal Hip Girder	3	1	Job Reference (optional)	

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 25 12:59:58
ID:3JFQ0NZS2Fb4KMzDuzGFfMyzCre-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 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	0.13	Vert(LL)	0.02	4-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.02	4-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 15 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-0-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-4-9, 3= Mechanical, 4= Mechanical
Max Horiz 2=102 (LC 6)
Max Uplift 2=-126 (LC 6), 3=-60 (LC 6)
Max Grav 2=144 (LC 1), 3=68 (LC 1), 4=58 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension

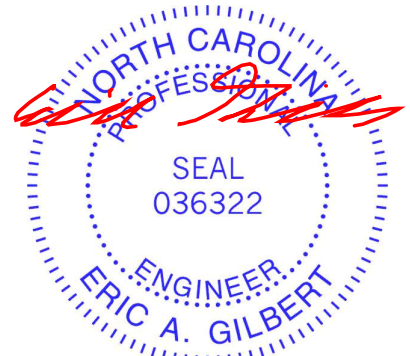
TOP CHORD 1-2=0/26, 2-3=-82/42
BOT CHORD 2-4=-53/61

NOTES

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; 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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * 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.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 60 lb uplift at joint 3 and 126 lb uplift at joint 2.
- 6) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-60
Trapezoidal Loads (lb/ft)
Vert: 2=0 (F=30, B=30)-to-6=-10 (F=25, B=25), 6=-10 (F=25, B=25)-to-3=-61 (F=0, B=0), 5=0 (F=10, B=10)-to-7=-3 (F=8, B=8), 7=-3 (F=8, B=8)-to-4=-20 (F=0, B=0)



April 29, 2025

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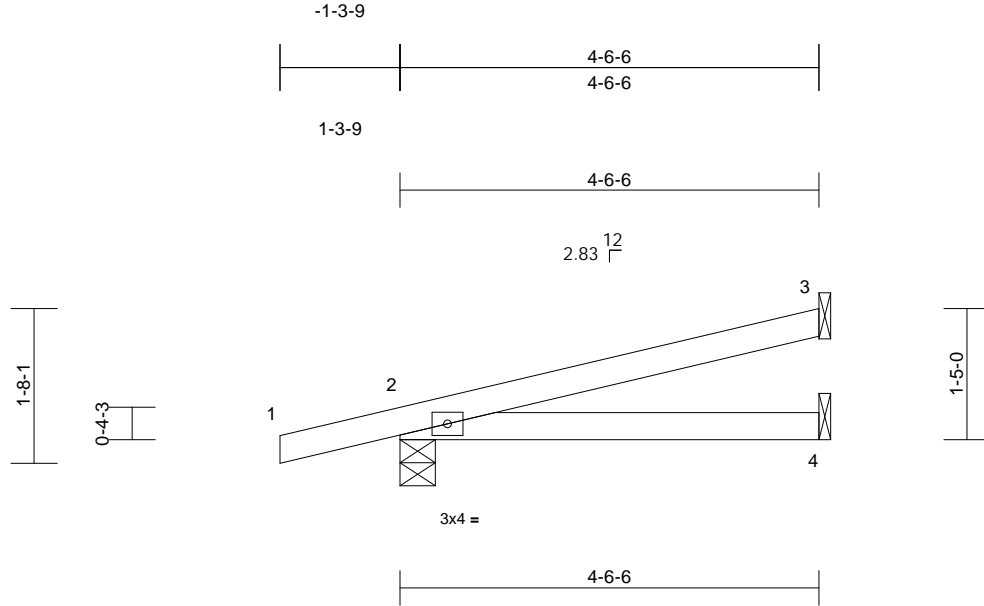
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	JSJ Builders	173037100
4939038	CJ2	Diagonal Hip Girder	2	1	Job Reference (optional)	

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 25 12:59:58
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Page: 1



Scale = 1:24.9

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	0.17	Vert(LL)	0.02	4-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.02	4-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 16 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS (size) 2=0-4-9, 3= Mechanical, 4= Mechanical
Max Horiz 2=71 (LC 6)
Max Uplift 2=-134 (LC 6), 3=-54 (LC 8)
Max Grav 2=157 (LC 1), 3=85 (LC 1), 4=68 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension

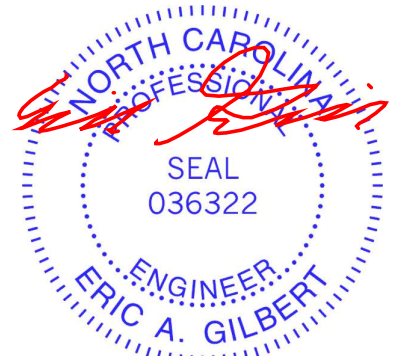
TOP CHORD 1-2=0/18, 2-3=-60/31
BOT CHORD 2-4=-51/45

NOTES

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; 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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * 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.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 54 lb uplift at joint 3 and 134 lb uplift at joint 2.
- 6) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-60
Trapezoidal Loads (lb/ft)
Vert: 2=0 (F=30, B=30)-to-6=-16 (F=22, B=22), 6=-16 (F=22, B=22)-to-3=-68 (F=-4, B=-4), 5=0 (F=10, B=10)-to-7=-5 (F=7, B=7), 7=-5 (F=7, B=7)-to-4=-23 (F=-1, B=-1)



April 29, 2025

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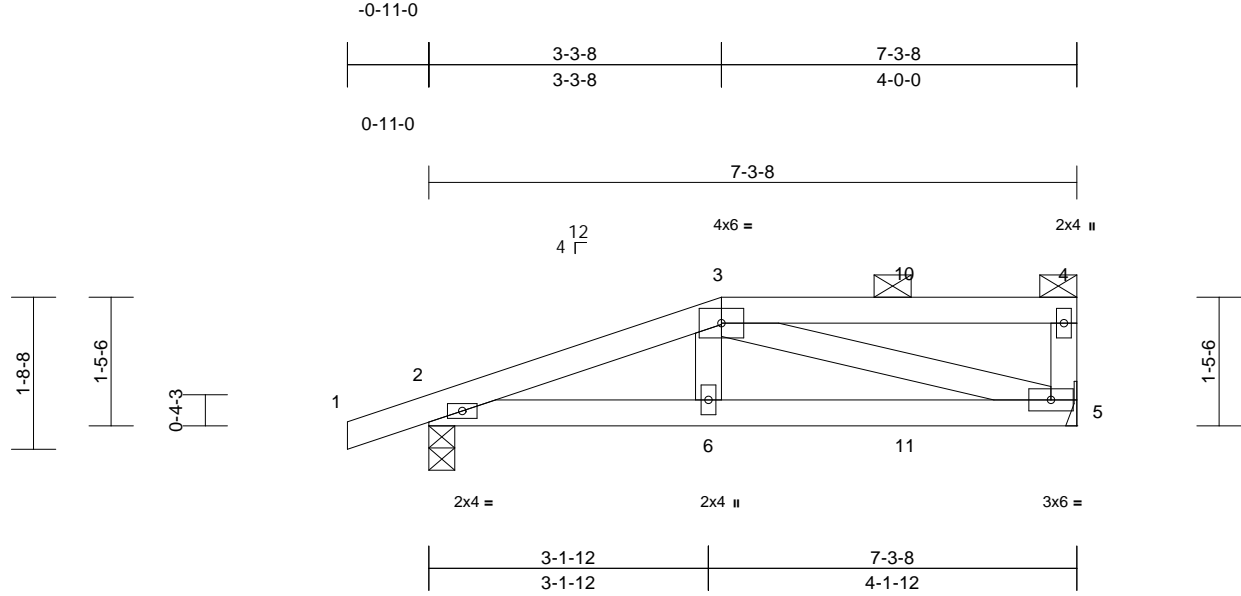
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	JSJ Builders	173037101
4939038	D01	Half Hip Girder	1	1	Job Reference (optional)	

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 25 12:59:58
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Page: 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	0.25	Vert(LL)	-0.01	5-6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.03	5-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.16	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.01	6-9	>999	240	Weight: 32 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, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 2=0-3-8, 5= Mechanical
Max Horiz 2=79 (LC 4)
Max Uplift 2=-172 (LC 4), 5=-123 (LC 4)
Max Grav 2=385 (LC 1), 5=338 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-3=-640/208, 3-4=-74/25, 4-5=-133/86
BOT CHORD 2-6=-217/592, 5-6=-224/577
WEBS 3-6=0/189, 3-5=-528/212

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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 172 lb uplift at joint 2 and 123 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.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 79 lb down and 99 lb up at 3-3-8, and 37 lb down and 35 lb up at 5-4-4 on top chord, and 37 lb down at 3-3-8, and 22 lb down at 5-4-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-60, 3-4=-60, 5-7=-20
Concentrated Loads (lb)
Vert: 6=-32 (B), 3=-23 (B), 10=-19 (B), 11=-22 (B)



April 29, 2025

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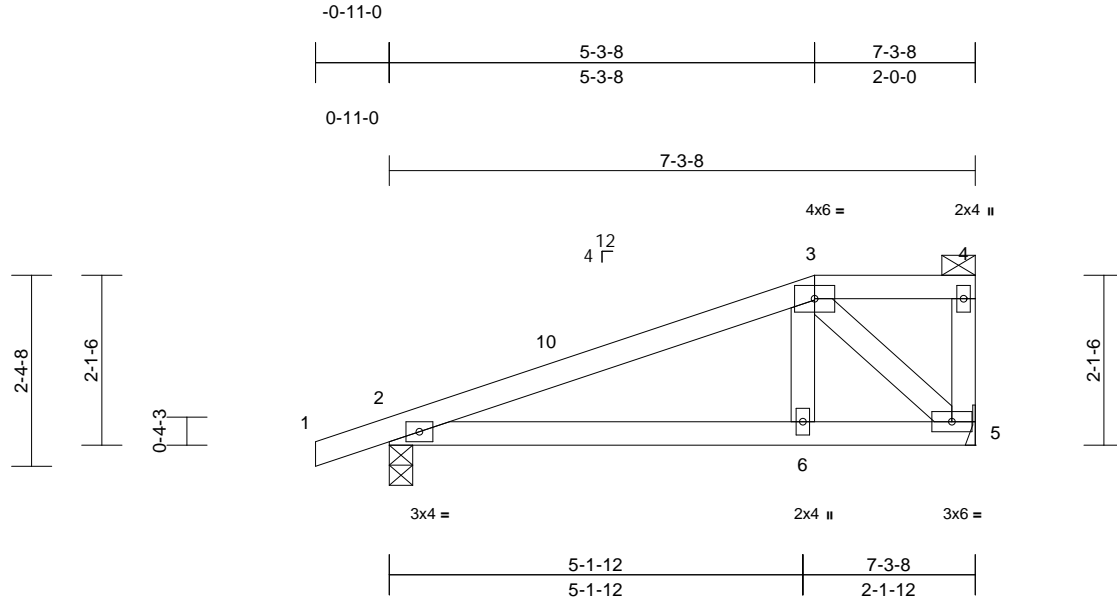
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	JSJ Builders	173037102
4939038	D02	Half Hip	1	1	Job Reference (optional)	

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 25 12:59:58
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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	0.30	Vert(LL)	-0.02	6-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.05	6-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.03	6-9	>999	240	Weight: 32 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 4-5:2x4 SP No.2

BRACING

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.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 2=0-3-8, 5= Mechanical
Max Horiz 2=114 (LC 8)
Max Uplift 2=-145 (LC 8), 5=-109 (LC 8)
Max Grav 2=344 (LC 1), 5=282 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-3=-343/161, 3-4=-3/4, 4-5=-43/38
BOT CHORD 2-6=-201/296, 5-6=-200/284
WEBS 3-6=-11/198, 3-5=-403/283

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-11-0 to 2-1-0, Interior (1) 2-1-0 to 5-3-8, Exterior (2) 5-3-8 to 7-1-12 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
- 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 145 lb uplift at joint 2 and 109 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



April 29, 2025

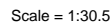
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818 Soundside Road
Edenton, NC 27932

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 25 12:59:58 Page: 1
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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	0.62	Vert(LL)	-0.08	4-7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.19	4-7	>457	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.12	4-7	>730	240	Weight: 27 lb	FT = 20%

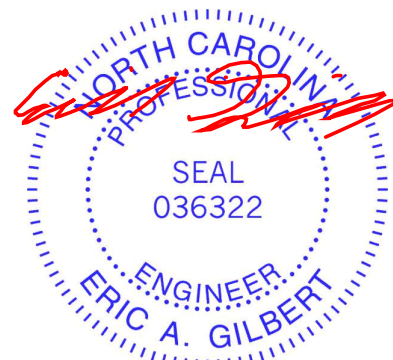
LOAD CASE(S) Standard

BRACING

REACTIONS (size) 2=0-3-8, 4= Mechanical
 Max Horiz 2=145 (LC 8)
 Max Uplift 2=-135 (LC 8), 4=-120 (LC 12)
 Max Grav 2=344 (LC 1), 4=282 (LC 1)

TOP CHORD 1-2=0/17, 2-3=-147/0, 3-4=-177/175
BOT CHORD 2-4=-72/151

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust)
 Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-11-0 to 2-1-0, Interior (1) 2-1-0 to 7-1-12 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * 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.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 120 lb uplift at joint 4 and 135 lb uplift at joint 2.



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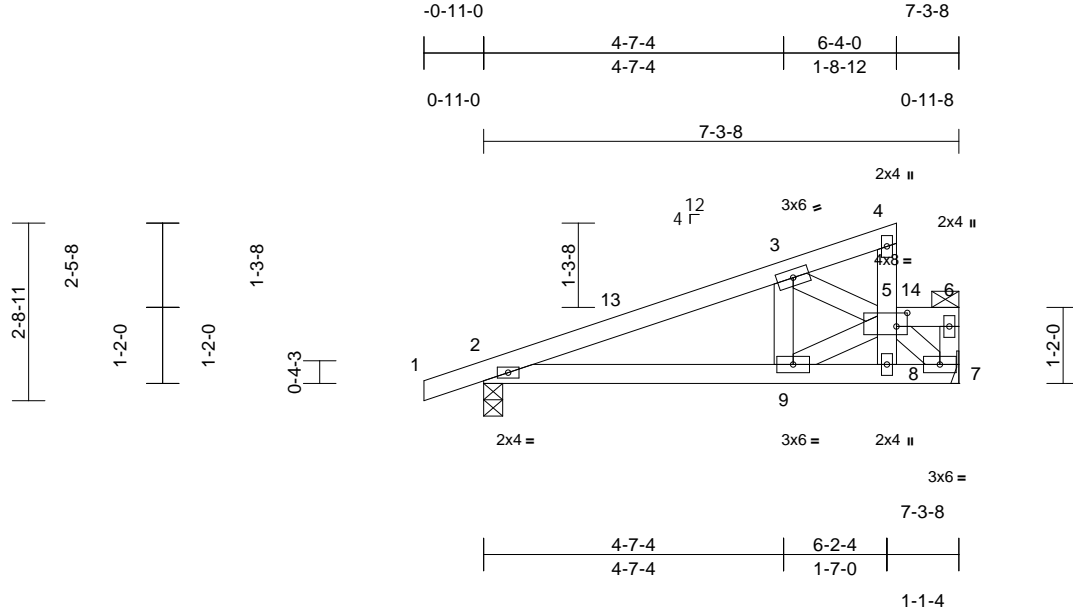
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	JSJ Builders	
4939038	D04	Half Hip	5	1	Job Reference (optional)	I73037104

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 25 12:59:59
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Page: 1



Scale = 1:35.4

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

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	0.21	Vert(LL)	-0.01	9-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.03	9-12	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.11	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.02	9-12	>999	240	Weight: 35 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 4-8,6-7:2x4 SP No.2

BRACING

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.): 5-8, 5-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 7= Mechanical
Max Horiz 2=186 (LC 12)
Max Uplift 2=-117 (LC 8)
Max Grav 2=379 (LC 1), 7=670 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/17, 2-3=-521/49, 3-4=-50/17, 5-8=-81/15, 4-5=-12/16, 5-6=-54/0, 6-7=-216/0

BOT CHORD 2-9=-191/473, 8-9=0/457, 7-8=0/481
WEBS 5-7=-579/0, 3-9=0/179, 3-5=-508/171, 5-9=-229/50

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-11-0 to 2-1-0, Interior (1) 2-1-0 to 7-1-12 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) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 5) * 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.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 117 lb uplift at joint 2.
- 8) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- 9) 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

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-4=-60, 5-6=-60, 7-10=-20
Concentrated Loads (lb)
Vert: 14=-422



April 29, 2025

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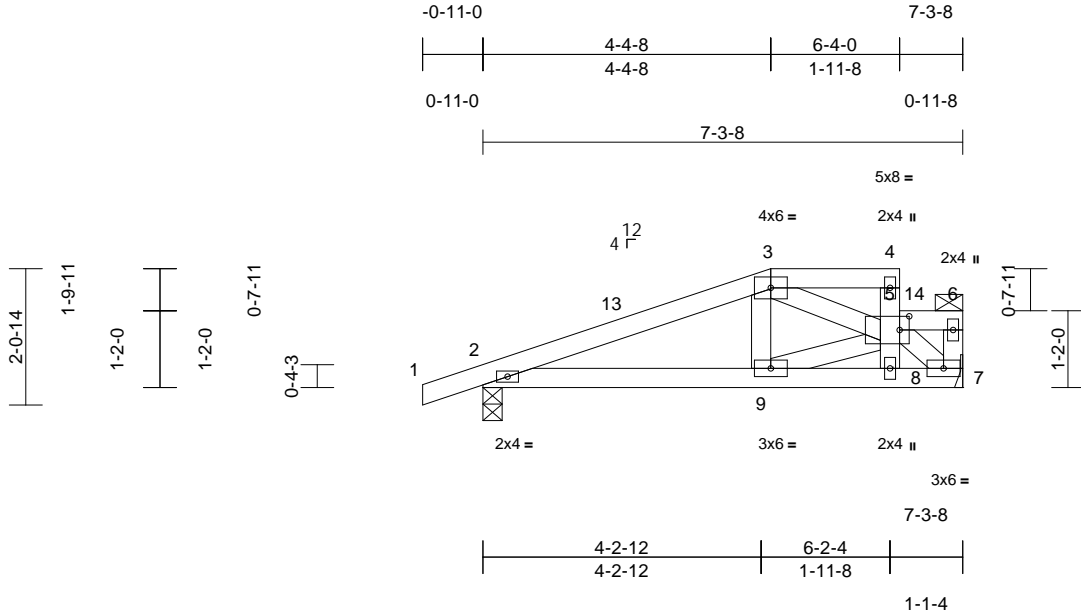
Job	Truss	Truss Type	Qty	Ply	JSJ Builders	173037105
4939038	D05	Roof Special	1	1	Job Reference (optional)	

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 25 12:59:59

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Scale = 1:35

Plate Offsets (X, Y): [5:0-1-12,0-2-8]

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	0.22	Vert(LL)	-0.01	9-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.03	9-12	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.11	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.02	9-12	>999	240	Weight: 35 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 4-8,6-7:2x4 SP No.2

BRACING

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.): 3-4, 5-8, 5-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 7= Mechanical
Max Horiz 2=124 (LC 12)
Max Uplift 2=121 (LC 8)
Max Grav 2=379 (LC 1), 7=670 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/17, 2-3=-526/40, 3-4=-67/12, 5-8=-57/12, 4-5=-53/48, 5-6=-54/0, 6-7=-224/0

BOT CHORD 2-9=90/475, 8-9=0/440, 7-8=0/479
WEBS 3-9=0/162, 3-5=-421/66, 5-9=-202/48, 5-7=-576/0

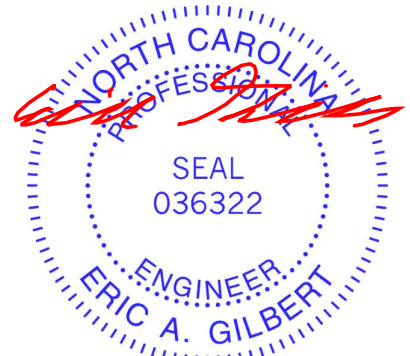
NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-11-0 to 2-1-0, Interior (1) 2-1-0 to 7-1-12 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) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 5) * 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.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 121 lb uplift at joint 2.
- 8) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- 9) 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

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-60, 3-4=-60, 5-6=-60, 7-10=-20
Concentrated Loads (lb)
Vert: 14=-422



April 29,2025

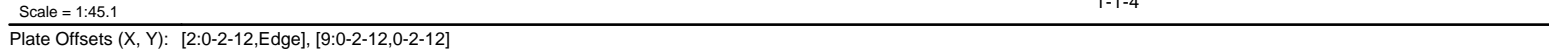
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Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 25 12:59:59 Page: 1
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LUMBER		<div><div>6) Refer to girder(s) for truss to truss connections.</div><div>7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 79 lb uplift at joint 2.</div><div>8) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.</div><div>9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.</div><div>10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 57 lb down and 64 lb up at 3-3-8 on top chord, and 292 lb down at 3-3-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.</div><div>11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).</div><div>LOAD CASE(S) Standard<div>1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (lb/ft) Vert: 1-3=-60, 3-4=-60, 4-5=-60, 6-7=-60, 2-8=-20 Concentrated Loads (lb) Vert: 11=-292 (F), 3=-3 (F), 14=-422</div></div></div>
TOP CHORD	2x4 SP No.2	
BOT CHORD	2x6 SP No.2	
WEBS	2x4 SP No.2	
BRACING		
TOP CHORD	Structural wood sheathing directly applied or 5-6-15 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4, 6-9, 6-7.	
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.	
REACTIONS		
	(size) 2=0-3-8, 8= Mechanical	
	Max Horiz 2=129 (LC 8)	
	Max Uplift 2=-79 (LC 4)	
	Max Grav 2=544 (LC 1), 8=800 (LC 1)	
FORCES		
	(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/17, 2-3=-1085/0, 3-4=-782/0, 4-5=-304/0, 6-9=-196/0, 5-6=0/45, 6-7=-475/0, 7-8=-584/0	
BOT CHORD	2-11=-9/1013, 10-11=-22/969, 9-10=0/826, 8-9=0/98	
WEBS	3-11=0/329, 3-10=-223/76, 4-10=0/324, 4-9=-699/0, 7-9=0/490	

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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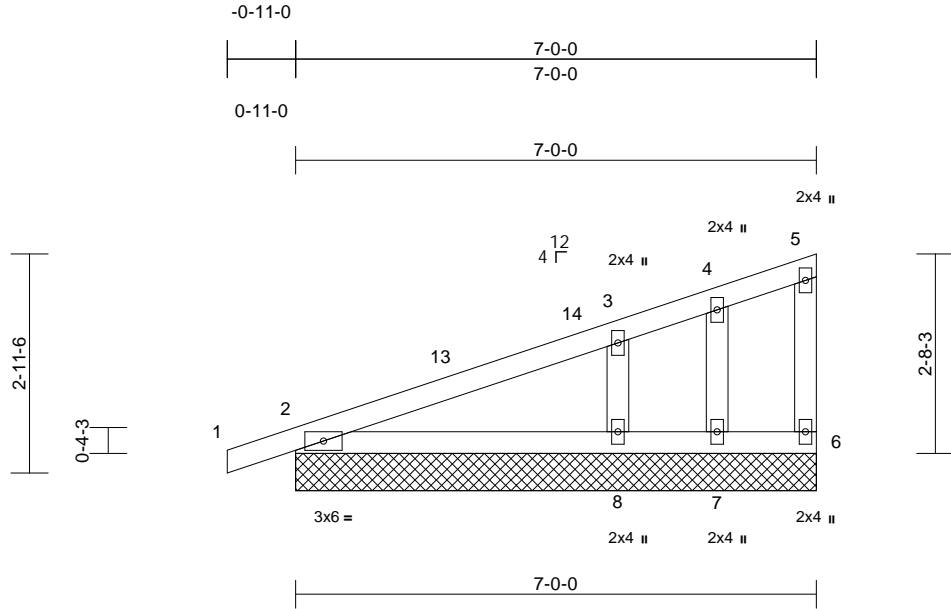
Job	Truss	Truss Type	Qty	Ply	JSJ Builders	173037107
4939038	E01	Monopitch Supported Gable	1	1	Job Reference (optional)	

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 25 13:00:00

Page: 1

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Scale = 1:31

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	0.32	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	2	n/a	n/a	
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 30 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.3

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) 2=7-0-0, 6=7-0-0, 7=7-0-0, 8=7-0-0
	Max Horiz 2=140 (LC 8)
	Max Uplift 2=-81 (LC 8), 6=-49 (LC 12), 8=-166 (LC 12)
	Max Grav 2=214 (LC 1), 6=20 (LC 1), 7=378 (LC 3), 8=283 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/17, 2-3=-157/68, 3-4=-49/0, 4-5=-22/15, 5-6=-51/69
BOT CHORD	2-8=-55/76, 7-8=-5/1, 6-7=-5/1
WEBS	4-7=0/72, 3-8=-297/298

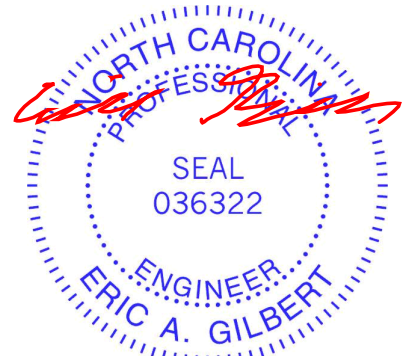
NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) -0-11-0 to 2-1-0, Exterior (2) 2-1-0 to 6-10-4 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
- 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.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 1-4-0 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 81 lb uplift at joint 2, 49 lb uplift at joint 6, 166 lb uplift at joint 8 and 81 lb uplift at joint 2.

LOAD CASE(S)

Standard



April 29, 2025

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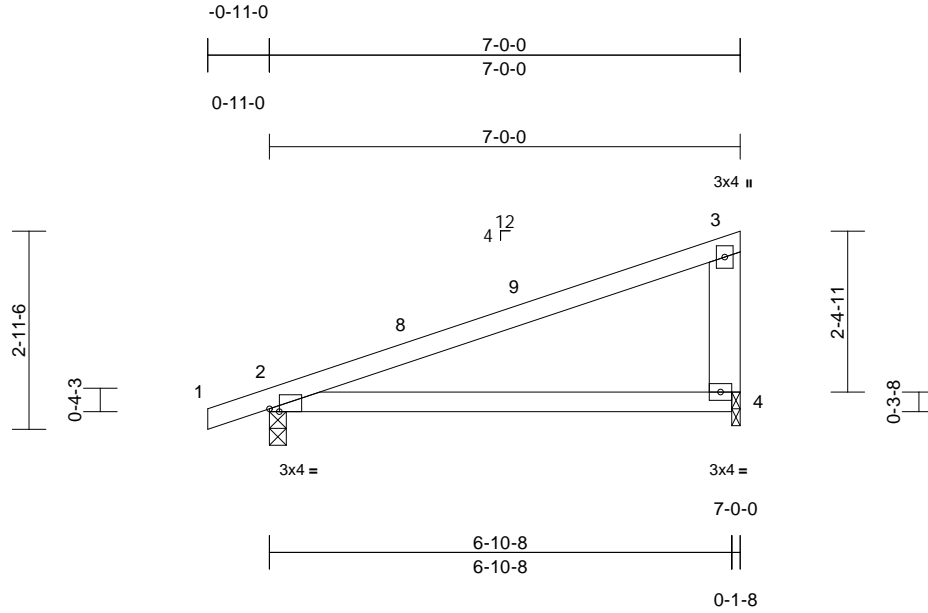
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	JSJ Builders	173037108
4939038	E02	Monopitch	3	1	Job Reference (optional)	

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 25 13:00:00
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Page: 1



Scale = 1:34.3

Plate Offsets (X, Y): [2:0-1-12,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	0.52	Vert(LL)	0.19	4-7	>421	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.14	4-7	>579	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 28 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x6 SP No.2

BRACING

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

REACTIONS

(size) 2=0-3-0, 4=0-1-8
Max Horiz 2=139 (LC 8)
Max Uplift 2=-215 (LC 8), 4=-196 (LC 8)
Max Grav 2=330 (LC 1), 4=267 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

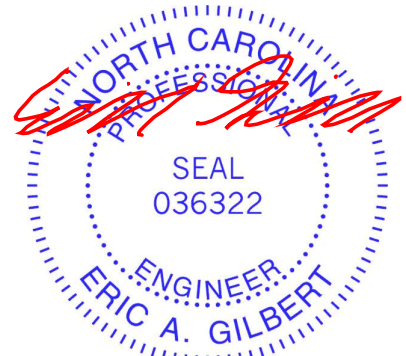
TOP CHORD 1-2=0/17, 2-3=-153/161, 3-4=-167/180
BOT CHORD 2-4=-201/123

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-11-0 to 2-1-0, Interior (1) 2-1-0 to 6-9-4 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
- 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" tall by 2'-0" wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 4 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) 4.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 215 lb uplift at joint 2 and 196 lb uplift at joint 4.

LOAD CASE(S) Standard



April 29, 2025

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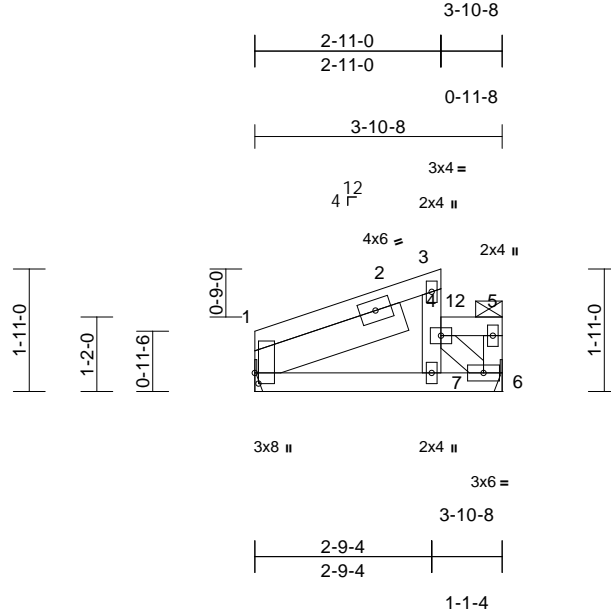
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	JSJ Builders	173037109
4939038	E03	Half Hip	2	1	Job Reference (optional)	

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 25 13:00:00
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Page: 1



Scale = 1:36.1

Plate Offsets (X, Y): [1:0-2-0,0-0-11]

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	Vert(LL)	0.00	7-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.01	7-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.08	Horz(CT)	0.00	1	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP		Wind(LL)	0.00	7-10	>999	240	Weight: 22 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2 *Except* 6-4:2x4 SP No.3
SLIDER Left 2x6 SP No.2 -- 2-6-0

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-8-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 4-7, 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1= Mechanical, 6= Mechanical
Max Horiz 1=84 (LC 12)
Max Grav 1=215 (LC 1), 6=505 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-3=-174/114, 4-7=-38/35, 3-4=-13/119,
4-5=0/0, 5-6=-194/0
BOT CHORD 1-7=-90/169, 6-7=0/303
WEBS 4-6=-411/0

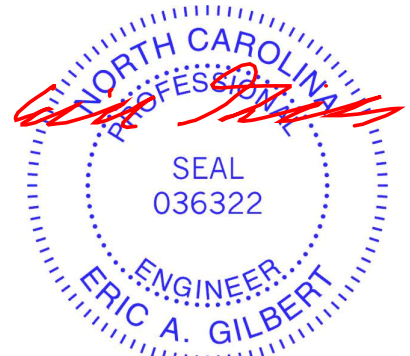
NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 1-9-8 to 4-6-12, Interior (1) 4-6-12 to 5-6-4 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
- 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.
- Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- 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

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-60, 4-5=-60, 6-8=-20
Concentrated Loads (lb)
Vert: 12=-422



April 29,2025

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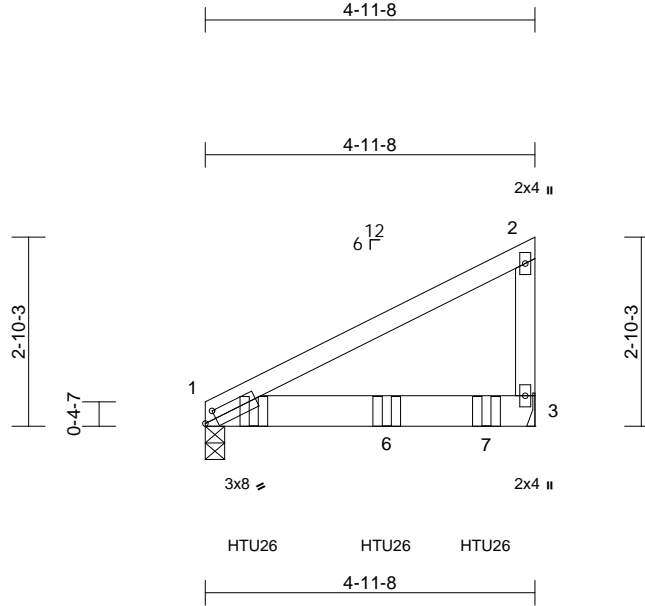
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	JSJ Builders	I73037110
4939038	JA1	Jack-Closed Girder	1	2	Job Reference (optional)	

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 25 13:00:00
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Page: 1



Scale = 1:34.7

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

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	0.47	Vert(LL)	-0.05	3-5	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.11	3-5	>549	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP		Wind(LL)	0.06	3-5	>924	240	Weight: 46 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.2

BRACING

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

REACTIONS (size) 1=0-3-8, 3= Mechanical
Max Horiz 1=125 (LC 8)
Max Uplift 1=-375 (LC 8), 3=-495 (LC 8)
Max Grav 1=1395 (LC 1), 3=1603 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-238/74, 2-3=-189/113
BOT CHORD 1-3=-30/11

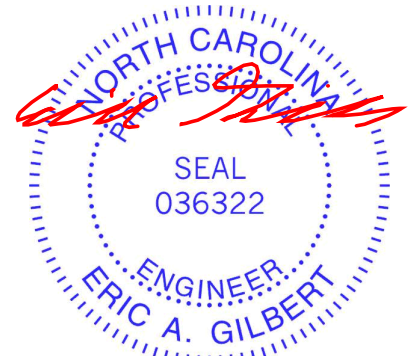
NOTES

- 2-ply truss to be connected together as follows:
Top chords connected with 10d (0.131"x3") nails as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected with 10d (0.131"x3") nails as follows: 2x6 - 2 rows staggered 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=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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 375 lb uplift at joint 1 and 495 lb uplift at joint 3.
- Use Simpson Strong-Tie HTU26 (20-10dx1 1/2 Girder, 14-10dx1 1/2 Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 0-8-12 from the left end to 4-2-12 to connect truss(es) to back face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-60, 1-3=-20
Concentrated Loads (lb)
Vert: 5=-872 (B), 6=-869 (B), 7=-873 (B)



April 29, 2025

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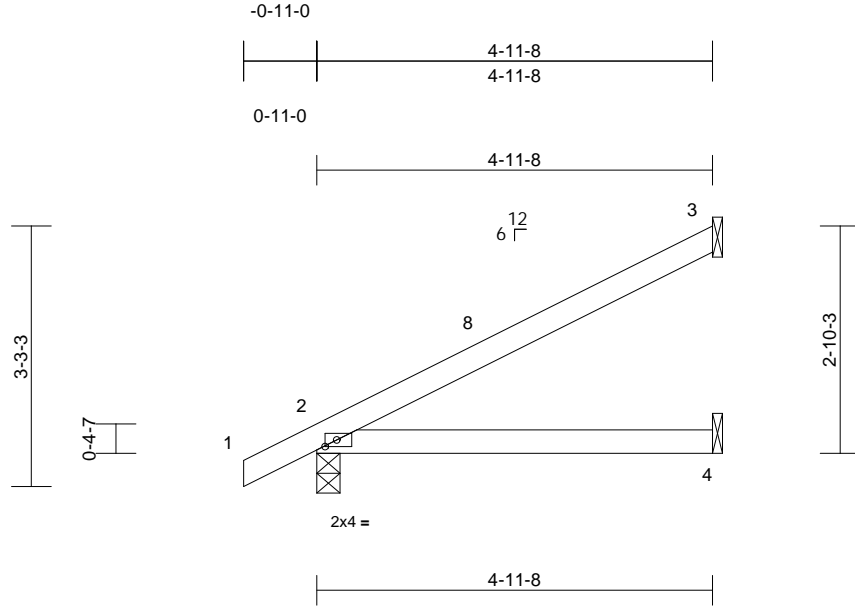
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	JSJ Builders	
4939038	JA2	Jack-Open	13	1	Job Reference (optional)	I73037111

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 25 13:00:00
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Page: 1



Scale = 1:28.9

Plate Offsets (X, Y): [2:0-1-12,0-1-0]

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	0.35	Vert(LL)	-0.02	4-7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.06	4-7	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP		Wind(LL)	0.05	4-7	>999	240	Weight: 17 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2

BOT CHORD 2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-11-8 oc purlins.

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

REACTIONS (size) 2=0-3-8, 3= Mechanical, 4= Mechanical
Max Horiz 2=148 (LC 12)
Max Uplift 2=-69 (LC 12), 3=-103 (LC 12)
Max Grav 2=256 (LC 1), 3=127 (LC 1), 4=91 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension

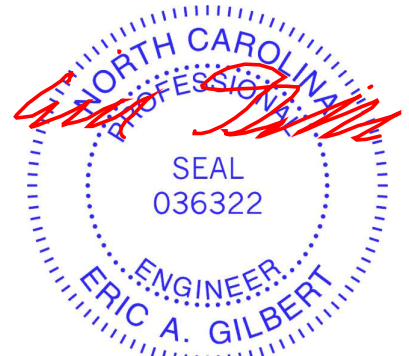
TOP CHORD 1-2=0/25, 2-3=-100/50

BOT CHORD 2-4=-84/82

NOTES

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-11-0 to 2-1-0, Interior (1) 2-1-0 to 4-10-12 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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * 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.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 103 lb uplift at joint 3 and 69 lb uplift at joint 2.

LOAD CASE(S) Standard



April 29, 2025

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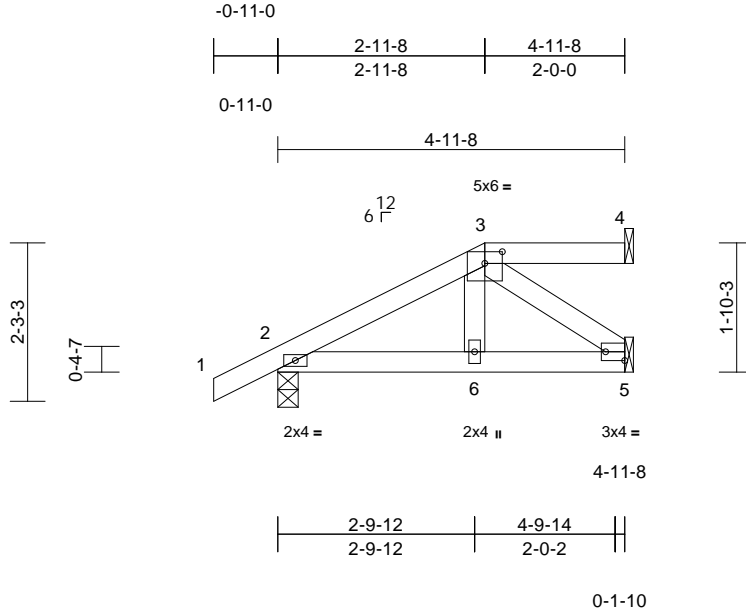
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	JSJ Builders	I73037112
4939038	JA3	Jack-Open Girder	3	1	Job Reference (optional)	

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 25 13:00:00
ID:JPxzkWiQv7Rlbp9HPjyITByzCqA-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:32.9

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

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	0.11	Vert(LL)	0.00	6-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.01	6-9	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.05	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP		Wind(LL)	0.01	6-9	>999	240	Weight: 22 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING

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

REACTIONS

(size) 2=0-3-8, 4= Mechanical, 5= Mechanical
Max Horiz 2=98 (LC 8)
Max Uplift 2=-113 (LC 8), 4=-39 (LC 4), 5=-73 (LC 8)
Max Grav 2=270 (LC 1), 4=58 (LC 1), 5=149 (LC 1)

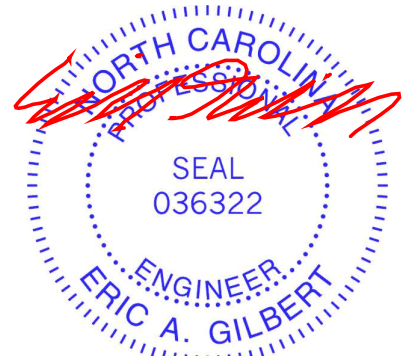
FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/25, 2-3=-241/93, 3-4=0/0
BOT CHORD 2-6=-108/183, 5-6=-110/174
WEBS 3-5=-221/139, 3-6=0/132

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; 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
- 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 39 lb uplift at joint 4, 113 lb uplift at joint 2 and 73 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.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 55 lb down and 111 lb up at 2-11-8 on top chord, and 36 lb down at 2-11-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
- LOAD CASE(S)** Standard
- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-60, 3-4=-60, 5-7=-20
Concentrated Loads (lb)
Vert: 3=-11 (F), 6=-19 (F)



April 29,2025

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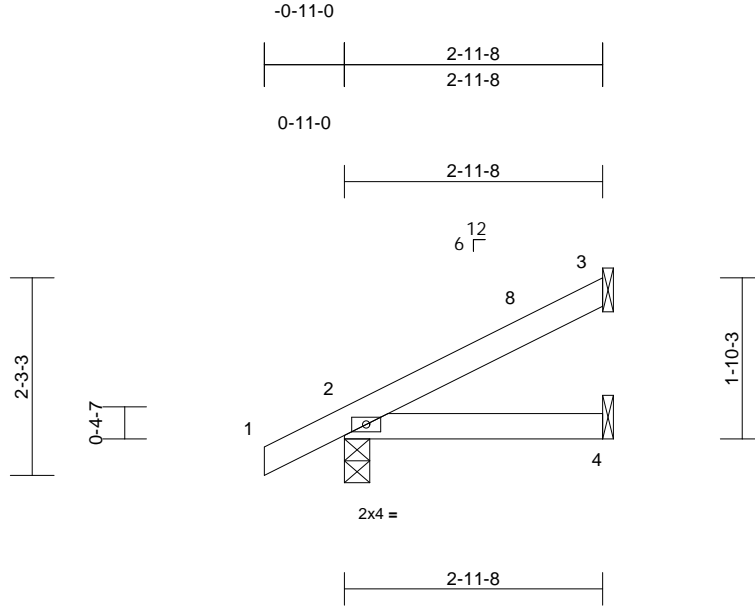
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	JSJ Builders	I73037113
4939038	JA4	Jack-Open	3	1	Job Reference (optional)	

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 25 13:00:01
ID:ERQbJ8hMSd_X83IK2nzqchyzCrT-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 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	0.10	Vert(LL)	0.00	4-7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	-0.01	4-7	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP		Wind(LL)	0.01	4-7	>999	240	Weight: 11 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or
2-11-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc
bracing.

REACTIONS (size) 2=0-3-8, 3= Mechanical, 4=
Mechanical
Max Horiz 2=96 (LC 12)
Max Uplift 2=-56 (LC 12), 3=-57 (LC 12)
Max Grav 2=180 (LC 1), 3=71 (LC 1), 4=52
(LC 3)

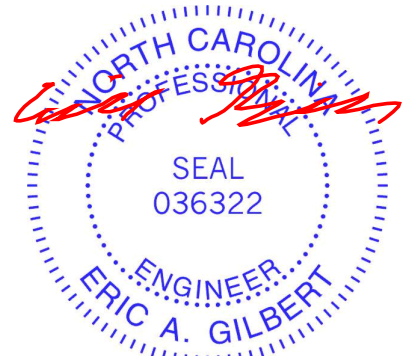
FORCES (lb) - Maximum Compression/Maximum
Tension

TOP CHORD 1-2=0/25, 2-3=-60/29
BOT CHORD 2-4=-19/46

NOTES

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat.
II; Exp C; Enclosed; MWFRS (envelope) exterior zone
and C-C Exterior (2) -0-11-0 to 2-1-0, Interior (1) 2-1-0 to
2-10-12 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
- 2) This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- 3) * 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.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 57 lb uplift at joint
3 and 56 lb uplift at joint 2.

LOAD CASE(S) Standard



April 29, 2025

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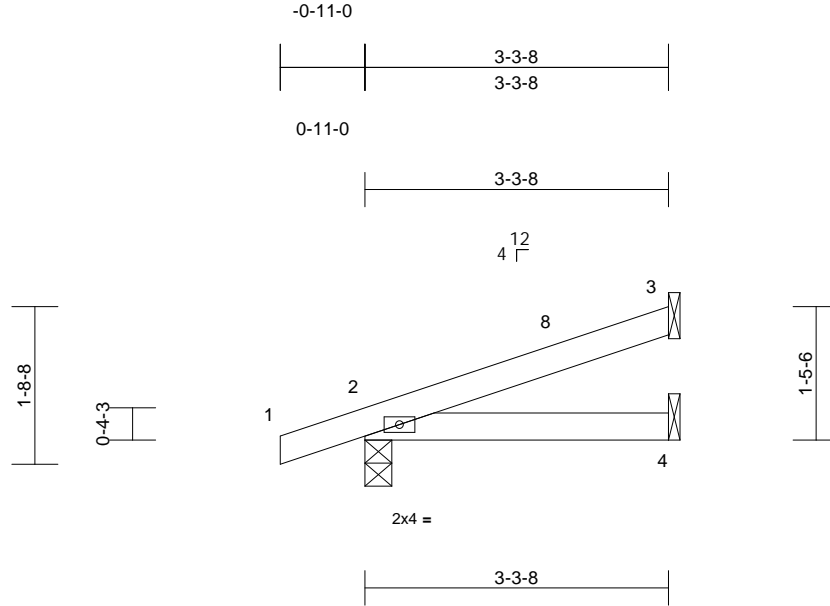
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	JSJ Builders	173037114
4939038	JD1	Jack-Open	2	1	Job Reference (optional)	

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 25 13:00:01
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Page: 1



Scale = 1:25

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	4-7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.01	4-7	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP		Wind(LL)	0.01	4-7	>999	240	Weight: 12 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS (size) 2=0-3-8, 3= Mechanical, 4=
Mechanical
Max Horiz 2=77 (LC 8)
Max Uplift 2=-96 (LC 8), 3=-53 (LC 12)
Max Grav 2=192 (LC 1), 3=79 (LC 1), 4=57
(LC 3)

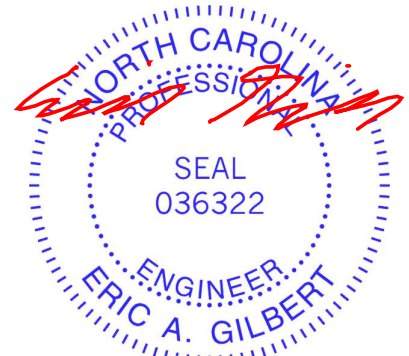
FORCES (lb) - Maximum Compression/Maximum
Tension

TOP CHORD 1-2=0/17, 2-3=-54/21
BOT CHORD 2-4=-29/63

NOTES

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat.
II; Exp C; Enclosed; MWFRS (envelope) exterior zone
and C-C Exterior (2) -0-11-0 to 2-1-0, Interior (1) 2-1-0 to
3-2-12 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
- 2) This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- 3) * 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.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 53 lb uplift at joint
3 and 96 lb uplift at joint 2.

LOAD CASE(S) Standard



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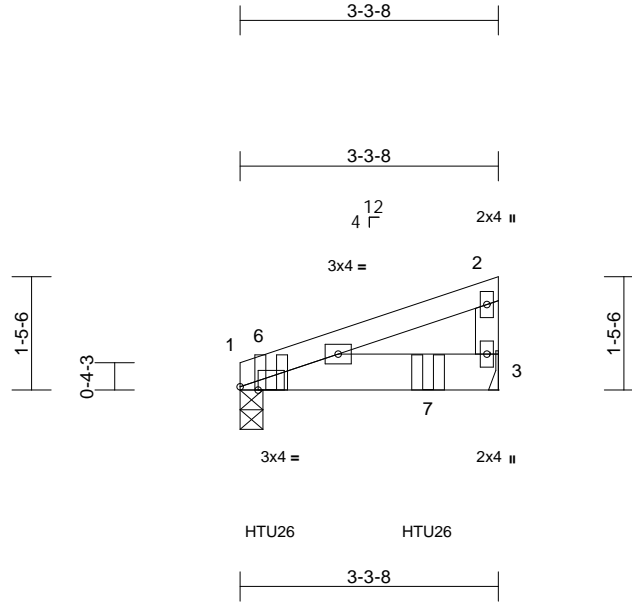
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	JSJ Builders	173037115
4939038	JD2	Jack-Closed Girder	1	1	Job Reference (optional)	

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Fri Apr 25 13:00:01
ID:Pn7mc0QRRJTj0?Sini?gMcSyzCzZ-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:29.4

Plate Offsets (X, Y): [1:0-2-12,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	0.12	Vert(LL)	-0.01	3-5	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.01	3-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP		Wind(LL)	0.00	3-5	>999	240	Weight: 14 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.2

BRACING

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

REACTIONS (size) 1=0-3-8, 3= Mechanical
Max Horiz 1=55 (LC 4)
Max Grav 1=349 (LC 1), 3=302 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-53/20, 2-3=-75/33
BOT CHORD 1-3=-8/1

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss) or equivalent spaced at 2-0-0 oc max. starting at 0-4-12 from the left end to 2-4-12 to connect truss(es) to front face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-60, 1-3=-20
Concentrated Loads (lb)
Vert: 6=-201 (F), 7=-198 (F)



April 29,2025

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

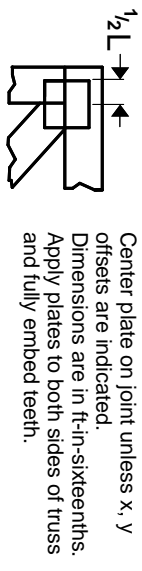
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Symbols

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

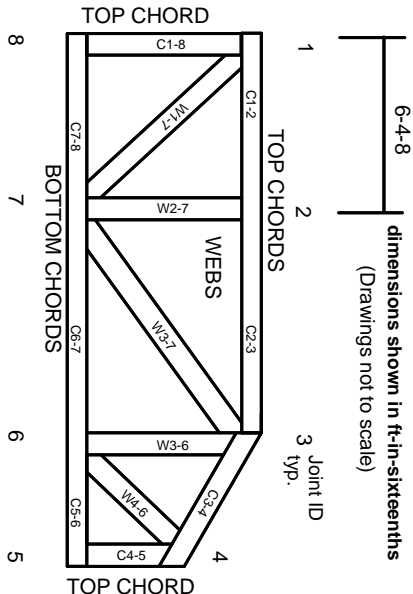


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

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