

RE: 4703112  
JSJ, Cypress Prime - Elev. A (4-16-25)

Trenco  
818 Soundside Rd  
Edenton, NC 27932

**Site Information:**

Customer: JSJ Builders Project Name: 4703112  
Lot/Block: 105 Model: Cypress Prime A  
Address: Subdivision: DUCKS LANDING  
City: Lillington 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 52 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I74008788	A01	6/6/2025	21	I74008808	C02	6/6/2025
2	I74008789	A02	6/6/2025	22	I74008809	C03	6/6/2025
3	I74008790	A03	6/6/2025	23	I74008810	C04	6/6/2025
4	I74008791	A04	6/6/2025	24	I74008811	C05	6/6/2025
5	I74008792	A05	6/6/2025	25	I74008812	C06	6/6/2025
6	I74008793	A06	6/6/2025	26	I74008813	CJ1	6/6/2025
7	I74008794	A07	6/6/2025	27	I74008814	D01	6/6/2025
8	I74008795	A08	6/6/2025	28	I74008815	D02	6/6/2025
9	I74008796	A09	6/6/2025	29	I74008816	E01	6/6/2025
10	I74008797	A10	6/6/2025	30	I74008817	E02	6/6/2025
11	I74008798	A11	6/6/2025	31	I74008818	E03	6/6/2025
12	I74008799	A12	6/6/2025	32	I74008819	JA1	6/6/2025
13	I74008800	A13	6/6/2025	33	I74008820	JB1	6/6/2025
14	I74008801	B01	6/6/2025	34	I74008821	JB2	6/6/2025
15	I74008802	B02	6/6/2025	35	I74008822	JB3	6/6/2025
16	I74008803	B03	6/6/2025	36	I74008823	V01	6/6/2025
17	I74008804	B04	6/6/2025	37	I74008824	V02	6/6/2025
18	I74008805	B05	6/6/2025	38	I74008825	V03	6/6/2025
19	I74008806	B06	6/6/2025	39	I74008826	V04	6/6/2025
20	I74008807	C01	6/6/2025	40	I74008827	V05	6/6/2025

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.



June 06, 2025



RE: 4703112 - JSJ, Cypress Prime - Elev. A (4-16-25)

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Edenton, NC 27932

**Site Information:**

Project Customer: JSJ Builders Project Name: 4703112

Lot/Block: 105

Subdivision: DUCKS LANDING

Address:

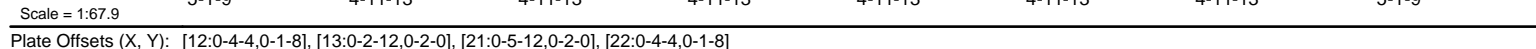
City, County: Lillington

State: NC

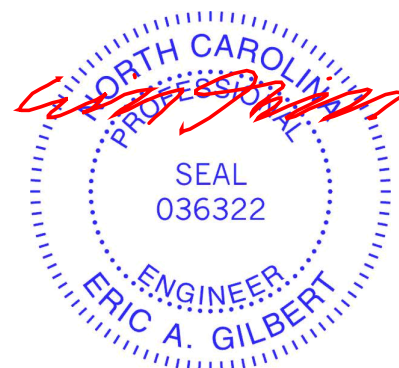
No.	Seal#	Truss Name	Date
41	I74008828	V06	6/6/2025
42	I74008829	V07	6/6/2025
43	I74008830	V08	6/6/2025
44	I74008831	V09	6/6/2025
45	I74008832	V10	6/6/2025
46	I74008833	V11	6/6/2025
47	I74008834	VA1	6/6/2025
48	I74008835	VA2	6/6/2025
49	I74008836	VA3	6/6/2025
50	I74008837	VA4	6/6/2025
51	I74008838	VA5	6/6/2025
52	I74008839	VA6	6/6/2025



Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:26 Page: 1  
ID: aJvp3UuIHvANsRz96uhBERzbzQV-RfC?PsB70Hq3NSqPqnL8w3uITXhGKWvRCdoi7J4zJC?i



<b>LUMBER</b>		1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:	1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
TOP CHORD	2x6 SP No.2	Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc; 2x6 - 2 rows staggered at 0-9-0 oc.	Uniform Loads (lb/ft)
BOT CHORD	2x6 SP 2400F 2.0E or 2x6 SP DSS	Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.	Vert: 1-11=-60, 12-22=-20
WEBS	2x4 SP No.2	Web connected as follows: 2x4 - 1 row at 0-9-0 oc.	Concentrated Loads (lb)
<b>BRACING</b>		2) 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.	Vert: 19=-179 (F), 20=-179 (F), 17=-179 (F), 14=-179 (F), 15=-179 (F), 23=-179 (F), 24=-179 (F), 25=-179 (F), 26=-179 (F), 27=-179 (F), 28=-179 (F), 29=-179 (F), 30=-179 (F), 31=-179 (F), 32=-179 (F), 33=-179 (F), 34=-179 (F), 35=-179 (F), 36=-179 (F), 37=-179 (F)
TOP CHORD	2-0-0 oc purlins (5-3-13 max.): 1-11, except end verticals.	3) Unbalanced roof live loads have been considered for this design.	
BOT CHORD	Rigid ceiling directly applied or 7-10-5 oc bracing.	4) 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 ; Lumber DOL=1.60 plate grip DOL=1.60	
<b>REACTIONS</b>		5) Provide adequate drainage to prevent water ponding.	
(size)	12= Mechanical, 22= Mechanical	6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.	
Max Uplift	12=-2172 (LC 4), 22=-2091 (LC 4)	7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.	
Max Grav	12=3435 (LC 1), 22=3343 (LC 1)	8) Refer to girder(s) for truss to truss connections.	
<b>FORCES</b>		9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2091 lb uplift at joint 22 and 2172 lb uplift at joint 12.	
(lb) - Maximum Compression/Maximum Tension		10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.	
TOP CHORD	1-22=-3143/1984, 1-2=-3943/2483, 2-3=-3943/2483, 3-5=-8397/5300, 5-6=-8397/5300, 6-7=-8458/5353, 7-9=-8458/5353, 9-10=-4063/2588, 10-11=-4063/2588, 11-12=-3236/2065	11) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-9-12 from the left end to 38-5-12 to connect truss(es) to front face of bottom chord.	
BOT CHORD	21-22=-23/36, 20-21=-4248/6736, 18-20=-4248/6736, 17-18=-5691/9006, 16-17=-5691/9006, 14-16=-4374/6880, 13-14=-4374/6880, 12-13=-23/36	12) Fill all nail holes where hanger is in contact with lumber.	
WEBS	1-21=-3100/4923, 2-21=-299/231, 3-21=-3520/2224, 3-20=-337/625, 3-18=-1326/2093, 5-18=-273/206, 6-18=-767/493, 6-17=-343/638, 6-16=-690/426, 7-16=-273/205, 9-16=-1234/1988, 9-14=-409/723, 9-13=-3550/2250, 10-13=-298/232, 11-13=-3232/5074	<b>LOAD CASE(S)</b> Standard	
<b>NOTES</b>			



June 6, 2025

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

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

**ENGINEERING BY**  
**TRENCO**  
A MiTek Affiliat

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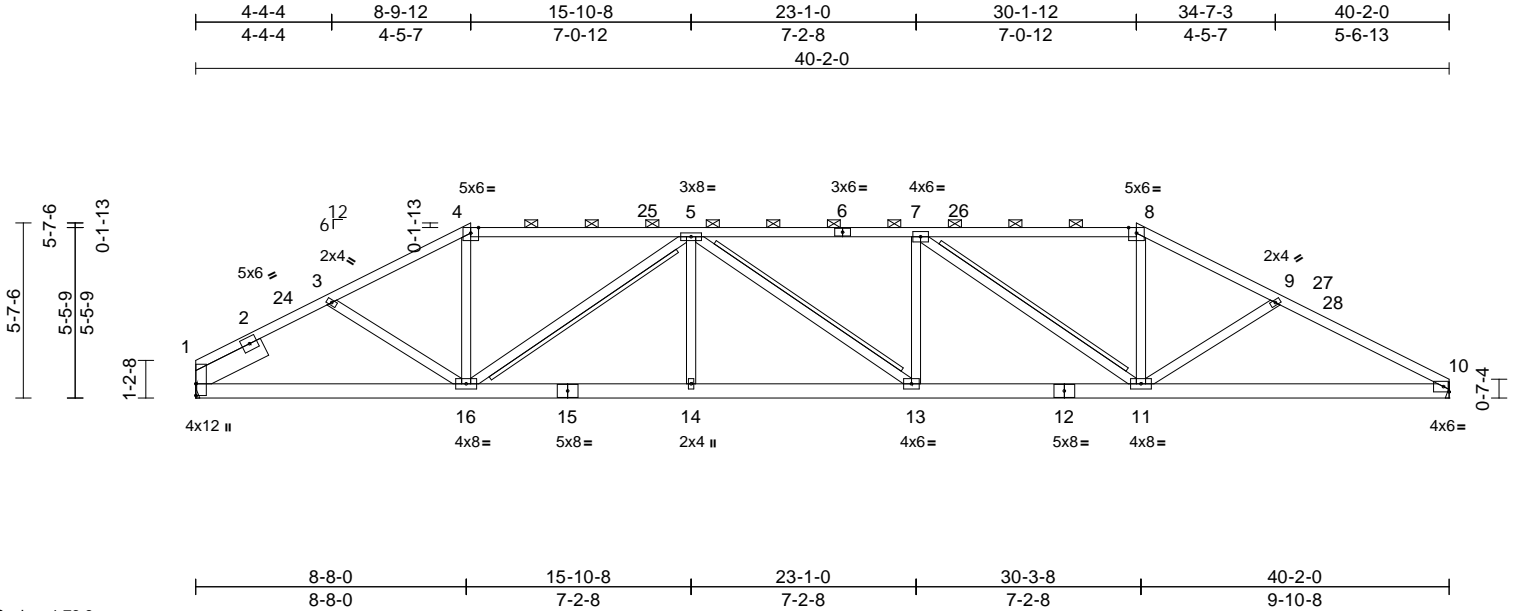
Job	Truss	Truss Type	Qty	Ply	JSJ, Cypress Prime - Elev. A (4-16-25)
4703112	A02	Hip	1	1	174008789
Job Reference (optional)					

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

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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	0.99	Vert(LL)	-0.21	13-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.43	13-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.11	10	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.24	13-14	>999	240	Weight: 246 lb	FT = 20%

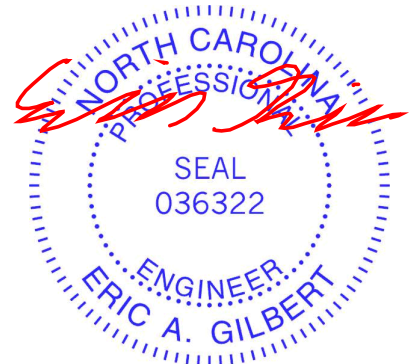
<b>LUMBER</b>	
TOP CHORD	2x4 SP No.2 *Except* 1-4:2x4 SP No.1
BOT CHORD	2x6 SP No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SPF No.2(flat)
SLIDER	Left 2x8 SP 2400F 2.0E or DSS -- 2-6-0
<b>BRACING</b>	
TOP CHORD	Structural wood sheathing directly applied or 2-1-8 oc purlins, except 2-0-0 oc purlins (2-2-0 max.): 4-8.
BOT CHORD	Rigid ceiling directly applied or 7-11-11 oc bracing.
WEBS	T-Brace: 2x4 SPF No.2 - 5-16, 5-13, 7-11 Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.
<b>REACTIONS</b> (size) 1= Mechanical, 10= Mechanical	
Max Horiz	1=-129 (LC 13)
Max Uplift	1=-355 (LC 9), 10=-347 (LC 8)
Max Grav	1=1607 (LC 1), 10=1607 (LC 1)
<b>FORCES</b> (lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-3=-2430/821, 3-4=-2421/791, 4-5=-2142/766, 5-7=-3162/1060, 7-8=-2363/831, 8-9=-2706/872, 9-10=-2956/971
BOT CHORD	1-16=-628/2049, 14-16=-845/3102, 13-14=-845/3102, 11-13=-825/3162, 10-11=-793/2574
WEBS	3-16=-91/269, 4-16=-132/672, 8-11=-177/839, 9-11=-229/268, 5-14=0/306, 5-16=-1239/454, 5-13=-67/141, 7-13=0/236, 7-11=-1066/428

#### 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) 0-0-0 to 4-2-9, Interior (1) 4-2-9 to 8-9-12, Exterior (2) 8-9-12 to 14-5-14, Interior (1) 14-5-14 to 30-1-12, Exterior (2) 30-1-12 to 35-9-14, Interior (1) 35-9-14 to 40-2-0 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
- 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 355 lb uplift at joint 1 and 347 lb uplift at joint 10.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

**LOAD CASE(S)** Standard



June 6,2025

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

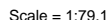
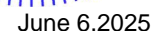
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



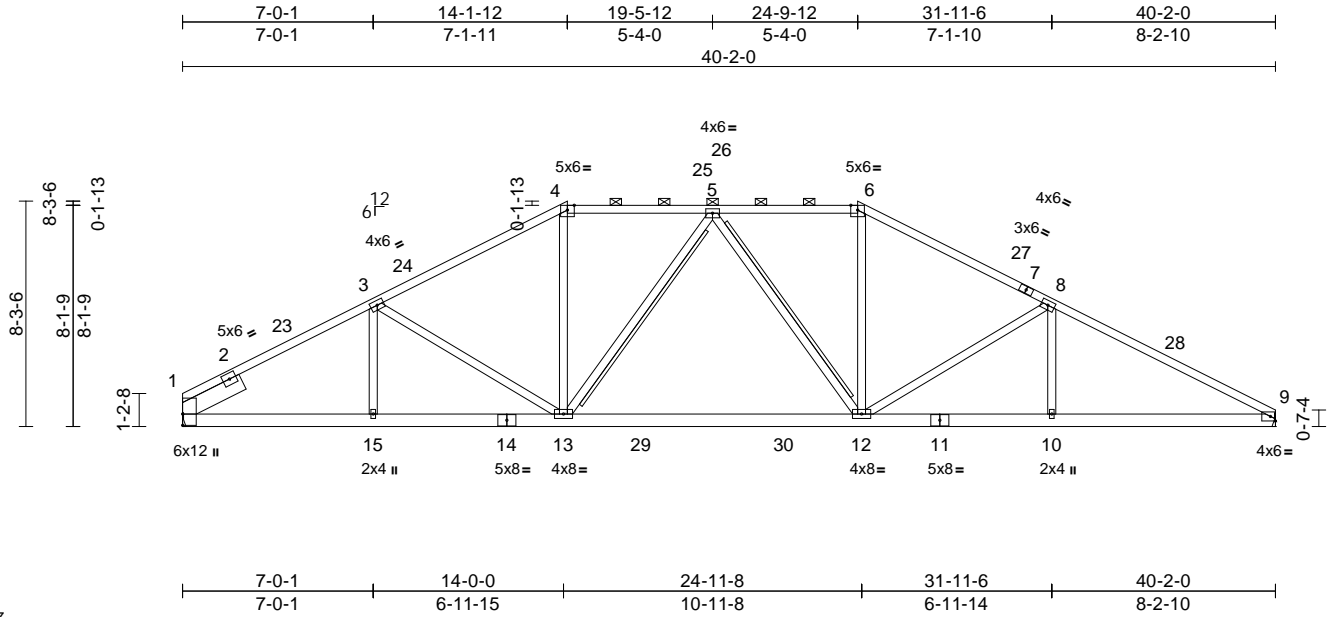
Job	Truss	Truss Type	Qty	Ply	JSJ, Cypress Prime - Elev. A (4-16-25)	174008791
4703112	A04	Hip	1	1	Job Reference (optional)	

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

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:28

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Scale = 1:84.7

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.93	Vert(LL)	-0.22	12-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.43	12-13	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.78	Horz(CT)	0.08	9	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.13	13-15	>999	240	Weight: 251 lb	FT = 20%

#### LUMBER

TOP CHORD	2x4 SP No.2 *Except* 1-4:2x4 SP No.1
BOT CHORD	2x6 SP No.2 *Except* 1-14:2x6 SP 2400F
	2.0E or 2x6 SP DSS
WEBS	2x4 SP No.3
OTHERS	2x4 SPF No.2(flat)
SLIDER	Left 2x8 SP 2400F 2.0E or DSS -- 2-6-0

#### BRACING

TOP CHORD	Structural wood sheathing directly applied, except
	2-0-0 oc purlins (3-10-9 max.): 4-6.
BOT CHORD	Rigid ceiling directly applied or 8-10-14 oc bracing.
WEBS	T-Brace: 2x4 SPF No.2 - 5-13, 5-12
	Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.
	Brace must cover 90% of web length.

REACTIONS	(size) 1= Mechanical, 9= Mechanical
	Max Horiz 1=-189 (LC 13)
	Max Uplift 1=-359 (LC 12), 9=-375 (LC 13)
	Max Grav 1=1607 (LC 1), 9=1607 (LC 1)

#### FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-3=-2448/767, 3-4=-2248/761, 4-5=-1924/758, 5-6=-1980/777, 6-8=-2324/787, 8-9=-2901/868
BOT CHORD	1-15=-578/2118, 13-15=-578/2118, 12-13=-482/2081, 10-12=-675/2500, 9-10=-675/2500
WEBS	3-15=-139/138, 3-13=-258/306, 4-13=-128/620, 5-13=-411/230, 5-12=-330/220, 6-12=-147/671, 8-12=-612/395, 8-10=0/252

#### 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) 0-0-0 to 4-0-3, Interior (1) 4-0-3 to 14-1-12, Exterior (2) 14-1-12 to 19-9-14, Interior (1) 19-9-14 to 24-9-12, Exterior (2) 24-9-12 to 30-5-14, Interior (1) 30-5-14 to 40-2-0 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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 359 lb uplift at joint 1 and 375 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.
- Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

LOAD CASE(S) Standard



June 6, 2025

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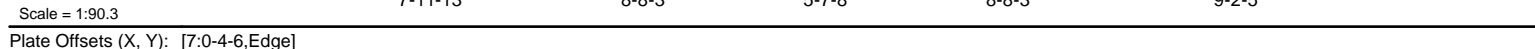
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<b>LUMBER</b>			<ul style="list-style-type: none"> <li>Unbalanced roof live loads have been considered for this design.</li> <li>Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-0 to 4-0-3, Interior (1) 4-0-3 to 16-9-12, Exterior (2) 16-9-12 to 28-0-6, Interior (1) 28-0-6 to 40-2-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces &amp; MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60</li> <li>Provide adequate drainage to prevent water ponding.</li> <li>This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.</li> <li>* 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.</li> <li>Refer to girder(s) for truss to truss connections.</li> <li>Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 389 lb uplift at joint 1 and 404 lb uplift at joint 11.</li> <li>Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.</li> <li>Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.</li> </ul>
TOP CHORD	2x4 SP No.2 *Except* 1-4:2x4 SP No.1		
BOT CHORD	2x6 SP No.2 *Except* 1-16:2x6 SP 2400F 2.0E or 2x6 SP DSS		
WEBS	2x4 SP No.3		
OTHERS	2x4 SPF No.2(flat)		
SLIDER	Left 2x8 SP 2400F 2.0E or DSS -- 2-6-0		
<b>BRACING</b>			
TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (3-9-12 max.): 6-7.		
BOT CHORD	Rigid ceiling directly applied or 8-10-12 oc bracing.		
WEBS	T-Brace: 2x4 SPF No.2 - 5-15, 7-15, 8-14		
	Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.		
	Brace must cover 90% of web length.		
<b>REACTIONS</b>			
	(size) 1= Mechanical, 11= Mechanical		
	Max Horiz 1=-219 (LC 13)		
	Max Uplift 1=-389 (LC 12), 11=-404 (LC 13)		
	Max Grav 1=1607 (LC 1), 11=1607 (LC 1)		
<b>FORCES</b>			
	(lb) - Maximum Compression/Maximum Tension		
TOP CHORD	1-3=-2479/767, 3-5=-2359/755, 5-6=-2035/751, 6-7=-1741/736, 7-8=-2058/760, 8-10=-2711/839, 10-11=-2953/871		
BOT CHORD	1-17=-638/2124, 15-17=-513/2039, 14-15=-330/1771, 12-14=-538/2181, 11-12=-678/2566		
WEBS	3-17=-106/210, 5-17=-19/219, 5-15=-456/339, 6-15=-142/594, 7-15=-219/149, 7-14=-197/666, 8-14=-614/380, 8-12=-104/476, 10-12=-311/285		
<b>LOAD CASE(S)</b>		Standard	

June 6, 2025

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

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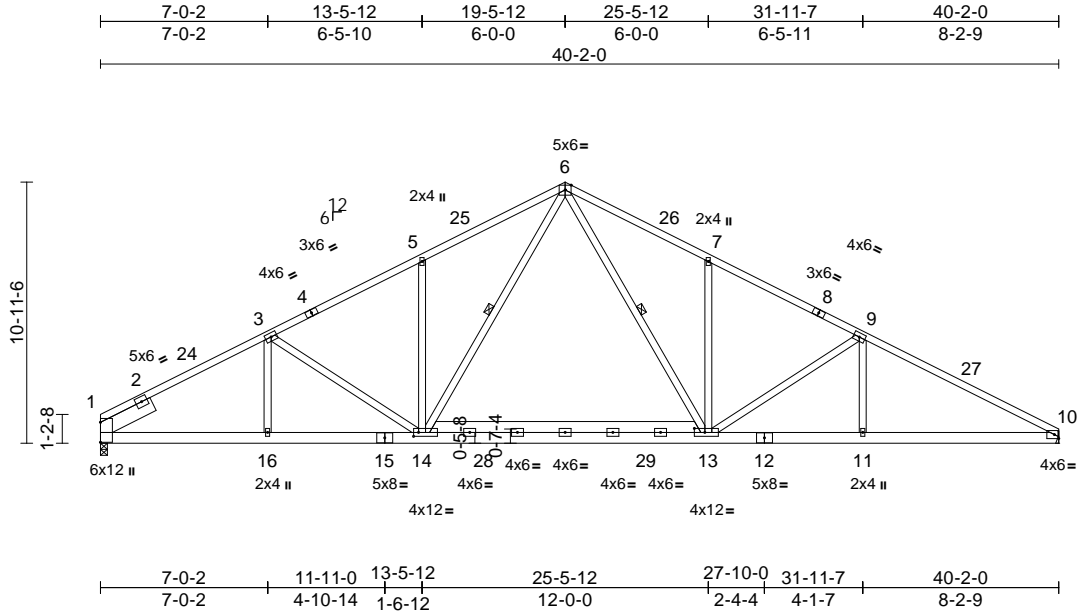


Job	Truss	Truss Type	Qty	Ply	JSJ, Cypress Prime - Elev. A (4-16-25)	174008793
4703112	A06	Common	1	1	Job Reference (optional)	

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

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:29  
ID:aCDu6yK3YBJ1P6ILFkAT3yzbzoT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:96.6

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.85	Vert(LL)	-0.19	13-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.37	13-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.67	Horz(CT)	0.06	10	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.16	13	>999	240	Weight: 285 lb	FT = 20%

#### LUMBER

TOP CHORD 2x4 SP No.2 \*Except\* 1-4:2x4 SP No.1  
BOT CHORD 2x6 SP No.2 \*Except\* 1-15:2x6 SP 2400F  
2.0E or 2x6 SP DSS  
WEBS 2x4 SP No.3  
SLIDER Left 2x8 SP 2400F 2.0E or DSS -- 2-6-0

#### BRACING

TOP CHORD Structural wood sheathing directly applied.  
BOT CHORD Rigid ceiling directly applied or 9-0-0 oc bracing.

WEBS 1 Row at midpt 6-14, 6-13

#### REACTIONS

(size) 1=0-3-8, 10= Mechanical  
Max Horiz 1=-251 (LC 13)  
Max Uplift 1=-414 (LC 12), 10=-427 (LC 13)  
Max Grav 1=1607 (LC 1), 10=1607 (LC 1)

#### FORCES

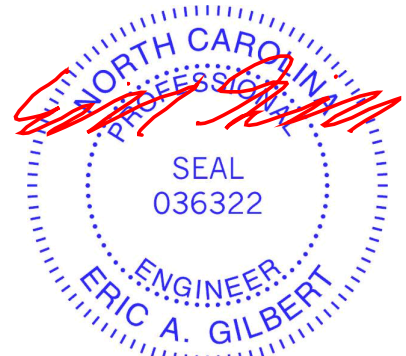
(lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-3=-2439/680, 3-5=-2270/667,  
5-6=-2283/813, 6-7=-2345/826,  
7-9=-2349/687, 9-10=-2896/759  
BOT CHORD 1-16=-662/2104, 14-16=-662/2104,  
13-14=-244/1516, 11-13=-543/2493,  
10-11=-543/2493  
WEBS 3-16=-142/103, 3-14=-242/244,  
5-14=-422/359, 6-14=-435/933,  
6-13=-468/1031, 7-13=-387/341,  
9-13=-587/349, 9-11=0/254

#### 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) 0-0-0 to 4-0-3, Interior (1) 4-0-3 to 19-5-12, Exterior (2) 19-5-12 to 23-5-15, Interior (1) 23-5-15 to 40-2-0 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
- 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) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 427 lb uplift at joint 10 and 414 lb uplift at joint 1.

LOAD CASE(S) Standard



June 6, 2025

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

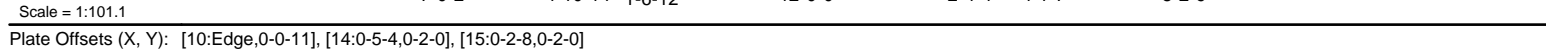
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

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Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:29 Page: 1  
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<b>LUMBER</b>		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) 0-0-0 to 4-0-3, Interior (1) 4-0-3 to 19-5-12, Exterior (2) 19-5-12 to 23-5-15, Interior (1) 23-5-15 to 41-1-0 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
TOP CHORD	2x4 SP No.2 *Except* 1-4:2x4 SP No.1	
BOT CHORD	2x6 SP No.2 *Except* 1-16:2x6 SP 2400F 2.0E or 2x6 SP DSS	
WEBS	2x4 SP No.3	
SLIDER	Left 2x8 SP 2400F 2.0E or DSS -- 2-6-0	
<b>BRACING</b>		
TOP CHORD	Structural wood sheathing directly applied.	
BOT CHORD	Rigid ceiling directly applied or 9-0-13 oc bracing.	
WEBS	1 Row at midpt 6-15, 6-14	
<b>REACTIONS</b>	(size) 1=0-3-8, 10=0-3-8 Max Horiz 1=-271 (LC 13) Max Uplift 1=-414 (LC 12), 10=-458 (LC 13) Max Grav 1=1606 (LC 1), 10=1662 (LC 1)	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 414 lb uplift at joint 1 and 458 lb uplift at joint 10.
<b>FORCES</b>	(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-3=-2438/680, 3-5=-2268/667, 5-6=-2282/812, 6-7=-2343/821, 7-9=-2347/678, 9-10=-2889/750, 10-11=0/25	
BOT CHORD	1-17=-652/2103, 15-17=-652/2103, 14-15=-234/1515, 12-14=-519/2487, 10-12=-519/2487	
WEBS	5-15=-422/359, 6-15=-435/932, 3-15=-242/244, 6-14=-467/1030, 7-14=-388/341, 9-14=-582/346, 3-17=-141/103, 9-12=0/252	

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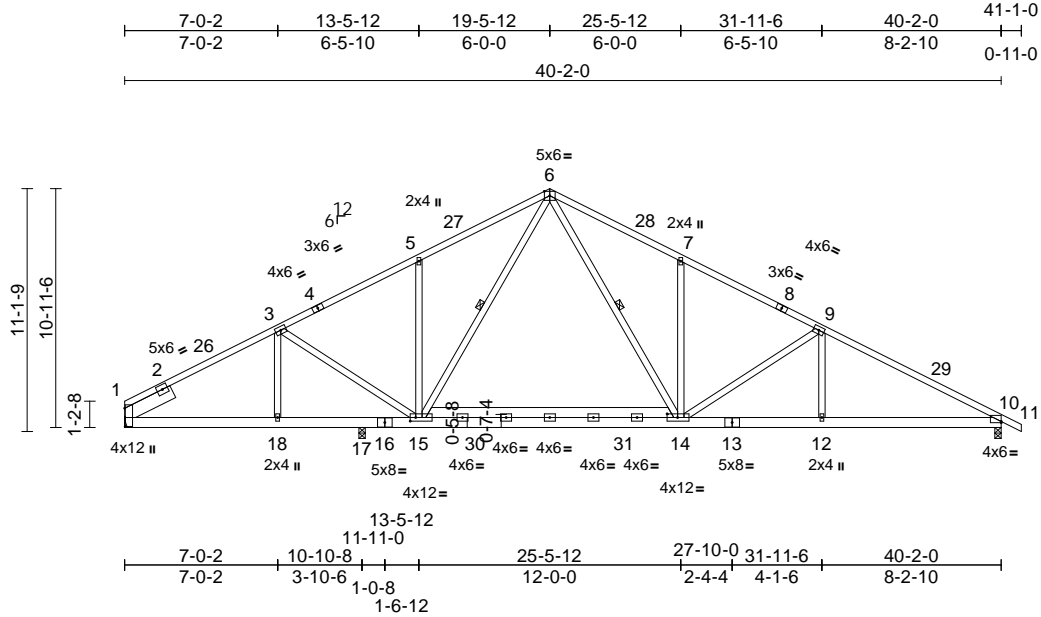
Job	Truss	Truss Type	Qty	Ply	JSJ, Cypress Prime - Elev. A (4-16-25)	174008795
4703112	A08	Common	4	1	Job Reference (optional)	

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

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:29

Page: 1

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Scale = 1:105.6

Plate Offsets (X, Y): [1:0-10-1,0-0-4], [10:Edge,0-0-11], [14:0-5-12,0-2-0], [15:0-3-0,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.71	Vert(LL)	-0.16	14-15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.31	14-15	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.67	Horz(CT)	0.04	10	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.12	14-15	>999	240	Weight: 287 lb	FT = 20%

#### LUMBER

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x6 SP No.2 \*Except\* 1-16:2x6 SP 2400F  
 2.0E or 2x6 SP DSS  
 WEBS 2x4 SP No.3  
 SLIDER Left 2x8 SP 2400F 2.0E or DSS -- 2-6-0

#### BRACING

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

WEBS 1 Row at midpt 6-15, 6-14

**REACTIONS** (size) 1= Mechanical, 10=0-3-8, 17=0-3-8  
 Max Horiz 1=-271 (LC 13)  
 Max Uplift 1=-255 (LC 12), 10=-408 (LC 13),  
 17=-219 (LC 12)  
 Max Grav 1=891 (LC 1), 10=1397 (LC 1),  
 17=981 (LC 1)

#### FORCES

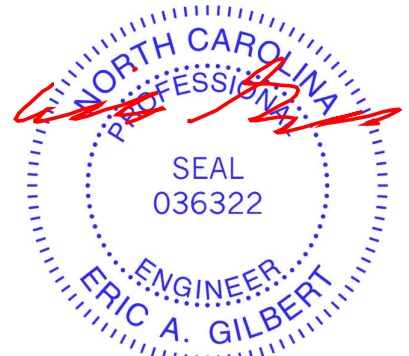
(lb) - Maximum Compression/Maximum  
 Tension  
 TOP CHORD 1-3=-1115/397, 3-5=-1144/421,  
 5-6=-1148/565, 6-7=-1779/715,  
 7-9=-1783/547, 9-10=-2330/645, 10-11=0/25  
 BOT CHORD 1-18=-393/1000, 17-18=-393/1000,  
 15-17=-393/1000, 14-15=-111/976,  
 12-14=-425/1987, 10-12=-425/1987  
 WEBS 3-18=-349/149, 3-15=-122/210,  
 5-15=-408/356, 6-15=-245/181,  
 6-14=-484/1108, 7-14=-386/341,  
 9-14=-587/348, 9-12=0/253

#### 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 Exterior (2) 0-0-0 to 4-0-3, Interior (1) 4-0-3 to  
 19-5-12, Exterior (2) 19-5-12 to 23-5-15, Interior (1)  
 23-5-15 to 41-1-0 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.
- Provide mechanical connection (by others) of truss to  
 bearing plate capable of withstanding 255 lb uplift at joint  
 1, 408 lb uplift at joint 10 and 219 lb uplift at joint 17.

**LOAD CASE(S)** Standard



June 6, 2025

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

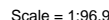
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ID:UHfZ6qBk0laxF8JzJrRYWzbzfc-RfC?PsB70Hq3NSqPanL8w3uITXbGKWRCdoi7J4ZJC?c



<b>Loading</b>	(psf)	<b>Spacing</b>	2-0-0	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.45	Vert(LL)	-0.12	13-15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.23	13-15	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.84	Horz(CT)	0.05	11	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.10	13-15	>999	240	Weight: 267 lb	FT = 20%

June 6.2025

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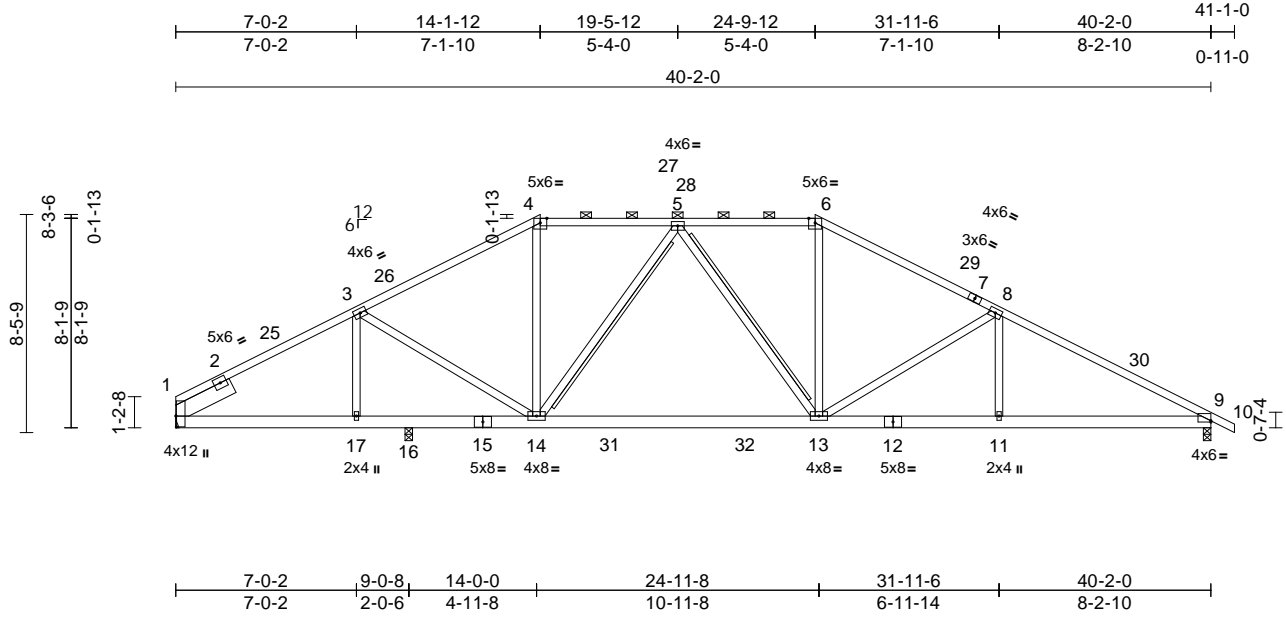
Job	Truss	Truss Type	Qty	Ply	JSJ, Cypress Prime - Elev. A (4-16-25)	174008797
4703112	A10	Hip	1	1	Job Reference (optional)	

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

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:30

Page: 1

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Scale = 1:89.4

Plate Offsets (X, Y): [1:0-5-0,0-0-4], [9:Edge,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	0.73	Vert(LL)	-0.22	13-14	>999	360	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.42	13-14	>895	240	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.78	Horz(CT)	0.06	9	n/a	n/a	
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.12	13-14	>999	240	Weight: 253 lb FT = 20%

#### LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x6 SP No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SPF No.2(flat)
SLIDER	Left 2x8 SP 2400F 2.0E or DSS -- 2-6-0

#### BRACING

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (4-4-0 max.): 4-6.
BOT CHORD	Rigid ceiling directly applied or 9-8-1 oc bracing.
WEBS	T-Brace: 2x4 SPF No.2 - 5-14, 5-13 Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.

REACTIONS	(size) 1= Mechanical, 9=0-3-8, 16=0-3-8 Max Horiz 1=-210 (LC 13) Max Uplift 1=-265 (LC 12), 9=-384 (LC 13), 16=-121 (LC 12) Max Grav 1=959 (LC 1), 9=1474 (LC 1), 16=835 (LC 1)
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#### FORCES

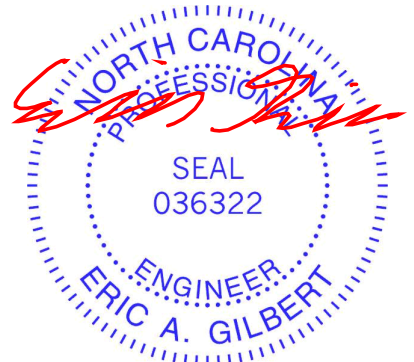
TOP CHORD	(lb) - Maximum Compression/Maximum Tension 1-3=-1218/485, 3-4=-1505/586, 4-5=-1257/573, 5-6=-1623/696, 6-8=-1923/695, 8-9=-2497/775, 9-10=0/25
BOT CHORD	1-17=-360/1041, 16-17=-360/1041, 14-16=-360/1041, 13-14=-339/1567, 11-13=-576/2140, 9-11=-576/2140
WEBS	4-14=-56/364, 5-14=-628/258, 5-13=-91/220, 6-13=-89/512, 8-13=-611/393, 8-11=0/249, 3-17=-651/294, 3-14=-114/418

#### 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) 0-0-0 to 4-0-3, Interior (1) 4-0-3 to 14-1-12, Exterior (2) 14-1-12 to 19-9-14, Interior (1) 19-9-14 to 24-9-12, Exterior (2) 24-9-12 to 30-5-14, Interior (1) 30-5-14 to 41-1-0 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 265 lb uplift at joint 1, 384 lb uplift at joint 9 and 121 lb uplift at joint 16.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

LOAD CASE(S) Standard



June 6,2025

**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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ENGINEERING BY  
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Edenton, NC 27932



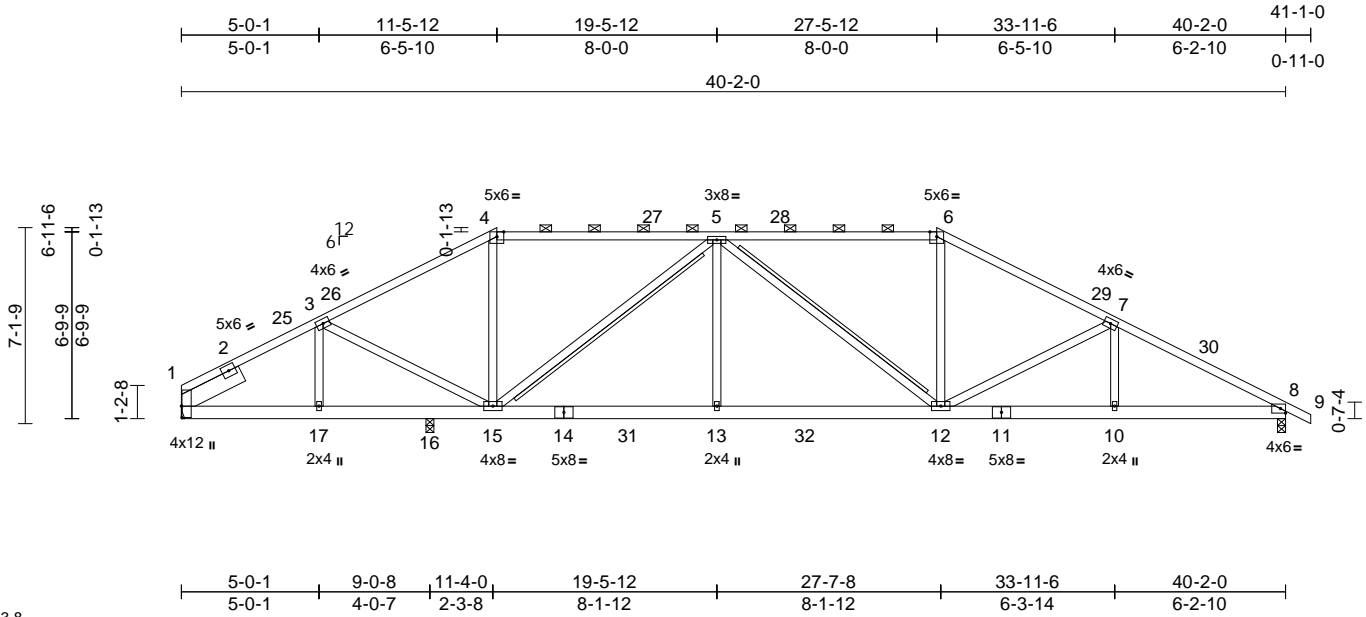
Job	Truss	Truss Type	Qty	Ply	JSJ, Cypress Prime - Elev. A (4-16-25)	174008798
4703112	A11	Hip	1	1	Job Reference (optional)	

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

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:30

Page: 1

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Scale = 1:83.8

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.71	Vert(LL)	-0.12	13-15	>999	360	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.26	13-15	>999	240	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.79	Horz(CT)	0.06	8	n/a	n/a	
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.12	13-15	>999	240	Weight: 253 lb FT = 20%

#### LUMBER

TOP CHORD	2x4 SP No.2 *Except* 4-6:2x4 SP No.1
BOT CHORD	2x6 SP No.2 *Except* 1-14:2x6 SP 2400F 2.0E or 2x6 SP DSS
WEBS	2x4 SP No.3
OTHERS	2x4 SPF No.2(flat)
SLIDER	Left 2x8 SP 2400F 2.0E or DSS -- 2-6-0

#### BRACING

TOP CHORD	Structural wood sheathing directly applied or 3-2-10 oc purlins, except 2-0-0 oc purlins (3-8-8 max.): 4-6.
BOT CHORD	Rigid ceiling directly applied or 9-6-0 oc bracing.
WEBS	T-Brace: 2x4 SPF No.2 - 5-15, 5-12 Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c.,with 3in minimum end distance. Brace must cover 90% of web length.

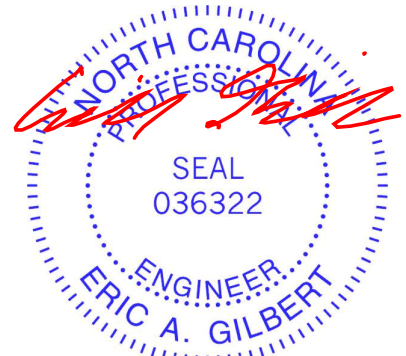
REACTIONS	(size) 1= Mechanical, 8=0-3-8, 16=0-3-8 Max Horiz 1=180 (LC 13) Max Uplift 1=196 (LC 12), 8=347 (LC 13), 16=198 (LC 9) Max Grav 1=793 (LC 1), 8=1426 (LC 1), 16=1049 (LC 1)
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FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-3=845/358, 3-4=1137/449, 4-5=944/451, 5-6=1719/697, 6-7=2011/700, 7-8=2464/770, 8-9=0/25
BOT CHORD	1-17=-259/788, 16-17=-259/788, 15-16=-259/788, 13-15=-411/1843, 12-13=-411/1843, 10-12=-599/2134, 8-10=-599/2134
WEBS	4-15=0/215, 5-15=-1208/373, 5-13=0/440, 5-12=-367/209, 6-12=-53/511, 7-12=-463/319, 7-10=0/193, 3-17=-487/252, 3-15=-132/329

#### 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) 0-0-0 to 4-0-3, Interior (1) 4-0-3 to 11-5-12, Exterior (2) 11-5-12 to 17-1-14, Interior (1) 17-1-14 to 27-5-12, Exterior (2) 27-5-12 to 33-1-14, Interior (1) 33-1-14 to 41-1-0 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) 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, with BCDL = 10.0psf.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 196 lb uplift at joint 1, 347 lb uplift at joint 8 and 198 lb uplift at joint 16.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 9) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

LOAD CASE(S) Standard



June 6,2025

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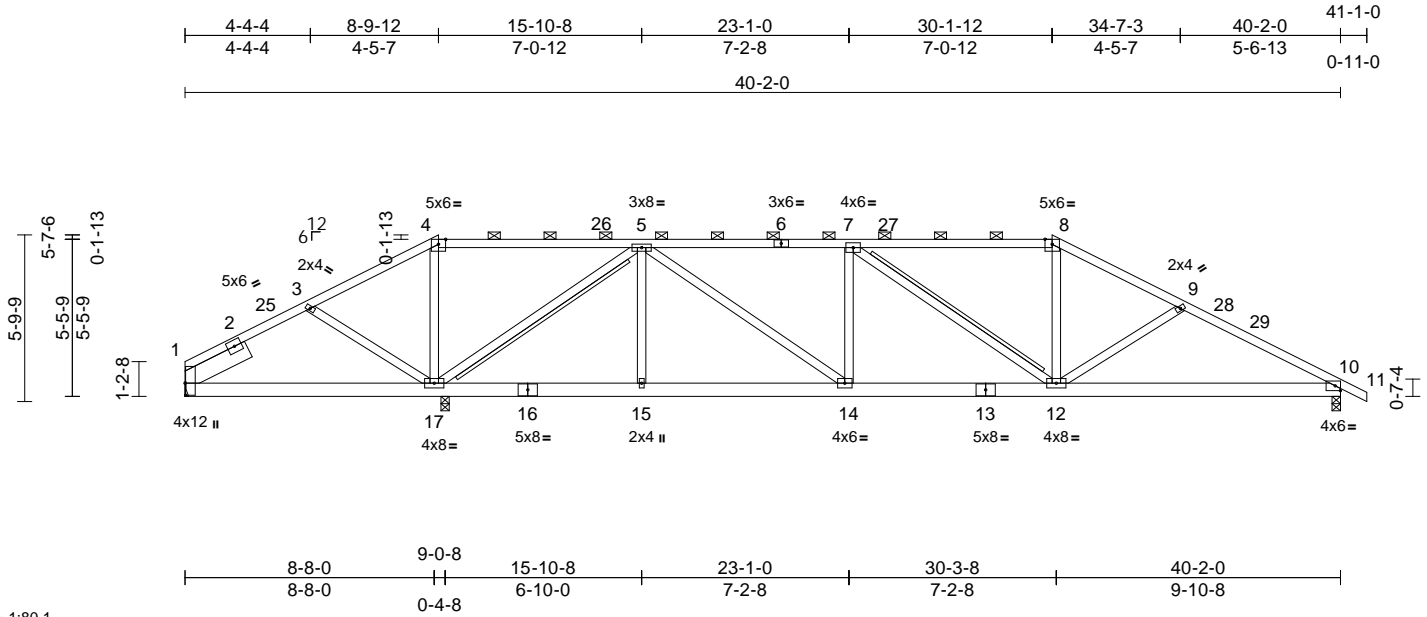


Job	Truss	Truss Type	Qty	Ply	JSJ, Cypress Prime - Elev. A (4-16-25)	
4703112	A12	Hip	1	1	Job Reference (optional)	I74008799

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

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:31  
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Page: 1



Scale = 1:80.1

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

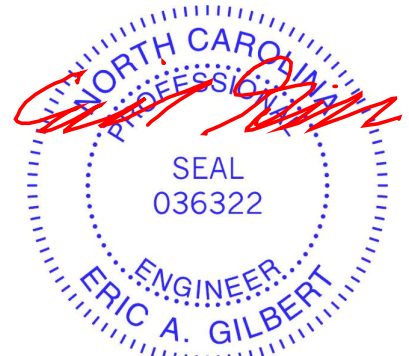
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.77	Vert(LL)	-0.09	12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.17	12-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.04	10	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.10	12-14	>999	240	Weight: 247 lb	FT = 20%

<b>LUMBER</b>		
TOP CHORD	2x4	SP No.2
BOT CHORD	2x6	SP No.2
WEBS	2x4	SP No.3
OTHERS	2x4	SPF No.2(flat)
SLIDER	Left 2x8	SP 2400F 2.0E or DSS -- 2-6-0
<b>BRACING</b>		
TOP CHORD	Structural wood sheathing directly applied or 3-11-5 oc purlins, except 2-0-0 oc purlins (3-7-9 max.): 4-8.	
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 1-17.	
WEBS	T-Brace:	2x4 SPF No.2 - 5-17, 7-12
	Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.	
<b>REACTIONS</b> (size) 1= Mechanical, 10=0-3-8, 17=0-3-8		
	Max Horiz	1=-150 (LC 13)
	Max Uplift	1=-203 (LC 24), 10=-285 (LC 13), 17=-570 (LC 9)
	Max Grav	1=149 (LC 8), 10=1212 (LC 24), 17=2111 (LC 1)
<b>FORCES</b> (lb) - Maximum Compression/Maximum Tension		
TOP CHORD	1-3=-400/531, 3-4=-213/740, 4-5=-144/601, 5-7=-1653/599, 7-8=-1502/568, 8-9=-1739/576, 9-10=-2009/682, 10-11=0/25	
BOT CHORD	1-17=-423/288, 15-17=-240/944, 14-15=-240/944, 12-14=-404/1653, 10-12=-520/1732	
WEBS	3-17=-380/276, 4-17=-615/293, 8-12=-43/474, 9-12=-264/271, 5-15=0/263, 5-17=-1857/622, 5-14=-279/878, 7-14=-361/239, 7-12=-309/211	

#### 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) 0-0-0 to 4-2-9, Interior (1) 4-2-9 to 8-9-12, Exterior (2) 8-9-12 to 14-5-14, Interior (1) 14-5-14 to 30-1-12, Exterior (2) 30-1-12 to 35-9-14, Interior (1) 35-9-14 to 41-1-0 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 203 lb uplift at joint 1, 570 lb uplift at joint 17 and 285 lb uplift at joint 10.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

**LOAD CASE(S)** Standard



June 6,2025

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Job	Truss	Truss Type	Qty	Ply	JSJ, Cypress Prime - Elev. A (4-16-25)	174008800
4703112	A13	Roof Special Girder	1	2	Job Reference (optional)	

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

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:31

Page: 1

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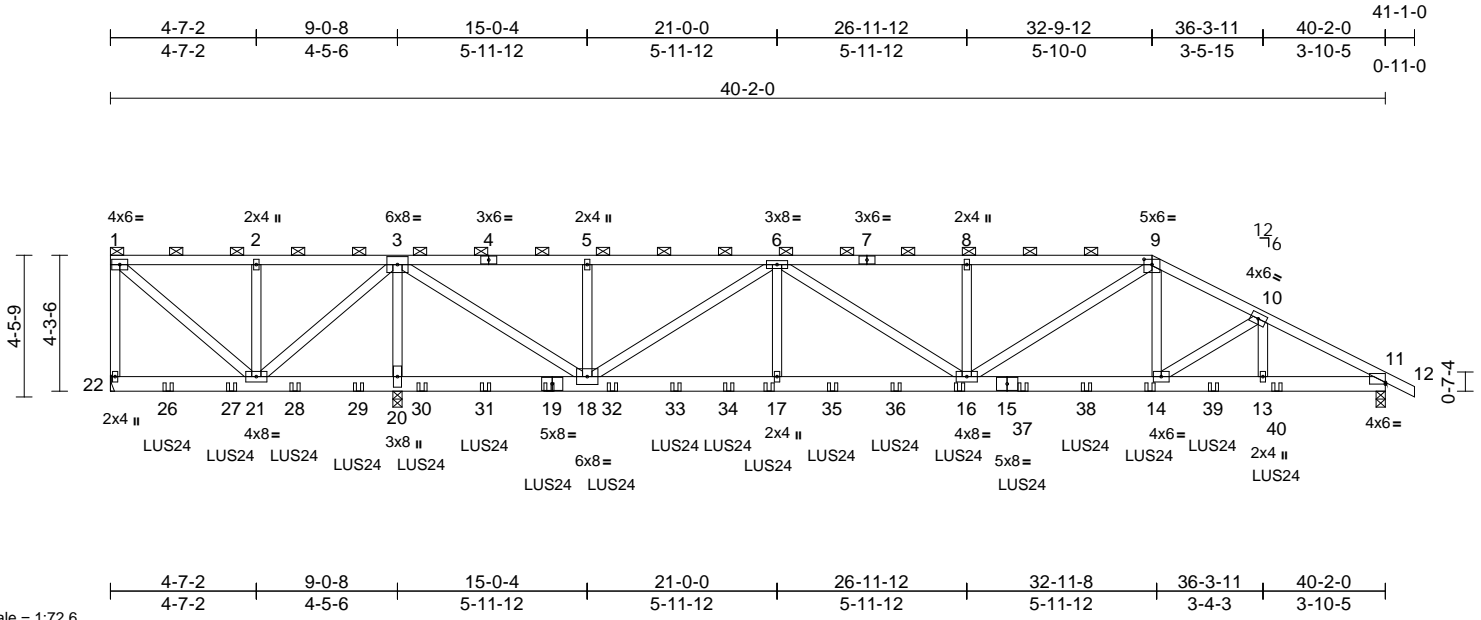


Plate Offsets (X, Y): [9:0-3-0,0-2-0], [11:Edge,0-0-11]

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	0.36	Vert(LL)	-0.12	16-17	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.22	16-17	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.56	Horz(CT)	0.02	11	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.20	16-17	>999	240	Weight: 515 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 end verticals, and 2-0-0 oc purlins (5-11-3 max.): 1-9.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 6-0-0 oc bracing: 20-21,18-20.

**REACTIONS** (size) 11=0-3-8, 20=0-3-8, 22= Mechanical  
Max Horiz 22=-213 (LC 9)  
Max Uplift 11=-1125 (LC 4), 20=-3169 (LC 4), 22=-620 (LC 1)  
Max Grav 11=2192 (LC 1), 20=5141 (LC 1), 22=362 (LC 4)

#### FORCES

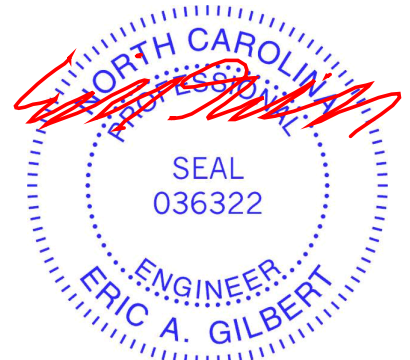
(lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-22=-448/794, 1-2=-592/1017, 2-3=-592/1017, 3-5=-1051/718, 5-6=-1051/718, 6-8=-4069/2520, 8-9=-4069/2520, 9-10=-3663/2135, 10-11=-3856/2104, 11-12=0/25  
BOT CHORD 21-22=0/215, 20-21=-2816/1805, 18-20=-2816/1805, 17-18=-2053/3409, 16-17=-2053/3409, 14-16=-1790/3218, 13-14=-1818/3386, 11-13=-1818/3386  
WEBS 9-14=-466/794, 10-14=-165/237, 10-13=-34/86, 3-20=-4436/2740, 5-18=-355/252, 3-18=-2859/4604, 6-18=-2831/1736, 6-17=-483/864, 6-16=-416/788, 8-16=-374/261, 9-16=-762/1108, 3-21=-1442/2394, 2-21=-259/190, 1-21=-1373/801

#### 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 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 620 lb uplift at joint 22, 3169 lb uplift at joint 20 and 1125 lb uplift at joint 11.
- 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 LUS24 (4-10d Girder, 2-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-9-12 from the left end to 36-9-0 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: 1-9=-60, 9-12=-60, 22-23=-20  
Concentrated Loads (lb)  
Vert: 19=-179 (B), 14=-179 (B), 17=-179 (B), 16=-179 (B), 26=-179 (B), 27=-179 (B), 28=-179 (B), 29=-179 (B), 30=-179 (B), 31=-179 (B), 32=-179 (B), 33=-179 (B), 34=-179 (B), 35=-179 (B), 36=-179 (B), 37=-179 (B), 38=-179 (B), 39=-179 (B), 40=-227 (B)



June 6,2025

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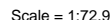
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Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:32 Page: 1  
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<b>Loading</b>	(psf)	<b>Spacing</b>	2-0-0	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.01	18	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 167 lb	FT = 20%

**TOP CHORD** 1-2=0/31, 2-3=-73/70, 3-4=-184/168,  
4-5=-153/149, 5-6=-138/134, 6-7=-122/143,  
7-8=-124/174, 8-9=-173/210, 9-10=-203/238,  
10-11=-203/238, 11-12=-172/200,  
12-13=-124/142, 13-14=-80/90,  
14-15=-54/49, 15-16=-67/58, 16-17=-117/80,  
17-18=-52/46, 18-19=0/31

**BOT CHORD** 2-34=-122/190, 33-34=-122/190,  
32-33=-122/190, 31-32=-122/190,  
30-31=-122/190, 29-30=-122/190,  
27-29=-122/190, 26-27=-122/190,  
25-26=-122/190, 24-25=-122/190,  
23-24=-122/190, 22-23=-122/190,  
21-22=-122/190, 20-21=-122/190,  
18-20=-122/190

**WEBS** 10-27=-186/119, 9-28=-100/67, 8-29=-114/92,  
7-30=-105/84, 6-31=-105/84, 5-32=-105/84,  
4-33=-106/83, 3-34=-140/142, 11-26=-92/60,  
12-25=-114/95, 13-24=-105/84,  
14-23=-105/84, 15-22=-105/84,  
16-21=-106/84, 17-20=-144/126

- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 1'-4" o.c.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* 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.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 110 lb uplift at joint 2, 35 lb uplift at joint 18, 3 lb uplift at joint 27, 51 lb uplift at joint 28, 75 lb uplift at joint 29, 68 lb uplift at joint 30, 68 lb uplift at joint 31, 70 lb uplift at joint 32, 61 lb uplift at joint 33, 153 lb uplift at joint 34, 44 lb uplift at joint 26, 79 lb uplift at joint 25, 68 lb uplift at joint 24, 68 lb uplift at joint 23, 70 lb uplift at joint 22, 62 lb uplift at joint 21, 132 lb uplift at joint 20, 110 lb uplift at joint 2 and 35 lb uplift at joint 18.

LOAD CASE(S) Standard

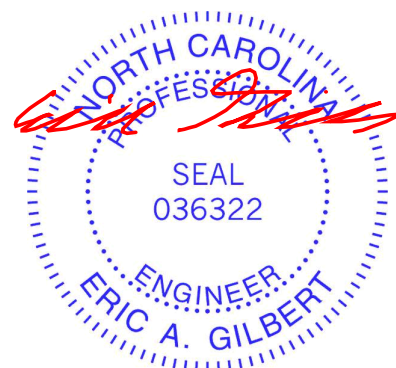
<b>REACTIONS</b>	(size)	2=21-3-0, 18=21-3-0, 20=21-3-0, 21=21-3-0, 22=21-3-0, 23=21-3-0, 24=21-3-0, 25=21-3-0, 26=21-3-0, 27=21-3-0, 28=21-3-0, 29=21-3-0, 30=21-3-0, 31=21-3-0, 32=21-3-0, 33=21-3-0, 34=21-3-0
	Max Horiz	2=-257 (LC 10)
	Max Uplift	2=-110 (LC 8), 18=-35 (LC 9), 20=-132 (LC 13), 21=-62 (LC 13), 22=-70 (LC 20), 23=-68 (LC 13), 24=-68 (LC 13), 25=-79 (LC 13), 26=-44 (LC 13), 27=-3 (LC 11), 28=-51 (LC 12), 29=-75 (LC 12), 30=-68 (LC 12), 31=-68 (LC 12), 32=-70 (LC 12), 33=-61 (LC 12), 34=-153 (LC 12)
	Max Grav	2=199 (LC 20), 18=142 (LC 22), 20=131 (LC 20), 21=120 (LC 20), 22=121 (LC 20), 23=120 (LC 20), 24=120 (LC 20), 25=123 (LC 20), 26=119 (LC 20), 27=196 (LC 13), 28=127 (LC 19), 29=121 (LC 19), 30=120 (LC 19), 31=120 (LC 19), 32=121 (LC 19), 33=118 (LC 19), 34=154 (LC 19)

## NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust)  
Vasd=103mph; TCDF=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 10-7-8, Corner (3) 10-7-8 to 13-7-8, Exterior (2) 13-7-8 to 22-2-0 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
- 3) 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.
- 4) All plates are 2x4 (II) MT20 unless otherwise indicated.

## FORCES

(Ib) - Maximum Compression/Maximum Tension



June 6, 2025



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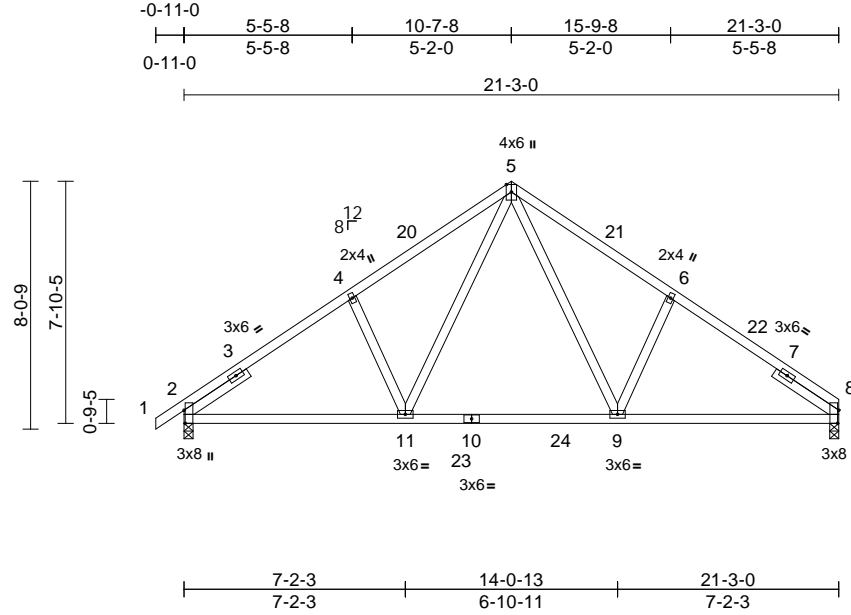
Job	Truss	Truss Type	Qty	Ply	JSJ, Cypress Prime - Elev. A (4-16-25)	
4703112	B02	Common	2	1	Job Reference (optional)	I74008802

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

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:32

Page: 1

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Scale = 1:74.8

Plate Offsets (X, Y): [2:0-5-2,Edge], [8:0-5-2,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	0.32	Vert(LL)	-0.11	9-11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.17	9-11	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.03	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.03	11-18	>999	240	Weight: 115 lb	FT = 20%

#### LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3
SLIDER	Left 2x4 SP No.2 -- 2-6-0, Right 2x4 SP No.2 -- 2-6-0

#### BRACING

TOP CHORD	Structural wood sheathing directly applied or 5-2-11 oc purlins.
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=250 (LC 9)
Max Uplift	2=-240 (LC 12), 8=-209 (LC 13)
Max Grav	2=906 (LC 1), 8=849 (LC 1)

#### FORCES

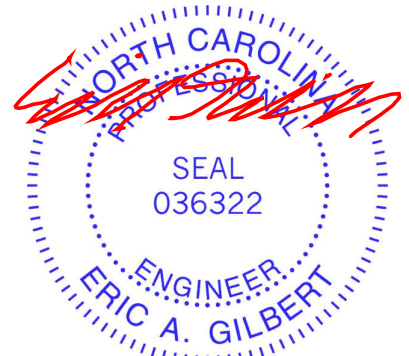
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/31, 2-4=-1071/307, 4-5=-1125/379, 5-6=-1125/390, 6-8=-1092/317
BOT CHORD	2-11=-295/1009, 9-11=-81/674, 8-9=-164/868
WEBS	5-9=-224/523, 6-9=-348/304, 5-11=-221/517, 4-11=-348/303

#### 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 10-7-8, Exterior (2) 10-7-8 to 13-7-8, Interior (1) 13-7-8 to 21-3-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 209 lb uplift at joint 8 and 240 lb uplift at joint 2.

LOAD CASE(S) Standard



June 6,2025

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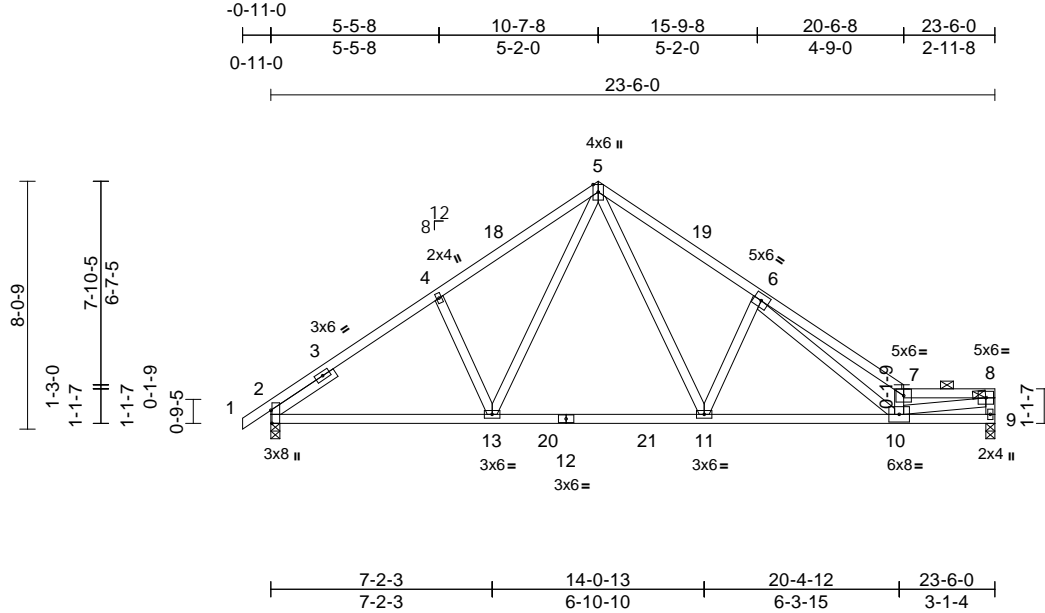


Job	Truss	Truss Type	Qty	Ply	JSJ, Cypress Prime - Elev. A (4-16-25)	174008803
4703112	B03	Roof Special	1	1	Job Reference (optional)	

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

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:32  
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Page: 1



Scale = 1:74.8

Plate Offsets (X, Y): [2:0-5-2,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	0.47	Vert(LL)	-0.14	11-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.30	10-11	>941	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.03	9	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.16	10-11	>999	240	Weight: 133 lb	FT = 20%

#### LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3 *Except* 8-9,10-8:2x4 SP No.2
SLIDER	Left 2x4 SP No.2 -- 2-6-0

#### BRACING

TOP CHORD	Structural wood sheathing directly applied or 3-0-14 oc purlins, except end verticals, and 2-0-0 oc purlins (3-4-14 max.): 7-8.
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=247 (LC 9)
	Max Uplift 2=-253 (LC 12), 9=-247 (LC 13)
	Max Grav 2=990 (LC 1), 9=933 (LC 1)

#### FORCES

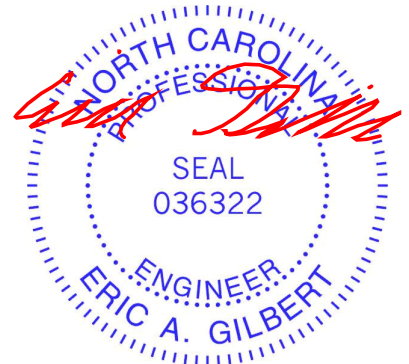
	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/31, 2-4=-1221/337, 4-5=-1253/408, 5-6=-1399/447, 6-7=-2750/737, 7-8=-2738/688, 8-9=-852/239
BOT CHORD	2-13=-323/1103, 11-13=-111/777, 10-11=-266/1216, 9-10=-52/179
WEBS	4-13=-342/302, 5-13=-217/497, 5-11=-286/782, 6-11=-587/366, 6-10=-387/1397, 7-10=-1698/543, 8-10=-658/2649

#### 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 10-7-8, Exterior (2) 10-7-8 to 13-7-8, Interior (1) 13-7-8 to 23-4-4 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 247 lb uplift at joint 9 and 253 lb uplift at joint 2.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



June 6,2025

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

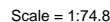
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

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Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:33 Page: 1  
ID:00uq2ev6z6EFdI73Q00b7Lzbz-CH-RfC?PsB70Hq3NSqPanL8w3uITXBGKWrCDoI7J4zJC?f



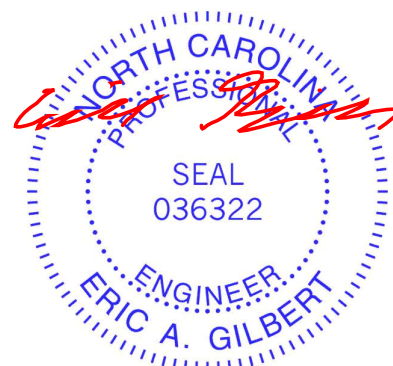
<b>Loading</b>	(psf)	<b>Spacing</b>	2-0-0	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.13	11-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.23	11-13	>999	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.88	Horz(CT)	0.03	9	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.11	10-11	>999	240	Weight: 134 lb	FT = 20%

- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* 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.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 249 lb uplift at joint 9 and 253 lb uplift at joint 2.
- 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

## 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 10-7-8, Exterior (2) 10-7-8 to 13-7-8, Interior (1) 13-7-8 to 23-4-4 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



June 6.2025

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

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

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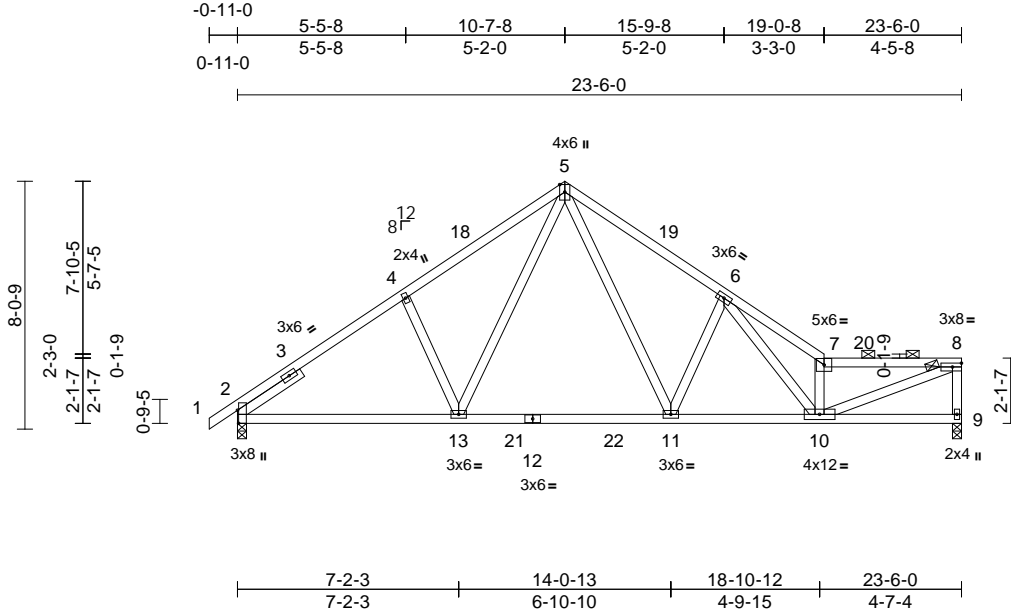
Job	Truss	Truss Type	Qty	Ply	JSJ, Cypress Prime - Elev. A (4-16-25)	174008805
4703112	B05	Roof Special	1	1	Job Reference (optional)	

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

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Scale = 1:74.8

Plate Offsets (X, Y): [2:0-5-2,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	0.38	Vert(LL)	-0.13	11-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.22	11-13	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.78	Horz(CT)	0.03	9	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.09	10-11	>999	240	Weight: 136 lb	FT = 20%

#### LUMBER

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.3 \*Except\* 8-9:2x4 SP No.2  
 SLIDER Left 2x4 SP No.2 -- 2-6-0

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 3-10-1 oc purlins, except end verticals, and 2-0-0 oc purlins (3-11-7 max.): 7-8.  
 BOT CHORD Rigid ceiling directly applied or 9-9-13 oc bracing.

**REACTIONS** (size) 2=0-3-8, 9=0-3-8  
 Max Horiz 2=243 (LC 9)  
 Max Uplift 2=-252 (LC 12), 9=-250 (LC 13)  
 Max Grav 2=990 (LC 1), 9=933 (LC 1)

#### FORCES

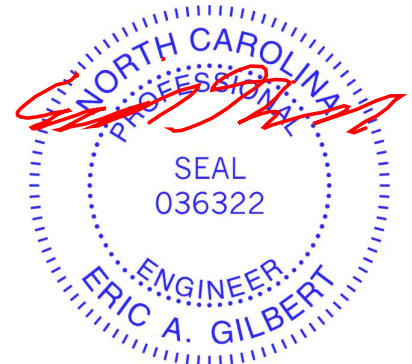
(lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/31, 2-4=-1223/334, 4-5=-1242/406, 5-6=-1357/440, 6-7=-2085/563, 7-8=-1805/452, 8-9=-874/272  
 BOT CHORD 2-13=-350/1093, 11-13=-139/766, 10-11=-286/1191, 9-10=-21/62  
 WEBS 4-13=-341/302, 5-13=-216/502, 6-10=-241/842, 7-10=-1331/432, 8-10=-465/1882, 5-11=-273/732, 6-11=-568/343

#### 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 10-7-8, Exterior (2) 10-7-8 to 13-7-8, Interior (1) 13-7-8 to 23-4-4 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 250 lb uplift at joint 9 and 252 lb uplift at joint 2.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard



June 6, 2025

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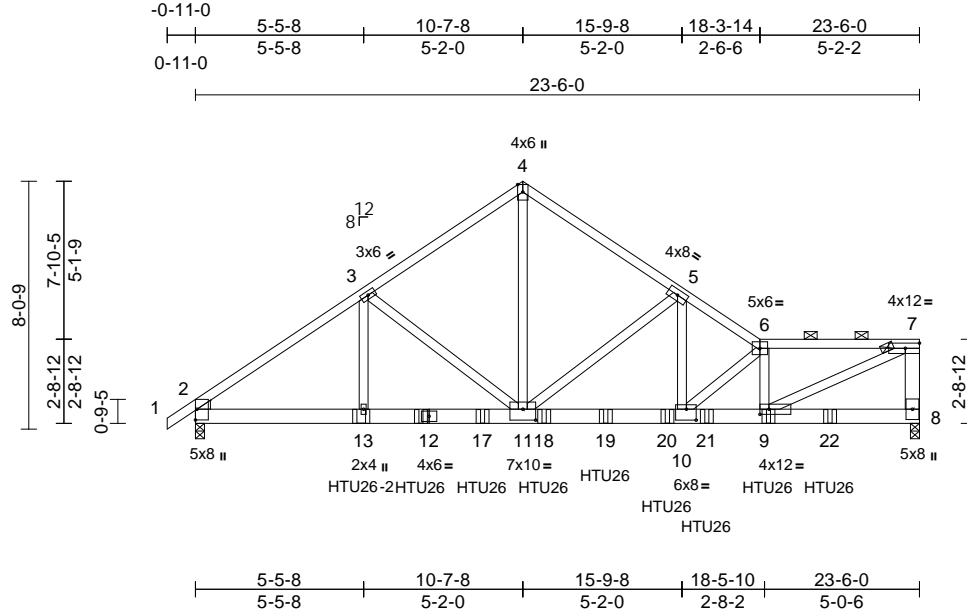
Job	Truss	Truss Type	Qty	Ply	JSJ, Cypress Prime - Elev. A (4-16-25)	174008806
4703112	B06	Roof Special Girder	1	2	Job Reference (optional)	

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

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:33

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Scale = 1:74.8

Plate Offsets (X, Y): [2:Edge,0-0-9], [9:0-3-8,0-2-0], [10:0-3-12,0-4-4], [11:0-5-0,0-4-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.14	10-11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.27	10-11	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.73	Horz(CT)	0.04	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.17	10-11	>999	240	Weight: 314 lb	FT = 20%

<b>LUMBER</b>	
TOP CHORD	2x4 SP No.2
BOT CHORD	2x6 SP No.2 *Except* 12-8:2x6 SP 2400F 2.0E or 2x6 SP DSS
WEBS	2x4 SP No.2 *Except* 7-8:2x6 SP No.2, 9-7:2x4 SP No.1
WEDGE	Left: 2x4 SP No.3
<b>BRACING</b>	
TOP CHORD	Structural wood sheathing directly applied or 4-4-7 oc purlins, except end verticals, and 2-0-0 oc purlins (3-10-7 max.): 6-7.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
<b>REACTIONS</b>	(size) 2=0-3-8, 8=0-3-8 Max Horiz 2=245 (LC 8) Max Uplift 2=-1218 (LC 8), 8=-1520 (LC 9) Max Grav 2=2785 (LC 15), 8=4635 (LC 1)
<b>FORCES</b>	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/31, 2-3=-4127/1848, 3-4=-4287/1612, 4-5=-4291/1604, 5-6=-7677/2572, 6-7=-8154/2670, 7-8=-4049/1376
BOT CHORD	2-13=-1634/3485, 11-13=-1634/3485, 10-11=-2124/6419, 9-10=-2728/8313, 8-9=-98/281
WEBS	3-13=-753/340, 3-11=-420/584, 4-11=-1601/4344, 5-11=-3695/1275, 5-10=-1127/3854, 6-10=-2586/826, 6-9=-2575/944, 7-9=-2864/8767

#### 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, 2x6 - 2 rows staggered 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 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 1520 lb uplift at joint 8 and 1218 lb uplift at joint 2.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Use Simpson Strong-Tie HTU26-2 (20-10d Girder, 14-10d Truss) or equivalent at 5-4-9 from the left end to connect truss(es) to back face of bottom chord.
- Use Simpson Strong-Tie HTU26 (20-10dx1 1/2 Girder, 11-10dx1 1/2 Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 7-3-13 from the left end to 20-7-3 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: 1-4=-60, 4-6=-60, 6-7=-60, 8-14=-20

#### Concentrated Loads (lb)

Vert: 12=28 (B), 13=312 (B), 9=-871 (B), 17=-773 (B), 18=-939 (B), 19=-640 (B), 20=-871 (B), 21=-871 (B), 22=-871 (B)



June 6, 2025

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

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Edenton, NC 27932

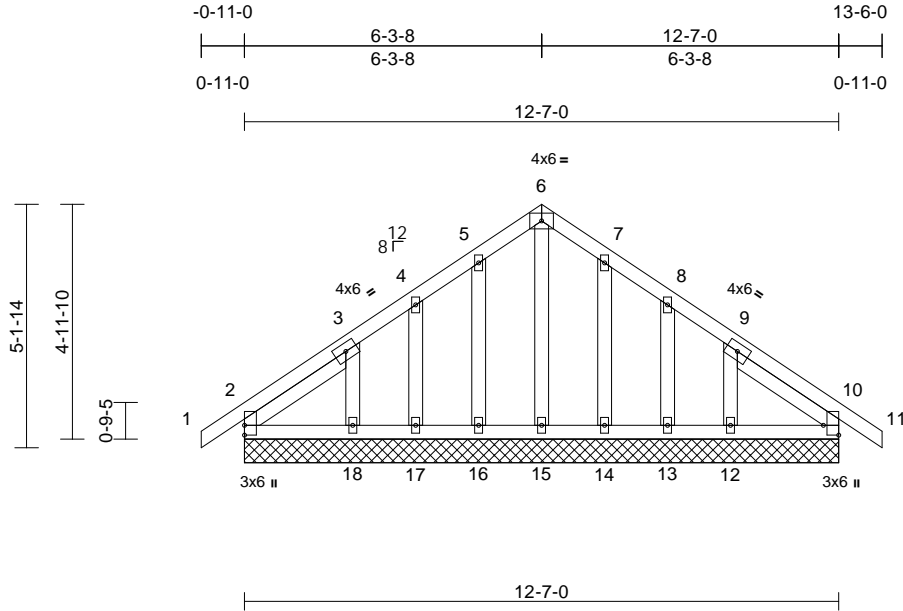


Job	Truss	Truss Type	Qty	Ply	JSJ, Cypress Prime - Elev. A (4-16-25)	174008807
4703112	C01	Common Supported Gable	1	1	Job Reference (optional)	

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

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:34  
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Page: 1



Scale = 1:48.8

Plate Offsets (X, Y): [10:Edge,0-3-14]

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	0.06	Vert(LL)	n/a	-	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	10	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS						Weight: 83 lb	FT = 20%

#### LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
OTHERS	2x4 SP No.3
SLIDER	Left 2x4 SP No.2 -- 2-7-13, Right 2x4 SP No.2 -- 2-7-13

#### 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=12-7-0, 10=12-7-0, 12=12-7-0, 13=12-7-0, 14=12-7-0, 15=12-7-0, 16=12-7-0, 17=12-7-0, 18=12-7-0
Max Horiz		2=160 (LC 11)
Max Uplift		2=-40 (LC 13), 10=-12 (LC 13), 12=-129 (LC 13), 13=-56 (LC 13), 14=-63 (LC 13), 16=-66 (LC 12), 17=-54 (LC 12), 18=-137 (LC 12)
Max Grav		2=165 (LC 20), 10=162 (LC 1), 12=189 (LC 20), 13=100 (LC 20), 14=127 (LC 20), 15=124 (LC 13), 16=131 (LC 19), 17=97 (LC 19), 18=199 (LC 19)

#### FORCES

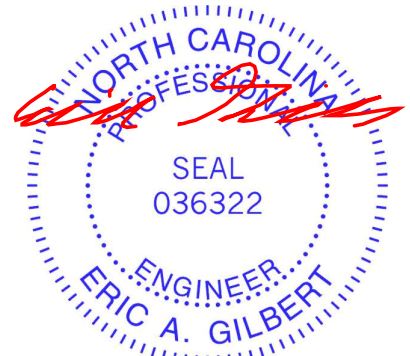
(lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/31, 2-3=-107/53, 3-4=-94/92, 4-5=-110/123, 5-6=-152/164, 6-7=-152/164, 7-8=-110/114, 8-9=-71/62, 9-10=-103/51, 10-11=0/31
BOT CHORD	2-18=-57/109, 17-18=-57/109, 16-17=-57/109, 15-16=-57/109, 14-15=-57/109, 13-14=-57/109, 12-13=-57/109, 10-12=-57/109
WEBS	6-15=-115/72, 5-16=-103/81, 4-17=-97/78, 3-18=-173/140, 7-14=-103/77, 8-13=-98/79, 9-12=-175/133

#### 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 2-3-8, Exterior (2) 2-3-8 to 6-3-8, Corner (3) 6-3-8 to 9-3-8, Exterior (2) 9-3-8 to 13-6-0 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 40 lb uplift at joint 2, 12 lb uplift at joint 10, 66 lb uplift at joint 16, 54 lb uplift at joint 17, 137 lb uplift at joint 18, 63 lb uplift at joint 14, 56 lb uplift at joint 13, 129 lb uplift at joint 12, 40 lb uplift at joint 2 and 12 lb uplift at joint 10.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 10, 23.

LOAD CASE(S) Standard



June 6,2025

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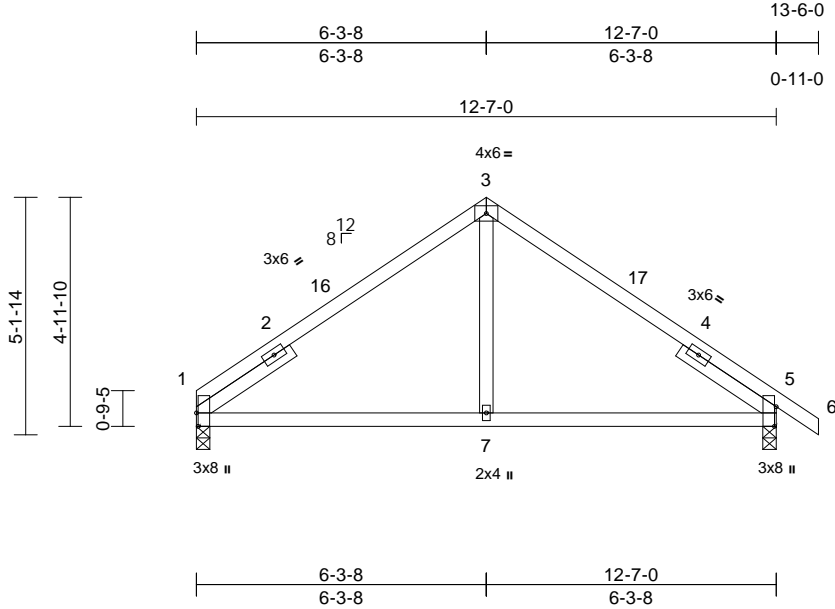
Job	Truss	Truss Type	Qty	Ply	JSJ, Cypress Prime - Elev. A (4-16-25)	174008808
4703112	C02	Common	2	1	Job Reference (optional)	

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

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:34

Page: 1

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Scale = 1:50

Plate Offsets (X, Y): [1:0-3-8,Edge], [5:0-5-2,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	0.46	Vert(LL)	-0.05	7-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.08	7-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	-0.03	1	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.07	7-10	>999	240	Weight: 57 lb	FT = 20%

#### LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3
SLIDER	Left 2x4 SP No.2 -- 2-6-0, Right 2x4 SP No.2 -- 2-6-0

- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 122 lb uplift at joint 1 and 153 lb uplift at joint 5.

**LOAD CASE(S)** Standard

#### BRACING

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

#### REACTIONS

(size)	1=0-3-8, 5=0-3-8
Max Horiz	1=-153 (LC 8)
Max Uplift	1=-122 (LC 12), 5=-153 (LC 13)
Max Grav	1=501 (LC 1), 5=560 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-3=-528/201, 3-5=-524/198, 5-6=0/31
BOT CHORD	1-7=-281/409, 5-7=-188/409
WEBS	3-7=0/275

#### 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) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 6-3-8, Exterior (2) 6-3-8 to 9-3-8, Interior (1) 9-3-8 to 13-6-0 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.



June 6, 2025

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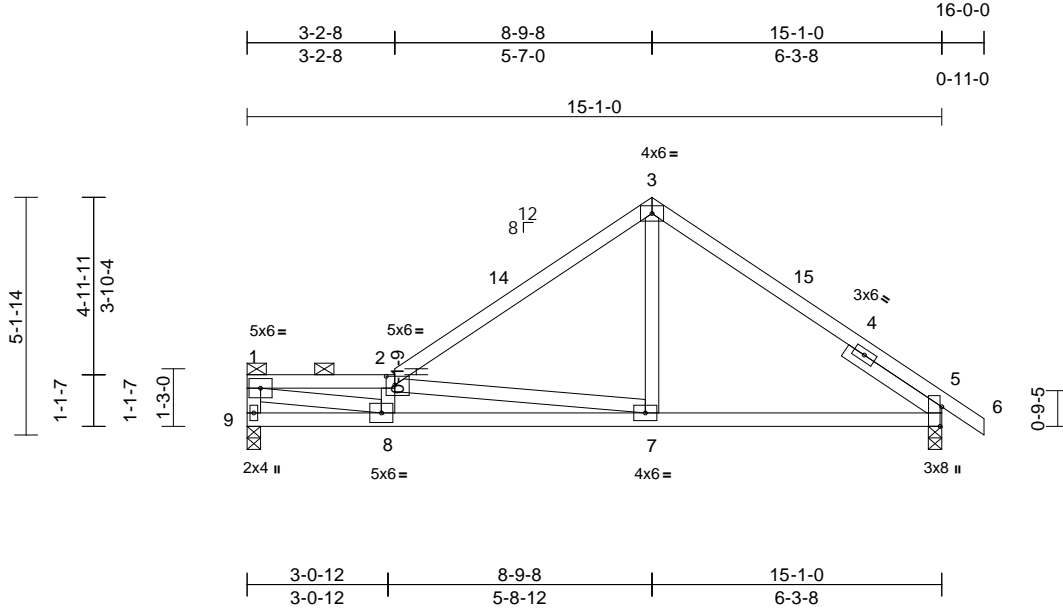


Job	Truss	Truss Type	Qty	Ply	JSJ, Cypress Prime - Elev. A (4-16-25)	174008809
4703112	C03	Roof Special	1	1	Job Reference (optional)	

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

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:34  
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Page: 1



Scale = 1:50

Plate Offsets (X, Y): [2:0-2-4,0-2-4], [5:0-5-2,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	0.51	Vert(LL)	-0.06	7-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.14	7-8	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.08	7-8	>999	240	Weight: 74 lb	FT = 20%

#### LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3 *Except* 9-1:2x4 SP No.2
SLIDER	Right 2x4 SP No.2 -- 2-6-0

#### BRACING

TOP CHORD	Structural wood sheathing directly applied or 5-8-3 oc purlins, except end verticals, and 2-0-0 oc purlins (4-7-9 max.): 1-2.
BOT CHORD	Rigid ceiling directly applied or 8-1-3 oc bracing.

#### REACTIONS

(size)	5=0-3-8, 9=0-3-8
Max Horiz	9=-150 (LC 8)
Max Uplift	5=-168 (LC 13), 9=-165 (LC 12)
Max Grav	5=654 (LC 1), 9=596 (LC 1)

#### FORCES

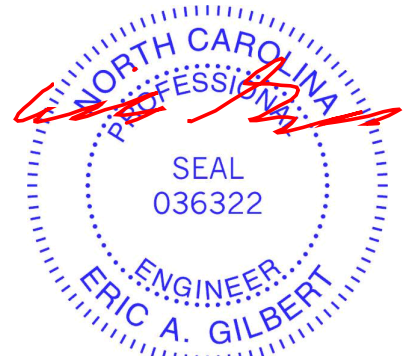
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-9=-532/178, 1-2=-1589/446, 2-3=-705/222, 3-5=-654/217, 5-6=0/31
BOT CHORD	8-9=-110/169, 7-8=-523/1655, 5-7=-190/512
WEBS	1-8=-421/1541, 2-8=-403/208, 2-7=-1157/454, 3-7=-26/405

#### 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) 0-1-12 to 3-2-8, Interior (1) 3-2-8 to 8-9-8, Exterior (2) 8-9-8 to 11-9-8, Interior (1) 11-9-8 to 16-0-0 zone; cantilever left and right exposed; end vertical 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 165 lb uplift at joint 9 and 168 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



June 6, 2025

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

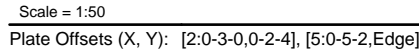
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

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Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:35 Page: 1  
ID:WfCAfZmC8V?9\_Rfexp9nwCzbz28-RfC?PsB70Hq3NSGpqnL8w3uITXbGKWkrDcoI7J4zJC?#



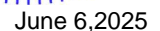
<b>LUMBER</b>	
TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3 *Except* 9-1:2x4 SP No.2
SLIDER	Right 2x4 SP No.2 -- 2-6-0
<b>BRACING</b>	
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (5-1-5 max.): 1-2.
BOT CHORD	Rigid ceiling directly applied or 9-7-10 oc bracing.
<b>REACTIONS</b>	(size) 5=0-3-8, 9=0-3-8 Max Horiz 9=-148 (LC 8) Max Uplift 5=-167 (LC 13), 9=-167 (LC 12) Max Grav 5=654 (LC 1), 9=596 (LC 1)
<b>FORCES</b>	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-9=-545/199, 1-2=-1215/343, 2-3=-686/228, 3-5=-637/215, 5-6=0/31
BOT CHORD	8-9=-108/146, 7-8=-373/1254, 5-7=-193/505
WEBS	1-8=-336/1227, 2-8=-370/192, 2-7=-778/315, 3-7=-42/407

- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 167 lb uplift at joint 9 and 167 lb uplift at joint 5.
- 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

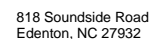
## NOTES

- 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) 0-1-12 to 3-1-12, Interior (1) 3-1-12 to 8-9-8, Exterior (2) 8-9-8 to 11-9-8, Interior (1) 11-9-8 to 16-0-0 zone; cantilever left and right exposed ; end vertical right 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.



WARNING – Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEL REFERENCE PAGE MIT-TR-17-0169, 1/12/2023 BEFORE USE.

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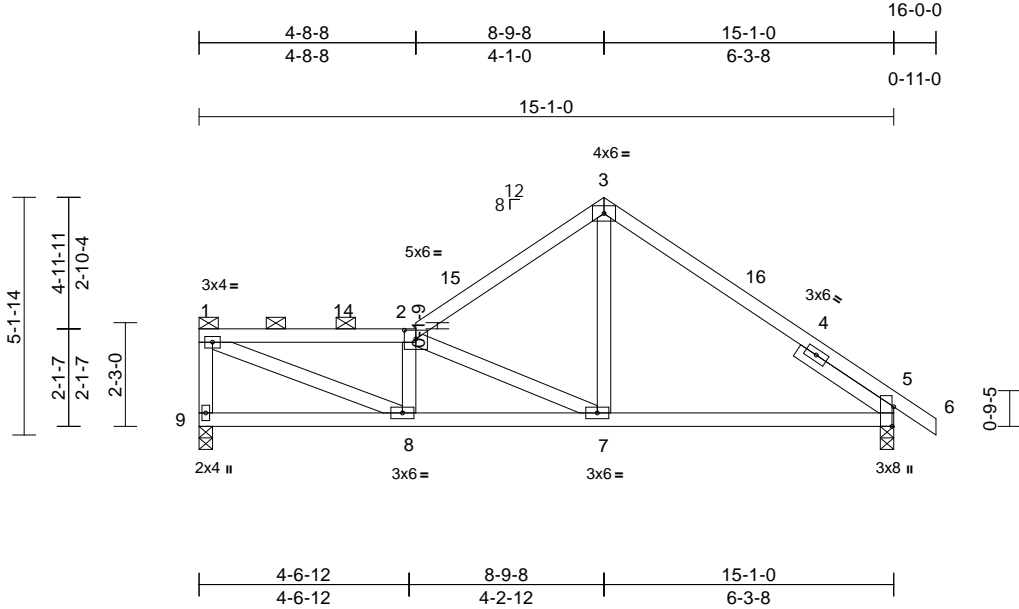
Job	Truss	Truss Type	Qty	Ply	JSJ, Cypress Prime - Elev. A (4-16-25)	174008811
4703112	C05	Roof Special	1	1	Job Reference (optional)	

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

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:35

Page: 1

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Scale = 1:50

Plate Offsets (X, Y): [2:0-3-0,0-2-4], [5:0-5-2,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	0.43	Vert(LL)	0.07	7-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.08	7-12	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.03	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 78 lb	FT = 20%

#### LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3 *Except* 9-1:2x4 SP No.2
SLIDER	Right 2x4 SP No.2 -- 2-6-0

#### BRACING

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

REACTIONS	(size) 5=0-3-8, 9=0-3-8
	Max Horiz 9=-162 (LC 13)
	Max Uplift 5=-165 (LC 13), 9=-170 (LC 12)
	Max Grav 5=654 (LC 1), 9=596 (LC 1)

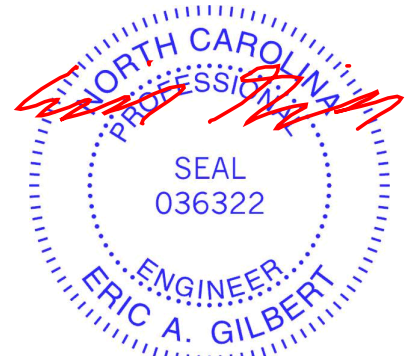
FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-9=-543/212, 1-2=-1007/289, 2-3=-670/235, 3-5=-622/213, 5-6=0/31
BOT CHORD	8-9=-107/153, 7-8=-280/1032, 5-7=-195/501
WEBS	1-8=-288/1032, 2-8=-338/184, 2-7=-584/238, 3-7=-59/410

#### 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) 0-1-12 to 3-1-12, Interior (1) 3-1-12 to 8-9-8, Exterior (2) 8-9-8 to 11-9-8, Interior (1) 11-9-8 to 16-0-0 zone; cantilever left and right exposed; end vertical 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 170 lb uplift at joint 9 and 165 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



June 6,2025

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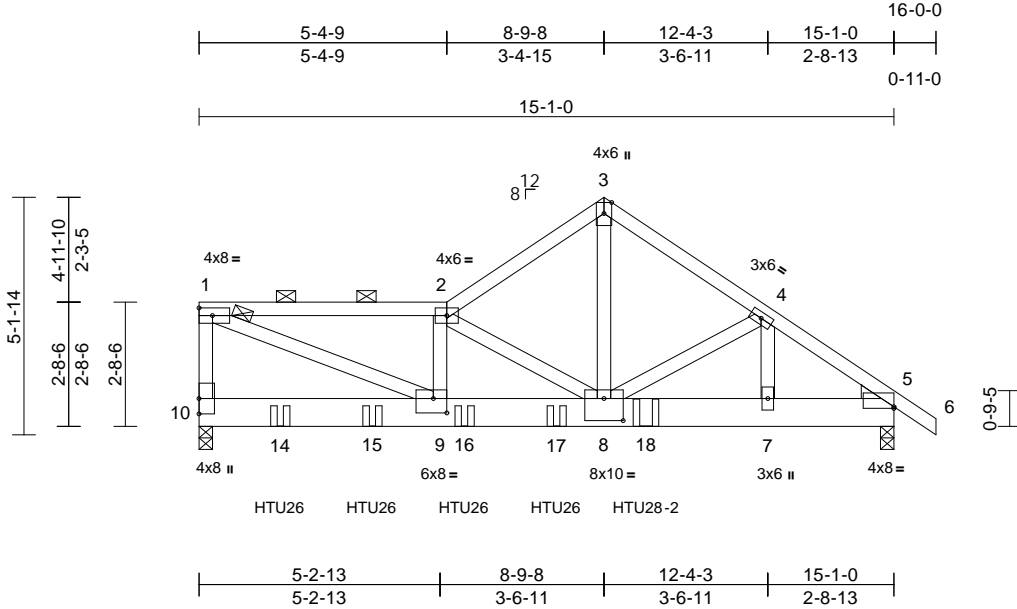


Job	Truss	Truss Type	Qty	Ply	JSJ, Cypress Prime - Elev. A (4-16-25)	174008812
4703112	C06	Roof Special Girder	1	<b>3</b>	Job Reference (optional)	

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

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:35  
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Page: 1



Scale = 1:50

Plate Offsets (X, Y): [5:Edge,0-0-7], [8:0-5-0,0-5-12], [9:0-3-8,0-3-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.08	8-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.16	8-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.86	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.10	8-9	>999	240	Weight: 322 lb	FT = 20%

#### LUMBER

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x8 SP 2400F 2.0E or 2x8 SP DSS  
WEBS 2x4 SP No.2  
WEDGE Right: 2x4 SP No.3

#### 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.): 1-2.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 5=0-3-8, 10=0-3-8  
Max Horiz 10=-179 (LC 9)  
Max Uplift 5=-1957 (LC 9), 10=-1959 (LC 8)  
Max Grav 5=4743 (LC 1), 10=6177 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-10=-4453/1520, 1-2=-9890/3267, 2-3=-6975/2823, 3-4=-6999/2842, 4-5=-6763/2859, 5-6=0/31  
BOT CHORD 9-10=-149/323, 8-9=-3311/9971, 7-8=-2294/5525, 5-7=-2294/5525  
WEBS 1-9=-3469/10520, 2-9=-1254/1004, 3-8=-2984/7390, 2-8=-4985/1255, 4-7=-339/57, 4-8=-75/416

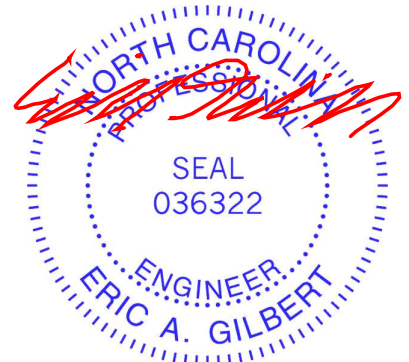
#### NOTES

- 3-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: 2x8 - 4 rows staggered at 0-4-0 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 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 1959 lb uplift at joint 10 and 1957 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.
- Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-9-3 from the left end to 7-9-3 to connect truss(es) to back face of bottom chord.
- Use Simpson Strong-Tie HTU28-2 (26-10d Girder, 26-10d Truss, Single Ply Girder) or equivalent at 8-8-7 from the left end 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, 2-3=-60, 3-6=-60, 10-11=-20  
Concentrated Loads (lb)  
Vert: 14=-1587 (B), 15=-1587 (B), 16=-1587 (B), 17=-1587 (B), 18=-3323 (B)



June 6, 2025

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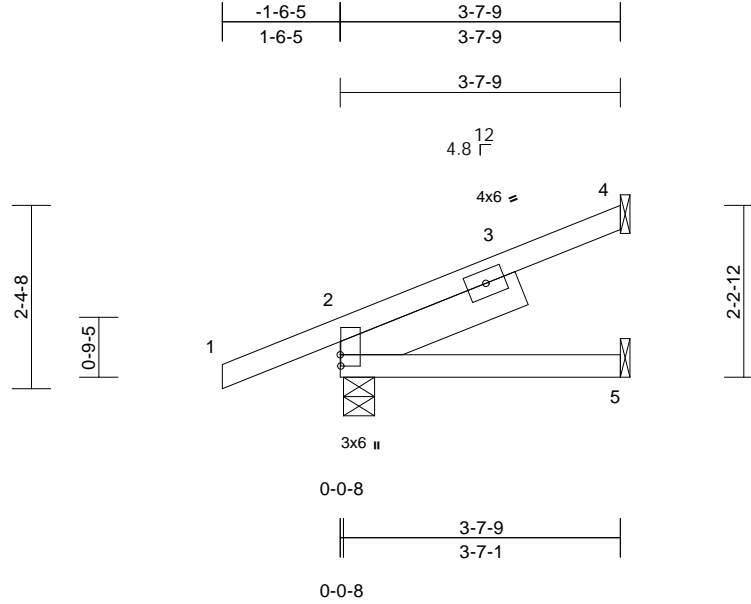
Job	Truss	Truss Type	Qty	Ply	JSJ, Cypress Prime - Elev. A (4-16-25)
4703112	CJ1	Jack-Open Girder	1	1	Job Reference (optional)
					I74008813

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

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:35

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Scale = 1:29.8

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	0.01	5-8	>999	240	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.01	5-8	>999	240	244/190
BCLL	0.0*	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	2	n/a	n/a	
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 20 lb FT = 20%

#### LUMBER

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
SLIDER Left 2x6 SP No.2 -- 2-6-0

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 3-7-9 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 2=0-4-13, 4= Mechanical, 5= Mechanical  
Max Horiz 2=114 (LC 12)  
Max Uplift 2=-116 (LC 12), 4=-72 (LC 12), 5=-1 (LC 12)  
Max Grav 2=154 (LC 1), 4=47 (LC 1), 5=44 (LC 3)

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

TOP CHORD 1-2=0/34, 2-4=-101/105  
BOT CHORD 2-5=-87/18

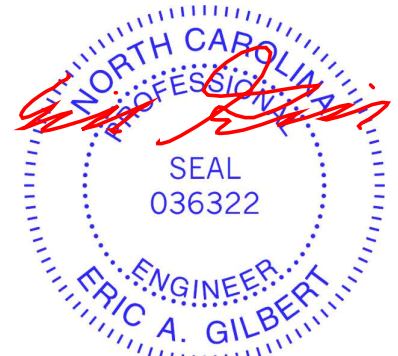
#### NOTES

- 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 72 lb uplift at joint 4, 116 lb uplift at joint 2 and 1 lb uplift at joint 5.

- 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-7=-12 (F=24, B=24), 7=-12 (F=24, B=24)-to-3=-32 (F=14, B=14), 3=-32 (F=14, B=14)-to-4=-54 (F=3, B=3), 6=0 (F=10, B=10)-to-8=-4 (F=8, B=8), 8=-4 (F=8, B=8)-to-5=-18 (F=1, B=1)



June 6,2025

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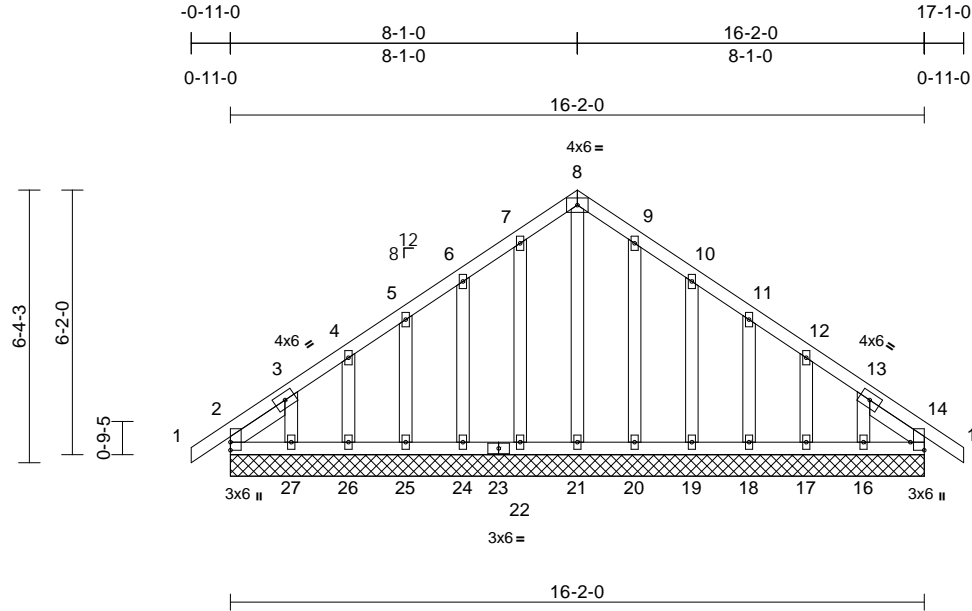
Job	Truss	Truss Type	Qty	Ply	JSJ, Cypress Prime - Elev. A (4-16-25)	
4703112	D01	Common Supported Gable	1	1	Job Reference (optional)	I74008814

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

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:36

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Scale = 1:53.7

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

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	0.06	Vert(LL)	n/a	-	n/a	999	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	14	n/a	n/a	
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							
Weight: 114 lb FT = 20%											

**LUMBER**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
OTHERS 2x4 SP No.3  
SLIDER Left 2x4 SP No.2 -- 1-7-4, Right 2x4 SP No.2 -- 1-7-4

**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=16-2-0, 14=16-2-0, 16=16-2-0, 17=16-2-0, 18=16-2-0, 19=16-2-0, 20=16-2-0, 21=16-2-0, 22=16-2-0, 24=16-2-0, 25=16-2-0, 26=16-2-0, 27=16-2-0  
Max Horiz 2=200 (LC 11)  
Max Uplift 2=77 (LC 8), 14=22 (LC 9), 16=116 (LC 13), 17=63 (LC 13), 18=69 (LC 13), 19=75 (LC 13), 20=54 (LC 13), 22=59 (LC 12), 24=73 (LC 12), 25=69 (LC 12), 26=61 (LC 12), 27=131 (LC 12)  
Max Grav 2=170 (LC 20), 14=132 (LC 1), 16=132 (LC 20), 17=119 (LC 20), 18=121 (LC 20), 19=122 (LC 20), 20=121 (LC 20), 21=149 (LC 13), 22=126 (LC 19), 24=120 (LC 19), 25=121 (LC 19), 26=117 (LC 19), 27=149 (LC 19)

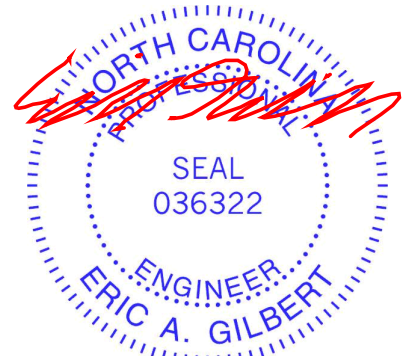
**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/31, 2-3=-49/52, 3-4=-125/120, 4-5=-108/104, 5-6=-94/119, 6-7=-125/154, 7-8=-162/187, 8-9=-162/187, 9-10=-125/142, 10-11=-78/86, 11-12=-49/41, 12-13=-60/50, 13-14=-33/35, 14-15=0/31

**BOT CHORD** 2-27=-92/146, 26-27=-92/146, 25-26=-92/146, 24-25=-92/146, 22-24=-92/146, 21-22=-92/146, 20-21=-92/146, 19-20=-92/146, 18-19=-92/146, 17-18=-92/146, 16-17=-92/146, 14-16=-92/146  
**WEBS** 8-21=-138/80, 7-22=-100/75, 6-24=-112/90, 5-25=-105/84, 4-26=-105/83, 3-27=-136/126, 9-20=-95/70, 10-19=-112/91, 11-18=-105/84, 12-17=-106/83, 13-16=-139/114

**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 Corner (3) -0-11-0 to 2-1-0, Exterior (2) 2-1-0 to 8-1-0, Corner (3) 8-1-0 to 11-1-0, Exterior (2) 11-1-0 to 17-1-0 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) 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.  
4) All plates are 2x4 (||) MT20 unless otherwise indicated.  
5) Gable requires continuous bottom chord bearing.  
6) Gable studs spaced at 1-4-0 oc.  
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.  
8) \* 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.

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 77 lb uplift at joint 2, 22 lb uplift at joint 14, 59 lb uplift at joint 22, 73 lb uplift at joint 24, 69 lb uplift at joint 25, 61 lb uplift at joint 26, 131 lb uplift at joint 27, 54 lb uplift at joint 20, 75 lb uplift at joint 19, 69 lb uplift at joint 18, 63 lb uplift at joint 17, 116 lb uplift at joint 16, 77 lb uplift at joint 2 and 22 lb uplift at joint 14.  
10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 14.

**LOAD CASE(S)** Standard



June 6, 2025

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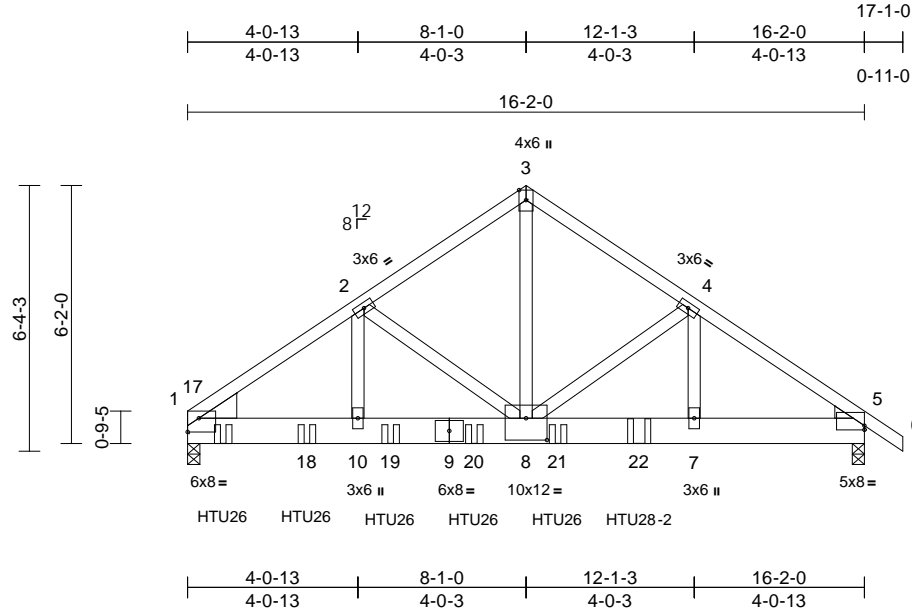


Job	Truss	Truss Type	Qty	Ply	JSJ, Cypress Prime - Elev. A (4-16-25)	174008815
4703112	D02	Common Girder	1	3	Job Reference (optional)	

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

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:36  
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Page: 1



Scale = 1:55

Plate Offsets (X, Y): [1:Edge,0-3-15], [5:Edge,0-1-3], [8:0-6-0,0-6-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.06	7-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.12	7-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.59	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.09	7-8	>999	240	Weight: 340 lb	FT = 20%

#### LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x8 SP 2400F 2.0E or 2x8 SP DSS
WEBS	2x4 SP No.2
WEDGE	Left: 2x8 SP 2400F 2.0E or DSS Right: 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)	1=0-3-8, 5=0-3-8
Max Horiz	1=-193 (LC 23)
Max Uplift	1=-2281 (LC 8), 5=-2206 (LC 9)
Max Grav	1=7338 (LC 1), 5=5361 (LC 1)

#### FORCES

TOP CHORD	1-2=-8821/2826, 2-3=-6771/2527, 3-4=-6763/2523, 4-5=-8288/3492, 5-6=0/31
BOT CHORD	1-10=-2366/7293, 8-10=-2366/7293, 7-8=-2799/6794, 5-7=-2799/6794
WEBS	2-10=-346/2244, 2-8=-2132/501, 3-8=-2640/7155, 4-8=-1510/1182, 4-7=-1158/1628

#### NOTES

- 3-ply truss to be connected together as follows:  
Top chords connected with 10d (0.131"x3") nails as follows: 2x4 - 1 row at 0-4-0 oc.  
Bottom chords connected with 10d (0.148"x3") nails as follows: 2x8 - 3 rows staggered at 0-4-0 oc.  
Web chords connected with 10d (0.131"x3") nails 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
- 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 2281 lb uplift at joint 1 and 2206 lb uplift at joint 5.
- Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss) or equivalent spaced at 2-0-0 oc max. starting at 0-10-3 from the left end to 8-10-3 to connect truss(es) to front face of bottom chord.
- Use Simpson Strong-Tie HTU28-2 (26-16d Girder, 26-10d Truss, Single Ply Girder) or equivalent at 10-9-7 from the left end to connect truss(es) to front face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

#### LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (lb/ft)  
Vert: 1-3=-60, 3-6=-60, 11-14=-20  
Concentrated Loads (lb)  
Vert: 17=-1588 (F), 18=-1587 (F), 19=-1587 (F), 20=-1587 (F), 21=-1587 (F), 22=-3415 (F)



June 6,2025

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

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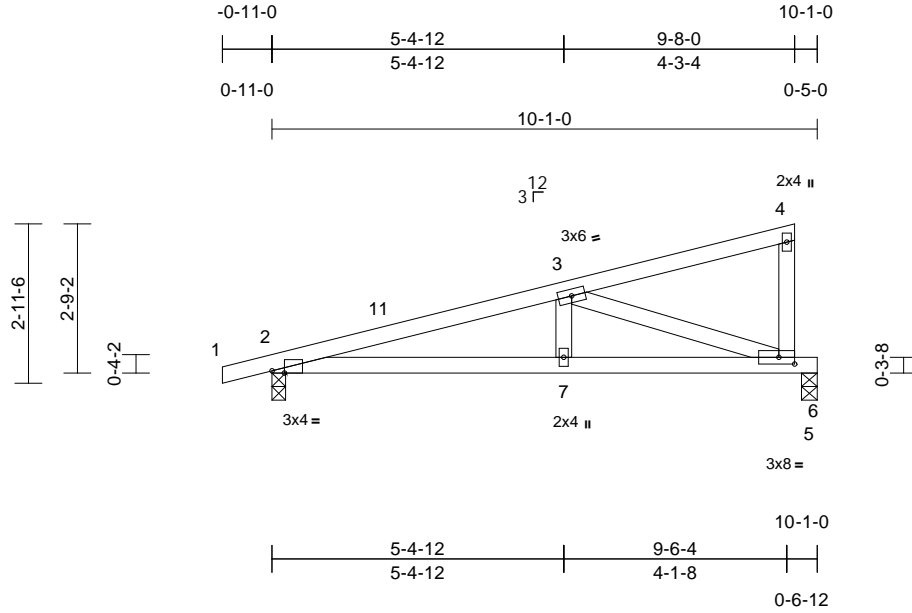


Job	Truss	Truss Type	Qty	Ply	JSJ, Cypress Prime - Elev. A (4-16-25)	174008816
4703112	E01	Monopitch	3	1	Job Reference (optional)	

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

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:36  
ID:oG6K\_SbF1rphFvxXJ1CdgbZbzyS-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:42.6

Plate Offsets (X, Y): [2:0-2-12,Edge], [6:0-3-8,0-1-8]

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	0.34	Vert(LL)	0.08	7-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.07	7-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.31	Horz(CT)	-0.01	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 42 lb	FT = 20%

#### LUMBER

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

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 303 lb uplift at joint 2 and 260 lb uplift at joint 5.

LOAD CASE(S) Standard

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 5-11-13 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 5-6-1 oc bracing.

#### REACTIONS

(size) 2=0-3-0, 5=0-3-8  
Max Horiz 2=140 (LC 8)  
Max Uplift 2=303 (LC 8), 5=260 (LC 8)  
Max Grav 2=455 (LC 1), 5=370 (LC 1)

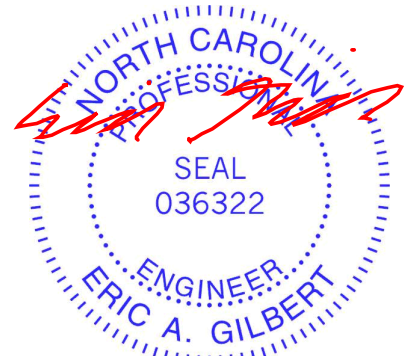
#### FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/13, 2-3=-865/988, 3-4=-89/53, 4-6=-92/93  
BOT CHORD 2-7=-1054/822, 6-7=-1054/822, 5-6=0/0  
WEBS 3-7=-335/230, 3-6=-812/1030

#### 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 9-6-4 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.



June 6,2025

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

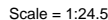
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

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Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:36 Page: 1  
ID:uobYTzV6?OuNNAe57U4pdVzc\_?A-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKwRCDoi7J4zJC?i



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

<b>LUMBER</b>		6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 80 lb uplift at joint 4 and 137 lb uplift at joint 2.
TOP CHORD	2x4 SP No.2	<b>LOAD CASE(S)</b> Standard
BOT CHORD	2x4 SP No.2	
WEBS	2x4 SP No.2	

## LUMBER

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

## BRACING

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

## REACTIONS

(size)	2=0-3-0, 4=0-3-8
Max Horiz	2=56 (LC 8)
Max Uplift	2=-137 (LC 8), 4=-80 (LC 8)
Max Grav	2=187 (LC 1), 4=116 (LC 1)

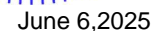
## FORCES

(Ib) - Maximum Compression/Maximum Tension

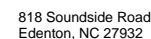
TOP CHORD 1-2=0/13, 2-3=-59/103, 3-4=-74/104  
BOT CHORD 2-4=-120/60

## 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 3-1-4 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
- 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) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 2.



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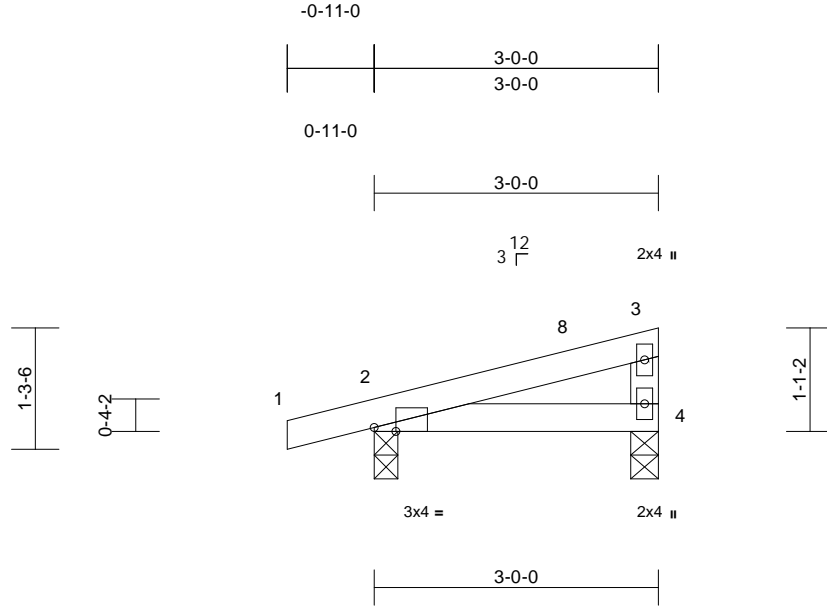


Job	Truss	Truss Type	Qty	Ply	JSJ, Cypress Prime - Elev. A (4-16-25)	174008818
4703112	E03	Monopitch	1	1	Job Reference (optional)	

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

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:37  
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Page: 1



Scale = 1:24.3

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	0.01	4-7	>999	240	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							Weight: 11 lb	FT = 20%

#### LUMBER

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

#### BRACING

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

**REACTIONS** (size) 2=0-3-0, 4=0-3-8  
Max Horiz 2=53 (LC 8)  
Max Uplift 2=-132 (LC 8), 4=-72 (LC 8)  
Max Grav 2=178 (LC 1), 4=105 (LC 1)

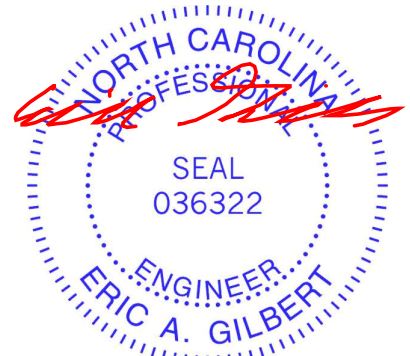
**FORCES** (lb) - Maximum Compression/Maximum  
Tension

TOP CHORD 1-2=0/13, 2-3=-51/91, 3-4=-67/95  
BOT CHORD 2-4=-106/54

#### 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 2-10-4 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 3-06-00 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 72 lb uplift at joint 4 and 132 lb uplift at joint 2.

**LOAD CASE(S)** Standard



June 6,2025

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

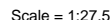
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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 May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:37 Page: 1  
ID:4a1Zs949vFvA44ExEK1DKXzc 4t-RfC?PsB70Hq3NSoPanL8w3uITXBGKWRCDoJ7J4zJC?f



<b>Loading</b>	(psf)	<b>Spacing</b>	2-0-0	<b>CSI</b>		<b>DEFL</b>	in	(loc)	I/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	0.01	4-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.14	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							Weight: 13 lb	FT = 20%

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEDGE Left: 2x4 SP No.3

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 69 lb uplift at joint 3, 51 lb uplift at joint 2 and 3 lb uplift at joint 4.

LOAD CASE(S) Standard

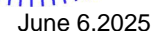
TOP CHORD	Structural wood sheathing directly applied or 3-4-4 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS	(size)	2=0-3-8, 3= Mechanical, 4= Mechanical
Max Horiz		2=106 (LC 12)
Max Uplift		2=-51 (LC 12), 3=-69 (LC 12), 4=-3 (LC 12)
Max Grav		2=194 (LC 1), 3=81 (LC 1), 4=59 (LC 3)

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

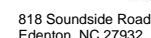
TOP CHORD  $1-2=0/25$ ,  $2-3=-63/34$   
BOT CHORD  $2-4=-89/61$

- 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  
3-3-8 zone; cantilever left and right exposed ; end  
vertical left and right exposed; C-C for members and  
forces & MWFRS for reactions shown; Lumber  
DOL=1.60 plate grip DOL=1.60
- 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.



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

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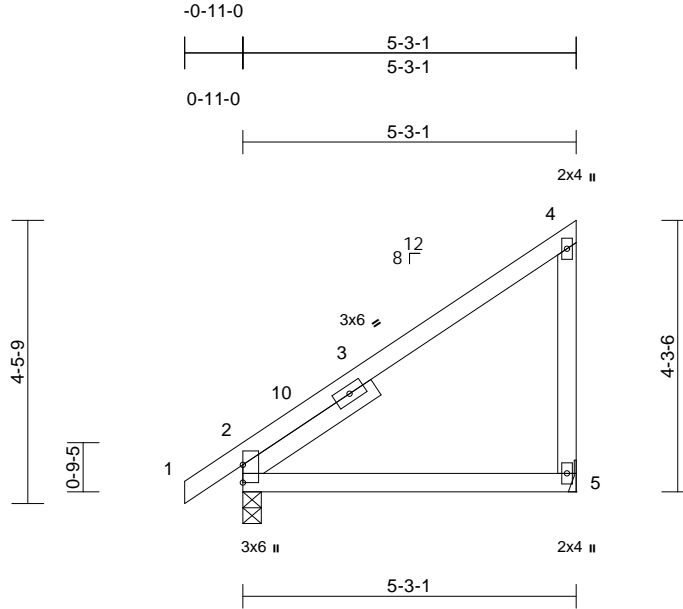


Job	Truss	Truss Type	Qty	Ply	JSJ, Cypress Prime - Elev. A (4-16-25)
4703112	JB1	Jack-Closed	37	1	174008820
Job Reference (optional)					

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

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:37  
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Page: 1



Scale = 1:36.3

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	0.46	Vert(LL)	0.07	5-8	>879	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.07	5-8	>901	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.03	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 28 lb	FT = 20%

#### LUMBER

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

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 5-3-1 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS

(size) 2=0-3-8, 5= Mechanical  
Max Horiz 2=205 (LC 12)  
Max Uplift 2=-29 (LC 12), 5=-145 (LC 12)  
Max Grav 2=264 (LC 1), 5=230 (LC 19)

#### FORCES

(lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/31, 2-4=-311/150, 4-5=-199/156  
BOT CHORD 2-5=-280/250

#### 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 5-1-5 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
- 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 5 and 29 lb uplift at joint 2.



June 6,2025

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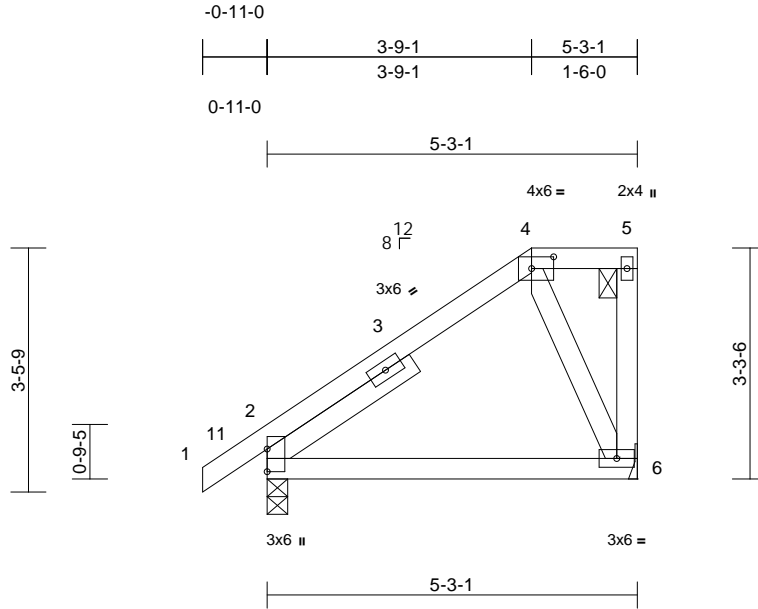


Job	Truss	Truss Type	Qty	Ply	JSJ, Cypress Prime - Elev. A (4-16-25)	
4703112	JB2	Jack-Closed	1	1	Job Reference (optional)	I74008821

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

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:37  
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Page: 1



Scale = 1:32.7

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	-0.02	6-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	-0.05	6-9	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP		Wind(LL)	0.03	6-9	>999	240	Weight: 31 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 2x4 SP No.2 -- 2-6-0

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 5-3-1 oc purlins, except end verticals, and 2-0-0 oc purlins: 4-5.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 2=0-3-8, 6= Mechanical  
Max Horiz 2=159 (LC 12)  
Max Uplift 2=-55 (LC 12), 6=-88 (LC 12)  
Max Grav 2=264 (LC 1), 6=199 (LC 1)

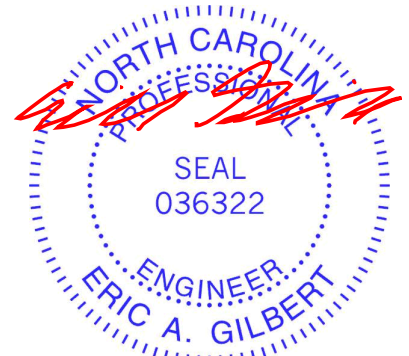
**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/31, 2-4=-318/60, 4-5=0/0, 5-6=-41/47  
BOT CHORD 2-6=-184/122  
WEBS 4-6=-157/137

#### 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 3-9-1, Exterior (2) 3-9-1 to 5-1-5 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 55 lb uplift at joint 2 and 88 lb uplift at joint 6.
- 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



June 6,2025

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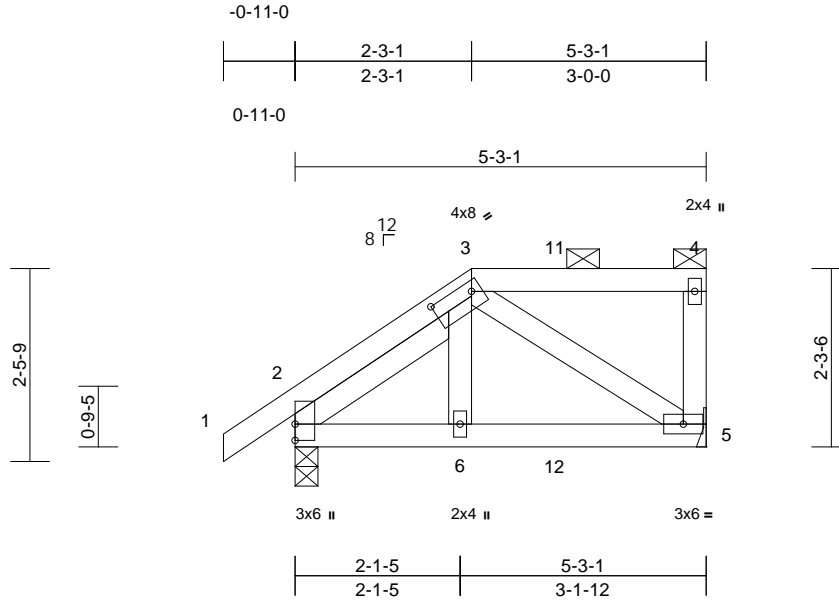
Job	Truss	Truss Type	Qty	Ply	JSJ, Cypress Prime - Elev. A (4-16-25)
4703112	JB3	Jack-Closed Girder	1	1	174008822
Job Reference (optional)					

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

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:37

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Scale = 1:29.5

Plate Offsets (X, Y): [3:0-6-8,0-1-8]

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	0.20	Vert(LL)	0.00	5-6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	-0.01	5-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.06	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP		Wind(LL)	0.00	5-6	>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  
 SLIDER Left 2x4 SP No.2 -- 2-5-3

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 5-3-1 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 2=0-3-8, 5= Mechanical  
 Max Horiz 2=107 (LC 25)  
 Max Uplift 2=-172 (LC 8), 5=-161 (LC 5)  
 Max Grav 2=306 (LC 1), 5=247 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/31, 2-3=-137/126, 3-4=-1/0, 4-5=-94/68  
 BOT CHORD 2-6=-165/181, 5-6=-164/174  
 WEBS 3-6=-12/153, 3-5=-212/200

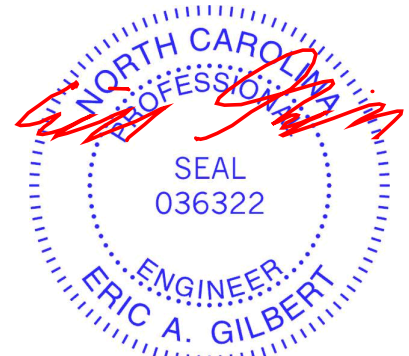
#### NOTES

- 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 161 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) 114 lb down and 145 lb up at 2-3-1, and 39 lb down and 51 lb up at 3-3-13 on top chord, and 34 lb down and 34 lb up at 2-3-1, and 23 lb down and 15 lb up at 3-3-13 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=-21 (B), 6=-24 (B), 11=-21 (B), 12=-23 (B)



June 6, 2025

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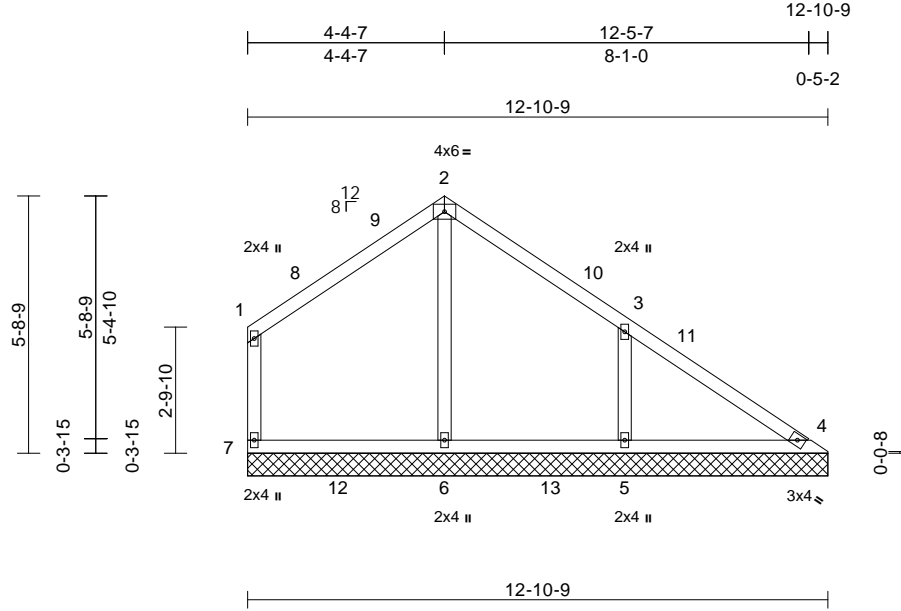
Job	Truss	Truss Type	Qty	Ply	JSJ, Cypress Prime - Elev. A (4-16-25)
4703112	V01	Valley	1	1	Job Reference (optional)
					I74008823

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

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Scale = 1:51.1

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	0.24	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.13	Horiz(TL)	0.00	4	n/a	n/a	
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 56 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" oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10'-0" oc bracing.

REACTIONS	(size)	4=12-10-9, 5=12-10-9, 6=12-10-9, 7=12-10-9
	Max Horiz	7=-225 (LC 10)
	Max Uplift	4=-51 (LC 9), 5=-253 (LC 13), 6=-15 (LC 8), 7=-108 (LC 12)
	Max Grav	4=193 (LC 19), 5=445 (LC 20), 6=426 (LC 20), 7=238 (LC 19)

#### FORCES

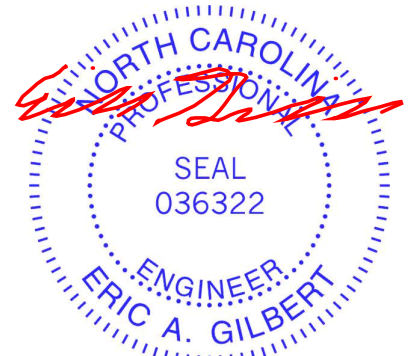
	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-7=-224/168, 1-2=-193/183, 2-3=-206/206, 3-4=-232/186
BOT CHORD	6-7=-152/203, 5-6=-152/203, 4-5=-152/203
WEBS	2-6=-227/80, 3-5=-371/295

#### 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) 0-1-12 to 3-1-12, Interior (1) 3-1-12 to 4-4-7, Exterior (2) 4-4-7 to 7-4-7, Interior (1) 7-4-7 to 12-5-2 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.

- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 108 lb uplift at joint 7, 51 lb uplift at joint 4, 15 lb uplift at joint 6 and 253 lb uplift at joint 5.

LOAD CASE(S) Standard



June 6, 2025

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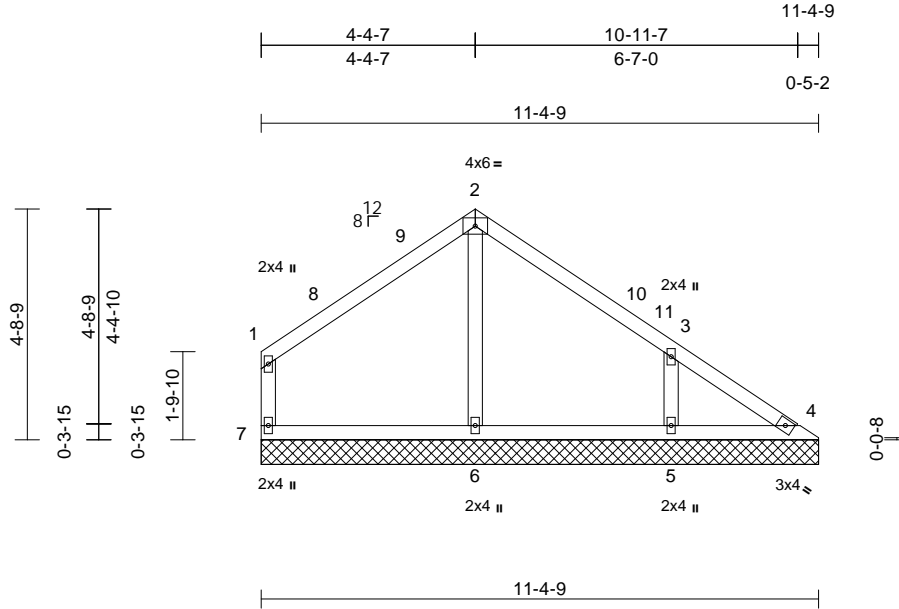
Job	Truss	Truss Type	Qty	Ply	JSJ, Cypress Prime - Elev. A (4-16-25)	
4703112	V02	Valley	1	1	Job Reference (optional)	I74008824

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

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Scale = 1:47

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.23	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.14	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.00	4	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S						Weight: 47 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" oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10'-0" oc bracing.

<b>REACTIONS</b>	(size)	4=11'-4-9, 5=11'-4-9, 6=11'-4-9, 7=11'-4-9
	Max Horiz	7=174 (LC 8)
	Max Uplift	4=66 (LC 9), 5=211 (LC 13), 6=9 (LC 8), 7=121 (LC 12)
	Max Grav	4=148 (LC 19), 5=352 (LC 20), 6=305 (LC 20), 7=227 (LC 19)

#### FORCES

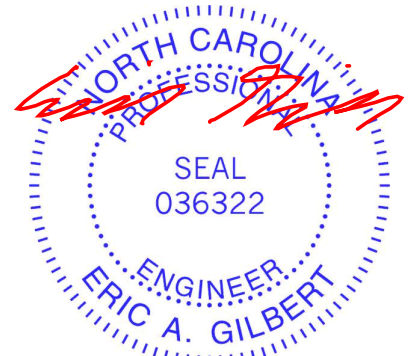
	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-7=-223/161, 1-2=-192/168, 2-3=-199/187, 3-4=-207/166
BOT CHORD	6-7=-128/173, 5-6=-128/173, 4-5=-128/173
WEBS	2-6=-217/66, 3-5=-311/250

#### 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) 0-1-12 to 3-1-12, Interior (1) 3-1-12 to 4-4-7, Exterior (2) 4-4-7 to 7-4-7, Interior (1) 7-4-7 to 10-11-2 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.

- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 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'-0"-0" tall by 2'-0"-0" wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 121 lb uplift at joint 7, 66 lb uplift at joint 4, 9 lb uplift at joint 6 and 211 lb uplift at joint 5.

**LOAD CASE(S)** Standard



June 6, 2025

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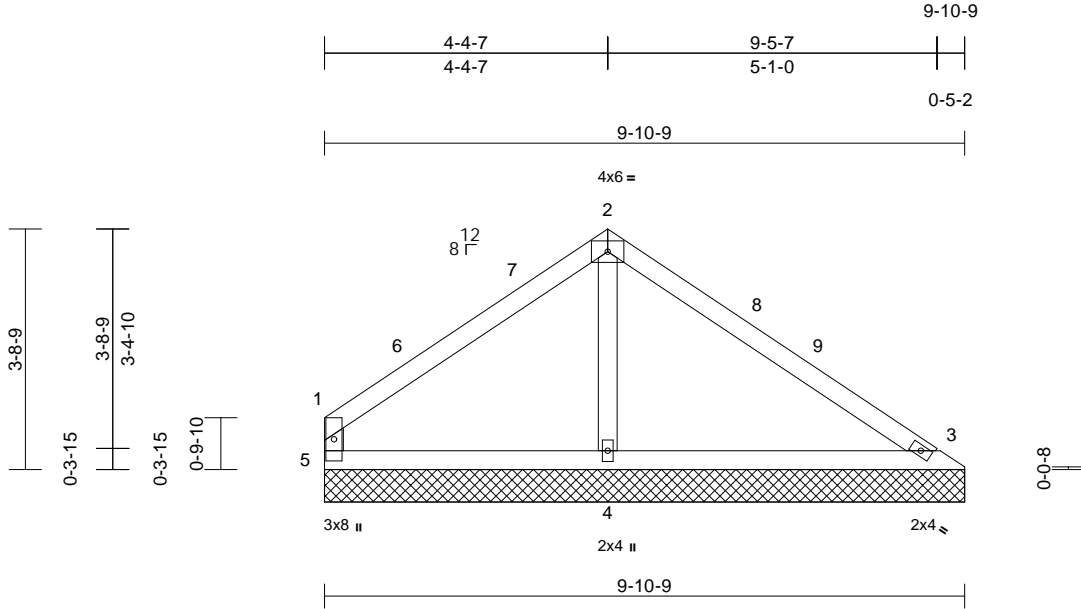


Job	Truss	Truss Type	Qty	Ply	JSJ, Cypress Prime - Elev. A (4-16-25)	
4703112	V03	Valley	1	1	Job Reference (optional)	I74008825

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

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Page: 1



Scale = 1:35.6

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	0.37	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horiz(TL)	0.00	3	n/a	n/a	
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 37 lb FT = 20%

#### LUMBER

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

#### BRACING

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

#### REACTIONS

(size)	3=9-10-9, 4=9-10-9, 5=9-10-9
Max Horiz	5=-123 (LC 10)
Max Uplift	3=-98 (LC 12), 4=-43 (LC 13), 5=-132 (LC 12)
Max Grav	3=227 (LC 1), 4=363 (LC 20), 5=230 (LC 19)

#### FORCES

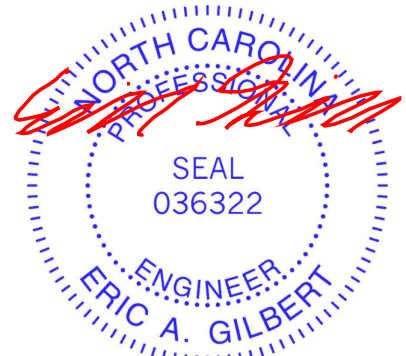
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-5=-225/157, 1-2=-207/158, 2-3=-226/178
BOT CHORD	4-5=-113/164, 3-4=-113/164
WEBS	2-4=-234/92

#### 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) 0-1-12 to 3-1-12, Interior (1) 3-1-12 to 4-4-7, Exterior (2) 4-4-7 to 7-4-7, Interior (1) 7-4-7 to 9-5-2 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.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 132 lb uplift at joint 5, 98 lb uplift at joint 3 and 43 lb uplift at joint 4.

**LOAD CASE(S)** Standard



June 6, 2025

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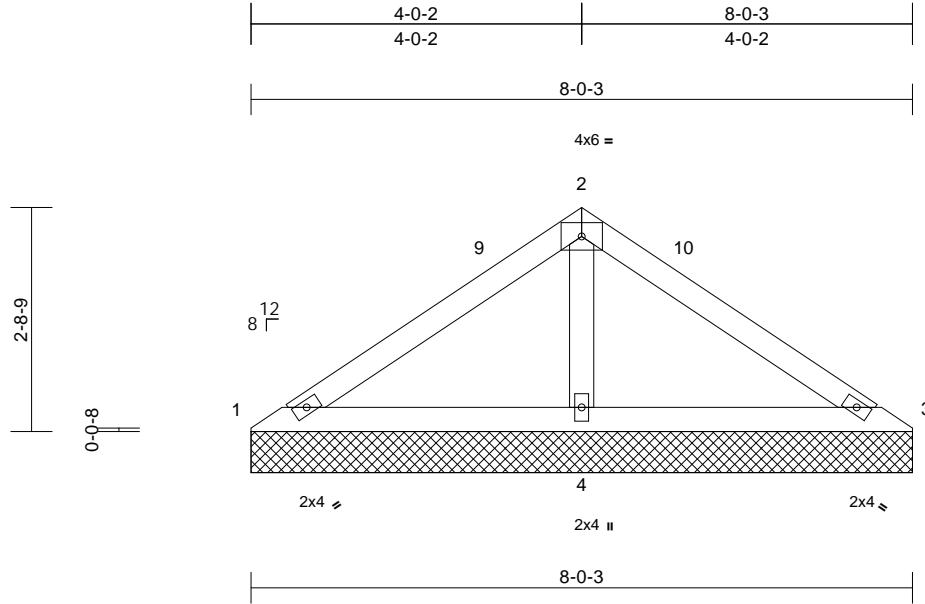


Job	Truss	Truss Type	Qty	Ply	JSJ, Cypress Prime - Elev. A (4-16-25)	174008826
4703112	V04	Valley	1	1	Job Reference (optional)	

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

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:38  
ID:hFWPEitk3Q9fzC2vXl6TzYzbwo-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?i

Page: 1



Scale = 1:27.9

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)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.09	Horiz(TL)	0.00	3	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  
OTHERS 2x4 SP No.3

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 8-0-3 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

#### REACTIONS

(size) 1=8-0-3, 3=8-0-3, 4=8-0-3  
Max Horiz 1=-85 (LC 8)  
Max Uplift 1=-8 (LC 12), 3=-22 (LC 13), 4=-147 (LC 12)  
Max Grav 1=79 (LC 23), 3=79 (LC 24), 4=537 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

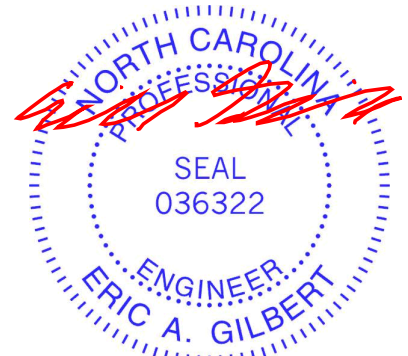
TOP CHORD 1-2=-82/224, 2-3=-81/220  
BOT CHORD 1-4=-210/135, 3-4=-210/135  
WEBS 2-4=-421/208

#### 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) 0-0-12 to 3-0-12, Interior (1) 3-0-12 to 4-0-14, Exterior (2) 4-0-14 to 7-2-2, Interior (1) 7-2-2 to 8-0-15 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.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 8 lb uplift at joint 1, 22 lb uplift at joint 3 and 147 lb uplift at joint 4.

LOAD CASE(S) Standard



June 6, 2025

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

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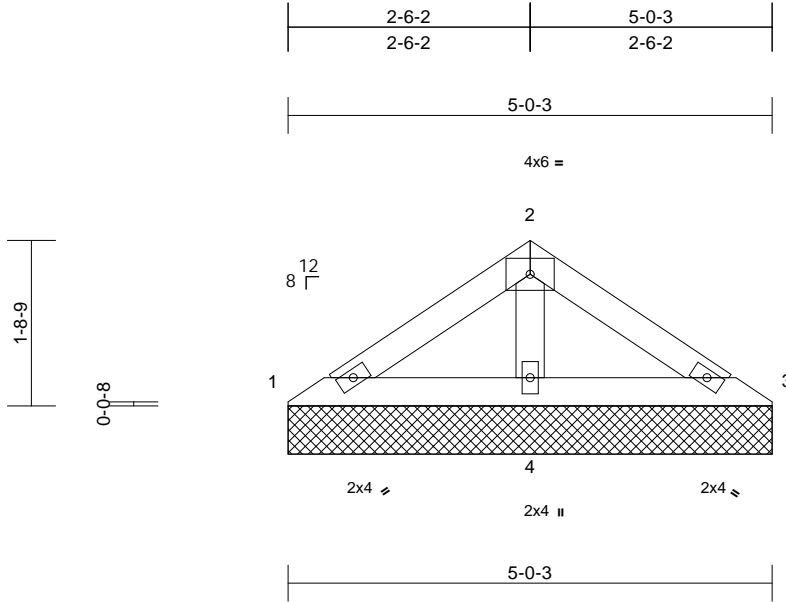


Job	Truss	Truss Type	Qty	Ply	JSJ, Cypress Prime - Elev. A (4-16-25)	174008827
4703112	V05	Valley	1	1	Job Reference (optional)	

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

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:38  
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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	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	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  
OTHERS 2x4 SP No.3

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 5-0-3 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

#### REACTIONS

(size) 1=5-0-3, 3=5-0-3, 4=5-0-3  
Max Horiz 1=-51 (LC 10)  
Max Uplift 1=-13 (LC 12), 3=-22 (LC 13),  
4=-75 (LC 12)  
Max Grav 1=64 (LC 23), 3=64 (LC 24), 4=297 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

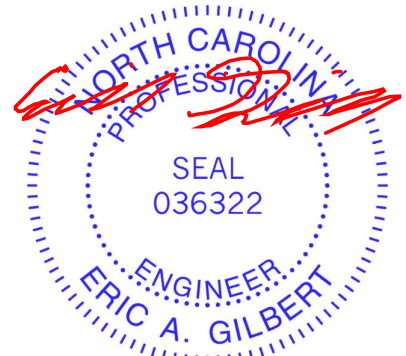
TOP CHORD 1-2=-61/103, 2-3=-61/97  
BOT CHORD 1-4=-107/78, 3-4=-107/78  
WEBS 2-4=-186/92

#### 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) 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.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 13 lb uplift at joint 1, 22 lb uplift at joint 3 and 75 lb uplift at joint 4.

LOAD CASE(S) Standard



June 6, 2025

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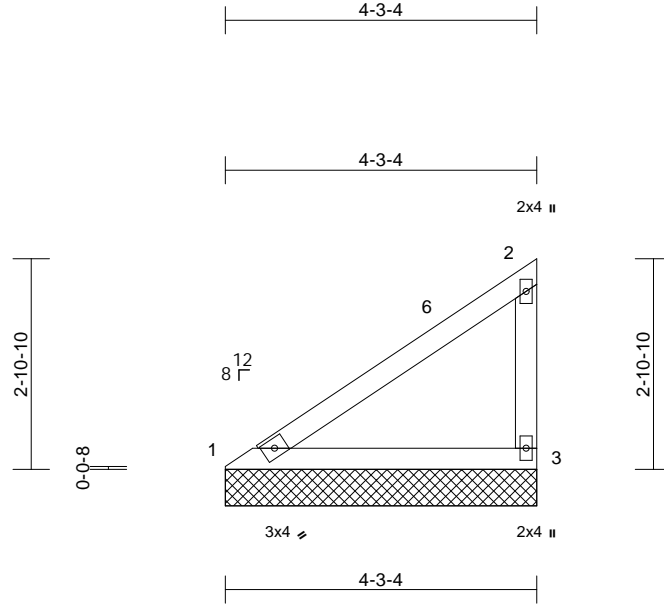


Job	Truss	Truss Type	Qty	Ply	JSJ, Cypress Prime - Elev. A (4-16-25)
4703112	V06	Valley	1	1	174008828
Job Reference (optional)					

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

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:39  
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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	0.23	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.23	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a	
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 17 lb FT = 20%

#### LUMBER

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

#### BRACING

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

#### REACTIONS (size)

1=4-3-4, 3=4-3-4	
Max Horiz	1=130 (LC 9)
Max Uplift	1=-36 (LC 12), 3=-80 (LC 12)
Max Grav	1=165 (LC 1), 3=193 (LC 19)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

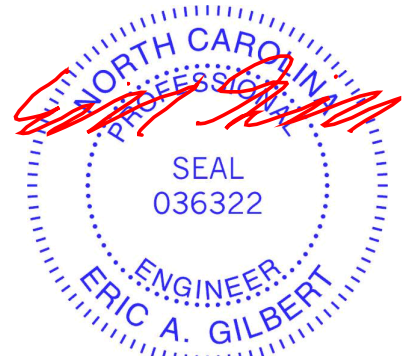
TOP CHORD	1-2=-230/133, 2-3=-174/136
BOT CHORD	1-3=-188/294

#### 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) 0-0-12 to 3-0-12, Interior (1) 3-0-12 to 4-2-4 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.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 80 lb uplift at joint 3 and 36 lb uplift at joint 1.

LOAD CASE(S) Standard



June 6, 2025

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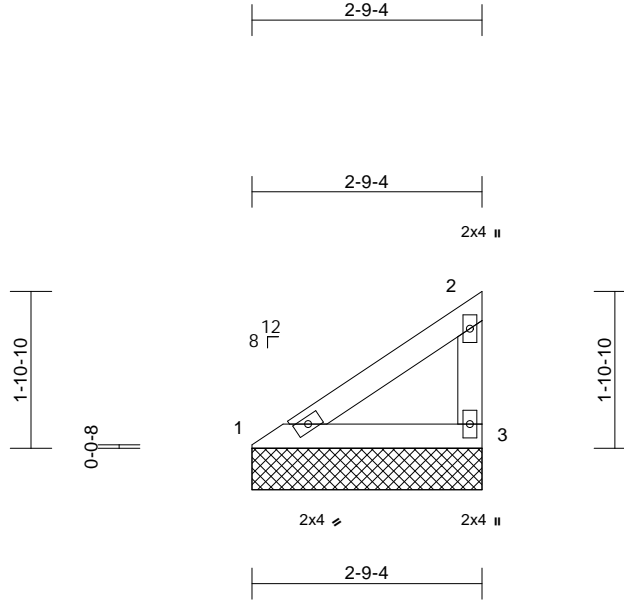


Job	Truss	Truss Type	Qty	Ply	JSJ, Cypress Prime - Elev. A (4-16-25)	
4703112	V07	Valley	1	1	Job Reference (optional)	I74008829

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

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:39  
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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	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 10 lb	FT = 20%

#### LUMBER

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

- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 50 lb uplift at joint 3 and 24 lb uplift at joint 1.

**LOAD CASE(S)** Standard

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 2-9-4 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS (size) 1=2-9-4, 3=2-9-4

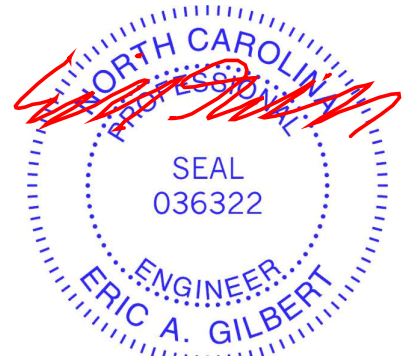
Max Horiz 1=79 (LC 9)  
Max Uplift 1=-24 (LC 12), 3=-50 (LC 12)  
Max Grav 1=105 (LC 1), 3=122 (LC 19)

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

TOP CHORD 1-2=-133/80, 2-3=-105/79  
BOT CHORD 1-3=-110/170

#### 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) 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.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.



June 6, 2025

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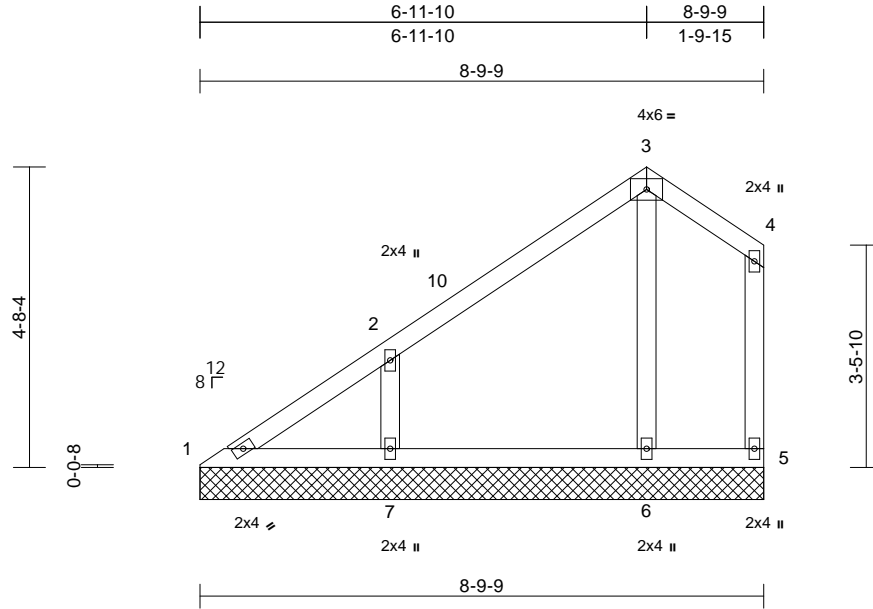


Job	Truss	Truss Type	Qty	Ply	JSJ, Cypress Prime - Elev. A (4-16-25)	174008830
4703112	V08	Valley	1	1	Job Reference (optional)	

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

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:39  
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Page: 1



Scale = 1:35.9

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	0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.10	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 41 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" oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6'-0" oc bracing.

<b>REACTIONS</b>	(size)	1=8-9-9, 5=8-9-9, 6=8-9-9, 7=8-9-9
	Max Horiz	1=207 (LC 9)
	Max Uplift	1=-31 (LC 8), 5=-55 (LC 8), 6=-56 (LC 9), 7=-204 (LC 12)
	Max Grav	1=126 (LC 20), 5=79 (LC 20), 6=277 (LC 19), 7=371 (LC 19)

#### FORCES

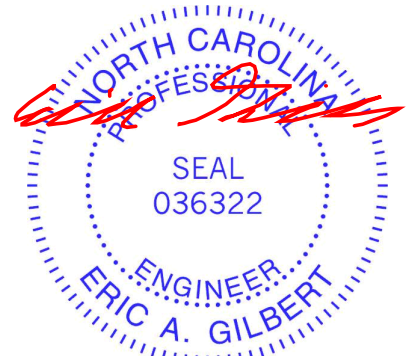
	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-219/229, 2-3=-149/116, 3-4=-118/136, 4-5=-102/103
BOT CHORD	1-7=-107/170, 6-7=-75/82, 5-6=-75/82
WEBS	3-6=-261/187, 2-7=-331/247

#### 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) 0-0-12 to 3-0-6, Interior (1) 3-0-6 to 7-0-6, Exterior (2) 7-0-6 to 8-8-9 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 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 55 lb uplift at joint 5, 31 lb uplift at joint 1, 56 lb uplift at joint 6 and 204 lb uplift at joint 7.

**LOAD CASE(S)** Standard



June 6, 2025

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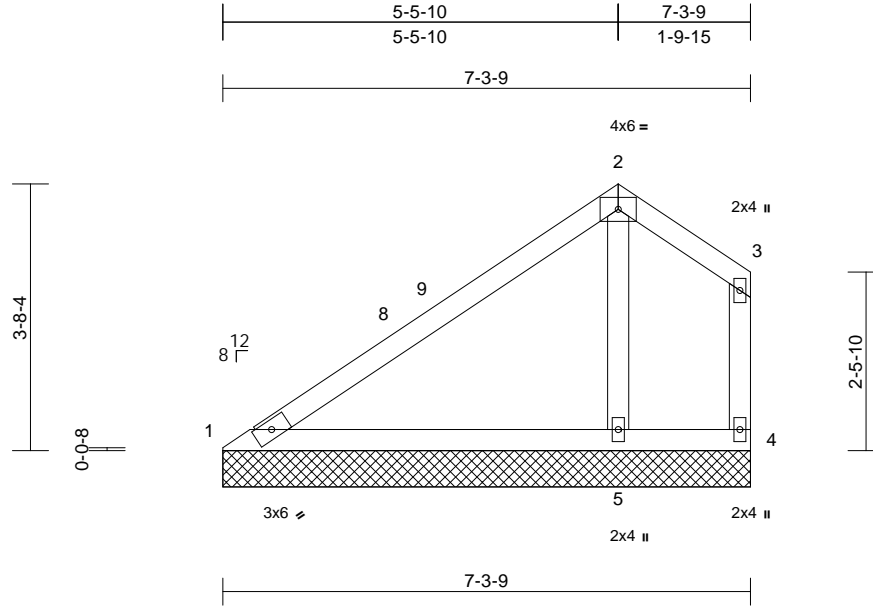


Job	Truss	Truss Type	Qty	Ply	JSJ, Cypress Prime - Elev. A (4-16-25)	
4703112	V09	Valley	1	1	Job Reference (optional)	I74008831

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

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:39  
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Page: 1



Scale = 1:31.9

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.36	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horiz(TL)	0.01	4	n/a	n/a	
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 31 lb FT = 20%

#### LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
OTHERS	2x4 SP No.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)	1=7-3-9, 4=7-3-9, 5=7-3-9
Max Horiz	1=156 (LC 9)
Max Uplift	1=-34 (LC 12), 4=-118 (LC 19), 5=-173 (LC 12)
Max Grav	1=175 (LC 1), 4=64 (LC 9), 5=526 (LC 19)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

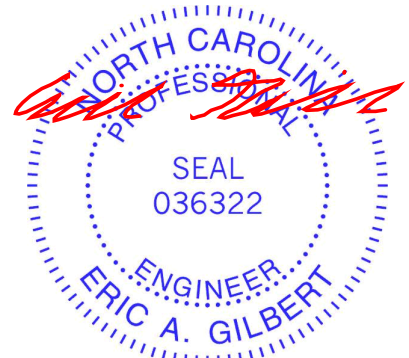
TOP CHORD	1-2=-244/147, 2-3=-63/99, 3-4=-60/70
BOT CHORD	1-5=-164/299, 4-5=-75/68
WEBS	2-5=-366/233

#### 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) 0-0-12 to 3-0-12, Interior (1) 3-0-12 to 5-6-6, Exterior (2) 5-6-6 to 7-2-9 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 4-0-0 oc.

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 118 lb uplift at joint 4, 34 lb uplift at joint 1 and 173 lb uplift at joint 5.

**LOAD CASE(S)** Standard



June 6, 2025

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

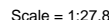
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

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Edenton, NC 27932



Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:39 Page: 1  
ID:S0aidtblAYbHYG3FUBfJs zbzv-RfC?PsB70Hg3NSqPqnL8w3uITXBgKWrcDoI7J4zJC?f



<b>LUMBER</b>	
TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
OTHERS	2x4 SP No.3
<b>BRACING</b>	
TOP CHORD	Structural wood sheathing directly applied or 5-9-9 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
<b>REACTIONS</b>	
(size)	1=5-9-9, 4=5-9-9, 5=5-9-9
Max Horiz	1=105 (LC 9)
Max Uplift	1=-40 (LC 12), 4=-41 (LC 8), 5=-60 (LC 12)
Max Grav	1=143 (LC 23), 4=60 (LC 20), 5=304 (LC 19)
<b>FORCES</b>	
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-211/100, 2-3=-74/83, 3-4=-91/81
BOT CHORD	1-5=-134/227, 4-5=-30/33
WEBS	2-5=-165/102

- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 41 lb uplift at joint 4. 40 lb uplift at joint 1 and 69 lb uplift at joint 5.

LOAD CASE(S) Standard

- ## 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) 0-0-12 to 3-0-12, Interior (1) 3-0-12 to 4-0-6, Exterior (2) 4-0-6 to 5-8-9 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) 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.
  - 4) Gable requires continuous bottom chord bearing.
  - 5) Gable studs spaced at 4-0-0 oc.



June 6.2025

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

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MH-1473 Rev. 1/2/2023 BEFORE USE.**

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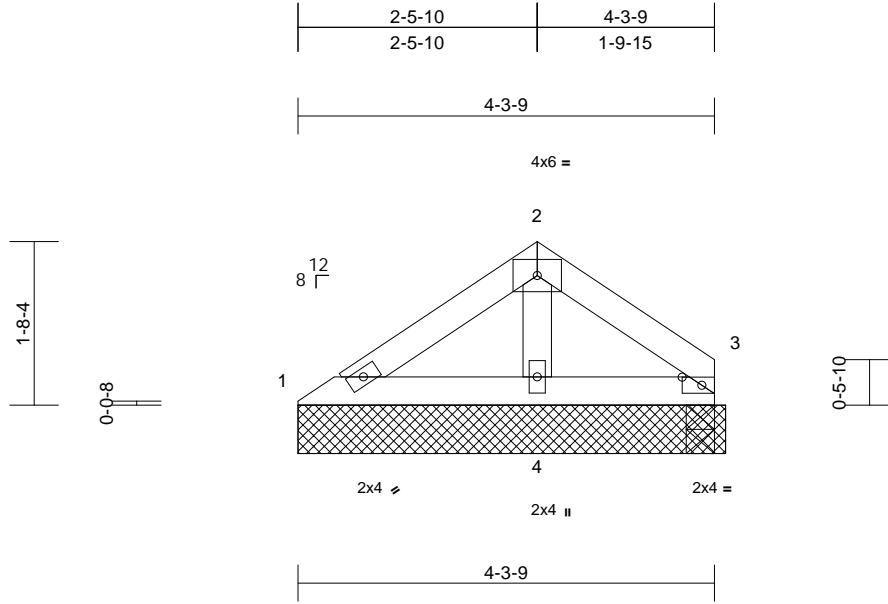


Job	Truss	Truss Type	Qty	Ply	JSJ, Cypress Prime - Elev. A (4-16-25)	
4703112	V11	Valley	1	1	Job Reference (optional)	I74008833

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

Run: 8.83 E Feb 1 2025 Print: 8.830 E Feb 1 2025 MiTek Industries, Inc. Fri Jun 06 11:02:11  
ID: HRTOSitAlcV0ooJfKwailrzbzvW-hfmJ5G1tXy?riLvnPNXcqdoS?pqZ1WC?ZZmN7pz9BQy

Page: 1



Scale = 1:23.8

Plate Offsets (X, Y): [3:0-1-9,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	0.06	Vert(LL)	0.00	4-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	0.00	4-8	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP		Wind(LL)	0.00	4-8	>999	240	Weight: 15 lb	FT = 20%

#### LUMBER

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

- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 3, 1, 4, 3.

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 4-3-9 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

#### REACTIONS

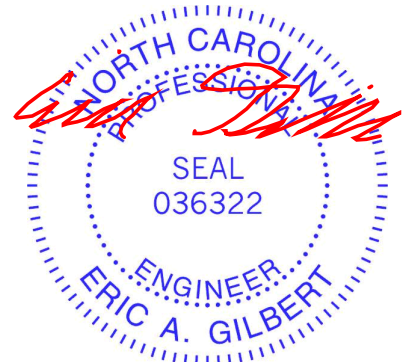
(size) 1=4-4-15, 3=4-4-15, 4=4-4-15  
Max Horiz 1=49 (LC 9)  
Max Uplift 1=-17 (LC 13), 3=-26 (LC 13), 4=-76 (LC 12)  
Max Grav 1=73 (LC 1), 3=61 (LC 24), 4=238 (LC 19)

#### FORCES

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

#### 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) 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.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.



June 6, 2025

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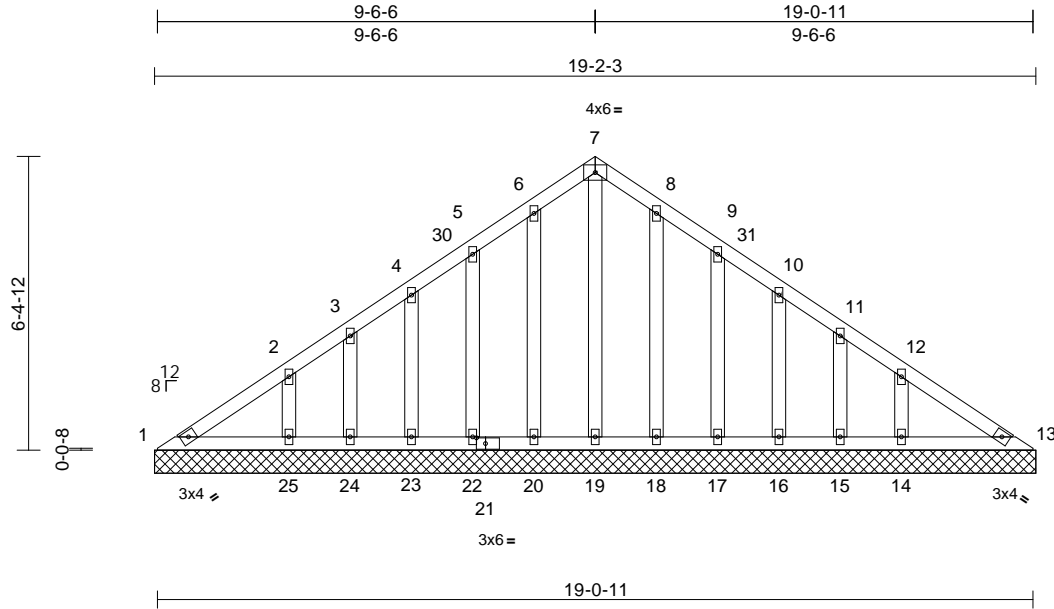


Job	Truss	Truss Type	Qty	Ply	JSJ, Cypress Prime - Elev. A (4-16-25)	174008834
4703112	VA1	Valley	1	1	Job Reference (optional)	

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

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:40  
ID:67tWrQMgKvXLcxNLgvl4vHzbzuu-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:50.2

Plate Offsets (X, Y): [21:0-2-6,0-1-8]

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	0.08	Vert(LL)	n/a	-	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(TL)	n/a	-	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.10	Horiz(TL)	0.00	13	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							
Weight: 117 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 10-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS** (size) 1=19-2-3, 13=19-2-3, 14=19-2-3, 15=19-2-3, 16=19-2-3, 17=19-2-3, 18=19-2-3, 19=19-2-3, 20=19-2-3, 22=19-2-3, 23=19-2-3, 24=19-2-3, 25=19-2-3  
Max Horiz 1=208 (LC 9)  
Max Uplift 1=-35 (LC 8), 14=-113 (LC 13), 15=-52 (LC 13), 16=-71 (LC 13), 17=-75 (LC 13), 18=-53 (LC 13), 20=-58 (LC 12), 22=-73 (LC 12), 23=-72 (LC 12), 24=-49 (LC 12), 25=-118 (LC 12)  
Max Grav 1=117 (LC 20), 13=87 (LC 24), 14=248 (LC 20), 15=66 (LC 20), 16=133 (LC 20), 17=118 (LC 20), 18=125 (LC 20), 19=175 (LC 22), 20=131 (LC 19), 22=116 (LC 19), 23=133 (LC 19), 24=64 (LC 19), 25=254 (LC 19)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=-180/182, 2-3=-123/136, 3-4=-94/126, 4-5=-78/128, 5-6=-95/163, 6-7=-134/185, 7-8=-134/175, 8-9=-95/127, 9-10=-49/80, 10-11=-14/63, 11-12=-47/63, 12-13=-126/123

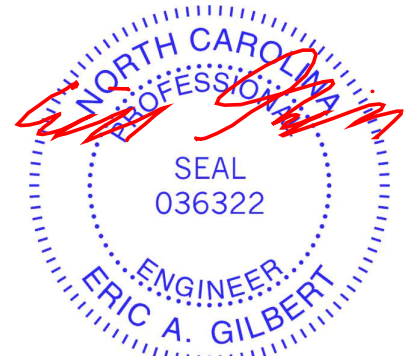
**BOT CHORD** 1-25=-129/155, 24-25=-129/155, 23-24=-129/155, 22-23=-129/155, 20-22=-129/155, 19-20=-129/155, 18-19=-129/155, 17-18=-129/155, 16-17=-129/155, 15-16=-129/155, 14-15=-129/155, 13-14=-129/155  
**WEBS** 7-19=-148/51, 6-20=-104/74, 5-22=-110/90, 4-23=-109/86, 3-24=-80/72, 2-25=-174/120, 8-18=-98/69, 9-17=-110/92, 10-16=-109/85, 11-15=-80/73, 12-14=-174/118

**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) 0-0-0 to 2-11-2, Interior (1) 2-11-2 to 9-7-2, Exterior (2) 9-7-2 to 12-7-2, Interior (1) 12-7-2 to 19-2-3 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) 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.  
4) All plates are 2x4 (||) MT20 unless otherwise indicated.  
5) Gable requires continuous bottom chord bearing.  
6) Gable studs spaced at 1-4-0 oc.  
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.  
8) \* 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.

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 35 lb uplift at joint 1, 58 lb uplift at joint 20, 73 lb uplift at joint 22, 72 lb uplift at joint 23, 49 lb uplift at joint 24, 118 lb uplift at joint 25, 53 lb uplift at joint 18, 75 lb uplift at joint 17, 71 lb uplift at joint 16, 52 lb uplift at joint 15 and 113 lb uplift at joint 14.

10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 13.

**LOAD CASE(S)** Standard



June 6, 2025

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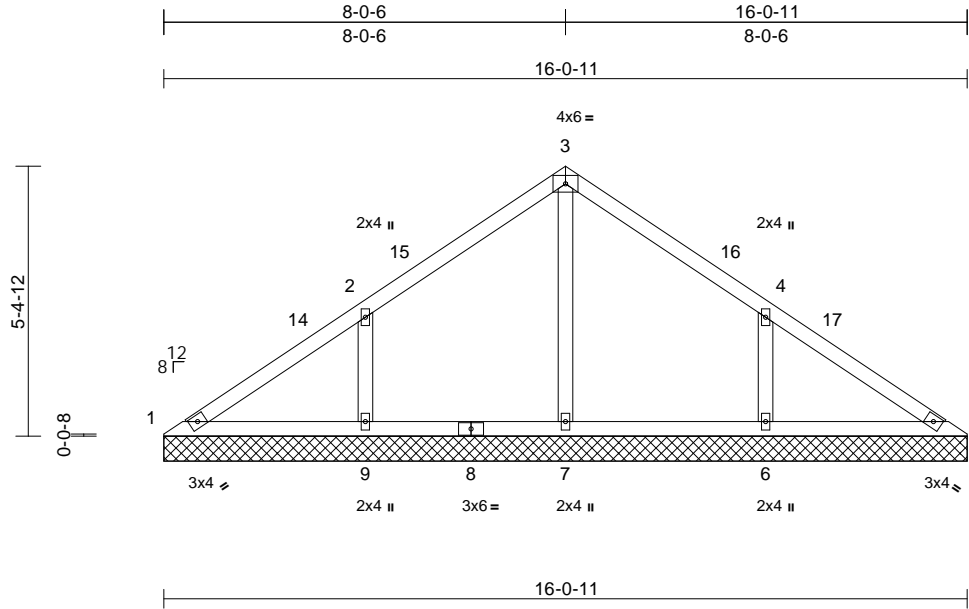


Job	Truss	Truss Type	Qty	Ply	JSJ, Cypress Prime - Elev. A (4-16-25)	174008835
4703112	VA2	Valley	1	1	Job Reference (optional)	

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

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:40  
ID:q2UlxrUXzowoU8GF0TRJOzbzuk-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWRCDoi7J4zJC?f

Page: 1



Scale = 1:46

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	0.24	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.13	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.14	Horiz(TL)	0.00	5	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS						Weight: 65 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 6-0-0 oc bracing.

**REACTIONS** (size) 1=16-0-11, 5=16-0-11, 6=16-0-11, 7=16-0-11, 9=16-0-11  
Max Horiz 1=-174 (LC 8)  
Max Uplift 1=-23 (LC 13), 6=-237 (LC 13), 9=-240 (LC 12)  
Max Grav 1=113 (LC 20), 5=101 (LC 24), 6=423 (LC 20), 7=346 (LC 1), 9=426 (LC 19)

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

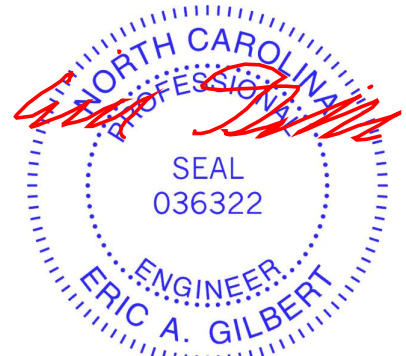
TOP CHORD 1-2=-151/207, 2-3=-51/162, 3-4=-51/141, 4-5=-119/155  
BOT CHORD 1-9=-144/152, 7-9=-144/133, 6-7=-144/133, 5-6=-144/133  
WEBS 3-7=-280/38, 2-9=-344/268, 4-6=-344/266

#### 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) 0-0-12 to 3-0-12, Interior (1) 3-0-12 to 8-1-2, Exterior (2) 8-1-2 to 11-1-2, Interior (1) 11-1-2 to 16-1-7 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.

- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 23 lb uplift at joint 1, 240 lb uplift at joint 9 and 237 lb uplift at joint 6.

**LOAD CASE(S)** Standard



June 6, 2025

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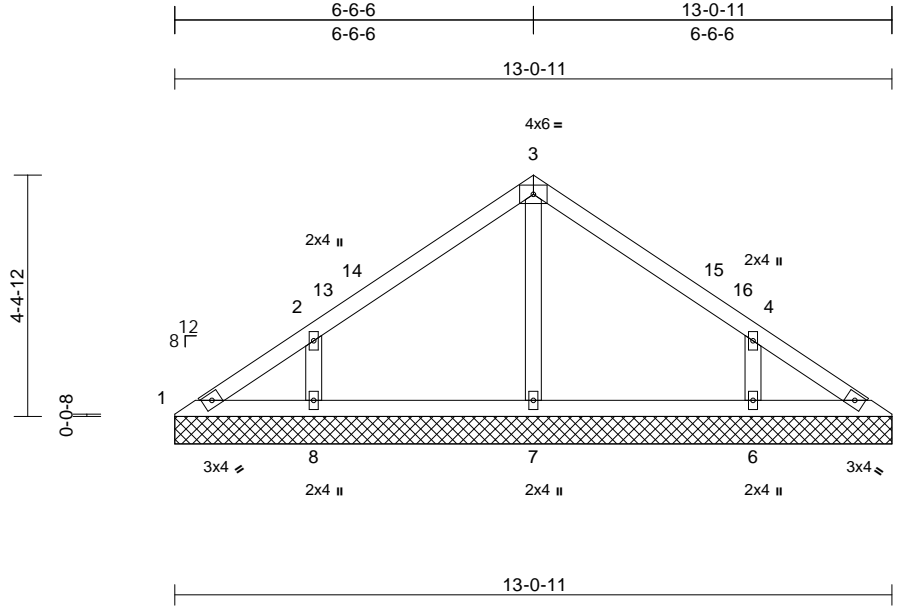
Job	Truss	Truss Type	Qty	Ply	JSJ, Cypress Prime - Elev. A (4-16-25)	174008836
4703112	VA3	Valley	1	1	Job Reference (optional)	

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

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:40

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	0.19	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	5	n/a	n/a	
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 50 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.

<b>REACTIONS</b> (size)	1=13-0-11, 5=13-0-11, 6=13-0-11, 7=13-0-11, 8=13-0-11
Max Horiz	1=-141 (LC 8)
Max Uplift	1=-29 (LC 8), 5=-4 (LC 12), 6=-196 (LC 13), 8=-200 (LC 12)
Max Grav	1=98 (LC 20), 5=74 (LC 1), 6=350 (LC 20), 7=278 (LC 1), 8=353 (LC 19)

#### FORCES

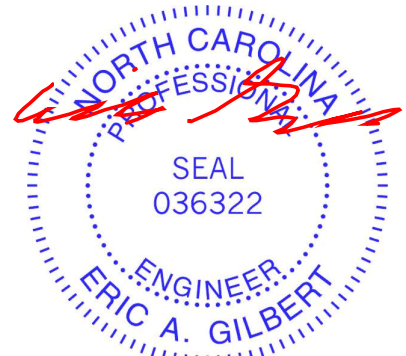
	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-134/121, 2-3=-123/132, 3-4=-123/117, 4-5=-96/67
BOT CHORD	1-8=-49/106, 7-8=-45/81, 6-7=-45/81, 5-6=-45/81
WEBS	3-7=-195/33, 2-8=-310/246, 4-6=-310/244

#### 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) 0-0-12 to 3-0-12, Interior (1) 3-0-12 to 6-7-2, Exterior (2) 6-7-2 to 9-7-2, Interior (1) 9-7-2 to 13-1-7 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.

- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 1, 4 lb uplift at joint 5, 200 lb uplift at joint 8 and 196 lb uplift at joint 6.

**LOAD CASE(S)** Standard



June 6, 2025

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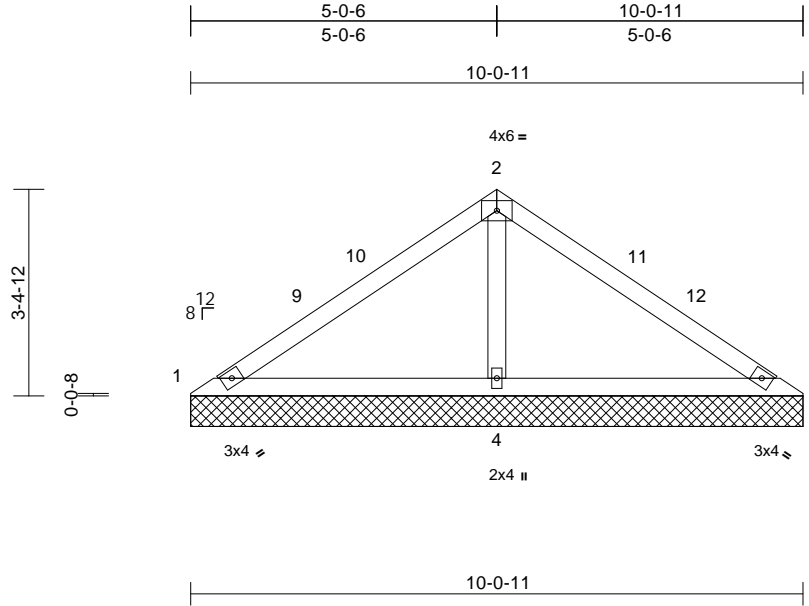


Job	Truss	Truss Type	Qty	Ply	JSJ, Cypress Prime - Elev. A (4-16-25)	174008837
4703112	VA4	Valley	1	1	Job Reference (optional)	

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

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:41  
ID:bbzKdaaY5RonmipjhCJe4zbzuc-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?i

Page: 1



Scale = 1:37.9

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	0.29	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.14	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 35 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 10-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

#### REACTIONS

(size) 1=10-0-11, 3=10-0-11, 4=10-0-11  
Max Horiz 1=-107 (LC 8)  
Max Uplift 1=-25 (LC 24), 3=-28 (LC 8), 4=-214 (LC 12)  
Max Grav 1=75 (LC 23), 3=75 (LC 24), 4=737 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

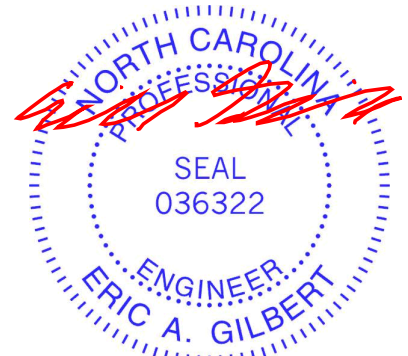
TOP CHORD 1-2=-133/337, 2-3=-132/337  
BOT CHORD 1-4=-323/187, 3-4=-323/187  
WEBS 2-4=-612/286

#### 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) 0-0-12 to 3-0-12, Interior (1) 3-0-12 to 5-1-2, Exterior (2) 5-1-2 to 8-1-2, Interior (1) 8-1-2 to 10-1-7 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.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 25 lb uplift at joint 1, 28 lb uplift at joint 3 and 214 lb uplift at joint 4.

LOAD CASE(S) Standard



June 6, 2025

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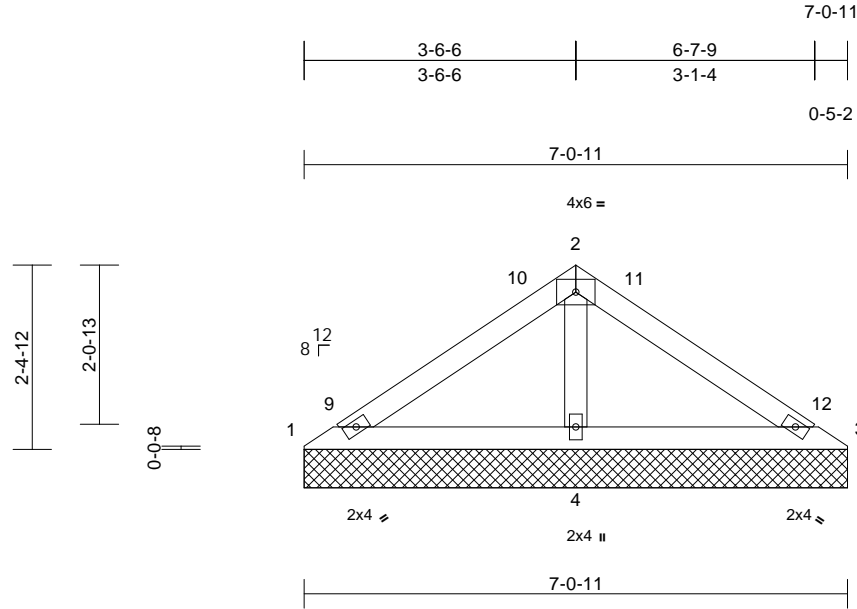
Job	Truss	Truss Type	Qty	Ply	JSJ, Cypress Prime - Elev. A (4-16-25)	
4703112	VA5	Valley	1	1	Job Reference (optional)	I74008838

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

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:41

Page: 1

ID:X\_542Gbpdd22V?0vBr6fnjVzbzua-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKwRCDoi7J4zJC?i



Scale = 1:29.9

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	0.13	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	3	n/a	n/a	
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 24 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 7'-0-11 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6'-0-0 oc bracing.

#### REACTIONS

(size) 1=7'-0-11, 3=7'-0-11, 4=7'-0-11  
Max Horiz 1=-74 (LC 8)  
Max Uplift 1=-12 (LC 12), 3=-24 (LC 13), 4=-120 (LC 12)  
Max Grav 1=77 (LC 23), 3=77 (LC 24), 4=452 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

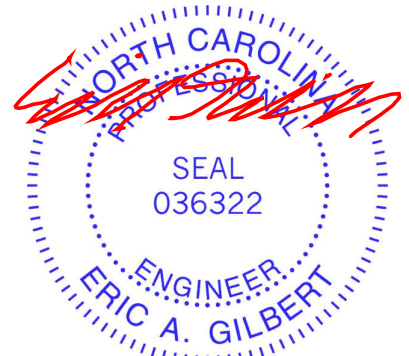
TOP CHORD 1-2=-76/178, 2-3=-76/174  
BOT CHORD 1-4=-166/111, 3-4=-166/111  
WEBS 2-4=-341/172

#### 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'-0-12 to 3'-0-12, Interior (1) 3'-0-12 to 3'-7-2, Exterior (2) 3'-7-2 to 6'-7-2, Interior (1) 6'-7-2 to 7'-1-7 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.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4'-0-0 oc.

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-0-0 tall by 2'-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 12 lb uplift at joint 1, 24 lb uplift at joint 3 and 120 lb uplift at joint 4.

LOAD CASE(S) Standard



June 6,2025

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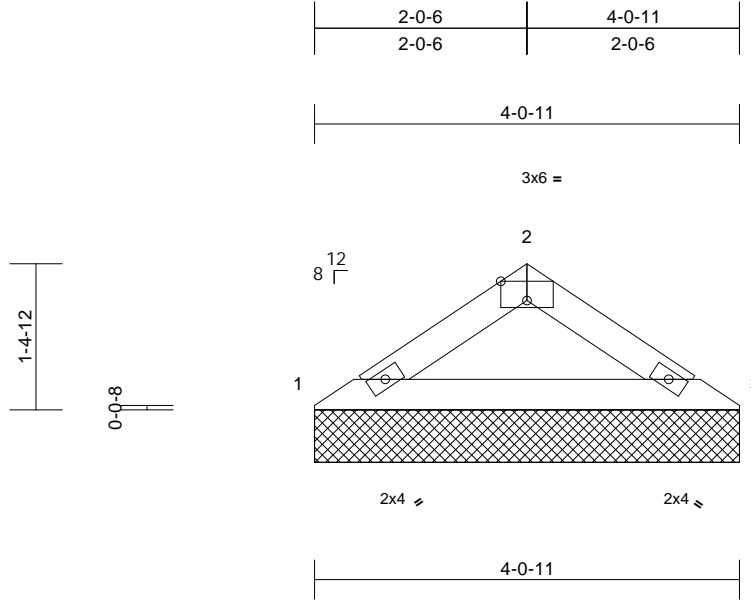


Job	Truss	Truss Type	Qty	Ply	JSJ, Cypress Prime - Elev. A (4-16-25)	
4703112	VA6	Valley	1	1	Job Reference (optional)	174008839

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

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 05 13:38:41  
ID:xZmDgHehwzR4sUdmWFCUL7zbzuX-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWRCDoi7J4zJC?f

Page: 1



Scale = 1:22

Plate Offsets (X, Y): [2:0-3:0,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)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a	
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							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 4'-0-11 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10'-0-0 oc bracing.

**REACTIONS** (size) 1=4'-0-11, 3=4'-0-11  
Max Horiz 1=-41 (LC 10)  
Max Uplift 1=-42 (LC 12), 3=-42 (LC 13)  
Max Grav 1=162 (LC 1), 3=162 (LC 1)

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

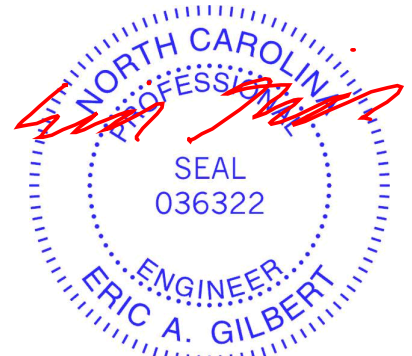
TOP CHORD 1-2=-246/97, 2-3=-246/97  
BOT CHORD 1-3=-67/202

#### 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) 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.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4'-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-0-0 tall by 2'-0-0 wide will fit between the bottom chord and any other members.

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 42 lb uplift at joint 1 and 42 lb uplift at joint 3.

**LOAD CASE(S)** Standard



June 6, 2025

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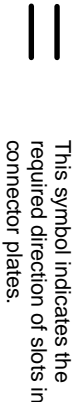
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# Symbols

## PLATE LOCATION AND ORIENTATION



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

## PLATE SIZE

**4 X 4**

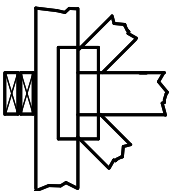
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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

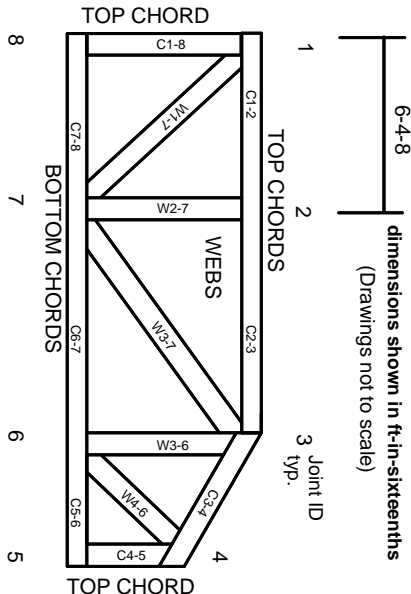


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

## 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 1 section 6.3. These truss designs rely on lumber values established by others.

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# General Safety Notes

**Failure to Follow Could Cause Property Damage or Personal Injury**

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.

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