ENGINEERING BY TRENCO
A MiTek Affiliate

Lumber design values are in accordance with ANSI/TPI 1 section 6.3
These truss designs rely on lumber values established by others.

RE: 4703097 - JSJ, Pinewood - Elev. A (5-27-20)

Trenco
818 Soundside Rd
Edenton, NC 27932

Site Information:

Project Customer: JSJ Builders Project Name:
Lot/Block: 96 Subdivision: DUCKS LANDING
Address:
City: Lillington State: NC

Name Address and License # of Structural Engineer of Record, If there is one, for the building.

Name: License #:
Address:
City, County: State:

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 Design Method: MWFRS (Envelope)/C-C hybrid Wind ASCE 7-10
Wind Speed: 130 mph
Roof Load: 40.0 psf Floor Load: N/A psf

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

No.	Seal#	Job ID#	Truss Name	Date	No.	Seal#	Job ID#	Truss Name	Date
1	I75044232	4703097	A01	7/22/25		I75044255	4703097	V03	7/22/25
2	I75044233	4703097	A02	7/22/25	25	I75044256	4703097	V04	7/22/25
3		4703097	A03	7/22/25	26	I75044257	4703097	V05	7/22/25
4	I75044235	4703097	A04	7/22/25	27	I75044258	4703097	V06	7/22/25
5	I75044236	4703097		7/22/25	28	I75044259	4703097	V07	7/22/25
6	I75044237	4703097	A06	7/22/25	29	I75044260	4703097	V08	7/22/25
7	I75044238	4703097	A07	7/22/25					
8	I75044239	4703097	B01	7/22/25					
9	I75044240	4703097	B02	7/22/25					
10	I75044241	4703097	C01	7/22/25					
11	I75044242	4703097	D01	7/22/25					
12		4703097		7/22/25					
13	I75044244	4703097	D03	7/22/25					
14	I75044245	4703097		7/22/25					
	I75044246	4703097	E02	7/22/25					
16	I75044247	4703097	G01	7/22/25					
17	I75044248	4703097	G02	7/22/25					
18	I75044249	4703097	G03	7/22/25					
19	I75044250	4703097	G04	7/22/25					
20	I75044251	4703097	H01	7/22/25					
21		4703097	H02	7/22/25					
22	I75044253	4703097	V01	7/22/25					
23	I75044254	4703097	V02	7/22/25					

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.

July 22,2025
Gilbert, Eric

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

ENGINEERING BY TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

RE: $JOBNAME - $JOBDESC

Site Information:

Project Customer: $SI_CUSTOMER Project Name: $SI_JOBNAME
Lot/Block: $SI_LOTNUM Subdivision: $SI_SUBDIV
Address: $SI_SITEADDR
City, County: $SI_SITECITY State: $SI_SITESTATE

ENGINEERING BY TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

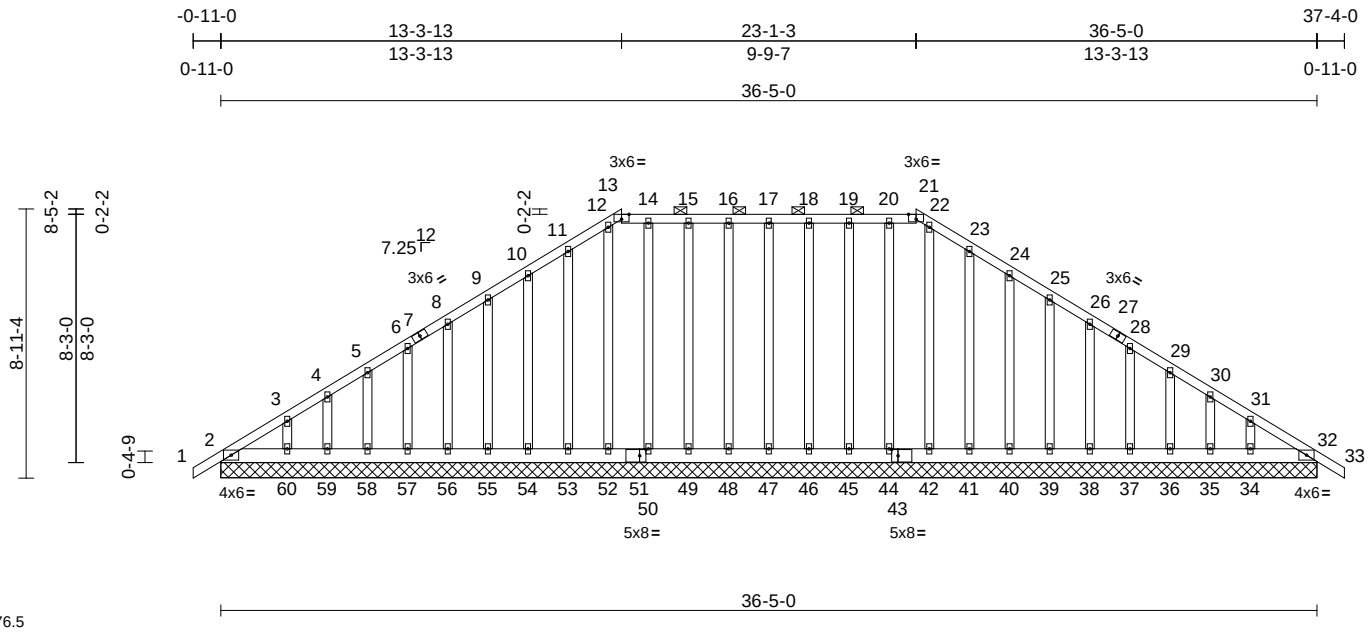
RE: $JOBNAME - $JOBDESC

Site Information:

Project Customer: $SI_CUSTOMER Project Name: $SI_JOBNAME
Lot/Block: $SI_LOTNUM Subdivision: $SI_SUBDIV
Address: $SI_SITEADDR
City, County: $SI_SITECITY State: $SI_SITESTATE

Job	Truss	Truss Type	Qty	Ply	JSJ, Pinewood - Elev. A (5-27-20)
4703097	A01	Hip Supported Gable	1	1	I75044232 Job Reference (optional)

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Mon Jul 21 09:53:27 Page: 1
ID:LSijGKaA4dkBzRl6t_7S2rzlGJ6-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:76.5

Plate Offsets (X, Y): [13:0-3-0,Edge], [21:0-3-0,Edge], [43:0-2-8,0-2-8], [51:0-2-8,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	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	0.11	Horz(CT)	0.01	32	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 341 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
OTHERS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 13-21.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=36-5-0, 32=36-5-0, 34=36-5-0, 35=36-5-0, 36=36-5-0, 37=36-5-0, 38=36-5-0, 39=36-5-0, 40=36-5-0, 41=36-5-0, 42=36-5-0, 44=36-5-0, 45=36-5-0, 46=36-5-0, 47=36-5-0, 48=36-5-0, 49=36-5-0, 50=36-5-0, 52=36-5-0, 53=36-5-0, 54=36-5-0, 55=36-5-0, 56=36-5-0, 57=36-5-0, 58=36-5-0, 59=36-5-0, 60=36-5-0
Max Horiz 2=-284 (LC 10)
Max Uplift 2=-56 (LC 8), 32=-8 (LC 9), 34=-82 (LC 13), 35=-58 (LC 13), 36=-64 (LC 13), 37=-63 (LC 13), 38=-63 (LC 13), 39=-62 (LC 13), 40=-66 (LC 13), 41=-63 (LC 13), 44=-29 (LC 9), 45=-43 (LC 8), 46=-38 (LC 8), 47=-37 (LC 9), 48=-38 (LC 8), 49=-44 (LC 8), 50=-32 (LC 9), 52=-13 (LC 9), 53=-64 (LC 12), 54=-65 (LC 12), 55=-63 (LC 12), 56=-63 (LC 12), 57=-63 (LC 12), 58=-64 (LC 12), 59=-57 (LC 12), 60=-84 (LC 12)
Max Grav 2=166 (LC 20), 32=149 (LC 1), 34=175 (LC 20), 35=99 (LC 20), 36=124 (LC 20), 37=118 (LC 20), 38=119 (LC 20), 39=119 (LC 20), 40=120 (LC 20), 41=121 (LC 20), 42=105 (LC 21), 44=105 (LC 24), 45=108 (LC 23), 46=107 (LC 24), 47=107 (LC 1), 48=107 (LC 23), 49=108 (LC 24), 50=105 (LC 23), 52=125 (LC 22), 53=122 (LC 19), 54=119 (LC 19), 55=119 (LC 19), 56=119 (LC 19), 57=118 (LC 19), 58=124 (LC 19), 59=98 (LC 19), 60=178 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/28, 2-3=-255/203, 3-4=-199/179, 4-5=-164/163, 5-6=-142/145, 6-8=-128/137, 8-9=-114/146, 9-10=-121/174, 10-11=-161/203, 11-12=-199/239, 12-13=-187/226, 13-14=-186/226, 14-15=-186/225, 15-16=-186/225, 16-17=-186/225, 17-18=-186/225, 18-19=-186/225, 19-20=-186/225, 20-21=-186/226, 21-22=-187/226, 22-23=-199/239, 23-24=-161/193, 24-25=-121/145, 25-26=-83/99, 26-28=-46/56, 28-29=-56/52, 29-30=-88/70, 30-31=-136/94, 31-32=-191/145, 32-33=0/28
BOT CHORD 2-60=-156/229, 59-60=-156/229, 58-59=-156/229, 57-58=-156/229, 56-57=-156/229, 55-56=-156/229, 54-55=-156/229, 53-54=-156/229, 52-53=-156/229, 50-52=-156/229, 49-50=-156/229, 48-49=-156/229, 47-48=-156/229, 46-47=-156/229, 45-46=-156/229, 44-45=-156/229, 42-44=-156/229, 41-42=-156/229, 40-41=-156/229, 39-40=-156/229, 38-39=-156/229, 37-38=-156/229, 36-37=-156/229, 35-36=-156/229, 34-35=-156/229, 32-34=-156/229
WEBS 17-47=-80/55, 16-48=-80/56, 15-49=-82/65, 14-50=-79/48, 12-52=-98/29, 11-53=-102/80, 10-54=-104/81, 9-55=-101/79, 8-56=-101/79, 6-57=-101/79, 5-58=-102/79, 4-59=-96/76, 3-60=-125/89, 18-46=-80/56, 19-45=-82/65, 20-44=-79/45, 22-42=-78/6, 23-41=-102/79, 24-40=-104/82, 25-39=-101/78, 26-38=-101/79, 28-37=-101/79, 29-36=-102/79, 30-35=-96/76, 31-34=-125/89

NOTES

July 22,2025

Continued on page 2

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

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) 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) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 (||) MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 1-4-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 56 lb uplift at joint 2, 8 lb uplift at joint 32, 37 lb uplift at joint 47, 38 lb uplift at joint 48, 44 lb uplift at joint 49, 32 lb uplift at joint 50, 13 lb uplift at joint 52, 64 lb uplift at joint 53, 65 lb uplift at joint 54, 63 lb uplift at joint 55, 63 lb uplift at joint 56, 63 lb uplift at joint 57, 64 lb uplift at joint 58, 57 lb uplift at joint 59, 84 lb uplift at joint 60, 38 lb uplift at joint 46, 43 lb uplift at joint 45, 29 lb uplift at joint 44, 63 lb uplift at joint 41, 66 lb uplift at joint 40, 62 lb uplift at joint 39, 63 lb uplift at joint 38, 63 lb uplift at joint 37, 64 lb uplift at joint 36, 58 lb uplift at joint 35 and 82 lb uplift at joint 34.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

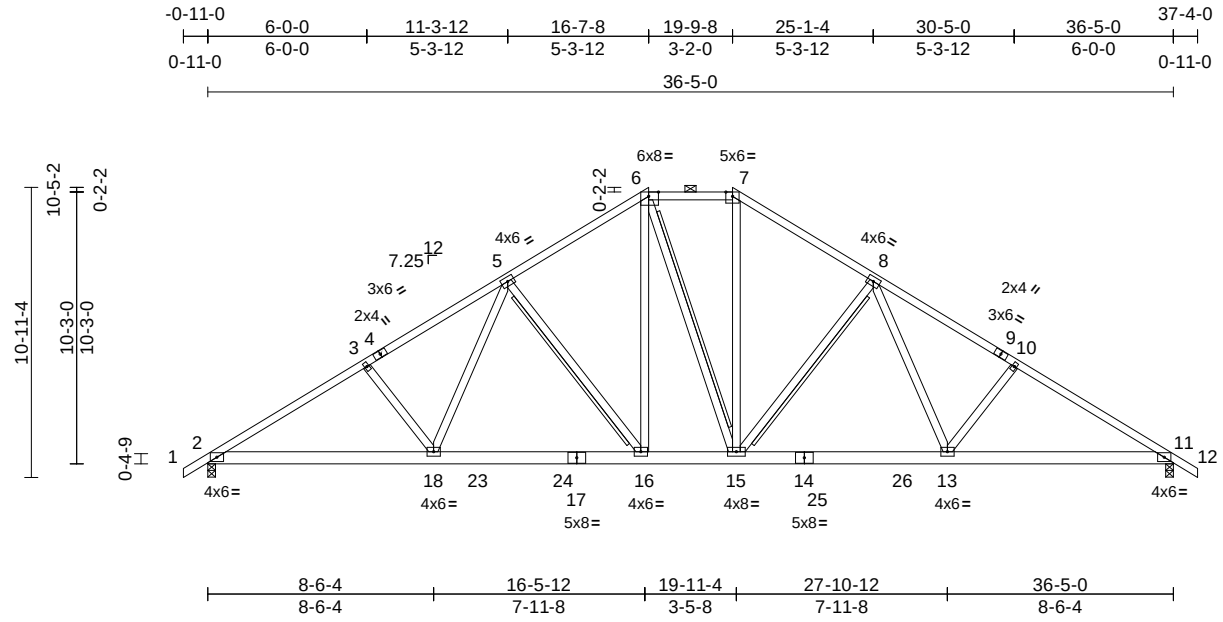
July 22,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Pinewood - Elev. A (5-27-20)
4703097	A02	Hip	1	1	I75044233
					Job Reference (optional)

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Mon Jul 21 09:53:28 Page: 1

ID:soJ4HTaYS8uoa8VeJMr3OszlGYb-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:86.9

Plate Offsets (X, Y): [6:0-4-8,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	0.39	Vert(LL)	-0.12	16-18	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.23	16-18	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.07	11	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.11	16-18	>999	240	Weight: 252 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)

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-4-3 oc purlins, except 2-0-0 oc purlins (4-9-7 max.): 6-7.
BOT CHORD Rigid ceiling directly applied or 9-2-13 oc bracing.
WEBS T-Brace: 2x4 SPF No.2 - 6-15, 5-16, 8-15
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) 2=0-3-8, 11=0-3-8
Max Horiz 2=-351 (LC 10)
Max Uplift 2=-391 (LC 12), 11=-391 (LC 13)
Max Grav 2=1512 (LC 1), 11=1512 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/28, 2-3=-2448/817, 3-5=-2283/827, 5-6=-1698/718, 6-7=-1488/672, 7-8=-1702/719, 8-10=-2281/827, 10-11=-2446/816, 11-12=0/28
BOT CHORD 2-18=-614/2222, 16-18=-394/1801, 15-16=-162/1380, 13-15=-367/1681, 11-13=-568/2033
WEBS 6-16=-225/667, 6-15=-184/192, 7-15=-205/646, 3-18=-367/276, 5-18=-151/595, 5-16=-691/377, 8-15=-685/376, 8-13=-149/589, 10-13=-368/276

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) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 391 lb uplift at joint 2 and 391 lb uplift at joint 11.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
8) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

LOAD CASE(S) Standard

July 22,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Pinewood - Elev. A (5-27-20)
4703097	A03	Common	5	1	I75044234 Job Reference (optional)

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Mon Jul 21 09:53:29 Page: 1
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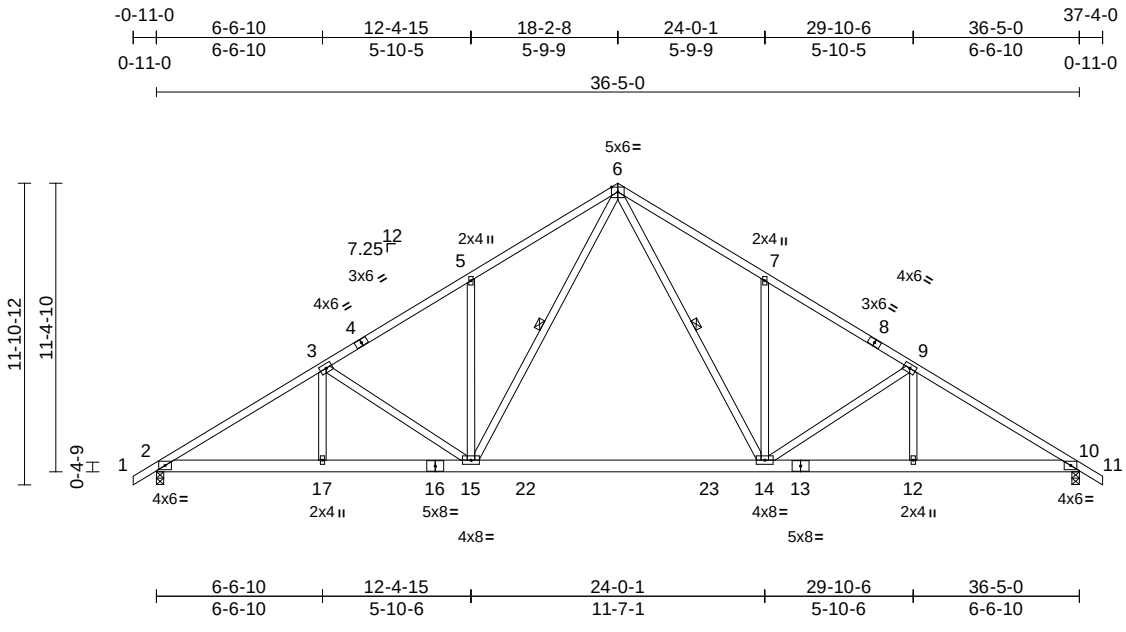

Scale = 1:90.9

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	0.46	Vert(LL)	-0.25	14-15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.46	14-15	>941	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.07	10	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.14	14-15	>999	240	Weight: 240 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-3-1 oc purlins.
BOT CHORD Rigid ceiling directly applied or 8-11-2 oc bracing.
WEBS 1 Row at midpt 6-15, 6-14

REACTIONS (size) 2=0-3-8, 10=0-3-8
Max Horiz 2=-386 (LC 10)
Max Uplift 2=-403 (LC 12), 10=-403 (LC 13)
Max Grav 2=1538 (LC 19), 10=1538 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/28, 2-3=-2474/800, 3-5=-2066/721, 5-6=-2240/930, 6-7=-2240/930, 7-9=-2066/721, 9-10=-2473/800, 10-11=0/28
BOT CHORD 2-17=-642/2314, 15-17=-642/2314, 14-15=-154/1351, 12-14=-542/2037, 10-12=-542/2037
WEBS 5-15=-455/366, 6-15=-471/1180, 6-14=-470/1179, 7-14=-455/366, 3-15=-598/322, 3-17=0/217, 9-14=-598/323, 9-12=0/217

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) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 403 lb uplift at joint 2 and 403 lb uplift at joint 10.

LOAD CASE(S) Standard

July 22,2025

ENGINEERING BY TRENCO
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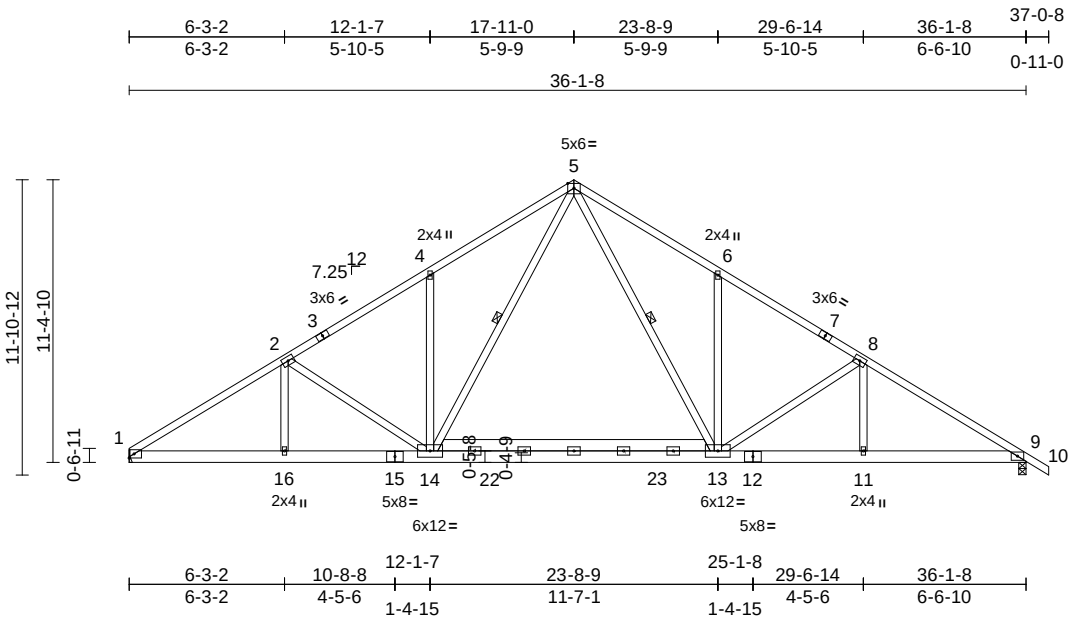
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	JSJ, Pinewood - Elev. A (5-27-20)
4703097	A04	Common	6	1	I75044235 Job Reference (optional)

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

Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Mon Jul 21 09:53:29
ID:ahoZiLUfX4MZ78oRvscV9mzIGQz-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:92.8

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	0.45	Vert(LL)	-0.14	13-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.28	13-14	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.57	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: 262 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-3-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-2-14 oc bracing.
WEBS 1 Row at midpt 5-14, 5-13

REACTIONS (size) 1= Mechanical, 9=0-3-8
Max Horiz 1=-379 (LC 8)
Max Uplift 1=-367 (LC 12), 9=-401 (LC 13)
Max Grav 1=1464 (LC 19), 9=1520 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-2351/766, 2-4=-2011/714, 4-5=-2189/924, 5-6=-2204/928, 6-8=-2029/719, 8-9=-2453/794, 9-10=0/28
BOT CHORD 1-16=-615/2202, 14-16=-615/2202, 13-14=-152/1308, 11-13=-537/2024, 9-11=-537/2024
WEBS 4-14=-461/368, 5-14=-465/1123, 5-13=-471/1149, 6-13=-456/366, 2-14=-516/296, 2-16=0/189, 8-13=-621/319, 8-11=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) 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) All plates are 4x6 (=) MT20 unless otherwise indicated.
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 367 lb uplift at joint 1 and 401 lb uplift at joint 9.

LOAD CASE(S) Standard

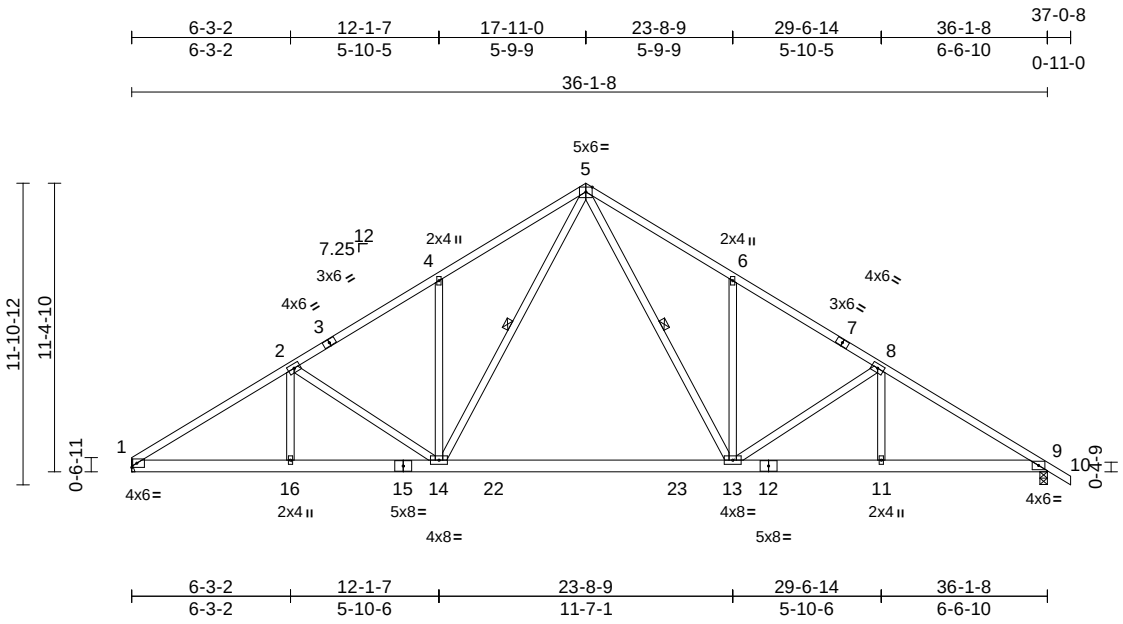
NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT

July 22,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Pinewood - Elev. A (5-27-20)
4703097	A05	Common	3	1	I75044236 Job Reference (optional)

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Mon Jul 21 09:53:29 Page: 1
ID:vp6B76SKqMEo0n1WlpVybRzlGN8-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:90.9

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	0.45	Vert(LL)	-0.24	13-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.45	13-14	>968	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.07	9	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.12	13-14	>999	240	Weight: 237 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-3-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-2-13 oc bracing.
WEBS 1 Row at midpt 5-14, 5-13

REACTIONS (size) 1= Mechanical, 9=0-3-8
Max Horiz 1=-379 (LC 8)
Max Uplift 1=-367 (LC 12), 9=-401 (LC 13)
Max Grav 1=1471 (LC 19), 9=1528 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-2352/768, 2-4=-2024/710, 4-5=-2201/920, 5-6=-2218/925, 6-8=-2044/716, 8-9=-2454/795, 9-10=0/28
BOT CHORD 1-16=-617/2203, 14-16=-617/2203, 13-14=-150/1333, 11-13=-538/2019, 9-11=-538/2019
WEBS 5-14=-464/1147, 5-13=-470/1177, 4-14=-461/368, 6-13=-455/366, 2-14=-498/301, 2-16=-4/157, 8-13=-599/323, 8-11=0/218

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) 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 367 lb uplift at joint 1 and 401 lb uplift at joint 9.

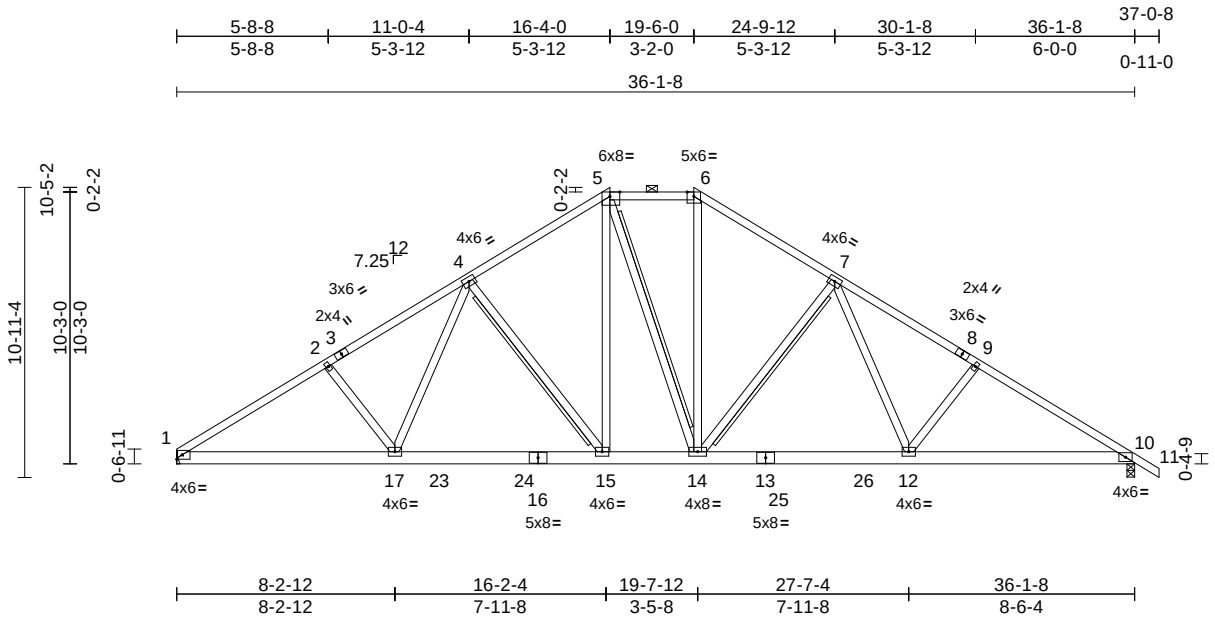
LOAD CASE(S) Standard

July 22,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Pinewood - Elev. A (5-27-20)
4703097	A06	Hip	1	1	I75044237 Job Reference (optional)

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Mon Jul 21 09:53:30 Page: 1
ID:1l8xytSSlM8FxIjQUgTtKRzlGKY-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:86.9

Plate Offsets (X, Y): [5:0-4-8,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	0.39	Vert(LL)	-0.12	15-17	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.23	15-17	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.07	10	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.11	15-17	>999	240	Weight: 249 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)

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-4-7 oc purlins, except 2-0-0 oc purlins (4-9-12 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 9-6-2 oc bracing.
WEBS T-Brace: 2x4 SPF No.2 - 5-14, 4-15, 7-14
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.

REACTIONS (size) 1= Mechanical, 10=0-3-8
Max Horiz 1=-344 (LC 8)
Max Uplift 1=-355 (LC 12), 10=-389 (LC 13)
Max Grav 1=1444 (LC 1), 10=1501 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-2353/790, 2-4=-2186/801, 4-5=-1677/712, 5-6=-1470/667, 6-7=-1681/713, 7-9=-2261/822, 9-10=-2425/811, 10-11=0/28
BOT CHORD 1-17=-593/2132, 15-17=-384/1756, 14-15=-158/1361, 12-14=-362/1662, 10-12=-563/2015
WEBS 5-15=-222/655, 5-14=-183/193, 6-14=-202/635, 2-17=-340/269, 4-17=-133/513, 4-15=-645/368, 7-14=-686/376, 7-12=-149/589, 9-12=-368/276

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) 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 355 lb uplift at joint 1 and 389 lb uplift at joint 10.
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.

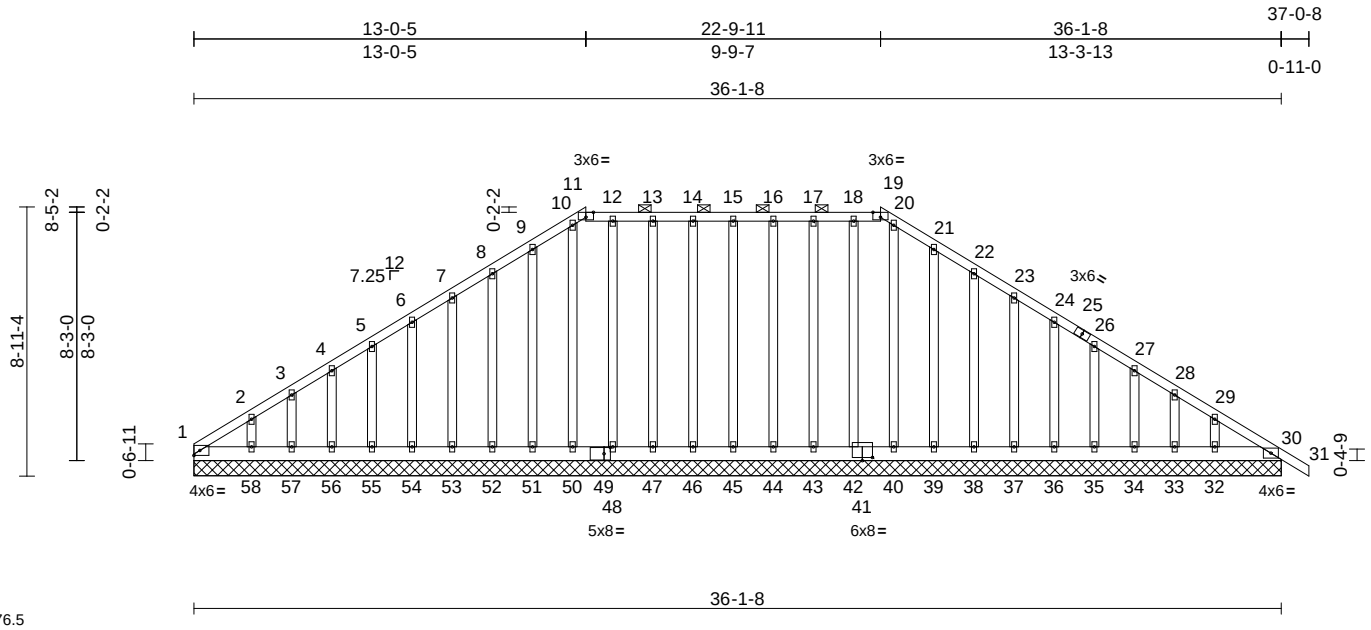
LOAD CASE(S) Standard

July 22,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Pinewood - Elev. A (5-27-20)
4703097	A07	Hip Supported Gable	1	1	I75044238 Job Reference (optional)

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Mon Jul 21 09:53:30 Page: 1
ID:f9FVanhtPuK8?annGJn0nFzlGHg-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:76.5

Plate Offsets (X, Y): [11:0-3-0,Edge], [19:0-3-0,Edge], [42:0-4-0,0-1-4], [49:0-2-8,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.07	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	0.11	Horz(CT)	0.01	30	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 338 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
OTHERS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 11-19.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=36-1-8, 30=36-1-8, 32=36-1-8, 33=36-1-8, 34=36-1-8, 35=36-1-8, 36=36-1-8, 37=36-1-8, 38=36-1-8, 39=36-1-8, 40=36-1-8, 42=36-1-8, 43=36-1-8, 44=36-1-8, 45=36-1-8, 46=36-1-8, 47=36-1-8, 48=36-1-8, 50=36-1-8, 51=36-1-8, 52=36-1-8, 53=36-1-8, 54=36-1-8, 55=36-1-8, 56=36-1-8, 57=36-1-8, 58=36-1-8
Max Horiz 1=-277 (LC 8)
Max Uplift 1=-74 (LC 10), 30=-8 (LC 9), 32=-82 (LC 13), 33=-58 (LC 13), 34=-64 (LC 13), 35=-63 (LC 13), 36=-63 (LC 13), 37=-62 (LC 13), 38=-66 (LC 13), 39=-63 (LC 13), 42=-29 (LC 9), 43=-43 (LC 8), 44=-38 (LC 8), 45=-37 (LC 9), 46=-38 (LC 8), 47=-44 (LC 8), 48=-32 (LC 9), 50=-13 (LC 9), 51=-64 (LC 12), 52=-65 (LC 12), 53=-62 (LC 12), 54=-63 (LC 12), 55=-61 (LC 12), 56=-69 (LC 12), 57=-40 (LC 12), 58=-130 (LC 12)
Max Grav 1=140 (LC 12), 30=149 (LC 1), 32=175 (LC 20), 33=99 (LC 20), 34=124 (LC 20), 35=118 (LC 20), 36=119 (LC 20), 37=119 (LC 20), 38=120 (LC 20), 39=121 (LC 20), 40=105 (LC 21), 42=105 (LC 24), 43=108 (LC 23), 44=107 (LC 24), 45=107 (LC 1), 46=107 (LC 23), 47=108 (LC 24), 48=105 (LC 23), 50=124 (LC 22), 51=122 (LC 19), 52=119 (LC 19), 53=119 (LC 19), 54=119 (LC 19), 55=117 (LC 19), 56=126 (LC 19), 57=93 (LC 19), 58=195 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-256/203, 2-3=-198/177, 3-4=-164/162, 4-5=-142/144, 5-6=-129/137, 6-7=-115/146, 7-8=-122/174, 8-9=-162/202, 9-10=-201/238, 10-11=-188/225, 11-12=-187/225, 12-13=-187/225, 13-14=-187/225, 14-15=-187/225, 15-16=-187/225, 16-17=-187/225, 17-18=-187/225, 18-19=-187/225, 19-20=-188/225, 20-21=-201/238, 21-22=-162/193, 22-23=-122/145, 23-24=-84/99, 24-26=-47/55, 26-27=-57/52, 27-28=-89/69, 28-29=-136/94, 29-30=-192/144, 30-31=0/28
BOT CHORD 1-58=-155/229, 57-58=-155/229, 56-57=-155/229, 55-56=-155/229, 54-55=-155/229, 53-54=-155/229, 52-53=-155/229, 51-52=-155/229, 50-51=-155/229, 48-50=-155/229, 47-48=-155/229, 46-47=-155/229, 45-46=-155/229, 44-45=-155/229, 43-44=-155/229, 42-43=-155/229, 40-42=-155/229, 39-40=-155/229, 38-39=-155/229, 37-38=-155/229, 36-37=-155/229, 35-36=-155/229, 34-35=-155/229, 33-34=-155/229, 32-33=-155/229, 30-32=-155/229
WEBS 15-45=-80/55, 14-46=-80/56, 13-47=-82/65, 12-48=-79/48, 10-50=-98/29, 9-51=-102/80, 8-52=-104/81, 7-53=-101/79, 6-54=-101/79, 5-55=-101/79, 4-56=-102/80, 3-57=-95/74, 2-58=-122/96, 16-44=-80/56, 17-43=-82/65, 18-42=-79/45, 20-40=-78/7, 21-39=-102/79, 22-38=-104/82, 23-37=-101/78, 24-36=-101/79, 26-35=-101/79, 27-34=-102/79, 28-33=-96/76, 29-32=-125/89

NOTES

July 22,2025

Continued on page 2

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

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) 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) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 (||) MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 1-4-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 74 lb uplift at joint 1, 37 lb uplift at joint 45, 38 lb uplift at joint 46, 44 lb uplift at joint 47, 32 lb uplift at joint 48, 13 lb uplift at joint 50, 64 lb uplift at joint 51, 65 lb uplift at joint 52, 62 lb uplift at joint 53, 63 lb uplift at joint 54, 61 lb uplift at joint 55, 69 lb uplift at joint 56, 40 lb uplift at joint 57, 130 lb uplift at joint 58, 38 lb uplift at joint 44, 43 lb uplift at joint 43, 29 lb uplift at joint 42, 63 lb uplift at joint 39, 66 lb uplift at joint 38, 62 lb uplift at joint 37, 63 lb uplift at joint 36, 63 lb uplift at joint 35, 64 lb uplift at joint 34, 58 lb uplift at joint 33, 82 lb uplift at joint 32, 8 lb uplift at joint 30 and 74 lb uplift at joint 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

July 22,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Pinewood - Elev. A (5-27-20)
4703097	B01	Hip Structural Gable	1	1	I75044239 Job Reference (optional)

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Mon Jul 21 09:53:30 Page: 1
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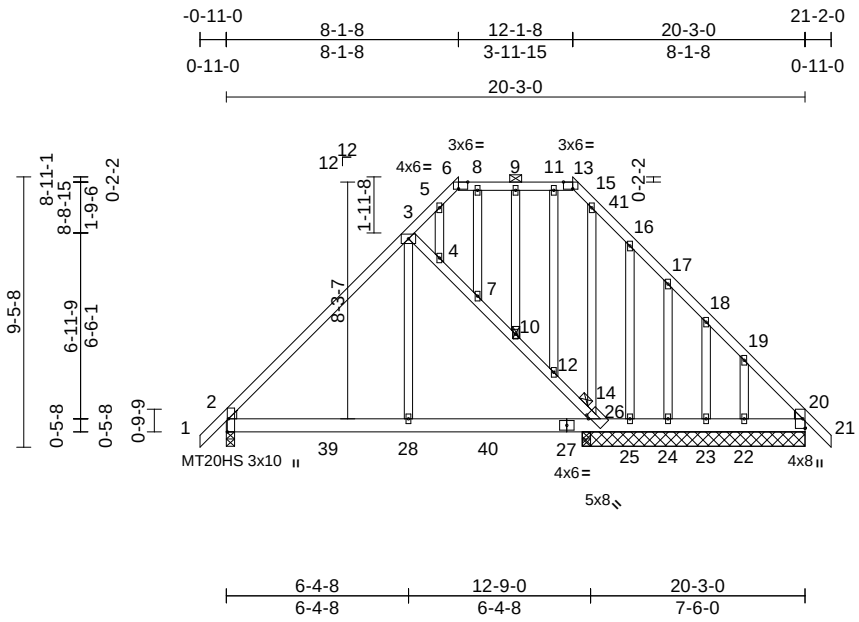

Scale = 1:80.6

Plate Offsets (X, Y): [2:0-5-8,Edge], [6:0-3-14,Edge], [13:0-3-14,Edge], [26:0-1-10,0-0-10]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	0.04	28-31	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.03	28-31	>999	240	MT20HS	187/143
BCLL	0.0*	Rep Stress Incr	NO	WB	0.12	Horz(CT)	-0.01	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 178 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x6 SP No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3
WEDGE	Left: 2x4 SP No.3 Right: 2x4 SP No.3

BRACING

TOP CHORD	Structural wood sheathing directly applied or 5-9-15 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 6-13, 3-34.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS	1 Brace at Jt(s): 10, 14

REACTIONS (size) 2=0-3-8, 20=7-9-8, 22=7-9-8, 23=7-9-8, 24=7-9-8, 25=7-9-8, 26=7-9-8
Max Horiz 2=299 (LC 11)
Max Uplift 2=-110 (LC 12), 20=-134 (LC 9), 22=-259 (LC 13), 23=-58 (LC 13), 24=-87 (LC 13), 25=-236 (LC 12), 26=-95 (LC 12)
Max Grav 2=835 (LC 1), 20=574 (LC 22), 22=165 (LC 11), 23=123 (LC 1), 24=158 (LC 20), 25=43 (LC 19), 26=646 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	6-8=-304/161, 8-9=-309/164, 9-11=-309/164, 11-13=-303/161, 3-4=-540/324, 4-7=-534/321, 7-10=-552/339, 10-12=-592/348, 12-14=-628/368, 14-26=-390/679, 1-2=0/39, 2-3=-876/176, 3-5=-499/219, 5-6=-377/186, 13-15=-401/186, 15-16=-433/176, 16-17=-473/162, 17-18=-488/168, 18-19=-540/172, 19-20=-624/189, 20-21=0/39
BOT CHORD	2-28=-280/708, 26-28=-222/708, 25-26=-119/477, 24-25=-119/477, 23-24=-119/477, 22-23=-119/477, 20-22=-119/477
WEBS	3-28=0/322, 9-10=-53/40, 7-8=-21/45, 4-5=-54/97, 11-12=-18/42, 14-15=-84/53, 16-25=-116/137, 17-24=-141/124, 18-23=-126/110, 19-22=-176/166

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) 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) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) All plates are 2x4 (||) MT20 unless otherwise indicated.
7) Gable studs spaced at 1-4-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 110 lb uplift at joint 2, 95 lb uplift at joint 26, 236 lb uplift at joint 25, 87 lb uplift at joint 24, 58 lb uplift at joint 23, 259 lb uplift at joint 22, 134 lb uplift at joint 20, 95 lb uplift at joint 26 and 134 lb uplift at joint 20.
11) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) 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)

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Continued on page 2

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

Vert: 28-29=-20, 32-36=-20, 14-34=30 (F), 1-3=-60, 15-41=-90 (F=-30), 21-41=-60

Trapezoidal Loads (lb/ft)

Vert: 6=-92 (F=-32)-to-8=-93 (F=-33), 8=-93 (F=-33)-to-9=-94 (F=-34), 9=-94 (F=-34)-to-11=-95 (F=-35), 11=-95 (F=-35)-to-13=-96 (F=-36), 28=-21 (F=-1)-to-40=-23 (F=-3), 40=-23 (F=-3)-to-27=-26 (F=-6), 27=-26 (F=-6)-to-32=-26 (F=-6), 3=-31 (F)-to-4=-32 (F), 4=-32 (F)-to-7=-33 (F), 7=-33 (F)-to-10=-34 (F), 10=-34 (F)-to-12=-35 (F), 12=-35 (F)-to-14=-36 (F), 3=-91 (F=-31)-to-5=-92 (F=-32), 5=-92 (F=-32)-to-6=-92 (F=-32), 13=-96 (F=-36)-to-15=-96 (F=-36)

July 22,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Pinewood - Elev. A (5-27-20)
4703097	B02	Hip Girder	1	3	I75044240 Job Reference (optional)

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Mon Jul 21 09:53:31 Page: 1

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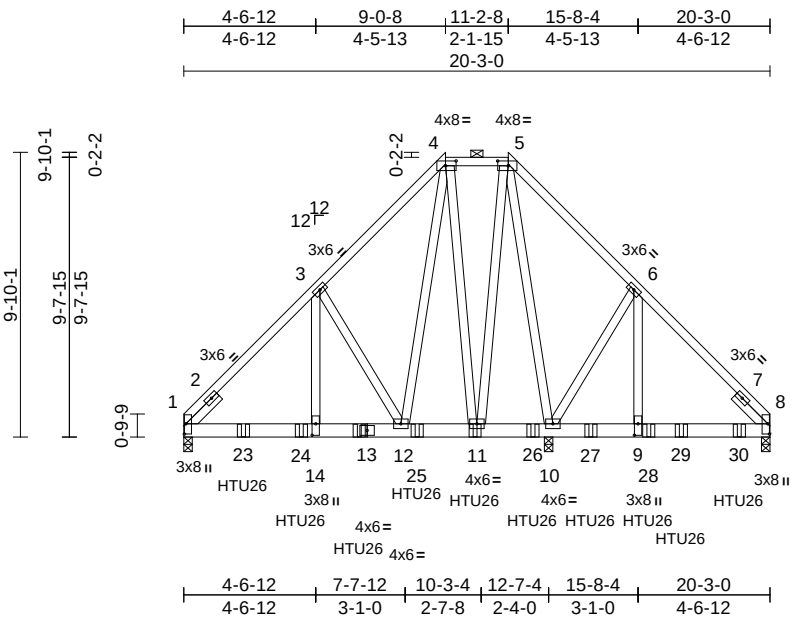

Scale = 1:79.6

Plate Offsets (X, Y): [1:0-4-4,0-0-11], [4:0-4-6,0-2-0], [5:0-4-6,0-2-0], [8:0-4-4,0-0-11], [9:0-4-12,0-1-8], [14:0-4-12,0-1-8]

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	0.21	Vert(LL)	-0.04	12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.07	12-14	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.35	Horz(CT)	0.01	10	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.04	12-14	>999	240	Weight: 533 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x6 SP No.2
WEBS	2x4 SP No.2
SLIDER	Left 2x4 SP No.2 -- 1-6-0, Right 2x4 SP No.2 -- 1-6-0

BRACING

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

REACTIONS (size) 1=0-3-8, 8=0-3-8, 10=0-3-8
Max Horiz 1=294 (LC 7)
Max Uplift 1=-1151 (LC 8), 8=-946 (LC 8), 10=-2033 (LC 9)
Max Grav 1=4427 (LC 1), 8=3595 (LC 15), 10=7833 (LC 16)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	4-5=-1261/528, 1-3=-4460/1201, 3-4=-2952/945, 5-6=-611/347, 6-8=-2656/722
BOT CHORD	1-14=-946/3258, 12-14=-946/3258, 11-12=-470/1601, 10-11=-295/983, 9-10=-439/1777, 8-9=-439/1777
WEBS	5-10=-3320/818, 4-12=-1123/3827, 5-11=-984/3563, 4-11=-1960/573, 3-12=-2073/784, 3-14=-666/2594, 6-10=-2750/966, 6-9=-878/3382

NOTES

1) 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: 2x6 - 2 rows staggered at 0-4-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
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.
3) Unbalanced roof live loads have been considered for this design.
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 ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
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 1151 lb uplift at joint 1, 2033 lb uplift at joint 10 and 946 lb uplift at joint 8.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left end to 19-2-4 to connect truss(es) to back face of bottom chord.
11) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 4-5=-60, 15-19=-20, 1-4=-60, 5-8=-60
Concentrated Loads (lb)
Vert: 13=-1424 (B), 11=-1424 (B), 23=-1424 (B), 24=-1424 (B), 25=-1424 (B), 26=-1424 (B), 27=-1424 (B), 28=-1424 (B), 29=-1424 (B), 30=-1425 (B)

July 22,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Pinewood - Elev. A (5-27-20)
4703097	C01	Hip Supported Gable	1	1	I75044241 Job Reference (optional)

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Mon Jul 21 09:53:31 Page: 1
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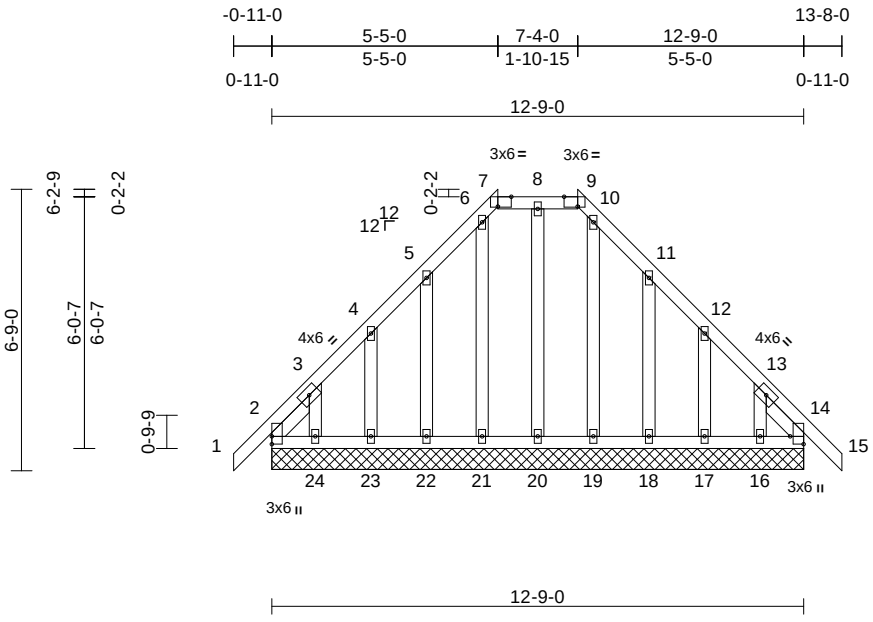


Scale = 1:55.2

Plate Offsets (X, Y): [7:0-3-14,Edge], [9:0-3-14,Edge], [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	0.09	Vert(LL)	n/a	-	n/a	999	MT20	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	0.05	Horz(CT)	0.00	14	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 100 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 -- 1-4-0, Right 2x4 SP No.2 -- 1-4-0

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 7-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=12-9-0, 14=12-9-0, 16=12-9-0, 17=12-9-0, 18=12-9-0, 19=12-9-0, 20=12-9-0, 21=12-9-0, 22=12-9-0, 23=12-9-0, 24=12-9-0
Max Horiz 2=-208 (LC 10)
Max Uplift 2=-115 (LC 8), 14=-57 (LC 9), 16=-153 (LC 13), 17=-106 (LC 13), 18=-115 (LC 13), 20=-20 (LC 9), 21=-24 (LC 9), 22=-115 (LC 12), 23=-105 (LC 12), 24=-167 (LC 12)
Max Grav 2=192 (LC 20), 14=155 (LC 22), 16=121 (LC 20), 17=133 (LC 20), 18=135 (LC 20), 19=98 (LC 21), 20=112 (LC 22), 21=115 (LC 22), 22=134 (LC 19), 23=132 (LC 19), 24=142 (LC 10)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/39, 2-3=-99/88, 3-4=-122/132, 4-5=-101/112, 5-6=-154/181, 6-7=-143/173, 7-8=-138/169, 8-9=-138/169, 9-10=-143/173, 10-11=-154/181, 11-12=-70/82, 12-13=-81/68, 13-14=-78/60, 14-15=0/39
BOT CHORD 2-24=-117/177, 23-24=-117/177, 22-23=-117/177, 21-22=-117/177, 20-21=-117/177, 19-20=-117/177, 18-19=-117/177, 17-18=-117/177, 16-17=-117/177, 14-16=-117/177
WEBS 8-20=-85/36, 6-21=-88/40, 5-22=-145/130, 4-23=-143/127, 3-24=-159/156, 10-19=-71/10, 11-18=-145/130, 12-17=-143/127, 13-16=-164/145

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) 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) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 (||) MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 1-4-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 115 lb uplift at joint 2, 57 lb uplift at joint 14, 20 lb uplift at joint 20, 24 lb uplift at joint 21, 115 lb uplift at joint 22, 105 lb uplift at joint 23, 167 lb uplift at joint 24, 115 lb uplift at joint 18, 106 lb uplift at joint 17, 153 lb uplift at joint 16, 115 lb uplift at joint 2 and 57 lb uplift at joint 14.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

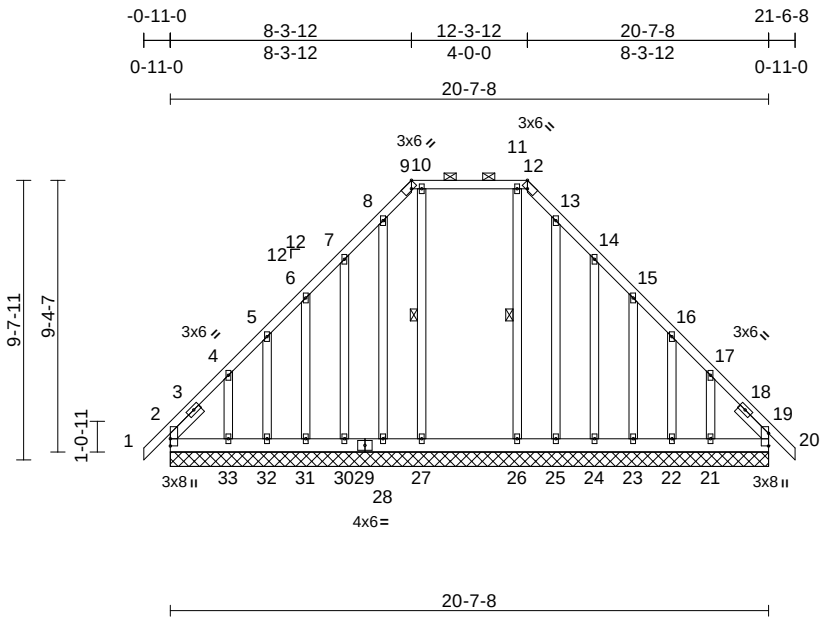
July 22,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Pinewood - Elev. A (5-27-20)
4703097	D01	Hip Supported Gable	1	1	I75044242 Job Reference (optional)

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Mon Jul 21 09:53:32 Page: 1

ID:78MHUDELUvZAWfoWrvobhWzlFyJ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:79.4

Plate Offsets (X, Y): [9:0-2-8,Edge], [12:0-2-8,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	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.01	19	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 198 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
OTHERS 2x4 SP No.3
SLIDER Left 2x4 SP No.2 -- 1-6-0, Right 2x4 SP No.2 -- 1-6-0

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 9-12.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 10-27, 11-26

REACTIONS (size) 2=20-7-8, 19=20-7-8, 21=20-7-8, 22=20-7-8, 23=20-7-8, 24=20-7-8, 25=20-7-8, 26=20-7-8, 27=20-7-8, 28=20-7-8, 30=20-7-8, 31=20-7-8, 32=20-7-8, 33=20-7-8
Max Horiz 2=-310 (LC 10)
Max Uplift 2=-129 (LC 8), 19=-80 (LC 9), 21=-287 (LC 13), 22=-43 (LC 13), 23=-121 (LC 13), 24=-120 (LC 13), 25=-41 (LC 13), 26=-21 (LC 8), 27=-48 (LC 9), 28=-50 (LC 12), 30=-118 (LC 12), 31=-123 (LC 12), 32=-38 (LC 12), 33=-301 (LC 12)
Max Grav 2=259 (LC 21), 19=232 (LC 22), 21=228 (LC 20), 22=98 (LC 1), 23=136 (LC 20), 24=145 (LC 20), 25=84 (LC 11), 26=287 (LC 22), 27=302 (LC 22), 28=96 (LC 10), 30=142 (LC 19), 31=137 (LC 19), 32=98 (LC 1), 33=244 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 9-10=-205/238, 10-11=-205/238, 11-12=-205/238, 1-2=0/39, 2-4=-308/230, 4-5=-173/160, 5-6=-145/141, 6-7=-123/171, 7-8=-214/238, 8-9=-233/261, 12-13=-233/261, 13-14=-214/237, 14-15=-123/135, 15-16=-97/91, 16-17=-125/107, 17-19=-268/171, 19-20=0/39
BOT CHORD 2-33=-168/270, 32-33=-168/270, 31-32=-168/270, 30-31=-168/270, 28-30=-168/270, 27-28=-168/270, 26-27=-168/270, 25-26=-168/270, 24-25=-168/270, 23-24=-168/270, 22-23=-168/270, 21-22=-168/270, 19-21=-168/270
WEBS 10-27=-174/83, 11-26=-159/56, 8-28=-91/56, 7-30=-154/140, 6-31=-138/126, 5-32=-120/101, 4-33=-198/200, 13-25=-82/48, 14-24=-154/142, 15-23=-138/125, 16-22=-120/102, 17-21=-199/194

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) 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) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 (||) MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 1-4-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 129 lb uplift at joint 2, 80 lb uplift at joint 19, 48 lb uplift at joint 27, 21 lb uplift at joint 26, 50 lb uplift at joint 28, 118 lb uplift at joint 30, 123 lb uplift at joint 31, 38 lb uplift at joint 32, 301 lb uplift at joint 33, 41 lb uplift at joint 25, 120 lb uplift at joint 24, 121 lb uplift at joint 23, 43 lb uplift at joint 22, 287 lb uplift at joint 21, 129 lb uplift at joint 2 and 80 lb uplift at joint 19.
11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 34.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

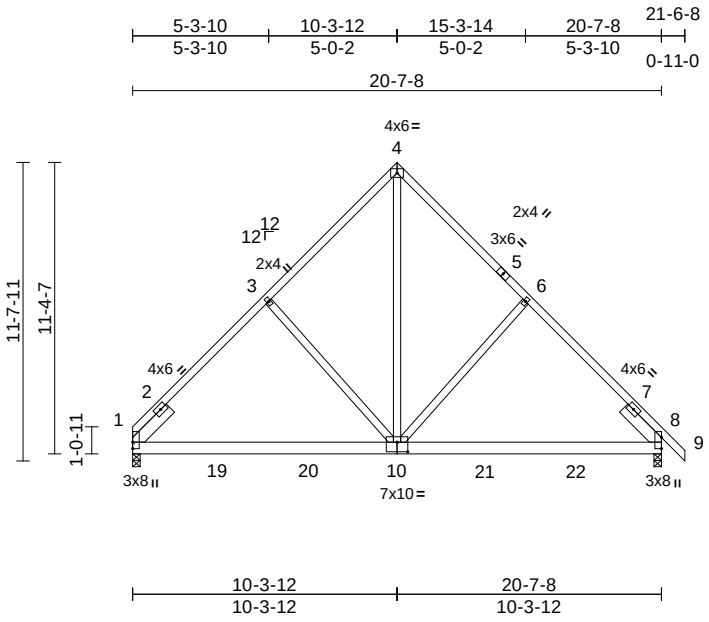
LOAD CASE(S) Standard

July 22,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Pinewood - Elev. A (5-27-20)
4703097	D02	Common	2	1	I75044243 Job Reference (optional)

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Mon Jul 21 09:53:32 Page: 1
ID:LzihObuLO6inJlONOpqoDJzlG_1-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:89.9

Plate Offsets (X, Y): [10:0-5-0,0-4-8]

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	0.39	Vert(LL)	-0.06	10-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.12	10-13	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.86	Horz(CT)	0.02	1	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.05	10-13	>999	240	Weight: 141 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 -- 1-11-12, Right 2x6 SP No.2 -- 1-11-12

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-11-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=0-3-8, 8=0-3-8
Max Horiz 1=-364 (LC 8)
Max Uplift 1=-181 (LC 13), 8=-197 (LC 13)
Max Grav 1=851 (LC 20), 8=892 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-891/349, 3-4=-822/413, 4-6=-822/413, 6-8=-892/349, 8-9=0/39
BOT CHORD 1-8=-283/776
WEBS 4-10=-382/823, 3-10=-386/359, 6-10=-386/358

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) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 181 lb uplift at joint 1 and 197 lb uplift at joint 8.

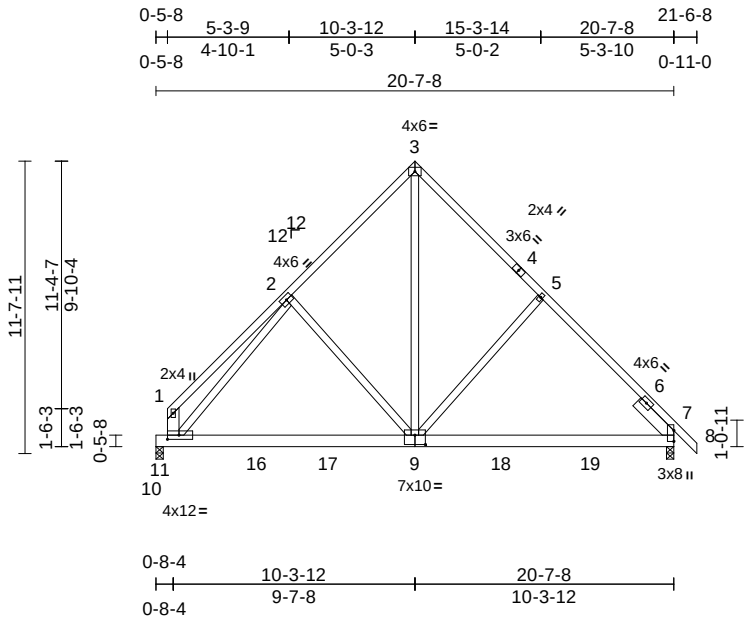
LOAD CASE(S) Standard

July 22,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Pinewood - Elev. A (5-27-20)
4703097	D03	Common	1	1	I75044244 Job Reference (optional)

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Mon Jul 21 09:53:32 Page: 1
ID:8a57bX4JSwqTM9_wIY2TOnzlFvw-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:91.8

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

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	0.48	Vert(LL)	-0.07	9-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.13	9-14	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.84	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.05	9-14	>999	240	Weight: 148 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except* 10-1:2x6 SP No.2
SLIDER Right 2x6 SP No.2 -- 1-11-12

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-11-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 7=0-3-8, 11=0-3-8
Max Horiz 11=-362 (LC 8)
Max Uplift 7=-195 (LC 13), 11=-173 (LC 13)
Max Grav 7=882 (LC 20), 11=810 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-690/239, 2-3=-810/406, 3-5=-811/407, 5-7=-875/343, 7-8=0/39, 1-10=-563/222
BOT CHORD 10-11=-344/362, 7-10=-215/753
WEBS 3-9=-373/805, 2-9=-367/361, 5-9=-386/358, 2-10=-283/156

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) 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) 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 173 lb uplift at joint 11 and 195 lb uplift at joint 7.

LOAD CASE(S) Standard

July 22,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Pinewood - Elev. A (5-27-20)
4703097	E01	Roof Special	7	1	I75044245 Job Reference (optional)

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Mon Jul 21 09:53:33 Page: 1
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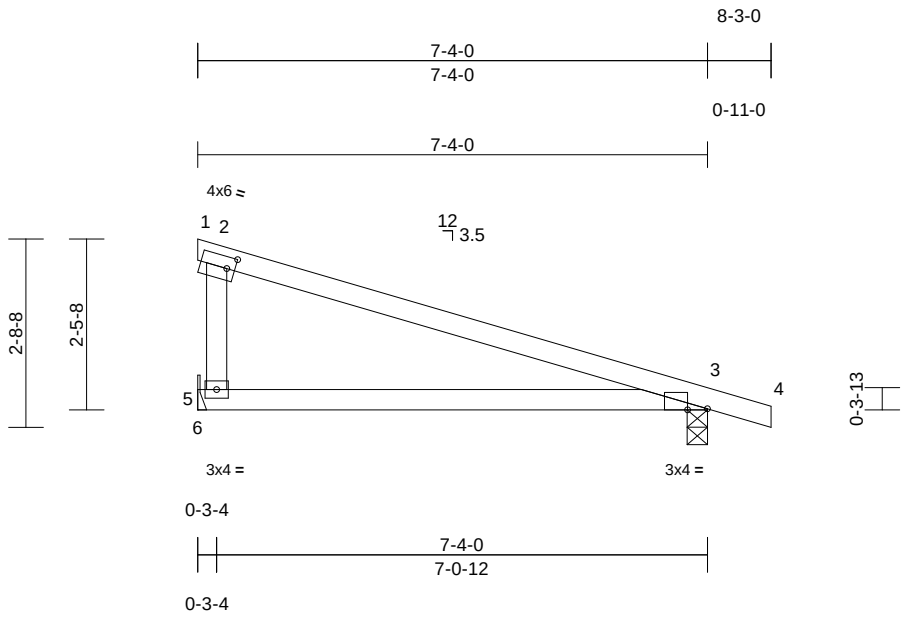

Scale = 1:33.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.54	Vert(LL)	-0.06	5-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.14	5-9	>591	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-MS		Wind(LL)	0.09	5-9	>961	240	Weight: 27 lb	FT = 20%

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

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

REACTIONS (size) 3=0-3-8, 5= Mechanical
Max Horiz 5=-130 (LC 9)
Max Uplift 3=-139 (LC 9), 5=-120 (LC 13)
Max Grav 3=341 (LC 1), 5=290 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-174/202, 1-2=-2/0, 2-3=-207/64, 3-4=0/15
BOT CHORD 5-6=0/0, 3-5=-56/169

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) 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 120 lb uplift at joint 5 and 139 lb uplift at joint 3.

LOAD CASE(S) Standard

July 22,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Pinewood - Elev. A (5-27-20)
4703097	E02	Roof Special Supported Gable	1	1	I75044246 Job Reference (optional)

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Mon Jul 21 09:53:33 Page: 1
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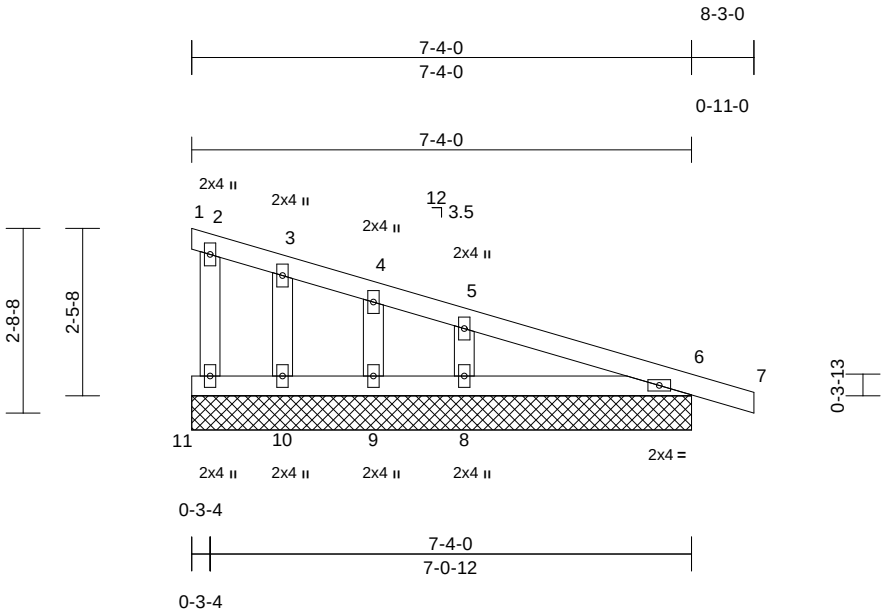

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 32 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 10-0-0 oc bracing.

REACTIONS (size) 1=7-4-0, 6=7-4-0, 8=7-4-0, 9=7-4-0, 10=7-4-0, 11=7-4-0
Max Horiz 1=-130 (LC 9)
Max Uplift 6=-113 (LC 9), 8=-101 (LC 13), 9=-22 (LC 9), 10=-50 (LC 13), 11=-20 (LC 9)
Max Grav 1=34 (LC 9), 6=174 (LC 1), 8=258 (LC 1), 9=37 (LC 1), 10=120 (LC 1), 11=38 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-11=-32/39, 1-2=-64/187, 2-3=-62/174, 3-4=-49/144, 4-5=-48/122, 5-6=-56/73, 6-7=0/15
BOT CHORD 10-11=0/1, 9-10=0/1, 8-9=0/1, 6-8=-14/51
WEBS 3-10=-85/94, 4-9=-44/62, 5-8=-166/164

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) 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) 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 1-4-0 oc.
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 113 lb uplift at joint 6, 20 lb uplift at joint 11, 50 lb uplift at joint 10, 22 lb uplift at joint 9, 101 lb uplift at joint 8 and 113 lb uplift at joint 6.

LOAD CASE(S) Standard

July 22,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Pinewood - Elev. A (5-27-20)
4703097	G01	Half Hip Supported Gable	1	1	I75044247 Job Reference (optional)

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

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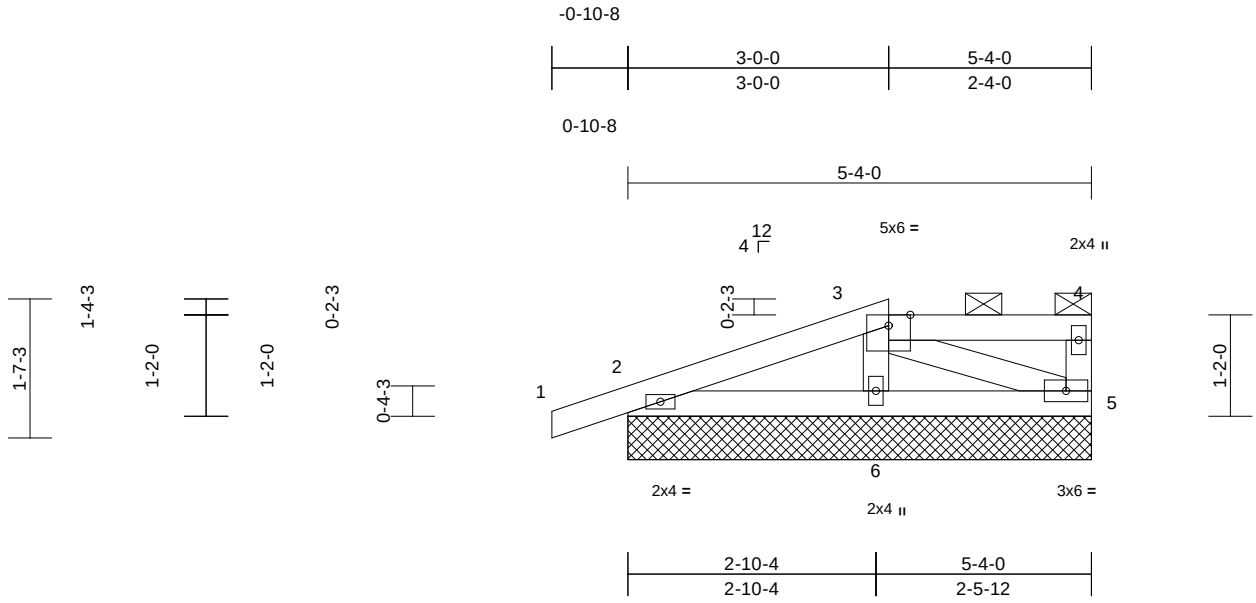

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 23 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-4-0 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=5-4-0, 5=5-4-0, 6=5-4-0
Max Horiz 2=63 (LC 8)
Max Uplift 2=-98 (LC 8), 5=-41 (LC 8), 6=-57 (LC 8)
Max Grav 2=175 (LC 1), 5=93 (LC 1), 6=199 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-3=-48/11, 3-4=-2/4, 4-5=-66/76
BOT CHORD 2-6=-30/55, 5-6=-44/37
WEBS 3-6=-112/126, 3-5=-41/48

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) zone; cantilever left and right exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) Provide adequate drainage to prevent water ponding.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 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 98 lb uplift at joint 2, 57 lb uplift at joint 6, 41 lb uplift at joint 5 and 98 lb uplift at joint 2.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

July 22,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Pinewood - Elev. A (5-27-20)
4703097	G02	Half Hip	6	1	I75044248 Job Reference (optional)

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

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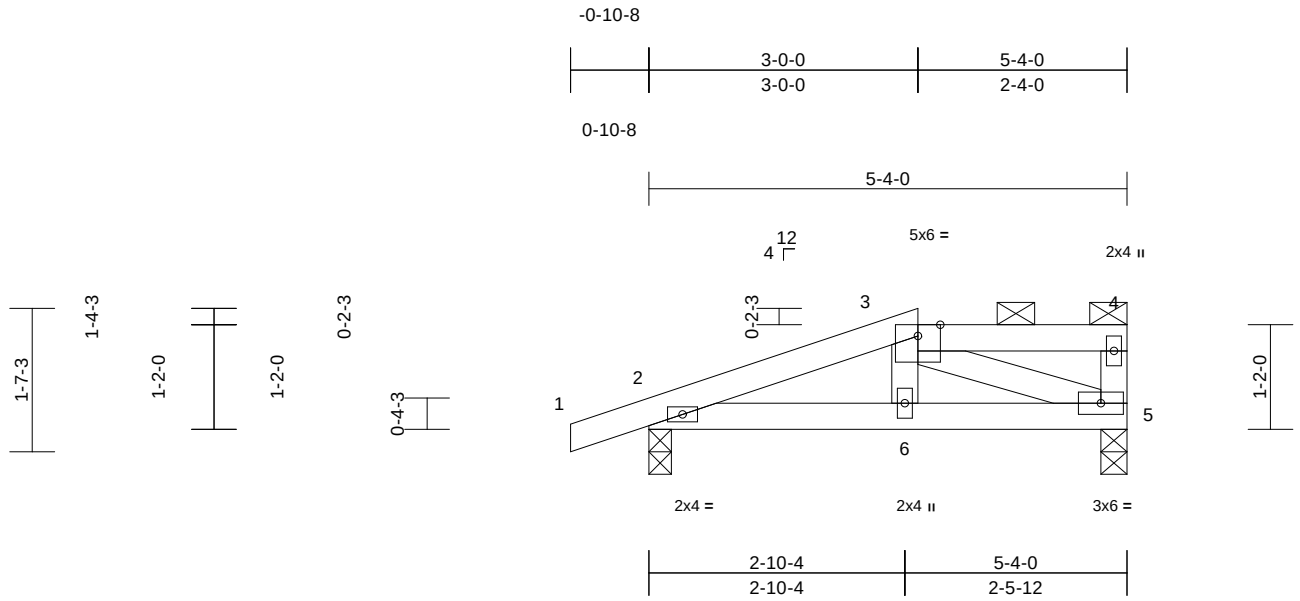

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	-0.01	6-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.02	6-9	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.21	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP		Wind(LL)	0.01	6-9	>999	240	Weight: 23 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-4-0 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=0-3-0, 5=0-3-8
Max Horiz 2=63 (LC 8)
Max Uplift 2=-19 (LC 8)
Max Grav 2=468 (LC 1), 5=482 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-3=-929/32, 3-4=-2/4, 4-5=-66/76
BOT CHORD 2-6=-55/876, 5-6=0/872
WEBS 3-5=-952/0, 3-6=-219/77

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) 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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 19 lb uplift at joint 2.
7) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
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
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-60, 3-4=-60, 5-7=-20
Concentrated Loads (lb)
Vert: 3=-482

July 22,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Pinewood - Elev. A (5-27-20)
4703097	G03	Half Hip	1	**2**	I75044249 Job Reference (optional)

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

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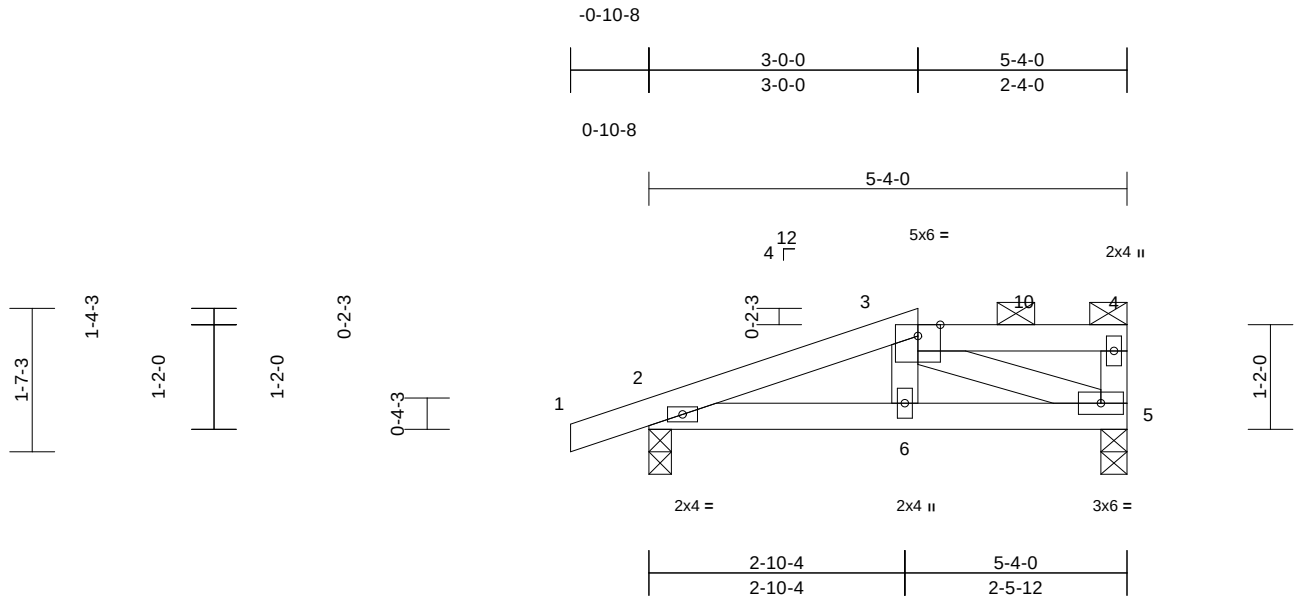

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.71	Vert(LL)	0.00	6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.02	6	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.16	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP		Wind(LL)	0.01	6-9	>999	240	Weight: 46 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-4-0 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=0-3-0, 5=0-3-8
Max Horiz 2=63 (LC 8)
Max Grav 2=674 (LC 1), 5=1324 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-3=-1555/0, 3-4=-23/20, 4-5=-626/0
BOT CHORD 2-6=0/1477, 5-6=0/1480
WEBS 3-5=-1616/0, 3-6=-249/46

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-4-0 oc.
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
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.
3) Unbalanced roof live loads have been considered for this design.
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 and C-C Exterior (2) 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
5) Provide adequate drainage to prevent water ponding.
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) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 838 lb down at 4-2-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-60, 3-4=-156 (F=-96), 5-7=-20
Concentrated Loads (lb)
Vert: 3=-482, 10=-838 (F)

July 22,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Pinewood - Elev. A (5-27-20)
4703097	G04	Half Hip	4	1	I75044250 Job Reference (optional)

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

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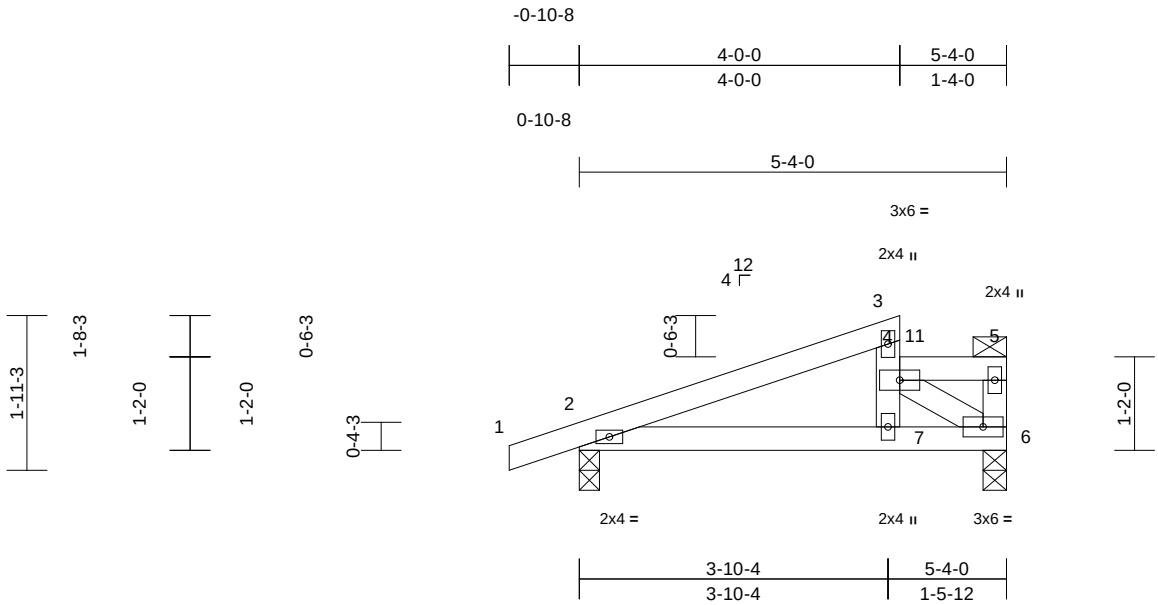

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.51	Vert(LL)	0.03	7-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.03	7-10	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.16	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 22 lb	FT = 20%

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

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

REACTIONS (size) 2=0-3-0, 6=0-3-8
Max Horiz 2=104 (LC 12)
Max Uplift 2=-94 (LC 8)
Max Grav 2=367 (LC 1), 6=633 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-3=-495/73, 4-7=-265/106, 3-4=0/127, 4-5=0/0, 5-6=-173/0
BOT CHORD 2-7=-124/447, 6-7=-117/682
WEBS 4-6=-816/140

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) -0-10-8 to 5-2-4 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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 94 lb uplift at joint 2.
7) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 532 lb down at 4-2-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
10) 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: 1-3=-60, 4-5=-60, 6-8=-20
Concentrated Loads (lb)
Vert: 11=-532 (F)

July 22,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Pinewood - Elev. A (5-27-20)
4703097	H01	Common Supported Gable	1	1	I75044251 Job Reference (optional)

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Mon Jul 21 09:53:34 Page: 1

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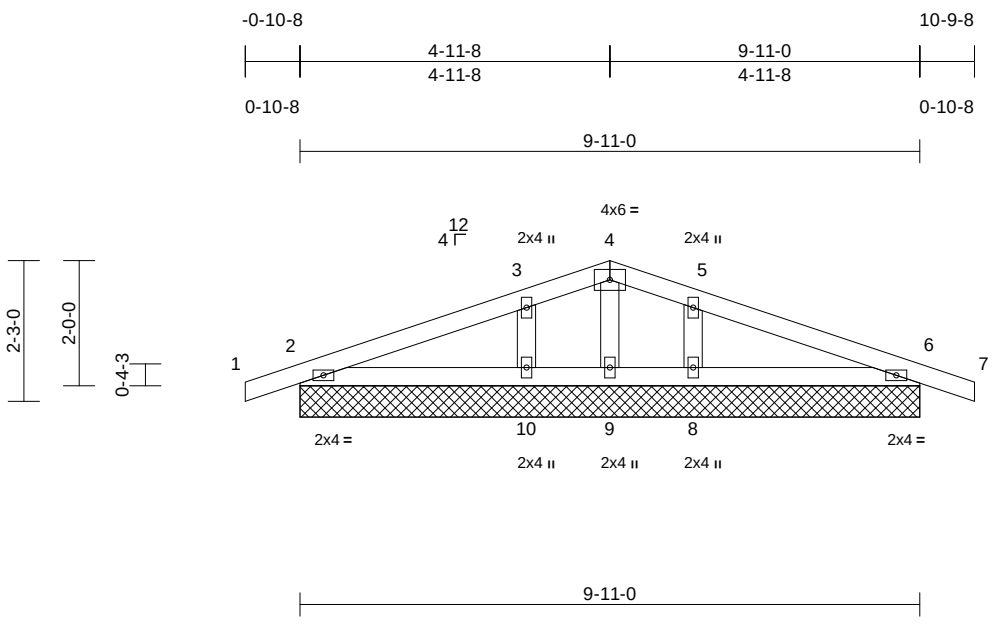

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 38 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS (size) 2=9-11-0, 6=9-11-0, 8=9-11-0, 9=9-11-0, 10=9-11-0
Max Horiz 2=44 (LC 12)
Max Uplift 2=-97 (LC 8), 6=-103 (LC 9), 8=-122 (LC 13), 9=-75 (LC 1), 10=-123 (LC 12)
Max Grav 2=185 (LC 1), 6=185 (LC 1), 8=302 (LC 1), 9=57 (LC 9), 10=302 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-3=-54/45, 3-4=-58/102, 4-5=-57/102, 5-6=-52/41, 6-7=0/17
BOT CHORD 2-10=-9/45, 9-10=0/40, 8-9=0/40, 6-8=0/48
WEBS 4-9=-53/43, 3-10=-193/180, 5-8=-193/181

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) 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 1-4-0 oc.
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 97 lb uplift at joint 2, 103 lb uplift at joint 6, 75 lb uplift at joint 9, 123 lb uplift at joint 10, 122 lb uplift at joint 8, 97 lb uplift at joint 2 and 103 lb uplift at joint 6.

LOAD CASE(S) Standard

July 22,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Pinewood - Elev. A (5-27-20)
4703097	H02	Common	5	1	I75044252 Job Reference (optional)

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

Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Mon Jul 21 09:53:34 Page: 1
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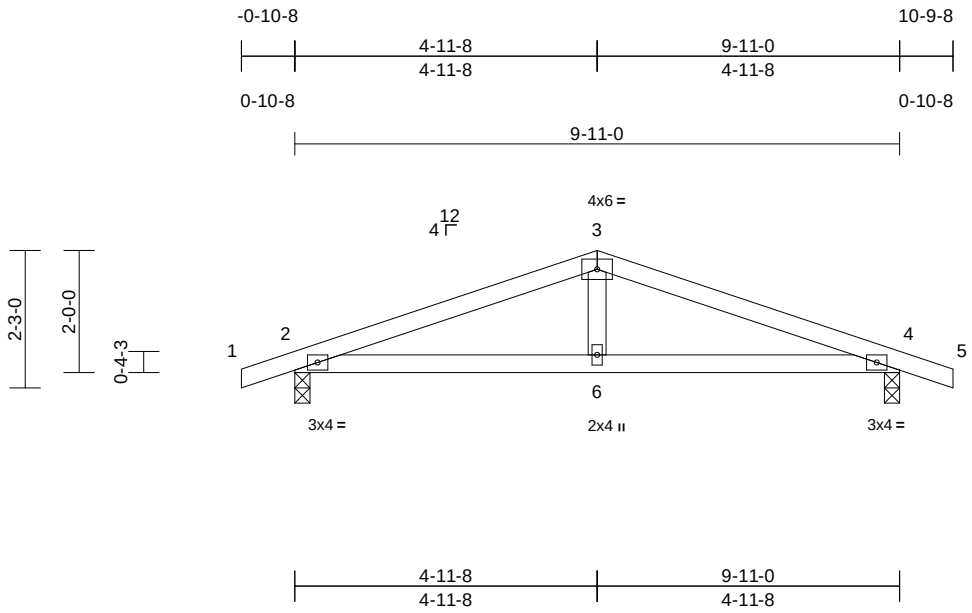

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	0.06	6-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	-0.05	6-9	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.08	Horz(CT)	-0.01	4	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
WEBS 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 6-0-12 oc bracing.

REACTIONS (size) 2=0-3-0, 4=0-3-0
Max Horiz 2=44 (LC 12)
Max Uplift 2=-292 (LC 8), 4=-292 (LC 9)
Max Grav 2=449 (LC 1), 4=449 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-3=-714/1000, 3-4=-714/1000, 4-5=0/17
BOT CHORD 2-6=-867/651, 4-6=-867/651
WEBS 3-6=-348/222

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) zone; cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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 capable of withstanding 292 lb uplift at joint 2 and 292 lb uplift at joint 4.

LOAD CASE(S) Standard

July 22,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Pinewood - Elev. A (5-27-20)
4703097	V01	Valley	1	1	I75044253 Job Reference (optional)

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Mon Jul 21 09:53:34 Page: 1
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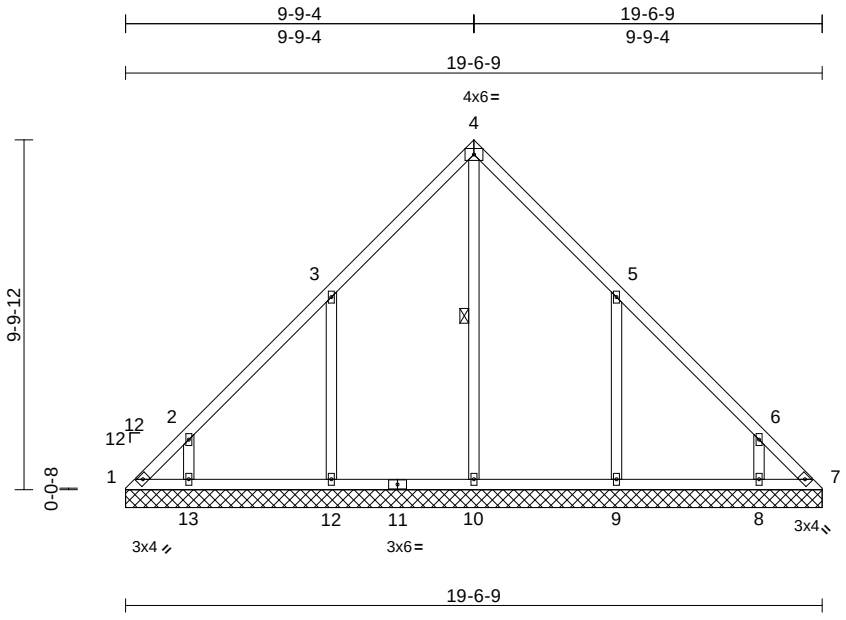

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.25	Horiz(TL)	0.01	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 102 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.
WEBS 1 Row at midpt 4-10

REACTIONS (size) 1=19-6-9, 7=19-6-9, 8=19-6-9, 9=19-6-9, 10=19-6-9, 12=19-6-9, 13=19-6-9
Max Horiz 1=-321 (LC 8)
Max Uplift 1=-153 (LC 10), 7=-77 (LC 11), 8=-203 (LC 13), 9=-363 (LC 13), 12=-362 (LC 12), 13=-216 (LC 12)
Max Grav 1=247 (LC 12), 7=196 (LC 13), 8=295 (LC 20), 9=491 (LC 20), 10=426 (LC 22), 12=490 (LC 19), 13=310 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-417/275, 2-3=-251/200, 3-4=-258/262, 4-5=-258/252, 5-6=-190/119, 6-7=-359/234
BOT CHORD 1-13=-159/270, 12-13=-159/270, 10-12=-159/270, 9-10=-159/270, 8-9=-159/270, 7-8=-159/270
WEBS 4-10=-210/102, 3-12=-443/408, 2-13=-332/296, 5-9=-443/408, 6-8=-332/292

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) 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 4-0-0 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, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 153 lb uplift at joint 1, 77 lb uplift at joint 7, 362 lb uplift at joint 12, 216 lb uplift at joint 13, 363 lb uplift at joint 9 and 203 lb uplift at joint 8.

LOAD CASE(S) Standard

July 22,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Pinewood - Elev. A (5-27-20)
4703097	V02	Valley	1	1	I75044254 Job Reference (optional)

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Mon Jul 21 09:53:35 Page: 1
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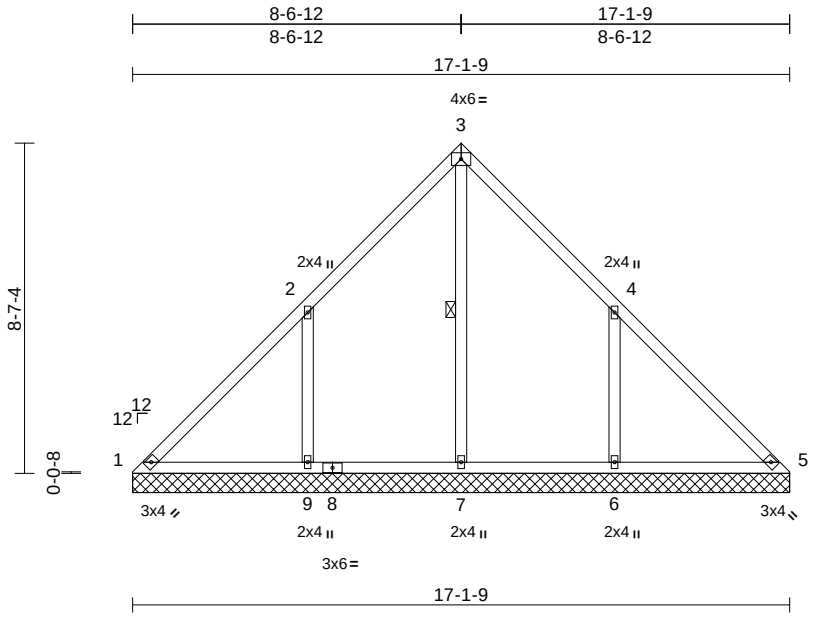

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.16	Horiz(TL)	0.01	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 84 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.
WEBS 1 Row at midpt 3-7

REACTIONS (size) 1=17-1-9, 5=17-1-9, 6=17-1-9, 7=17-1-9, 9=17-1-9
Max Horiz 1=-280 (LC 8)
Max Uplift 1=-67 (LC 10), 5=-2 (LC 11), 6=-391 (LC 13), 9=-397 (LC 12)
Max Grav 1=170 (LC 21), 5=137 (LC 22), 6=551 (LC 20), 7=481 (LC 19), 9=558 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-293/288, 2-3=-90/176, 3-4=-74/139, 4-5=-235/256
BOT CHORD 1-9=-244/271, 7-9=-244/271, 6-7=-244/271, 5-6=-244/271
WEBS 3-7=-296/0, 2-9=-466/416, 4-6=-466/413

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) 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.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 67 lb uplift at joint 1, 2 lb uplift at joint 5, 397 lb uplift at joint 9 and 391 lb uplift at joint 6.

LOAD CASE(S) Standard

July 22,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Pinewood - Elev. A (5-27-20)
4703097	V03	Valley	1	1	I75044255
					Job Reference (optional)

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

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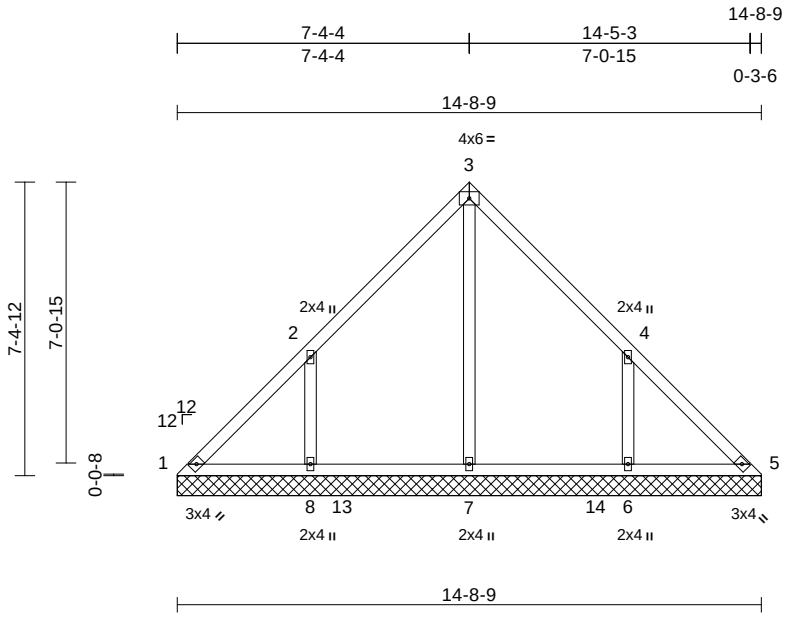

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.20	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 70 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=14-8-9, 5=14-8-9, 6=14-8-9, 7=14-8-9, 8=14-8-9
Max Horiz 1=-240 (LC 8)
Max Uplift 1=-68 (LC 8), 5=-12 (LC 9), 6=-329 (LC 13), 8=-335 (LC 12)
Max Grav 1=167 (LC 20), 5=127 (LC 22), 6=454 (LC 20), 7=404 (LC 19), 8=461 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-232/214, 2-3=-148/182, 3-4=-143/160, 4-5=-184/147
BOT CHORD 1-8=-141/199, 7-8=-141/199, 6-7=-141/199, 5-6=-141/199
WEBS 3-7=-205/0, 2-8=-411/367, 4-6=-411/364

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) 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.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 68 lb uplift at joint 1, 12 lb uplift at joint 5, 335 lb uplift at joint 8 and 329 lb uplift at joint 6.

LOAD CASE(S) Standard

July 22,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Pinewood - Elev. A (5-27-20)
4703097	V04	Valley	1	1	I75044256 Job Reference (optional)

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

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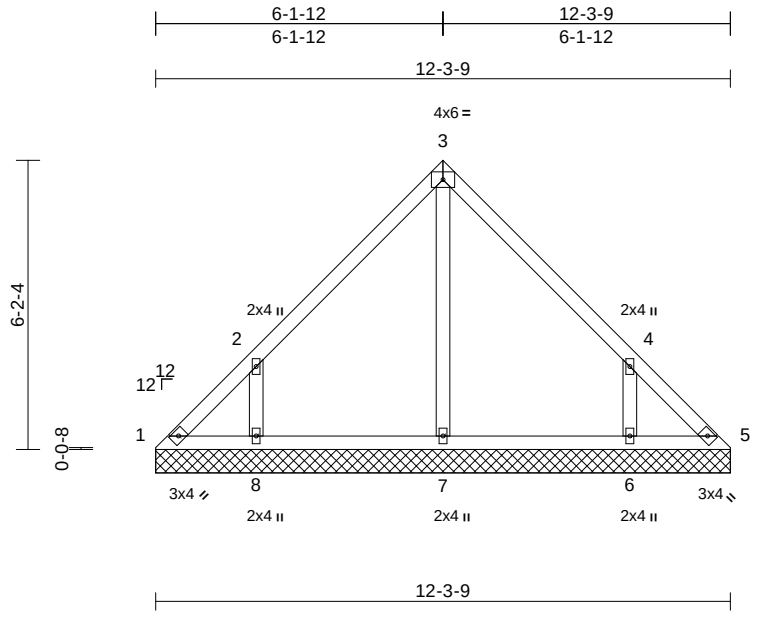

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.11	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 56 lb	FT = 20%

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

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

REACTIONS (size) 1=12-3-9, 5=12-3-9, 6=12-3-9, 7=12-3-9, 8=12-3-9
Max Horiz 1=-200 (LC 8)
Max Uplift 1=-75 (LC 8), 5=-27 (LC 9), 6=-285 (LC 13), 8=-293 (LC 12)
Max Grav 1=142 (LC 20), 5=109 (LC 22), 6=366 (LC 20), 7=232 (LC 19), 8=374 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-214/176, 2-3=-176/171, 3-4=-175/159, 4-5=-176/119
BOT CHORD 1-8=-79/143, 7-8=-72/143, 6-7=-72/143, 5-6=-72/143
WEBS 3-7=-148/3, 2-8=-393/355, 4-6=-393/352

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) 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.
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 75 lb uplift at joint 1, 27 lb uplift at joint 5, 293 lb uplift at joint 8 and 285 lb uplift at joint 6.

LOAD CASE(S) Standard

July 22,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Pinewood - Elev. A (5-27-20)
4703097	V05	Valley	1	1	I75044257 Job Reference (optional)

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

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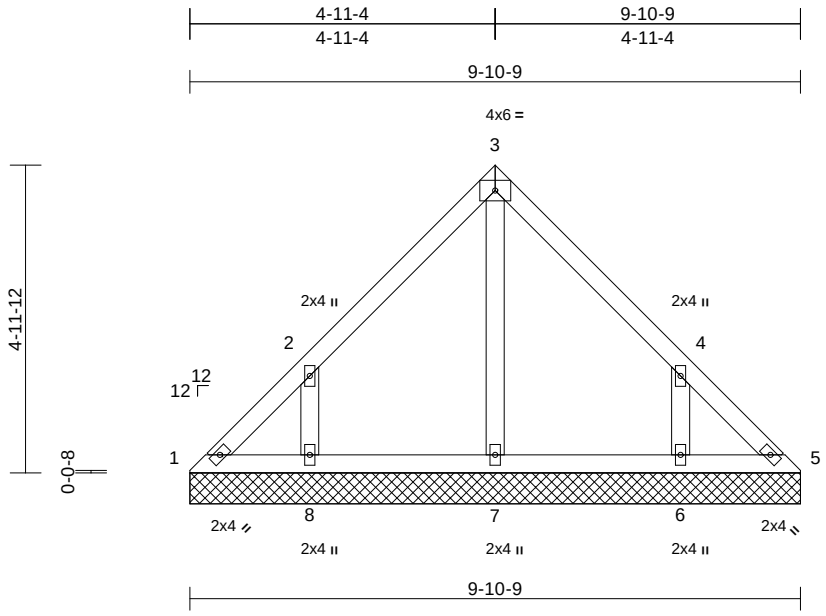

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 45 lb	FT = 20%

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

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

REACTIONS (size) 1=9-10-9, 5=9-10-9, 6=9-10-9, 7=9-10-9, 8=9-10-9
Max Horiz 1=-159 (LC 8)
Max Uplift 1=-53 (LC 8), 5=-13 (LC 9), 6=-216 (LC 13), 8=-223 (LC 12)
Max Grav 1=116 (LC 20), 5=87 (LC 19), 6=284 (LC 20), 7=181 (LC 19), 8=292 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-157/137, 2-3=-129/131, 3-4=-129/124, 4-5=-126/91
BOT CHORD 1-8=-68/120, 7-8=-68/120, 6-7=-68/120, 5-6=-68/120
WEBS 3-7=-121/2, 2-8=-297/260, 4-6=-297/259

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) 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 3-0-0 oc.
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 53 lb uplift at joint 1, 13 lb uplift at joint 5, 223 lb uplift at joint 8 and 216 lb uplift at joint 6.

LOAD CASE(S) Standard

July 22,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Pinewood - Elev. A (5-27-20)
4703097	V06	Valley	1	1	I75044258 Job Reference (optional)

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Mon Jul 21 09:53:36 Page: 1
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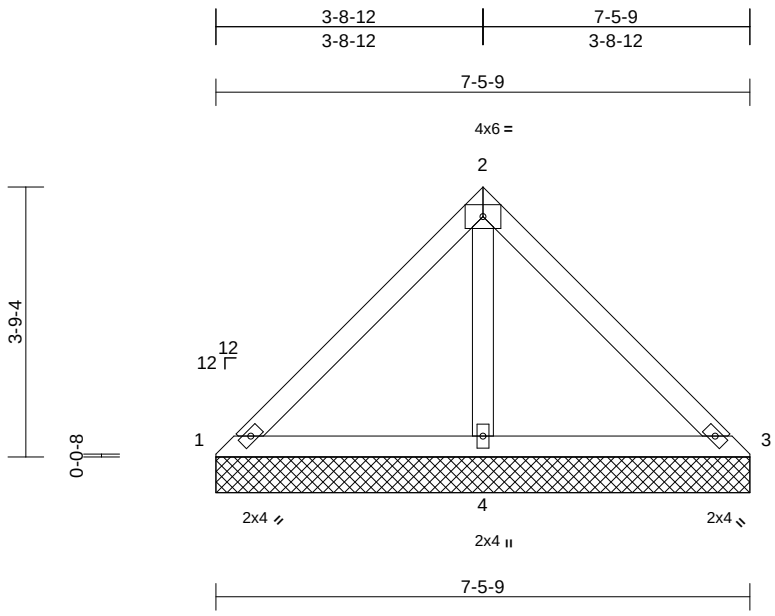

Scale = 1:32.2

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	0.16	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	0.10	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 30 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 7-5-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 1=7-5-9, 3=7-5-9, 4=7-5-9
Max Horiz 1=119 (LC 11)
Max Uplift 3=-1 (LC 8), 4=-183 (LC 12)
Max Grav 1=80 (LC 23), 3=80 (LC 24), 4=479 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-92/188, 2-3=-83/168
BOT CHORD 1-4=-182/161, 3-4=-182/161
WEBS 2-4=-400/234

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) 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.
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 1 lb uplift at joint 3 and 183 lb uplift at joint 4.

LOAD CASE(S) Standard

July 22,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Pinewood - Elev. A (5-27-20)
4703097	V07	Valley	1	1	I75044259 Job Reference (optional)

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

Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Mon Jul 21 09:53:36 Page: 1
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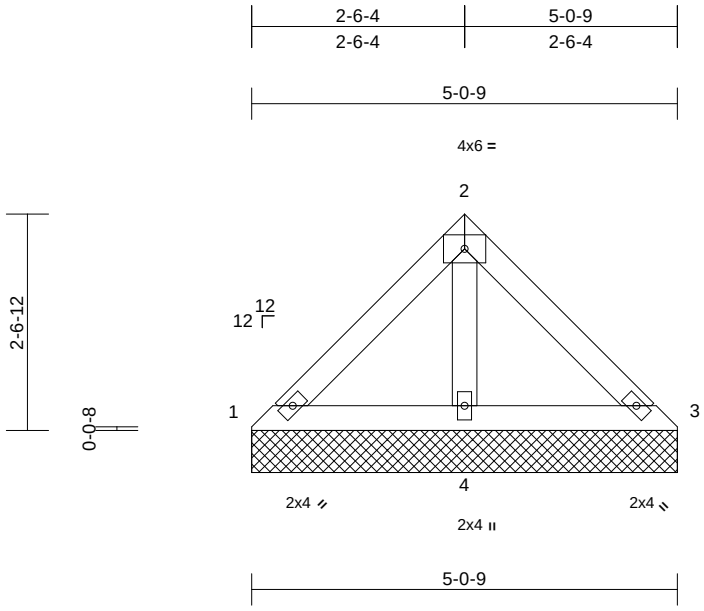

Scale = 1:27.3

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	0.08	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	0.04	Horiz(TL)	0.00	3	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
OTHERS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-0-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 1=5-0-9, 3=5-0-9, 4=5-0-9
Max Horiz 1=-79 (LC 10)
Max Uplift 1=-2 (LC 13), 3=-6 (LC 13), 4=-106 (LC 12)
Max Grav 1=65 (LC 23), 3=65 (LC 24), 4=296 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-53/99, 2-3=-53/83
BOT CHORD 1-4=-113/107, 3-4=-113/107
WEBS 2-4=-202/113

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) 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.
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 2 lb uplift at joint 1, 6 lb uplift at joint 3 and 106 lb uplift at joint 4.

LOAD CASE(S) Standard

July 22,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Pinewood - Elev. A (5-27-20)
4703097	V08	Valley	1	1	I75044260 Job Reference (optional)

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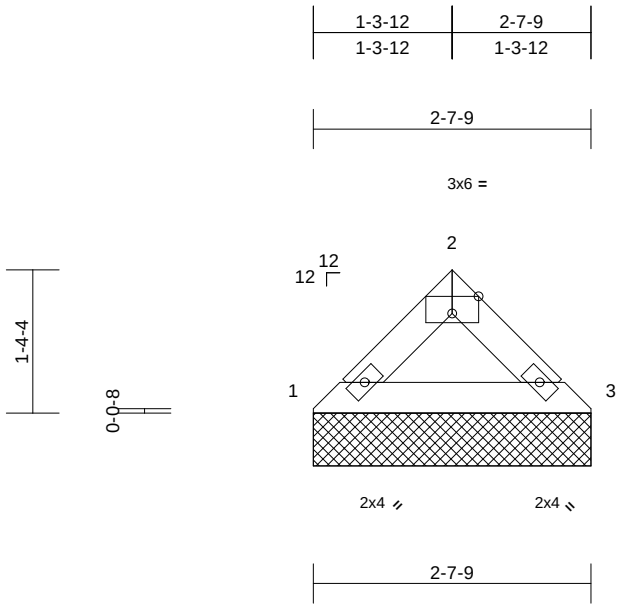


Scale = 1:21.8

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	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	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: 8 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-7-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=2-7-9, 3=2-7-9
Max Horiz 1=38 (LC 9)
Max Uplift 1=-24 (LC 12), 3=-24 (LC 13)
Max Grav 1=105 (LC 1), 3=105 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-122/48, 2-3=-122/48
BOT CHORD 1-3=-30/97

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) 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.
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 24 lb uplift at joint 1 and 24 lb uplift at joint 3.

LOAD CASE(S) Standard

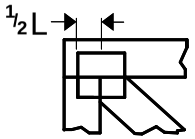
NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT

July 22,2025

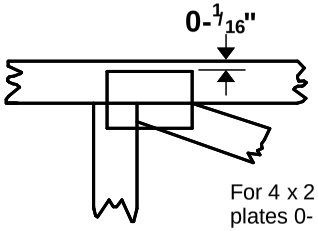
ENGINEERING BY TRENCO A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.

This symbol indicates the required direction of slots in connector plates.

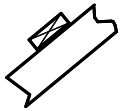
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

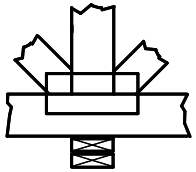
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

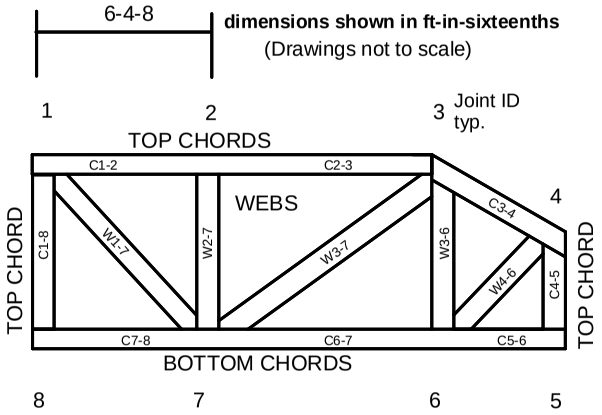


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

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

Design General Notes

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

Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

MiTek®

ENGINEERING BY TRENCO
A MiTek Affiliate

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

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/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 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/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.