ENGINEERING BY TRENCO
A MiTek Affiliate

RE: 4703078
JSJ, Gavin Prime - Elev. A

Trenco
818 Soundside Rd
Edenton, NC 27932

Site Information:

Customer: JSJ Builders Project Name: 4703078
Lot/Block: 85 Model: Gavin Prime A
Address: Subdivision: DUCKS LANDING
City: Lillington State: NC

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

Design Code: IRC2015/TPI2014 Design Program: MiTek 20/20 8.6
Wind Code: ASCE 7-10 Wind Speed: 130 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 21 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I70946314	A01	1/23/2025	21	I70946334	V04	1/23/2025
2	I70946315	A02	1/23/2025				
3	I70946316	A03	1/23/2025				
4	I70946317	A04	1/23/2025				
5	I70946318	A05	1/23/2025				
6	I70946319	A06	1/23/2025				
7	I70946320	A07	1/23/2025				
8	I70946321	B01	1/23/2025				
9	I70946322	B02	1/23/2025				
10	I70946323	C01	1/23/2025				
11	I70946324	C02	1/23/2025				
12	I70946325	D01	1/23/2025				
13	I70946326	D02	1/23/2025				
14	I70946327	D03	1/23/2025				
15	I70946328	D04	1/23/2025				
16	I70946329	D05	1/23/2025				
17	I70946330	D06	1/23/2025				
18	I70946331	V01	1/23/2025				
19	I70946332	V02	1/23/2025				
20	I70946333	V03	1/23/2025				

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

Truss Design Engineer's Name: Tony Miller
My license renewal date for the state of North Carolina is December 31, 2025.
North Carolina COA: C-0844

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

January 23, 2025

Tony Miller

Job	Truss	Truss Type	Qty	Ply	JSJ, Gavin Prime - Elev. A	
4703078	A01	Hip Supported Gable	2	1	Job Reference (optional)	I70946314

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

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Wed Jan 22 14:16:47 Page: 1
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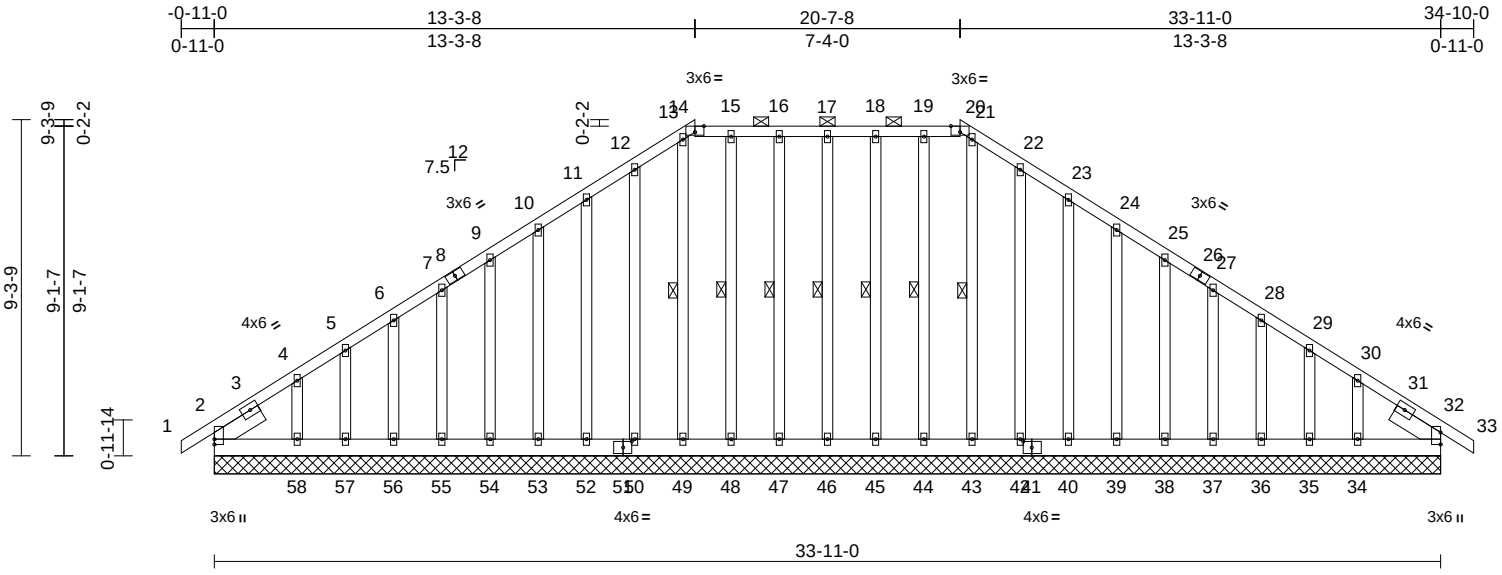

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Plate Offsets (X, Y): [14:0-3-0,Edge], [20:0-3-0,Edge], [41:0-2-13,0-2-0], [51:0-2-13,0-2-0]

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	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	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: 345 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
OTHERS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 -- 1-6-0, Right 2x6 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.): 14-20.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 17-46, 16-47, 15-48, 13-49, 18-45, 19-44, 21-43

REACTIONS (size) 2=33-11-0, 32=33-11-0, 34=33-11-0, 35=33-11-0, 36=33-11-0, 37=33-11-0, 38=33-11-0, 39=33-11-0, 40=33-11-0, 42=33-11-0, 43=33-11-0, 44=33-11-0, 45=33-11-0, 46=33-11-0, 47=33-11-0, 48=33-11-0, 49=33-11-0, 50=33-11-0, 52=33-11-0, 53=33-11-0, 54=33-11-0, 55=33-11-0, 56=33-11-0, 57=33-11-0, 58=33-11-0, 59=33-11-0, 63=33-11-0
Max Horiz 2=-293 (LC 10), 59=-293 (LC 10)
Max Uplift 2=-100 (LC 8), 32=-35 (LC 9), 34=-201 (LC 13), 35=-12 (LC 13), 36=-77 (LC 13), 37=-62 (LC 13), 38=-65 (LC 13), 39=-64 (LC 13), 40=-70 (LC 13), 42=-59 (LC 13), 44=-30 (LC 9), 45=-42 (LC 8), 46=-38 (LC 8), 47=-44 (LC 8), 48=-32 (LC 9), 49=-8 (LC 9), 50=-60 (LC 12), 52=-69 (LC 12), 53=-64 (LC 12), 54=-65 (LC 12), 55=-61 (LC 12), 56=-79 (LC 12), 57=-15 (LC 13), 58=-224 (LC 12), 59=-100 (LC 8), 63=-35 (LC 9)
Max Grav 2=222 (LC 20), 32=170 (LC 19), 34=223 (LC 20), 35=87 (LC 1), 36=129 (LC 20), 37=117 (LC 20), 38=120 (LC 20), 39=119 (LC 20), 40=121 (LC 20), 42=120 (LC 20), 43=112 (LC 21), 44=105 (LC 24), 45=109 (LC 23), 46=107 (LC 1), 47=109 (LC 24), 48=105 (LC 23), 49=131 (LC 22), 50=122 (LC 19), 52=120 (LC 19), 53=119 (LC 19), 54=120 (LC 19), 55=117 (LC 19), 56=131 (LC 19), 57=87 (LC 1), 58=249 (LC 19), 59=222 (LC 20), 63=170 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/29, 2-4=-249/211, 4-5=-181/168, 5-6=-162/157, 6-7=-147/146, 7-9=-131/147, 9-10=-123/176, 10-11=-163/205, 11-12=-206/236, 12-13=-243/279, 13-14=-222/258, 14-15=-221/258, 15-16=-222/258, 16-17=-222/258, 17-18=-222/258, 18-19=-222/258, 19-20=-221/258, 20-21=-222/258, 21-22=-243/279, 22-23=-206/235, 23-24=-163/184, 24-25=-123/136, 25-27=-83/90, 27-28=-70/65, 28-29=-81/71, 29-30=-111/84, 30-32=-188/123, 32-33=0/29

January 23,2025

Continued on page 2

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

BOT CHORD 2-58=-133/218, 57-58=-133/218, 56-57=-133/218, 55-56=-133/218, 54-55=-133/218, 53-54=-133/218, 52-53=-133/218, 50-52=-133/218, 49-50=-133/218, 48-49=-133/218, 47-48=-133/218, 46-47=-133/218, 45-46=-133/218, 44-45=-133/218, 43-44=-133/218, 42-43=-133/218, 40-42=-133/218, 39-40=-133/218, 38-39=-133/218, 37-38=-133/218, 36-37=-133/218, 35-36=-133/218, 34-35=-133/218, 32-34=-133/218

WEBS 17-46=-80/56, 16-47=-82/65, 15-48=-78/48, 13-49=-104/33, 12-50=-97/76, 11-52=-107/85, 10-53=-102/80, 9-54=-102/81, 7-55=-102/80, 6-56=-105/84, 5-57=-88/63, 4-58=-151/139, 18-45=-82/65, 19-44=-78/46, 21-43=-85/33, 22-42=-97/75, 23-40=-107/86, 24-39=-102/80, 25-38=-102/81, 27-37=-102/80, 28-36=-105/83, 29-35=-89/65, 30-34=-153/130

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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint 2, 35 lb uplift at joint 32, 38 lb uplift at joint 46, 44 lb uplift at joint 47, 32 lb uplift at joint 48, 8 lb uplift at joint 49, 60 lb uplift at joint 50, 69 lb uplift at joint 52, 64 lb uplift at joint 53, 65 lb uplift at joint 54, 61 lb uplift at joint 55, 79 lb uplift at joint 56, 15 lb uplift at joint 57, 224 lb uplift at joint 58, 42 lb uplift at joint 45, 30 lb uplift at joint 44, 59 lb uplift at joint 42, 70 lb uplift at joint 40, 64 lb uplift at joint 39, 65 lb uplift at joint 38, 62 lb uplift at joint 37, 77 lb uplift at joint 36, 12 lb uplift at joint 35, 201 lb uplift at joint 34, 100 lb uplift at joint 2 and 35 lb uplift at joint 32.
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

Job	Truss	Truss Type	Qty	Ply	JSJ, Gavin Prime - Elev. A	
4703078	A02	Hip	1	1	Job Reference (optional)	I70946315

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Wed Jan 22 14:16:48 Page: 1

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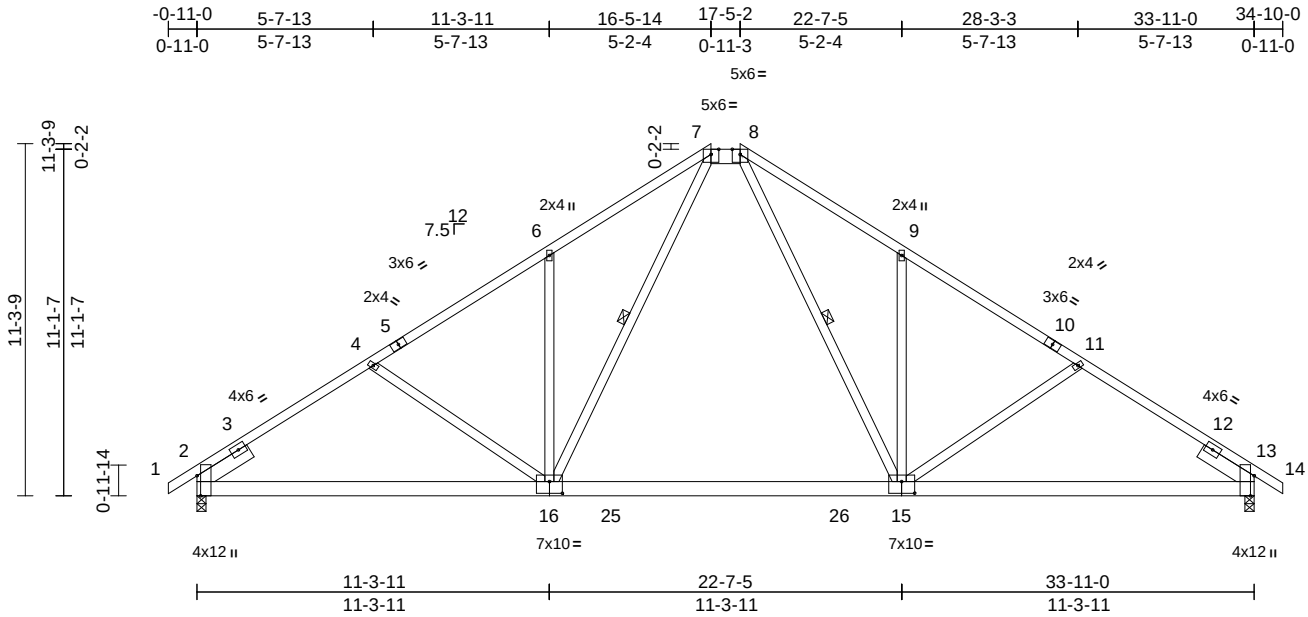

Scale = 1:73.9

Plate Offsets (X, Y): [2:0-7-12,Edge], [13:0-7-12,Edge], [15:0-5-0,0-4-8], [16:0-5-0,0-4-8]

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	0.77	Vert(LL)	-0.31	15-16	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.47	15-16	>872	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.48	Horz(CT)	0.07	13	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.14	15-16	>999	240	Weight: 229 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 *Except* 7-8:2x6 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 2-6-3 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 7-8.
BOT CHORD Rigid ceiling directly applied or 9-10-6 oc bracing.
WEBS 1 Row at midpt 7-16, 8-15

REACTIONS (size) 2=0-3-8, 13=0-3-8
Max Horiz 2=-360 (LC 10)
Max Uplift 2=-368 (LC 12), 13=-368 (LC 13)
Max Grav 2=1427 (LC 19), 13=1427 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/29, 2-4=-1948/690, 4-6=-1747/629, 6-7=-1915/833, 7-8=-1269/611, 8-9=-1915/833, 9-11=-1747/629, 11-13=-1948/690, 13-14=0/29
BOT CHORD 2-13=-542/1824
WEBS 7-16=-430/1001, 8-15=-429/1001, 6-16=-437/372, 9-15=-437/372, 11-15=-322/277, 4-16=-322/277

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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 368 lb uplift at joint 2 and 368 lb uplift at joint 13.
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

January 23,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Gavin Prime - Elev. A	
4703078	A03	Common	3	1	Job Reference (optional)	I70946316

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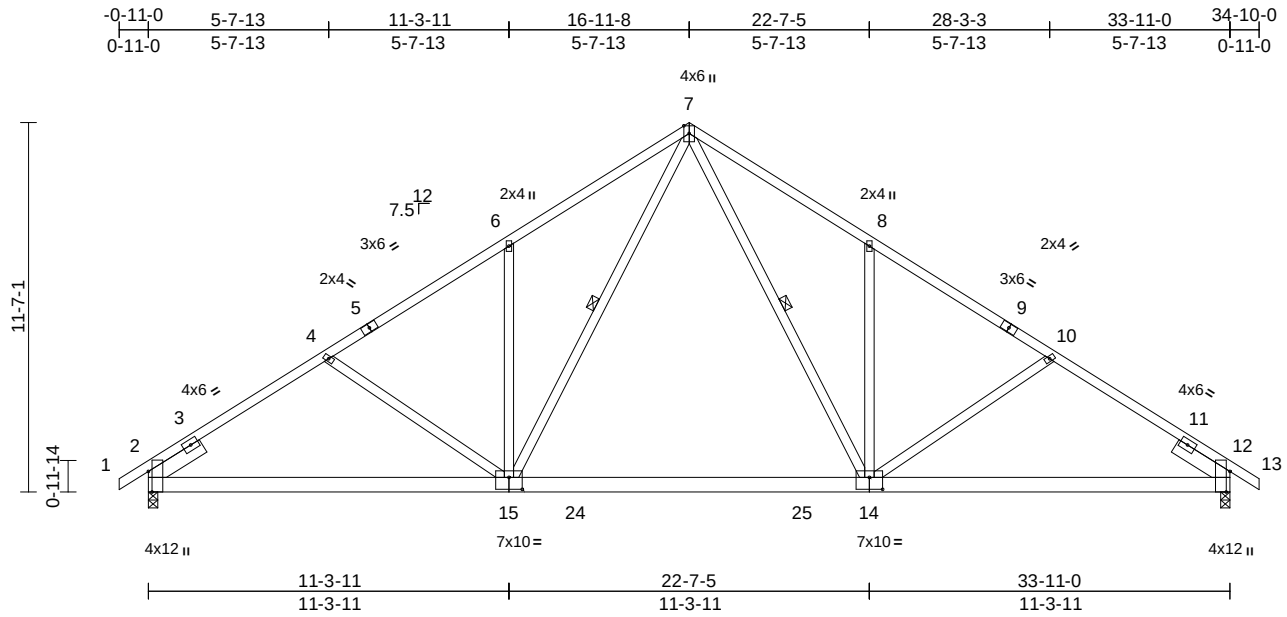

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Plate Offsets (X, Y): [2:0-7-12,Edge], [12:0-7-12,Edge], [14:0-5-0,0-4-8], [15:0-5-0,0-4-8]

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	0.76	Vert(LL)	-0.31	14-15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.47	14-15	>873	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.07	12	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.13	14-15	>999	240	Weight: 230 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except* 15-7,14-7:2x4 SP No.2
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 2-6-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-9-6 oc bracing.
WEBS 1 Row at midpt 7-15, 7-14

REACTIONS (size) 2=0-3-8, 12=0-3-8
Max Horiz 2=-373 (LC 10)
Max Uplift 2=-370 (LC 12), 12=-370 (LC 13)
Max Grav 2=1434 (LC 19), 12=1434 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/29, 2-4=-1962/685, 4-6=-1768/626, 6-7=-1963/850, 7-8=-1963/850, 8-10=-1768/626, 10-12=-1962/685, 12-13=0/29
BOT CHORD 2-12=-555/1844
WEBS 6-15=-484/382, 7-15=-448/1038, 7-14=-448/1038, 8-14=-484/382, 4-15=-316/275, 10-14=-316/275

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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 370 lb uplift at joint 2 and 370 lb uplift at joint 12.

LOAD CASE(S) Standard

January 23,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Gavin Prime - Elev. A	
4703078	A04	Common	7	1	Job Reference (optional)	I70946317

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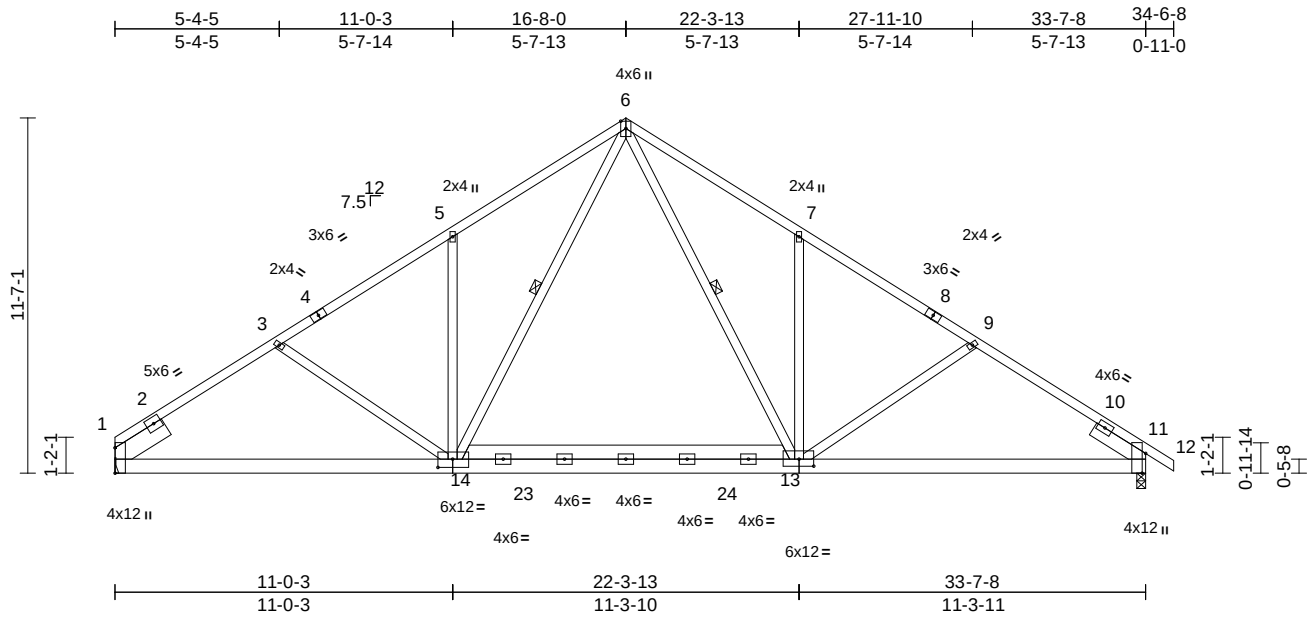

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Plate Offsets (X, Y): [1:0-9-15,Edge], [11:0-7-12,Edge], [13:0-5-12,0-2-12], [14:0-5-12,0-3-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.90	Vert(LL)	-0.16	13-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.27	13-14	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.06	11	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.12	13-14	>999	240	Weight: 253 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except* 14-6,13-6:2x4 SP No.2
SLIDER Left 2x8 SP 2400F 2.0E or DSS -- 1-11-12, Right 2x6 SP No.2 -- 1-11-12

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-9-4 oc bracing.
WEBS 1 Row at midpt 6-14, 6-13

REACTIONS (size) 1= Mechanical, 11=0-3-8
Max Horiz 1=-366 (LC 8)
Max Uplift 1=-335 (LC 12), 11=-368 (LC 13)
Max Grav 1=1360 (LC 19), 11=1417 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-1909/675, 3-5=-1736/611, 5-6=-1917/822, 6-7=-1947/830, 7-9=-1772/621, 9-11=-1961/693, 11-12=0/29
BOT CHORD 1-11=-548/1791
WEBS 6-14=-429/978, 6-13=-436/1028, 5-14=-485/378, 3-14=-276/263, 7-13=-474/374, 9-13=-324/280

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) Bearings are assumed to be: , Joint 11 SP No.2 crushing capacity of 565 psi.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 335 lb uplift at joint 1 and 368 lb uplift at joint 11.

LOAD CASE(S) Standard

January 23,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Gavin Prime - Elev. A	
4703078	A05	Common	1	1	Job Reference (optional)	I70946318

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

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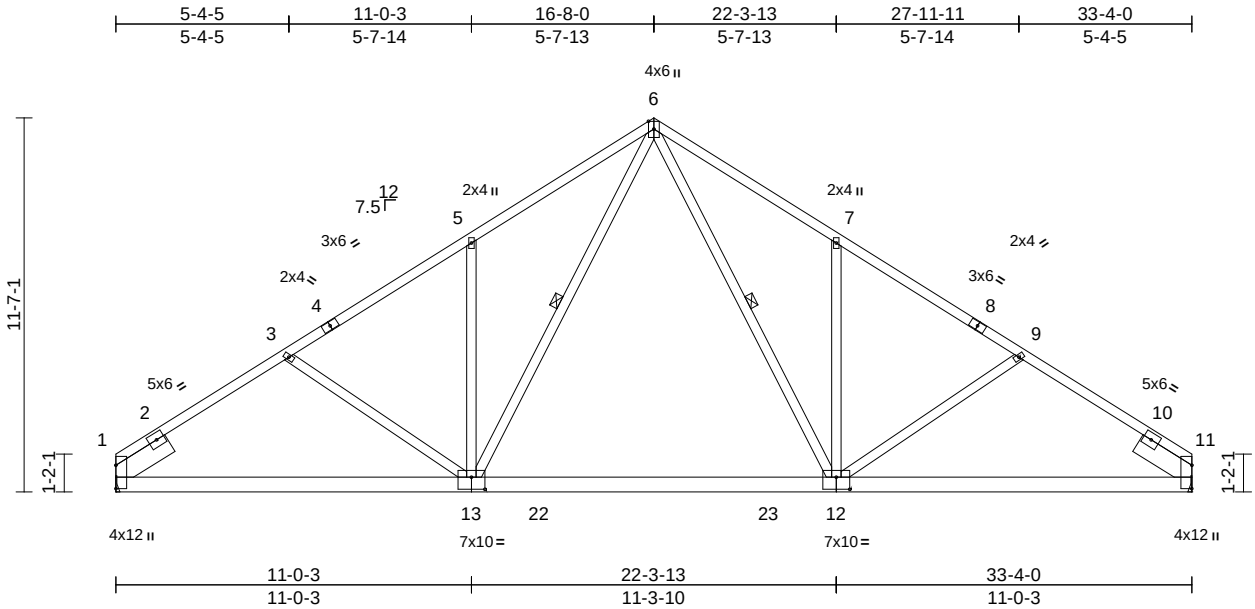

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Plate Offsets (X, Y): [1:0-8-11,0-0-1], [11:0-8-11,0-0-1], [12:0-5-0,0-4-8], [13:0-5-0,0-4-8]

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	0.98	Vert(LL)	-0.33	12-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.51	12-13	>785	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.08	11	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.16	12-13	>999	240	Weight: 227 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except* 13-6,12-6:2x4 SP No.2
SLIDER Left 2x8 SP 2400F 2.0E or DSS -- 1-11-12, Right 2x8 SP 2400F 2.0E or DSS -- 1-11-12

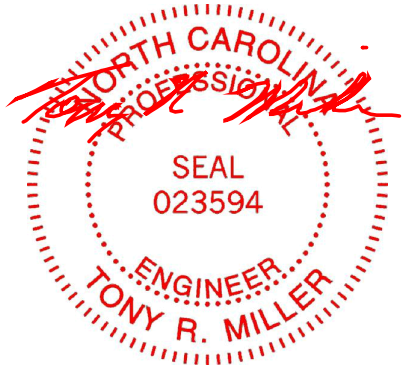
BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied or 9-9-11 oc bracing.
WEBS 1 Row at midpt 6-13, 6-12

REACTIONS (size) 1= Mechanical, 11= Mechanical
Max Horiz 1=-348 (LC 8)
Max Uplift 1=-333 (LC 12), 11=-333 (LC 13)
Max Grav 1=1357 (LC 19), 11=1357 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-1874/657, 3-5=-1699/605, 5-6=-1900/831, 6-7=-1900/831, 7-9=-1699/605, 9-11=-1874/657
BOT CHORD 1-11=-549/1744
WEBS 6-13=-440/1005, 6-12=-440/1005, 5-13=-496/386, 3-13=-269/259, 7-12=-496/386, 9-12=-269/260

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 ;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 333 lb uplift at joint 1 and 333 lb uplift at joint 11.

LOAD CASE(S) Standard



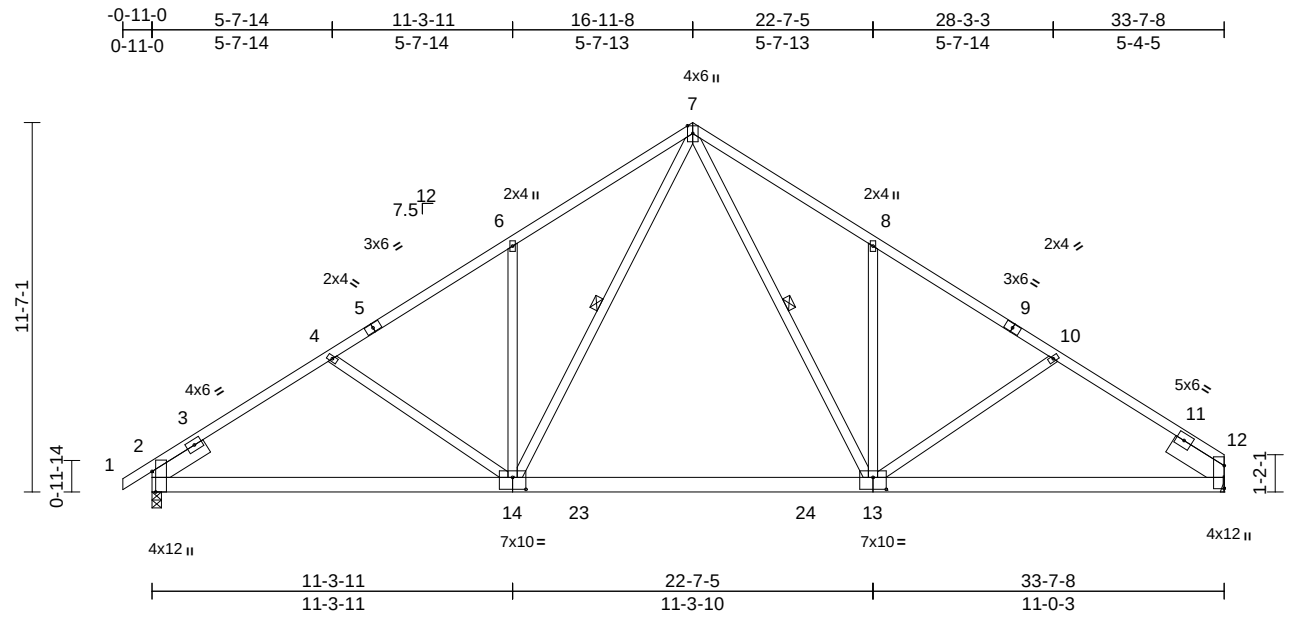
January 23,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Gavin Prime - Elev. A	
4703078	A06	Common	4	1	Job Reference (optional)	I70946319

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

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Wed Jan 22 14:16:49 Page: 1
ID:8i2alZBn3sSuGtb4_zlYTAzmGx1-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:72.3

Plate Offsets (X, Y): [2:0-7-12,Edge], [12:0-8-11,0-0-1], [13:0-5-0,0-4-8], [14:0-5-0,0-4-8]

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	0.99	Vert(LL)	-0.32	13-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.49	13-14	>826	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.08	12	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.15	13-14	>999	240	Weight: 228 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except* 14-7,13-7:2x4 SP No.2
SLIDER Left 2x6 SP No.2 -- 1-11-12, Right 2x8 SP 2400F 2.0E or DSS -- 1-11-12

BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied or 9-7-14 oc bracing.
WEBS 1 Row at midpt 7-14, 7-13

REACTIONS (size) 2=0-3-8, 12= Mechanical
Max Horiz 2=366 (LC 9)
Max Uplift 2=-368 (LC 12), 12=-335 (LC 13)
Max Grav 2=1424 (LC 19), 12=1367 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/29, 2-4=-1946/680, 4-6=-1750/621, 6-7=-1945/844, 7-8=-1918/837, 8-10=-1717/611, 10-12=-1890/663
BOT CHORD 2-12=-570/1819
WEBS 7-14=-449/1045, 7-13=-439/997, 6-14=-485/382, 4-14=-317/275, 8-13=-496/386, 10-13=-268/260

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) 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) Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 368 lb uplift at joint 2 and 335 lb uplift at joint 12.

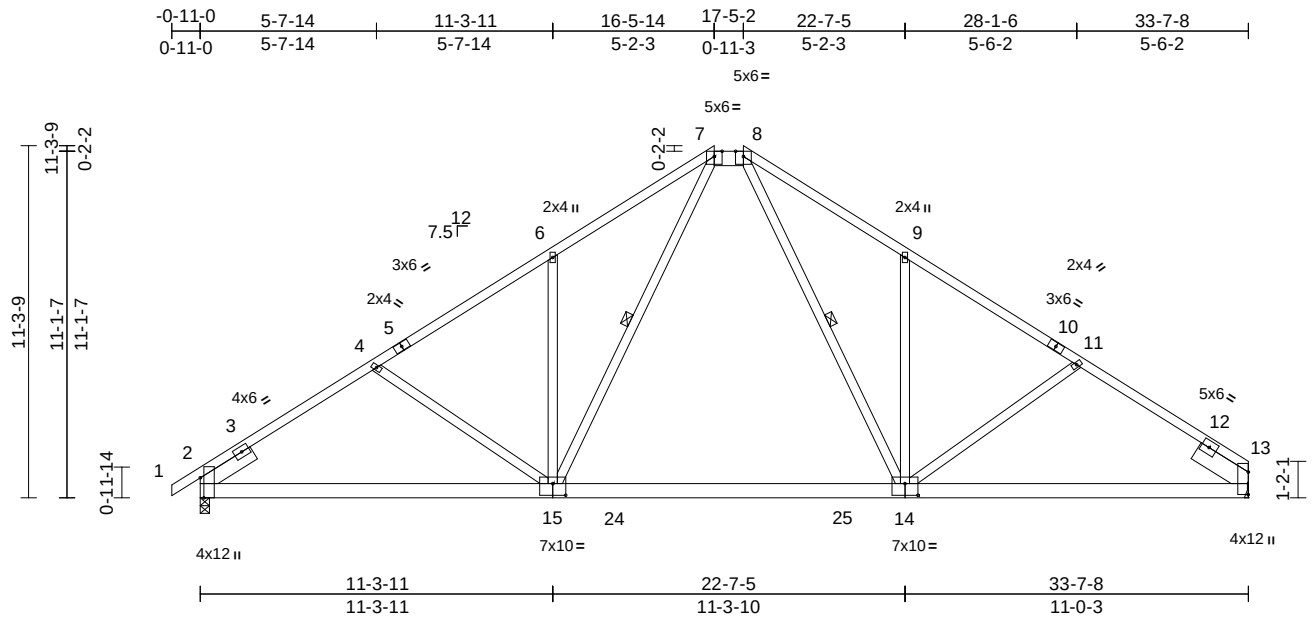
LOAD CASE(S) Standard

January 23,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Gavin Prime - Elev. A	
4703078	A07	Hip	1	1	Job Reference (optional)	I70946320

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Wed Jan 22 14:16:49 Page: 1
ID:8i2alZBn3sSuGtb4_zlYTAzmGx1-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:73.9

Plate Offsets (X, Y): [2:0-7-12,Edge], [13:0-8-11,0-0-1], [14:0-5-0,0-4-8], [15:0-5-0,0-4-8]

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	1.00	Vert(LL)	-0.32	14-15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.49	14-15	>824	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.48	Horz(CT)	0.08	13	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.14	14-15	>999	240	Weight: 227 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 7-8:2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 -- 1-11-12, Right 2x8 SP 2400F 2.0E or DSS -- 1-11-12

BRACING
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (6-0-0 max.): 7-8.
BOT CHORD Rigid ceiling directly applied or 9-8-12 oc bracing.
WEBS 1 Row at midpt 7-15, 8-14

REACTIONS (size) 2=0-3-8, 13= Mechanical
Max Horiz 2=353 (LC 9)
Max Uplift 2=-366 (LC 12), 13=-333 (LC 13)
Max Grav 2=1416 (LC 19), 13=1360 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/29, 2-4=-1932/684, 4-6=-1729/623, 6-7=-1898/828, 7-8=-1250/606, 8-9=-1868/819, 9-11=-1697/616, 11-13=-1874/664
BOT CHORD 2-13=-558/1798
WEBS 7-15=-431/1010, 8-14=-418/958, 9-14=-439/369, 11-14=-274/260, 6-15=-440/373, 4-15=-323/277

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) 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) Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 366 lb uplift at joint 2 and 333 lb uplift at joint 13.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

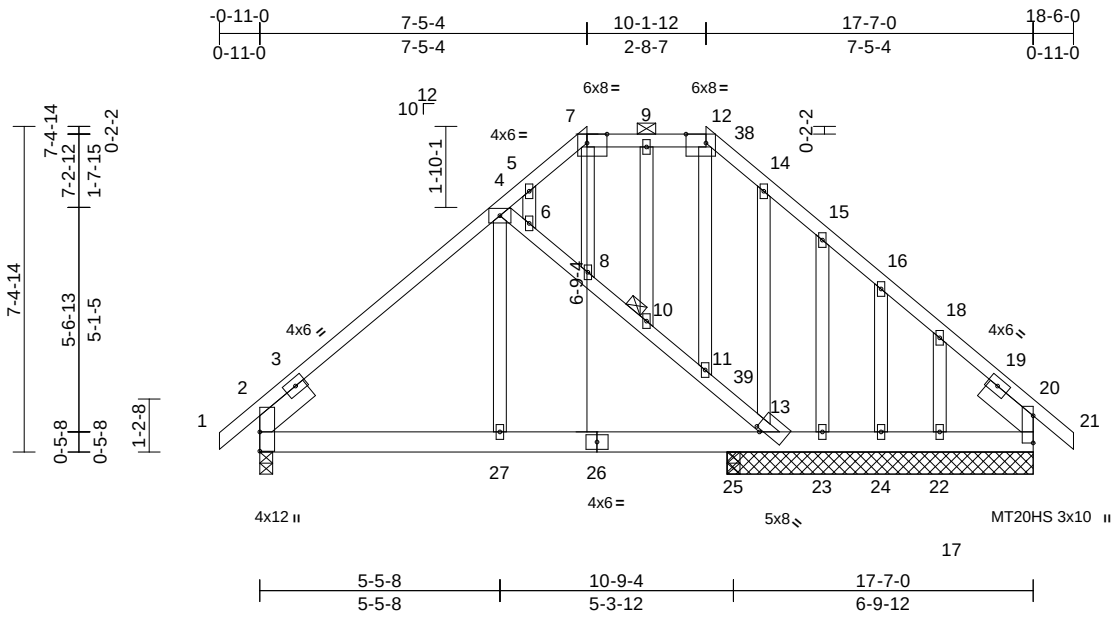
LOAD CASE(S) Standard

January 23,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Gavin Prime - Elev. A
4703078	B01	Hip Structural Gable	1	1	I70946321 Job Reference (optional)

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Wed Jan 22 14:16:49 Page: 1
ID:ZT1YbH?_DkQPMsDf9yGQ1?zmGhn-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:52.4

Plate Offsets (X, Y): [7:0-5-7,Edge], [12:0-5-7,Edge], [17:0-1-8,0-0-11]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.02	17-32	>675	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.04	17-32	>402	240	MT20HS	187/143
BCLL	0.0*	Rep Stress Incr	NO	WB	0.07	Horz(CT)	-0.01	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.02	17-32	>986	240	Weight: 147 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
SLIDER Left 2x6 SP No.2 -- 1-6-0, Right 2x6 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.): 7-12, 4-33.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 10

REACTIONS (size) 2=0-3-8, 17=6-11-8, 20=6-11-8, 22=6-11-8, 23=6-11-8, 24=6-11-8, 25=0-3-8, 34=6-11-8
Max Horiz 2=-521 (LC 13)
Max Uplift 2=-279 (LC 13), 17=-90 (LC 13), 20=-40 (LC 8), 22=-208 (LC 13), 23=-180 (LC 13), 24=-71 (LC 8), 25=-16 (LC 13), 34=-40 (LC 8)
Max Grav 2=744 (LC 1), 17=318 (LC 1), 20=549 (LC 1), 22=175 (LC 20), 23=721 (LC 1), 24=38 (LC 16), 25=624 (LC 1), 34=549 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-4=-788/459, 4-5=-536/416, 5-7=-498/404, 7-9=-408/340, 9-12=-407/340, 12-14=-481/394, 14-15=-452/341, 15-16=-411/250, 16-18=-403/176, 18-20=-441/77, 20-21=0/35, 4-6=-378/234, 6-8=-370/220, 8-10=-369/156, 10-11=-407/131, 11-13=-469/87, 13-17=-365/499
BOT CHORD 2-27=-298/535, 25-27=-93/535, 17-25=-93/535, 17-23=-30/289, 23-24=-30/289, 22-24=-30/289, 20-22=-30/289
WEBS 4-27=0/187, 9-10=-45/59, 7-8=-159/178, 5-6=-44/44, 11-12=-124/129, 13-14=-104/81, 15-23=-174/129, 16-24=-144/104, 18-22=-146/161

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.
10) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 279 lb uplift at joint 2, 90 lb uplift at joint 17, 180 lb uplift at joint 23, 71 lb uplift at joint 24, 208 lb uplift at joint 22, 40 lb uplift at joint 20, 16 lb uplift at joint 25 and 40 lb uplift at joint 20.
12) 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.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-4=-60, 20-38=-100, 20-21=-60, 27-28=-20, 17-25=-20, 32-34=-20, 13-39=-100, 13-33=100, 17-33=-100
Trapezoidal Loads (lb/ft)

January 23,2025

Continued on page 2

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818 Soundside Road
Edenton, NC 27932

Vert: 4=-61 (F=-1)-to-5=-62 (F=-2), 5=-62 (F=-2)-to-7=-63 (F=-3), 7=-63 (F=-3)-to-9=-64 (F=-4), 9=-64 (F=-4)-to-12=-66 (F=-6), 12=-106 (F=-6)-to-38=-106 (F=-6), 27=-21 (F=-1)-to-26=-23 (F=-3), 26=-23 (F=-3)-to-25=-26 (F=-6), 4=-61 (F=-1)-to-6=-62 (F=-2), 6=-62 (F=-2)-to-8=-63 (F=-3), 8=-63 (F=-3)-to-10=-64 (F=-4), 10=-64 (F=-4)-to-11=-66 (F=-6), 11=-106 (F=-6)-to-39=-106 (F=-6)

Job	Truss	Truss Type	Qty	Ply	JSJ, Gavin Prime - Elev. A
4703078	B02	Common Girder	1	**3**	I70946322 Job Reference (optional)

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Wed Jan 22 14:16:50 Page: 1
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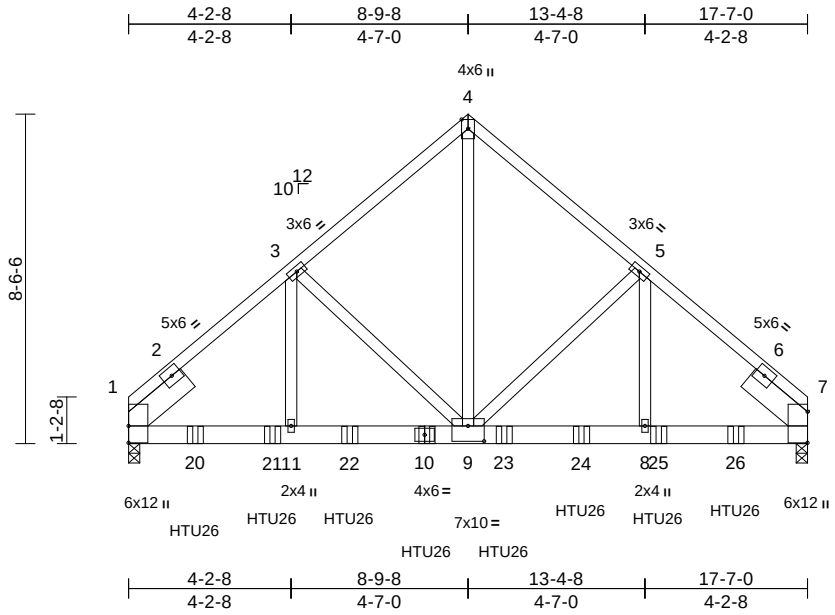

Scale = 1:59.7

Plate Offsets (X, Y): [9:0-5-0,0-4-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.07	9-11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.15	9-11	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.47	Horz(CT)	0.05	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.08	9-11	>999	240	Weight: 386 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.2
SLIDER Left 2x8 SP 2400F 2.0E or DSS -- 1-11-12, Right 2x8 SP 2400F 2.0E or DSS -- 1-11-12

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

REACTIONS (size) 1=0-3-8, 7=0-3-8
Max Horiz 1=244 (LC 7)
Max Uplift 1=-1556 (LC 8), 7=-1532 (LC 9)
Max Grav 1=6042 (LC 1), 7=5953 (LC 16)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-6535/1725, 3-4=-4911/1392, 4-5=-4910/1392, 5-7=-6502/1716
BOT CHORD 1-11=-1349/5005, 9-11=-1349/5005, 8-9=-1217/4841, 7-8=-1217/4841
WEBS 3-11=-533/2132, 3-9=-1625/607, 4-9=-1585/5832, 5-9=-1592/599, 5-8=-523/2091

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 0-5-0 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1556 lb uplift at joint 1 and 1532 lb uplift at joint 7.
9) Use Simpson Strong-Tie HTU26 (10-16d Girder, 14-10dx1 1/2 Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-8-12 from the left end to 15-8-12 to connect truss(es) to back face of bottom chord.
10) 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: 1-4=-60, 4-7=-60, 12-16=-20
Concentrated Loads (lb)
Vert: 10=-1324 (B), 20=-1324 (B), 21=-1324 (B), 22=-1324 (B), 23=-1324 (B), 24=-1324 (B), 25=-1324 (B), 26=-1313 (B)

January 23,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Gavin Prime - Elev. A
4703078	C01	Hip Structural Gable	1	1	I70946323 Job Reference (optional)

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Wed Jan 22 14:16:50 Page: 1
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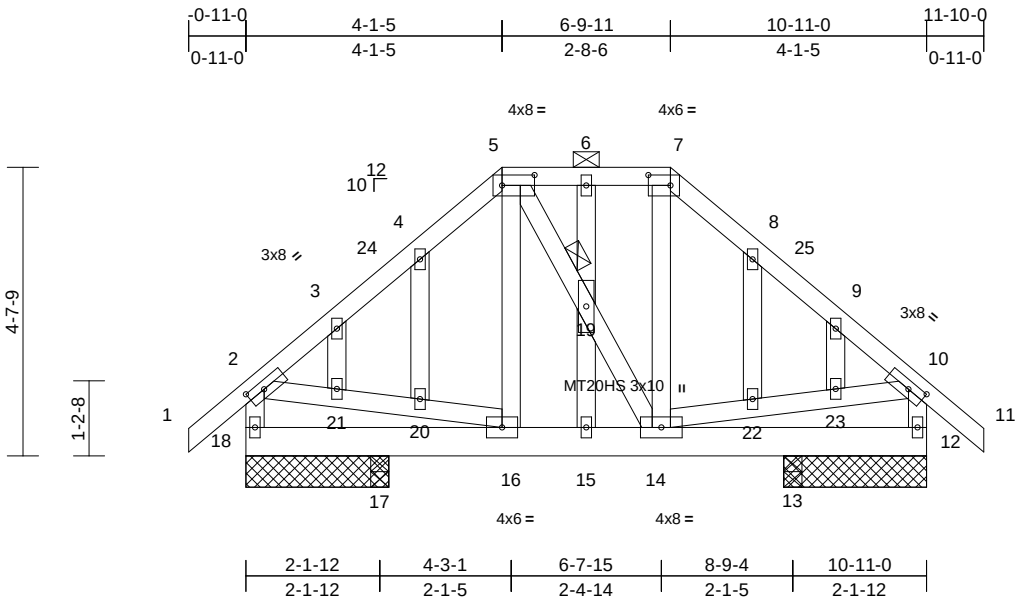


Scale = 1:37

Plate Offsets (X, Y): [2:0-3-5,0-1-8], [5:0-6-4,0-2-0], [7:0-4-4,0-2-0], [10:0-3-5,0-1-8]

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	0.19	Vert(LL)	-0.01	15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.01	15	>999	240	MT20HS	187/143
BCLL	0.0*	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.00	12	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.01	15	>999	240	Weight: 97 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except* 18-2,12-10:2x4 SP No.2
OTHERS 2x4 SP No.3

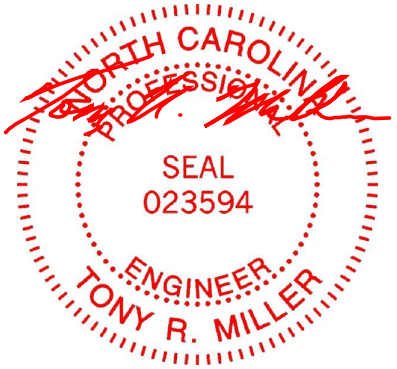
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 19

REACTIONS (size) 12=2-3-8, 13=0-3-8, 17=0-3-8, 18=2-3-8
Max Horiz 18=-186 (LC 10)
Max Uplift 12=-119 (LC 13), 13=-4 (LC 13), 17=-9 (LC 12), 18=-114 (LC 12)
Max Grav 12=425 (LC 1), 13=164 (LC 3), 17=164 (LC 3), 18=428 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/41, 2-3=-399/146, 3-4=-347/162, 4-5=-337/209, 5-6=-313/209, 6-7=-313/209, 7-8=-334/207, 8-9=-347/163, 9-10=-398/143, 10-11=0/41, 2-18=-438/253, 10-12=-437/252
BOT CHORD 17-18=-170/214, 16-17=-170/214, 15-16=-86/268, 14-15=-86/268, 13-14=-67/172, 12-13=-67/172
WEBS 5-16=-16/46, 5-19=-55/57, 14-19=-62/68, 7-14=-31/57, 2-21=-69/218, 20-21=-70/219, 16-20=-75/225, 14-22=-77/218, 22-23=-72/212, 10-23=-71/212, 6-19=-38/76, 15-19=-45/85, 4-20=-46/57, 3-21=-28/18, 8-22=-43/53, 9-23=-32/18

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) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
8) Gable studs spaced at 1-4-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * 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.
11) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 114 lb uplift at joint 18, 119 lb uplift at joint 12, 9 lb uplift at joint 17 and 4 lb uplift at joint 13.
13) 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.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
15) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-60, 2-24=-60, 10-25=-60, 10-11=-60, 17-18=-20, 12-13=-20
Trapezoidal Loads (lb/ft)
Vert: 24=-62 (F=-2)-to-4=-62 (F=-2), 4=-62 (F=-2)-to-5=-64 (F=-4), 5=-64 (F=-4)-to-6=-65 (F=-5), 6=-65 (F=-5)-to-7=-64 (F=-4), 7=-64 (F=-4)-to-8=-62 (F=-2), 8=-62 (F=-2)-to-25=-62 (F=-2), 17=-42 (F=-22)-to-16=-44 (F=-24), 16=-44 (F=-24)-to-15=-45 (F=-25), 15=-45 (F=-25)-to-14=-44 (F=-24), 14=-44 (F=-24)-to-13=-42 (F=-22)



January 23,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Gavin Prime - Elev. A	
4703078	C02	Common	1	1	Job Reference (optional)	I70946324

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Wed Jan 22 14:16:50 Page: 1
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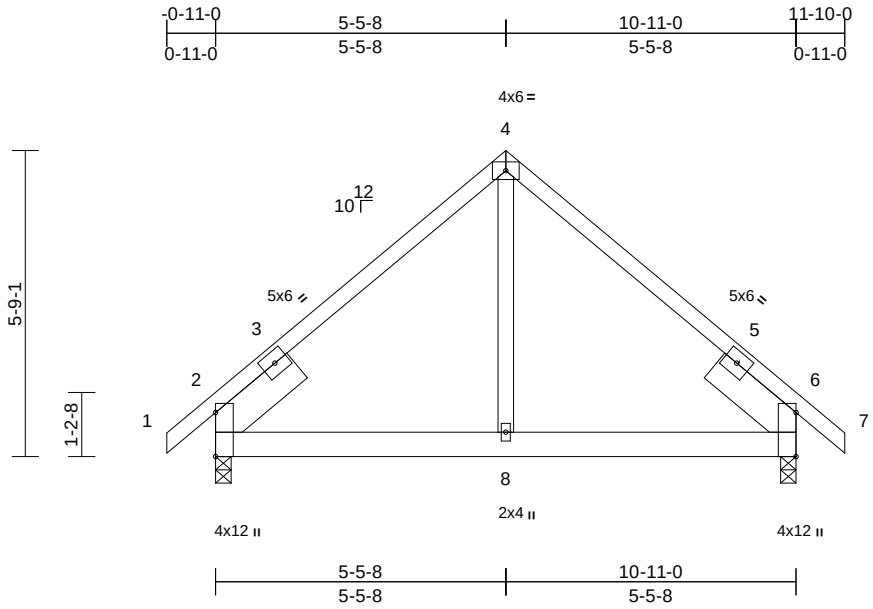

Scale = 1:43.3

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

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	0.25	Vert(LL)	0.02	8-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.02	8-11	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.09	Horz(CT)	-0.02	2	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 2x6 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x8 SP 2400F 2.0E or DSS -- 1-11-12, Right 2x8 SP 2400F 2.0E or DSS -- 1-11-12

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=0-3-8, 6=0-3-8
Max Horiz 2=177 (LC 11)
Max Uplift 2=-124 (LC 12), 6=-124 (LC 13)
Max Grav 2=492 (LC 1), 6=492 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-4=-425/279, 4-6=-425/279, 6-7=0/35
BOT CHORD 2-8=-154/293, 6-8=-73/289
WEBS 4-8=-82/252

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.
5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 124 lb uplift at joint 2 and 124 lb uplift at joint 6.

LOAD CASE(S) Standard

January 23,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Gavin Prime - Elev. A	
4703078	D01	Monopitch Supported Gable	1	1	Job Reference (optional)	I70946325

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

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Wed Jan 22 14:16:50 Page: 1
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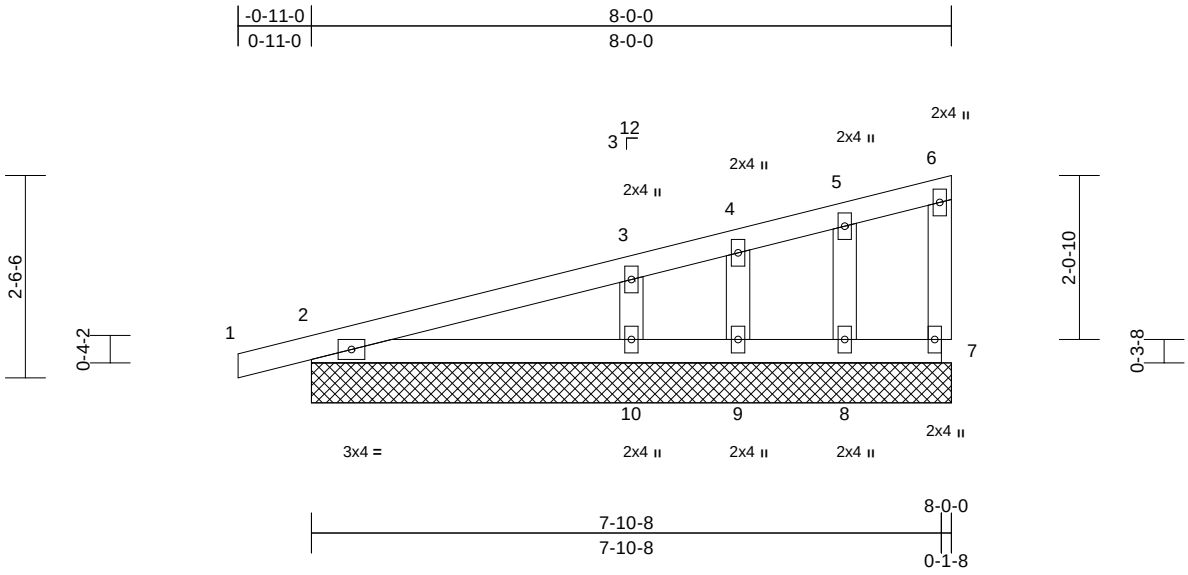


Scale = 1:28.8

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	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 33 lb	FT = 20%

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

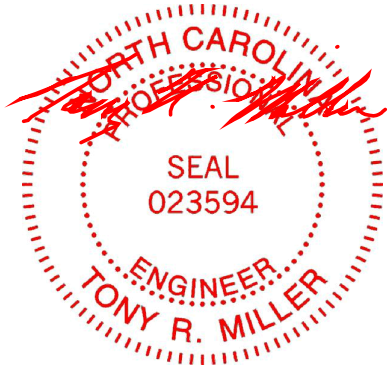
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=8-0-0, 7=8-0-0, 8=8-0-0, 9=8-0-0, 10=8-0-0, 11=8-0-0
Max Horiz 2=118 (LC 8), 11=118 (LC 8)
Max Uplift 2=-85 (LC 8), 7=-16 (LC 8), 8=-49 (LC 12), 9=-14 (LC 3), 10=-129 (LC 12), 11=-85 (LC 8)
Max Grav 2=193 (LC 1), 7=35 (LC 1), 8=135 (LC 1), 9=2 (LC 12), 10=330 (LC 1), 11=193 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/13, 2-3=-104/48, 3-4=-48/12, 4-5=-36/16, 5-6=-12/5, 6-7=-28/31
BOT CHORD 2-10=-47/76, 9-10=-2/2, 8-9=-2/2, 7-8=-2/2
WEBS 5-8=-94/96, 4-9=-16/35, 3-10=-211/199

NOTES
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 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
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) All plates are 2x4 MT20 unless otherwise indicated.
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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 85 lb uplift at joint 2, 16 lb uplift at joint 7, 49 lb uplift at joint 8, 14 lb uplift at joint 9, 129 lb uplift at joint 10 and 85 lb uplift at joint 2.

LOAD CASE(S) Standard



January 23,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Gavin Prime - Elev. A	
4703078	D02	Monopitch	4	1	Job Reference (optional)	I70946326

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Wed Jan 22 14:16:50 Page: 1
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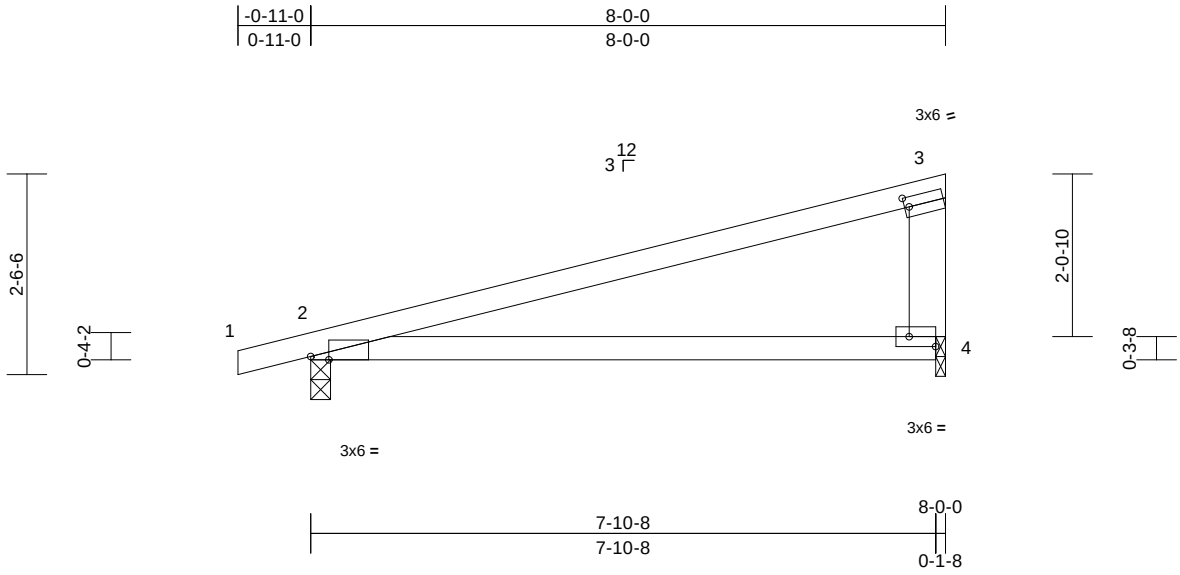

Scale = 1:29

Plate Offsets (X, Y): [2:0-2-12,Edge], [3:0-0-11,0-1-8], [4:Edge,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	0.36	4-7	>263	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.24	4-7	>382	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 30 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x6 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 7-4-11 oc bracing.

REACTIONS (size) 2=0-3-0, 4=0-1-8
Max Horiz 2=117 (LC 8)
Max Uplift 2=-248 (LC 8), 4=-216 (LC 8)
Max Grav 2=369 (LC 1), 4=308 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/13, 2-3=-217/309, 3-4=-191/211
BOT CHORD 2-4=-352/204

NOTES
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 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
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi, Joint 4 SP No.2 crushing capacity of 565 psi.
5) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 248 lb uplift at joint 2 and 216 lb uplift at joint 4.

LOAD CASE(S) Standard

January 23,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Gavin Prime - Elev. A
4703078	D03	Monopitch	3	1	I70946327 Job Reference (optional)

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Wed Jan 22 14:16:50 Page: 1
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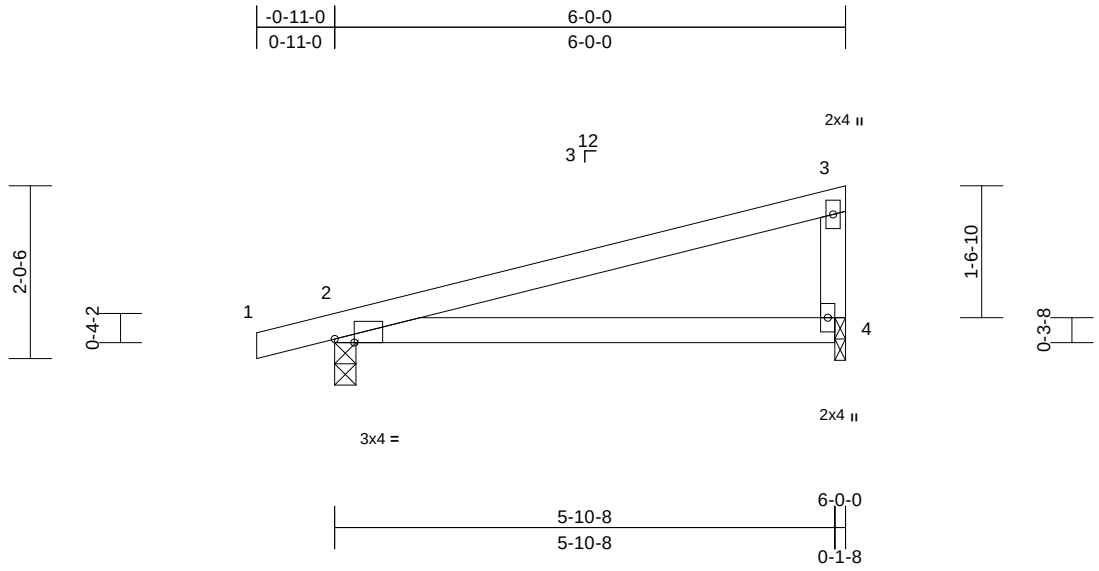

Scale = 1:27.1

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.51	Vert(LL)	0.18	4-7	>391	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.12	4-7	>575	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 21 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) 2=0-3-0, 4=0-1-8
Max Horiz 2=92 (LC 8)
Max Uplift 2=-202 (LC 8), 4=-161 (LC 8)
Max Grav 2=293 (LC 1), 4=230 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/13, 2-3=-146/214, 3-4=-151/195
BOT CHORD 2-4=-249/133

NOTES
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 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
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
5) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 2, 4.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 202 lb uplift at joint 2 and 161 lb uplift at joint 4.

LOAD CASE(S) Standard

January 23,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Gavin Prime - Elev. A
4703078	D04	Monopitch Supported Gable	1	1	I70946328 Job Reference (optional)

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

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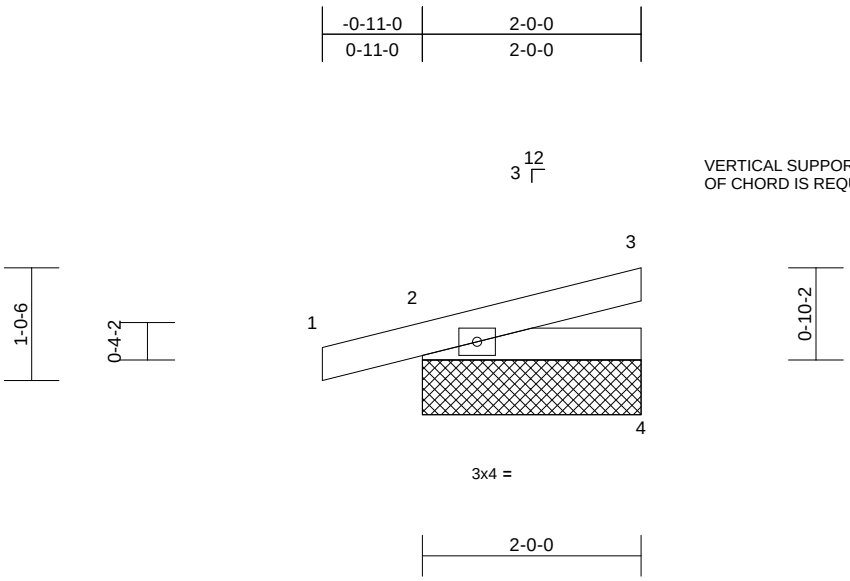

Scale = 1:21.1

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 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 2-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=2-0-0, 3=2-0-0, 4=2-0-0, 5=2-0-0
Max Horiz 2=42 (LC 8), 5=42 (LC 8)
Max Uplift 2=-90 (LC 8), 3=-23 (LC 12), 4=-2 (LC 12), 5=-90 (LC 8)
Max Grav 2=148 (LC 1), 3=42 (LC 1), 4=32 (LC 3), 5=148 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/13, 2-3=-38/9
BOT CHORD 2-4=-9/39

NOTES
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 2-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 90 lb uplift at joint 2, 2 lb uplift at joint 4, 23 lb uplift at joint 3 and 90 lb uplift at joint 2.
9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 3, 5.

LOAD CASE(S) Standard

January 23,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Gavin Prime - Elev. A	
4703078	D05	Monopitch Supported Gable	1	1	Job Reference (optional)	I70946329

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

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Wed Jan 22 14:16:50 Page: 1
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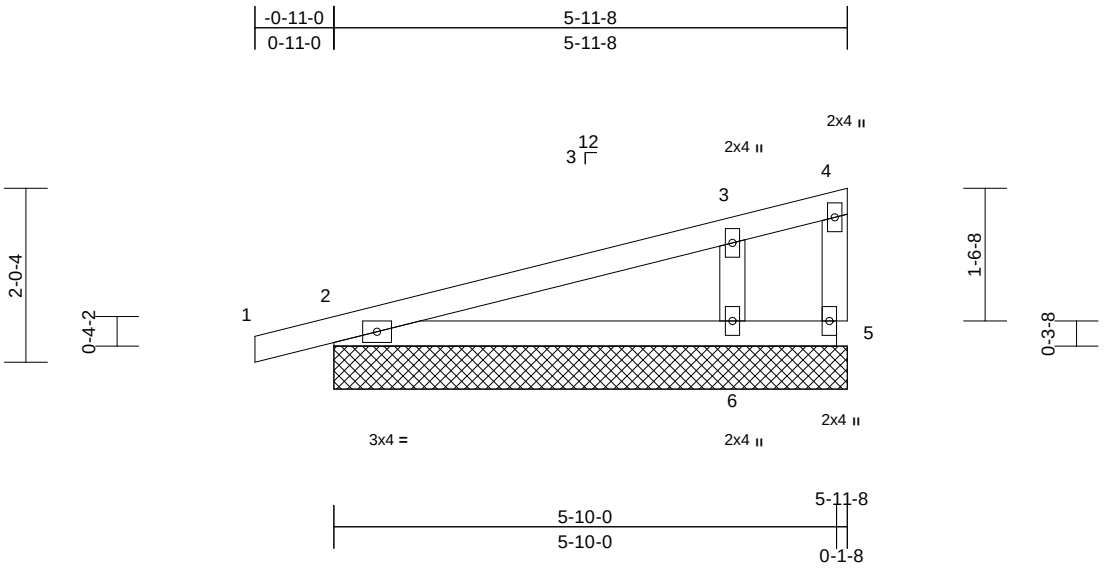

Scale = 1:26.7

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	2	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.2
OTHERS 2x4 SP No.3

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) 2=5-11-8, 5=5-11-8, 6=5-11-8, 7=5-11-8
Max Horiz 2=92 (LC 8), 7=92 (LC 8)
Max Uplift 2=-99 (LC 8), 5=-87 (LC 1), 6=-154 (LC 12), 7=-99 (LC 8)
Max Grav 2=211 (LC 1), 5=33 (LC 12), 6=396 (LC 1), 7=211 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/13, 2-3=-78/38, 3-4=-28/8, 4-5=-34/44
BOT CHORD 2-6=-56/91, 5-6=0/0
WEBS 3-6=-256/263

NOTES
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 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
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 1-4-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 99 lb uplift at joint 2, 87 lb uplift at joint 5, 154 lb uplift at joint 6 and 99 lb uplift at joint 2.

LOAD CASE(S) Standard

January 23,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Gavin Prime - Elev. A	
4703078	D06	Monopitch	4	1	Job Reference (optional)	I70946330

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

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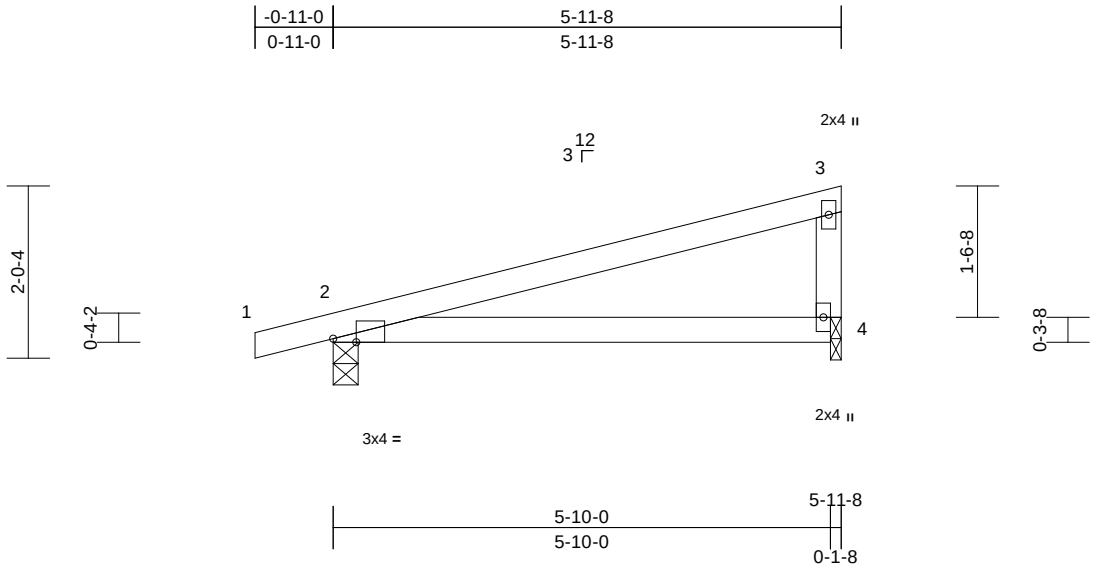

Scale = 1:27

Plate Offsets (X, Y): [2:0-3-4,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	0.49	Vert(LL)	-0.05	4-7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.12	4-7	>587	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP		Wind(LL)	0.08	4-7	>899	240	Weight: 21 lb	FT = 20%

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

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

REACTIONS (size) 2=0-3-8, 4=0-1-8
Max Horiz 2=92 (LC 8)
Max Uplift 2=-129 (LC 8), 4=-89 (LC 12)
Max Grav 2=292 (LC 1), 4=228 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/13, 2-3=-144/46, 3-4=-150/156
BOT CHORD 2-4=-102/150

NOTES
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 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
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
5) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 129 lb uplift at joint 2 and 89 lb uplift at joint 4.

LOAD CASE(S) Standard

January 23,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Gavin Prime - Elev. A	
4703078	V01	Valley	1	1	Job Reference (optional)	I70946331

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

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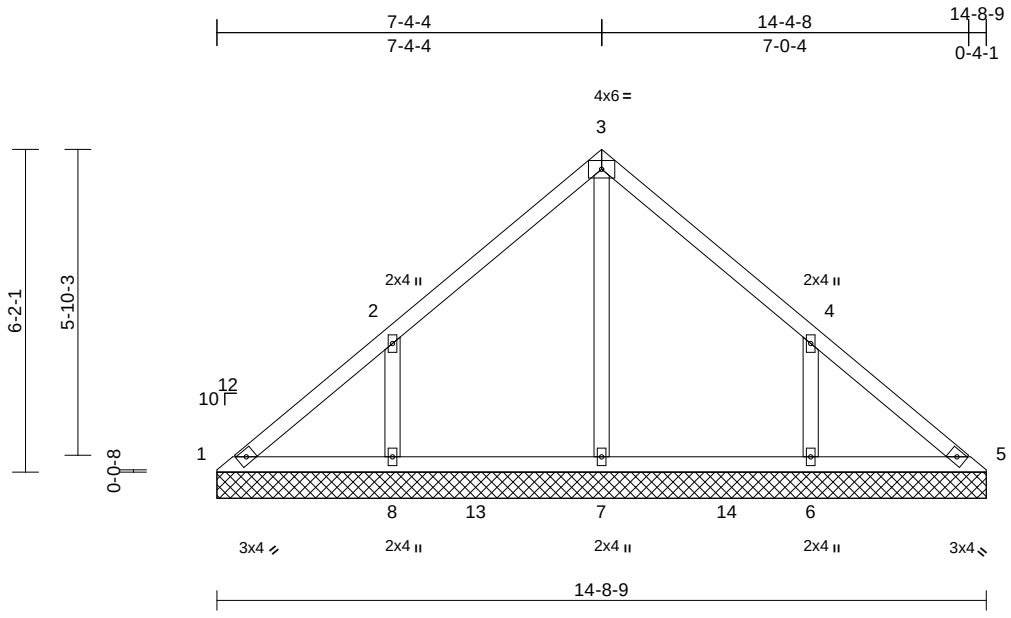

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.15	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 64 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=200 (LC 11)
Max Uplift 1=-45 (LC 8), 6=-267 (LC 13), 8=-272 (LC 12)
Max Grav 1=137 (LC 20), 5=101 (LC 19), 6=418 (LC 20), 7=405 (LC 19), 8=423 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-169/181, 2-3=-121/161, 3-4=-120/142, 4-5=-125/119
BOT CHORD 1-8=-113/150, 7-8=-113/150, 6-7=-113/150, 5-6=-113/150
WEBS 3-7=-222/4, 2-8=-362/304, 4-6=-362/302

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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 45 lb uplift at joint 1, 272 lb uplift at joint 8 and 267 lb uplift at joint 6.

LOAD CASE(S) Standard

January 23,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Gavin Prime - Elev. A	
4703078	V02	Valley	1	1	Job Reference (optional)	I70946332

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

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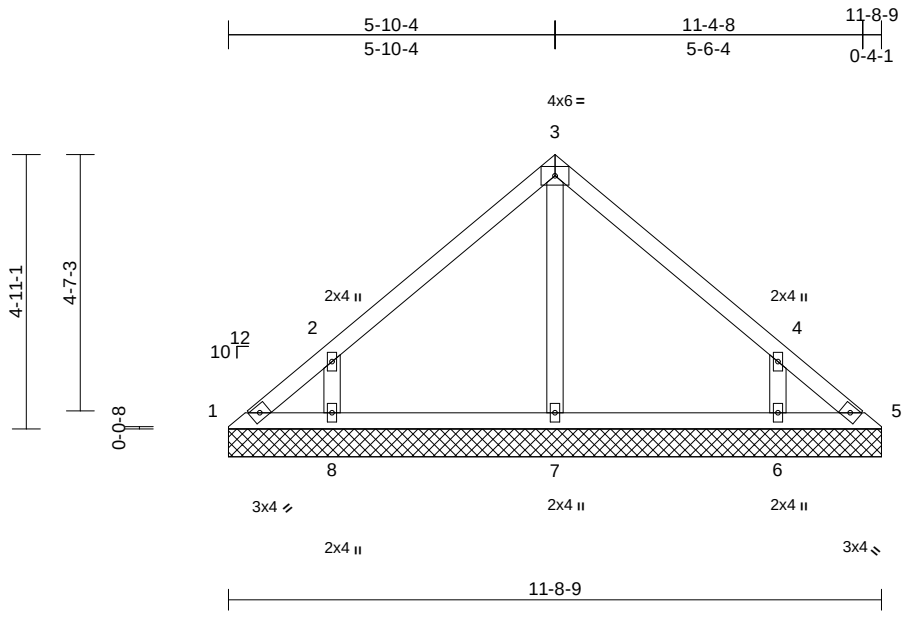

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.09	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 48 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=11-8-9, 5=11-8-9, 6=11-8-9, 7=11-8-9, 8=11-8-9
Max Horiz 1=-158 (LC 8)
Max Uplift 1=-58 (LC 8), 5=-18 (LC 9), 6=-229 (LC 13), 8=-235 (LC 12)
Max Grav 1=102 (LC 20), 5=72 (LC 19), 6=346 (LC 20), 7=238 (LC 1), 8=352 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-164/141, 2-3=-161/146, 3-4=-158/139, 4-5=-128/89
BOT CHORD 1-8=-54/96, 7-8=-47/96, 6-7=-47/96, 5-6=-47/96
WEBS 3-7=-151/8, 2-8=-358/308, 4-6=-358/306

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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 58 lb uplift at joint 1, 18 lb uplift at joint 5, 235 lb uplift at joint 8 and 229 lb uplift at joint 6.

LOAD CASE(S) Standard

January 23,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Gavin Prime - Elev. A	
4703078	V03	Valley	1	1	Job Reference (optional)	I70946333

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

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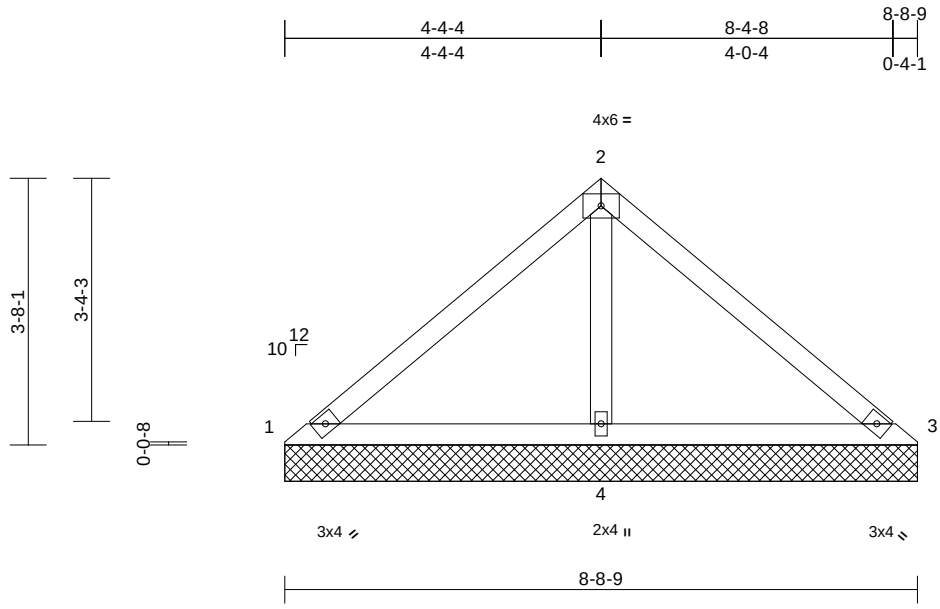

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.12	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 33 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 8-8-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 1=8-8-9, 3=8-8-9, 4=8-8-9
Max Horiz 1=-116 (LC 8)
Max Uplift 1=-10 (LC 24), 3=-14 (LC 8), 4=-202 (LC 12)
Max Grav 1=77 (LC 23), 3=77 (LC 24), 4=605 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-111/253, 2-3=-111/241
BOT CHORD 1-4=-241/181, 3-4=-241/181
WEBS 2-4=-509/279

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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 10 lb uplift at joint 1, 14 lb uplift at joint 3 and 202 lb uplift at joint 4.

LOAD CASE(S) Standard

January 23,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Gavin Prime - Elev. A
4703078	V04	Valley	1	1	I70946334 Job Reference (optional)

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

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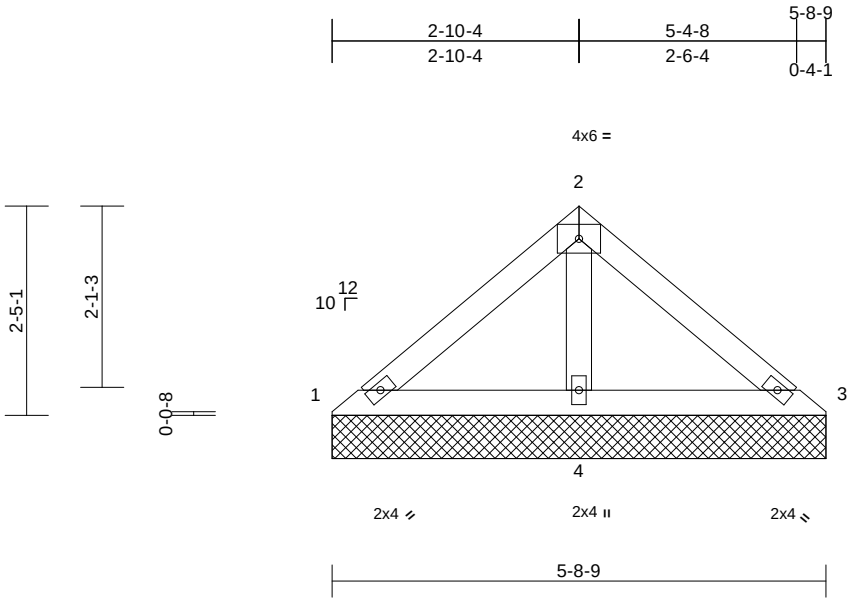

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 21 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 5-8-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 1=5-8-9, 3=5-8-9, 4=5-8-9
Max Horiz 1=-74 (LC 8)
Max Uplift 1=-1 (LC 13), 3=-13 (LC 13), 4=-110 (LC 12)
Max Grav 1=67 (LC 23), 3=67 (LC 24), 4=354 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-58/127, 2-3=-58/116
BOT CHORD 1-4=-137/113, 3-4=-137/113
WEBS 2-4=-250/135

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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1 lb uplift at joint 1, 13 lb uplift at joint 3 and 110 lb uplift at joint 4.

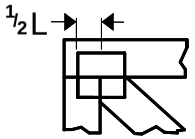
LOAD CASE(S) Standard

January 23,2025

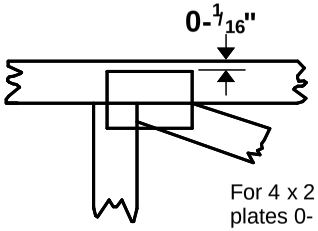
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

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.

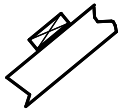
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

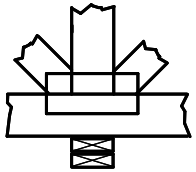
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

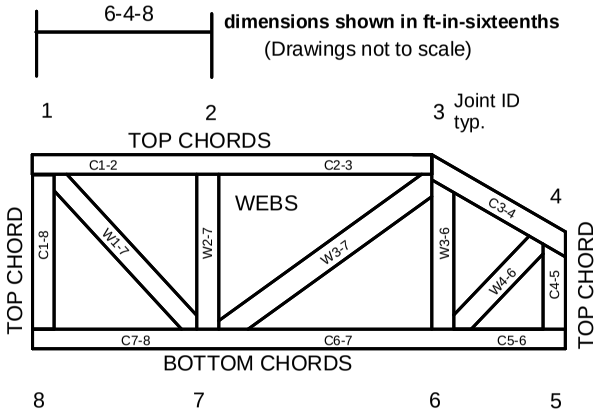


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

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.