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: 4703108 - JSJ, Smith Prime Plan (12-19-24)

Trenco
818 Soundside Rd
Edenton, NC 27932

Site Information:

Project Customer: JSJ Builders Project Name:
Lot/Block: 104 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 16 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Job ID#	Truss Name	Date
1	I74964167	4703108	A01	7/17/25
2	I74964168	4703108	A02	7/17/25
3	I74964169	4703108	A03	7/17/25
4	I74964170	4703108	A04	7/17/25
5	I74964171	4703108		7/17/25
6	I74964172	4703108	A06	7/17/25
7	I74964173	4703108	A07	7/17/25
8	I74964174	4703108	A08	7/17/25
9	I74964175	4703108	A09	7/17/25
10	I74964176	4703108	B01	7/17/25
11	I74964177	4703108	B02	7/17/25
12	I74964178	4703108	B03	7/17/25
13	I74964179	4703108		7/17/25
14	I74964180	4703108	B05	7/17/25
	I74964181	4703108	PB01	7/17/25
16	I74964182	4703108	PB02	7/17/25

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 17,2025
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

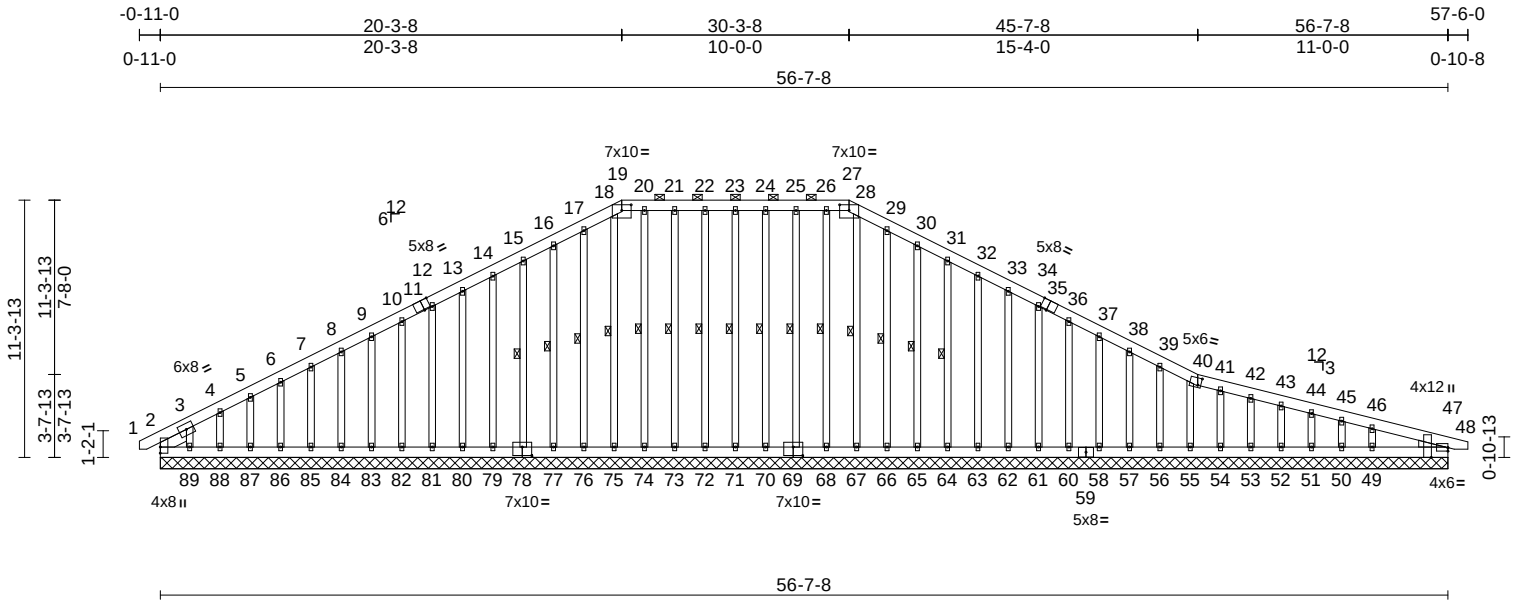
RE: $JOBNAME - $JOBDESC

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, Smith Prime Plan (12-19-24)
4703108	A01	Piggyback Base Supported Gable	1	1	I74964167 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. Wed Jul 16 15:57:20 Page: 1
ID:rXx7qFxcR9Qpgha4WwwB0UyIhb0-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:101.3

Plate Offsets (X, Y): [2:Edge,0-0-0], [11:0-3-10,Edge], [19:0-5-0,0-3-0], [27:0-5-0,0-3-0], [35:0-3-10,Edge], [40:0-1-9,0-3-12], [47:Edge,0-1-13], [47:0-5-2,Edge], [69:0-5-0,0-4-8], [78:0-5-0,0-4-8]

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	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.01	47	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 651 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
OTHERS 2x4 SP No.3
WEDGE Right: 2x4 SP No.3
SLIDER Left 2x6 SP No.2 -- 1-4-7

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 19-27.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 23-71, 24-70, 25-69, 26-68, 28-67, 29-66, 30-65, 31-64, 22-72, 21-73, 20-74, 18-75, 17-76, 16-77, 15-78

REACTIONS (size) 2=56-7-8, 47=56-7-8, 49=56-7-8, 50=56-7-8, 51=56-7-8, 52=56-7-8, 53=56-7-8, 54=56-7-8, 55=56-7-8, 56=56-7-8, 57=56-7-8, 58=56-7-8, 60=56-7-8, 61=56-7-8, 62=56-7-8, 63=56-7-8, 64=56-7-8, 65=56-7-8, 66=56-7-8, 67=56-7-8, 68=56-7-8, 69=56-7-8, 70=56-7-8, 71=56-7-8, 72=56-7-8, 73=56-7-8, 74=56-7-8, 75=56-7-8, 76=56-7-8, 77=56-7-8, 78=56-7-8, 79=56-7-8, 80=56-7-8, 81=56-7-8, 82=56-7-8, 83=56-7-8, 84=56-7-8, 85=56-7-8, 86=56-7-8, 87=56-7-8, 88=56-7-8, 89=56-7-8
Max Horiz 2=-240 (LC 13)

Max Uplift 2=-74 (LC 17), 47=-48 (LC 9), 49=-154 (LC 13), 50=-9 (LC 9), 51=-50 (LC 13), 52=-41 (LC 9), 53=-46 (LC 13), 54=-32 (LC 9), 55=-50 (LC 13), 56=-57 (LC 13), 57=-57 (LC 13), 58=-55 (LC 13), 60=-55 (LC 13), 61=-55 (LC 13), 62=-55 (LC 13), 63=-55 (LC 13), 64=-58 (LC 13), 65=-62 (LC 13), 66=-35 (LC 13), 69=-36 (LC 9), 70=-42 (LC 9), 71=-39 (LC 8), 72=-41 (LC 8), 73=-36 (LC 8), 74=-2 (LC 9), 76=-41 (LC 12), 77=-60 (LC 12), 78=-57 (LC 12), 79=-56 (LC 12), 80=-55 (LC 12), 81=-55 (LC 12), 82=-55 (LC 12), 83=-55 (LC 12), 84=-55 (LC 12), 85=-55 (LC 12), 86=-54 (LC 12), 87=-56 (LC 12), 88=-53 (LC 12), 89=-217 (LC 12)

Max Grav 2=256 (LC 12), 47=157 (LC 1), 49=256 (LC 24), 50=44 (LC 1), 51=118 (LC 24), 52=105 (LC 1), 53=107 (LC 24), 54=97 (LC 1), 55=104 (LC 1), 56=120 (LC 1), 57=106 (LC 24), 58=106 (LC 24), 60=107 (LC 1), 61=107 (LC 1), 62=107 (LC 24), 63=107 (LC 1), 64=107 (LC 1), 65=107 (LC 1), 66=106 (LC 24), 67=106 (LC 22), 68=107 (LC 22), 69=108 (LC 23), 70=106 (LC 23), 71=107 (LC 24), 72=108 (LC 24), 73=108 (LC 24), 74=109 (LC 22), 75=125 (LC 22), 76=106 (LC 23), 77=108 (LC 1), 78=107 (LC 1), 79=106 (LC 23), 80=107 (LC 23), 81=107 (LC 1), 82=107 (LC 1), 83=107 (LC 23), 84=107 (LC 1), 85=107 (LC 23), 86=106 (LC 1), 87=108 (LC 1), 88=103 (LC 23), 89=126 (LC 19)

Continued on page 2

NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT

July 17,2025

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

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/20, 2-3=-141/54, 3-4=-276/117, 4-5=-232/127, 5-6=-195/138, 6-7=-160/149, 7-8=-132/170, 8-9=-104/192, 9-10=-77/214, 10-12=-70/236, 12-13=-85/258, 13-14=-100/280, 14-15=-115/303, 15-16=-131/348, 16-17=-147/394, 17-18=-157/426, 18-19=-150/400, 19-20=-148/414, 20-21=-148/414, 21-22=-148/414, 22-23=-148/414, 23-24=-148/414, 24-25=-148/414, 25-26=-149/414, 26-27=-149/414, 27-28=-150/401, 28-29=-157/427, 29-30=-147/394, 30-31=-131/349, 31-32=-116/304, 32-33=-101/261, 33-34=-86/219, 34-36=-71/176, 36-37=-56/133, 37-38=-41/108, 38-39=-33/96, 39-40=-52/85, 40-41=-63/70, 41-42=-76/60, 42-43=-94/47, 43-44=-113/34, 44-45=-131/33, 45-46=-144/34, 46-47=-178/57, 47-48=0/8

BOT CHORD 2-89=-63/208, 88-89=-63/208, 87-88=-63/208, 86-87=-63/208, 85-86=-63/208, 84-85=-63/208, 83-84=-63/208, 82-83=-63/208, 81-82=-63/208, 80-81=-63/208, 79-80=-63/208, 77-79=-63/208, 76-77=-62/208, 75-76=-62/208, 74-75=-62/208, 73-74=-62/208, 72-73=-62/208, 71-72=-62/208, 70-71=-62/208, 68-70=-62/208, 67-68=-62/207, 66-67=-62/207, 65-66=-62/207, 64-65=-62/207, 63-64=-62/207, 62-63=-62/207, 61-62=-62/207, 60-61=-62/207, 58-60=-62/207, 57-58=-62/207, 56-57=-62/207, 55-56=-62/207, 54-55=-56/201, 53-54=-56/201, 52-53=-56/201, 51-52=-56/201, 50-51=-56/201, 49-50=-56/201, 47-49=-56/201

WEBS 23-71=-80/59, 24-70=-81/60, 25-69=-81/52, 26-68=-78/15, 28-67=-80/0, 29-66=-80/56, 30-65=-80/87, 31-64=-80/84, 32-63=-80/80, 33-62=-80/80, 34-61=-80/80, 36-60=-80/80, 37-58=-79/80, 38-57=-79/81, 39-56=-94/86, 40-55=-78/79, 41-54=-71/48, 42-53=-80/68, 43-52=-81/67, 44-51=-81/67, 45-50=-55/44, 46-49=-155/132, 22-72=-81/61, 21-73=-81/52, 20-74=-82/18, 18-75=-98/0, 17-76=-80/57, 16-77=-80/87, 15-78=-80/83, 14-79=-80/80, 13-80=-80/80, 12-81=-80/80, 10-82=-80/80, 9-83=-80/80, 8-84=-80/80, 7-85=-80/80, 6-86=-80/80, 5-87=-80/78, 4-88=-80/87, 3-89=-77/174

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 74 lb uplift at joint 2, 48 lb uplift at joint 47, 39 lb uplift at joint 71, 42 lb uplift at joint 70, 36 lb uplift at joint 69, 35 lb uplift at joint 66, 62 lb uplift at joint 65, 58 lb uplift at joint 64, 55 lb uplift at joint 63, 55 lb uplift at joint 62, 55 lb uplift at joint 61, 55 lb uplift at joint 60, 55 lb uplift at joint 58, 57 lb uplift at joint 57, 57 lb uplift at joint 56, 50 lb uplift at joint 55, 32 lb uplift at joint 54, 46 lb uplift at joint 53, 41 lb uplift at joint 52, 50 lb uplift at joint 51, 9 lb uplift at joint 50, 154 lb uplift at joint 49, 41 lb uplift at joint 72, 36 lb uplift at joint 73, 2 lb uplift at joint 74, 41 lb uplift at joint 76, 60 lb uplift at joint 77, 57 lb uplift at joint 78, 56 lb uplift at joint 79, 55 lb uplift at joint 80, 55 lb uplift at joint 81, 55 lb uplift at joint 82, 55 lb uplift at joint 83, 55 lb uplift at joint 84, 55 lb uplift at joint 85, 54 lb uplift at joint 86, 56 lb uplift at joint 87, 53 lb uplift at joint 88, 217 lb uplift at joint 89, 74 lb uplift at joint 2 and 48 lb uplift at joint 47.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

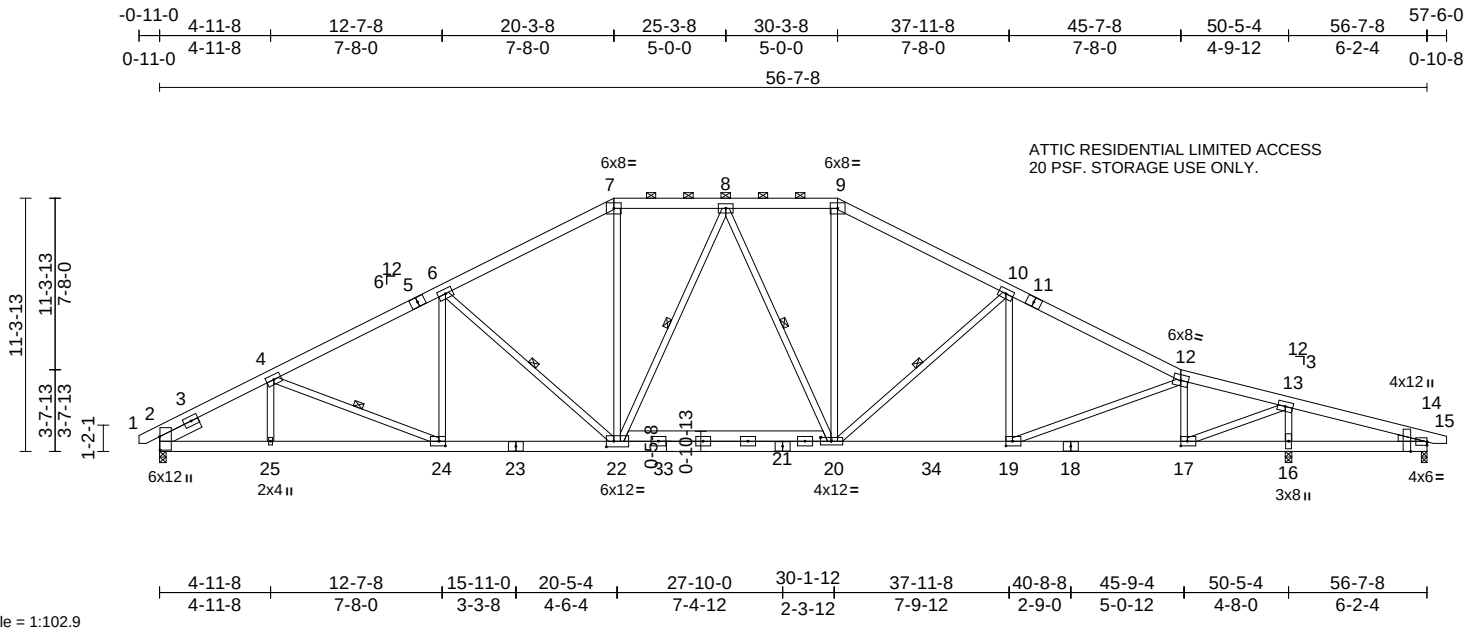
LOAD CASE(S) Standard

July 17,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Smith Prime Plan (12-19-24)
4703108	A02	Piggyback Base	6	1	I74964168 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. Wed Jul 16 15:57:21 Page: 1
ID:BJfdlmWam8d4mejibxoNWhyIvQ_-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:102.9

Plate Offsets (X, Y): [2:0-7-3,0-0-4], [14:Edge,0-1-13], [14:0-5-2,Edge], [17:0-3-8,0-2-8], [19:0-3-8,0-2-8], [20:0-5-12,0-2-0], [22:0-4-0,0-3-0], [24:0-3-8,0-2-8]

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	0.78	Vert(LL)	-0.18	20-22	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.35	20-22	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.79	Horz(CT)	0.09	16	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.15	20-22	>999	240	Weight: 464 lb	FT = 20%

LUMBER

TOP CHORD	2x6 SP No.2
BOT CHORD	2x6 SP No.2 *Except* 2-23,18-14:2x6 SP 2400F 2.0E or 2x6 SP DSS
WEBS	2x4 SP No.3 *Except* 13-17:2x4 SP No.2
WEDGE	Right: 2x4 SP No.3
SLIDER	Left 2x6 SP No.2 -- 1-11-12

BRACING

TOP CHORD	Structural wood sheathing directly applied or 2-11-6 oc purlins, except 2-0-0 oc purlins (4-11-2 max.): 7-9.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 4-24, 6-22, 10-20, 8-22, 8-20

REACTIONS (size) 2=0-3-8, 14=0-3-0, 16=0-3-8
Max Horiz 2=-240 (LC 13)
Max Uplift 2=-496 (LC 12), 14=-321 (LC 20), 16=-676 (LC 13)
Max Grav 2=2006 (LC 1), 14=53 (LC 12), 16=2789 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/20, 2-4=-3118/1308, 4-6=-3070/1349, 6-7=-2540/1230, 7-8=-2180/1182, 8-9=-2130/1161, 9-10=-2482/1208, 10-12=-2808/1248, 12-13=-1983/867, 13-14=-351/1189, 14-15=0/8
BOT CHORD	2-25=-1038/2680, 24-25=-1038/2680, 22-24=-926/2694, 20-22=-606/2210, 19-20=-839/2457, 17-19=-724/1934, 16-17=-1103/385, 14-16=-1103/385
WEBS	4-25=-131/178, 4-24=-84/192, 6-24=0/338, 6-22=-728/477, 7-22=-279/793, 9-20=-270/763, 10-20=-510/388, 10-19=-62/151, 12-19=-124/624, 12-17=-1249/614, 8-22=-294/213, 8-20=-395/208, 13-16=-2452/1057, 13-17=-1169/3229

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 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) All plates are 5x8 (=) MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 496 lb uplift at joint 2, 321 lb uplift at joint 14 and 676 lb uplift at joint 16.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

July 17,2025

ENGINEERING BY TRENCO
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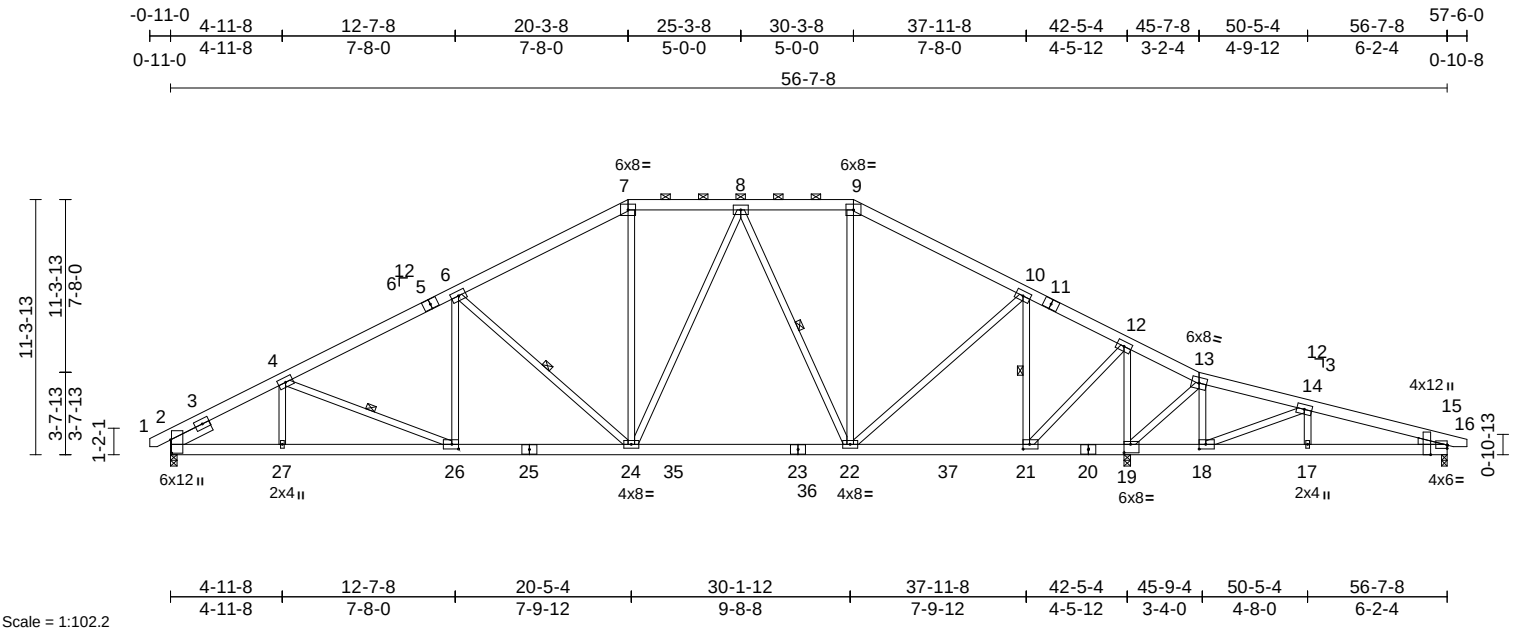
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	JSJ, Smith Prime Plan (12-19-24)
4703108	A03	Piggyback Base	2	1	I74964169 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. Wed Jul 16 15:57:22 Page: 1
ID:GYiQkyjJCsDul?NwSxbqZmyIvOQ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:102.2

Plate Offsets (X, Y): [2:0-7-3,0-0-8], [15:Edge,0-1-13], [15:0-5-2,Edge], [18:0-3-8,0-2-8], [19:0-3-8,0-4-8], [21:0-3-8,0-2-8], [26:0-3-8,0-2-8]

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	0.58	Vert(LL)	-0.15	22-24	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.27	22-24	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.06	19	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.12	26-27	>999	240	Weight: 452 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-6-10 oc purlins, except 2-0-0 oc purlins (5-9-12 max.): 7-9.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 4-26, 6-24, 10-21, 8-22

REACTIONS (size) 2=0-3-8, 15=0-3-0, 19=0-3-8
Max Horiz 2=-240 (LC 13)
Max Uplift 2=-448 (LC 12), 15=-315 (LC 9), 19=-595 (LC 13)
Max Grav 2=1670 (LC 1), 15=418 (LC 24), 19=2556 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/20, 2-4=-2554/1034, 4-6=-2395/1024, 6-7=-1862/888, 7-8=-1581/874, 8-9=-1238/709, 9-10=-1472/698, 10-12=-771/287, 12-13=-420/725, 13-14=-78/343, 14-15=-547/614, 15-16=0/8
BOT CHORD 2-27=-797/2184, 26-27=-797/2184, 24-26=-634/2097, 22-24=-224/1462, 21-22=-5/708, 19-21=-611/583, 18-19=-332/176, 17-18=-533/509, 15-17=-533/509
WEBS 4-27=-55/146, 4-26=-128/196, 6-26=0/363, 6-24=-754/497, 7-24=-127/499, 9-22=-47/366, 13-19=-478/574, 13-18=-413/344, 14-18=-749/746, 14-17=-189/226, 10-22=-212/775, 10-21=-1215/653, 12-21=-762/1802, 12-19=-2104/996, 8-24=-162/372, 8-22=-662/302

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; porch 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) All plates are 5x8 (=) MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 448 lb uplift at joint 2, 595 lb uplift at joint 19 and 315 lb uplift at joint 15.
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

July 17,2025

ENGINEERING BY TRENCO
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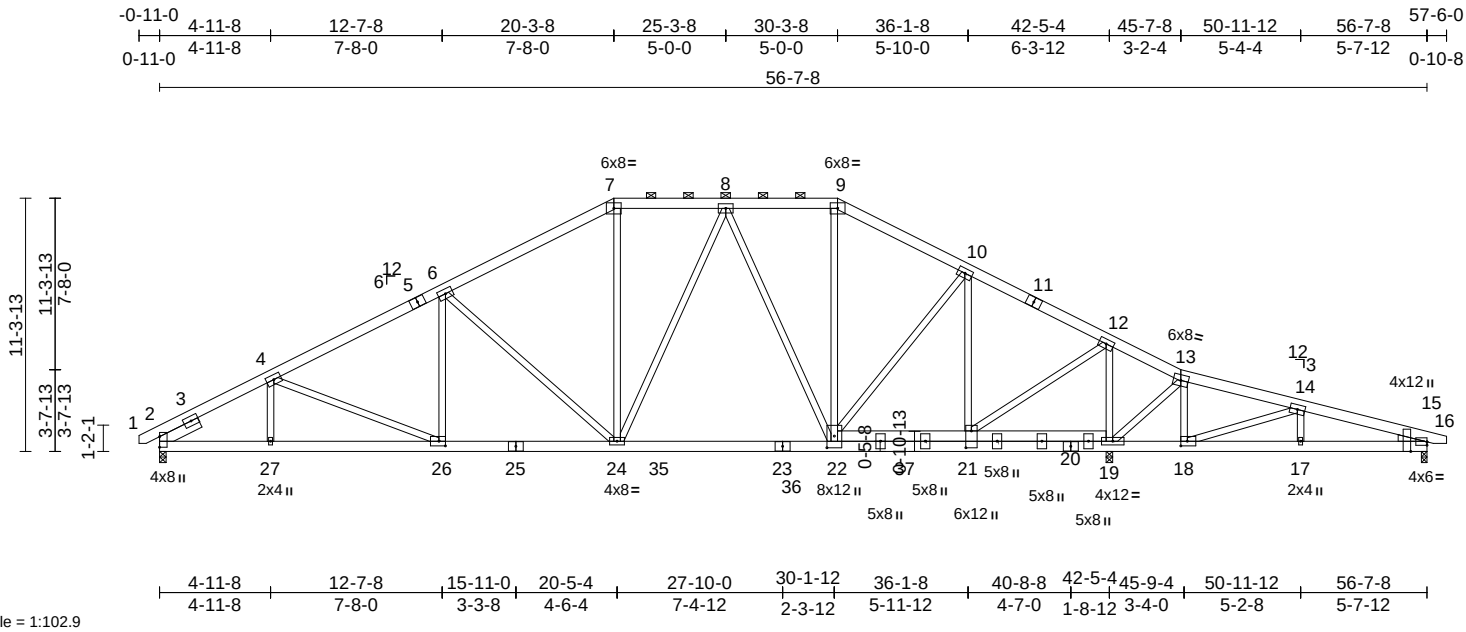
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	JSJ, Smith Prime Plan (12-19-24)
4703108	A04	Piggyback Base Girder	1	2	I74964170 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. Wed Jul 16 15:57:22 Page: 1

ID:GYiQkyjJCsDul?NwSxbqZmyIvOQ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:102.9

Plate Offsets (X, Y): [2:Edge,0-0-0], [15:Edge,0-1-13], [15:0-5-2,Edge], [18:0-3-8,0-2-8], [21:0-9-0,0-3-0], [22:0-6-4,0-4-0], [26:0-3-8,0-2-8]

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	0.41	Vert(LL)	-0.07	22-24	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.14	26-27	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.53	Horz(CT)	0.05	19	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.06	26-27	>999	240	Weight: 963 lb	FT = 20%

LUMBER

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

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 6-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 15=0-3-0, 19=0-3-8
Max Horiz 2=-240 (LC 9)
Max Uplift 2=-263 (LC 8), 15=-352 (LC 5)
Max Grav 2=2028 (LC 1), 15=269 (LC 20), 19=5104 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/20, 2-4=-3159/354, 4-6=-3118/265, 6-7=-2576/135, 7-8=-2204/189, 8-9=-2195/0, 9-10=-2540/0, 10-12=-2864/0, 12-13=-100/1171, 13-14=0/873, 14-15=-163/591, 15-16=0/8

BOT CHORD 2-27=-459/2703, 26-27=-459/2703, 24-26=-216/2740, 22-24=0/2268, 21-22=0/2483, 19-21=-1020/249, 18-19=-824/0, 17-18=-515/144, 15-17=-515/144

WEBS 4-27=-111/98, 4-26=-44/263, 6-26=-10/350, 6-24=-736/453, 7-24=0/788, 9-22=0/828, 13-19=-280/416, 13-18=-271/307, 14-18=-897/485, 14-17=-45/241, 8-24=-390/68, 8-22=-226/487, 10-22=-696/0, 10-21=-69/817, 12-21=0/4286, 12-19=-4558/0

NOTES

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 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; porch right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) All plates are 5x8 (=) MT20 unless otherwise indicated.
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 263 lb uplift at joint 2 and 352 lb uplift at joint 15.
10) 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.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2750 lb down at 36-1-8 on bottom 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: 1-7=-60, 7-9=-60, 9-13=-60, 13-16=-60, 28-32=-20
Concentrated Loads (lb)
Vert: 21=-2750 (B)

July 17,2025

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July 17,2025

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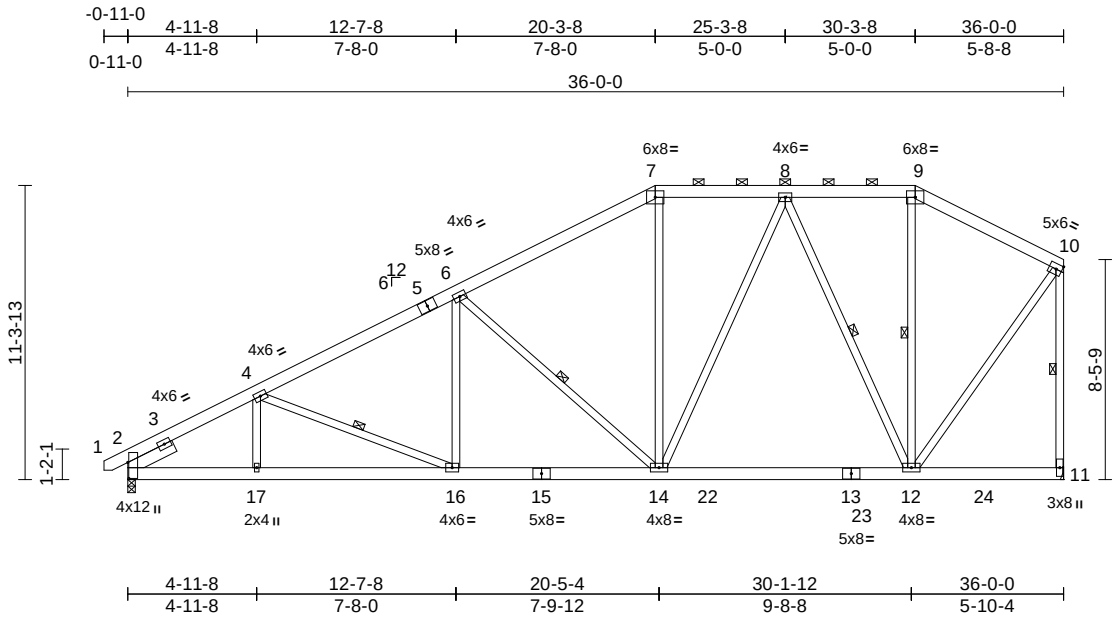
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	JSJ, Smith Prime Plan (12-19-24)
4703108	A05	Piggyback Base	3	1	I74964171 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. Wed Jul 16 15:57:23 Page: 1
ID:y?R42VnRJnRMSUUIao5NeQyIvJB-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:88.6

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.49	Vert(LL)	-0.12	12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.21	12-14	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.79	Horz(CT)	0.05	11	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.10	16-17	>999	240	Weight: 314 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-0-10 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-9.
BOT CHORD Rigid ceiling directly applied or 6-11-9 oc bracing.
WEBS 1 Row at midpt 4-16, 6-14, 9-12, 10-11, 8-12

REACTIONS (size) 2=0-3-8, 11= Mechanical
Max Horiz 2=464 (LC 12)
Max Uplift 2=-390 (LC 12), 11=-293 (LC 12)
Max Grav 2=1480 (LC 1), 11=1503 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/20, 2-4=-2229/852, 4-6=-2013/815, 6-7=-1448/671, 7-8=-1208/679, 8-9=-682/418, 9-10=-808/388, 10-11=-1426/642
BOT CHORD 2-17=-1088/1904, 16-17=-1088/1904, 14-16=-893/1746, 12-14=-430/1001, 11-12=-3/5
WEBS 4-17=-28/146, 4-16=-184/214, 6-16=0/377, 6-14=-766/506, 7-14=-33/335, 9-12=-55/145, 10-12=-439/1171, 8-14=-223/548, 8-12=-843/426

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) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 390 lb uplift at joint 2 and 293 lb uplift at joint 11.
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

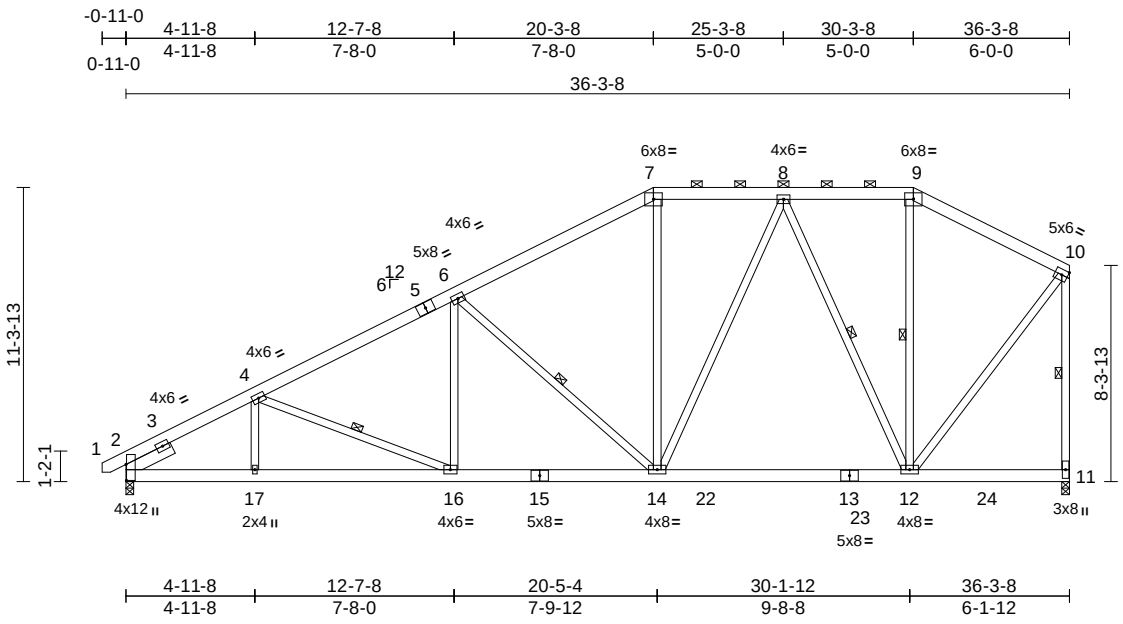
July 17,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Smith Prime Plan (12-19-24)
4703108	A06	Piggyback Base	1	1	I74964172 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. Wed Jul 16 15:57:23 Page: 1

ID:71VW405hkHFS6kdLkKa0qOyIvK4-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:88.6

Plate Offsets (X, Y): [2:0-7-7,0-0-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.50	Vert(LL)	-0.12	12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.21	12-14	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.80	Horz(CT)	0.05	11	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.10	16-17	>999	240	Weight: 315 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-0-4 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-9.
BOT CHORD Rigid ceiling directly applied or 6-11-8 oc bracing.
WEBS 1 Row at midpt 4-16, 6-14, 9-12, 10-11, 8-12

REACTIONS (size) 2=0-3-8, 11=0-3-8
Max Horiz 2=460 (LC 12)
Max Uplift 2=-393 (LC 12), 11=-292 (LC 12)
Max Grav 2=1492 (LC 1), 11=1515 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/20, 2-4=-2249/864, 4-6=-2036/829, 6-7=-1472/685, 7-8=-1231/692, 8-9=-716/438, 9-10=-848/406, 10-11=-1431/647
BOT CHORD 2-17=-1090/1921, 16-17=-1090/1921, 14-16=-897/1768, 12-14=-437/1028, 11-12=-4/5
WEBS 4-17=-30/144, 4-16=-181/213, 6-16=0/376, 6-14=-765/505, 7-14=-39/343, 9-12=-52/156, 10-12=-438/1175, 8-14=-220/538, 8-12=-831/416

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 393 lb uplift at joint 2 and 292 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.

LOAD CASE(S) Standard

July 17,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Smith Prime Plan (12-19-24)
4703108	A07	Piggyback Base	2	1	I74964173 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. Wed Jul 16 15:57:23 Page: 1
ID:71VW405hkHFS6kdLkKa0qOyIvK4-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

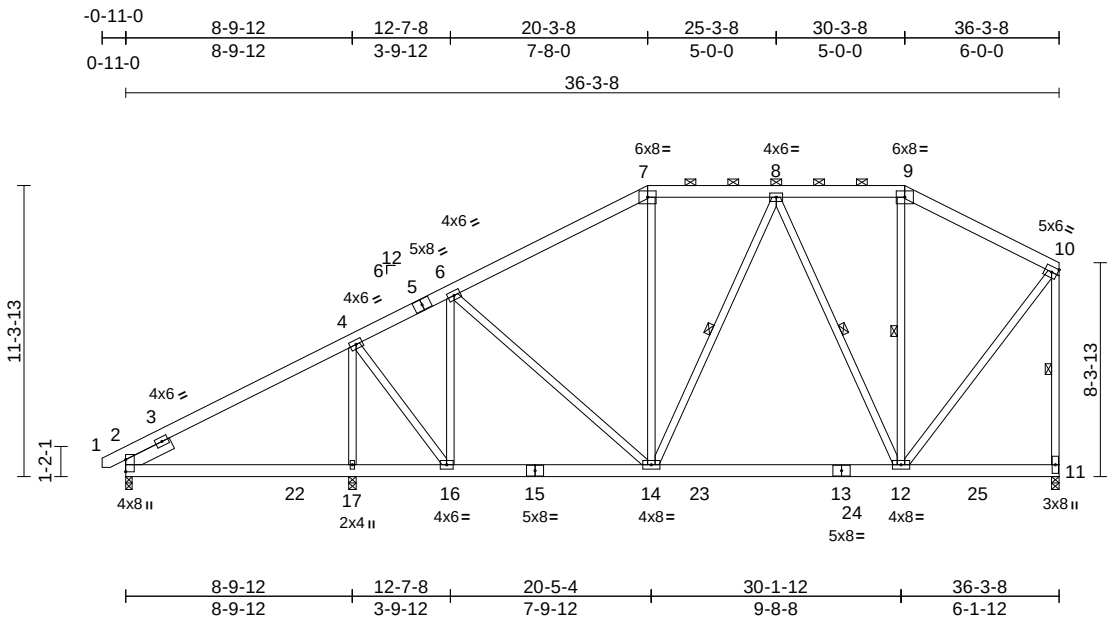


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Plate Offsets (X, Y): [2:Edge,0-0-0]

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	0.33	Vert(LL)	-0.10	12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.16	12-14	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.67	Horz(CT)	-0.02	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.09	17-20	>999	240	Weight: 315 lb	FT = 20%

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

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.): 7-9.
BOT CHORD Rigid ceiling directly applied or 8-1-14 oc bracing.
WEBS 1 Row at midpt 9-12, 10-11, 8-14, 8-12

REACTIONS (size) 2=0-3-0, 11=0-3-8, 17=0-3-8
Max Horiz 2=460 (LC 12)
Max Uplift 2=-208 (LC 9), 11=-229 (LC 12), 17=-258 (LC 12)
Max Grav 2=598 (LC 23), 11=1223 (LC 2), 17=1254 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/20, 2-4=-576/491, 4-6=-907/595, 6-7=-998/559, 7-8=-813/587, 8-9=-554/396, 9-10=-668/360, 10-11=-1138/572
BOT CHORD 2-17=-711/438, 16-17=-711/438, 14-16=-619/758, 12-14=-363/738, 11-12=-4/5
WEBS 4-17=-993/271, 4-16=0/603, 6-16=-381/50, 6-14=-42/271, 7-14=0/167, 9-12=-105/119, 10-12=-370/909, 8-14=-156/246, 8-12=-526/335

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 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 208 lb uplift at joint 2, 258 lb uplift at joint 17 and 229 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.

LOAD CASE(S) Standard

July 17,2025

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	JSJ, Smith Prime Plan (12-19-24)
4703108	A08	Piggyback Base	4	1	I74964174 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. Wed Jul 16 15:57:24 Page: 1
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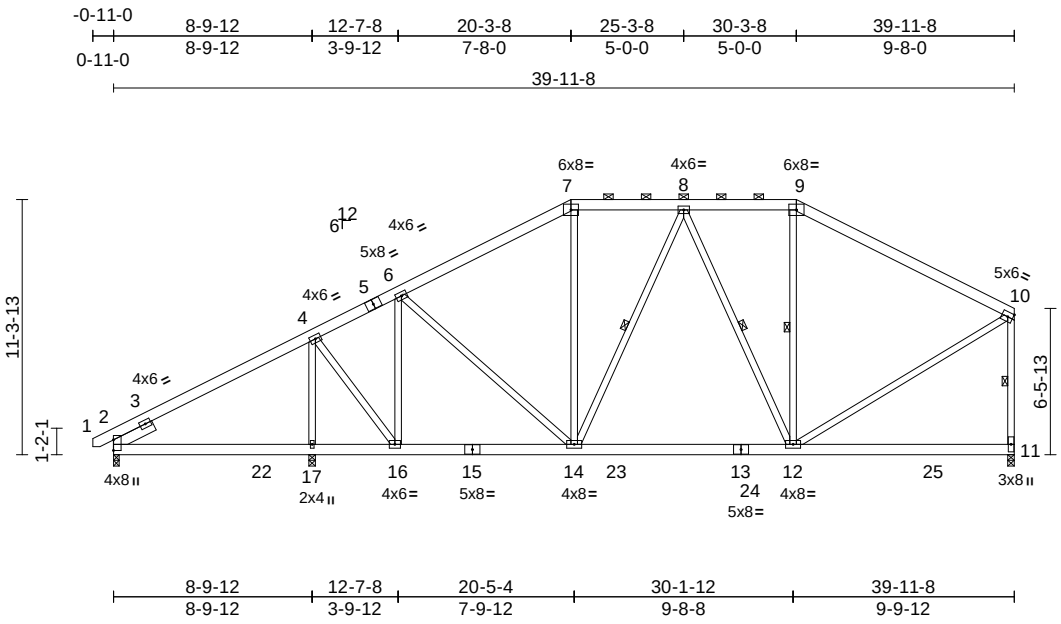


Scale = 1:102.2

Plate Offsets (X, Y): [2: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	0.69	Vert(LL)	-0.10	12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.15	12-14	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.90	Horz(CT)	-0.02	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.08	17-20	>999	240	Weight: 333 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-8-11 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-9.
BOT CHORD Rigid ceiling directly applied or 8-7-10 oc bracing.
WEBS 1 Row at midpt 9-12, 10-11, 8-14, 8-12

REACTIONS (size) 2=0-3-0, 11=0-3-8, 17=0-3-8
Max Horiz 2=406 (LC 12)
Max Uplift 2=-215 (LC 9), 11=-270 (LC 13), 17=-283 (LC 12)
Max Grav 2=597 (LC 23), 11=1342 (LC 2), 17=1405 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/20, 2-4=-575/528, 4-6=-1002/678, 6-7=-1176/687, 7-8=-973/702, 8-9=-866/601, 9-10=-1048/539, 10-11=-1212/628
BOT CHORD 2-17=-637/437, 16-17=-637/437, 14-16=-588/842, 12-14=-406/965, 11-12=-18/27
WEBS 4-17=-1144/323, 4-16=0/738, 6-16=-489/106, 6-14=-34/314, 7-14=-6/222, 9-12=-112/197, 8-14=-155/146, 8-12=-371/230, 10-12=-365/993

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 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 215 lb uplift at joint 2, 283 lb uplift at joint 17 and 270 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.

LOAD CASE(S) Standard

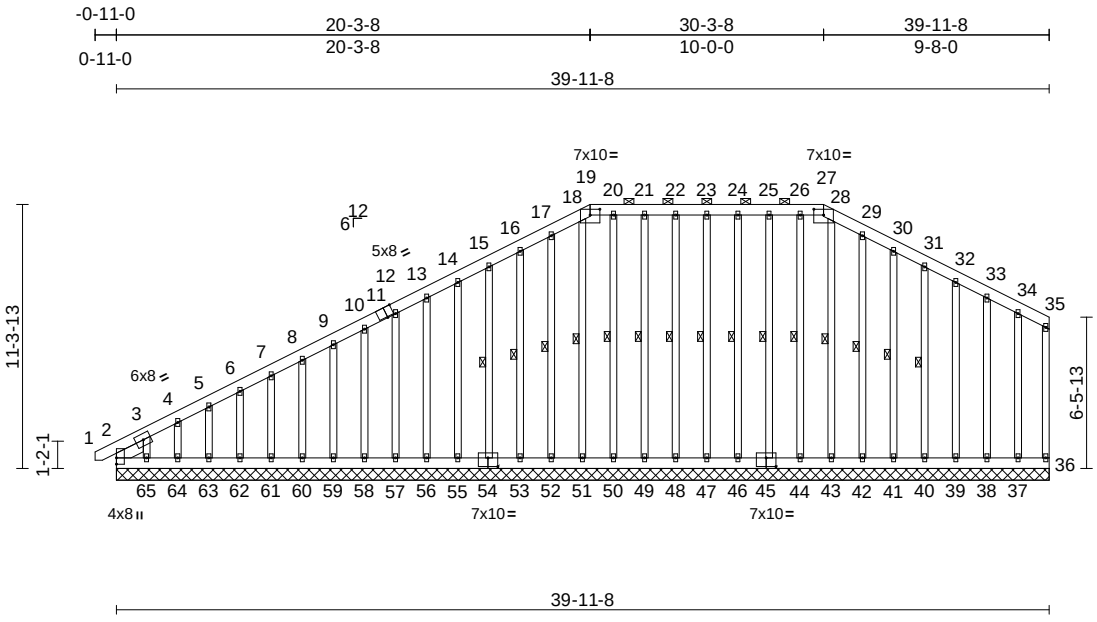
July 17,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Smith Prime Plan (12-19-24)
4703108	A09	Piggyback Base Supported Gable	1	1	I74964175 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. Wed Jul 16 15:57:24 Page: 1

ID:e2DrlxJxV4_8Zf_YRNwwQcyIhXz-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:98.7

Plate Offsets (X, Y): [2:Edge,0-0-0], [11:0-3-10,Edge], [19:0-5-0,0-3-0], [27:0-5-0,0-3-0], [45:0-5-0,0-4-8], [54:0-5-0,0-4-8]

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	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 529 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.2
OTHERS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 -- 1-4-7

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.): 19-27.

BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except:
10-0-0 oc bracing:
44-45,43-44,42-43,41-42,40-41,39-40,38-39, 37-38,36-37.

WEBS 1 Row at midpt 23-47, 24-46, 25-45, 26-44, 28-43, 29-42, 30-41, 31-40, 22-48, 21-49, 20-50, 18-51, 17-52, 16-53, 15-54

REACTIONS (size) 2=39-11-8, 36=39-11-8, 37=39-11-8, 38=39-11-8, 39=39-11-8, 40=39-11-8, 41=39-11-8, 42=39-11-8, 43=39-11-8, 44=39-11-8, 45=39-11-8, 46=39-11-8, 47=39-11-8, 48=39-11-8, 49=39-11-8, 50=39-11-8, 51=39-11-8, 52=39-11-8, 53=39-11-8, 54=39-11-8, 55=39-11-8, 56=39-11-8, 57=39-11-8, 58=39-11-8, 59=39-11-8, 60=39-11-8, 61=39-11-8, 62=39-11-8, 63=39-11-8, 64=39-11-8, 65=39-11-8

Max Horiz 2=406 (LC 12)

Max Uplift 2=-45 (LC 10), 36=-20 (LC 13), 37=-53 (LC 13), 38=-57 (LC 13), 39=-56 (LC 13), 40=-57 (LC 13), 41=-60 (LC 13), 42=-40 (LC 13), 44=-18 (LC 9), 45=-37 (LC 9), 46=-41 (LC 9), 47=-39 (LC 8), 48=-41 (LC 8), 49=-37 (LC 9), 50=-22 (LC 9), 51=-6 (LC 9), 52=-47 (LC 12), 53=-59 (LC 12), 54=-56 (LC 12), 55=-56 (LC 12), 56=-55 (LC 12), 57=-55 (LC 12), 58=-55 (LC 12), 59=-55 (LC 12), 60=-55 (LC 12), 61=-55 (LC 12), 62=-54 (LC 12), 63=-55 (LC 12), 64=-54 (LC 12), 65=-268 (LC 12)

Max Grav 2=356 (LC 12), 36=43 (LC 1), 37=102 (LC 24), 38=109 (LC 1), 39=107 (LC 24), 40=107 (LC 1), 41=107 (LC 24), 42=107 (LC 24), 43=106 (LC 24), 44=109 (LC 1), 45=108 (LC 23), 46=106 (LC 23), 47=107 (LC 24), 48=108 (LC 24), 49=108 (LC 24), 50=107 (LC 23), 51=115 (LC 22), 52=107 (LC 23), 53=107 (LC 1), 54=107 (LC 1), 55=106 (LC 23), 56=107 (LC 23), 57=107 (LC 1), 58=107 (LC 1), 59=107 (LC 1), 60=107 (LC 1), 61=107 (LC 23), 62=106 (LC 1), 63=108 (LC 1), 64=103 (LC 23), 65=122 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/20, 2-3=-190/55, 3-4=-386/107, 4-5=-341/91, 5-6=-304/92, 6-7=-265/92, 7-8=-226/98, 8-9=-187/109, 9-10=-148/119, 10-12=-116/132, 12-13=-88/154, 13-14=-64/176, 14-15=-56/198, 15-16=-71/221, 16-17=-87/244, 17-18=-100/273, 18-19=-99/268, 19-20=-95/275, 20-21=-95/275, 21-22=-95/275, 22-23=-95/275, 23-24=-95/275, 24-25=-95/275, 25-26=-96/275, 26-27=-96/275, 27-28=-100/268, 28-29=-100/274, 29-30=-88/237, 30-31=-72/193, 31-32=-57/149, 32-33=-42/106, 33-34=-26/61, 34-35=-12/22, 35-36=-34/32

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Continued on page 2

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BOT CHORD 2-65=-1/1, 64-65=-1/1, 63-64=-1/1, 62-63=-1/1, 61-62=-1/1, 60-61=-1/1, 59-60=-1/1, 58-59=-1/1, 57-58=-1/1, 56-57=-1/1, 55-56=-1/1, 53-55=-1/1, 52-53=-1/1, 51-52=-1/1, 50-51=-1/1, 49-50=-1/1, 48-49=-1/1, 47-48=-1/1, 46-47=-1/1, 44-46=-1/1, 43-44=0/1, 42-43=0/1, 41-42=0/1, 40-41=0/1, 39-40=0/1, 38-39=0/1, 37-38=0/1, 36-37=0/1

WEBS 23-47=-80/58, 24-46=-81/58, 25-45=-81/53, 26-44=-80/35, 28-43=-80/4, 29-42=-80/64, 30-41=-80/85, 31-40=-80/82, 32-39=-81/81, 33-38=-83/83, 34-37=-75/75, 22-48=-81/59, 21-49=-82/53, 20-50=-80/38, 18-51=-88/22, 17-52=-80/64, 16-53=-80/85, 15-54=-80/82, 14-55=-80/80, 13-56=-80/80, 12-57=-80/80, 10-58=-80/80, 9-59=-80/80, 8-60=-80/80, 7-61=-80/80, 6-62=-80/80, 5-63=-80/77, 4-64=-81/92, 3-65=-94/213

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) 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 20 lb uplift at joint 36, 45 lb uplift at joint 2, 39 lb uplift at joint 47, 41 lb uplift at joint 46, 37 lb uplift at joint 45, 18 lb uplift at joint 44, 40 lb uplift at joint 42, 60 lb uplift at joint 41, 57 lb uplift at joint 40, 56 lb uplift at joint 39, 57 lb uplift at joint 38, 53 lb uplift at joint 37, 41 lb uplift at joint 48, 37 lb uplift at joint 49, 22 lb uplift at joint 50, 6 lb uplift at joint 51, 47 lb uplift at joint 52, 59 lb uplift at joint 53, 56 lb uplift at joint 54, 56 lb uplift at joint 55, 55 lb uplift at joint 56, 55 lb uplift at joint 57, 55 lb uplift at joint 58, 55 lb uplift at joint 59, 55 lb uplift at joint 60, 55 lb uplift at joint 61, 54 lb uplift at joint 62, 55 lb uplift at joint 63, 54 lb uplift at joint 64, 268 lb uplift at joint 65 and 45 lb uplift at joint 2.
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 17,2025

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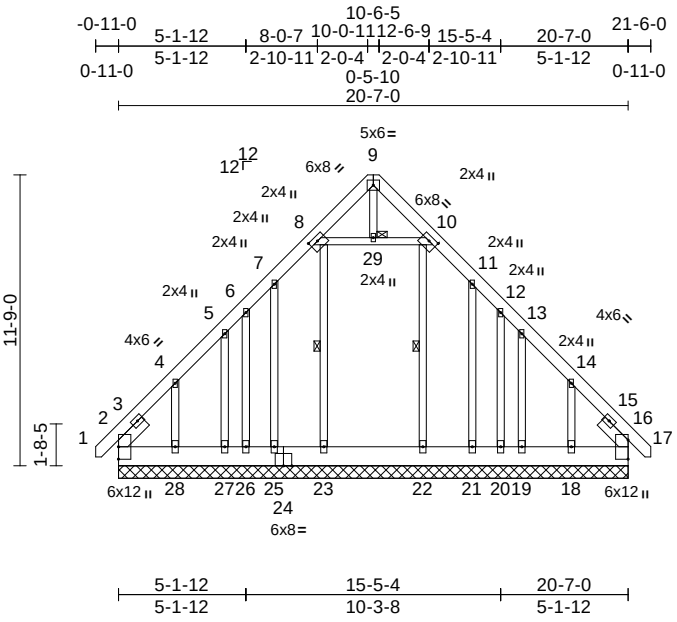
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	JSJ, Smith Prime Plan (12-19-24)
4703108	B01	Attic Supported Gable	1	1	I74964176 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. Wed Jul 16 15:57:25 Page: 1

ID:VjRfOY2J2qaxIXqAEYU96UyIhUQ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:93.1

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

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	0.07	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	0.09	Horz(CT)	0.01	16	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 256 lb	FT = 20%

LUMBER

TOP CHORD	2x6 SP No.2
BOT CHORD	2x10 SP 2400F 2.0E or 2x10 SP DSS
WEBS	2x4 SP No.2 *Except* 9-29:2x4 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.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 8-23, 10-22
JOINTS	1 Brace at Jt(s): 29

REACTIONS (size) 2=20-7-0, 16=20-7-0, 18=20-7-0, 19=20-7-0, 20=20-7-0, 21=20-7-0, 22=20-7-0, 23=20-7-0, 25=20-7-0, 26=20-7-0, 27=20-7-0, 28=20-7-0

Max Horiz 2=-366 (LC 10)

Max Uplift 2=-183 (LC 8), 16=-143 (LC 9), 18=-355 (LC 13), 19=-41 (LC 12), 20=-124 (LC 13), 21=-64 (LC 13), 23=-2 (LC 9), 25=-66 (LC 12), 26=-125 (LC 12), 27=-46 (LC 13), 28=-368 (LC 12)

Max Grav 2=353 (LC 21), 16=322 (LC 20), 18=291 (LC 11), 19=114 (LC 1), 20=129 (LC 21), 21=98 (LC 1), 22=318 (LC 22), 23=333 (LC 20), 25=98 (LC 1), 26=131 (LC 20), 27=114 (LC 1), 28=310 (LC 10)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/34, 2-4=-291/237, 4-5=-224/183, 5-6=-193/228, 6-7=-239/276, 7-8=-287/307, 8-9=-147/100, 9-10=-147/100, 10-11=-287/302, 11-12=-239/249, 12-13=-173/201, 13-14=-196/147, 14-16=-251/195, 16-17=0/34
BOT CHORD	2-28=-155/248, 27-28=-155/248, 26-27=-155/248, 25-26=-155/249, 23-25=-155/249, 22-23=-153/244, 21-22=-149/245, 20-21=-149/244, 19-20=-149/244, 18-19=-148/244, 16-18=-148/243
WEBS	12-20=-110/102, 6-26=-110/101, 8-29=-209/268, 10-29=-209/268, 9-29=-50/39, 8-23=-181/45, 7-25=-102/83, 5-27=-140/121, 4-28=-229/242, 10-22=-166/21, 11-21=-99/80, 13-19=-140/122, 14-18=-230/238

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 3x6 (||) MT20 unless otherwise indicated.
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, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 183 lb uplift at joint 2, 143 lb uplift at joint 16, 124 lb uplift at joint 20, 125 lb uplift at joint 26, 2 lb uplift at joint 23, 66 lb uplift at joint 25, 46 lb uplift at joint 27, 368 lb uplift at joint 28, 64 lb uplift at joint 21, 41 lb uplift at joint 19 and 355 lb uplift at joint 18.
10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 16.
11) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

July 17,2025

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

July 17,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Smith Prime Plan (12-19-24)
4703108	B02	Attic	1	1	I74964177 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. Wed Jul 16 15:57:25 Page: 1
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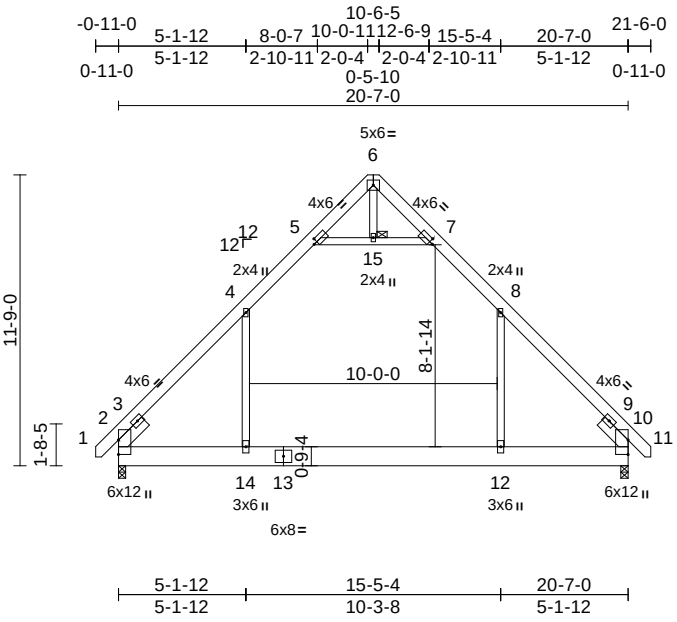

Scale = 1:93.1

Plate Offsets (X, Y): [5:0-1-13,0-2-0], [7:0-1-13,0-2-0]

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	0.86	Vert(LL)	-0.18	12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	-0.30	12-14	>815	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.19	Horz(CT)	0.03	10	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.12	12-14	>999	240	Weight: 189 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x10 SP 2400F 2.0E or 2x10 SP DSS
WEBS 2x4 SP No.2 *Except* 6-15:2x4 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 4-8-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 15

REACTIONS (size) 2=0-3-8, 10=0-3-8
Max Horiz 2=-366 (LC 10)
Max Uplift 2=-69 (LC 13), 10=-69 (LC 12)
Max Grav 2=1247 (LC 21), 10=1247 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/34, 2-4=-1452/262, 4-5=-806/265, 5-6=-50/204, 6-7=-50/204, 7-8=-805/265, 8-10=-1452/262, 10-11=0/34
BOT CHORD 2-14=-150/896, 12-14=0/897, 10-12=-23/895
WEBS 8-12=-70/684, 4-14=-71/684, 5-15=-1038/412, 7-15=-1038/412, 6-15=0/69

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) Ceiling dead load (5.0 psf) on member(s). 4-5, 7-8, 5-15, 7-15; Wall dead load (5.0psf) on member(s).8-12, 4-14
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 12-14
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 69 lb uplift at joint 2 and 69 lb uplift at joint 10.
8) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

July 17,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Smith Prime Plan (12-19-24)
4703108	B03	Attic	4	1	I74964178 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. Wed Jul 16 15:57:26 Page: 1
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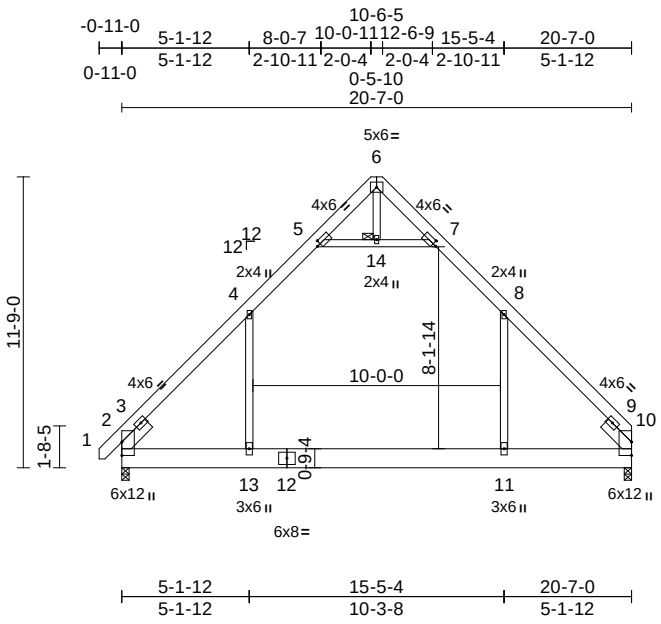


Scale = 1:93.1

Plate Offsets (X, Y): [5:0-1-13,0-2-0], [7:0-1-13,0-2-0]

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	0.86	Vert(LL)	-0.18	11-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	-0.30	11-13	>814	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.19	Horz(CT)	-0.03	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.12	11-13	>999	240	Weight: 187 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x10 SP 2400F 2.0E or 2x10 SP DSS
WEBS 2x4 SP No.2 *Except* 6-14:2x4 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 4-8-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 14

REACTIONS (size) 2=0-3-8, 10=0-3-8
Max Horiz 2=357 (LC 9)
Max Uplift 2=-68 (LC 13), 10=-61 (LC 12)
Max Grav 2=1248 (LC 21), 10=1219 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/34, 2-4=-1454/262, 4-5=-806/264, 5-6=-49/205, 6-7=-49/205, 7-8=-806/264, 8-10=-1453/249
BOT CHORD 2-13=-166/884, 11-13=-4/885, 10-11=-33/883
WEBS 8-11=-70/685, 4-13=-70/685, 5-14=-1039/411, 7-14=-1039/411, 6-14=0/69

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) Ceiling dead load (5.0 psf) on member(s). 4-5, 7-8, 5-14, 7-14; Wall dead load (5.0psf) on member(s).8-11, 4-13
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 11-13
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 61 lb uplift at joint 10 and 68 lb uplift at joint 2.
8) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

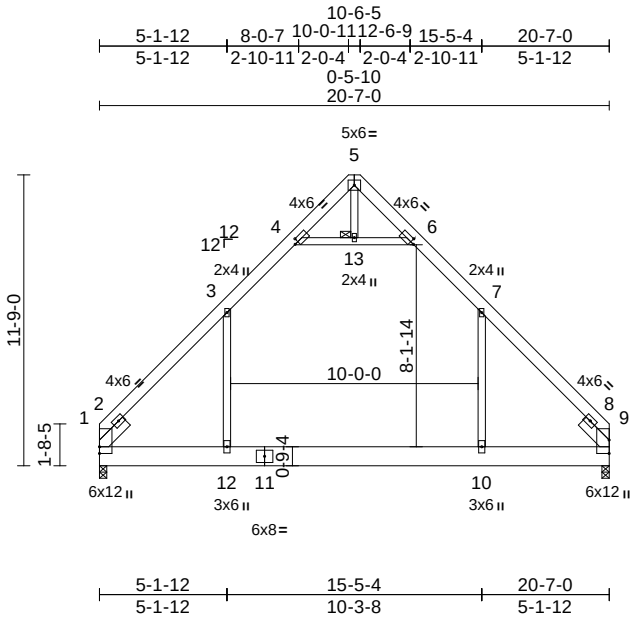
July 17,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Smith Prime Plan (12-19-24)
4703108	B04	Attic	3	1	I74964179 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. Wed Jul 16 15:57:26 Page: 1

ID:yL9Dy3KImJo0YGDZcmrZtiylvDJ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:93.1

Plate Offsets (X, Y): [4:0-1-13,0-2-0], [6:0-1-13,0-2-0]

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	0.86	Vert(LL)	-0.18	10-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	-0.30	10-12	>814	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.19	Horz(CT)	-0.03	1	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.12	10-12	>999	240	Weight: 184 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2
BOT CHORD 2x10 SP 2400F 2.0E or 2x10 SP DSS
WEBS 2x4 SP No.2 *Except* 5-13:2x4 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 4-8-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 13

REACTIONS (size) 1=0-3-8, 9=0-3-8
Max Horiz 1=340 (LC 9)
Max Uplift 1=-60 (LC 13), 9=-60 (LC 12)
Max Grav 1=1220 (LC 21), 9=1220 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-1456/249, 3-4=-807/264, 4-5=-49/205, 5-6=-49/206, 6-7=-807/264, 7-9=-1455/249
BOT CHORD 1-12=-151/885, 10-12=-4/886, 9-10=-32/884
WEBS 7-10=-69/686, 3-12=-70/686, 4-13=-1040/409, 6-13=-1040/409, 5-13=0/69

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) Ceiling dead load (5.0 psf) on member(s). 3-4, 6-7, 4-13, 6-13; Wall dead load (5.0psf) on member(s).7-10, 3-12
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 10-12
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 60 lb uplift at joint 1 and 60 lb uplift at joint 9.
8) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

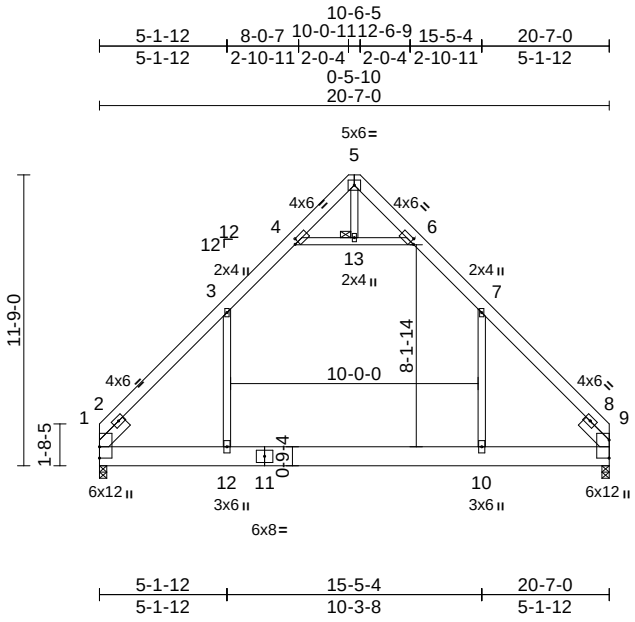
July 17,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Smith Prime Plan (12-19-24)
4703108	B05	Attic	1	2	I74964180 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. Wed Jul 16 15:57:26 Page: 1

ID:yL9Dy3KImJo0YGDZcmrZtiylvDJ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:93.1

Plate Offsets (X, Y): [4:0-1-13,0-2-0], [6:0-1-13,0-2-0]

Loading	(psf)	Spacing	2-6-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.11	10-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.19	10-12	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.12	Horz(CT)	-0.02	1	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.07	10-12	>999	240	Weight: 368 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2
BOT CHORD 2x10 SP 2400F 2.0E or 2x10 SP DSS
WEBS 2x4 SP No.2 *Except* 5-13:2x4 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.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 13

REACTIONS (size) 1=0-3-8, 9=0-3-8
Max Horiz 1=424 (LC 9)
Max Uplift 1=-75 (LC 13), 9=-75 (LC 12)
Max Grav 1=1525 (LC 21), 9=1525 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-1818/237, 3-4=-1007/330, 4-5=-63/255, 5-6=-63/255, 6-7=-1007/330, 7-9=-1818/237
BOT CHORD 1-12=-181/1104, 10-12=-5/1105, 9-10=-36/1103
WEBS 7-10=-90/858, 3-12=-91/859, 4-13=-1300/516, 6-13=-1300/516, 5-13=0/87

NOTES

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x10 - 2 rows staggered 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 and right exposed;C-C for members and forces & MWFRS for reactions shown; 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) Ceiling dead load (5.0 psf) on member(s). 3-4, 6-7, 4-13, 6-13; Wall dead load (5.0psf) on member(s).7-10, 3-12
8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 10-12
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 75 lb uplift at joint 1 and 75 lb uplift at joint 9.
10) Attic room checked for L/360 deflection.

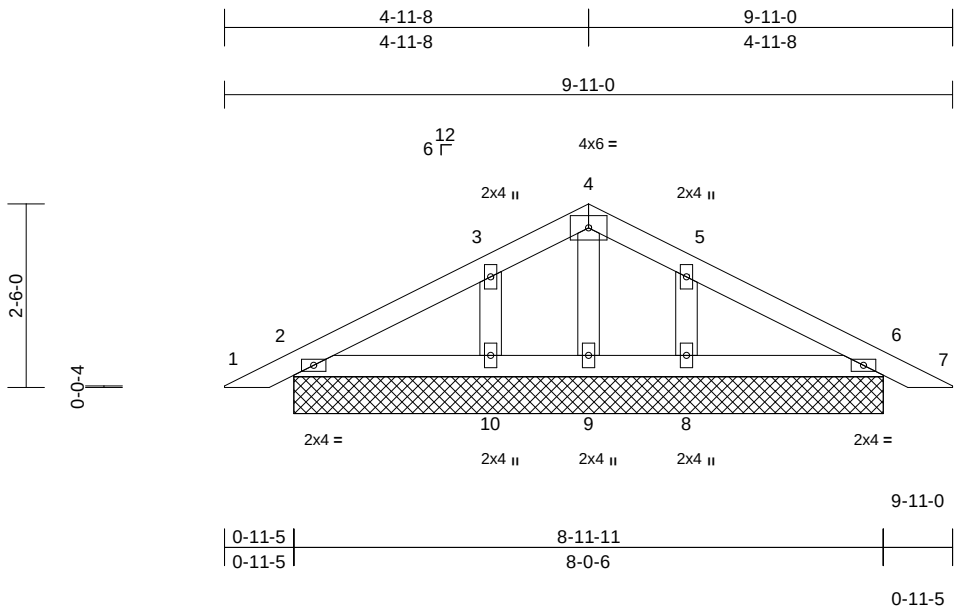
LOAD CASE(S) Standard

July 17,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Smith Prime Plan (12-19-24)
4703108	PB01	Piggyback	2	1	I74964181 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. Wed Jul 16 15:57:26 Page: 1
ID:oluU2EyA?oaoUSFCNBWQbhyIvUa-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:31.4

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	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	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: 34 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=8-0-6, 6=8-0-6, 8=8-0-6, 9=8-0-6, 10=8-0-6
Max Horiz 2=52 (LC 12)
Max Uplift 2=-42 (LC 12), 6=-52 (LC 13), 8=-108 (LC 13), 10=-109 (LC 12)
Max Grav 2=137 (LC 1), 6=137 (LC 1), 8=215 (LC 1), 9=58 (LC 13), 10=215 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-3=-37/47, 3-4=-50/103, 4-5=-50/103, 5-6=-29/30, 6-7=0/17
BOT CHORD 2-10=-13/61, 9-10=-13/61, 8-9=-13/61, 6-8=-13/61
WEBS 4-9=-44/10, 3-10=-141/153, 5-8=-141/154

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 42 lb uplift at joint 2, 52 lb uplift at joint 6, 109 lb uplift at joint 10, 108 lb uplift at joint 8, 42 lb uplift at joint 2 and 52 lb uplift at joint 6.
9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

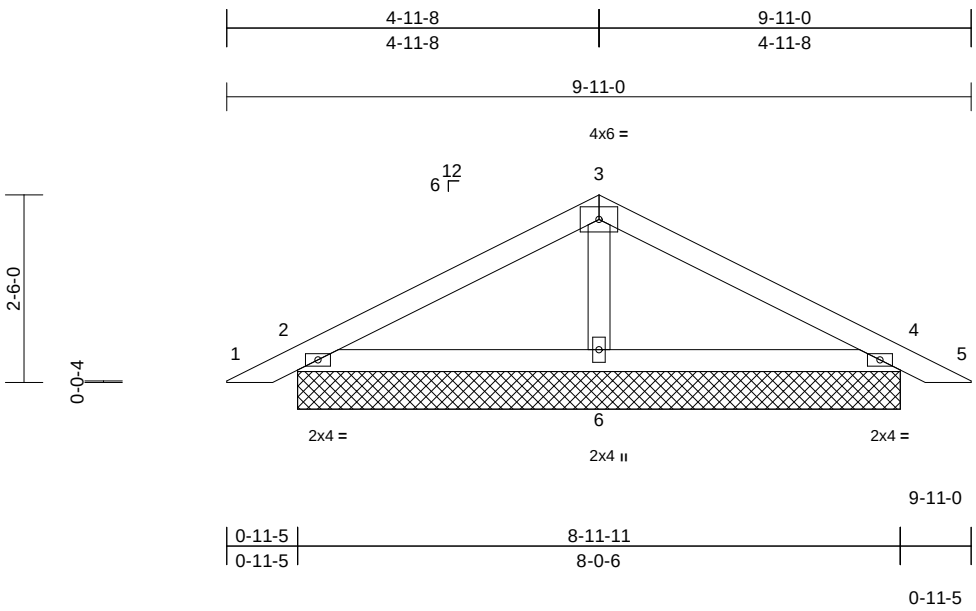
LOAD CASE(S) Standard

July 17,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Smith Prime Plan (12-19-24)
4703108	PB02	Piggyback	19	1	I74964182 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. Wed Jul 16 15:57:27 Page: 1
ID:hFcZJno03pyeQSli6ynNZxyIvUn-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:30.7

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	0.17	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	0.04	Horz(CT)	0.00	11	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 31 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
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=8-0-6, 4=8-0-6, 6=8-0-6
Max Horiz 2=-52 (LC 17)
Max Uplift 2=-80 (LC 12), 4=-90 (LC 13), 6=-52 (LC 12)
Max Grav 2=201 (LC 1), 4=201 (LC 1), 6=318 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-3=-95/104, 3-4=-95/105, 4-5=0/17
BOT CHORD 2-6=-26/62, 4-6=-19/62
WEBS 3-6=-175/118

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 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 80 lb uplift at joint 2, 90 lb uplift at joint 4, 52 lb uplift at joint 6, 80 lb uplift at joint 2 and 90 lb uplift at joint 4.
9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

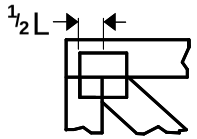
LOAD CASE(S) Standard

July 17,2025

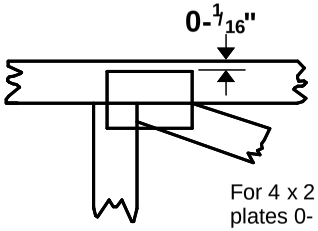
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

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.

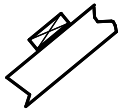
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

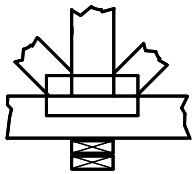
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

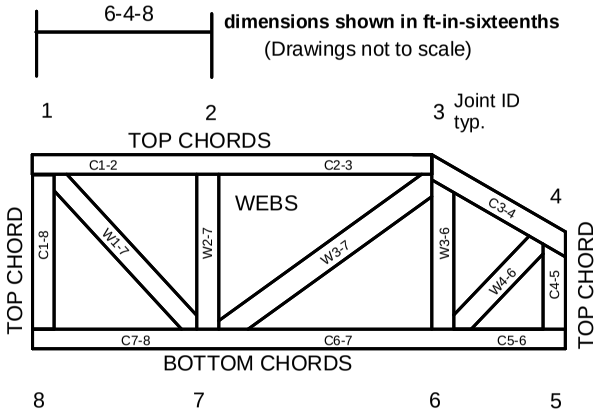


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

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.