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: 4619346 - JSJ, Maplewood Prime A (12-26-24)

Trenco
818 Soundside Rd
Edenton, NC 27932

Site Information:

Project Customer: JSJ Builders Project Name:
Lot/Block: 4 Subdivision: ILAS WAY
Address:
City: Dunn 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 20 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Job ID#	Truss Name	Date
1	I73109378	4619346	A01	4/30/25
2	I73109379	4619346	A02	4/30/25
3	I73109380	4619346	A03	4/30/25
4	I73109381	4619346	A04	4/30/25
5	I73109382	4619346		4/30/25
6	I73109383	4619346	A06	4/30/25
7	I73109384	4619346	A07	4/30/25
8	I73109385	4619346	B01	4/30/25
9	I73109386	4619346	B02	4/30/25
10	I73109387	4619346	C01	4/30/25
11	I73109388	4619346	C02	4/30/25
12	I73109389	4619346		4/30/25
13	I73109390	4619346	C04	4/30/25
14	I73109391	4619346	V01	4/30/25
	I73109392	4619346	V02	4/30/25
16	I73109393	4619346	V03	4/30/25
17	I73109394	4619346	V04	4/30/25
18	I73109395	4619346	V05	4/30/25
19	I73109396	4619346	V06	4/30/25
20	I73109397	4619346	V07	4/30/25

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: Galinski, John
My license renewal date for the state of North Carolina is December 31, 2025.

April 30,2025
Galinski, John

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

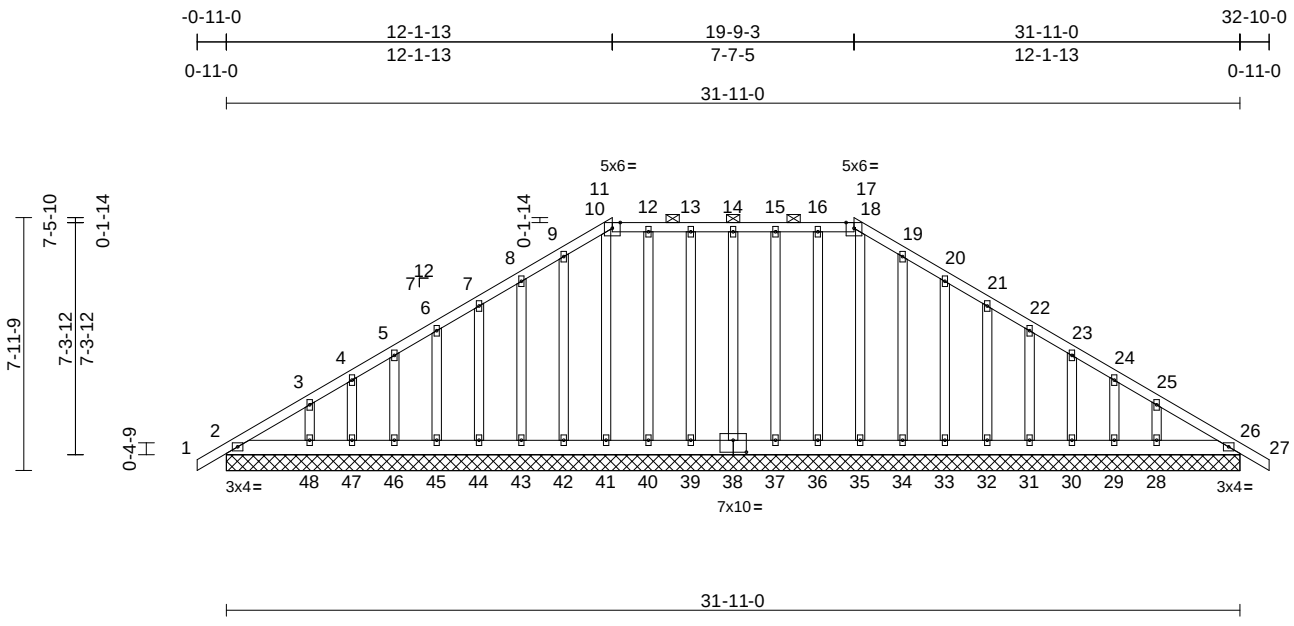
RE: $JOBNAME - $JOBDESC

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, Maplewood Prime A (12-26-24)
4619346	A01	Hip Supported Gable	1	1	I73109378 Job Reference (optional)

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 12:38:12 Page: 1
ID:YFAsy9mqBrEqN0MGY4iGStzmvGV-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:72.5

Plate Offsets (X, Y): [38:0-5-0,0-4-8]

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	0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.14	Horz(CT)	-0.01	26	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 273 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 10-0-0 oc purlins, except 2-0-0 oc purlins (10-0-0 max.): 11-17.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 2=31-11-0, 26=31-11-0, 28=31-11-0, 29=31-11-0, 30=31-11-0, 31=31-11-0, 32=31-11-0, 33=31-11-0, 34=31-11-0, 35=31-11-0, 36=31-11-0, 37=31-11-0, 38=31-11-0, 39=31-11-0, 40=31-11-0, 41=31-11-0, 42=31-11-0, 43=31-11-0, 44=31-11-0, 45=31-11-0, 46=31-11-0, 47=31-11-0, 48=31-11-0
Max Horiz 2=252 (LC 11)
Max Uplift 2=-1 (LC 20), 26=-39 (LC 9), 28=-101 (LC 13), 29=-47 (LC 13), 30=-64 (LC 13), 31=-61 (LC 13), 32=-61 (LC 13), 33=-65 (LC 13), 34=-54 (LC 13), 36=-34 (LC 8), 37=-42 (LC 9), 38=-37 (LC 8), 39=-41 (LC 9), 40=-34 (LC 8), 42=-54 (LC 12), 43=-65 (LC 12), 44=-60 (LC 12), 45=-64 (LC 12), 46=-51 (LC 12), 47=-172 (LC 20), 48=-67 (LC 13)
Max Grav 2=0 (LC 8), 26=122 (LC 24), 28=211 (LC 20), 29=82 (LC 20), 30=127 (LC 20), 31=116 (LC 20), 32=119 (LC 20), 33=116 (LC 20), 34=128 (LC 20), 35=175 (LC 1), 36=116 (LC 1), 37=105 (LC 24), 38=107 (LC 1), 39=106 (LC 24), 40=116 (LC 23), 41=175 (LC 23), 42=127 (LC 19), 43=116 (LC 19), 44=121 (LC 19), 45=108 (LC 19), 46=170 (LC 1), 47=74 (LC 8), 48=440 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/28, 2-3=-165/249, 3-4=-107/206, 4-5=-60/210, 5-6=-20/194, 6-7=-54/182, 7-8=-90/189, 8-9=-129/201, 9-10=-163/214, 10-11=-155/206, 11-12=-153/203, 12-13=-152/202, 13-14=-152/202, 14-15=-152/202, 15-16=-152/202, 16-17=-153/203, 17-18=-155/206, 18-19=-163/214, 19-20=-129/205, 20-21=-90/193, 21-22=-54/187, 22-23=-61/200, 23-24=-88/213, 24-25=-113/220, 25-26=-172/251, 26-27=0/28
BOT CHORD 2-48=-211/217, 47-48=-211/217, 46-47=-211/217, 45-46=-211/217, 44-45=-211/217, 43-44=-211/217, 42-43=-211/217, 41-42=-211/217, 40-41=-211/217, 39-40=-211/217, 37-39=-211/217, 36-37=-211/217, 35-36=-211/217, 34-35=-211/217, 33-34=-211/217, 32-33=-211/217, 31-32=-211/217, 30-31=-211/217, 29-30=-211/217, 28-29=-211/217, 26-28=-211/217
WEBS 14-38=-80/55, 13-39=-79/62, 12-40=-89/50, 10-41=-149/2, 9-42=-101/70, 8-43=-103/81, 7-44=-100/77, 6-45=-99/77, 5-46=-106/77, 4-47=-81/78, 3-48=-161/103, 15-37=-78/62, 16-36=-89/50, 18-35=-148/13, 19-34=-101/70, 20-33=-103/81, 21-32=-100/77, 22-31=-99/77, 23-30=-102/79, 24-29=-87/70, 25-28=-144/102

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.

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Continued on page 2

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818 Soundside Road
Edenton, NC 27932

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 1 lb uplift at joint 2, 39 lb uplift at joint 26, 37 lb uplift at joint 38, 41 lb uplift at joint 39, 34 lb uplift at joint 40, 54 lb uplift at joint 42, 65 lb uplift at joint 43, 60 lb uplift at joint 44, 64 lb uplift at joint 45, 51 lb uplift at joint 46, 172 lb uplift at joint 47, 67 lb uplift at joint 48, 42 lb uplift at joint 37, 34 lb uplift at joint 36, 54 lb uplift at joint 34, 65 lb uplift at joint 33, 61 lb uplift at joint 32, 61 lb uplift at joint 31, 64 lb uplift at joint 30, 47 lb uplift at joint 29, 101 lb uplift at joint 28 and 1 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

Job	Truss	Truss Type	Qty	Ply	JSJ, Maplewood Prime A (12-26-24)
4619346	A02	Hip	1	1	I73109379 Job Reference (optional)

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 12:38:13 Page: 1
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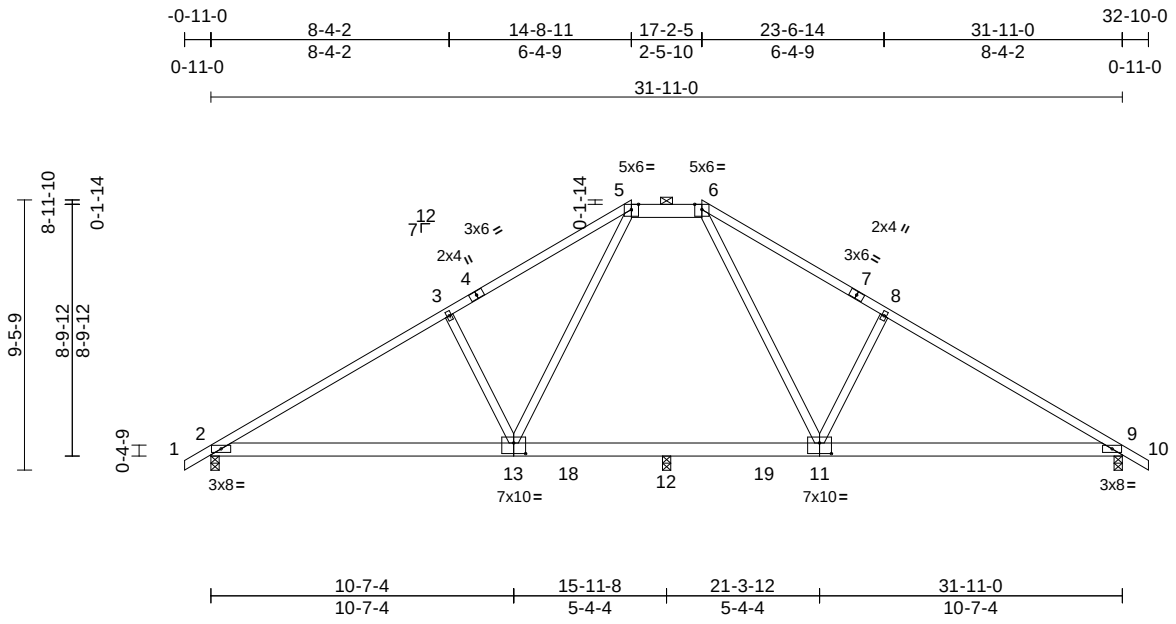

Scale = 1:80.7

Plate Offsets (X, Y): [11:0-5-0,0-4-8], [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	0.80	Vert(LL)	-0.23	11-17	>835	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.42	11-17	>461	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.48	Horz(CT)	0.05	9	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.27	13-15	>697	240	Weight: 177 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 5-6:2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

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

REACTIONS (size) 2=0-3-8, 9=0-3-8, 12=0-3-8
Max Horiz 2=-302 (LC 10)
Max Uplift 2=-355 (LC 12), 9=-358 (LC 13)
Max Grav 2=1254 (LC 1), 9=1254 (LC 1), 12=324 (LC 18)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/28, 2-3=-1863/687, 3-5=-1757/751, 5-6=-1236/609, 6-8=-1756/751, 8-9=-1863/686, 9-10=0/28
BOT CHORD 2-12=-460/1561, 9-12=-426/1522
WEBS 5-13=-277/723, 3-13=-505/411, 6-11=-280/723, 8-11=-505/411

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 355 lb uplift at joint 2 and 358 lb uplift at joint 9.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

April 30,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Maplewood Prime A (12-26-24)
4619346	A03	Common	4	1	I73109380 Job Reference (optional)

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

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 12:38:14
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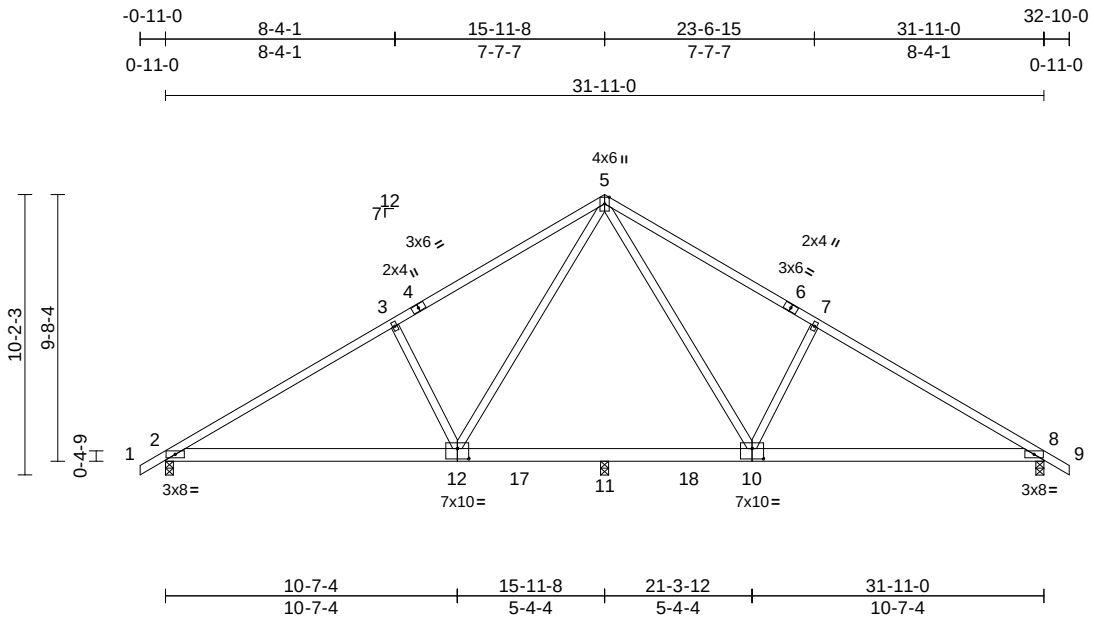

Scale = 1:83.7

Plate Offsets (X, Y): [10:0-5-0,0-4-8], [12:0-5-0,0-4-8]

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	0.84	Vert(LL)	-0.13	10-16	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.33	10-16	>584	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.05	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.19	12-14	>999	240	Weight: 179 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied or 9-10-6 oc bracing.

REACTIONS (size) 2=0-3-8, 8=0-3-8, 11=0-3-8
Max Horiz 2=328 (LC 11)
Max Uplift 2=-359 (LC 12), 8=-362 (LC 13)
Max Grav 2=1246 (LC 1), 8=1246 (LC 1), 11=318 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/28, 2-3=-1854/673, 3-5=-1804/750, 5-7=-1803/749, 7-8=-1854/673, 8-9=0/28
BOT CHORD 2-11=-504/1630, 8-11=-418/1519
WEBS 5-12=-328/790, 3-12=-563/428, 5-10=-332/789, 7-10=-563/428

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 359 lb uplift at joint 2 and 362 lb uplift at joint 8.

LOAD CASE(S) Standard

April 30,2025

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	JSJ, Maplewood Prime A (12-26-24)
4619346	A04	Common	6	1	I73109381 Job Reference (optional)

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

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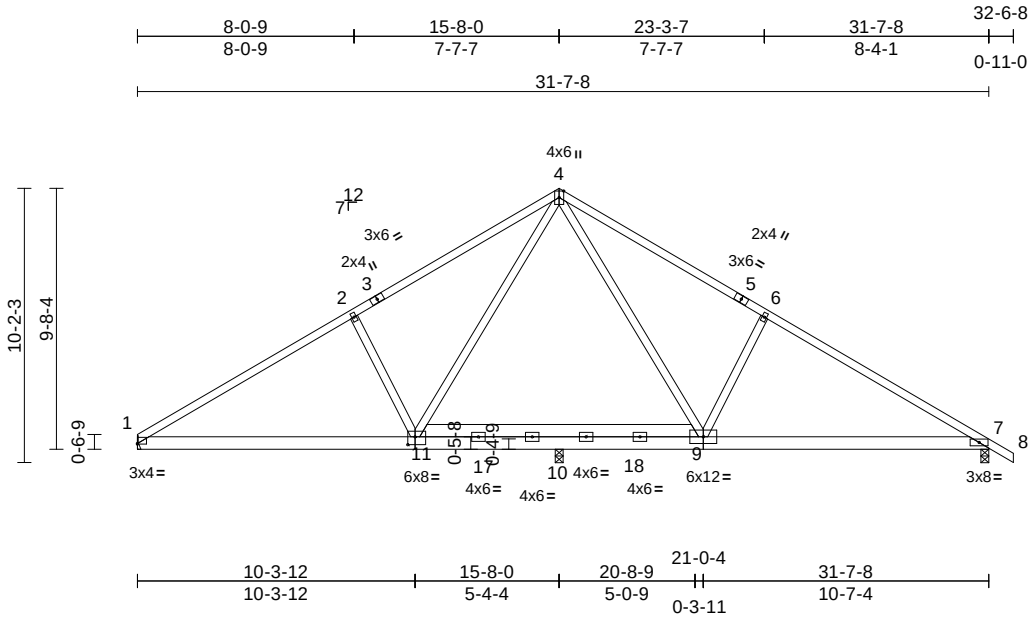

Scale = 1:85.6

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

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	0.83	Vert(LL)	-0.12	9-16	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.29	9-16	>660	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.61	Horz(CT)	0.04	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.16	9-16	>999	240	Weight: 200 lb	FT = 20%

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

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

REACTIONS (size) 1= Mechanical, 7=0-3-8, 10=0-3-8
Max Horiz 1=-322 (LC 8)
Max Uplift 1=-277 (LC 12), 7=-317 (LC 13), 10=-92 (LC 12)
Max Grav 1=1035 (LC 1), 7=1097 (LC 1), 10=565 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1579/550, 2-4=-1479/604, 4-6=-1526/616, 6-7=-1620/562, 7-8=0/28
BOT CHORD 1-10=-430/1412, 7-10=-324/1320
WEBS 4-11=-259/579, 2-11=-547/422, 4-9=-275/648, 6-9=-559/426

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 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 277 lb uplift at joint 1, 317 lb uplift at joint 7 and 92 lb uplift at joint 10.

LOAD CASE(S) Standard

April 30,2025

ENGINEERING BY
TRENCO
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	JSJ, Maplewood Prime A (12-26-24)
4619346	A05	Common	5	1	I73109382 Job Reference (optional)

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

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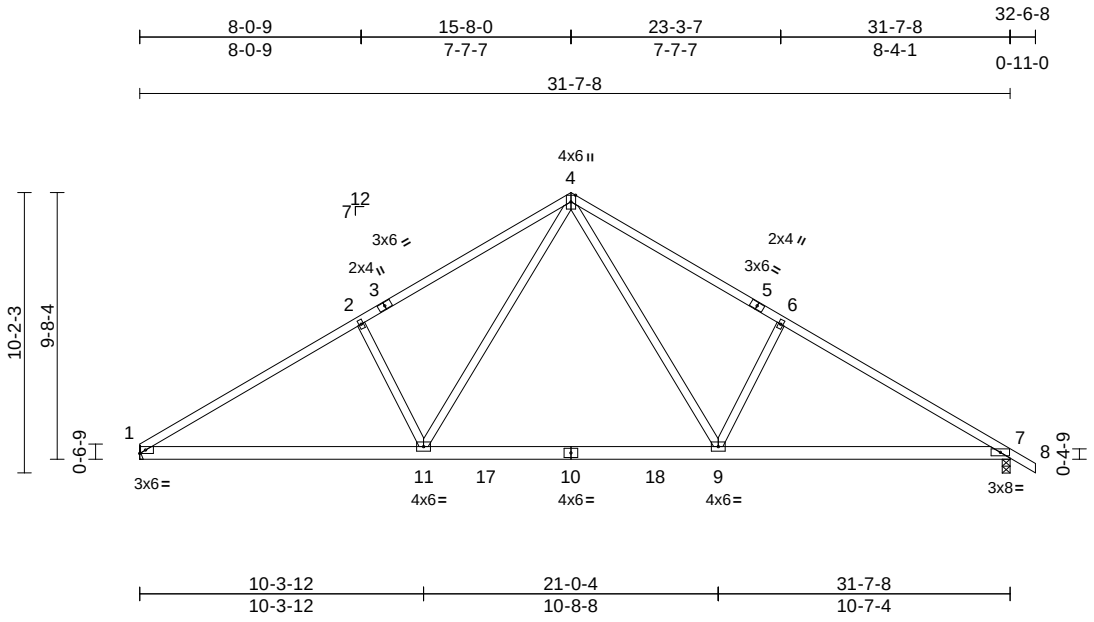


Scale = 1:83.7

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	0.90	Vert(LL)	-0.20	9-11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.30	9-11	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.05	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.16	9-16	>999	240	Weight: 176 lb	FT = 20%

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

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

REACTIONS (size) 1= Mechanical, 7=0-3-8
Max Horiz 1=-322 (LC 8)
Max Uplift 1=-323 (LC 12), 7=-357 (LC 13)
Max Grav 1=1287 (LC 19), 7=1344 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-2025/668, 2-4=-1927/744, 4-6=-1973/756, 6-7=-2068/679, 7-8=0/28
BOT CHORD 1-11=-490/1881, 9-11=-148/1205, 7-9=-424/1678
WEBS 4-11=-314/914, 2-11=-543/423, 4-9=-329/984, 6-9=-558/428

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 323 lb uplift at joint 1 and 357 lb uplift at joint 7.

LOAD CASE(S) Standard

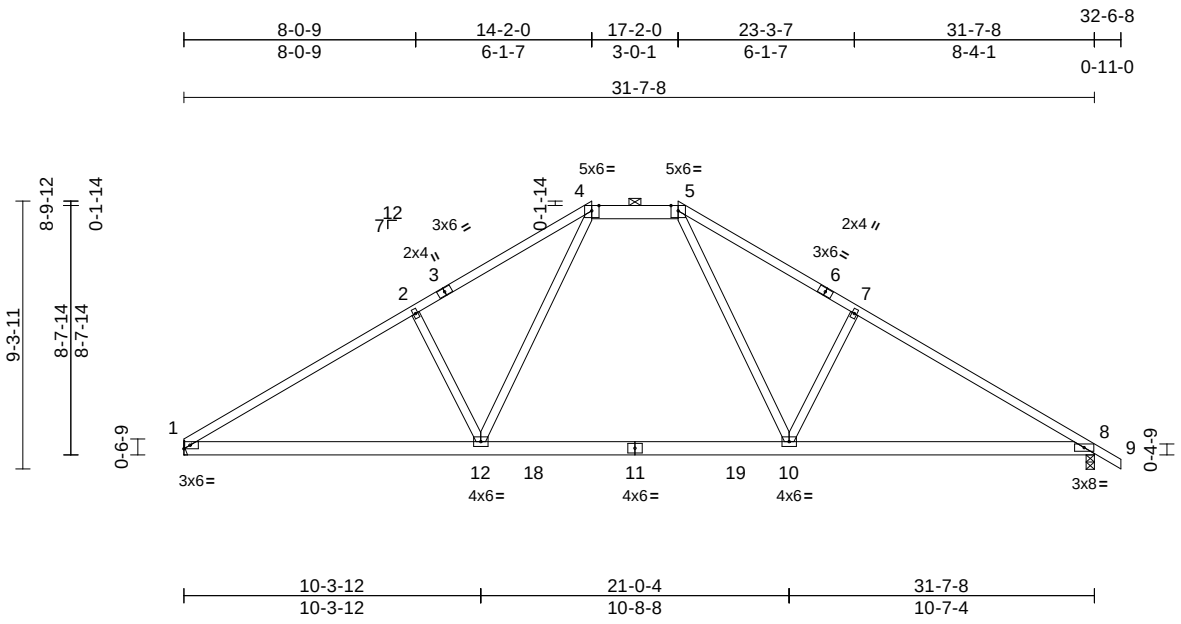
April 30,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Maplewood Prime A (12-26-24)
4619346	A06	Hip	1	1	I73109383 Job Reference (optional)

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

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 12:38:15 Page: 1
ID:mTEqNpbAzKXdopQK6cGgN6zmv3p-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:80

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	0.79	Vert(LL)	-0.26	10-17	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.42	10-17	>900	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.05	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.29	10-17	>999	240	Weight: 174 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 4-5:2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

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

REACTIONS (size) 1= Mechanical, 8=0-3-8
Max Horiz 1=-290 (LC 8)
Max Uplift 1=-311 (LC 12), 8=-346 (LC 13)
Max Grav 1=1264 (LC 1), 8=1321 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1982/672, 2-4=-1838/733, 4-5=-1317/606, 5-7=-1880/744, 7-8=-2018/682, 8-9=0/28
BOT CHORD 1-12=-423/1788, 10-12=-173/1246, 8-10=-422/1654
WEBS 4-12=-244/813, 2-12=-468/402, 5-10=-257/878, 7-10=-495/409

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 311 lb uplift at joint 1 and 346 lb uplift at joint 8.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

April 30,2025

ENGINEERING BY TRENCO
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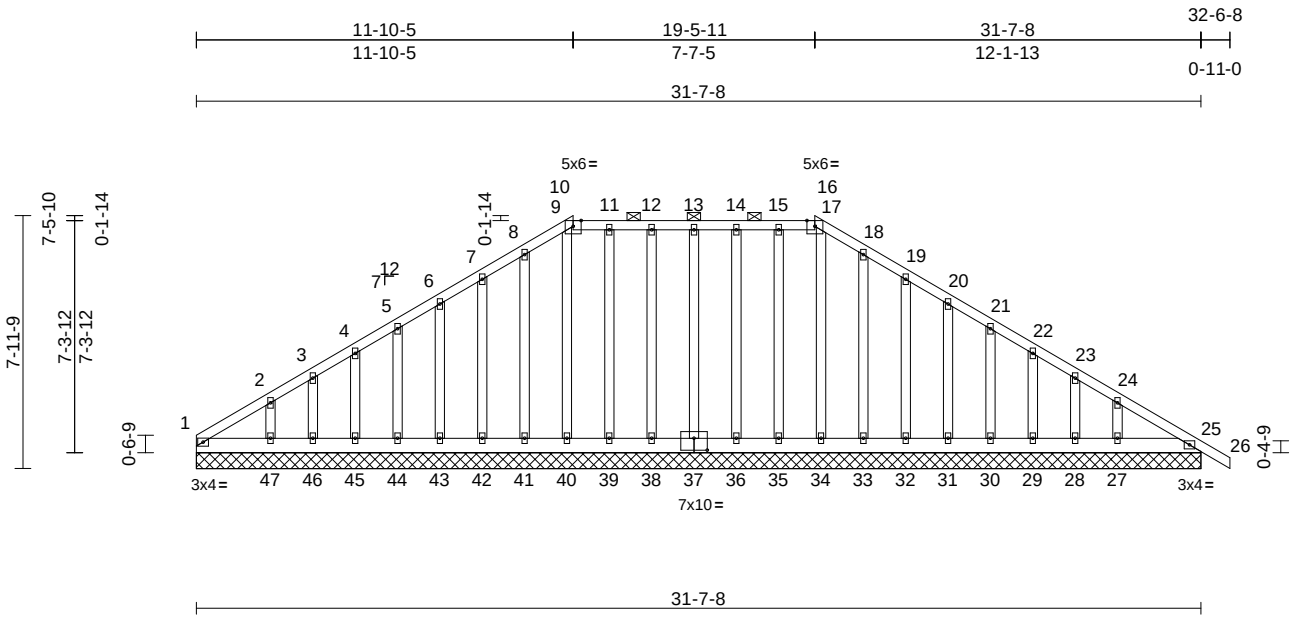
Job	Truss	Truss Type	Qty	Ply	JSJ, Maplewood Prime A (12-26-24)
4619346	A07	Hip Supported Gable	1	1	I73109384 Job Reference (optional)

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 12:38:15 Page: 1
ID:8W9RimTznmkG21WMuR4oqWzmv2g-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:72.5

Plate Offsets (X, Y): [37:0-5-0,0-4-8]

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	0.05	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.01	25	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 271 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 10-16.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=31-7-8, 25=31-7-8, 27=31-7-8, 28=31-7-8, 29=31-7-8, 30=31-7-8, 31=31-7-8, 32=31-7-8, 33=31-7-8, 34=31-7-8, 35=31-7-8, 36=31-7-8, 37=31-7-8, 38=31-7-8, 39=31-7-8, 40=31-7-8, 41=31-7-8, 42=31-7-8, 43=31-7-8, 44=31-7-8, 45=31-7-8, 46=31-7-8, 47=31-7-8
Max Horiz 1=-245 (LC 8)
Max Uplift 1=-49 (LC 8), 27=-101 (LC 13), 28=-47 (LC 13), 29=-64 (LC 13), 30=-60 (LC 13), 31=-61 (LC 13), 32=-65 (LC 13), 33=-53 (LC 13), 35=-36 (LC 9), 36=-41 (LC 8), 37=-37 (LC 9), 38=-42 (LC 8), 39=-36 (LC 9), 40=-14 (LC 9), 41=-56 (LC 12), 42=-64 (LC 12), 43=-61 (LC 12), 44=-59 (LC 12), 45=-68 (LC 12), 46=-31 (LC 12), 47=-136 (LC 12)
Max Grav 1=129 (LC 20), 25=160 (LC 1), 27=215 (LC 20), 28=80 (LC 20), 29=128 (LC 20), 30=116 (LC 20), 31=119 (LC 20), 32=119 (LC 20), 33=120 (LC 20), 34=104 (LC 22), 35=107 (LC 24), 36=108 (LC 23), 37=107 (LC 1), 38=108 (LC 24), 39=107 (LC 23), 40=122 (LC 22), 41=122 (LC 19), 42=118 (LC 19), 43=119 (LC 19), 44=116 (LC 19), 45=129 (LC 19), 46=77 (LC 19), 47=225 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 10-11=-172/207, 11-12=-171/206, 12-13=-171/206, 13-14=-171/206, 14-15=-171/206, 15-16=-172/207, 16-17=-174/210, 17-18=-184/218, 18-19=-151/179, 19-20=-112/133, 20-21=-76/89, 21-22=-45/48, 22-23=-55/50, 23-24=-87/63, 24-25=-150/114, 25-26=0/28, 1-2=-207/176, 2-3=-151/146, 3-4=-131/133, 4-5=-118/123, 5-6=-105/131, 6-7=-112/158, 7-8=-151/185, 8-9=-184/218, 9-10=-174/210
BOT CHORD 1-47=-132/198, 46-47=-132/198, 45-46=-132/198, 44-45=-132/198, 43-44=-132/198, 42-43=-132/198, 41-42=-132/198, 40-41=-132/198, 39-40=-132/198, 38-39=-132/198, 36-38=-132/198, 35-36=-132/198, 34-35=-132/198, 33-34=-132/198, 32-33=-132/198, 31-32=-132/198, 30-31=-132/198, 29-30=-132/198, 28-29=-132/198, 27-28=-132/198, 25-27=-132/198
WEBS 13-37=-80/55, 12-38=-81/62, 11-39=-80/52, 9-40=-95/31, 8-41=-96/72, 7-42=-103/80, 6-43=-99/77, 5-44=-99/77, 4-45=-102/79, 3-46=-87/68, 2-47=-139/107, 14-36=-81/62, 15-35=-80/52, 17-34=-78/12, 18-33=-94/69, 19-32=-103/81, 20-31=-99/77, 21-30=-99/77, 22-29=-102/79, 23-28=-87/70, 24-27=-144/102

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.

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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 49 lb uplift at joint 1, 37 lb uplift at joint 37, 42 lb uplift at joint 38, 36 lb uplift at joint 39, 14 lb uplift at joint 40, 56 lb uplift at joint 41, 64 lb uplift at joint 42, 61 lb uplift at joint 43, 59 lb uplift at joint 44, 68 lb uplift at joint 45, 31 lb uplift at joint 46, 136 lb uplift at joint 47, 41 lb uplift at joint 36, 36 lb uplift at joint 35, 53 lb uplift at joint 33, 65 lb uplift at joint 32, 61 lb uplift at joint 31, 60 lb uplift at joint 30, 64 lb uplift at joint 29, 47 lb uplift at joint 28, 101 lb uplift at joint 27 and 49 lb uplift at joint 1.
11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 48.
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, Maplewood Prime A (12-26-24)
4619346	B01	Hip Supported Gable	1	1	I73109385 Job Reference (optional)

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 12:38:15 Page: 1
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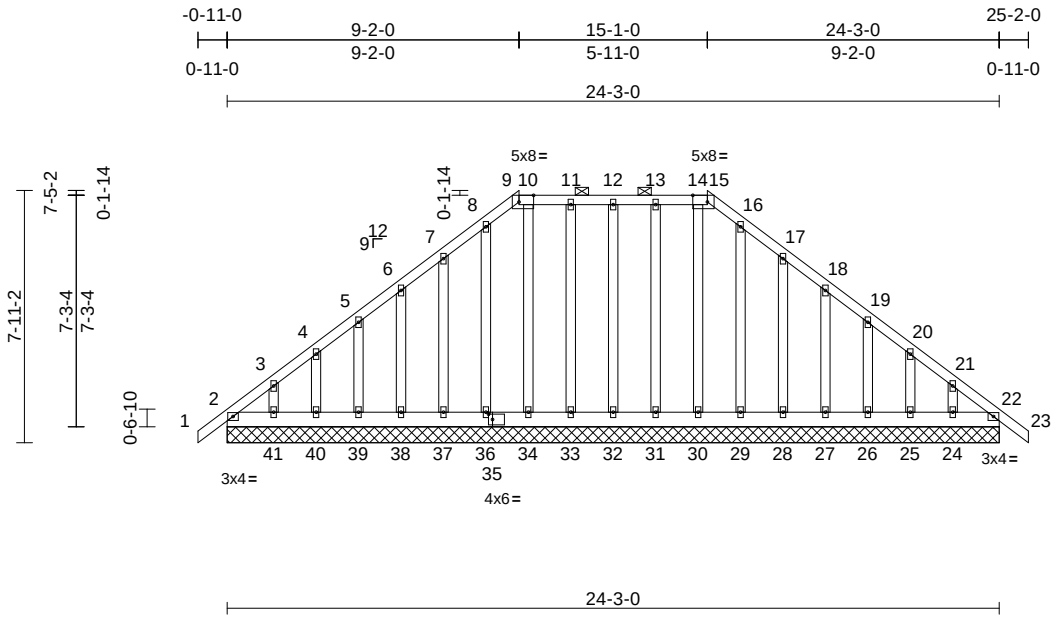

Scale = 1:72.4

Plate Offsets (X, Y): [10:0-5-8,Edge], [14:0-5-8,Edge], [35:0-1-8,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.01	22	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 213 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 9-15.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=24-3-0, 22=24-3-0, 24=24-3-0, 25=24-3-0, 26=24-3-0, 27=24-3-0, 28=24-3-0, 29=24-3-0, 30=24-3-0, 31=24-3-0, 32=24-3-0, 33=24-3-0, 34=24-3-0, 36=24-3-0, 37=24-3-0, 38=24-3-0, 39=24-3-0, 40=24-3-0, 41=24-3-0
Max Horiz 2=250 (LC 11)
Max Uplift 2=-76 (LC 8), 22=-29 (LC 9), 24=-98 (LC 13), 25=-71 (LC 13), 26=-78 (LC 13), 27=-76 (LC 13), 28=-85 (LC 13), 29=-27 (LC 13), 31=-42 (LC 9), 32=-40 (LC 8), 33=-43 (LC 8), 34=-20 (LC 9), 36=-38 (LC 12), 37=-83 (LC 12), 38=-76 (LC 12), 39=-79 (LC 12), 40=-69 (LC 12), 41=-104 (LC 12)
Max Grav 2=168 (LC 20), 22=135 (LC 1), 24=128 (LC 20), 25=121 (LC 20), 26=123 (LC 20), 27=122 (LC 20), 28=125 (LC 20), 29=111 (LC 20), 30=109 (LC 22), 31=109 (LC 23), 32=107 (LC 23), 33=109 (LC 24), 34=120 (LC 22), 36=123 (LC 19), 37=124 (LC 19), 38=122 (LC 19), 39=124 (LC 19), 40=119 (LC 19), 41=135 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 9-10=-151/177, 10-11=-158/188, 11-12=-158/188, 12-13=-158/188, 13-14=-158/188, 14-15=-151/177, 1-2=0/33, 2-3=-241/179, 3-4=-179/156, 4-5=-131/132, 5-6=-113/117, 6-7=-95/137, 7-8=-149/177, 8-9=-172/199, 15-16=-172/199, 16-17=-149/172, 17-18=-94/107, 18-19=-55/51, 19-20=-70/60, 20-21=-130/88, 21-22=-192/141, 22-23=0/33
BOT CHORD 2-41=-142/214, 40-41=-142/214, 39-40=-142/214, 38-39=-142/214, 37-38=-142/214, 36-37=-142/214, 34-36=-142/214, 33-34=-142/214, 32-33=-142/214, 31-32=-142/214, 30-31=-142/214, 29-30=-142/214, 28-29=-142/214, 27-28=-142/214, 26-27=-142/214, 25-26=-142/214, 24-25=-142/214, 22-24=-142/214
WEBS 12-32=-81/60, 11-33=-83/60, 10-34=-93/37, 8-36=-96/54, 7-37=-119/99, 6-38=-112/93, 5-39=-112/92, 4-40=-113/93, 3-41=-114/91, 13-31=-83/60, 14-30=-82/21, 16-29=-84/43, 17-28=-119/101, 18-27=-112/93, 19-26=-112/92, 20-25=-113/93, 21-24=-115/90

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.

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10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 76 lb uplift at joint 2, 29 lb uplift at joint 22, 40 lb uplift at joint 32, 43 lb uplift at joint 33, 20 lb uplift at joint 34, 38 lb uplift at joint 36, 83 lb uplift at joint 37, 76 lb uplift at joint 38, 79 lb uplift at joint 39, 69 lb uplift at joint 40, 104 lb uplift at joint 41, 42 lb uplift at joint 31, 27 lb uplift at joint 29, 85 lb uplift at joint 28, 76 lb uplift at joint 27, 78 lb uplift at joint 26, 71 lb uplift at joint 25, 98 lb uplift at joint 24, 76 lb uplift at joint 2 and 29 lb uplift at joint 22.
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

Job	Truss	Truss Type	Qty	Ply	JSJ, Maplewood Prime A (12-26-24)
4619346	B02	Hip Girder	1	3	I73109386 Job Reference (optional)

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 12:38:16 Page: 1
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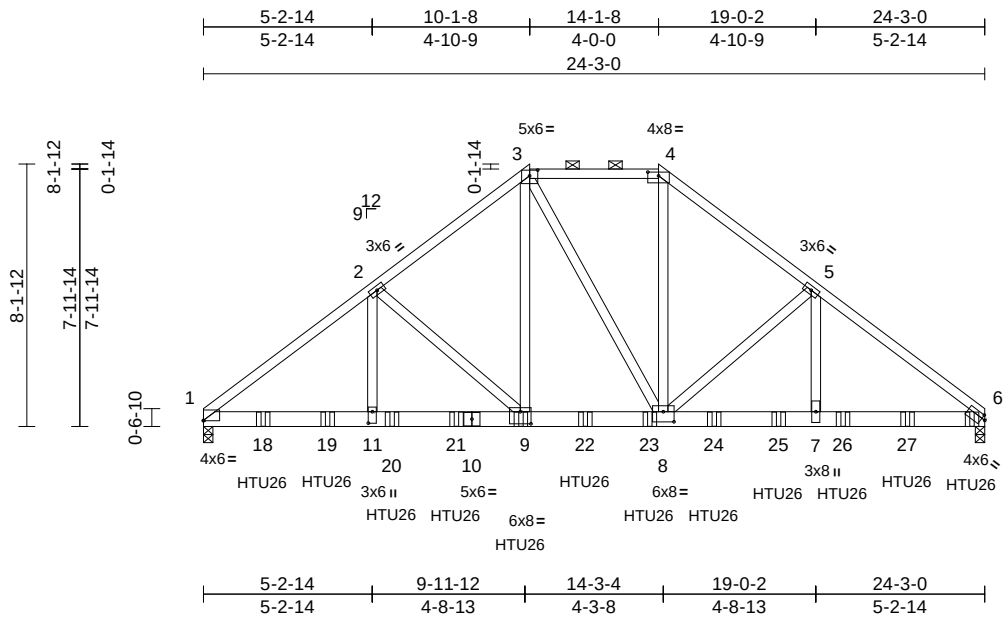

Scale = 1:71.5

Plate Offsets (X, Y): [1:Edge,0-0-2], [3:0-3-0,0-2-2], [4:0-4-0,0-1-6], [6:0-1-5,0-1-8], [8:0-4-0,0-3-12], [9:0-4-0,0-4-8], [11:0-4-4,0-1-8]

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	0.45	Vert(LL)	-0.10	9-11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.92	Vert(CT)	-0.19	9-11	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.38	Horz(CT)	0.06	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.11	9-11	>999	240	Weight: 491 lb	FT = 20%

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

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

REACTIONS (size) 1=0-3-8, 6=0-3-8
Max Horiz 1=251 (LC 24)
Max Uplift 1=-2037 (LC 8), 6=-2135 (LC 9)
Max Grav 1=7672 (LC 1), 6=7827 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 3-4=-6115/1789, 1-2=-10618/2837, 2-3=-7952/2193, 4-5=-7774/2160, 5-6=-9953/2706
BOT CHORD 1-11=-2323/8479, 9-11=-2323/8479, 8-9=-1615/6249, 7-8=-2049/7897, 6-7=-2049/7897
WEBS 2-11=-793/3246, 2-9=-2895/935, 3-9=-1288/4769, 3-8=-478/185, 4-8=-1193/4278, 5-8=-2250/831, 5-7=-667/2539

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 0-6-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2037 lb uplift at joint 1 and 2135 lb uplift at joint 6.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-10-4 from the left end to 23-10-4 to connect truss(es) to back face of bottom chord.
11) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 3-4=-60, 12-15=-20, 1-3=-60, 4-6=-60
Concentrated Loads (lb)
Vert: 9=-1244 (B), 17=-1021 (B), 18=-1244 (B), 19=-1244 (B), 20=-1244 (B), 21=-1244 (B), 22=-1244 (B), 23=-1015 (B), 24=-1015 (B), 25=-1015 (B), 26=-1015 (B), 27=-1015 (B)

April 30,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Maplewood Prime A (12-26-24)
4619346	C01	Monopitch Supported Gable	1	1	I73109387 Job Reference (optional)

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 12:38:16 Page: 1
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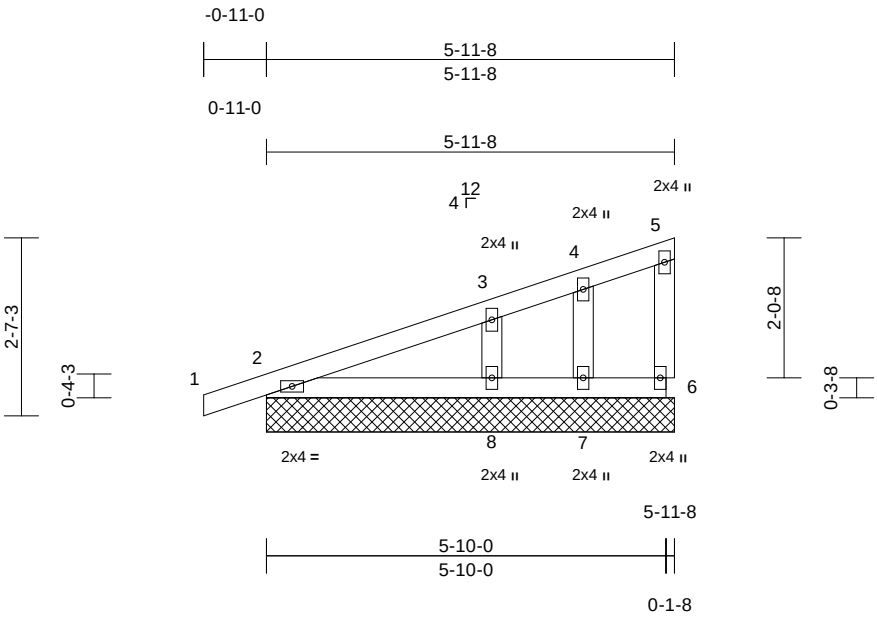

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 25 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, 6=5-11-8, 7=5-11-8, 8=5-11-8
Max Horiz 2=122 (LC 8)
Max Uplift 2=-73 (LC 8), 6=-21 (LC 12), 7=-23 (LC 8), 8=-108 (LC 12)
Max Grav 2=172 (LC 1), 6=49 (LC 1), 7=43 (LC 1), 8=255 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-3=-111/52, 3-4=-44/13, 4-5=-17/9, 5-6=-34/41
BOT CHORD 2-8=-30/54, 7-8=0/0, 6-7=0/0
WEBS 4-7=-46/67, 3-8=-167/185

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) 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 73 lb uplift at joint 2, 21 lb uplift at joint 6, 23 lb uplift at joint 7, 108 lb uplift at joint 8 and 73 lb uplift at joint 2.

LOAD CASE(S) Standard

April 30,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Maplewood Prime A (12-26-24)
4619346	C02	Monopitch	5	1	I73109388 Job Reference (optional)

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 12:38:16 Page: 1
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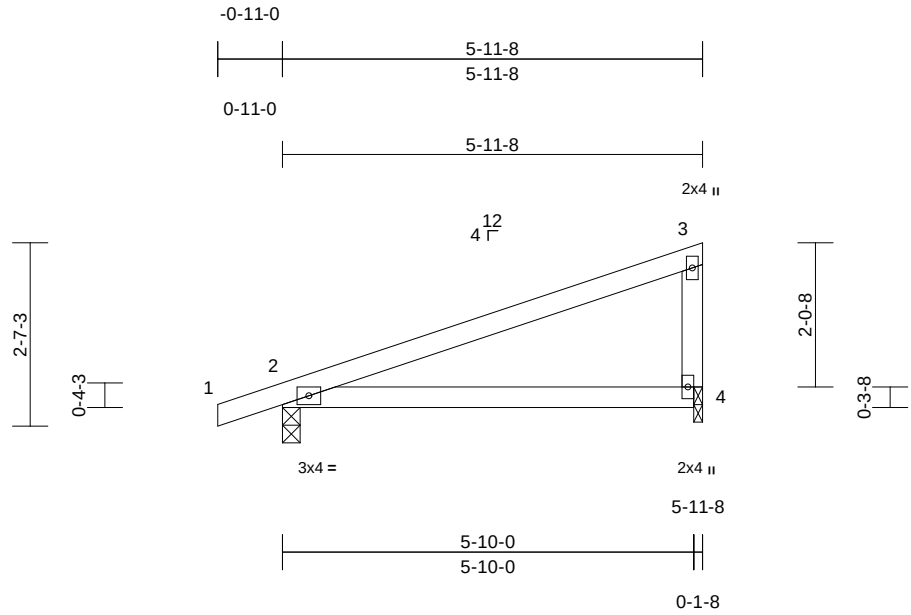

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	0.18	4-7	>385	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.12	4-7	>591	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 22 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=0-3-0, 4=0-1-8
Max Horiz 2=122 (LC 8)
Max Uplift 2=-193 (LC 8), 4=-167 (LC 8)
Max Grav 2=292 (LC 1), 4=228 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-3=-100/136, 3-4=-152/203
BOT CHORD 2-4=-190/101

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) 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 193 lb uplift at joint 2 and 167 lb uplift at joint 4.

LOAD CASE(S) Standard

April 30,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Maplewood Prime A (12-26-24)
4619346	C03	Monopitch	12	1	I73109389 Job Reference (optional)

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

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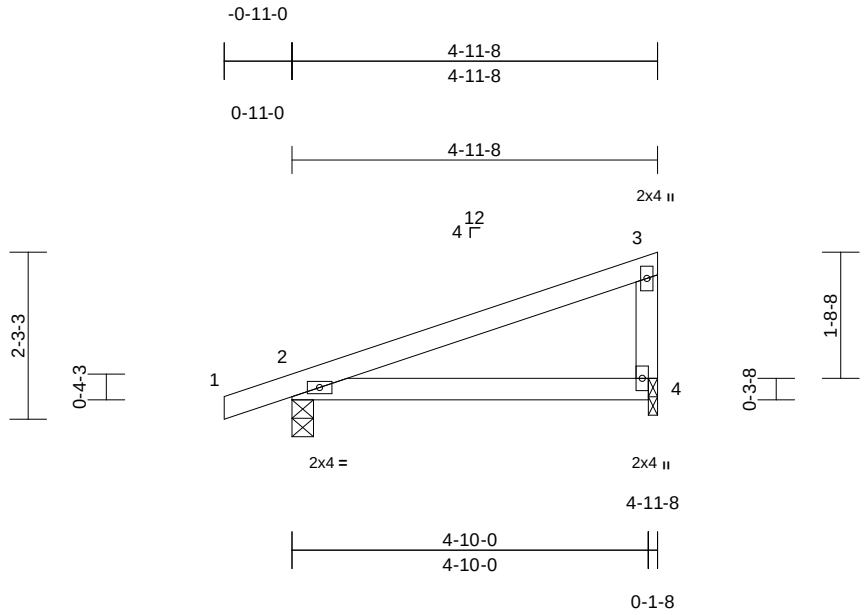

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	-0.02	4-7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.05	4-7	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP		Wind(LL)	0.04	4-7	>999	240	Weight: 19 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-11-8 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=105 (LC 8)
Max Uplift 2=-111 (LC 8), 4=-79 (LC 12)
Max Grav 2=253 (LC 1), 4=187 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-3=-81/32, 3-4=-124/140
BOT CHORD 2-4=-65/98

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.
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 111 lb uplift at joint 2 and 79 lb uplift at joint 4.

LOAD CASE(S) Standard

April 30,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Maplewood Prime A (12-26-24)
4619346	C04	Monopitch Supported Gable	1	1	I73109390 Job Reference (optional)

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

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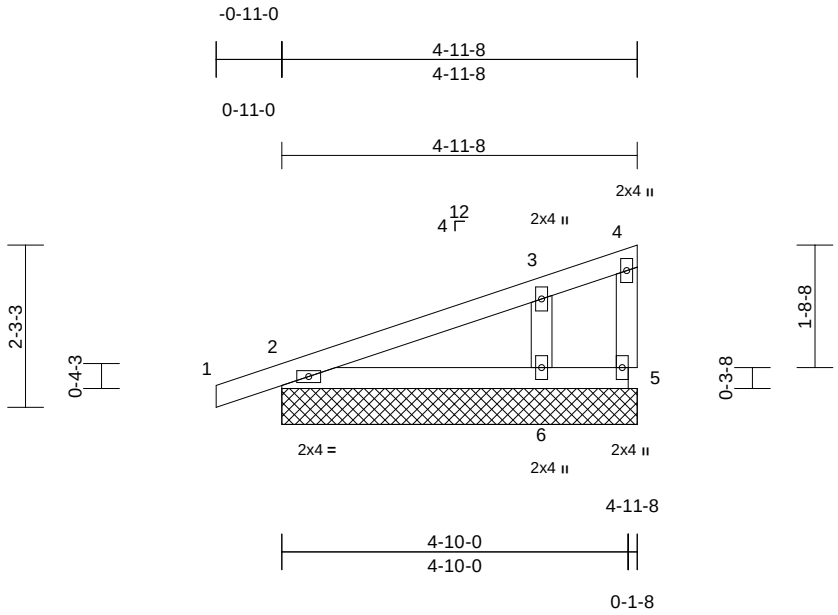

Scale = 1:32.2

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 20 lb	FT = 20%

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

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

REACTIONS (size) 2=4-11-8, 5=4-11-8, 6=4-11-8
Max Horiz 2=105 (LC 8)
Max Uplift 2=-83 (LC 8), 5=-29 (LC 1), 6=-121 (LC 12)
Max Grav 2=182 (LC 1), 5=12 (LC 12), 6=287 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-3=-82/43, 3-4=-26/1, 4-5=-3/13
BOT CHORD 2-6=-31/59, 5-6=0/0
WEBS 3-6=-189/215

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) 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 83 lb uplift at joint 2, 29 lb uplift at joint 5, 121 lb uplift at joint 6 and 83 lb uplift at joint 2.

LOAD CASE(S) Standard

April 30,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Maplewood Prime A (12-26-24)
4619346	V01	Valley	1	1	I73109391 Job Reference (optional)

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 12:38:17 Page: 1
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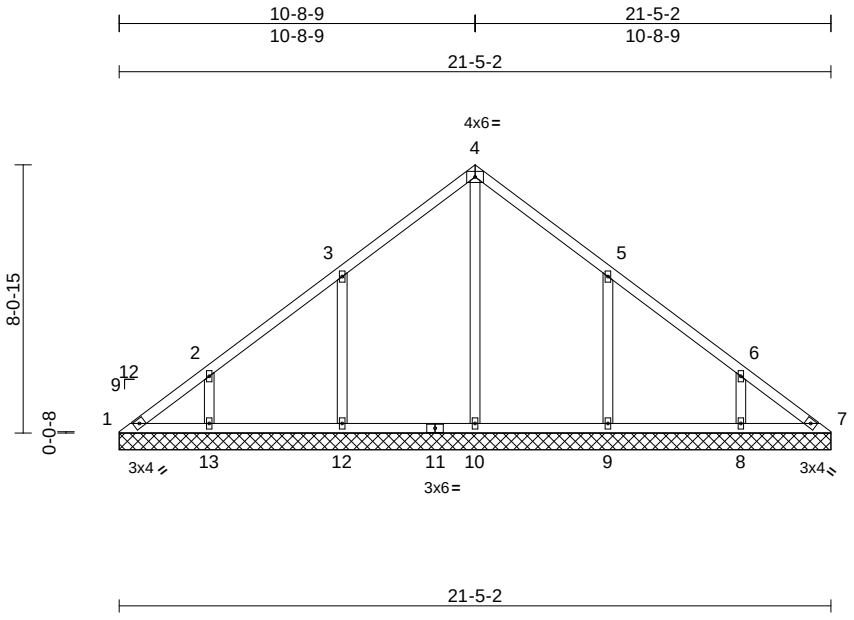

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.25	Horiz(TL)	0.01	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 99 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=21-5-2, 7=21-5-2, 8=21-5-2, 9=21-5-2, 10=21-5-2, 12=21-5-2, 13=21-5-2
Max Horiz 1=-263 (LC 8)
Max Uplift 1=-67 (LC 8), 7=-5 (LC 9), 8=-181 (LC 13), 9=-259 (LC 13), 12=-258 (LC 12), 13=-186 (LC 12)
Max Grav 1=151 (LC 20), 7=106 (LC 22), 8=319 (LC 20), 9=457 (LC 20), 10=432 (LC 22), 12=457 (LC 19), 13=325 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-248/214, 2-3=-183/161, 3-4=-214/237, 4-5=-214/227, 5-6=-115/82, 6-7=-187/128
BOT CHORD 1-13=-118/190, 12-13=-118/190, 10-12=-118/190, 9-10=-118/190, 8-9=-118/190, 7-8=-118/190
WEBS 4-10=-216/7, 3-12=-364/307, 2-13=-286/228, 5-9=-364/307, 6-8=-286/226

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 (||) MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 67 lb uplift at joint 1, 5 lb uplift at joint 7, 258 lb uplift at joint 12, 186 lb uplift at joint 13, 259 lb uplift at joint 9 and 181 lb uplift at joint 8.

LOAD CASE(S) Standard

April 30,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Maplewood Prime A (12-26-24)
4619346	V02	Valley	1	1	I73109392 Job Reference (optional)

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

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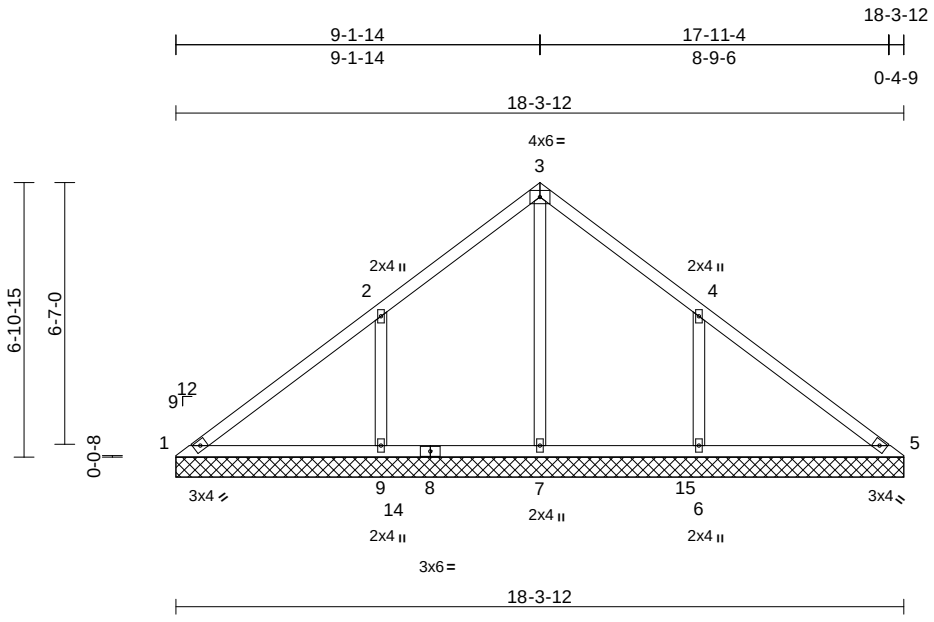

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.23	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.31	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 79 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS (size) 1=18-3-12, 5=18-3-12, 6=18-3-12, 7=18-3-12, 9=18-3-12
Max Horiz 1=-225 (LC 8)
Max Uplift 1=-30 (LC 8), 6=-309 (LC 13), 9=-313 (LC 12)
Max Grav 1=116 (LC 20), 5=103 (LC 24), 6=550 (LC 20), 7=532 (LC 19), 9=554 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-215/318, 2-3=-25/218, 3-4=0/205, 4-5=-157/270
BOT CHORD 1-9=-264/214, 7-9=-264/214, 6-7=-264/214, 5-6=-264/214
WEBS 3-7=-368/39, 2-9=-417/334, 4-6=-417/333

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 1, 313 lb uplift at joint 9 and 309 lb uplift at joint 6.

LOAD CASE(S) Standard

April 30,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Maplewood Prime A (12-26-24)
4619346	V03	Valley	1	1	I73109393 Job Reference (optional)

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

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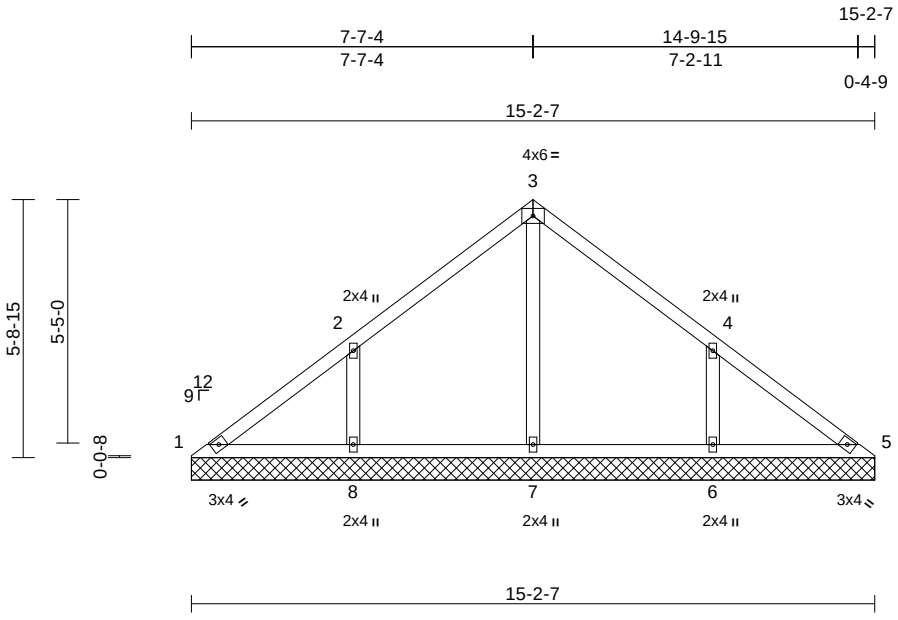

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.14	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 10-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 1=15-2-7, 5=15-2-7, 6=15-2-7, 7=15-2-7, 8=15-2-7
Max Horiz 1=-186 (LC 8)
Max Uplift 1=-33 (LC 8), 6=-249 (LC 13), 8=-252 (LC 12)
Max Grav 1=125 (LC 20), 5=96 (LC 24), 6=406 (LC 20), 7=317 (LC 1), 8=410 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-160/183, 2-3=-93/149, 3-4=-93/128, 4-5=-115/131
BOT CHORD 1-8=-119/149, 7-8=-119/138, 6-7=-119/138, 5-6=-119/138
WEBS 3-7=-245/20, 2-8=-349/282, 4-6=-349/281

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 33 lb uplift at joint 1, 252 lb uplift at joint 8 and 249 lb uplift at joint 6.

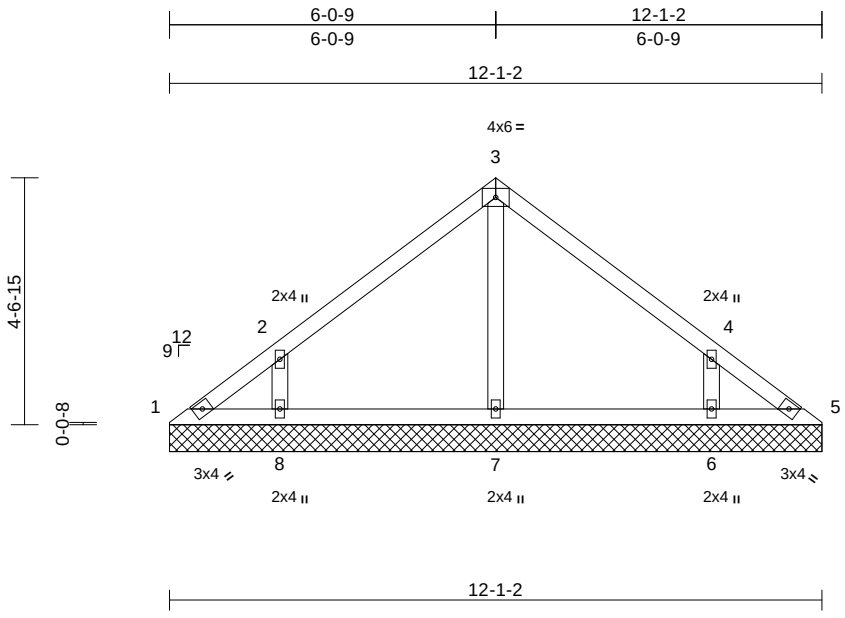
LOAD CASE(S) Standard

April 30,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Maplewood Prime A (12-26-24)
4619346	V04	Valley	1	1	I73109394 Job Reference (optional)

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 12:38:18 Page: 1
ID:LiGsX4nzpSZ6ipplxemopIzmvJ3-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:42.7

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	0.18	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	0.08	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=12-1-2, 5=12-1-2, 6=12-1-2, 7=12-1-2, 8=12-1-2
Max Horiz 1=-147 (LC 8)
Max Uplift 1=-45 (LC 8), 5=-9 (LC 9), 6=-209 (LC 13), 8=-213 (LC 12)
Max Grav 1=97 (LC 20), 5=69 (LC 19), 6=342 (LC 20), 7=253 (LC 1), 8=347 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-140/127, 2-3=-146/139, 3-4=-146/132, 4-5=-98/74
BOT CHORD 1-8=-46/85, 7-8=-42/85, 6-7=-42/85, 5-6=-42/85
WEBS 3-7=-167/20, 2-8=-332/276, 4-6=-332/274

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 45 lb uplift at joint 1, 9 lb uplift at joint 5, 213 lb uplift at joint 8 and 209 lb uplift at joint 6.

LOAD CASE(S) Standard

April 30,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Maplewood Prime A (12-26-24)
4619346	V05	Valley	1	1	I73109395 Job Reference (optional)

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

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 12:38:18 Page: 1
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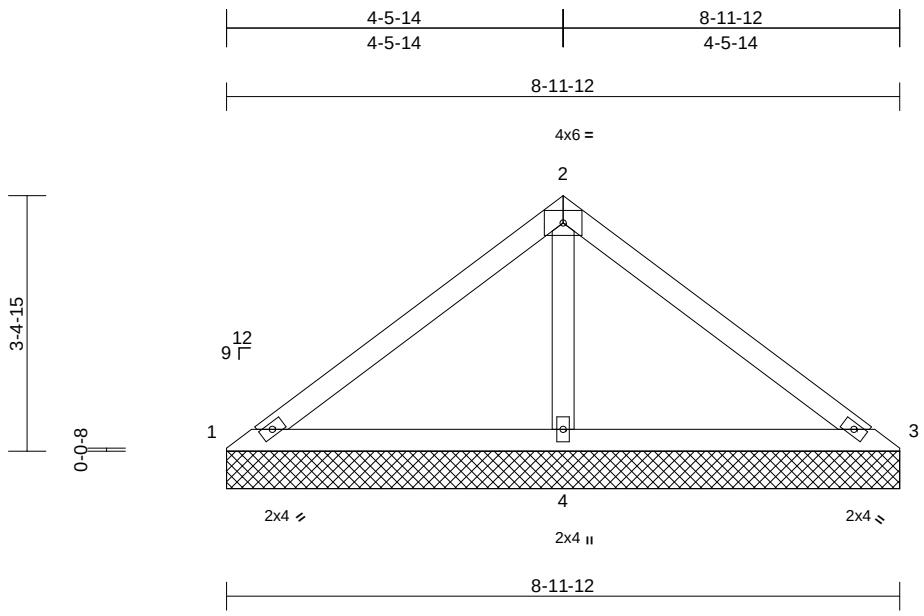

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.12	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 8-11-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 1=8-11-12, 3=8-11-12, 4=8-11-12
Max Horiz 1=-108 (LC 10)
Max Uplift 1=-13 (LC 24), 3=-20 (LC 8), 4=-194 (LC 12)
Max Grav 1=76 (LC 23), 3=76 (LC 24), 4=633 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-112/271, 2-3=-112/264
BOT CHORD 1-4=-257/178, 3-4=-257/178
WEBS 2-4=-523/277

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) 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 13 lb uplift at joint 1, 20 lb uplift at joint 3 and 194 lb uplift at joint 4.

LOAD CASE(S) Standard

April 30,2025

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

Job	Truss	Truss Type	Qty	Ply	JSJ, Maplewood Prime A (12-26-24)
4619346	V06	Valley	1	1	I73109396 Job Reference (optional)

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Tue Apr 29 12:38:18 Page: 1
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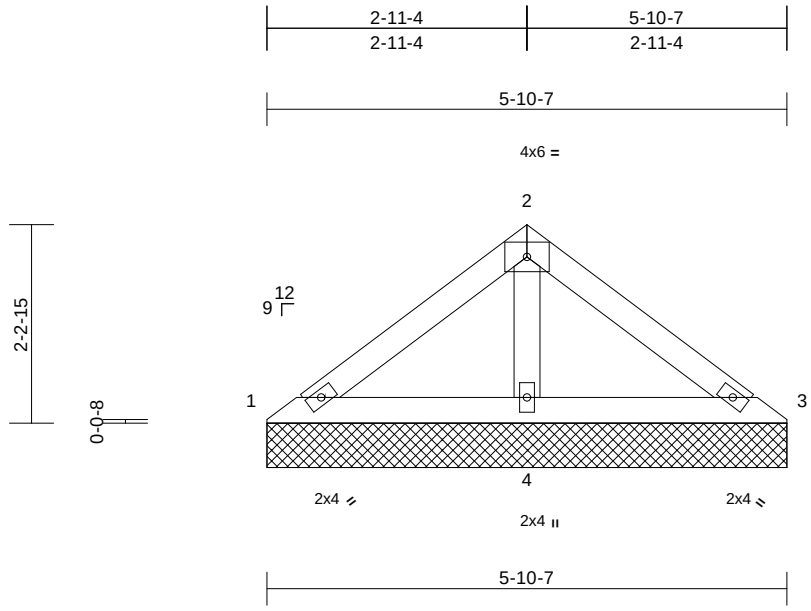

Scale = 1:26

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.11	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 5-10-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 1=5-10-7, 3=5-10-7, 4=5-10-7
Max Horiz 1=69 (LC 9)
Max Uplift 1=-5 (LC 12), 3=-18 (LC 13), 4=-105 (LC 12)
Max Grav 1=67 (LC 23), 3=67 (LC 24), 4=367 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-61/135, 2-3=-61/127
BOT CHORD 1-4=-143/109, 3-4=-143/109
WEBS 2-4=-257/135

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 5 lb uplift at joint 1, 18 lb uplift at joint 3 and 105 lb uplift at joint 4.

LOAD CASE(S) Standard

April 30,2025

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	JSJ, Maplewood Prime A (12-26-24)
4619346	V07	Valley	1	1	I73109397 Job Reference (optional)

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

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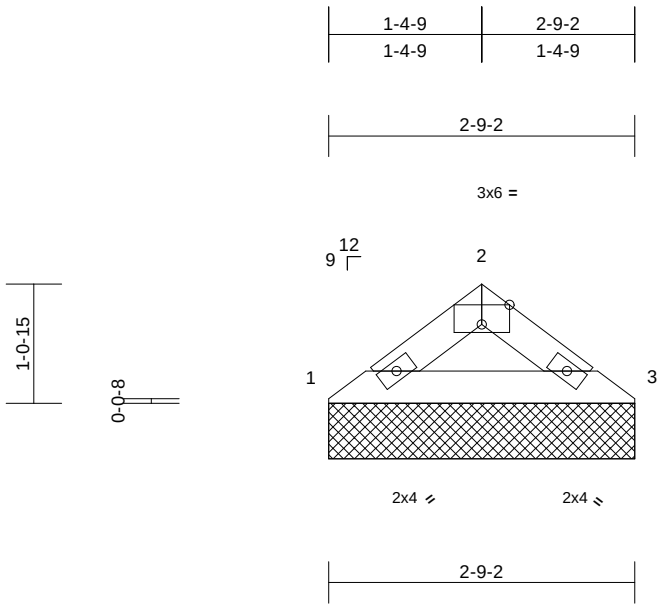

Scale = 1:20.8

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 8 lb	FT = 20%

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

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

REACTIONS (size) 1=2-9-2, 3=2-9-2
Max Horiz 1=-30 (LC 10)
Max Uplift 1=-28 (LC 12), 3=-28 (LC 13)
Max Grav 1=110 (LC 1), 3=110 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-146/58, 2-3=-146/58
BOT CHORD 1-3=-34/118

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 2-0-0 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 28 lb uplift at joint 1 and 28 lb uplift at joint 3.

LOAD CASE(S) Standard

April 30,2025

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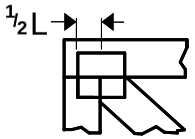
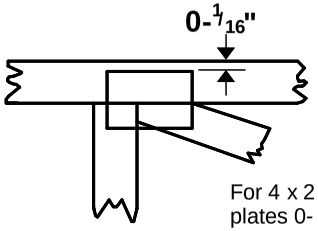
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

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.

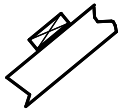
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

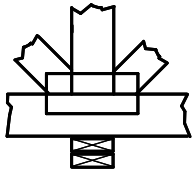
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

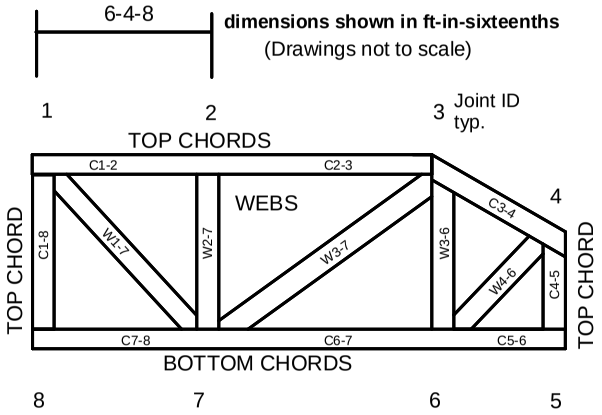


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

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.