ENGINEERING BY TRENCO
A MiTek Affiliate

Lumber design values are in accordance with ANSI/TPI 1-2007 section 6.3
These truss designs rely on lumber values established by others.

RE: 3876658 - Furr, Mayview B

Trenco
818 Soundside Rd
Edenton, NC 27932

Site Information:

Project Customer: Furr Construction Project Name:
Lot/Block: 5 Subdivision: SHADY GROVE CHURCH RD
Address:
City: 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):

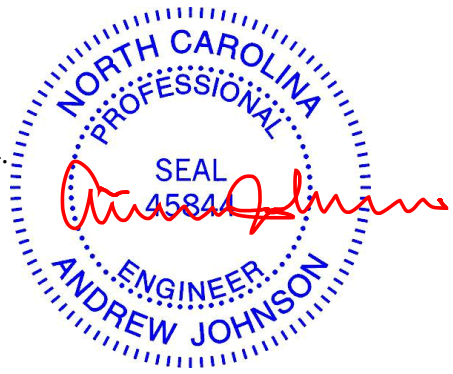
Design Code: IRC2015/TPI2014 Design Program: MiTek 20/20 8.6
Wind Code: ASCE 7-10 Design Method: MWFRS (Envelope)/C-C hybrid Wind ASCE 7-10
Wind Speed: 130 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 30 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Job ID#	Truss Name	Date	No.	Seal#	Job ID#	Truss Name	Date
1	I63762456	3876658	A01	2/21/24		I63762479	3876658	V01	2/21/24
2	I63762457	3876658	A02	2/21/24	25	I63762480	3876658	V02	2/21/24
3	I63762458	3876658	A03	2/21/24	26	I63762481	3876658	V03	2/21/24
4	I63762459	3876658	A04	2/21/24	27	I63762482	3876658	V04	2/21/24
5	I63762460	3876658		2/21/24	28	I63762483	3876658	V05	2/21/24
6	I63762461	3876658	A06	2/21/24	29	I63762484	3876658	V06	2/21/24
7	I63762462	3876658	A07	2/21/24	30	I63762485	3876658	V07	2/21/24
8	I63762463	3876658	A08	2/21/24					
9	I63762464	3876658	A09	2/21/24					
10	I63762465	3876658	B01	2/21/24					
11	I63762466	3876658	B02	2/21/24					
12	I63762467	3876658	B03	2/21/24					
13	I63762468	3876658	D01	2/21/24					
14	I63762469	3876658		2/21/24					
	I63762470	3876658	D03	2/21/24					
16	I63762471	3876658	D04	2/21/24					
17	I63762472	3876658		2/21/24					
18	I63762473	3876658	E02	2/21/24					
19	I63762474	3876658	E03	2/21/24					
20	I63762475	3876658	G01	2/21/24					
21	I63762476	3876658	G02	2/21/24					
22	I63762477	3876658	G03	2/21/24					
23	I63762478	3876658	PB01	2/21/24					

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: Johnson, Andrew
My license renewal date for the state of North Carolina is December 31, 2024.



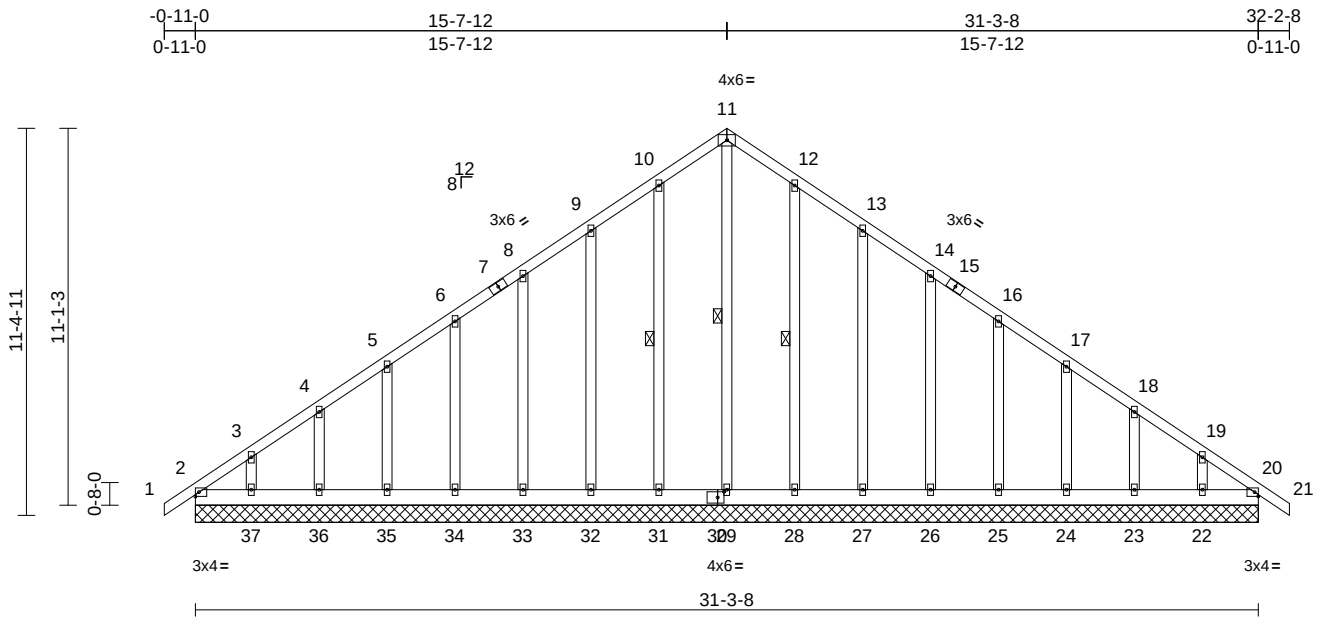
February 21,2024

Johnson, Andrew

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.

Job	Truss	Truss Type	Qty	Ply	Furr, Mayview B
3876658	A01	Common Supported Gable	1	1	I63762456
					Job Reference (optional)

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Feb 21 08:14:37 Page: 1
ID:UoIyNl2sxuK2di9HW2fTBezPn2N-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:67.8

Plate Offsets (X, Y): [30:0-2-4,0-2-0]

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	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.01	20	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 253 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.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 11-29, 10-31, 12-28

REACTIONS (size) 2=31-3-8, 20=31-3-8, 22=31-3-8, 23=31-3-8, 24=31-3-8, 25=31-3-8, 26=31-3-8, 27=31-3-8, 28=31-3-8, 29=31-3-8, 31=31-3-8, 32=31-3-8, 33=31-3-8, 34=31-3-8, 35=31-3-8, 36=31-3-8, 37=31-3-8, 38=31-3-8
Max Horiz 2=368 (LC 11), 38=368 (LC 11)
Max Uplift 2=-174 (LC 8), 23=-225 (LC 13), 24=-70 (LC 13), 25=-111 (LC 13), 26=-99 (LC 13), 27=-112 (LC 13), 28=-86 (LC 13), 29=-12 (LC 11), 31=-94 (LC 12), 32=-109 (LC 12), 33=-102 (LC 12), 34=-102 (LC 12), 35=-106 (LC 12), 36=-91 (LC 12), 37=-162 (LC 12), 38=-174 (LC 8)
Max Grav 2=231 (LC 9), 22=315 (LC 1), 23=162 (LC 11), 24=190 (LC 20), 25=178 (LC 20), 26=181 (LC 20), 27=180 (LC 20), 28=188 (LC 20), 29=366 (LC 13), 31=196 (LC 19), 32=177 (LC 19), 33=181 (LC 19), 34=180 (LC 19), 35=183 (LC 19), 36=174 (LC 19), 37=216 (LC 19), 38=231 (LC 9)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/31, 2-3=-346/334, 3-4=-300/303, 4-5=-253/273, 5-6=-207/252, 6-8=-184/255, 8-9=-202/302, 9-10=-272/353, 10-11=-330/389, 11-12=-330/380, 12-13=-272/311, 13-14=-202/227, 14-16=-138/150, 16-17=-71/106, 17-18=-49/117, 18-19=-144/137, 19-20=-202/184, 20-21=0/31
BOT CHORD 2-37=-272/277, 36-37=-187/229, 35-36=-187/229, 34-35=-187/229, 33-34=-187/229, 32-33=-187/229, 31-32=-187/229, 29-31=-187/229, 28-29=-187/229, 27-28=-187/229, 26-27=-187/229, 25-26=-187/229, 24-25=-187/229, 23-24=-187/229, 22-23=-187/229, 20-22=-187/229
WEBS 11-29=-342/223, 10-31=-156/118, 9-32=-165/133, 8-33=-157/125, 6-34=-158/127, 5-35=-158/126, 4-36=-161/127, 3-37=-154/126, 12-28=-148/110, 13-27=-165/136, 14-26=-157/125, 16-25=-159/128, 17-24=-157/121, 18-23=-175/150, 19-22=-143/93

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) -0-11-0 to 2-1-0, Exterior (2) 2-1-0 to 15-7-12, Corner (3) 15-7-12 to 18-7-12, Exterior (2) 18-7-12 to 32-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.

NORTH CAROLINA PROFESSIONAL SEAL 45844 ENGINEER ANDREW JOHNSON

February 21,2024

Continued on page 2

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

10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 174 lb uplift at joint 2, 12 lb uplift at joint 29, 94 lb uplift at joint 31, 109 lb uplift at joint 32, 102 lb uplift at joint 33, 102 lb uplift at joint 34, 106 lb uplift at joint 35, 91 lb uplift at joint 36, 162 lb uplift at joint 37, 86 lb uplift at joint 28, 112 lb uplift at joint 27, 99 lb uplift at joint 26, 111 lb uplift at joint 25, 70 lb uplift at joint 24, 225 lb uplift at joint 23 and 174 lb uplift at joint 2.
11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Furr, Mayview B	
3876658	A02	Common	1	1	Job Reference (optional)	I63762457

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Feb 21 08:14:43 Page: 1
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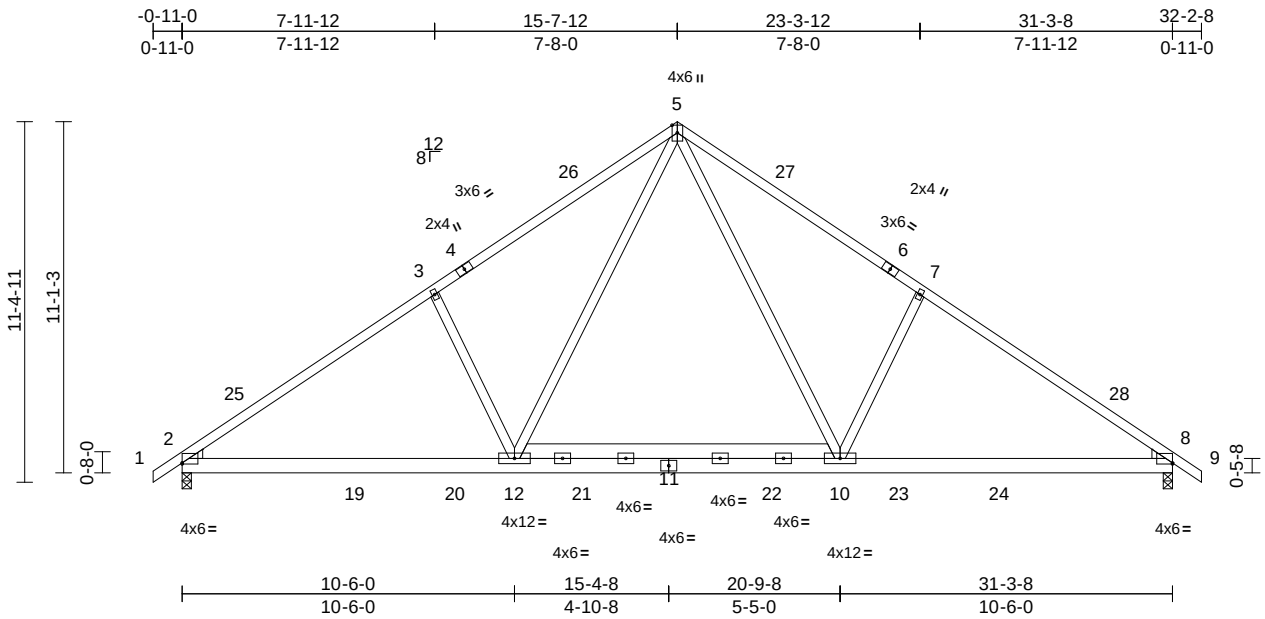


Scale = 1:72.8

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.93	Vert(LL)	-0.10	10-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.17	10-12	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.91	Horz(CT)	0.03	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.08	12-15	>999	240	Weight: 209 lb	FT = 20%

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

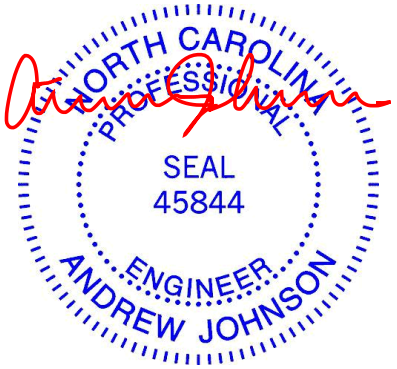
BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 8=0-3-8
Max Horiz 2=-368 (LC 10)
Max Uplift 2=-341 (LC 12), 8=-341 (LC 13)
Max Grav 2=1411 (LC 19), 8=1411 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/31, 2-3=-1913/456, 3-5=-1775/573, 5-7=-1774/572, 7-8=-1912/456, 8-9=0/31
BOT CHORD 2-12=-452/1745, 10-12=-109/1123, 8-10=-233/1495
WEBS 3-12=-556/452, 5-12=-337/943, 5-10=-337/942, 7-10=-556/452

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-11-0 to 2-1-0, Interior (1) 2-1-0 to 15-7-12, Exterior (2) 15-7-12 to 18-7-12, Interior (1) 18-7-12 to 32-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 4x6 MT20 unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 341 lb uplift at joint 2 and 341 lb uplift at joint 8.
8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



February 21,2024

ENGINEERING BY TRENCO
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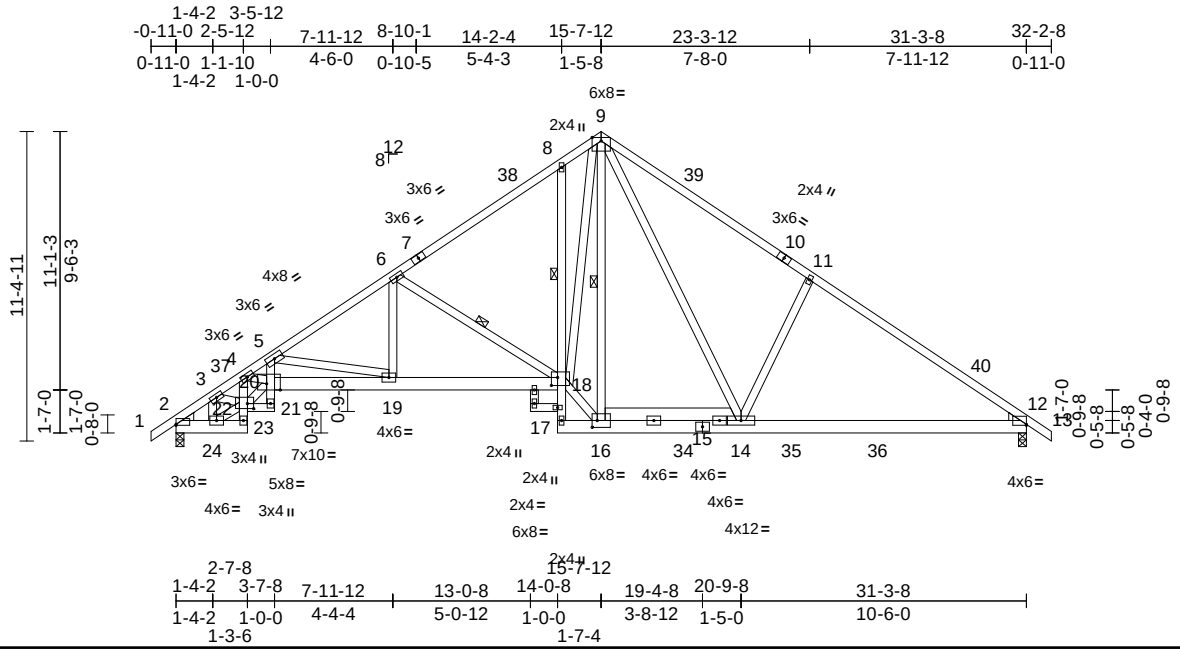
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Furr, Mayview B
3876658	A03	Roof Special	3	1	I63762458 Job Reference (optional)

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Feb 21 08:14:44 Page: 1

ID:hCvXAqsut4BMaHYkcJRn1BzPn6U-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:84.8

Plate Offsets (X, Y): [2:Edge,0-0-6], [12:Edge,0-0-6], [16:0-2-4,0-3-0], [18:0-2-12,0-3-8], [20:0-6-0,Edge], [22:0-2-12,0-2-4]

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	0.88	Vert(LL)	-0.15	19-20	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.31	19-20	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.99	Horz(CT)	0.23	12	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.20	19-20	>999	240	Weight: 252 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 2-23,20-18,17-15,15-12,16-14:2x6 SP No.2
WEBS 2x4 SP No.3 *Except* 22-20:2x4 SP No.2
WEDGE Left: 2x4 SP No.3
Right: 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
2-2-0 oc bracing: 19-20
9-10-6 oc bracing: 18-19.
1 Row at midpt 8-18
6-0-0 oc bracing: 17-18
WEBS 1 Row at midpt 9-16, 6-18

REACTIONS (size) 2=0-3-8, 12=0-3-8
Max Horiz 2=-368 (LC 10)
Max Uplift 2=-341 (LC 12), 12=-341 (LC 13)
Max Grav 2=1307 (LC 1), 12=1350 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/31, 2-3=-1561/367, 3-4=-2758/773, 4-5=-5127/1494, 5-6=-2405/640, 6-8=-1606/458, 8-9=-1654/595, 9-11=-1749/573, 11-12=-1795/457, 12-13=0/31

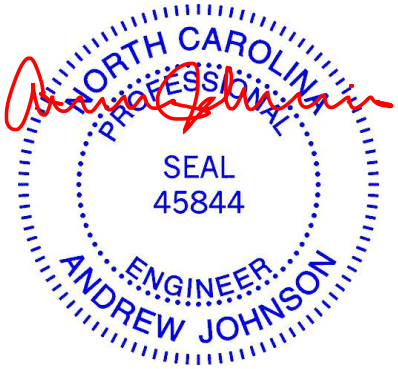
BOT CHORD 2-24=-489/1449, 23-24=-109/348, 22-23=-57/229, 4-22=-1748/527, 21-22=-167/523, 20-21=-61/219, 5-20=-565/1930, 19-20=-1414/4603, 18-19=-559/2206, 17-18=-343/76, 8-18=-250/265, 16-17=-35/94, 14-16=-115/1097, 12-14=-235/1400

WEBS 9-16=-550/4, 6-19=-107/647, 9-14=-356/786, 3-24=-1185/390, 22-24=-449/1299, 3-22=-320/1149, 5-19=-2455/875, 6-18=-997/442, 11-14=-562/450, 4-20=-587/1978, 20-22=-891/2887, 16-18=-103/1486, 9-18=-472/1591

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-11-0 to 2-1-0, Interior (1) 2-1-0 to 15-7-12, Exterior (2) 15-7-12 to 18-7-12, Interior (1) 18-7-12 to 32-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 341 lb uplift at joint 2 and 341 lb uplift at joint 12.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



February 21,2024

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Furr, Mayview B
3876658	A04	Roof Special	2	1	I63762459
					Job Reference (optional)

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Feb 21 08:14:45 Page: 1

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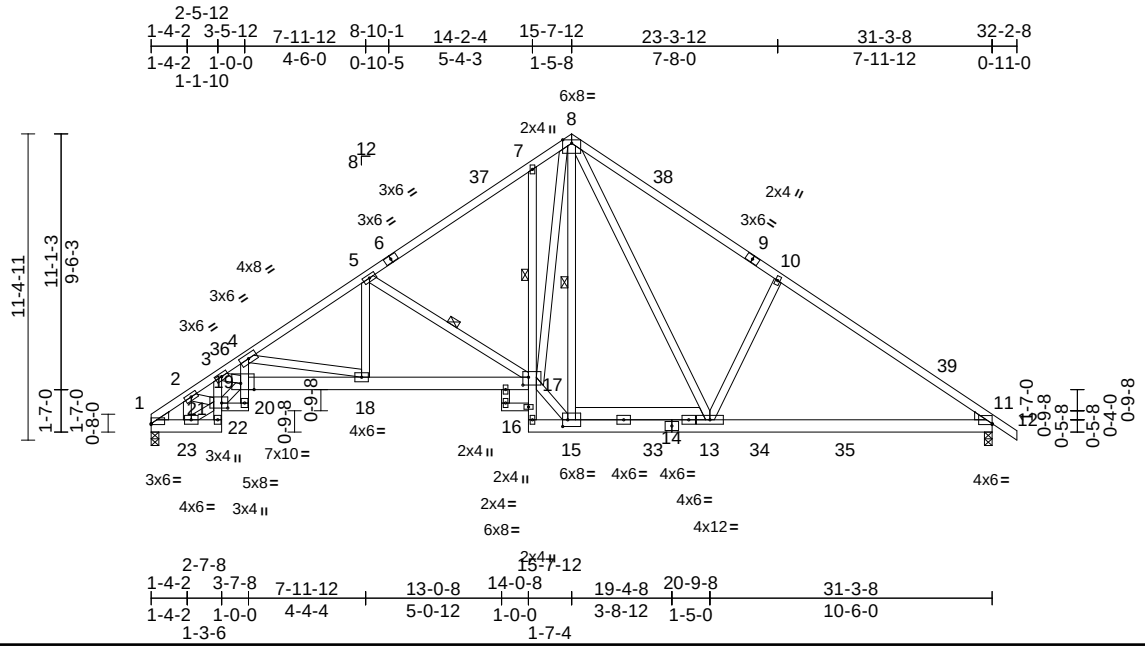

Scale = 1:85.7

Plate Offsets (X, Y): [1:Edge,0-0-6], [11:Edge,0-0-6], [15:0-2-4,0-3-0], [17:0-2-8,0-3-8], [19:0-6-0,Edge], [21:0-2-12,0-2-4]

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	0.88	Vert(LL)	-0.16	18-19	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.31	18-19	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.23	11	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.20	18-19	>999	240	Weight: 250 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 1-22,19-17,16-14,14-11,15-13:2x6 SP No.2
WEBS 2x4 SP No.3 *Except* 21-19:2x4 SP No.2
WEDGE Left: 2x4 SP No.3
Right: 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
2-2-0 oc bracing: 18-19
9-10-1 oc bracing: 17-18.
1 Row at midpt 7-17
6-0-0 oc bracing: 16-17
WEBS 1 Row at midpt 8-15, 5-17

REACTIONS (size) 1=0-3-8, 11=0-3-8
Max Horiz 1=-362 (LC 8)
Max Uplift 1=-311 (LC 12), 11=-341 (LC 13)
Max Grav 1=1251 (LC 1), 11=1350 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-1554/382, 2-3=-2779/786, 3-4=-5153/1510, 4-5=-2410/643, 5-7=-1608/462, 7-8=-1656/596, 8-10=-1750/573, 10-11=-1795/458, 11-12=0/31
BOT CHORD 1-23=-503/1472, 22-23=-111/351, 21-22=-57/229, 3-21=-1750/528, 20-21=-169/526, 19-20=-62/220, 4-19=-574/1945, 18-19=-1428/4625, 17-18=-562/2211, 16-17=-343/76, 7-17=-250/265, 15-16=-35/94, 13-15=-116/1098, 11-13=-235/1401
WEBS 8-15=-550/4, 5-18=-110/651, 8-13=-356/786, 2-23=-1186/391, 21-23=-462/1321, 2-21=-316/1142, 4-18=-2472/886, 5-17=-1001/444, 10-13=-562/450, 3-19=-590/1983, 19-21=-904/2907, 15-17=-104/1488, 8-17=-473/1593

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 15-7-12, Exterior (2) 15-7-12 to 18-7-12, Interior (1) 18-7-12 to 32-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 311 lb uplift at joint 1 and 341 lb uplift at joint 11.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

February 21,2024

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

Job	Truss	Truss Type	Qty	Ply	Furr, Mayview B	
3876658	A05	Common	1	1	Job Reference (optional)	I63762460

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Feb 21 08:14:47 Page: 1
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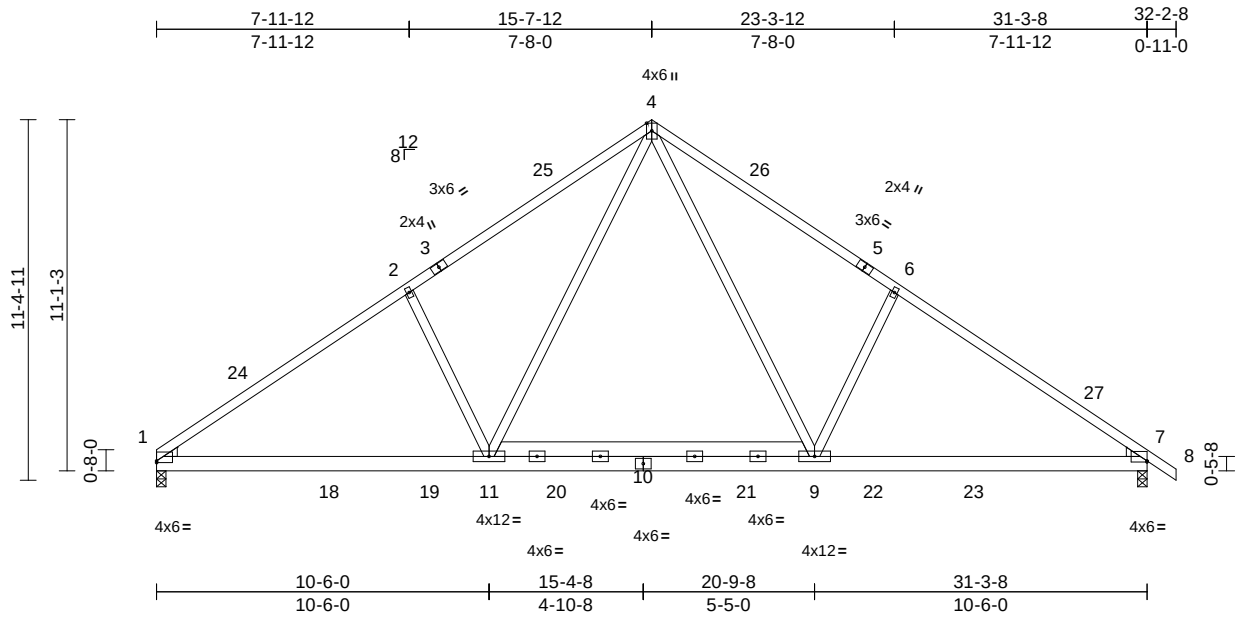

Scale = 1:72.8

Plate Offsets (X, Y): [1:Edge,0-0-10], [7:Edge,0-0-6]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.93	Vert(LL)	-0.10	9-11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.17	9-11	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.08	11-14	>999	240	Weight: 207 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
WEDGE Left: 2x4 SP No.3
Right: 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=0-3-8, 7=0-3-8
Max Horiz 1=-362 (LC 10)
Max Uplift 1=-311 (LC 12), 7=-341 (LC 13)
Max Grav 1=1357 (LC 19), 7=1411 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1918/465, 2-4=-1780/575, 4-6=-1775/572, 6-7=-1913/457, 7-8=0/31
BOT CHORD 1-11=-446/1748, 9-11=-110/1125, 7-9=-233/1496
WEBS 2-11=-555/452, 4-11=-340/948, 4-9=-337/942, 6-9=-556/452

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 15-7-12, Exterior (2) 15-7-12 to 18-7-12, Interior (1) 18-7-12 to 32-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 4x6 MT20 unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 311 lb uplift at joint 1 and 341 lb uplift at joint 7.
8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

NORTH CAROLINA PROFESSIONAL SEAL 45844 ENGINEER ANDREW JOHNSON

February 21,2024

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

Job	Truss	Truss Type	Qty	Ply	Furr, Mayview B	
3876658	A06	Common	2	1	Job Reference (optional)	I63762461

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

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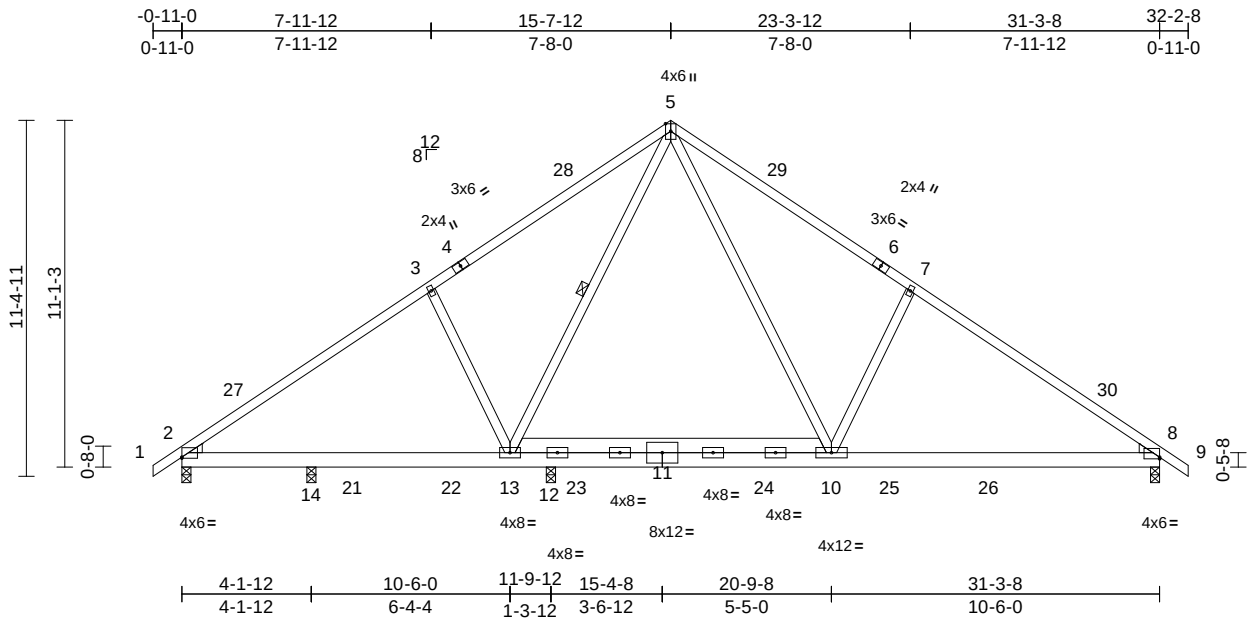


Scale = 1:73.7

Plate Offsets (X, Y): [2:Edge,0-0-6], [8:Edge,0-0-10]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.81	Vert(LL)	-0.08	10-20	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.17	10-20	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.87	Horz(CT)	0.01	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.09	10-20	>999	240	Weight: 209 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied or 4-1-11 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 5-13

REACTIONS (size) 2=0-3-8, 8=0-3-8, 12=0-3-8, 14=0-3-8
Max Horiz 2=368 (LC 11)
Max Uplift 2=-150 (LC 12), 8=-294 (LC 13), 12=-223 (LC 12), 14=-59 (LC 12)
Max Grav 2=532 (LC 1), 8=1008 (LC 20), 12=1091 (LC 19), 14=322 (LC 19)

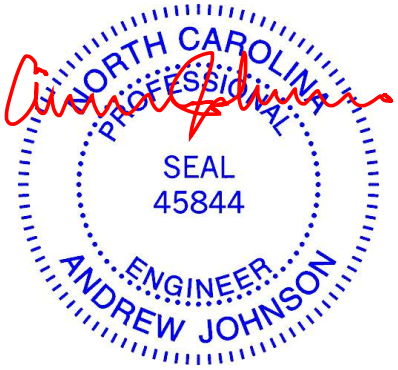
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/31, 2-3=-637/313, 3-5=-570/346, 5-7=-1094/489, 7-8=-1209/369, 8-9=0/31
BOT CHORD	2-14=-419/573, 13-14=-207/573, 12-13=-27/642, 10-12=-15/506, 8-10=-219/886
WEBS	3-13=-553/452, 5-13=-481/58, 5-10=-321/865, 7-10=-564/453

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-11-0 to 2-1-0, Interior (1) 2-1-0 to 15-7-12, Exterior (2) 15-7-12 to 18-7-12, Interior (1) 18-7-12 to 32-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 150 lb uplift at joint 2, 294 lb uplift at joint 8, 59 lb uplift at joint 14 and 223 lb uplift at joint 12.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



February 21,2024

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

Job	Truss	Truss Type	Qty	Ply	Furr, Mayview B	
3876658	A07	Common	2	1	Job Reference (optional)	I63762462

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

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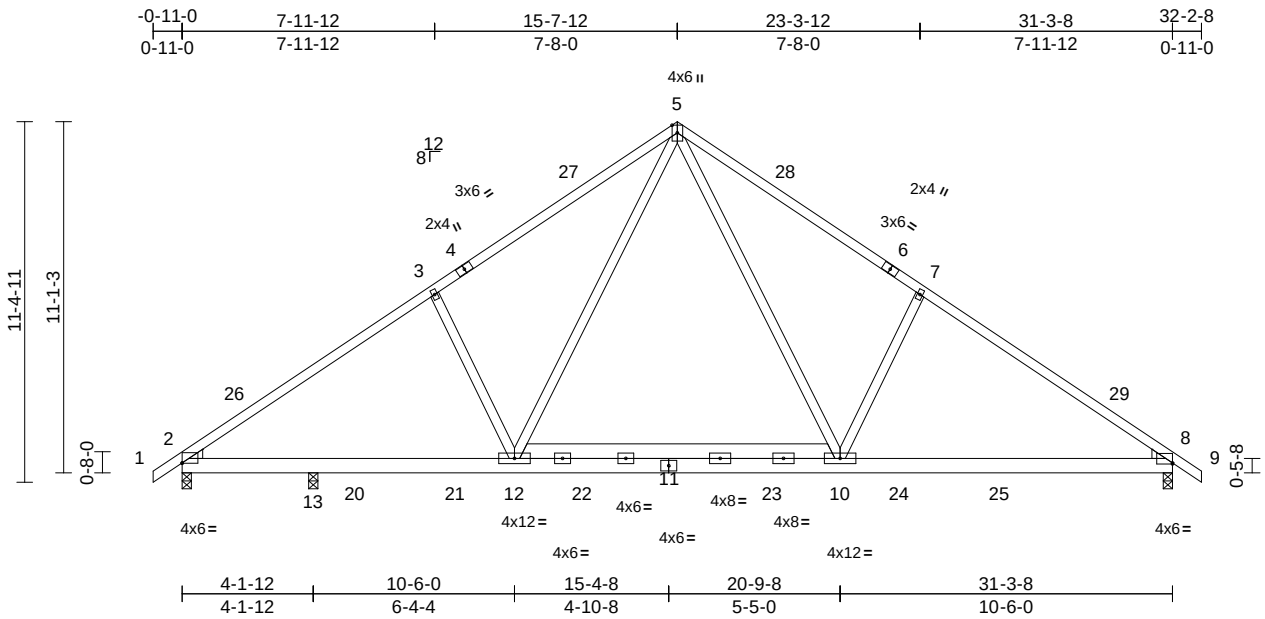

Scale = 1:72.8

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.90	Vert(LL)	-0.11	10-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.19	10-12	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.03	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.08	10-12	>999	240	Weight: 209 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
WEDGE Left: 2x4 SP No.3
Right: 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) 2=0-3-8, 8=0-3-8, 13=0-3-8
Max Horiz 2=-368 (LC 10)
Max Uplift 2=-305 (LC 12), 8=-343 (LC 13), 13=-42 (LC 12)
Max Grav 2=1203 (LC 19), 8=1387 (LC 20), 13=240 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/31, 2-3=-1752/446, 3-5=-1612/547, 5-7=-1736/575, 7-8=-1875/455, 8-9=0/31
BOT CHORD 2-13=-457/1604, 12-13=-419/1604, 10-12=-98/1064, 8-10=-233/1453
WEBS 3-12=-543/450, 5-12=-307/769, 5-10=-335/972, 7-10=-555/452

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-11-0 to 2-1-0, Interior (1) 2-1-0 to 15-7-12, Exterior (2) 15-7-12 to 18-7-12, Interior (1) 18-7-12 to 32-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 305 lb uplift at joint 2, 343 lb uplift at joint 8 and 42 lb uplift at joint 13.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

February 21,2024

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

Job	Truss	Truss Type	Qty	Ply	Furr, Mayview B	
3876658	A08	Common	8	1	Job Reference (optional)	I63762463

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Feb 21 08:14:48 Page: 1
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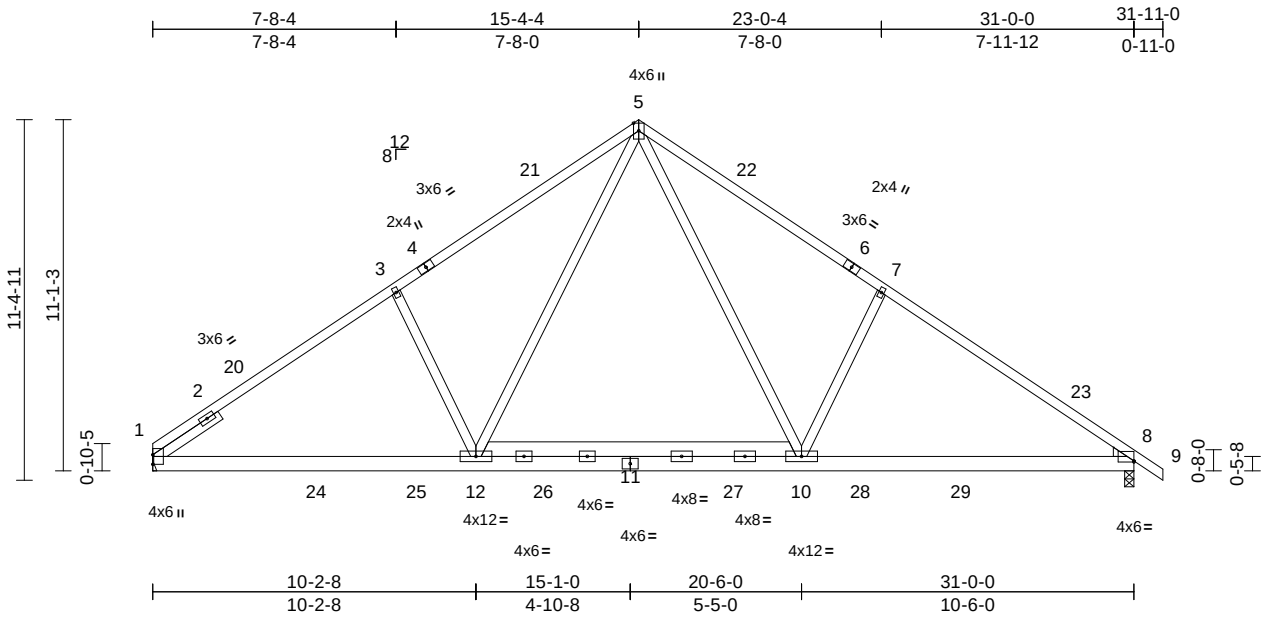


Scale = 1:72.8

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.98	Vert(LL)	-0.10	10-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.17	10-12	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.91	Horz(CT)	0.03	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.08	10-19	>999	240	Weight: 209 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
WEDGE Right: 2x4 SP No.3
SLIDER Left 2x4 SP No.2 -- 2-6-0

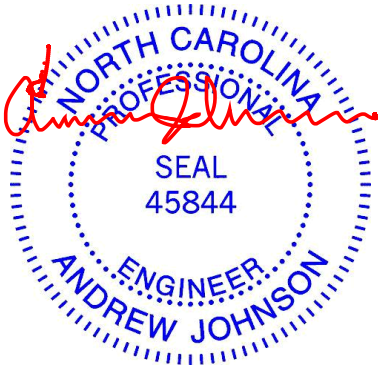
BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1= Mechanical, 8=0-3-8
Max Horiz 1=-361 (LC 8)
Max Uplift 1=-306 (LC 12), 8=-339 (LC 13)
Max Grav 1=1345 (LC 19), 8=1400 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-1774/457, 3-5=-1716/562, 5-7=-1755/568, 7-8=-1894/452, 8-9=0/31
BOT CHORD 1-12=-429/1685, 10-12=-106/1104, 8-10=-232/1479
WEBS 3-12=-520/434, 5-12=-327/882, 5-10=-336/950, 7-10=-554/452

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-3-8 to 3-3-8, Interior (1) 3-3-8 to 15-7-12, Exterior (2) 15-7-12 to 18-7-12, Interior (1) 18-7-12 to 32-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Bearings are assumed to be: , Joint 8 SP No.2 crushing capacity of 565 psi.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 306 lb uplift at joint 1 and 339 lb uplift at joint 8.
8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



February 21,2024

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

Job	Truss	Truss Type	Qty	Ply	Furr, Mayview B
3876658	A09	Common Supported Gable	1	1	I63762464 Job Reference (optional)

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Feb 21 08:14:48 Page: 1
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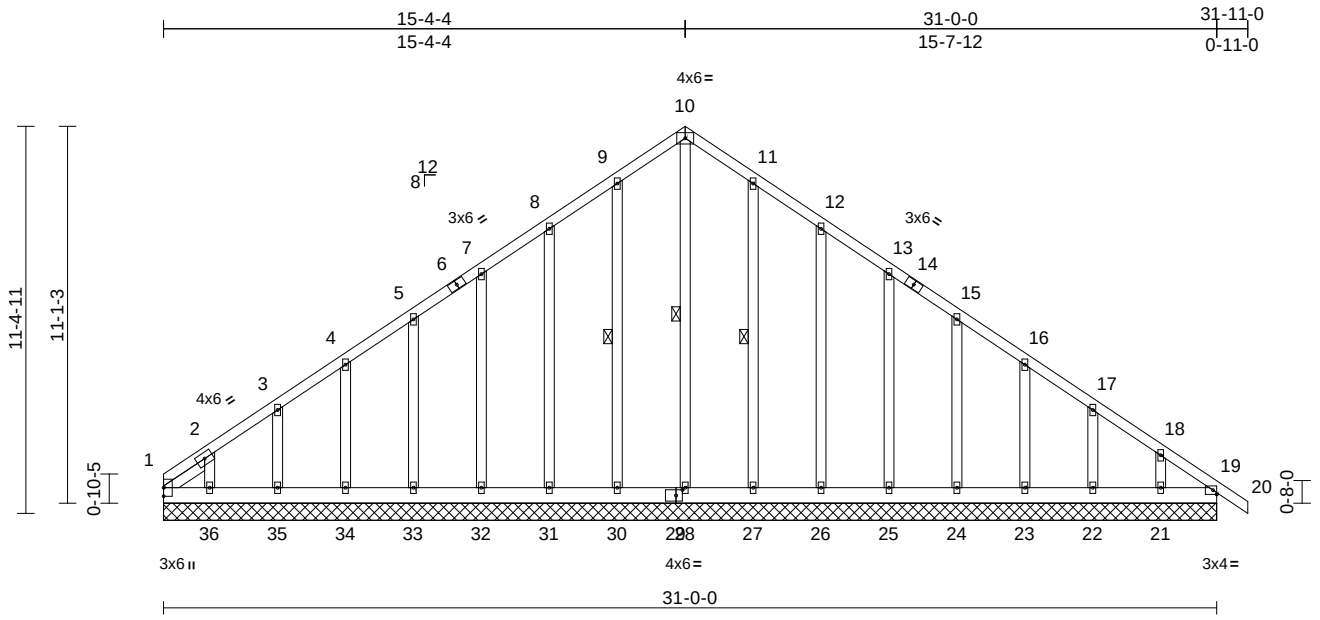

Scale = 1:67.8

Plate Offsets (X, Y): [29:0-2-4,0-2-0]

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	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.01	19	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 253 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
OTHERS 2x4 SP No.3
SLIDER Left 2x4 SP No.2 -- 1-5-12

BRACING
TOP CHORD Structural wood sheathing directly applied or 10-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 10-28, 9-30, 11-27

REACTIONS (size) 1=31-0-0, 19=31-0-0, 21=31-0-0, 22=31-0-0, 23=31-0-0, 24=31-0-0, 25=31-0-0, 26=31-0-0, 27=31-0-0, 28=31-0-0, 30=31-0-0, 31=31-0-0, 32=31-0-0, 33=31-0-0, 34=31-0-0, 35=31-0-0, 36=31-0-0, 37=31-0-0
Max Horiz 1=-361 (LC 8), 37=-361 (LC 8)
Max Uplift 1=-250 (LC 10), 22=-225 (LC 13), 23=-71 (LC 13), 24=-111 (LC 13), 25=-99 (LC 13), 26=-112 (LC 13), 27=-86 (LC 13), 28=-13 (LC 11), 30=-94 (LC 12), 31=-109 (LC 12), 32=-102 (LC 12), 33=-102 (LC 12), 34=-104 (LC 12), 35=-97 (LC 12), 36=-208 (LC 12), 37=-250 (LC 10)
Max Grav 1=291 (LC 9), 21=315 (LC 1), 22=160 (LC 11), 23=191 (LC 20), 24=178 (LC 20), 25=181 (LC 20), 26=180 (LC 20), 27=187 (LC 20), 28=367 (LC 13), 30=196 (LC 19), 31=177 (LC 19), 32=181 (LC 19), 33=180 (LC 19), 34=181 (LC 19), 35=178 (LC 19), 36=256 (LC 19), 37=291 (LC 9)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-144/144, 2-3=-303/306, 3-4=-255/274, 4-5=-209/253, 5-7=-185/256, 7-8=-202/302, 8-9=-271/354, 9-10=-330/390, 10-11=-330/380, 11-12=-271/311, 12-13=-202/227, 13-15=-137/149, 15-16=-71/105, 16-17=-49/116, 17-18=-144/136, 18-19=-202/185, 19-20=0/31
BOT CHORD 1-36=-188/230, 35-36=-188/230, 34-35=-188/230, 33-34=-188/230, 32-33=-188/230, 31-32=-188/230, 30-31=-188/230, 28-30=-188/230, 27-28=-188/230, 26-27=-188/230, 25-26=-188/230, 24-25=-188/230, 23-24=-188/230, 22-23=-188/230, 21-22=-188/230, 19-21=-188/230
WEBS 10-28=-343/223, 9-30=-156/118, 8-31=-165/133, 7-32=-157/125, 5-33=-159/127, 4-34=-157/126, 3-35=-162/130, 2-36=-178/179, 11-27=-148/110, 12-26=-165/136, 13-25=-157/125, 15-24=-159/128, 16-23=-157/121, 17-22=-175/150, 18-21=-142/93

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) 0-0-0 to 3-0-0, Exterior (2) 3-0-0 to 15-4-4, Corner (3) 15-4-4 to 18-4-4, Exterior (2) 18-4-4 to 31-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.

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Continued on page 2

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10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 250 lb uplift at joint 1, 13 lb uplift at joint 28, 94 lb uplift at joint 30, 109 lb uplift at joint 31, 102 lb uplift at joint 32, 102 lb uplift at joint 33, 104 lb uplift at joint 34, 97 lb uplift at joint 35, 208 lb uplift at joint 36, 86 lb uplift at joint 27, 112 lb uplift at joint 26, 99 lb uplift at joint 25, 111 lb uplift at joint 24, 71 lb uplift at joint 23, 225 lb uplift at joint 22 and 250 lb uplift at joint 1.
11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Furr, Mayview B	
3876658	B01	Common Supported Gable	1	1	Job Reference (optional)	I63762465

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Feb 21 08:14:49 Page: 1
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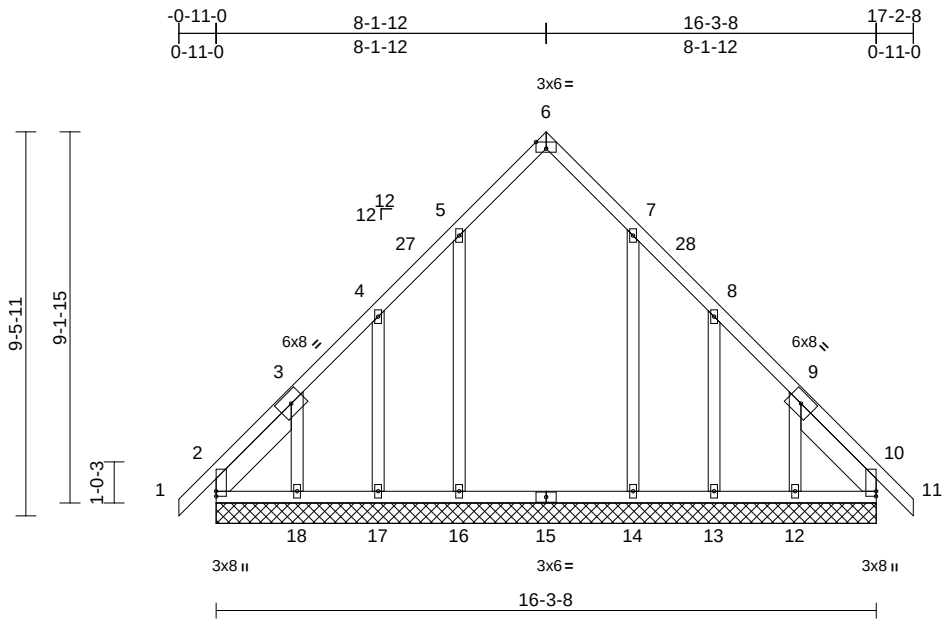


Scale = 1:56.9

Plate Offsets (X, Y): [2:Edge,0-0-0], [6:0-3-0,Edge], [10: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	0.11	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	NO	WB	0.18	Horz(CT)	0.01	10	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 116 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 -- 2-10-2, Right 2x6 SP No.2 -- 2-10-2

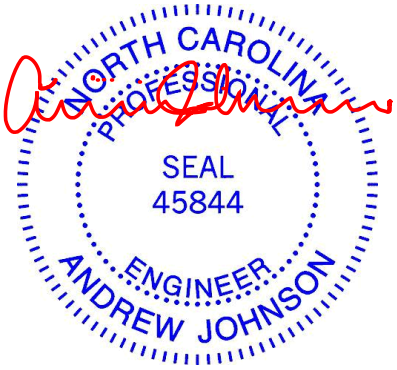
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=16-3-8, 6=16-3-8, 10=16-3-8, 12=16-3-8, 13=16-3-8, 14=16-3-8, 16=16-3-8, 17=16-3-8, 18=16-3-8, 19=16-3-8, 23=16-3-8
Max Horiz 2=-302 (LC 10), 19=-302 (LC 10)
Max Uplift 2=-166 (LC 8), 6=-53 (LC 11), 10=-68 (LC 9), 12=-235 (LC 13), 13=-160 (LC 13), 14=-156 (LC 13), 16=-157 (LC 12), 17=-159 (LC 12), 18=-254 (LC 12), 19=-166 (LC 8), 23=-68 (LC 9)
Max Grav 2=251 (LC 20), 6=373 (LC 13), 10=172 (LC 19), 12=242 (LC 20), 13=147 (LC 20), 14=334 (LC 20), 16=335 (LC 19), 17=145 (LC 19), 18=264 (LC 19), 19=251 (LC 20), 23=172 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/39, 2-3=-87/63, 3-4=-192/191, 4-5=-166/243, 5-6=-291/329, 6-7=-291/313, 7-8=-166/190, 8-9=-87/89, 9-10=-83/61, 10-11=0/39
BOT CHORD 2-18=-128/207, 17-18=-128/207, 16-17=-128/207, 14-16=-128/207, 13-14=-128/207, 12-13=-128/207, 10-12=-128/207
WEBS 5-16=-217/200, 7-14=-217/200, 4-17=-203/181, 3-18=-244/253, 8-13=-203/181, 9-12=-249/237

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-11-0 to 2-0-0, Interior (1) 2-0-0 to 8-1-12, Exterior (2) 8-1-12 to 11-1-12, Interior (1) 11-1-12 to 17-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 166 lb uplift at joint 2, 68 lb uplift at joint 10, 53 lb uplift at joint 6, 157 lb uplift at joint 16, 156 lb uplift at joint 14, 159 lb uplift at joint 17, 254 lb uplift at joint 18, 160 lb uplift at joint 13, 235 lb uplift at joint 12, 166 lb uplift at joint 2 and 68 lb uplift at joint 10.
11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 10, 23.
12) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



February 21,2024

ENGINEERING BY TRENCO
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Furr, Mayview B	
3876658	B02	Common	2	1	Job Reference (optional)	I63762466

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Feb 21 08:14:50 Page: 1
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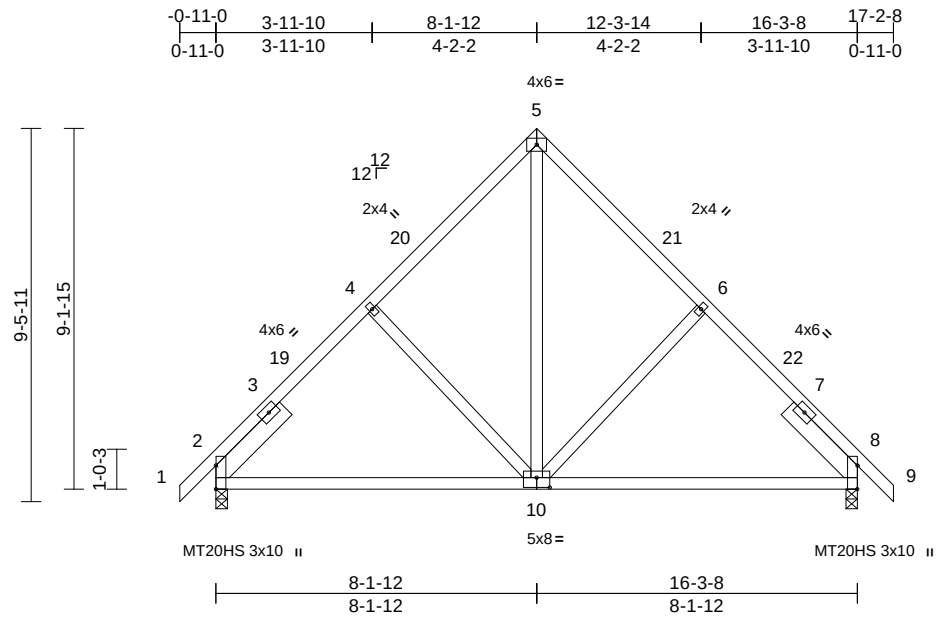

Scale = 1:58.5

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

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	0.26	Vert(LL)	-0.06	10-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.12	10-13	>999	240	MT20HS	187/143
BCLL	0.0*	Rep Stress Incr	YES	WB	0.33	Horz(CT)	0.01	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.02	10-13	>999	240	Weight: 105 lb	FT = 20%

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

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.

REACTIONS (size) 2=0-3-8, 8=0-3-8
Max Horiz 2=302 (LC 11)
Max Uplift 2=-160 (LC 12), 8=-160 (LC 13)
Max Grav 2=707 (LC 1), 8=707 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/39, 2-4=-652/237, 4-5=-633/279, 5-6=-633/279, 6-8=-652/237, 8-9=0/39
BOT CHORD 2-8=-238/556
WEBS 5-10=-222/605, 6-10=-305/289, 4-10=-305/289

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-11-0 to 2-1-0, Interior (1) 2-1-0 to 8-1-12, Exterior (2) 8-1-12 to 11-1-12, Interior (1) 11-1-12 to 17-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 160 lb uplift at joint 2 and 160 lb uplift at joint 8.
8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

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ENGINEERING BY TRENCO
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Furr, Mayview B
3876658	B03	Common Girder	1	3	I63762467 Job Reference (optional)

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Feb 21 08:14:50 Page: 1
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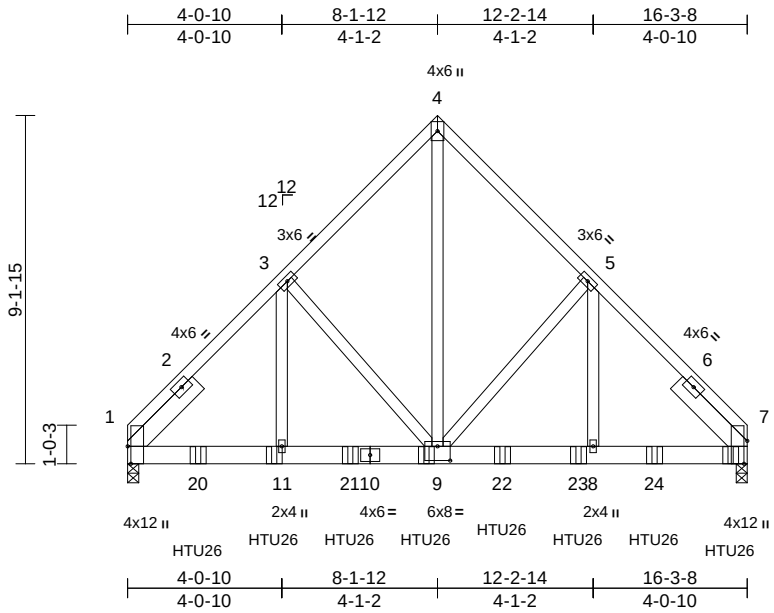

Scale = 1:60.6

Plate Offsets (X, Y): [1:0-5-8,Edge], [7:0-7-3,Edge], [9:0-4-0,0-4-8]

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	0.35	Vert(LL)	-0.05	8-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.09	8-9	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.43	Horz(CT)	0.02	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.05	8-9	>999	240	Weight: 382 lb	FT = 20%

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

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.

REACTIONS (size) 1=0-3-8, 7=0-3-8
Max Horiz 1=-272 (LC 23)
Max Uplift 1=-1296 (LC 9), 7=-1530 (LC 8)
Max Grav 1=5394 (LC 16), 7=6390 (LC 15)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-5783/1454, 3-4=-4240/1173, 4-5=-4242/1174, 5-7=-5903/1481
BOT CHORD 1-11=-1045/4127, 9-11=-1045/4127, 8-9=-953/4093, 7-8=-953/4093
WEBS 3-11=-513/2214, 3-9=-1633/608, 4-9=-1479/5591, 5-9=-1774/642, 5-8=-557/2395

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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1296 lb uplift at joint 1 and 1530 lb uplift at joint 7.
9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 1-10-4 from the left end to 15-10-4 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: 1-4=-60, 4-7=-60, 12-16=-20
Concentrated Loads (lb)
Vert: 11=-1219 (B), 9=-1219 (B), 18=-1225 (B), 20=-1219 (B), 21=-1219 (B), 22=-1219 (B), 23=-1219 (B), 24=-1219 (B)

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Furr, Mayview B
3876658	D01	Attic	1	1	I63762468
					Job Reference (optional)

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Feb 21 08:14:51 Page: 1

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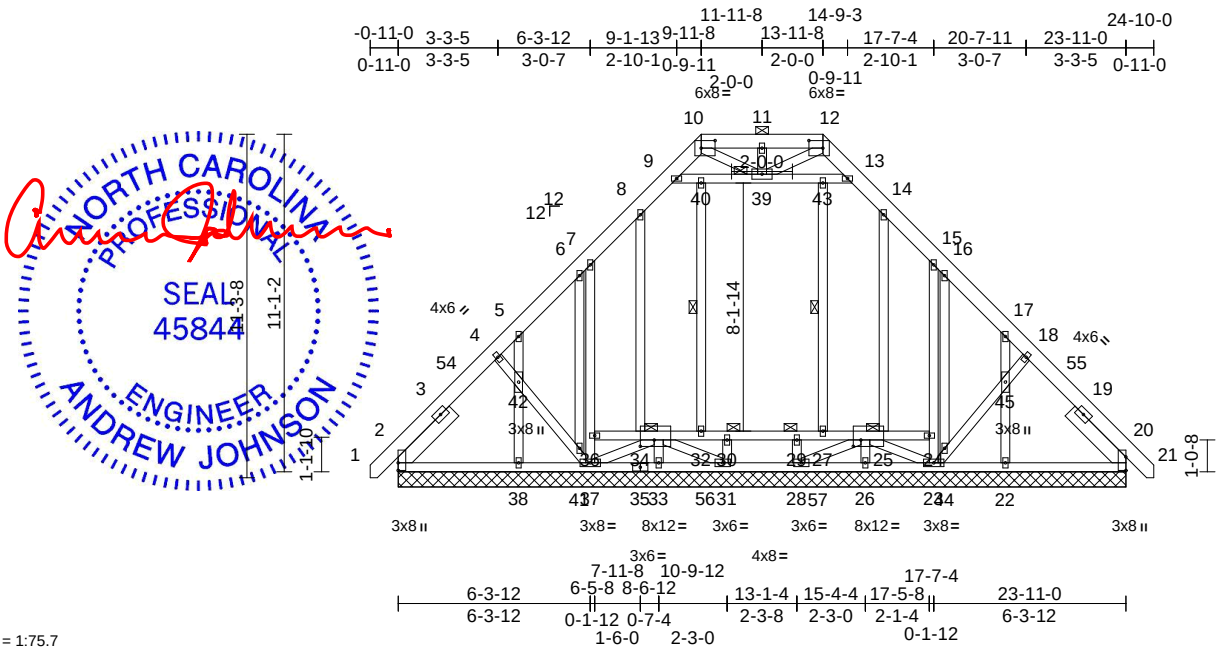

Scale = 1:75.7

Plate Offsets (X, Y): [2:Edge,0-0-0], [10:0-5-8,0-3-0], [12:0-5-8,0-3-0], [20:Edge,0-0-0], [25:0-3-0,0-2-8], [34:0-5-8,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.19	Horz(CT)	0.01	20	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 289 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3 *Except* 7-37,15-23,9-13:2x4 SP No.2
OTHERS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 -- 2-6-0, Right 2x6 SP No.2 -- 2-6-0

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 10-12.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 32-40, 27-43
JOINTS 1 Brace at Jt(s): 39, 30, 29, 34, 25

REACTIONS (size) 2=23-11-0, 20=23-11-0, 22=23-11-0, 23=23-11-0, 26=23-11-0, 28=23-11-0, 31=23-11-0, 33=23-11-0, 37=23-11-0, 38=23-11-0, 46=23-11-0, 50=23-11-0
Max Horiz 2=-362 (LC 10), 46=-362 (LC 10)
Max Uplift 2=-91 (LC 8), 20=-34 (LC 9), 22=-11 (LC 13), 23=-432 (LC 13), 33=-69 (LC 9), 37=-381 (LC 12), 38=-23 (LC 12), 46=-91 (LC 8), 50=-34 (LC 9)
Max Grav 2=360 (LC 1), 20=360 (LC 1), 22=181 (LC 1), 23=373 (LC 21), 26=242 (LC 25), 28=257 (LC 18), 31=257 (LC 18), 33=293 (LC 23), 37=316 (LC 20), 38=181 (LC 1), 46=360 (LC 1), 50=360 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/34, 2-4=-293/180, 4-5=-231/177, 5-6=-254/202, 6-7=-194/199, 7-8=-252/237, 8-9=-277/239, 9-10=-227/131, 10-11=-210/159, 11-12=-210/159, 12-13=-227/131, 13-14=-277/241, 14-15=-252/228, 15-16=-147/134, 16-17=-211/138, 17-18=-176/106, 18-20=-245/108, 20-21=0/34
BOT CHORD 2-38=-190/284, 37-38=-190/284, 33-37=-113/252, 31-33=-81/139, 28-31=-110/190, 26-28=-81/142, 23-26=-54/219, 22-23=-55/216, 20-22=-55/216, 34-36=-3/3, 32-34=-55/130, 30-32=-55/130, 29-30=-55/130, 27-29=-55/130, 25-27=-55/130, 24-25=-3/5
WEBS 36-37=-183/154, 7-36=-173/159, 23-24=-183/159, 15-24=-173/163, 9-40=-173/210, 39-40=-173/210, 39-43=-173/177, 13-43=-173/177, 4-42=-227/246, 41-42=-210/230, 37-41=-253/269, 23-44=-253/271, 44-45=-209/232, 18-45=-227/246, 10-39=-94/88, 11-39=-111/76, 12-39=-81/88, 30-31=-144/0, 28-29=-138/0, 34-37=-119/104, 33-34=-287/111, 31-34=-31/55, 23-25=-125/146, 25-26=-226/0, 25-28=-31/52, 32-40=-42/25, 8-34=-171/110, 6-41=-58/51, 5-42=-99/26, 38-42=-113/45, 27-43=-38/12, 14-25=-154/73, 16-44=-58/52, 17-45=-99/32, 22-45=-113/42

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-9-10 to 2-2-6, Interior (1) 2-2-6 to 9-11-8, Exterior (2) 9-11-8 to 17-11-11, Interior (1) 17-11-11 to 24-8-10 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 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

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Continued on page 2

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10) All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 91 lb uplift at joint 2, 34 lb uplift at joint 20, 381 lb uplift at joint 37, 432 lb uplift at joint 23, 69 lb uplift at joint 33, 23 lb uplift at joint 38, 11 lb uplift at joint 22, 91 lb uplift at joint 2 and 34 lb uplift at joint 20.
12) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Furr, Mayview B	
3876658	D02	Attic	4	1	Job Reference (optional)	I63762469

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Feb 21 08:14:54 Page: 1

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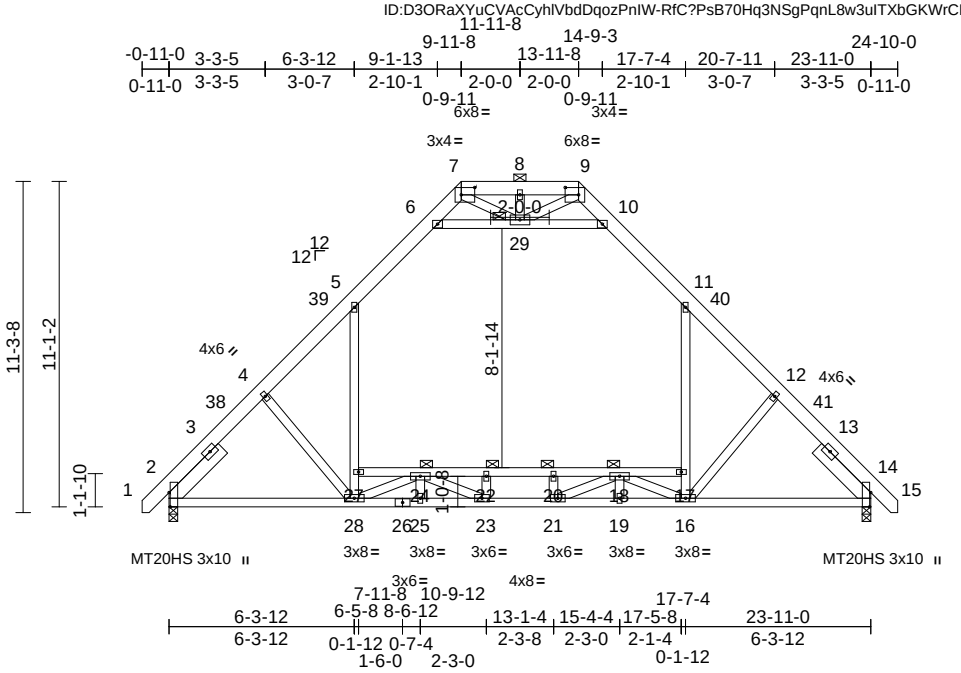

Scale = 1:78.5

Plate Offsets (X, Y): [2:0-5-13,Edge], [7:0-5-8,0-3-0], [9:0-5-8,0-3-0], [14:0-5-13,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	-0.17	25-28	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.31	20-22	>932	240	MT20HS	187/143
BCLL	0.0*	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.05	14	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.22	28-32	>999	240	Weight: 212 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP 2400F 2.0E or 2x6 SP DSS *Except* 7-9:2x6 SP No.2
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3 *Except* 5-28,11-16,6-10:2x4 SP No.2
SLIDER Left 2x6 SP No.2 -- 2-6-0, Right 2x6 SP No.2 -- 2-6-0

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-7-11 oc purlins, except 2-0-0 oc purlins (10-0-0 max.): 7-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 29, 22, 20, 24, 18

REACTIONS (size) 2=0-3-8, 14=0-3-8
Max Horiz 2=-362 (LC 10)
Max Uplift 2=-22 (LC 12), 14=-22 (LC 13)
Max Grav 2=1501 (LC 2), 14=1501 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/34, 2-4=-1724/115, 4-5=-1678/142, 5-6=-947/256, 6-7=-26/494, 7-8=0/623, 8-9=0/623, 9-10=-26/495, 10-11=-947/256, 11-12=-1678/142, 12-14=-1724/117, 14-15=0/34
BOT CHORD 2-28=-153/1353, 25-28=0/2253, 23-25=0/2253, 21-23=0/2718, 19-21=0/2066, 16-19=0/2066, 14-16=-23/1125, 24-27=-153/149, 22-24=-1854/0, 20-22=-1854/0, 18-20=-1854/0, 17-18=-158/155
WEBS 27-28=-19/797, 5-27=-1/956, 16-17=-21/800, 11-17=-1/956, 6-29=-1865/343, 10-29=-1867/345, 4-28=-385/345, 12-16=-387/347, 7-29=-229/325, 8-29=-163/77, 9-29=-229/325, 22-23=-248/0, 20-21=-248/0, 24-28=-1329/0, 24-25=-97/122, 23-24=-44/776, 16-18=-1329/0, 18-19=-105/131, 18-21=-57/787

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-9-10 to 2-2-6, Interior (1) 2-2-6 to 9-11-8, Exterior (2) 9-11-8 to 18-2-7, Interior (1) 18-2-7 to 24-8-10 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) All plates are MT20 plates unless otherwise indicated.
5) All plates are 2x4 MT20 unless otherwise indicated.
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) Ceiling dead load (5.0 psf) on member(s). 5-6, 10-11, 6-29, 10-29; Wall dead load (5.0psf) on member (s).5-27, 11-17
9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 24-27, 22-24, 20-22, 18-20, 17-18
10) All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 22 lb uplift at joint 2 and 22 lb uplift at joint 14.
12) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

February 21,2024

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

Job	Truss	Truss Type	Qty	Ply	Furr, Mayview B	
3876658	D03	Attic	4	1	Job Reference (optional)	I63762470

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Feb 21 08:14:55 Page: 1

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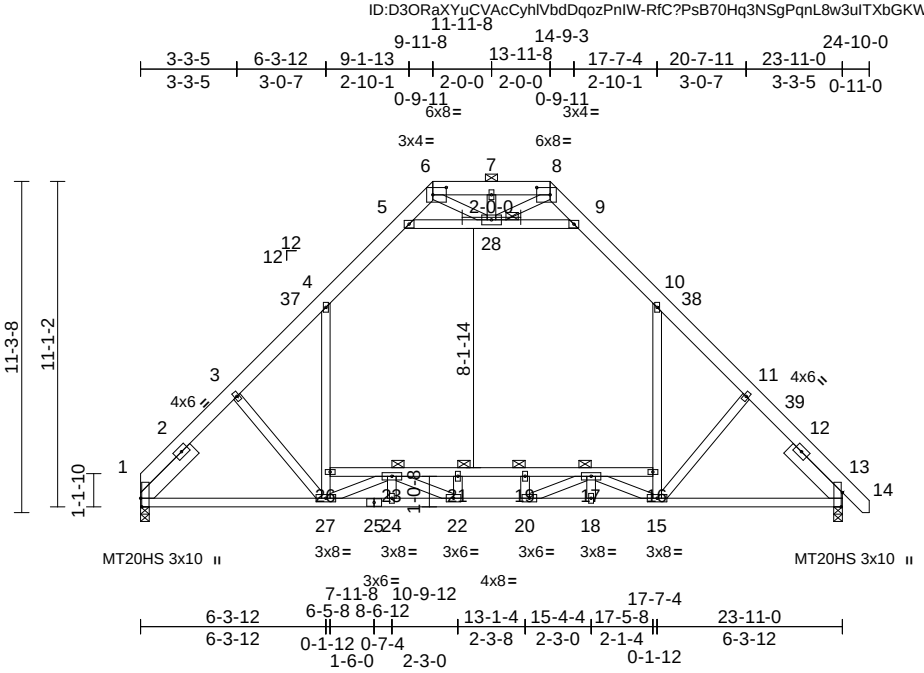

Scale = 1:78.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	-0.17	24-27	>999	360	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.31	19-21	>931	240	MT20	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.05	13	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.22	27-31	>999	240	Weight: 210 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP 2400F 2.0E or 2x6 SP DSS *Except* 6-8:2x6 SP No.2
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3 *Except* 4-27,10-15,5-9:2x4 SP No.2
SLIDER Left 2x6 SP No.2 -- 2-6-0, Right 2x6 SP No.2 -- 2-6-0

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-7-9 oc purlins, except 2-0-0 oc purlins (10-0-0 max.): 6-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 28, 21, 19, 23, 17

REACTIONS (size) 1=0-3-8, 13=0-3-8
Max Horiz 1=-353 (LC 10)
Max Uplift 13=-22 (LC 13)
Max Grav 1=1460 (LC 2), 13=1502 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-3=-1727/113, 3-4=-1681/150, 4-5=-947/258, 5-6=-26/495, 6-7=0/624, 7-8=0/624, 8-9=-26/495, 9-10=-948/256, 10-11=-1679/142, 11-13=-1725/117, 13-14=0/34
BOT CHORD 1-27=-145/1358, 24-27=0/2255, 22-24=0/2255, 20-22=0/2719, 18-20=0/2066, 15-18=0/2066, 13-15=-23/1125, 23-26=-154/149, 21-23=-1854/0, 19-21=-1854/0, 17-19=-1854/0, 16-17=-158/155
WEBS 26-27=-19/801, 4-26=-1/958, 15-16=-21/800, 10-16=-1/956, 5-28=-1866/343, 9-28=-1870/345, 3-27=-391/346, 11-15=-387/347, 7-28=-163/78, 6-28=-229/324, 8-28=-229/326, 21-22=-248/0, 19-20=-248/0, 23-24=-97/122, 23-27=-1329/0, 22-23=-44/775, 17-18=-106/131, 15-17=-1329/0, 17-20=-57/788

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-0 to 3-1-9, Interior (1) 3-1-9 to 9-11-8, Exterior (2) 9-11-8 to 18-2-7, Interior (1) 18-2-7 to 24-8-10 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) All plates are MT20 plates unless otherwise indicated.
5) All plates are 2x4 MT20 unless otherwise indicated.
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) Ceiling dead load (5.0 psf) on member(s). 4-5, 9-10, 5-28, 9-28; Wall dead load (5.0psf) on member(s).4-26, 10-16
9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 23-26, 21-23, 19-21, 17-19, 16-17
10) All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 22 lb uplift at joint 13.
12) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

February 21,2024

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

Job	Truss	Truss Type	Qty	Ply	Furr, Mayview B	
3876658	D04	Attic	2	1	Job Reference (optional)	I63762471

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Feb 21 08:14:56 Page: 1

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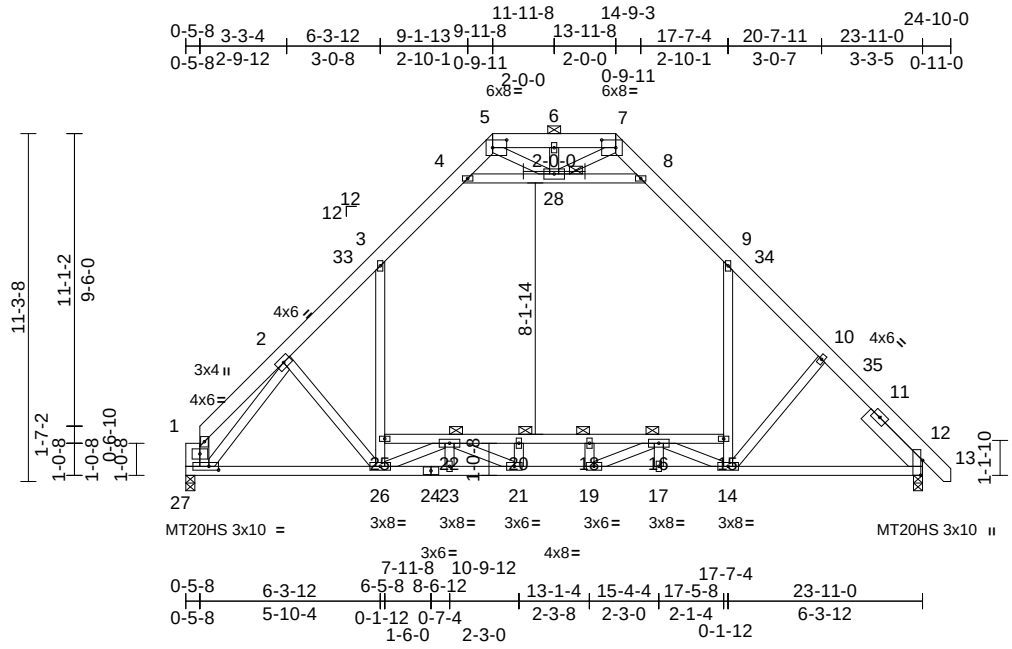

Scale = 1:74.8

Plate Offsets (X, Y): [5:0-5-8,0-3-0], [7:0-5-8,0-3-0], [12:0-5-13,Edge], [27:0-3-12,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	-0.18	14-17	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.31	16-18	>906	240	MT20HS	187/143
BCLL	0.0*	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.04	12	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.22	14-31	>999	240	Weight: 212 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP 2400F 2.0E or 2x6 SP DSS *Except* 5-7:2x6 SP No.2
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3 *Except* 3-26,9-14,4-8,27-1:2x4 SP No.2
OTHERS 2x6 SP No.2
SLIDER Right 2x6 SP No.2 -- 2-6-0

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-7-15 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 5-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 28, 20, 18, 22, 16

REACTIONS (size) 12=0-3-8, 27=0-3-8
Max Horiz 27=-381 (LC 10)
Max Uplift 12=-23 (LC 13)
Max Grav 12=1473 (LC 2), 27=1468 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-268/74, 2-3=-1602/137, 3-4=-929/256, 4-5=-26/469, 5-6=0/584, 6-7=0/584, 7-8=-27/459, 8-9=-909/255, 9-10=-1641/141, 10-12=-1685/117, 12-13=0/34, 1-27=-194/82
BOT CHORD 26-27=-143/1218, 23-26=0/2148, 21-23=0/2148, 19-21=0/2674, 17-19=0/2066, 14-17=0/2066, 12-14=-23/1105, 22-25=-142/160, 20-22=-1843/0, 18-20=-1843/0, 16-18=-1843/0, 15-16=-175/151
WEBS 25-26=-6/719, 3-25=0/889, 14-15=-22/797, 9-15=-2/953, 4-28=-1805/344, 8-28=-1762/344, 2-26=-264/334, 10-14=-409/348, 6-28=-157/77, 5-28=-225/348, 7-28=-235/291, 20-21=-254/0, 18-19=-242/0, 22-23=-102/97, 22-26=-1300/0, 21-22=-29/831, 16-17=-102/143, 14-16=-1336/0, 16-19=-67/732, 2-27=-1476/39

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-2-12 to 3-0-11, Interior (1) 3-0-11 to 9-11-8, Exterior (2) 9-11-8 to 18-2-7, Interior (1) 18-2-7 to 24-8-10 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) All plates are MT20 plates unless otherwise indicated.
5) All plates are 2x4 MT20 unless otherwise indicated.
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) Ceiling dead load (5.0 psf) on member(s). 3-4, 8-9, 4-28, 8-28; Wall dead load (5.0psf) on member(s).3-25, 9-15
9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 22-25, 20-22, 18-20, 16-18, 15-16
10) All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 23 lb uplift at joint 12.
12) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

February 21,2024

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

Job	Truss	Truss Type	Qty	Ply	Furr, Mayview B
3876658	E01	Monopitch Supported Gable	1	1	I63762472 Job Reference (optional)

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Feb 21 08:14:58 Page: 1
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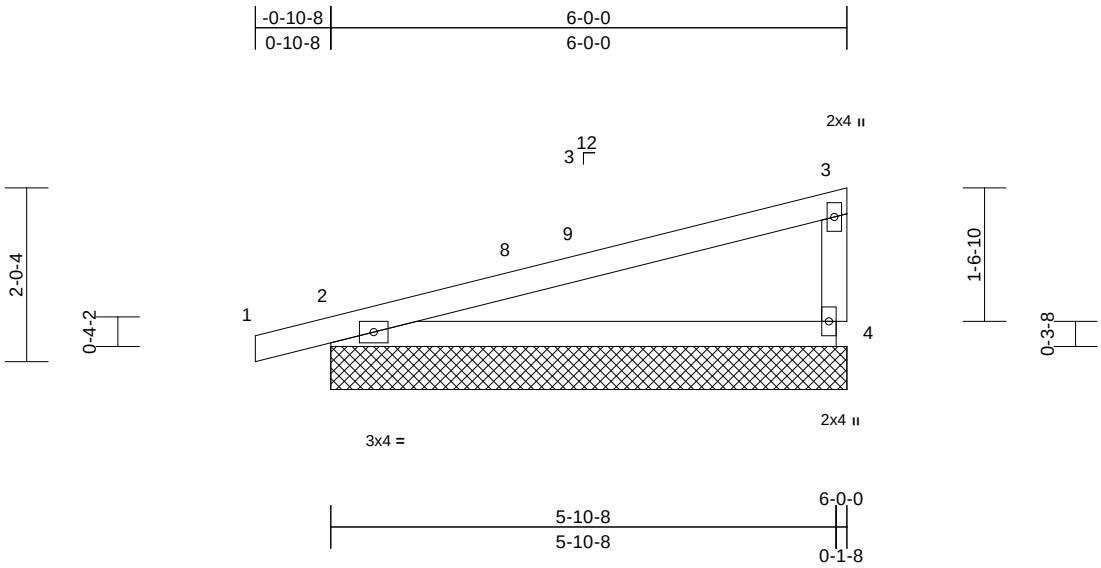

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.49	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 21 lb	FT = 20%

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

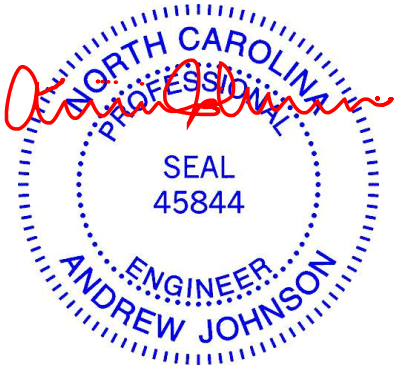
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=6-0-0, 4=6-0-0, 5=6-0-0
Max Horiz 2=92 (LC 8), 5=92 (LC 8)
Max Uplift 2=-126 (LC 8), 4=-90 (LC 12), 5=-126 (LC 8)
Max Grav 2=291 (LC 1), 4=230 (LC 1), 5=291 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/13, 2-3=-149/62, 3-4=-151/235
BOT CHORD 2-4=-135/151

NOTES
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) -0-10-8 to 2-1-8, Exterior (2) 2-1-8 to 5-10-4 zone; cantilever left and right exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 2-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 126 lb uplift at joint 2, 90 lb uplift at joint 4 and 126 lb uplift at joint 2.
9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



February 21,2024

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

Job	Truss	Truss Type	Qty	Ply	Furr, Mayview B
3876658	E02	Monopitch	5	1	I63762473
					Job Reference (optional)

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Feb 21 08:14:58 Page: 1
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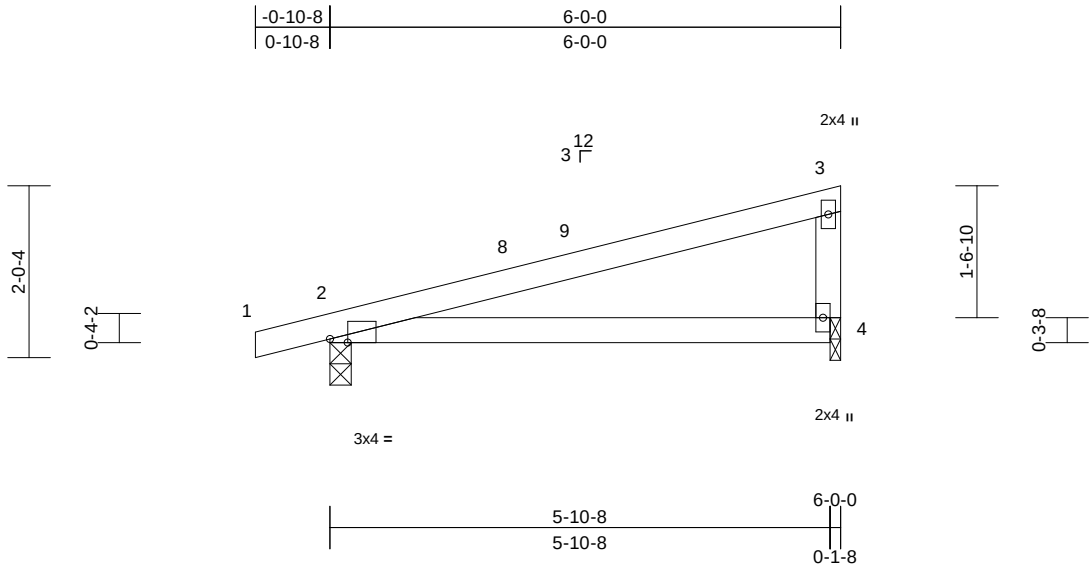

Scale = 1:27.1

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.49	Vert(LL)	0.16	4-7	>428	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.12	4-7	>572	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 21 lb	FT = 20%

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

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

REACTIONS (size) 2=0-3-0, 4=0-1-8
Max Horiz 2=92 (LC 8)
Max Uplift 2=-199 (LC 8), 4=-161 (LC 8)
Max Grav 2=291 (LC 1), 4=230 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/13, 2-3=-149/189, 3-4=-151/182
BOT CHORD 2-4=-216/136

NOTES
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 5-10-4 zone; cantilever left and right exposed ; end vertical left exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
5) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 199 lb uplift at joint 2 and 161 lb uplift at joint 4.
8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

February 21,2024

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

Job	Truss	Truss Type	Qty	Ply	Furr, Mayview B	
3876658	E03	Half Hip	2	1	Job Reference (optional)	I63762474

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Feb 21 08:14:58 Page: 1
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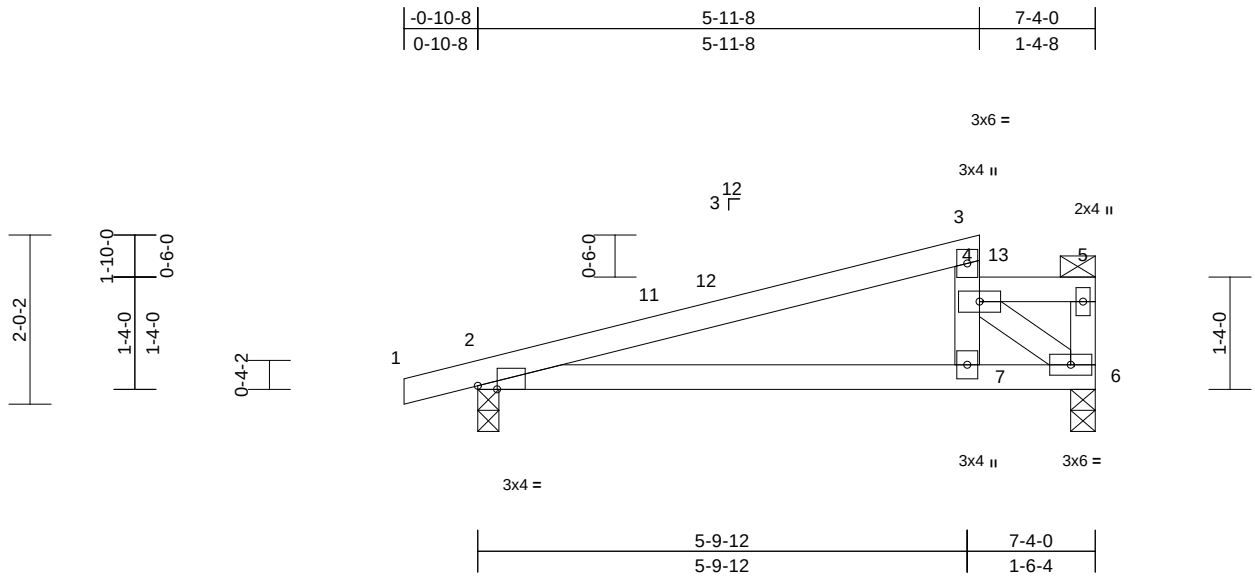


Scale = 1:27.4

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	0.09	7-10	>970	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.08	7-10	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.18	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 28 lb	FT = 20%

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

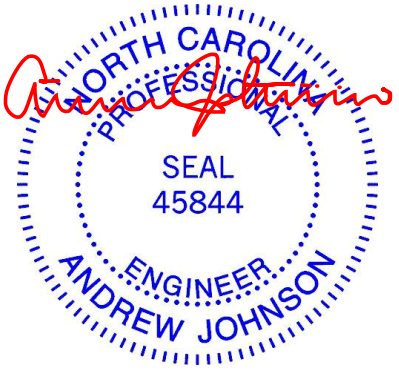
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5, 4-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-0, 6=0-3-8
Max Horiz 2=109 (LC 12)
Max Uplift 2=-169 (LC 8)
Max Grav 2=420 (LC 1), 6=760 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/13, 2-3=-678/226, 4-5=-57/0, 5-6=-247/0, 4-7=-341/185, 3-4=-17/139
BOT CHORD 2-7=-287/637, 6-7=-145/751
WEBS 4-6=-870/210

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 7-2-4 zone; cantilever left and right exposed ; end vertical left exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 169 lb uplift at joint 2.
8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) 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.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-60, 4-5=-60, 6-8=-20
Concentrated Loads (lb)
Vert: 13=-552



February 21,2024

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

Job	Truss	Truss Type	Qty	Ply	Furr, Mayview B	
3876658	G01	Common Supported Gable	1	1	Job Reference (optional)	I63762475

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Feb 21 08:14:59 Page: 1
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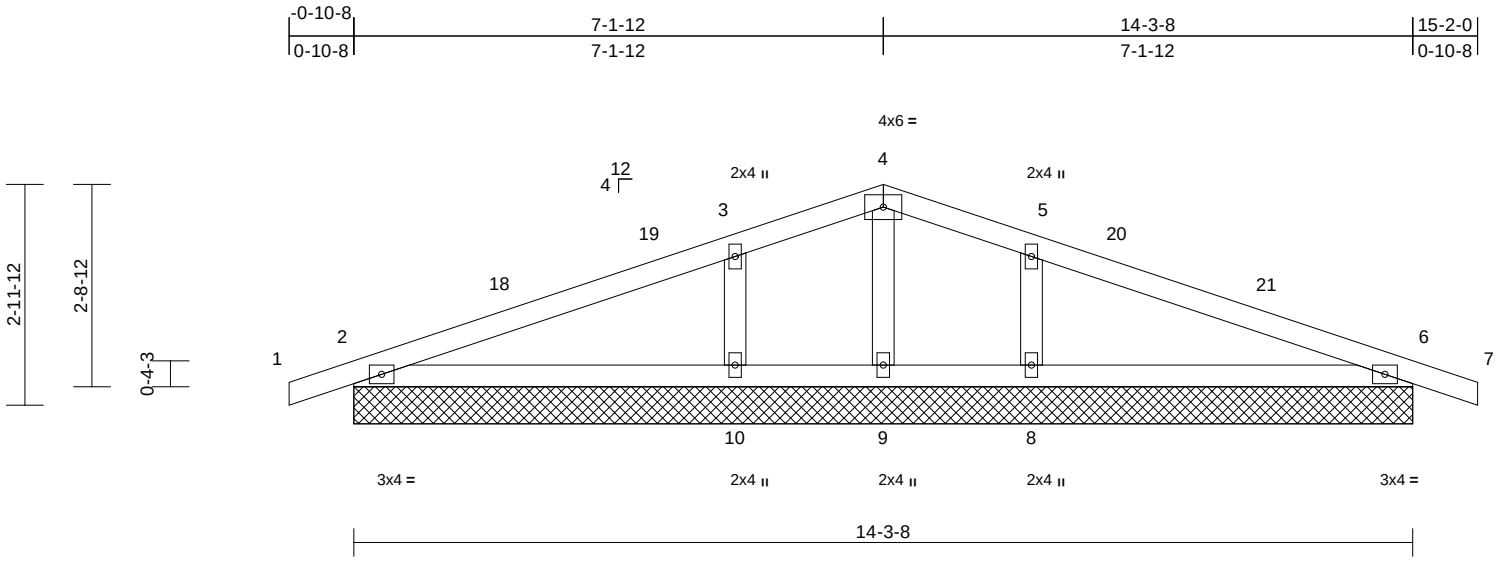


Scale = 1:31.1

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 54 lb	FT = 20%

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

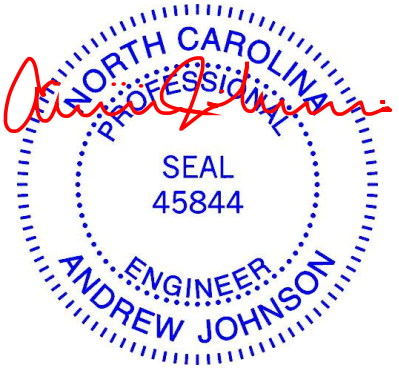
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=14-3-8, 6=14-3-8, 8=14-3-8, 9=14-3-8, 10=14-3-8, 11=14-3-8, 15=14-3-8
Max Horiz 2=-60 (LC 13), 11=-60 (LC 13)
Max Uplift 2=-112 (LC 8), 6=-120 (LC 9), 8=-180 (LC 13), 9=-112 (LC 1), 10=-181 (LC 12), 11=-112 (LC 8), 15=-120 (LC 9)
Max Grav 2=241 (LC 1), 6=241 (LC 1), 8=439 (LC 1), 9=87 (LC 9), 10=439 (LC 1), 11=241 (LC 1), 15=241 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-3=-80/81, 3-4=-95/169, 4-5=-95/172, 5-6=-80/84, 6-7=0/17
BOT CHORD 2-10=-25/70, 9-10=0/60, 8-9=0/60, 6-8=-14/73
WEBS 4-9=-72/67, 3-10=-287/322, 5-8=-287/322

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) -0-10-8 to 2-1-8, Exterior (2) 2-1-8 to 7-1-12, Corner (3) 7-1-12 to 10-1-12, Exterior (2) 10-1-12 to 15-2-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 112 lb uplift at joint 2, 120 lb uplift at joint 6, 112 lb uplift at joint 9, 181 lb uplift at joint 10, 180 lb uplift at joint 8, 112 lb uplift at joint 2 and 120 lb uplift at joint 6.
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



February 21,2024

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

Job	Truss	Truss Type	Qty	Ply	Furr, Mayview B	
3876658	G02	Common	3	1	Job Reference (optional)	I63762476

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

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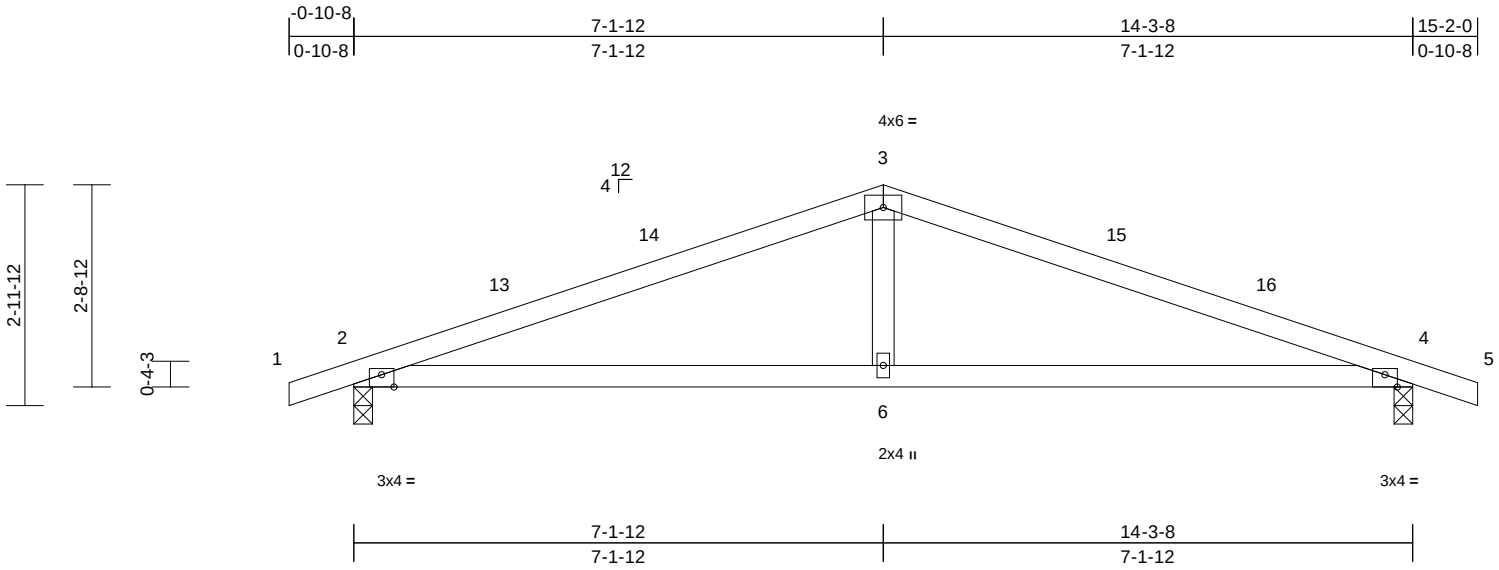

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Plate Offsets (X, Y): [2:0-2-0,Edge], [4:0-2-0,Edge]

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	0.69	Vert(LL)	0.19	6-12	>919	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.18	6-12	>961	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.02	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 50 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-1-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 5-1-2 oc bracing.

REACTIONS (size) 2=0-3-0, 4=0-3-0
Max Horiz 2=-60 (LC 13)
Max Uplift 2=-397 (LC 8), 4=-397 (LC 9)
Max Grav 2=624 (LC 1), 4=624 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-3=-1079/1228, 3-4=-1079/1228, 4-5=0/17
BOT CHORD 2-6=-1079/971, 4-6=-1079/971
WEBS 3-6=-476/331

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 7-1-12, Exterior (2) 7-1-12 to 10-1-12, Interior (1) 10-1-12 to 15-2-0 zone; cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 397 lb uplift at joint 2 and 397 lb uplift at joint 4.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

February 21,2024

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

Job	Truss	Truss Type	Qty	Ply	Furr, Mayview B	
3876658	G03	Common	2	1	Job Reference (optional)	I63762477

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

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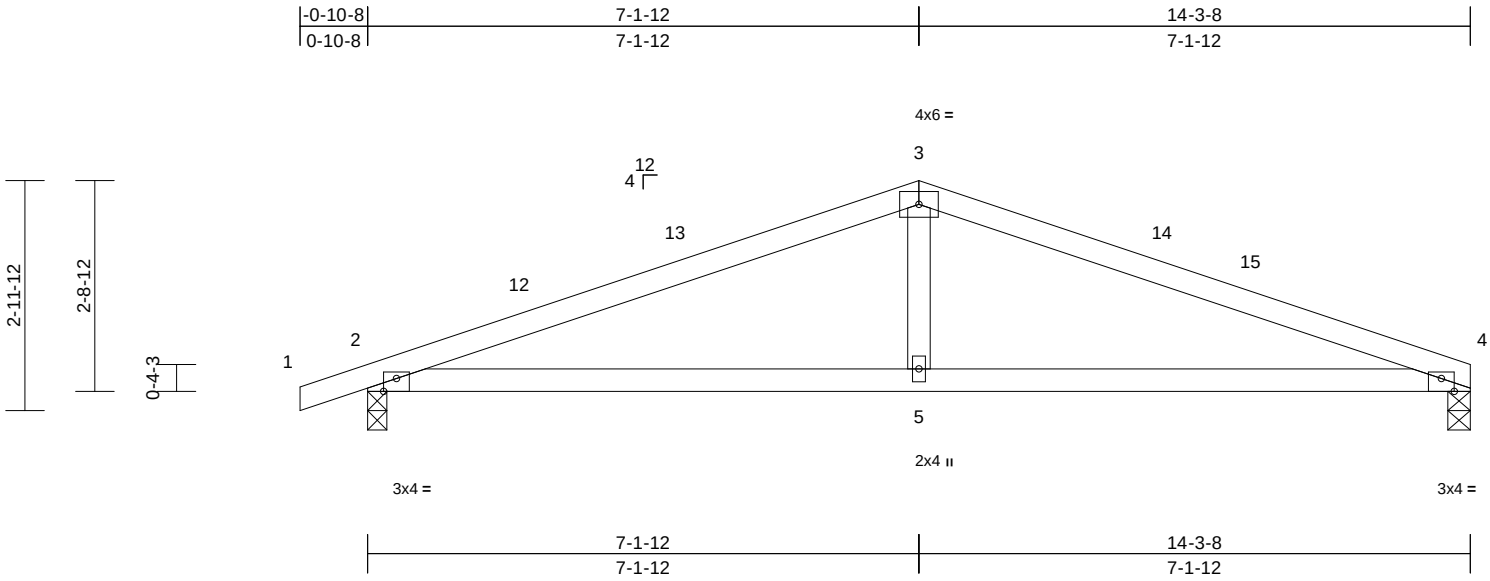

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Plate Offsets (X, Y): [2:0-2-0,Edge], [4:0-2-0,Edge]

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	0.70	Vert(LL)	0.19	5-8	>897	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.19	5-8	>926	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.13	Horz(CT)	-0.02	4	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
WEBS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-0-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 4-11-15 oc bracing.

REACTIONS (size) 2=0-3-0, 4=0-3-8
Max Horiz 2=67 (LC 16)
Max Uplift 2=-397 (LC 8), 4=-345 (LC 9)
Max Grav 2=626 (LC 1), 4=570 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-3=-1086/1237, 3-4=-1086/1249
BOT CHORD 2-5=-1111/977, 4-5=-1111/977
WEBS 3-5=-483/332

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 7-1-12, Exterior (2) 7-1-12 to 10-1-12, Interior (1) 10-1-12 to 14-3-8 zone; cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 345 lb uplift at joint 4 and 397 lb uplift at joint 2.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

February 21,2024

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

Job	Truss	Truss Type	Qty	Ply	Furr, Mayview B	
3876658	PB01	Piggyback	11	1	Job Reference (optional)	I63762478

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

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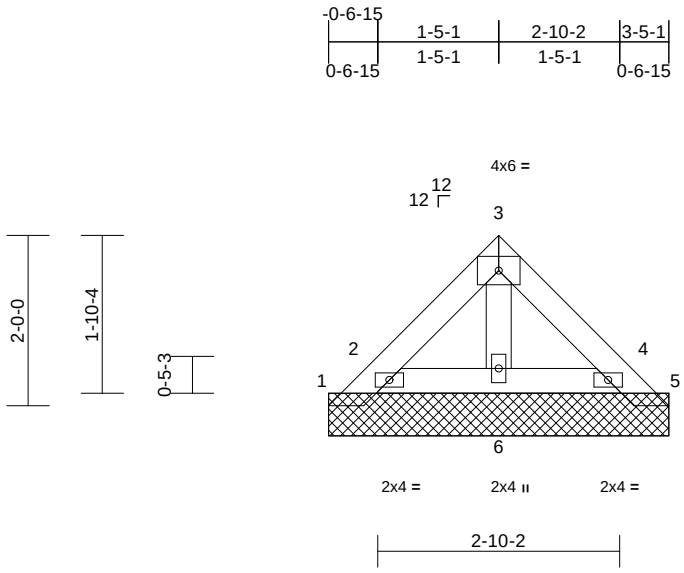

Scale = 1:27.1

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.03	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	0.02	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 14 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 4-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 1=4-0-0, 2=4-0-0, 4=4-0-0, 5=4-0-0, 6=4-0-0, 7=4-0-0
Max Horiz 1=-60 (LC 8)
Max Uplift 1=-65 (LC 10), 2=-74 (LC 12), 5=-13 (LC 13), 6=-35 (LC 13), 7=-74 (LC 12)
Max Grav 1=65 (LC 9), 2=136 (LC 19), 5=58 (LC 1), 6=161 (LC 1), 7=136 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-87/101, 2-3=-31/36, 3-4=-23/40, 4-5=-40/22
BOT CHORD 2-6=-58/64, 4-6=-58/64
WEBS 3-6=-84/26

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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 74 lb uplift at joint 2, 65 lb uplift at joint 1, 13 lb uplift at joint 5, 35 lb uplift at joint 6 and 74 lb uplift at joint 2.
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

February 21,2024

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

Job	Truss	Truss Type	Qty	Ply	Furr, Mayview B
3876658	V01	Valley	1	1	I63762479
					Job Reference (optional)

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

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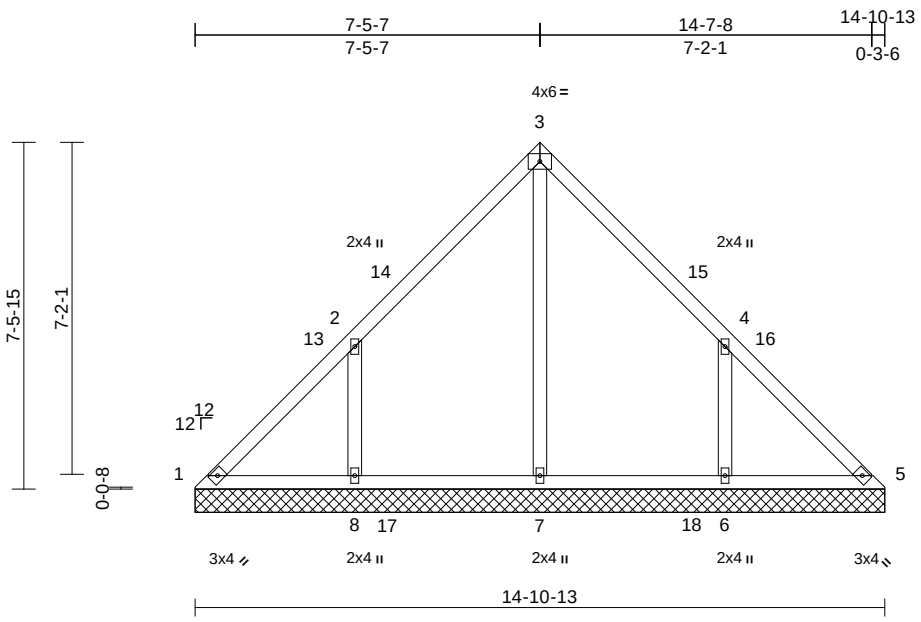

Scale = 1:49.8

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	0.23	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.21	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 71 lb	FT = 20%

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

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

REACTIONS (size) 1=14-10-13, 5=14-10-13, 6=14-10-13, 7=14-10-13, 8=14-10-13
Max Horiz 1=-243 (LC 8)
Max Uplift 1=-67 (LC 8), 5=-11 (LC 9), 6=-333 (LC 13), 8=-340 (LC 12)
Max Grav 1=168 (LC 20), 5=128 (LC 22), 6=462 (LC 20), 7=410 (LC 19), 8=469 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-236/218, 2-3=-144/182, 3-4=-139/153, 4-5=-187/154
BOT CHORD 1-8=-148/204, 7-8=-148/204, 6-7=-148/204, 5-6=-148/204
WEBS 3-7=-212/0, 2-8=-414/370, 4-6=-414/367

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-8 to 3-0-8, Interior (1) 3-0-8 to 7-5-15, Exterior (2) 7-5-15 to 10-5-15, Interior (1) 10-5-15 to 14-11-5 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 67 lb uplift at joint 1, 11 lb uplift at joint 5, 340 lb uplift at joint 8 and 333 lb uplift at joint 6.
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

NORTH CAROLINA PROFESSIONAL SEAL 45844 ENGINEER ANDREW JOHNSON

February 21,2024

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

Job	Truss	Truss Type	Qty	Ply	Furr, Mayview B	
3876658	V02	Valley	1	1	Job Reference (optional)	I63762480

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Feb 21 08:15:02 Page: 1
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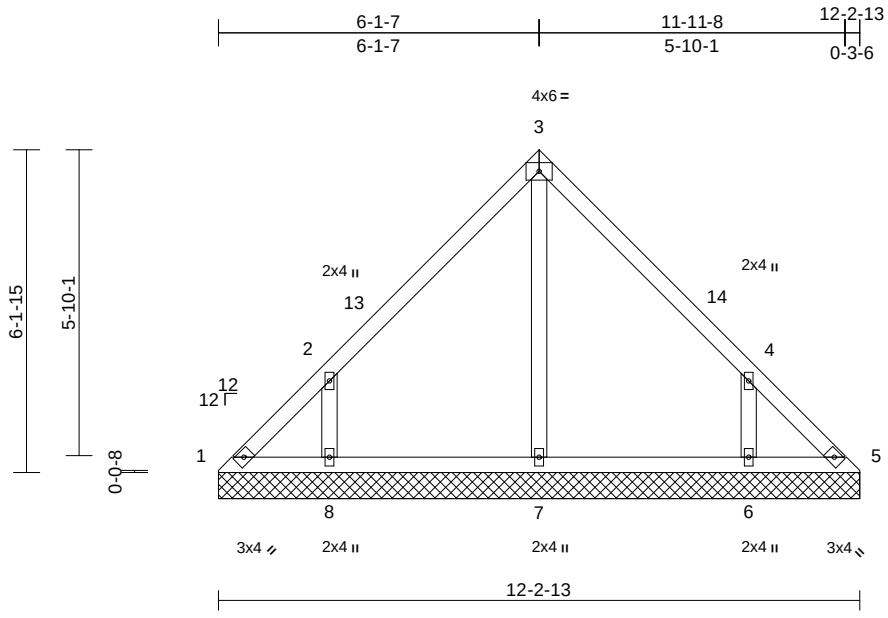


Scale = 1:44

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

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

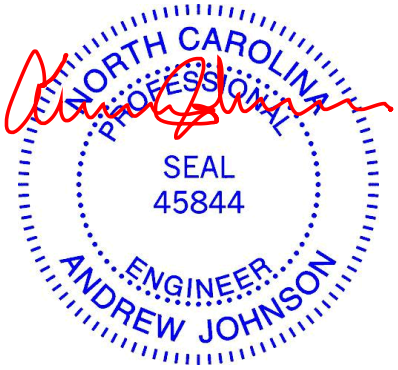
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=12-2-13, 5=12-2-13, 6=12-2-13, 7=12-2-13, 8=12-2-13
Max Horiz 1=199 (LC 9)
Max Uplift 1=-75 (LC 8), 5=-27 (LC 9), 6=-285 (LC 13), 8=-292 (LC 12)
Max Grav 1=141 (LC 20), 5=108 (LC 22), 6=365 (LC 20), 7=231 (LC 19), 8=374 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-215/176, 2-3=-177/171, 3-4=-175/156, 4-5=-177/119
BOT CHORD 1-8=-78/142, 7-8=-71/142, 6-7=-71/142, 5-6=-71/142
WEBS 3-7=-146/3, 2-8=-393/355, 4-6=-393/352

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-8 to 3-0-8, Interior (1) 3-0-8 to 6-1-15, Exterior (2) 6-1-15 to 9-1-15, Interior (1) 9-1-15 to 12-3-5 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 75 lb uplift at joint 1, 27 lb uplift at joint 5, 292 lb uplift at joint 8 and 285 lb uplift at joint 6.
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



February 21,2024

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

Job	Truss	Truss Type	Qty	Ply	Furr, Mayview B	
3876658	V03	Valley	1	1	Job Reference (optional)	I63762481

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

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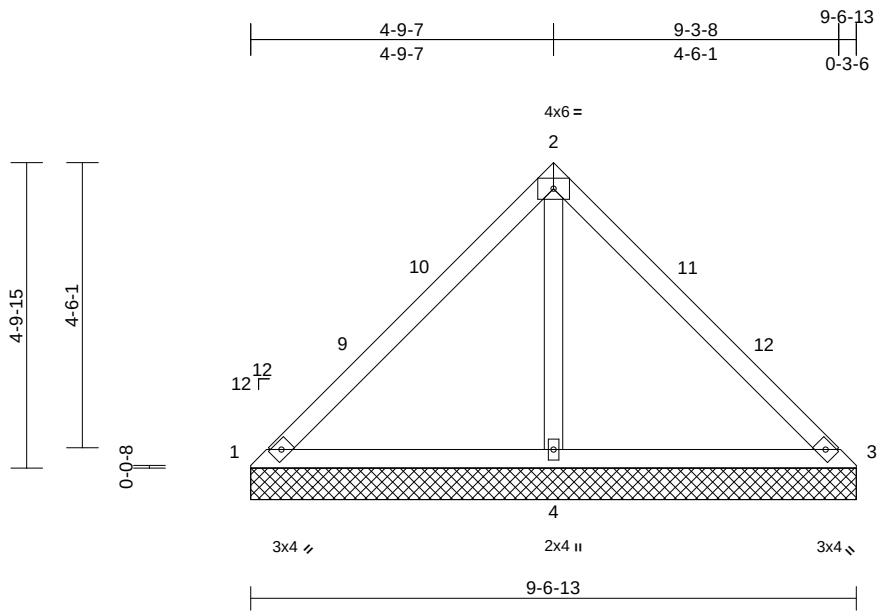

Scale = 1:36.4

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	0.29	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.28	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.24	Horiz(TL)	0.01	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 39 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 9-6-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 1=9-6-13, 3=9-6-13, 4=9-6-13
Max Horiz 1=-154 (LC 8)
Max Uplift 1=-17 (LC 24), 3=-17 (LC 23), 4=-285 (LC 12)
Max Grav 1=78 (LC 23), 3=78 (LC 24), 4=680 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-169/288, 2-3=-169/280
BOT CHORD 1-4=-284/223, 3-4=-284/223
WEBS 2-4=-623/344

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-8 to 3-0-8, Interior (1) 3-0-8 to 4-9-15, Exterior (2) 4-9-15 to 7-9-15, Interior (1) 7-9-15 to 9-7-5 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 17 lb uplift at joint 1, 17 lb uplift at joint 3 and 285 lb uplift at joint 4.
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

February 21,2024

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

Job	Truss	Truss Type	Qty	Ply	Furr, Mayview B	
3876658	V04	Valley	1	1	Job Reference (optional)	I63762482

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

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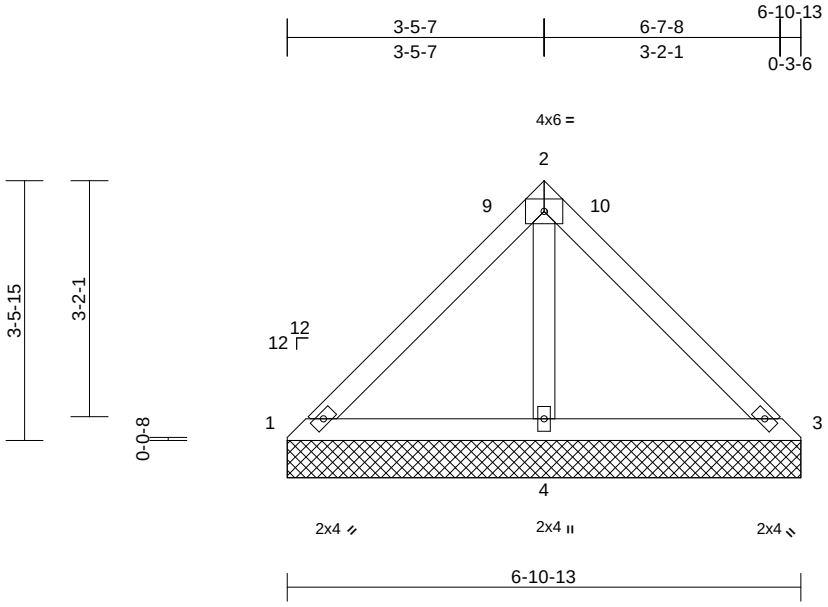

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 28 lb	FT = 20%

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

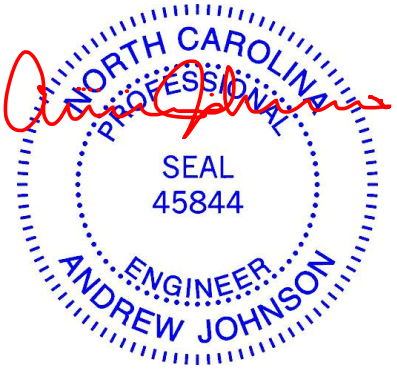
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-10-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 1=6-10-13, 3=6-10-13, 4=6-10-13
Max Horiz 1=-110 (LC 8)
Max Uplift 4=-184 (LC 12)
Max Grav 1=71 (LC 23), 3=71 (LC 24), 4=455 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-97/173, 2-3=-97/162
BOT CHORD 1-4=-195/172, 3-4=-195/172
WEBS 2-4=-371/218

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-8 to 3-0-8, Interior (1) 3-0-8 to 3-5-15, Exterior (2) 3-5-15 to 6-3-6, Interior (1) 6-3-6 to 6-11-5 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 184 lb uplift at joint 4.
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



February 21,2024

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

Job	Truss	Truss Type	Qty	Ply	Furr, Mayview B	
3876658	V05	Valley	1	1	Job Reference (optional)	I63762483

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

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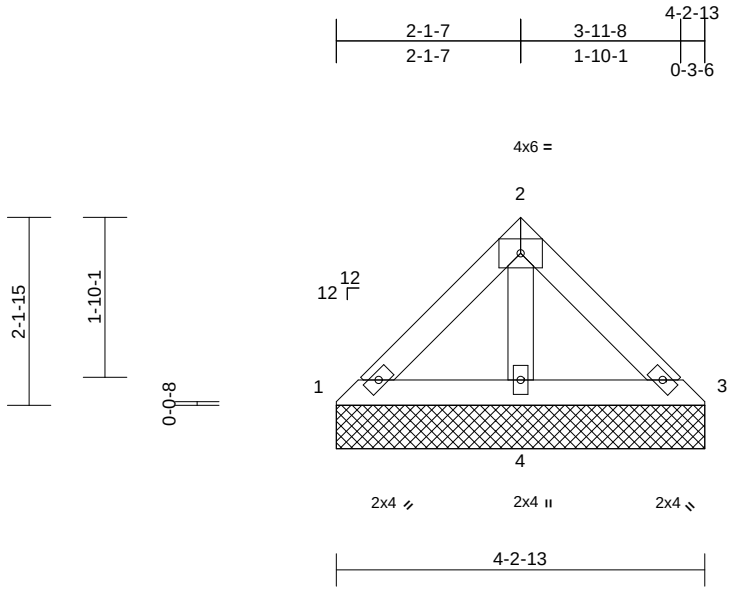

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 16 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-2-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 1=4-2-13, 3=4-2-13, 4=4-2-13
Max Horiz 1=-65 (LC 8)
Max Uplift 1=-7 (LC 13), 3=-10 (LC 13), 4=-79 (LC 12)
Max Grav 1=59 (LC 23), 3=59 (LC 24), 4=236 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-50/73, 2-3=-50/59
BOT CHORD 1-4=-83/81, 3-4=-83/81
WEBS 2-4=-142/74

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 7 lb uplift at joint 1, 10 lb uplift at joint 3 and 79 lb uplift at joint 4.
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

February 21,2024

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

Job	Truss	Truss Type	Qty	Ply	Furr, Mayview B	
3876658	V06	Valley	1	1	Job Reference (optional)	I63762484

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

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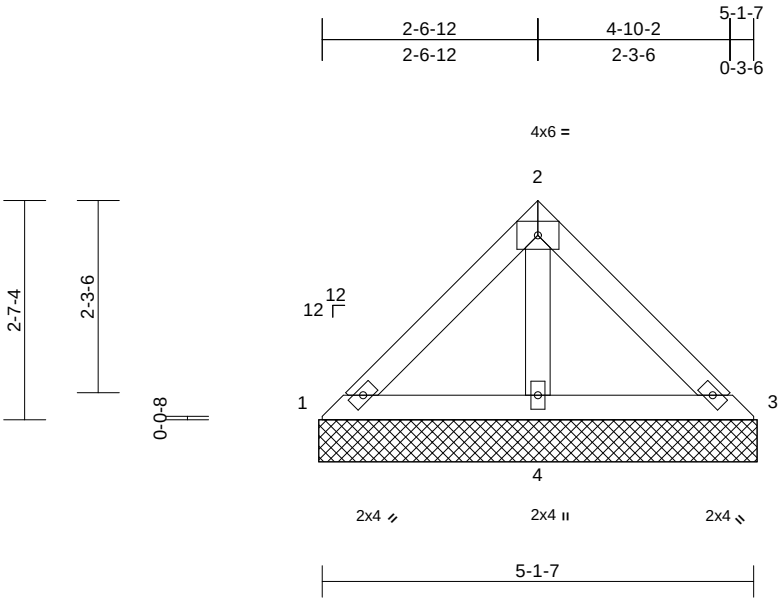

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 20 lb	FT = 20%

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

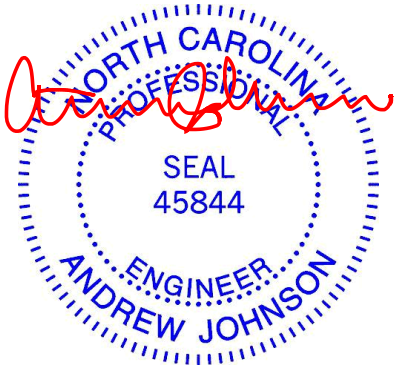
BRACING
TOP CHORD Structural wood sheathing directly applied or 5-1-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 1=5-2-7, 3=5-2-7, 4=5-2-7
Max Horiz 1=80 (LC 9)
Max Uplift 3=-4 (LC 13), 4=-113 (LC 12)
Max Grav 1=63 (LC 23), 3=63 (LC 24), 4=315 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-53/110, 2-3=-53/95
BOT CHORD 1-4=-123/114, 3-4=-123/114
WEBS 2-4=-223/126

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 4 lb uplift at joint 3 and 113 lb uplift at joint 4.
10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 3.
11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



February 21,2024

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

Job	Truss	Truss Type	Qty	Ply	Furr, Mayview B	
3876658	V07	Valley	1	1	Job Reference (optional)	I63762485

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

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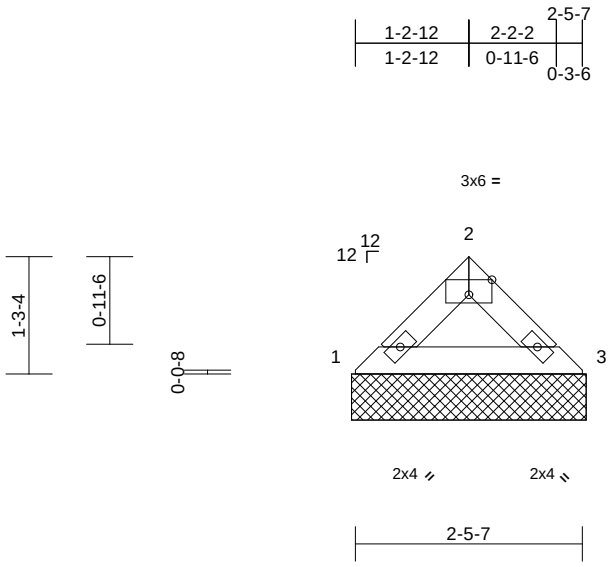


Scale = 1:24.9

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 8 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-5-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=2-6-7, 3=2-6-7
Max Horiz 1=-35 (LC 8)
Max Uplift 1=-24 (LC 12), 3=-24 (LC 13)
Max Grav 1=102 (LC 1), 3=102 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-120/47, 2-3=-120/47
BOT CHORD 1-3=-29/97

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 24 lb uplift at joint 1 and 24 lb uplift at joint 3.
10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 3.
11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

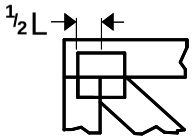
LOAD CASE(S) Standard

February 21,2024

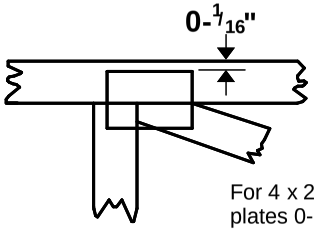
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

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.

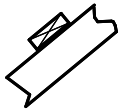
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

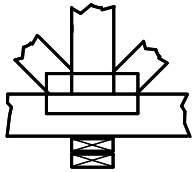
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

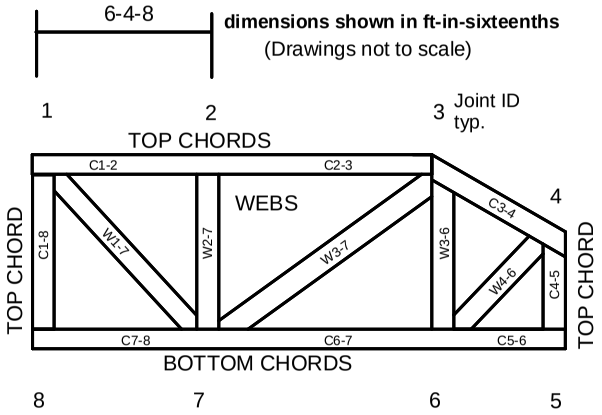


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

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.