

RE: 25-3703-A
SGR-LOT 74 ROOF

Trenco
818 Soundside Rd
Edenton, NC 27932

Site Information:

Customer: Project Name: 25-3703-A
Lot/Block:

Address:

City:

Model:

Subdivision:

State:

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

Design Code: IRC2018/TPI2014

Wind Code: ASCE 7-16

Roof Load: 40.0 psf

Design Program: MiTek 20/20 8.5

Wind Speed: 130 mph

Floor Load: N/A psf

This package includes 40 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I74047316	CJ01	6/9/2025	21	I74047336	T06	6/9/2025
2	I74047317	HG01	6/9/2025	22	I74047337	T07	6/9/2025
3	I74047318	J01	6/9/2025	23	I74047338	V01	6/9/2025
4	I74047319	J02	6/9/2025	24	I74047339	V02	6/9/2025
5	I74047320	M01	6/9/2025	25	I74047340	V03	6/9/2025
6	I74047321	M01A	6/9/2025	26	I74047341	V04	6/9/2025
7	I74047322	M02	6/9/2025	27	I74047342	V05	6/9/2025
8	I74047323	PB01	6/9/2025	28	I74047343	V06	6/9/2025
9	I74047324	PB01GE	6/9/2025	29	I74047344	V07	6/9/2025
10	I74047325	T01	6/9/2025	30	I74047345	V08	6/9/2025
11	I74047326	T01G	6/9/2025	31	I74047346	V09GE	6/9/2025
12	I74047327	T01GE	6/9/2025	32	I74047347	V10	6/9/2025
13	I74047328	T02	6/9/2025	33	I74047348	V11	6/9/2025
14	I74047329	T02G	6/9/2025	34	I74047349	V12	6/9/2025
15	I74047330	T02GE	6/9/2025	35	I74047350	V13	6/9/2025
16	I74047331	T03	6/9/2025	36	I74047351	V14	6/9/2025
17	I74047332	T03GE	6/9/2025	37	I74047352	V15	6/9/2025
18	I74047333	T03S	6/9/2025	38	I74047353	V16	6/9/2025
19	I74047334	T05	6/9/2025	39	I74047354	V17	6/9/2025
20	I74047335	T05A	6/9/2025	40	I74047355	V18	6/9/2025

The truss drawing(s) referenced above have been prepared by
Truss Engineering Co. under my direct supervision
based on the parameters provided by Riverside Roof Truss.

Truss Design Engineer's Name: Gilbert, Eric

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

North Carolina COA: C-0844

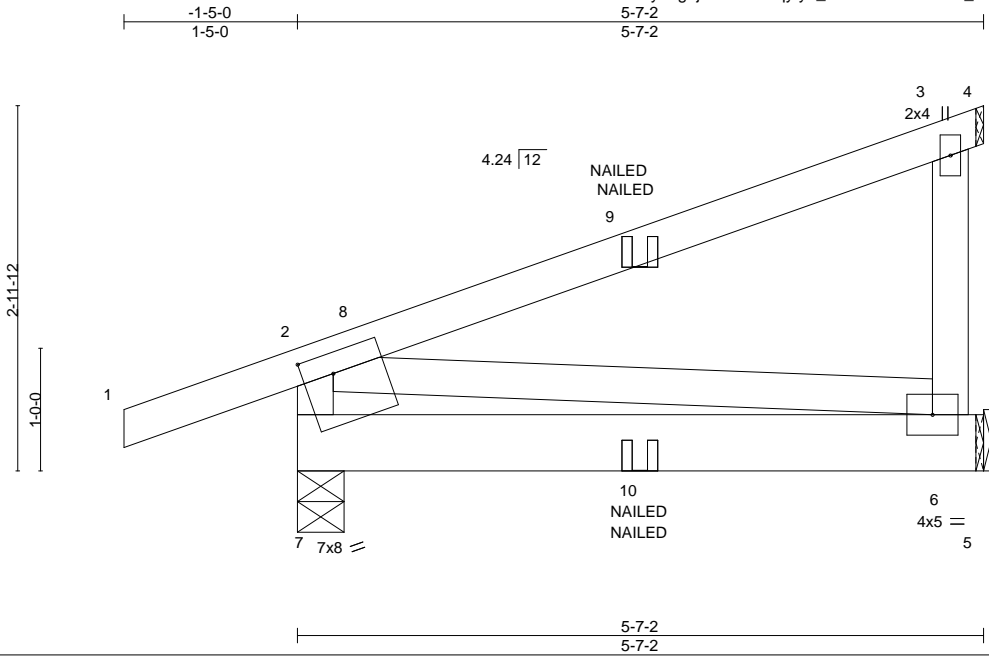
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which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



June 09, 2025

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 74 ROOF	174047316
25-3703-A	CJ01	Diagonal Hip Girder	2	1	Job Reference (optional)	

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:10:07 2025 Page 1
ID:tdHS5lWyLmg?jaR9E1eBtqly9_-mDO6d2m9COGt_aHSLKgAtUihhaMyIZfKt_MWVz86m_



Scale = 1:18.8

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.57	Vert(LL)	-0.01	6-7	>999	240	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.15	Vert(CT)	-0.02	6-7	>999	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.02	Horz(CT)	-0.00	6	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr NO	Matrix-MP							
BCDL 10.0	Code IRC2018/TPI2014								

Weight: 35 lb FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 7=0-4-9, 6=Mechanical
Max Horz 7=95(LC 9)
Max Uplift 7=-88(LC 12), 6=-38(LC 12)
Max Grav 7=315(LC 2), 6=231(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

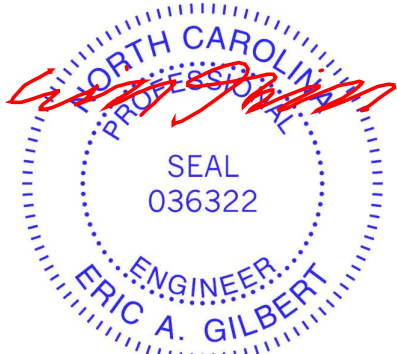
TOP CHORD 2-7=-263/94

NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 6.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-43, 2-3=-43, 3-4=-43, 5-7=-20



June 9,2025

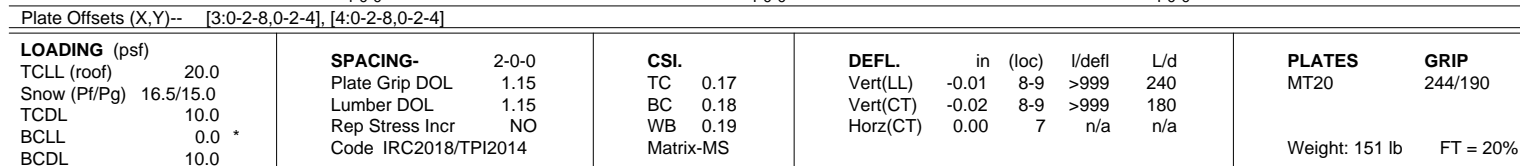
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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

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Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:10:08 2025 Page 1
ID:tdHSSiVlyNg?jaR9E1eBtqly9_-EPyVqOnnzOjckrev2BPFg00Z4w5hAAoZXjv1yz286lz
-1-0-0 4-0-0 8-0-0 12-0-0 13-0-0
1-0-0 4-0-0 4-0-0 4-0-0 1-0-0
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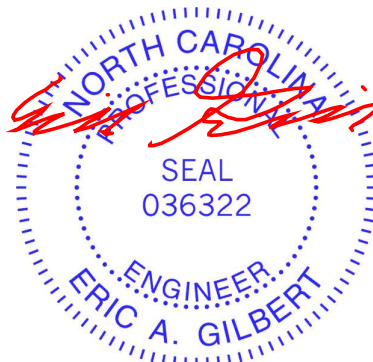


REACTIONS. (size) 10=0-3-8, 7=0-3-8
 Max Horz 10=64(LC 11)
 Max Uplift 10=-177(LC 12), 7=-175(LC 12)
 Max Grav 10=957(LC 35), 7=948(LC 35)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1197/233, 3-4=-1022/222, 4-5=-1191/231, 2-10=-912/195, 5-7=-902/193
 BOT CHORD 8-9=-172/1010
 WEBS 3-9=-59/333, 4-8=-68/360, 2-9=-163/919, 5-8=-162/910

NOTES-

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs 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 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) TLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 6) Unbalanced snow loads have been considered for this design.
- 7) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 8) Provide adequate drainage to prevent water ponding.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=177, 7=175.
- 12) This truss is designed in accordance with the 2018 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.



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Continued on page 2



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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 74 ROOF	I74047317
25-3703-A	HG01	Hip Girder	1	2	Job Reference (optional)	

Riverside Roof Truss, LLC, Danville, Va - 24541,

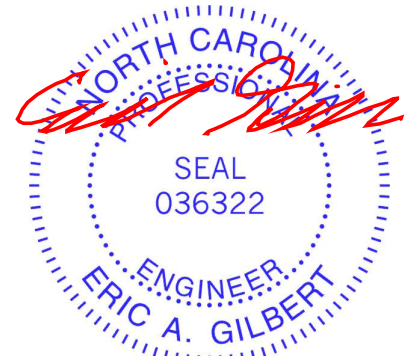
8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:10:08 2025 Page 2
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NOTES-

- 14) Use Simpson Strong-Tie THJA26 (THJA26 on 2 ply, Left Hand Hip) or equivalent at 4-0-6 from the left end to connect truss(es) to front face of bottom chord.
- 15) Use Simpson Strong-Tie THJA26 (THJA26 on 2 ply, Right Hand Hip) or equivalent at 7-11-10 from the left end to connect truss(es) to front face of bottom chord.
- 16) Fill all nail holes where hanger is in contact with lumber.
- 17) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-2=-43, 2-3=-43, 3-4=-53, 4-5=-43, 5-6=-43, 7-10=-20
 - Concentrated Loads (lb)
 - Vert: 9=-336(F) 8=-336(F) 13=-134(F)



June 9, 2025

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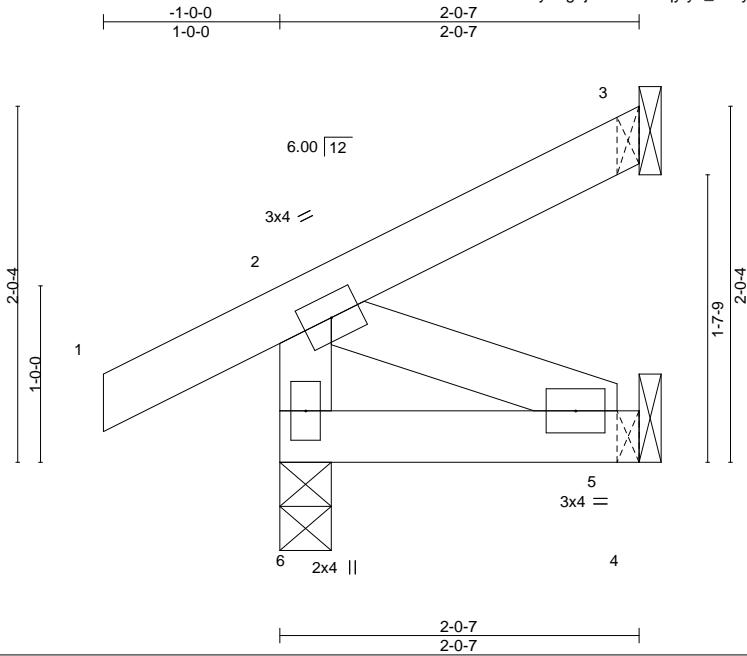
Job	Truss	Truss Type	Qty	Ply	SGR-LOT 74 ROOF	174047318
25-3703-A	J01	Jack-Open	2	1	Job Reference (optional)	

Riverside Roof Truss, LLC,

Danville, Va - 24541,

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:10:08 2025 Page 1

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Scale = 1:13.1

LOADING (psf)	SPACING-	CS.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.09	Vert(LL) -0.00	6	>999	240	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.03	Vert(CT) -0.00	5-6	>999	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.03	Horz(CT) -0.00	3	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MP						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 12 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 2-0-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

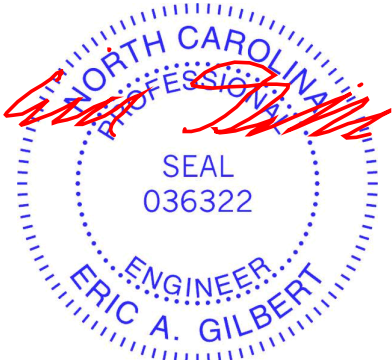
REACTIONS.

(size) 6=0-3-8, 3=Mechanical, 5=Mechanical
Max Horz 6=69(LC 16)
Max Uplift 6=24(LC 16), 3=-10(LC 13), 5=-14(LC 16)
Max Grav 6=167(LC 21), 3=34(LC 21), 5=40(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 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
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 3, 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



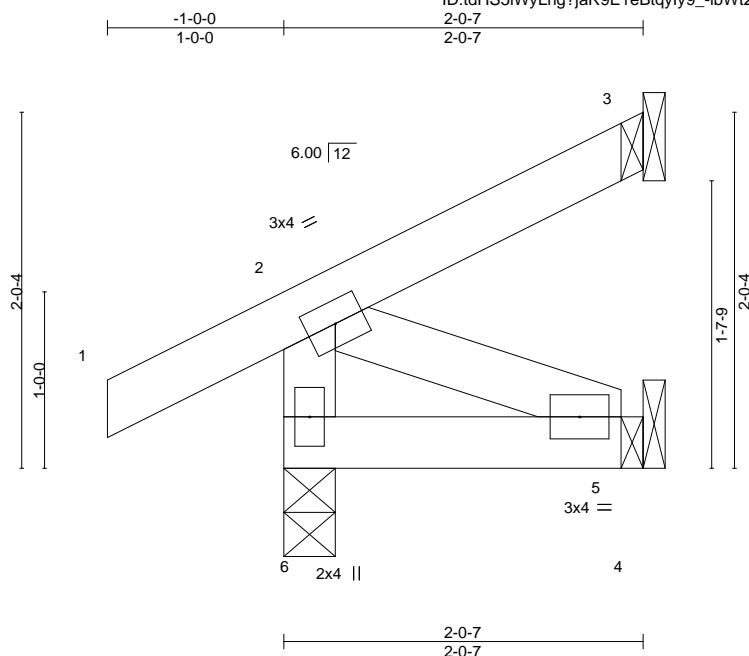
June 9,2025

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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	TC 0.09	Vert(LL)	-0.00	6	>999	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	BC 0.03	Vert(CT)	-0.00	5-6	>999		
TCDL	10.0	Rep Stress Incr	WB 0.03	Horz(CT)	-0.00	3	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014	Matrix-MP					Weight: 12 lb	FT = 20%
BCDL	10.0								

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 2-0-7 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 6=0-3-8, 3=Mechanical, 5=Mechanical
Max Horz 6=69(LC 16)
Max Uplift 6=-24(LC 16), 3=-10(LC 13), 5=-14(LC 16)
Max Grav 6=167(LC 21), 3=34(LC 21), 5=40(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 3, 5.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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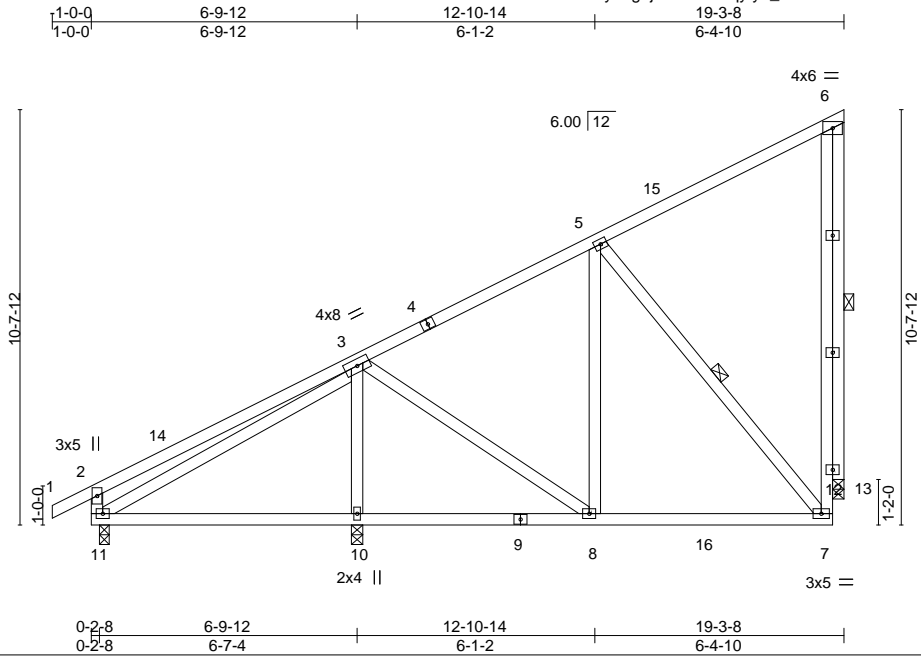
Job	Truss	Truss Type	Qty	Ply	SGR-LOT 74 ROOF	174047320
25-3703-A	M01	Monopitch	3	1		

Riverside Roof Truss, LLC,

Danville, Va - 24541,

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:10:09 2025 Page 1

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LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.54	Vert(LL)	-0.06 7-8 >999 240	MT20		244/190	
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.10 7-8 >999 180				
TCDL	10.0	Rep Stress Incr	YES	WB	0.34	Horz(CT)	-0.02 13 n/a n/a				
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-MS							
BCDL	10.0										
								Weight: 142 lb		FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	2x4 SP No.3	WEBS	1 Row at midpt 5-7, 6-13
OTHERS	2x4 SP No.3		

REACTIONS. (size) 11=0-3-0, 10=0-3-8, 13=0-3-8
Max Horz 11=312(LC 16)
Max Uplift 10=-40(LC 16), 13=-108(LC 16)
Max Grav 11=335(LC 2), 10=905(LC 28), 13=556(LC 28)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-371/179, 3-5=-373/0, 7-12=-86/423, 6-12=-86/423, 2-11=-380/200
BOT CHORD 7-8=-103/294
WEBS 3-11=-310/286, 3-10=-666/185, 3-8=0/278, 5-7=-419/149, 6-13=-556/165

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 18-10-4 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
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
 - All plates are 3x4 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Bearing at joint(s) 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10 except (jt=lb) 13=108.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 9,2025

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 74 ROOF	174047321
25-3703-A	M01A	Monopitch	2	1		

Riverside Roof Truss, LLC, Danville, Va - 24541,

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:10:10 2025 Page 1
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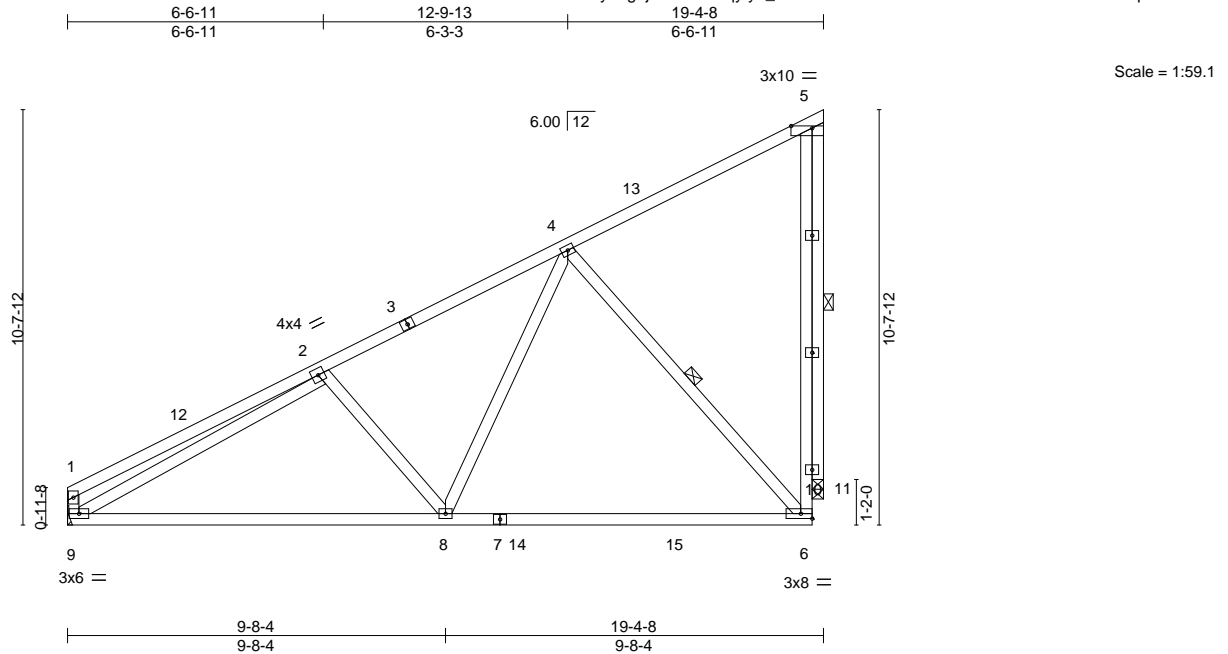


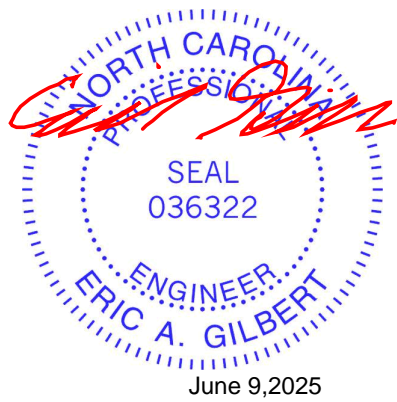
Plate Offsets (X,Y)-- [5:0-6-8,Edge]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	-0.31	6-8	>732	240	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.48	6-8	>475	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.81	Horz(CT)	-0.05	11	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-MS							Weight: 132 lb	FT = 20%
BCDL	10.0											

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 5-8-7 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2 *Except* 7-9: 2x4 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3	WEBS	1 Row at midpt 4-6, 5-11
OTHERS	2x4 SP No.3		

REACTIONS. (size) 9=Mechanical, 11=0-3-8
Max Horz 9=287(LC 16)
Max Uplift 11=122(LC 16)
Max Grav 9=864(LC 28), 11=890(LC 28)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-426/99, 2-4=-989/14, 6-10=-121/762, 5-10=-121/762, 1-9=-321/106
BOT CHORD 8-9=-294/1020, 6-8=-150/567
WEBS 2-8=-299/207, 4-8=-29/688, 4-6=-799/218, 2-9=-770/0, 5-11=-891/201

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 18-11-4 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
 - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 4) Unbalanced snow loads have been considered for this design.
 - 5) All plates are 3x4 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 8) Refer to girder(s) for truss to truss connections.
 - 9) Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=122.
 - 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 9,2025

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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 74 ROOF	174047322
25-3703-A	M02	Monopitch	3	1	Job Reference (optional)	

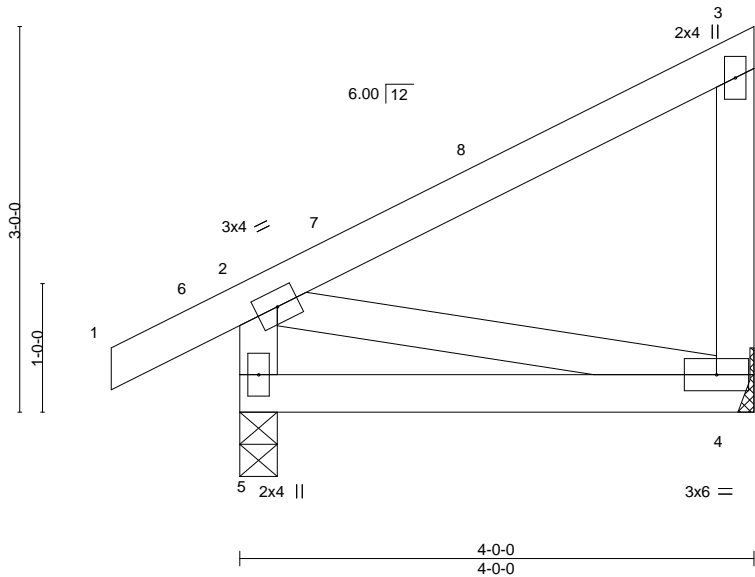
Riverside Roof Truss, LLC, Danville, Va - 24541,

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:10:10 2025 Page 1

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Scale = 1:17.9



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	-0.01 4-5 >999 240	MT20		244/190	
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.02 4-5 >999 180				
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	-0.00 4 n/a n/a				
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-MP							
BCDL	10.0										
								Weight: 24 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 4-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 5=0-3-8, 4=Mechanical
Max Horz 5=98(LC 15)
Max Uplift 5=42(LC 16), 4=-26(LC 13)
Max Grav 5=228(LC 2), 4=154(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 3-10-4 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
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 9,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

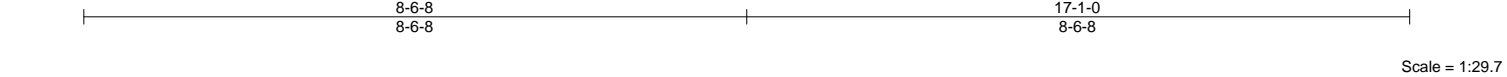
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 74 ROOF	174047323
25-3703-A	PB01	Piggyback	24	1		

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:10:11 2025 Page 1
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LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	0.00	MT20		244/190	
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	0.00				
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00				
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-S							
BCDL	10.0										

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.

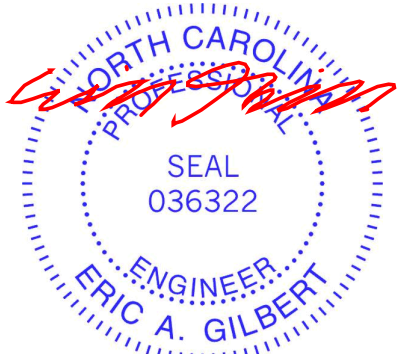
All bearings 15-1-14.
(lb) - Max Horz 2=67(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 2, 6, 10, 8
Max Grav All reactions 250 lb or less at joint(s) 2, 6 except 9=268(LC 2), 10=355(LC 34), 8=355(LC 35)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

WEBS 3-10=-266/177, 5-8=-266/177

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-4-11 to 3-4-11, Interior(1) 3-4-11 to 8-6-8, Exterior(2R) 8-6-8 to 11-6-8, Interior(1) 11-6-8 to 16-8-5 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
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6, 10, 8.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



June 9,2025

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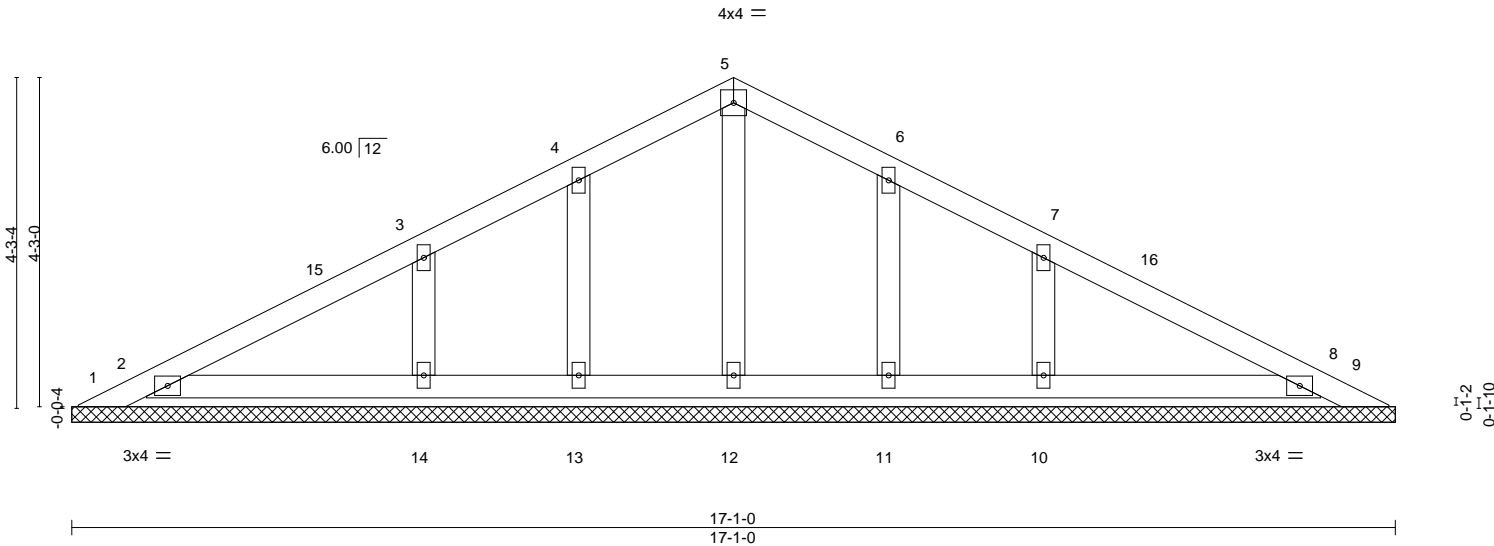
Job	Truss	Truss Type	Qty	Ply	SGR-LOT 74 ROOF	174047324
25-3703-A	PB01GE	GABLE	2	1	Job Reference (optional)	

Riverside Roof Truss, LLC, Danville, Va - 24541,

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:10:12 2025 Page 1
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Scale = 1:29.7



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	n/a	-	n/a	999	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999	
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	8	n/a	n/a	
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-S							
BCDL	10.0										

Weight: 68 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.

All bearings 17-1-0.
(lb) - Max Horz 1=67(LC 15)
Max Uplift All uplift 100 lb or less at joint(s) 9, 2, 8, 13, 14, 11, 10 except 1=110(LC 28)
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 12, 13, 11 except 2=288(LC 2), 8=288(LC 2), 14=251(LC 2), 10=251(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) 0-4-11 to 3-4-11, Exterior(2N) 3-4-11 to 8-6-8, Corner(3R) 8-6-8 to 11-6-8, Exterior(2N) 11-6-8 to 16-8-5 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
- 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.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 2, 8, 13, 14, 11, 10 except (jt=lb) 1=110.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



June 9,2025

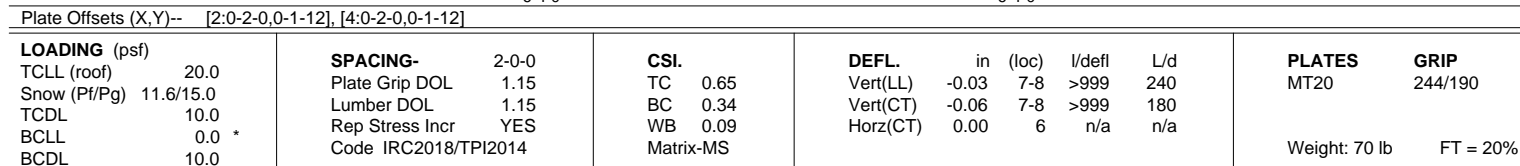
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1-0-0 6-4-0 12-8-0 13-8-0
1-0-0 6-4-0 6-4-0 1-0-0
4x4 = Scale = 1:30.7



REACTIONS. (size) 8=0-3-8, 6=0-3-8
 Max Horz 8=-113(LC 14)
 Max Uplift 8=-66(LC 16), 6=-66(LC 16)
 Max Grav 8=564(LC 2), 6=564(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	2-3=-535/107, 3-4=-535/107, 2-8=-508/163, 4-6=-508/164
BOT CHORD	7-8=-119/309

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 6-4-0, Exterior(2R) 6-4-0 to 9-4-0, Interior(1) 9-4-0 to 13-8-0 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 4) Unbalanced snow loads have been considered for this design.
 - 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
 - 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.
 - 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



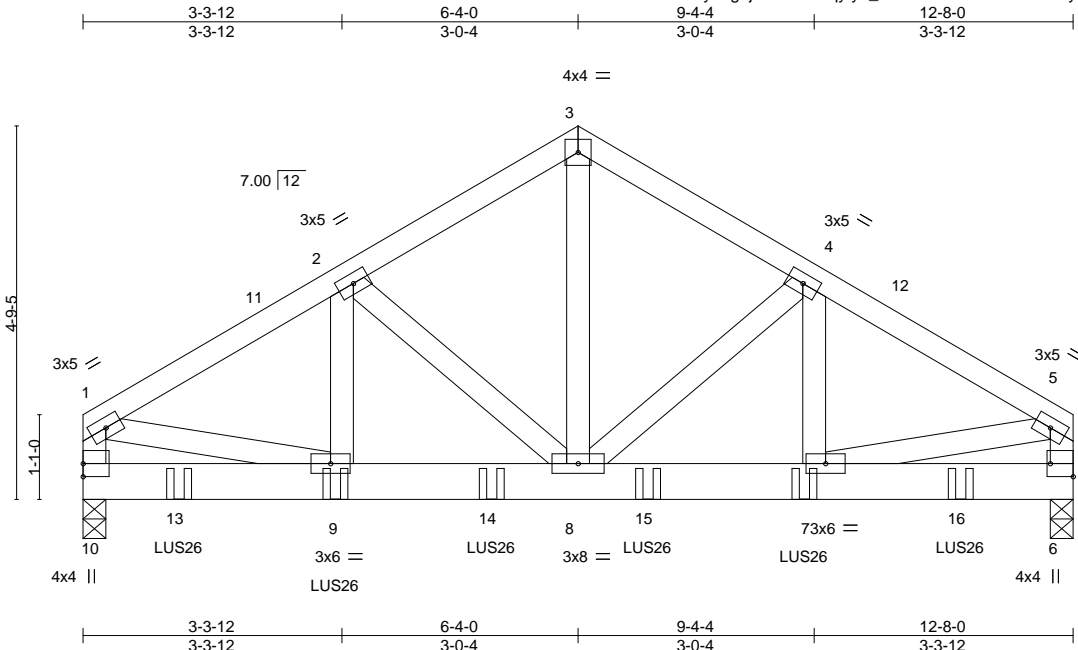
June 9.2025

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 74 ROOF	174047326
25-3703-A	T01G	Common Girder	1	2	Job Reference (optional)	

Riverside Roof Truss, LLC, Danville, Va - 24541,

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Scale = 1:29.5

Plate Offsets (X,Y)-- [6:Edge,0-3-8]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	20.0	Plate Grip DOL	2-0-0	TC	0.47	in (loc)	l/defl	MT20	GRIP
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.37	Vert(LL)	>999		244/190
TCDL	10.0	Rep Stress Incr	NO	WB	0.44	Vert(CT)	>999		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-MS		Horz(CT)	0.01		
BCDL	10.0							Weight: 171 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	2x6 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3		

REACTIONS. (size) 10=0-3-8, 6=0-3-8
Max Horz 10=97(LC 35)
Max Uplift 6=127(LC 12)
Max Grav 10=2634(LC 3), 6=2350(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2868/0, 2-3=-2145/95, 3-4=-2145/94, 4-5=-2689/143, 1-10=-2026/0, 5-6=-1907/104
BOT CHORD 9-10=-14/395, 8-9=0/2434, 7-8=-73/2280, 6-7=-18/313
WEBS 3-8=-44/1958, 4-8=-613/129, 4-7=-95/558, 2-8=-812/0, 2-9=0/784, 1-9=0/2141, 5-7=-56/2024

- NOTES-**
- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs 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 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 6) Unbalanced snow loads have been considered for this design.
 - 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=127.
 - 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 11) Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-2-12 from the left end to 11-2-12 to connect truss(es) to back face of bottom chord.
 - 12) Fill all nail holes where hanger is in contact with lumber.

Continued on page 2

LOAD CASE(S) Standard

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



June 9,2025



818 Soundside Road
Edenton, NC 27932

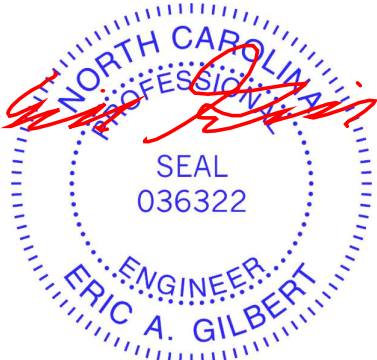
Job	Truss	Truss Type	Qty	Ply	SGR-LOT 74 ROOF	I74047326
25-3703-A	T01G	Common Girder	1	2	Job Reference (optional)	

Riverside Roof Truss, LLC, Danville, Va - 24541,

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:10:13 2025 Page 2
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LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-43, 3-5=-43, 6-10=-20
Concentrated Loads (lb)
Vert: 7=-474(B) 9=-595(B) 13=-595(B) 14=-474(B) 15=-474(B) 16=-474(B)



June 9,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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



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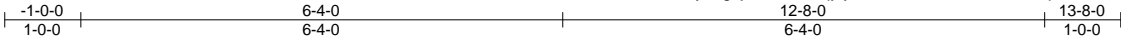
Job	Truss	Truss Type	Qty	Ply	SGR-LOT 74 ROOF	174047327
25-3703-A	T01GE	Common Supported Gable	1	1	Job Reference (optional)	

Riverside Roof Truss, LLC,

Danville, Va - 24541,

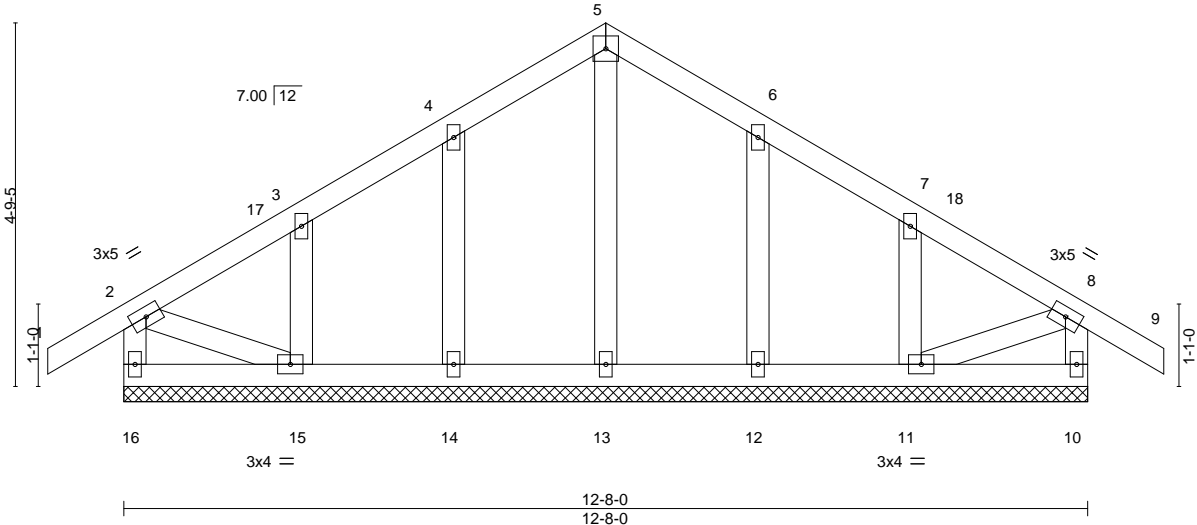
8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:10:14 2025 Page 1

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4x4 =

Scale = 1:30.3



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	GRIP
TCLL (roof)	20.0	2-0-0		TC	0.09	in	(loc)	l/defl	L/d	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Plate Grip DOL	1.15	BC	0.04	Vert(LL)	-0.00	9	n/r		
TCDL	10.0	Lumber DOL	1.15	WB	0.04	Vert(CT)	-0.00	9	n/r		
BCLL	0.0 *	Rep Stress Incr	YES	Matrix-S		Horz(CT)	0.00	10	n/a		
BCDL	10.0	Code IRC2018/TPI2014								Weight: 73 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	2x4 SP No.3		
OTHERS	2x4 SP No.3		

REACTIONS. All bearings 12-8-0.

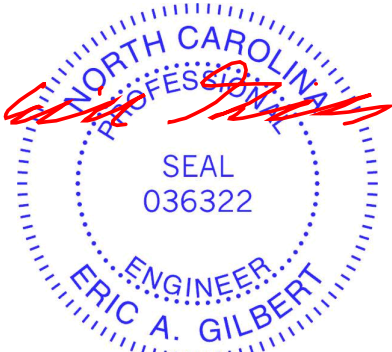
(lb) - Max Horz 16=-113(LC 14)

Max Uplift All uplift 100 lb or less at joint(s) 16, 10, 14, 15, 12, 11

Max Grav All reactions 250 lb or less at joint(s) 16, 10, 13, 14, 15, 12, 11

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -1-0-0 to 2-0-0, Exterior(2N) 2-0-0 to 6-4-0, Corner(3R) 6-4-0 to 9-4-0, Exterior(2N) 9-4-0 to 13-8-0 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
 - 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.
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 10, 14, 15, 12, 11.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 9,2025

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 74 ROOF	174047328
25-3703-A	T02	Common	1	1	Job Reference (optional)	

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:10:15 2025 Page 1
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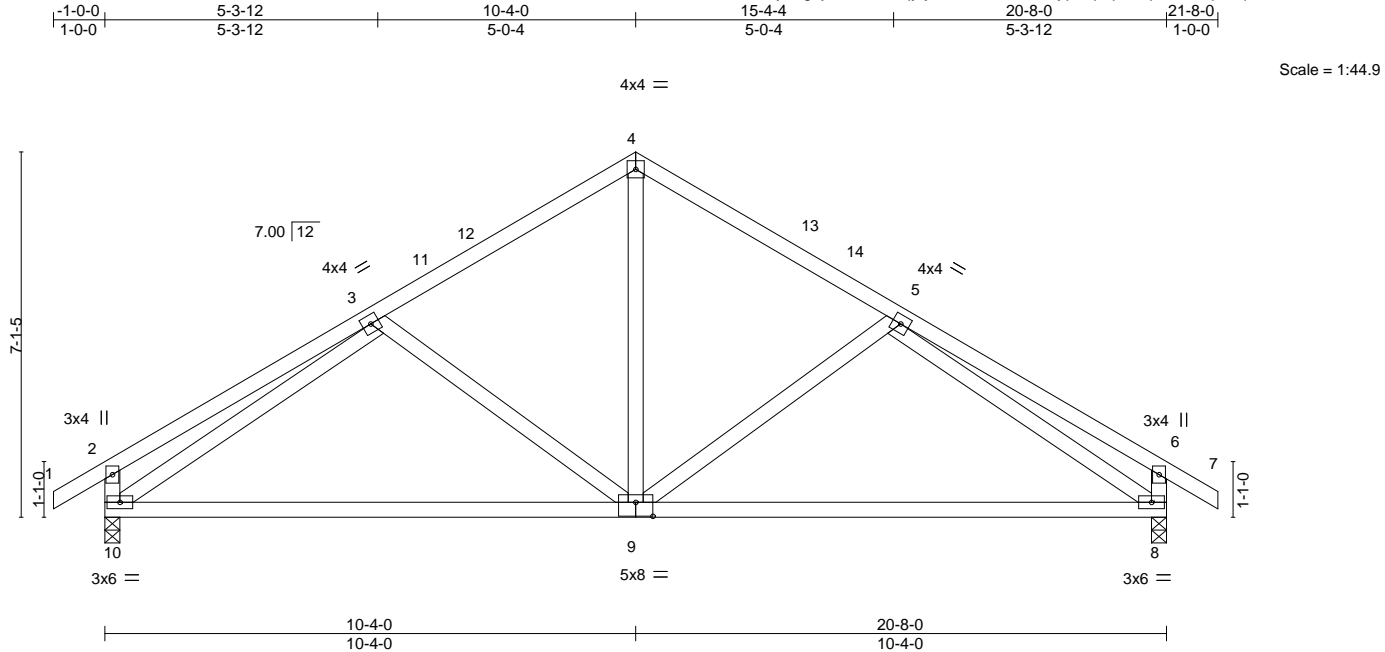


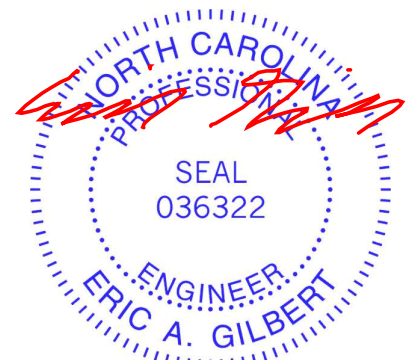
Plate Offsets (X,Y)-- [9:0-4-0,0-3-4]										
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP
TCLL (roof)	20.0		2-0-0			in (loc)	l/defl	L/d	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Plate Grip DOL	1.15	TC	0.54	Vert(LL)	-0.19 8-9	>999 240		
TCDL	10.0	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.38 8-9	>649 180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.02 8	n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS					Weight: 118 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	

REACTIONS.	(size) 10=0-3-8, 8=0-3-8
	Max Horz 10=160(LC 14)
	Max Uplift 10=85(LC 16), 8=85(LC 16)
	Max Grav 10=884(LC 2), 8=884(LC 2)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-315/70, 3-4=-832/123, 4-5=-832/123, 5-6=-315/70, 2-10=-337/100, 6-8=-337/100
BOT CHORD	9-10=-63/811, 8-9=-51/811
WEBS	4-9=-16/514, 3-10=-760/97, 5-8=-760/97

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 10-4-0, Exterior(2R) 10-4-0 to 13-4-0, Interior(1) 13-4-0 to 21-8-0 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
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 8.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 9,2025

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 74 ROOF	174047329
25-3703-A	T02G	Common Girder	1	3	Job Reference (optional)	

Riverside Roof Truss, LLC, Danville, Va - 24541,

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:10:15 2025 Page 1
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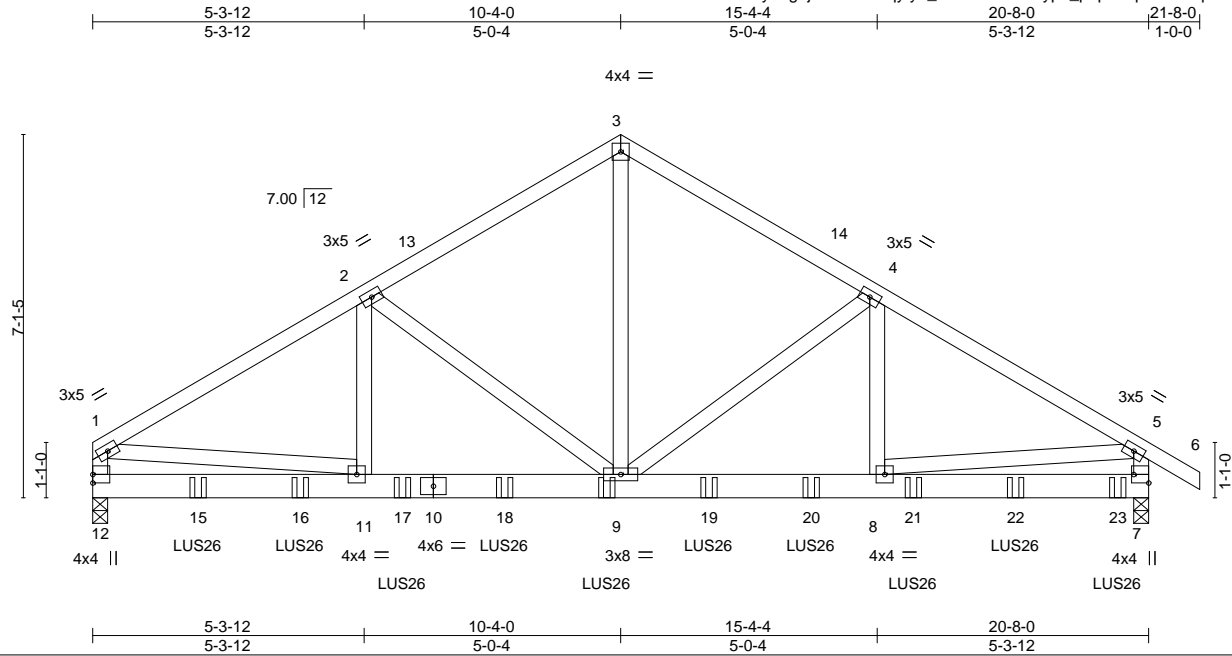


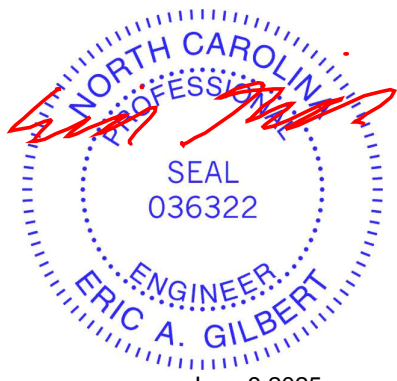
Plate Offsets (X, Y)-- [7:Edge,0-3-8]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	20.0	2-0-0		TC	0.59	in (loc)	l/defl	L/d	GRIP
Snow (Pf/Pg)	11.6/15.0	Plate Grip DOL	1.15	BC	0.45	Vert(LL)	-0.05 8-9	>999	244/190
TCDL	10.0	Lumber DOL	1.15	WB	0.46	Vert(CT)	-0.09 8-9	>999	
BCLL	0.0 *	Rep Stress Incr	NO	Matrix-MS		Horz(CT)	0.02 7	n/a	
BCDL	10.0	Code IRC2018/TPI2014							
								Weight: 417 lb FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	2x6 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3		

REACTIONS.	
(size)	12=0-3-8, 7=0-3-8
Max Horz	12=-154(LC 36)
Max Uplift	12=-298(LC 12), 7=-372(LC 12)
Max Grav	12=3462(LC 2), 7=3964(LC 2)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	1-2=-4620/419, 2-3=-3448/365, 3-4=-3446/364, 4-5=-4660/419, 1-12=-2933/275, 5-7=-3029/312
BOT CHORD	11-12=-130/735, 9-11=-261/3921, 8-9=-258/3947, 7-8=-58/744
WEBS	3-9=-278/3122, 4-9=-1324/169, 4-8=-75/1183, 2-9=-1292/173, 2-11=-74/1129, 1-11=-226/3302, 5-8=-203/3237

- 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 0-9-0 oc.
Webs 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 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 6) Unbalanced snow loads have been considered for this design.
 - 7) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
 - 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=298, 7=372.
 - 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 12) Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left



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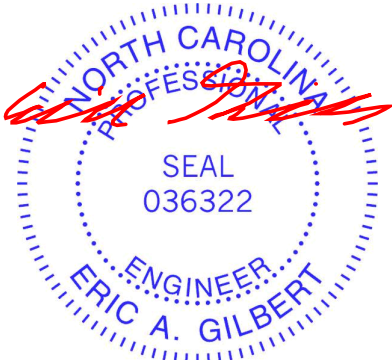
Job	Truss	Truss Type	Qty	Ply	SGR-LOT 74 ROOF	174047329
25-3703-A	T02G	Common Girder	1	3	Job Reference (optional)	

Riverside Roof Truss, LLC, Danville, Va - 24541,

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:10:16 2025 Page 2
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NOTES-
13) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-43, 3-5=-43, 5-6=-43, 7-12=-20
Concentrated Loads (lb)
Vert: 9=-469(B) 15=-474(B) 16=-469(B) 17=-469(B) 18=-469(B) 19=-469(B) 20=-469(B) 21=-469(B) 22=-469(B) 23=-480(B)



June 9,2025

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ENGINEERING BY

TRENCO

A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 74 ROOF	174047330
25-3703-A	T02GE	Common Supported Gable	1	1	Job Reference (optional)	

Riverside Roof Truss, LLC, Danville, Va - 24541,

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:10:16 2025 Page 1
ID:tdHS5iWylNg?jaR9E1eBtqlyl9_-?xRWW7to49ObZzTBNjKHZMMOSJhEZod_PnfKJUz86lr

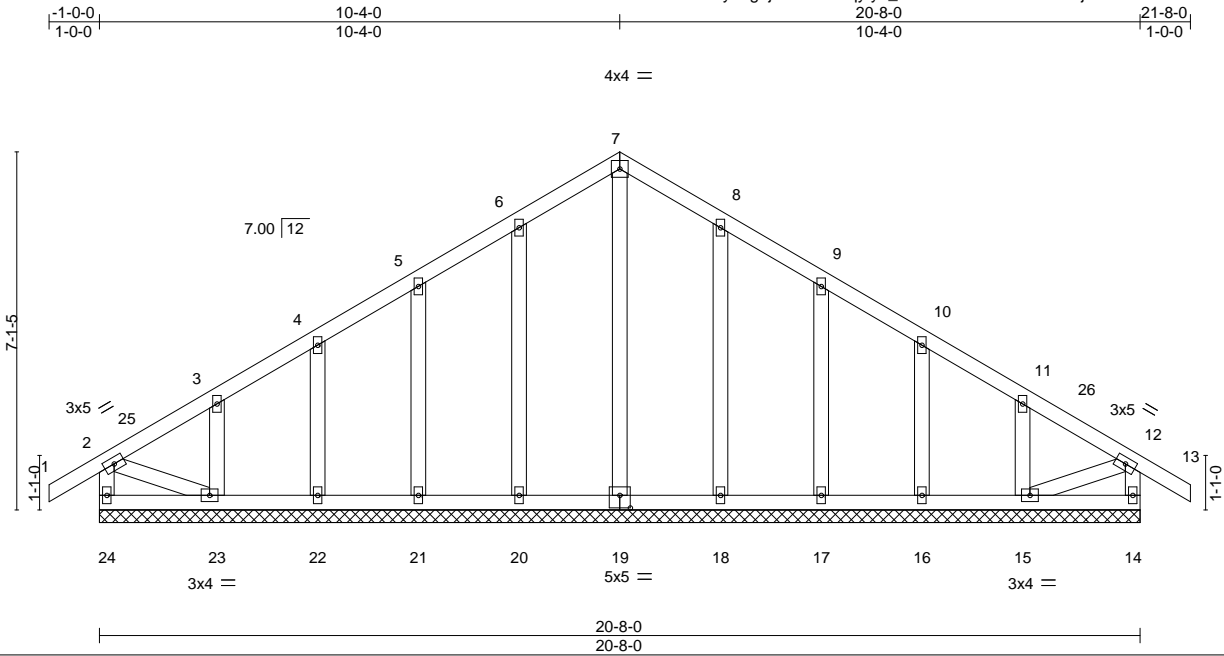


Plate Offsets (X,Y)-- [19:0-2,8,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.09	Vert(LL) -0.00	13	n/r	120		MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.04	Vert(CT) -0.00	13	n/r	120			
TCDL 10.0	Lumber DOL 1.15	WB 0.10	Horz(CT) 0.00	14	n/a	n/a			
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S							
BCDL 10.0	Code IRC2018/TPI2014								
								Weight: 131 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 23-24,14-15.

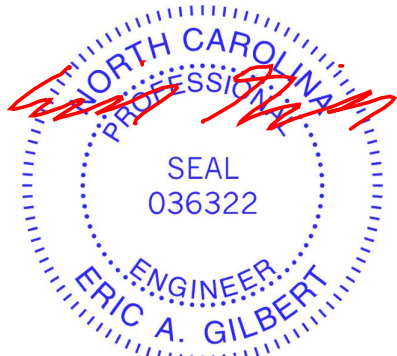
REACTIONS.

All bearings 20-8-0.
(lb) - Max Horz 24=160(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 24, 14, 20, 21, 22, 23, 18, 17, 16, 15
Max Grav All reactions 250 lb or less at joint(s) 24, 14, 19, 20, 21, 22, 23, 18, 17, 16, 15

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -1-0-0 to 2-0-0, Exterior(2N) 2-0-0 to 10-4-0, Corner(3R) 10-4-0 to 13-4-0, Exterior(2N) 13-4-0 to 21-8-0 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
- 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.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 24, 14, 20, 21, 22, 23, 18, 17, 16, 15.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 9,2025

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ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 74 ROOF	174047331
25-3703-A	T03	Piggyback Base	6	1		

Riverside Roof Truss, LLC, Danville, Va - 24541,

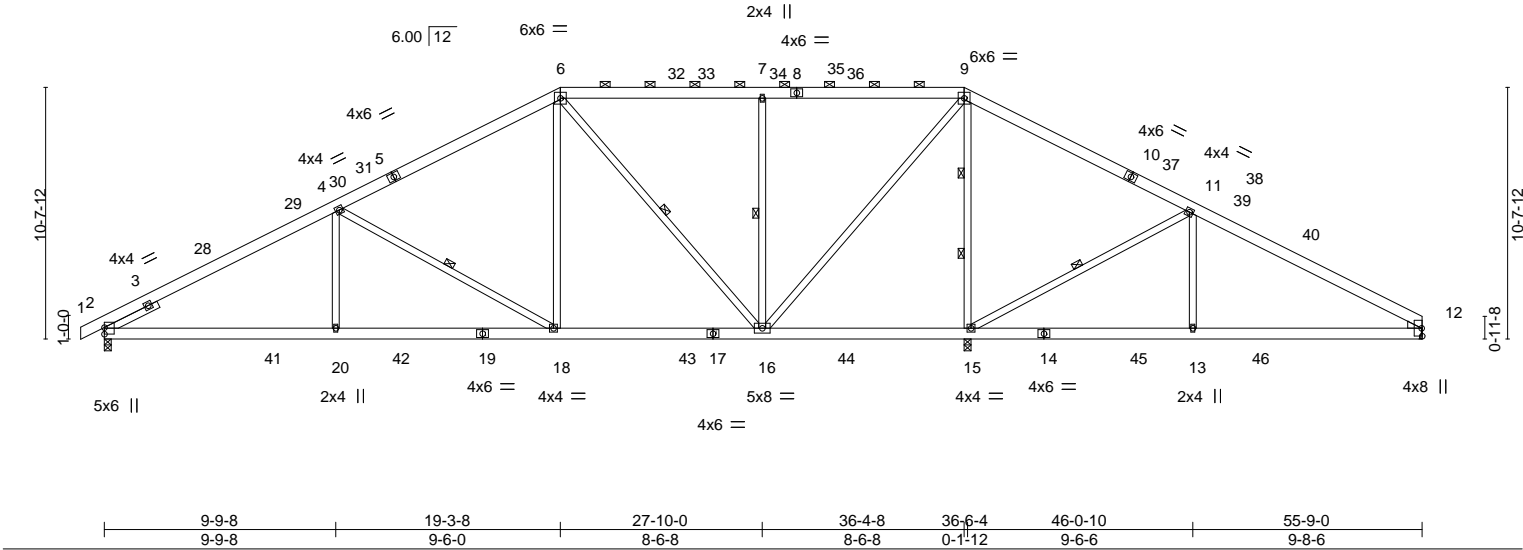
8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:10:17 2025 Page 1

ID:tdHS5lWYLnG?jaR9E1eBtqly9_-T8?ujTuQrTWSB61NxRsW6auQ2jtlI337dRPuswz86lq

-1-0-0 9-9-8 19-3-8 27-10-0 36-4-8 46-0-10 55-9-0

1-0-0 9-9-8 9-6-0 8-6-8 8-6-8 9-8-2 9-8-6

Scale = 1:97.5



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.70	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 16.5/15.0	Plate Grip DOL 1.15	BC 0.69	Vert(LL) -0.12 18-20 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.85	Vert(CT) -0.23 18-20 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.05 15 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 407 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-4-13 oc purlins, except
BOT CHORD 2x6 SP No.2	2-0-0 oc purlins (6-0-0 max.): 6-9.
WEBS 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
WEDGE	6-0-0 oc bracing: 15-16.
Right: 2x4 SP No.3	1 Row at midpt 4-18, 6-16, 7-16, 11-15
SLIDER Left 2x4 SP No.3 2-6-0	2 Rows at 1/3 pts 9-15

REACTIONS. (size) 2=0-3-8, 15=0-3-8, 12=Mechanical
Max Horz 2=206(LC 15)
Max Uplift 2=-124(LC 16), 15=-124(LC 16), 12=-53(LC 16)
Max Grav 2=1668(LC 28), 15=2954(LC 29), 12=688(LC 29)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-2540/258, 4-6=-1636/263, 6-7=-858/260, 7-9=-858/260, 9-11=0/718, 11-12=-726/143
BOT CHORD 2-20=-144/2329, 18-20=-144/2329, 16-18=0/1435, 15-16=-511/138, 13-15=-25/577, 12-13=-25/577
WEBS 4-20=0/448, 4-18=-1055/175, 6-18=0/920, 6-16=-984/46, 7-16=-741/173, 9-16=-137/1927, 9-15=-2081/217, 11-15=-1209/188, 11-13=0/493

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=56ft; eave=7ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 4-6-14, Interior(1) 4-6-14 to 19-3-8, Exterior(2R) 19-3-8 to 27-2-2, Interior(1) 27-2-2 to 36-4-8, Exterior(2R) 36-4-8 to 44-3-2, Interior(1) 44-3-2 to 55-9-0 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - 4) Unbalanced snow loads have been considered for this design.
 - 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
 - 6) Provide adequate drainage to prevent water ponding.
 - 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 9) Refer to girder(s) for truss to truss connections.
 - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12 except (jt=lb) 2=124, 15=124.
 - 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and Contr to meet standard ANSI/TPI 1.

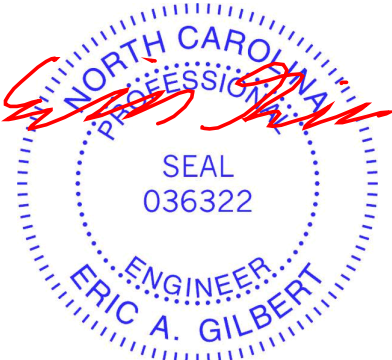


Job	Truss	Truss Type	Qty	Ply	SGR-LOT 74 ROOF	I74047331
25-3703-A	T03	Piggyback Base	6	1	Job Reference (optional)	

Riverside Roof Truss, LLC, Danville, Va - 24541,

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:10:17 2025 Page 2
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NOTES-
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



June 9,2025

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 74 ROOF	174047332
25-3703-A	T03GE	Piggyback Base Supported Gable	2	1	Job Reference (optional)	

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:10:19 2025 Page 1
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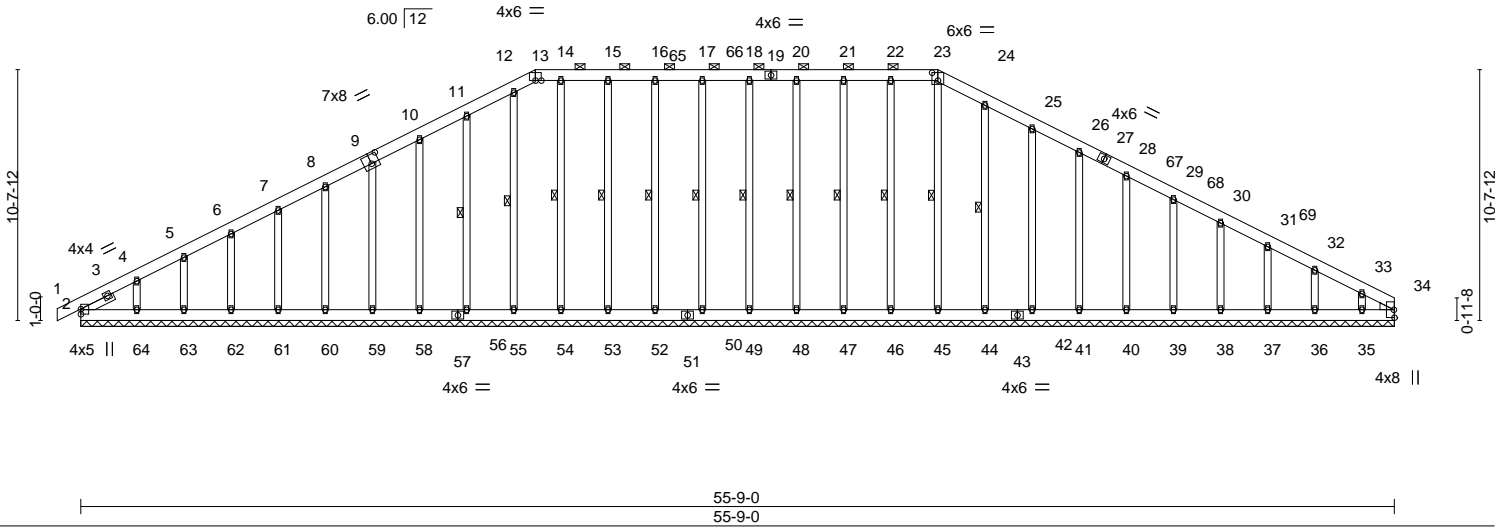
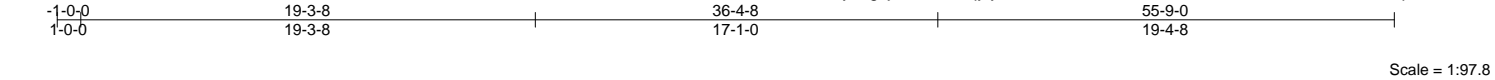


Plate Offsets (X,Y)-- [9:0-4-0,0-4-8], [23:0-3-0,0-4-0]																					
LOADING (psf)		SPACING-		2-0-0		CSI.		DEFL.		in (loc)		l/defl		L/d		PLATES		GRIP			
TCLL (roof) 20.0		Plate Grip DOL		1.15		TC 0.07		Vert(LL)		-0.00		1		n/r		120		MT20		244/190	
Snow (Pf/Pg) 16.5/15.0		Lumber DOL		1.15		BC 0.03		Vert(CT)		-0.00		1		n/r		120					
TCDL 10.0		Rep Stress Incr		YES		WB 0.19		Horz(CT)		0.01		34		n/a		n/a					
BCLL 0.0 *		Code IRC2018/TPI2014				Matrix-S															
BCDL 10.0																					
																		Weight: 542 lb		FT = 20%	

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except
BOT CHORD 2x6 SP No.2	2-0-0 oc purlins (6-0-0 max.): 13-23.
OTHERS 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEDGE	WEBS 1 Row at midpt 23-45, 22-46, 21-47, 20-48, 18-49, 17-50,
Right: 2x4 SP No.3	16-52, 15-53, 14-54, 12-55, 11-56, 24-44
SLIDER Left 2x4 SP No.3 1-6-4	

REACTIONS. All bearings 55-9-0.
(lb) - Max Horz 2=208(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 2, 46, 47, 48, 49, 50, 52, 53, 56,
58, 59, 60, 61, 62, 63, 64, 44, 42, 41, 40, 39, 38, 37, 36, 35, 34
Max Grav All reactions 250 lb or less at joint(s) 2, 45, 46, 47, 48, 49, 50, 52, 53,
54, 55, 56, 58, 59, 60, 61, 62, 63, 64, 44, 42, 41, 40, 39, 38, 37, 36, 35,
34

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 11-12=113/285, 12-13=115/286, 13-14=111/287, 14-15=111/287, 15-16=111/287,
16-17=111/287, 17-18=111/287, 18-20=111/287, 20-21=111/287, 21-22=111/287,
22-23=111/287, 23-24=118/299, 24-25=102/259

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=56ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -1-0-0 to 4-4-8, Exterior(2N) 4-4-8 to 19-3-8, Corner(3R) 19-3-8 to 24-10-6, Exterior(2N) 24-10-6 to 36-4-8, Corner(3R) 36-4-8 to 41-11-6, Exterior(2N) 41-11-6 to 55-7-4 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - 5) Unbalanced snow loads have been considered for this design.
 - 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
 - 7) Provide adequate drainage to prevent water ponding.
 - 8) All plates are 2x4 MT20 unless otherwise indicated.
 - 9) Gable requires continuous bottom chord bearing.
 - 10) Gable studs spaced at 2-0-0 oc.
 - 11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.



Continued on page 2

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ENGINEERING BY
TRENCO
A MiTek Affiliate
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Edenton, NC 27932

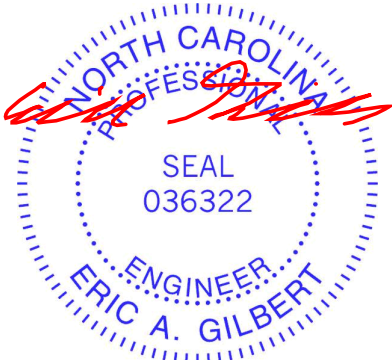
Job	Truss	Truss Type	Qty	Ply	SGR-LOT 74 ROOF	I74047332
25-3703-A	T03GE	Piggyback Base Supported Gable	2	1	Job Reference (optional)	

Riverside Roof Truss, LLC, Danville, Va - 24541,

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:10:20 2025 Page 2
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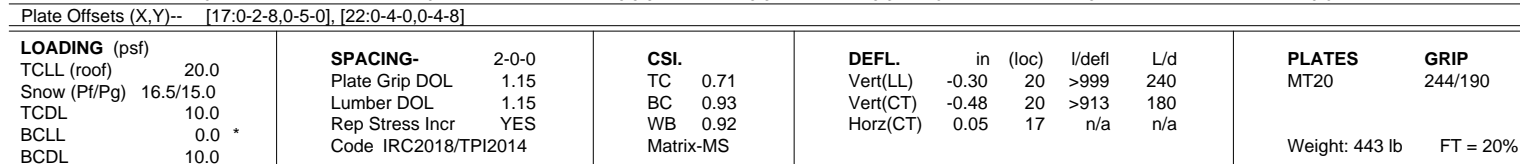
NOTES-

- 12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 46, 47, 48, 49, 50, 52, 53, 56, 58, 59, 60, 61, 62, 63, 64, 44, 42, 41, 40, 39, 38, 37, 36, 35, 34.
- 14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



June 9,2025

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:10:21 2025 Page 1
 ID:tdHSIWylng7jaR9E1eBtqly9_-LvEPzqxvi0tgkL8AGwSGQ35tKAVEs1jY2N57iz86lm
 -1-0-0 9-7-12 19-3-8 25-9-0 31-0-12 36-4-8 42-2-4 48-0-0 55-9-0
 1-0-0 9-7-12 9-7-12 6-5-8 5-3-12 5-3-12 5-9-12 5-9-12 7-9-0
 Scale = 1:99



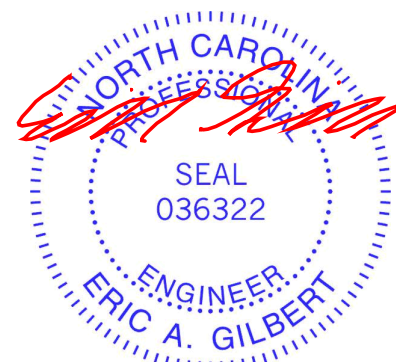
REACTIONS. (size) 2=0-3-8, 14=Mechanical, 17=0-3-8
 Max Horz 2=206(LC 15)
 Max Uplift 2=-106(LC 16), 14=-53(LC 16), 17=-24(LC 16)
 Max Grav 2=1600(LC 28). 14=444(LC 55). 17=3699(LC 29)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	2-4=-2424/210, 4-6=-1478/220, 6-7=-901/200, 7-9=-901/200, 9-10=0/939, 10-11=0/1122, 11-13=-462/218, 13-14=-470/184
BOT CHORD	2-25=-105/2228, 23-25=-105/2228, 22-23=0/1295, 18-22=-84/277, 17-18=-84/277, 15-17=-555/52, 14-15=-129/341
WEBS	4-25=0/477, 4-23=-1088/173, 6-23=-11/780, 6-22=-794/99, 7-22=-459/126, 21-22=-34/1604, 9-21=0/1726, 9-19=-2068/126, 17-19=-2191/91, 10-17=-708/50, 11-17=-846/192, 11-15=-96/1099, 13-15=-419/185, 18-20=-255/0

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=56ft; eave=7ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 1-0-0 to 4-6-14, Interior(1) 4-6-14 to 19-3-8, Exterior(2R) 19-3-8 to 27-2-2, Interior(1) 27-2-2 to 36-4-8, Exterior(2R) 36-4-8 to 44-3-2, Interior(1) 44-3-2 to 55-9-0 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.00/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) Refer to notes for truss to truss connections.



June 9.2025



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MIT-7473 Rev. 1/2/2023 BEFORE USE.

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818 Soundside Road
Edenton, NC 27932

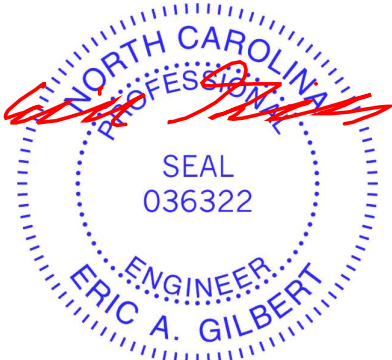
Job	Truss	Truss Type	Qty	Ply	SGR-LOT 74 ROOF	I74047333
25-3703-A	T03S	Piggyback Base	8	1	Job Reference (optional)	

Riverside Roof Truss, LLC, Danville, Va - 24541,

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:10:21 2025 Page 2
ID:tdHS5lWyLNg?jaR9E1eBtqly9_-LvEPZqxxvi0tgkL8AGwSGQ35tKAVes1jY2N5?iz86lm

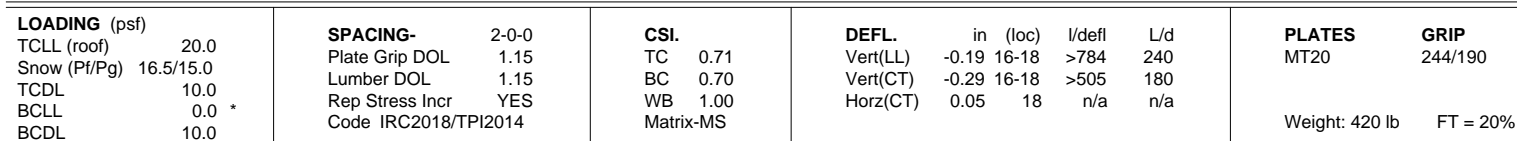
NOTES-

- 10) Bearing at joint(s) 17 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 17 except (jt=lb) 2=106.
- 12) This truss is designed in accordance with the 2018 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.



June 9,2025

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:10:22 2025 Page 1
 ID:tdHS5WlyLNg?jaR9E1eBtqlyl9_-p5onmAxZg?9kHuwKk_RhpdGekalzl?snifcX8z86ll
 -1-0-0 9-9-8 19-3-8 27-10-0 36-4-8 42-7-6 48-10-4 55-8-0 56-8-0
 1-0-0 9-9-8 9-6-0 8-6-8 8-6-8 6-2-14 6-2-14 6-9-12 1-0-0
 Scale = 1:97.5



BRACING-	
TOP CHORD	Structural wood sheathing directly applied or 4-5-1 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 6-9.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 4-21, 6-19, 7-19, 9-19, 9-18, 10-18, 10-16

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

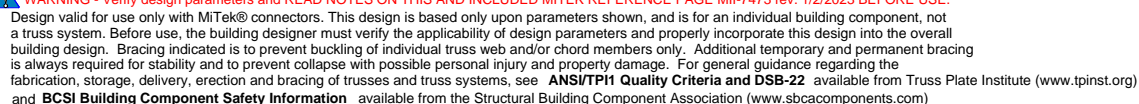
TOP CHORD	2-4=-2540/261, 4-6=-1638/268, 6-7=-841/267, 7-9=-841/267, 9-10=0/624
BOT CHORD	2-23=-122/2335, 21-23=-122/2335, 19-21=0/1442, 18-19=-436/151, 16-18=-255/72
WEBS	4-23=0/445, 4-21=-1051/175, 6-21=0/928, 6-19=-976/41, 7-19=-743/180, 9-19=-148/1896, 9-18=-1993/191, 10-18=-505/187, 10-16=-51/263, 12-16=-385/166

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCFL=6.0psf; BCFL=6.0psf; h=25ft; B=45ft; L=56ft; eave=7ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 4-6-13, Interior(1) 4-6-13 to 19-3-8, Exterior(2R) 19-3-8 to 27-2-0, Interior(1) 27-2-0 to 36-4-8, Exterior(2R) 36-4-8 to 44-3-0, Interior(1) 44-3-0 to 56-8-0 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCFL = 10.0psf.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 14 except (jt=lb) 2=128, 18=104.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



June 9, 2025

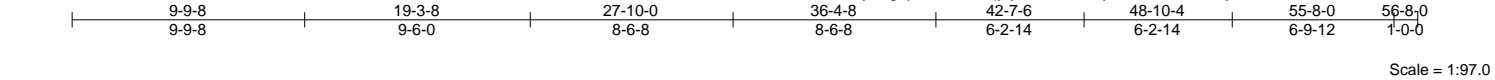


818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 74 ROOF	174047335
25-3703-A	T05A	PIGGYBACK BASE	1	1		

Riverside Roof Truss, LLC, Danville, Va - 24541,

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:10:23 2025 Page 1
ID:tdHS5IWylng?jaR9E1eBtqyly9_-lIIMA_WyBRJHbv1VXHhywMr8RP7wdilF00MsC3az86lk



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.71	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 16.5/15.0	Plate Grip DOL 1.15	BC 0.69	Vert(LL) -0.19 15-17 >784 240		
TCDL 10.0	Lumber DOL 1.15	WB 1.00	Vert(CT) -0.29 15-17 >505 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.05 17 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 418 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-5-2 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-8.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 3-20, 5-18, 6-18, 8-18, 8-17, 9-17, 9-15

REACTIONS. All bearings 0-3-8 except (jt=length) 13=0-3-0.
(lb) - Max Horz 1=205(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 1, 15, 13 except 17=103(LC 16)
Max Grav All reactions 250 lb or less at joint(s) except 1=1615(LC 28), 17=2744(LC 28), 15=687(LC 29), 13=345(LC 55)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-2547/266, 3-5=-1642/274, 5-6=-842/271, 6-8=-842/271, 8-9=0/621
BOT CHORD 1-22=-122/2341, 20-22=-122/2341, 18-20=0/1446, 17-18=-433/151, 15-17=-252/72
WEBS 3-22=0/446, 3-20=-1054/176, 5-20=0/929, 5-18=-975/40, 6-18=-744/181, 8-18=-148/1895, 8-17=-1991/191, 9-17=-504/186, 9-15=-50/260, 11-15=-385/166

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=56ft; eave=7ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 5-6-13, Interior(1) 5-6-13 to 19-3-8, Exterior(2R) 19-3-8 to 27-2-0, Interior(1) 27-2-0 to 36-4-8, Exterior(2R) 36-4-8 to 44-3-0, Interior(1) 44-3-0 to 56-8-0 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - 4) Unbalanced snow loads have been considered for this design.
 - 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
 - 6) Provide adequate drainage to prevent water ponding.
 - 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 15, 13 except (jt=lb) 17=103.
 - 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



June 9,2025

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

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 74 ROOF	174047336
25-3703-A	T06	Piggyback Base	5	1	Job Reference (optional)	

Riverside Roof Truss, LLC, Danville, Va - 24541,

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:10:24 2025 Page 1
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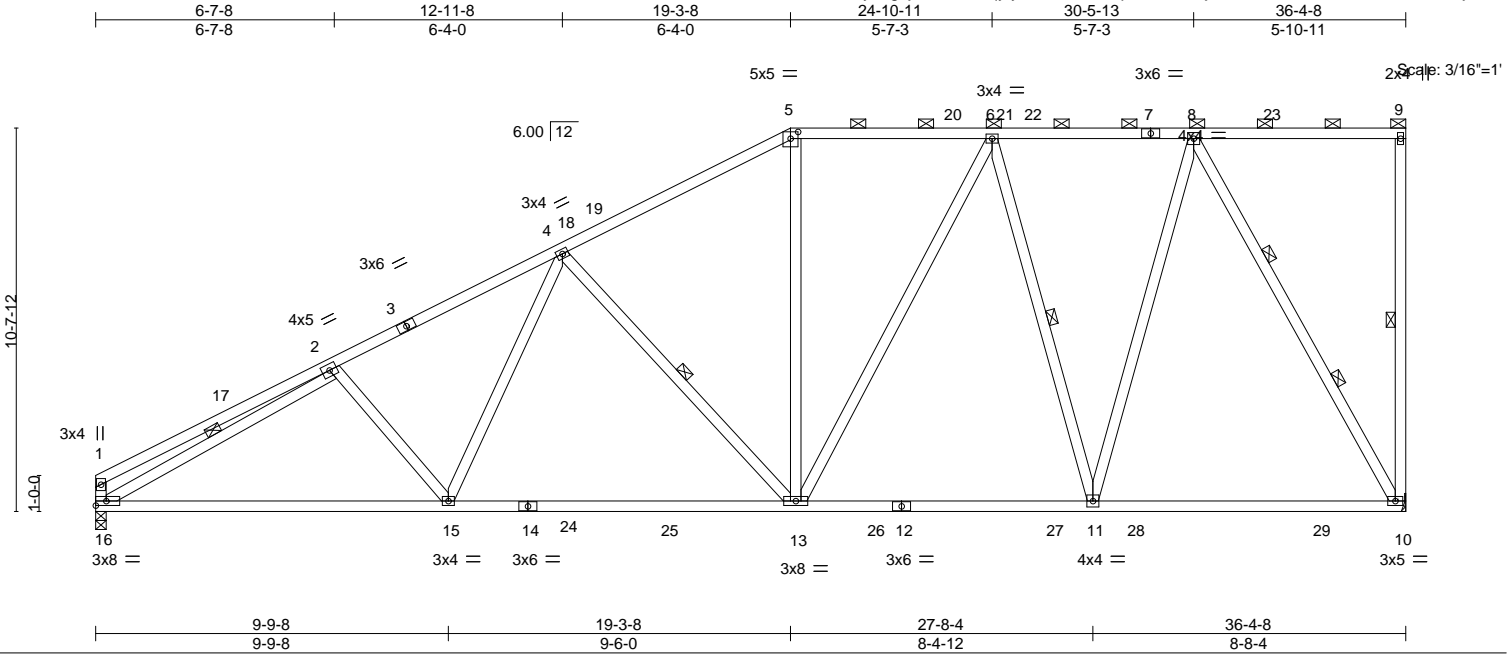
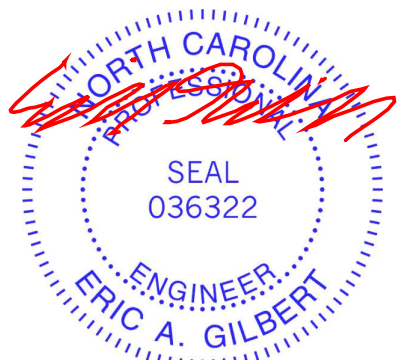


Plate Offsets (X,Y)-- [5:0-2-8,0-2-4]											
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	2-0-0		TC	0.65	in (loc)	l/defl	L/d	MT20	244/190	
Snow (Pf/Pg)	16.5/15.0	Plate Grip DOL	1.15	BC	0.98	Vert(LL)	-0.28 13-15	>999	240		
TCDL	10.0	Lumber DOL	1.15	WB	0.87	Vert(CT)	-0.47 13-15	>920	180		
BCLL	0.0 *	Rep Stress Incr	YES			Horz(CT)	0.08 10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							
									Weight: 251 lb	FT = 20%	

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-5-14 oc purlins, except end verticals, and 2-0-0 oc purlins (4-6-5 max.): 5-9.
BOT CHORD 2x4 SP No.1 *Except* 10-12: 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 9-10, 4-13, 6-11, 2-16
	2 Rows at 1/3 pts 8-10
REACTIONS.	
(size) 10=Mechanical, 16=0-3-8	
Max Horz 16=294(LC 16)	
Max Uplift 10=-130(LC 16), 16=-45(LC 16)	
Max Grav 10=1753(LC 38), 16=1696(LC 27)	

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-521/76, 2-4=-2559/146, 4-5=-1791/153, 5-6=-1546/171, 6-8=-1120/97, 1-16=-376/88
BOT CHORD	15-16=-355/2346, 13-15=-275/2035, 11-13=-139/1315, 10-11=-86/814
WEBS	4-15=0/553, 4-13=-798/154, 5-13=0/473, 6-13=-71/582, 6-11=-747/164, 8-11=-50/1174, 8-10=-1655/179, 2-16=-2220/73

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=36ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-9-6, Interior(1) 3-9-6 to 19-3-8, Exterior(2R) 19-3-8 to 24-5-4, Interior(1) 24-5-4 to 36-2-12 zone; cantilever left and right exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - 4) Unbalanced snow loads have been considered for this design.
 - 5) Provide adequate drainage to prevent water ponding.
 - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 8) Refer to girder(s) for truss to truss connections.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16 except (jt=lb) 10=130.
 - 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



June 9,2025

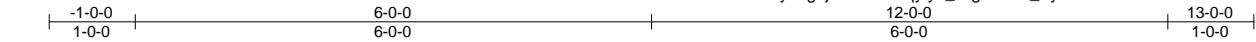
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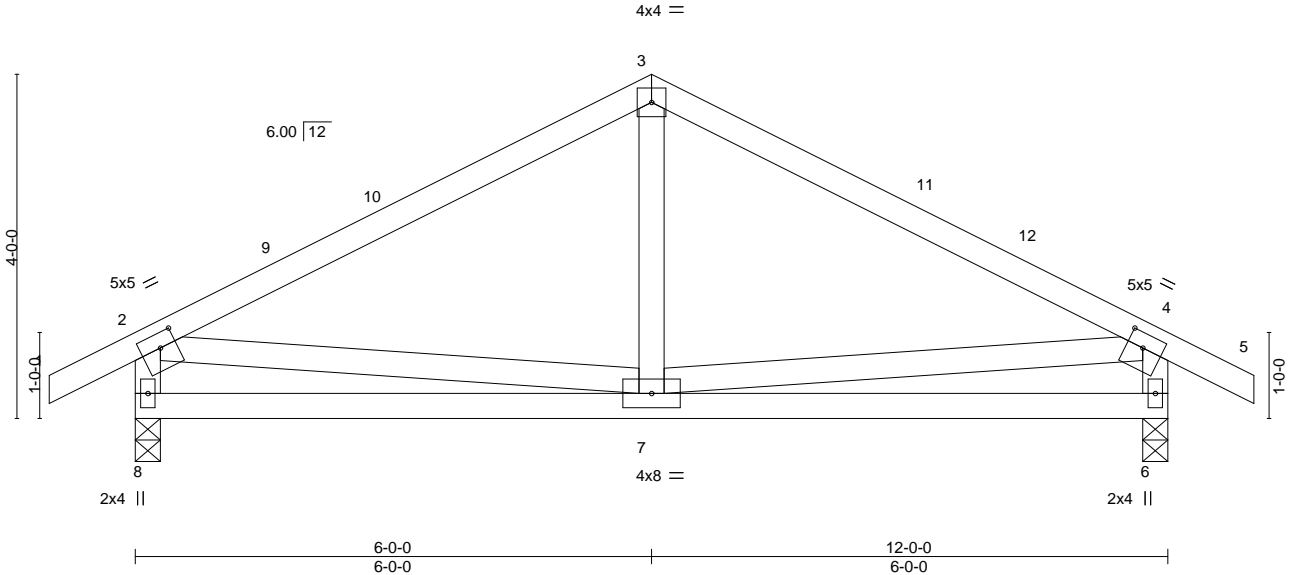
Job	Truss	Truss Type	Qty	Ply	SGR-LOT 74 ROOF	174047337
25-3703-A	T07	Common	3	1	Job Reference (optional)	

Riverside Roof Truss, LLC, Danville, Va - 24541,

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:10:25 2025 Page 1
ID:tdHS5IWyLNg?jaR9E1eBtqly9_-EgUwOC_SywXJ8LfvP6?ORGD0Yxi8AtsITgJ8Tz86li



Scale = 1:26.8



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	0.60	Vert(LL)	-0.02	7-8	>999	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.05	7-8	>999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	6	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-MS							
BCDL	10.0									Weight: 65 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3		

REACTIONS.	(size) 8=0-3-8, 6=0-3-8
	Max Horz 8=-83(LC 14)
	Max Uplift 8=-64(LC 16), 6=-64(LC 16)
	Max Grav 8=537(LC 2), 6=537(LC 2)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-537/175, 3-4=-537/175, 2-8=-484/232, 4-6=-484/232
BOT CHORD	7-8=-165/272, 6-7=-121/253

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 6-0-0, Exterior(2R) 6-0-0 to 9-0-0, Interior(1) 9-0-0 to 13-0-0 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
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 9,2025

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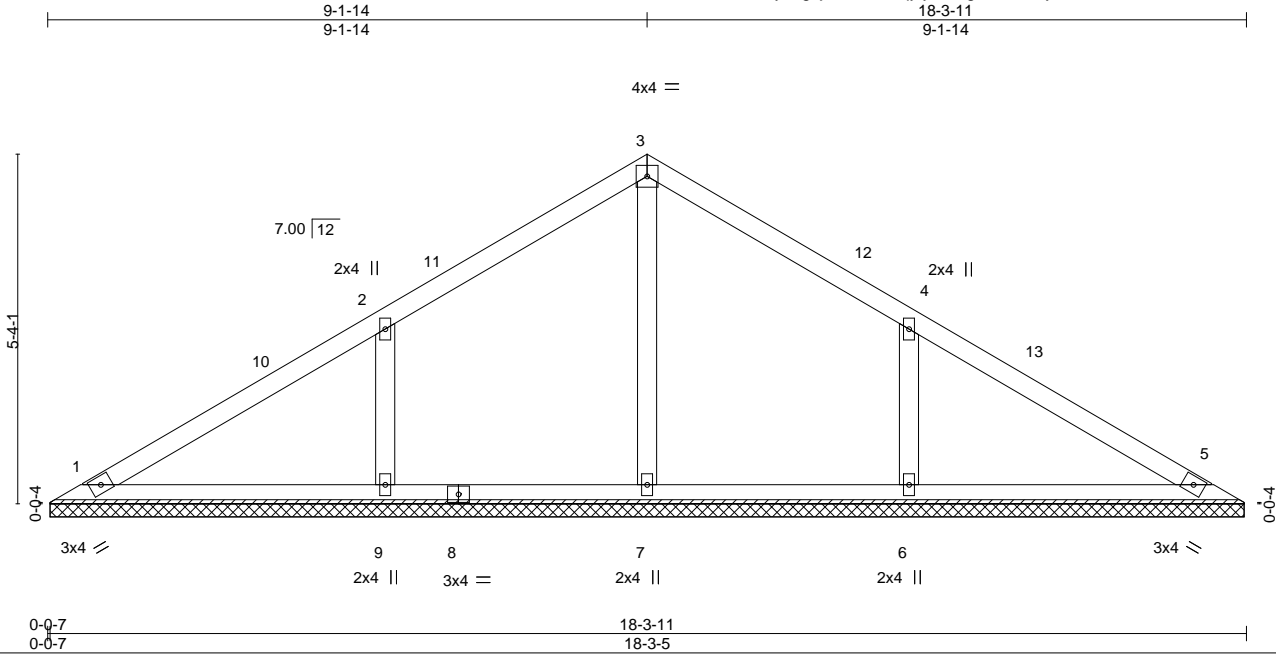
ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 74 ROOF	174047338
25-3703-A	V01	Valley	1	1		

Riverside Roof Truss, LLC, Danville, Va - 24541,

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:10:25 2025 Page 1
ID:tdHS5IWyLNg?jaR9E1eBtqly9_-EgUwOC_SywXJ8LfVp6?ORGDIzXkJA13ITgJ8Tz86ii



Scale = 1:35.2

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.28	Vert(LL) n/a	-	n/a	999		MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.17	Vert(CT) n/a	-	n/a	999			
TCDL 10.0	Lumber DOL 1.15	WB 0.08	Horz(CT) 0.00	5	n/a	n/a			
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S							
BCDL 10.0	Code IRC2018/TPI2014							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 10-0-0 oc bracing.

REACTIONS.

All bearings 18-2-14.
(lb) - Max Horz 1=100(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 9, 6
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 9=419(LC 27), 6=418(LC 34)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

WEBS 2-9=309/142, 4-6=309/142

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 9-1-14, Exterior(2R) 9-1-14 to 12-1-14, Interior(1) 12-1-14 to 17-9-3 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
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 9, 2025

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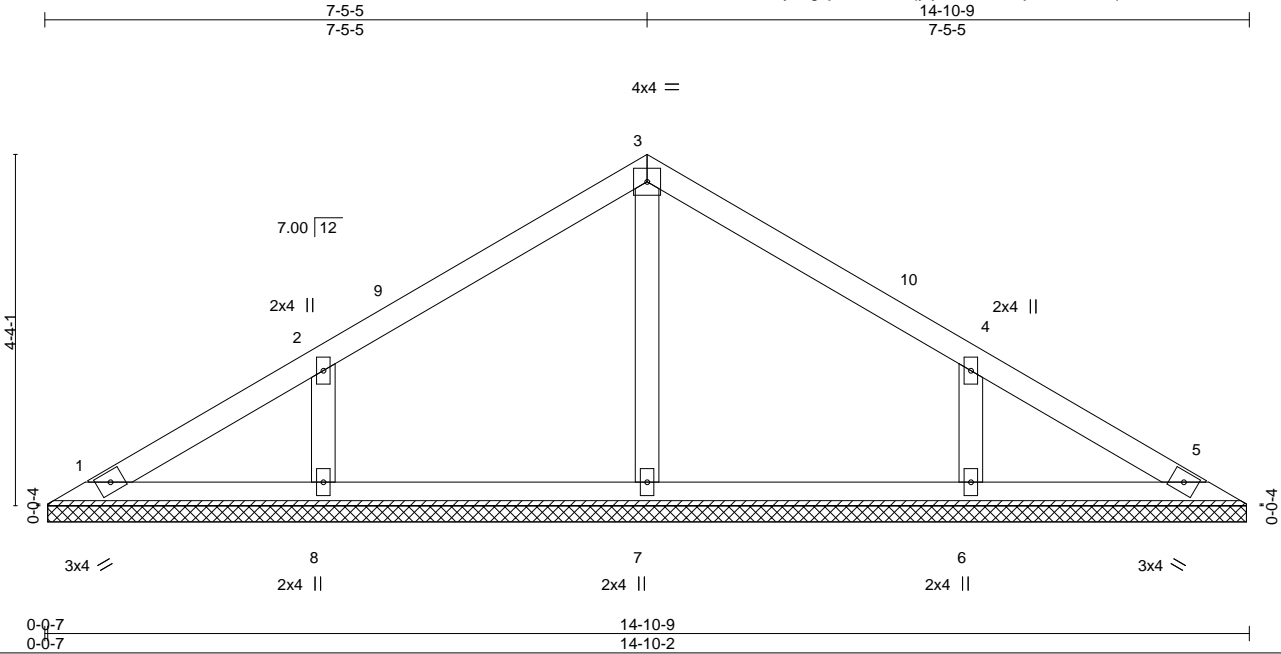
ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 74 ROOF	174047339
25-3703-A	V02	Valley	1	1	Job Reference (optional)	

Riverside Roof Truss, LLC, Danville, Va - 24541,

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:10:26 2025 Page 1
ID:tdHS5iWyLNg?jaR9E1eBtqly9_it2lcY?4jEfAmVD6zqWdzTm3cL4OvKaSiK4sgvz86lh



Scale = 1:28.5

LOADING (psf)	SPACING-	CSL	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.11	Vert(CT)	n/a	-	n/a	999		
TCDL 10.0	Lumber DOL 1.15	WB 0.07	Horz(CT)	0.00	5	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S							
BCDL 10.0	Code IRC2018/TPI2014							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.

All bearings 14-9-11.
(lb) - Max Horz 1=80(LC 15)
Max Uplift All uplift 100 lb or less at joint(s) 8, 6
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=269(LC 2), 8=328(LC 33), 6=328(LC 34)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-6-8 to 3-5-5, Interior(1) 3-5-5 to 7-5-5, Exterior(2R) 7-5-5 to 10-5-5, Interior(1) 10-5-5 to 14-4-1 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) Gable requires continuous bottom chord bearing.
- 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 9,2025

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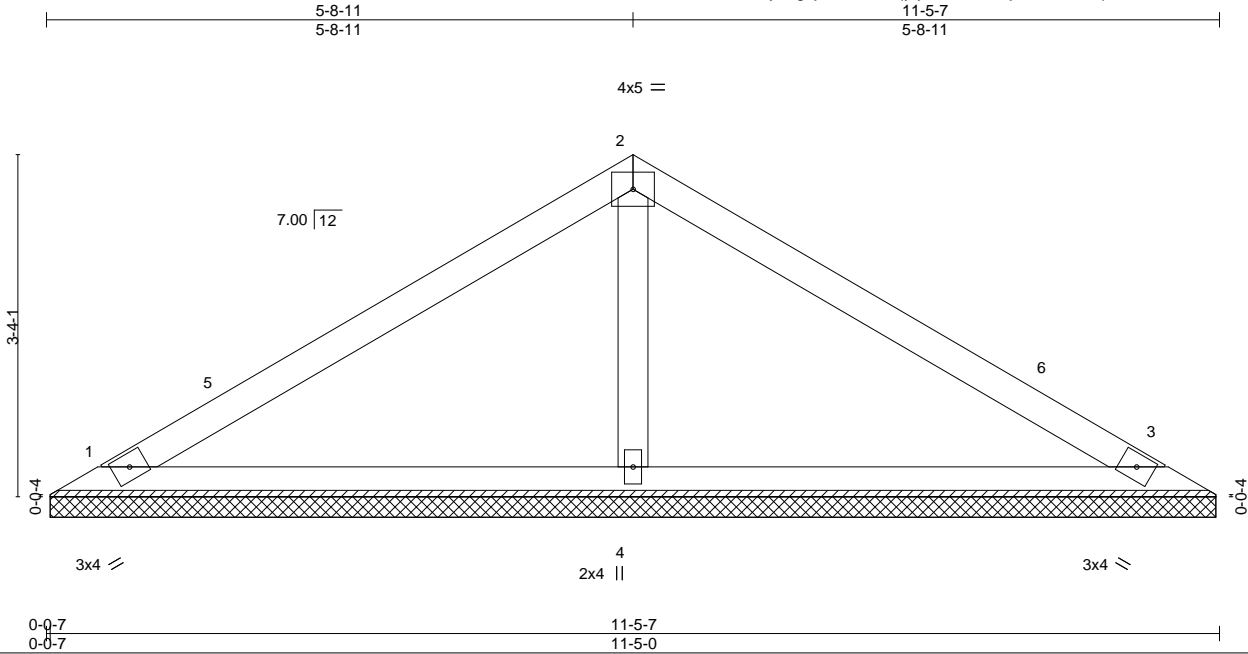
ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 74 ROOF	174047340
25-3703-A	V03	Valley	1	1	Job Reference (optional)	

Riverside Roof Truss, LLC, Danville, Va - 24541,

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:10:26 2025 Page 1
ID:tdHS5iWylNg?jaR9E1eBtyly9_it2lcY?4jEfAmVD6zqWdzTm05L1?vKUSIK4sgvz86lh



LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.43	Vert(LL) n/a	-	n/a	999		MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.27	Vert(CT) n/a	-	n/a	999			
TCDL 10.0	Lumber DOL 1.15	WB 0.07	Horz(CT) 0.00	3	n/a	n/a			
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S							
BCDL 10.0	Code IRC2018/TPI2014								
								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 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=11-4-9, 3=11-4-9, 4=11-4-9
Max Horz 1=60(LC 14)
Max Uplift 1=25(LC 16), 3=25(LC 16)
Max Grav 1=196(LC 2), 3=196(LC 2), 4=437(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

WEBS 2-4=284/106

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 5-8-11, Exterior(2R) 5-8-11 to 8-8-11, Interior(1) 8-8-11 to 10-10-15 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
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 9,2025

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ENGINEERING BY
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A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

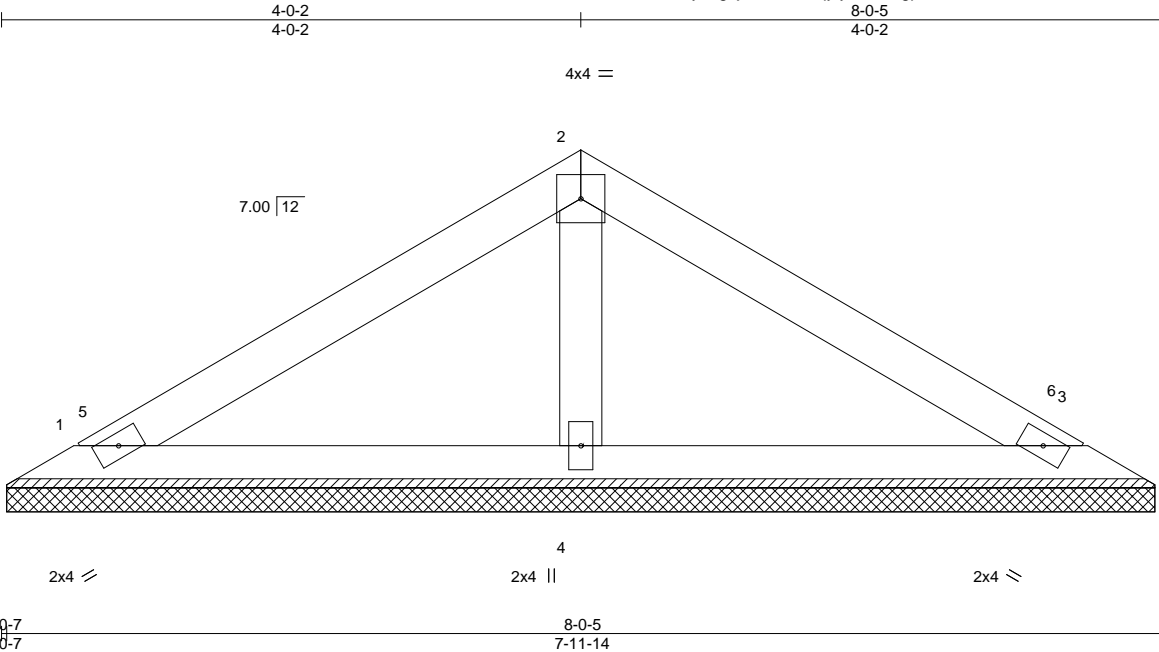
Job	Truss	Truss Type	Qty	Ply	SGR-LOT 74 ROOF	174047341
25-3703-A	V04	Valley	1	1	Job Reference (optional)	

Riverside Roof Truss, LLC,

Danville, Va - 24541,

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:10:27 2025 Page 1

ID:tdHS5IWyLNg?jaR9E1eBtqly9_-A3cgpu?iUYn1OfolWX1sWhJEhlQWeoGbx_qQCLz86lg



Scale: 3/4"=1'

LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	n/a	MT20		244/190	
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a				
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00				
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-P							
BCDL	10.0										

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=7-11-7, 3=7-11-7, 4=7-11-7
Max Horz 1=40(LC 15)
Max Uplift 1=24(LC 16), 3=24(LC 16)
Max Grav 1=145(LC 2), 3=145(LC 2), 4=265(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 4-0-2, Exterior(2R) 4-0-2 to 7-0-2, Interior(1) 7-0-2 to 7-5-13 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
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 9,2025

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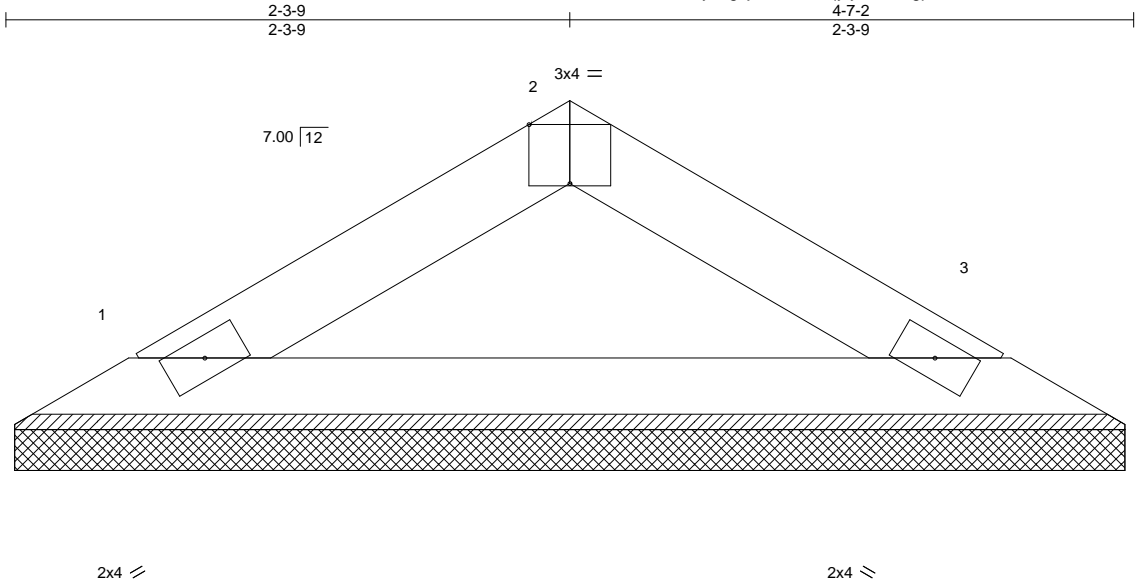
ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 74 ROOF	174047342
25-3703-A	V05	Valley	1	1	Job Reference (optional)	

Riverside Roof Truss, LLC, Danville, Va - 24541,

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:10:27 2025 Page 1
ID:tdHS5IWyLNg?jaR9E1eBtqly9_-A3cgpu?iUYn1OfolWX1sWhJHfIP2eorbx_qQCLz86lg



Scale = 1:9.4

0-0-7		0-0-7		4-7-2			
Plate Offsets (X,Y)--		[2:0-2-0,Edge]		4-6-11			
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC 0.05	Vert(LL)	n/a -	n/a 999
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC 0.15	Vert(CT)	n/a -	n/a 999
TCDL	10.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00 3	n/a n/a
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-P			
BCDL	10.0						
						Weight: 13 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 4-7-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

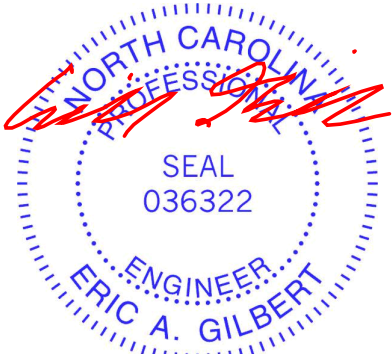
REACTIONS.

(size) 1=4-6-5, 3=4-6-5
Max Horz 1=20(LC 14)
Max Uplift 1=9(LC 16), 3=9(LC 16)
Max Grav 1=141(LC 2), 3=141(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) Gable requires continuous bottom chord bearing.
- 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 9,2025

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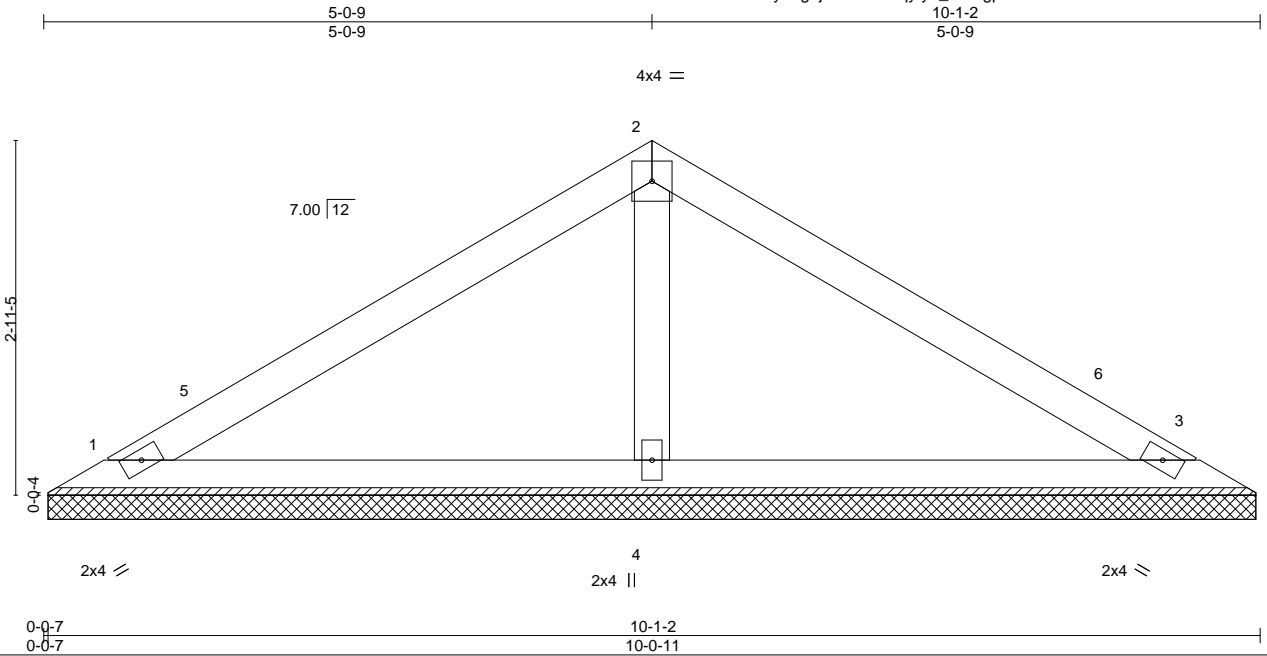
ENGINEERING BY
TRENCO
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 74 ROOF	174047343
25-3703-A	V06	Valley	1	1	Job Reference (optional)	

Riverside Roof Truss, LLC, Danville, Va - 24541,

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:10:27 2025 Page 1
ID:tdHSSiWYLng?jaR9E1eBtqly9_-A3cgpu?iUYn1OfolWX1sWhJDdlOFeozbx_qQCLz86lg



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	2-0-0		TC	0.31	in	(loc)	l/defl	L/d	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Plate Grip DOL	1.15	BC	0.20	n/a	-	n/a	999		
TCDL	10.0	Lumber DOL	1.15	WB	0.06	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	Matrix-S		0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014								Weight: 34 lb	FT = 20%

LUMBER-

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

BRACING-

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

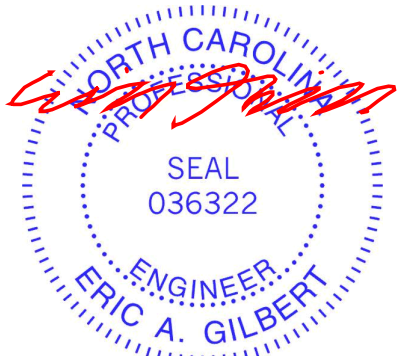
REACTIONS.

(size) 1=10-0-5, 3=10-0-5, 4=10-0-5
Max Horz 1=-52(LC 14)
Max Uplift 1=-22(LC 16), 3=-22(LC 16)
Max Grav 1=171(LC 2), 3=171(LC 2), 4=380(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 5-0-9, Exterior(2R) 5-0-9 to 8-0-9, Interior(1) 8-0-9 to 9-6-10 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) Gable requires continuous bottom chord bearing.
- 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 9,2025

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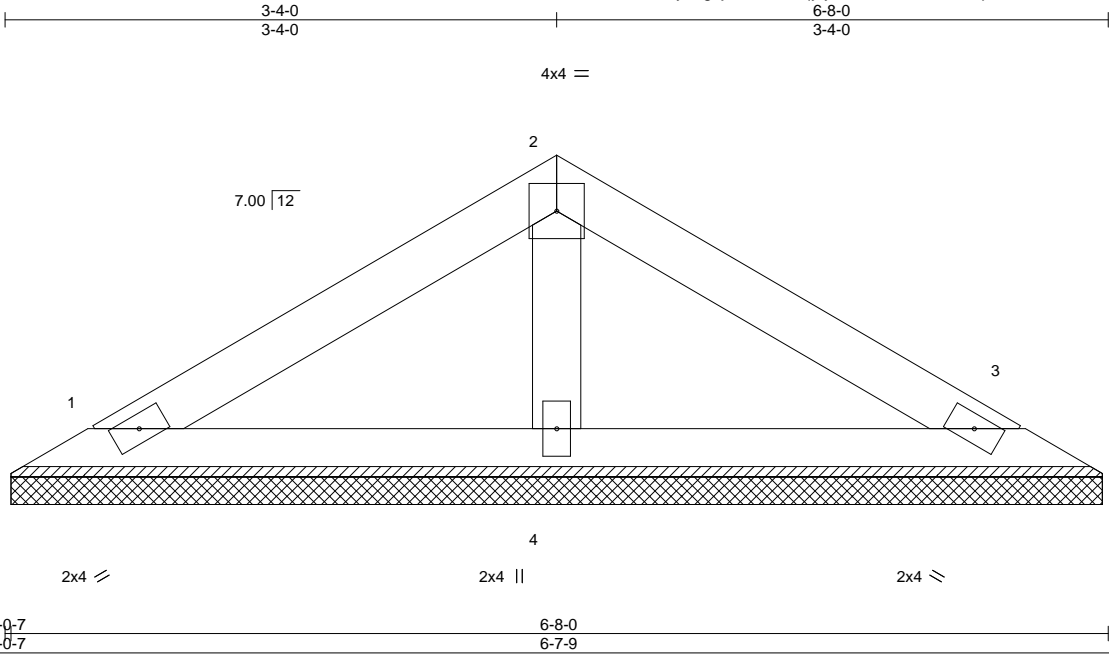
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 74 ROOF	174047344
25-3703-A	V07	Valley	1	1	Job Reference (optional)	

Riverside Roof Truss, LLC,

Danville, Va - 24541,

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:10:28 2025 Page 1
ID:tdHS5iWylNg?jaR9E1eBtqly9_-eFA31D0KFrVu?pNU4EY53urQw8mPNEel9eZzk0z86lf



Scale = 1:13.9

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.08	Vert(CT)	n/a	-	n/a	999		
TCDL 10.0	Lumber DOL 1.15	WB 0.03	Horz(CT)	0.00	3	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P							
BCDL 10.0	Code IRC2018/TPI2014							Weight: 21 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=6-7-2, 3=6-7-2, 4=6-7-2
Max Horz 1=33(LC 15)
Max Uplift 1=19(LC 16), 3=19(LC 16)
Max Grav 1=118(LC 20), 3=118(LC 21), 4=213(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 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
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 9,2025

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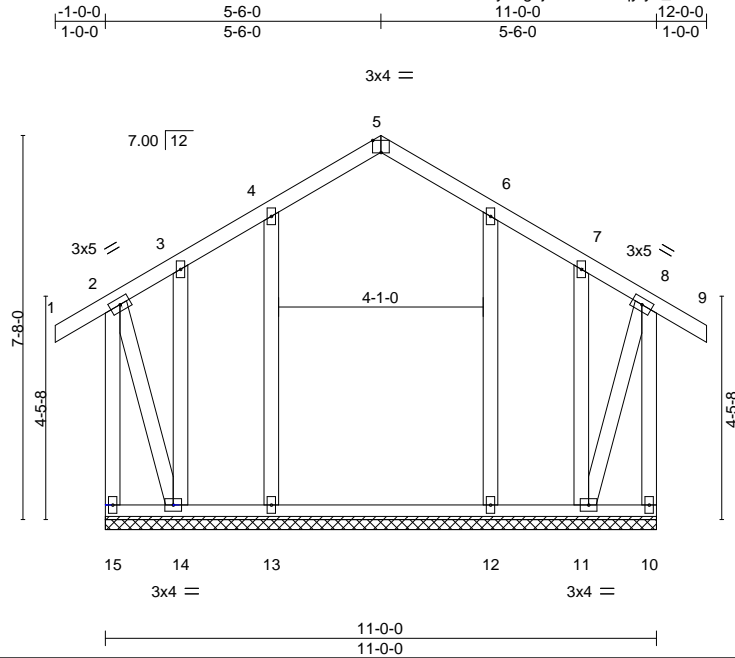
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 74 ROOF	I74047346
25-3703-A	V09GE	GABLE	1	1	Job Reference (optional)	

Riverside Roof Truss, LLC, Danville, VA. 24541

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8.830 e Nov 8 2024 MiTek Industries, Inc. Mon Jun 9 14:18:47 2025 Page 1



Scale = 1:46.0

Plate Offsets (X,Y)-- [5:0-2-0,Edge]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL 2-0-0	TC 0.20	Vert(LL) -0.00	9	n/r	120	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Lumber DOL 1.15	BC 0.17	Vert(CT) -0.01	8-9	n/r	120		
TCDL 10.0	Rep Stress Incr YES	WB 0.15	Horz(CT) -0.00	10	n/a	n/a		
BCLL 0.0 *	Code IRC2018/TPI2014	Matrix-S						
BCDL 10.0							Weight: 95 lb	FT = 20%

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

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

REACTIONS. All bearings 11-0-0.
(lb) - Max Horz 15=-213(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) except 15=-138(LC 14), 10=-126(LC 15), 14=-259(LC 16), 11=-259(LC 16)
Max Grav All reactions 250 lb or less at joint(s) 11 except 15=428(LC 29), 10=418(LC 28), 13=362(LC 28), 12=359(LC 29), 14=255(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-15=-388/131, 8-10=-379/119
WEBS 2-14=-216/383, 8-11=-206/371

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 5-6-0, Exterior(2R) 5-6-0 to 8-6-0, Interior(1) 8-6-0 to 12-0-0 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 4) Unbalanced snow loads have been considered for this design.
 - 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
 - 6) All plates are 2x4 MT20 unless otherwise indicated.
 - 7) Gable requires continuous bottom chord bearing.
 - 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 138 lb uplift at joint 15, 126 lb uplift at joint 10, 259 lb uplift at joint 14 and 259 lb uplift at joint 11.
 - 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



June 9,2025

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A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

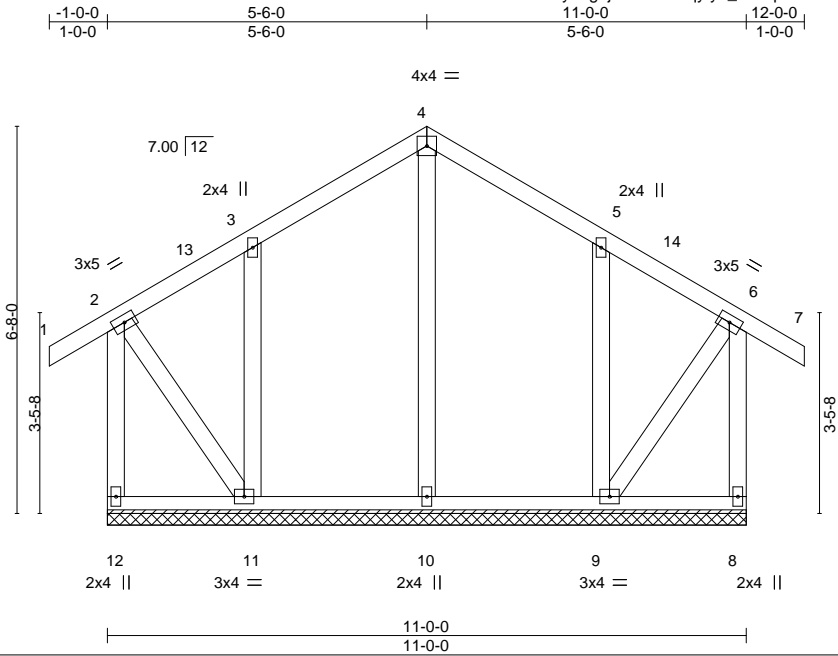
Job	Truss	Truss Type	Qty	Ply	SGR-LOT 74 ROOF	174047347
25-3703-A	V10	GABLE	1	1	Job Reference (optional)	

Riverside Roof Truss, LLC,

Danville, Va - 24541,

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:10:30 2025 Page 1

ID:tdHS5iWylNg?jaR9E1eBtqly9_-aeHpSv2anT9cF6XtCfaZ8JxnwySZr6P2dy24pgz86ld



Scale = 1:39.7

LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	-0.00	7	l/defl	L/d	MT20	244/190	
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	-0.01	7	n/r	120			
TCDL	10.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	-0.00	8	n/a	n/a			
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-S							Weight: 81 lb	FT = 20%	
BCDL	10.0												

LUMBER-

TOP CHORD 2x4 SP No.2

BOT CHORD 2x4 SP No.2

WEBS 2x4 SP No.3

OTHERS 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.

BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

All bearings 11-0-0.

(lb) - Max Horz 12=-180(LC 14)

Max Uplift All uplift 100 lb or less at joint(s) 12, 8, 11, 9

Max Grav All reactions 250 lb or less at joint(s) 12, 8 except 10=317(LC 30), 11=379(LC 28), 9=365(LC 29)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 5-6-0, Exterior(2R) 5-6-0 to 8-6-0, Interior(1) 8-6-0 to 12-0-0 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
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 8, 11, 9.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 9,2025

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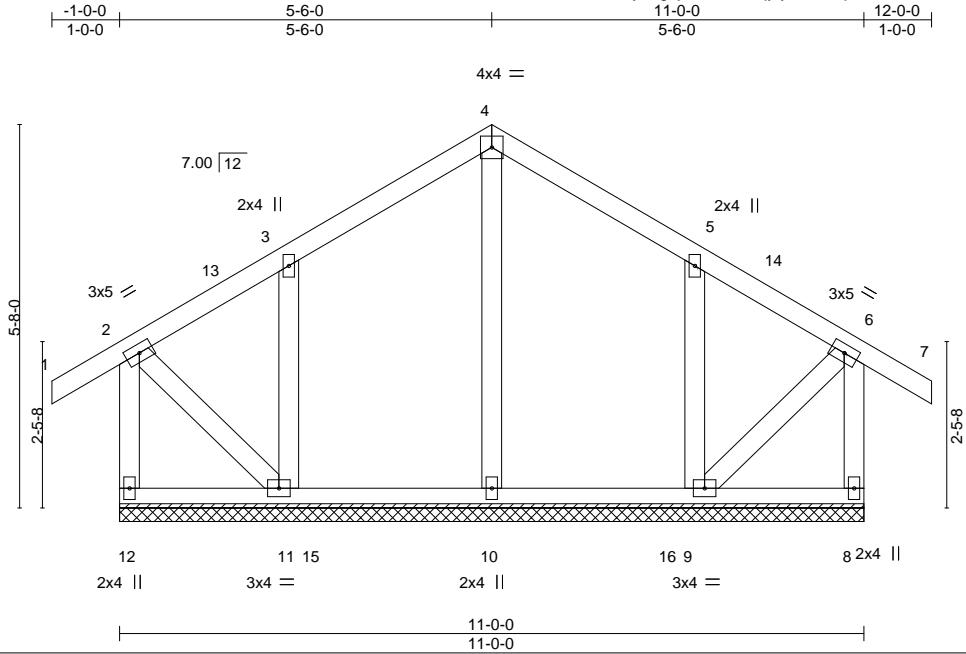
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 74 ROOF	174047348
25-3703-A	V11	GABLE	1	1	Job Reference (optional)	

Riverside Roof Truss, LLC,

Danville, Va - 24541,

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:10:30 2025 Page 1
ID:tdHS5lWYLnG?jaR9E1eBtqly9_-aeHpSv2anT9cF6XtCfaZ8Jxn1ySar752dy24pgz86ld



Scale = 1:34.1

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.11	Vert(LL) -0.00	7	n/r	120	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.10	Vert(CT) -0.01	7	n/r	120		
TCDL 10.0	Lumber DOL 1.15	WB 0.10	Horz(CT) -0.00	8	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 71 lb	FT = 20%

LUMBER-

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

BRACING-

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

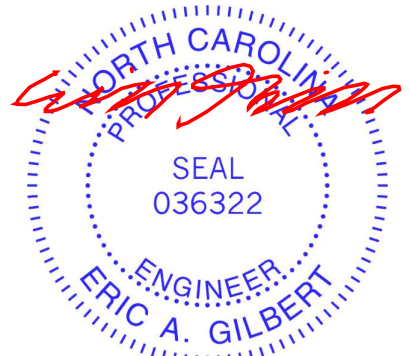
REACTIONS.

All bearings 11-0-0.
(lb) - Max Horz 12=-148(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 12, 8, 11, 9
Max Grav All reactions 250 lb or less at joint(s) 12, 8 except 10=304(LC 30), 11=336(LC 28), 9=324(LC 29)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 5-6-0, Exterior(2R) 5-6-0 to 8-6-0, Interior(1) 8-6-0 to 12-0-0 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
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 8, 11, 9.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 9,2025

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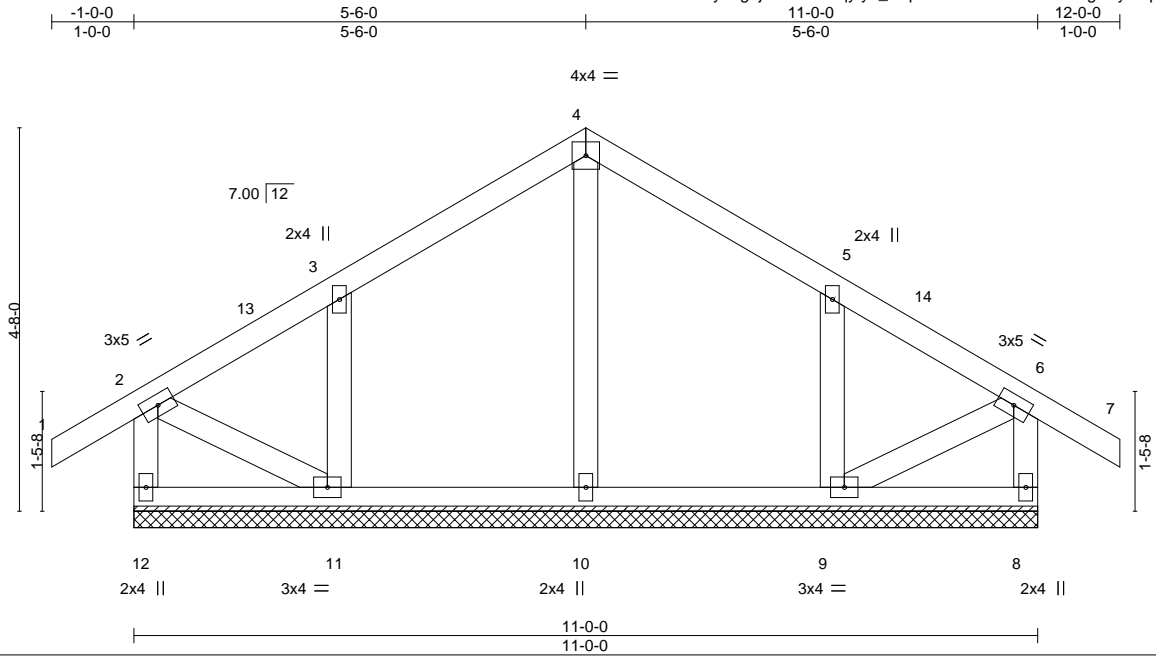
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 74 ROOF	174047349
25-3703-A	V12	GABLE	1	1	Job Reference (optional)	

Riverside Roof Truss, LLC, Danville, Va - 24541,

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:10:31 2025 Page 1

ID:tdHS5IWyLNg?jaR9E1eBtqly9_-3qrBf2CYmHTsG63IN6ogXTynMpMabtBrcodL6z86lc



Scale = 1:28.0

LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	2-0-0		TC	0.11	in (loc)	l/defl	L/d	MT20	244/190	
Snow (Pf/Pg)	11.6/15.0	Plate Grip DOL	1.15	BC	0.06	Vert(LL)	-0.00 7 n/r	120			
TCDL	10.0	Lumber DOL	1.15	WB	0.06	Vert(CT)	-0.00 7 n/r	120			
BCLL	0.0 *	Rep Stress Incr	YES	Matrix-S		Horz(CT)	-0.00 8 n/a	n/a			
BCDL	10.0	Code IRC2018/TPI2014									
										Weight: 62 lb	FT = 20%

LUMBER-

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

BRACING-

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

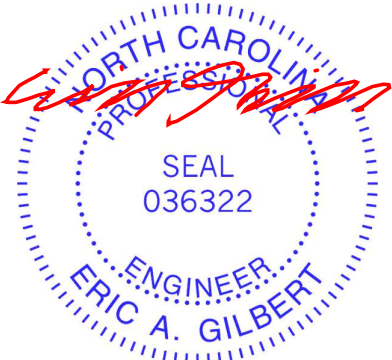
REACTIONS.

All bearings 11-0-0.
(lb) - Max Horz 12=-116(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 12, 8, 11, 9
Max Grav All reactions 250 lb or less at joint(s) 12, 8, 10, 11, 9

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 5-6-0, Exterior(2R) 5-6-0 to 8-6-0, Interior(1) 8-6-0 to 12-0-0 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
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 8, 11, 9.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 9,2025

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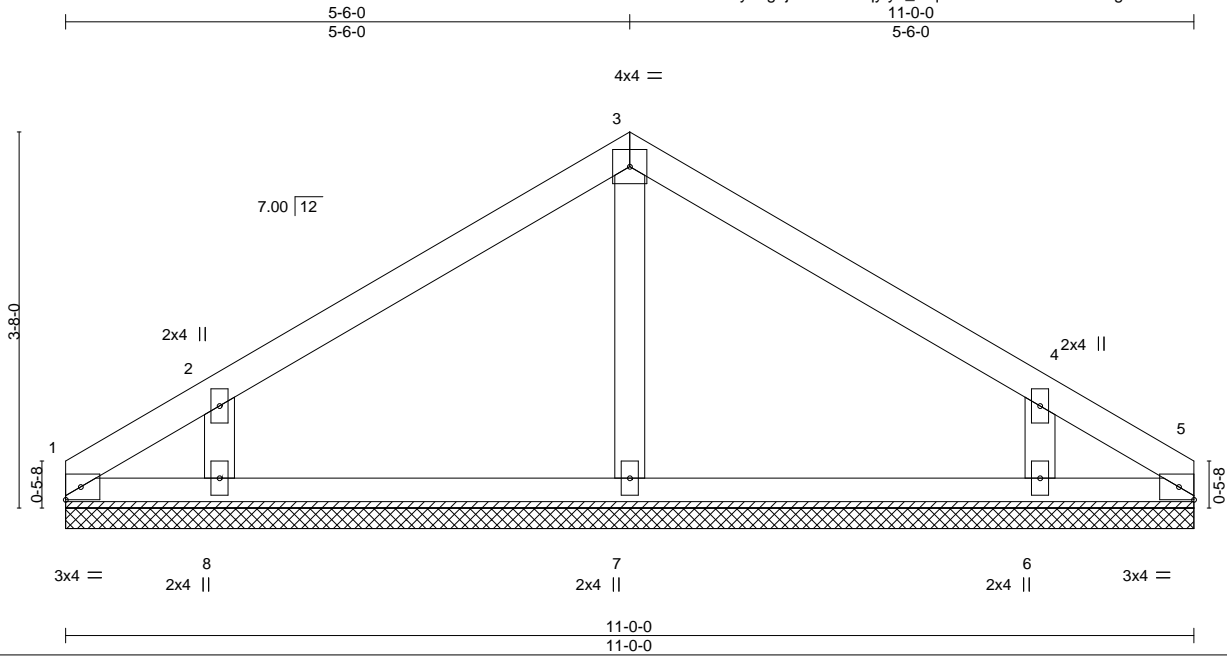
ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 74 ROOF	174047350
25-3703-A	V13	Valley	1	1	Job Reference (optional)	

Riverside Roof Truss, LLC, Danville, Va - 24541,

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:10:31 2025 Page 1
ID:tdHS5IWylNg?jaR9E1eBtqlyl9_-3qrBf2CYmHTsG63IN6ogXTwHMoRab1BrcodL6z86lc



LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.20	Vert(LL) n/a	-	n/a	999		MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.12	Vert(CT) n/a	-	n/a	999			
TCDL 10.0	Lumber DOL 1.15	WB 0.05	Horz(CT) 0.00	5	n/a	n/a			
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S							
BCDL 10.0	Code IRC2018/TPI2014								
								Weight: 43 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.

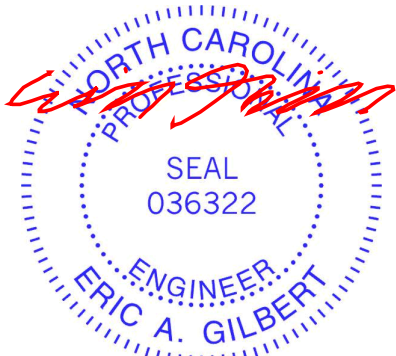
All bearings 11-0-0.
(lb) - Max Horz 1=67(LC 15)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 8, 6
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=274(LC 2), 8=308(LC 20), 6=308(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

WEBS 2-8=-250/161, 4-6=-250/161

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 5-6-0, Exterior(2R) 5-6-0 to 8-6-0, Interior(1) 8-6-0 to 11-0-0 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
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 8, 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 9,2025

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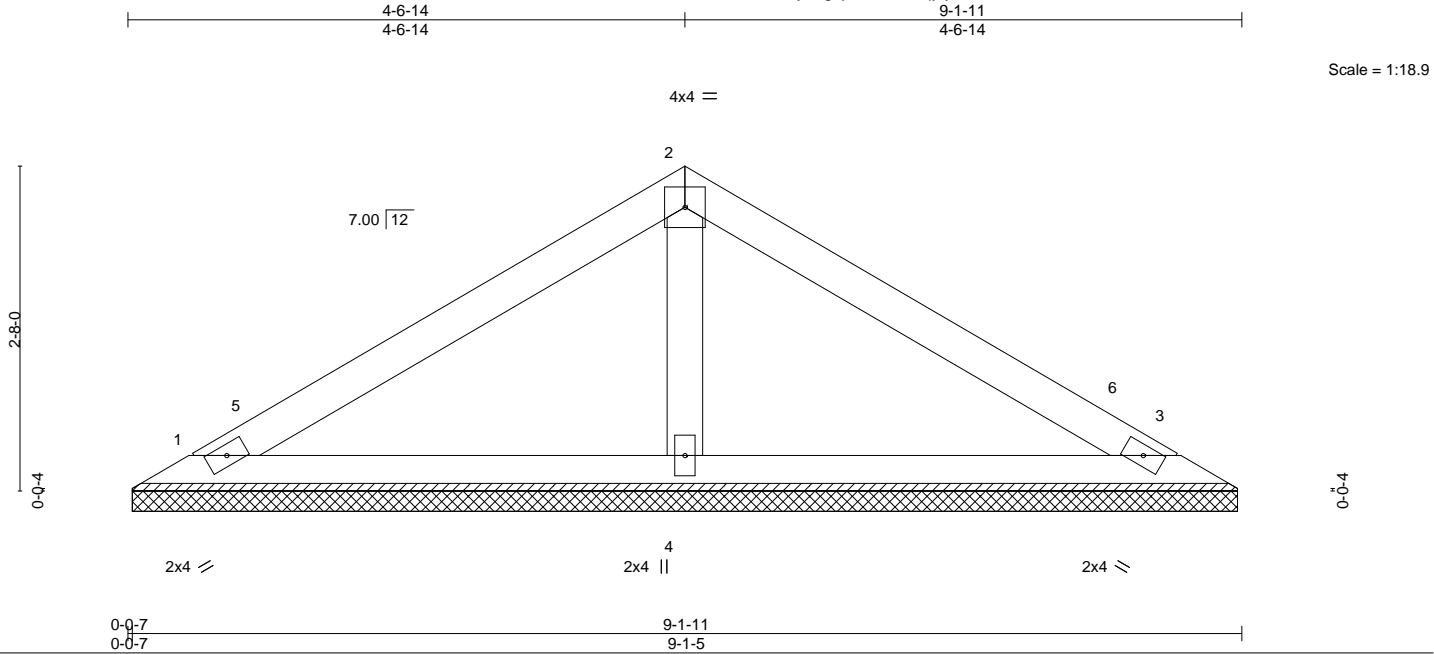
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 74 ROOF	174047351
25-3703-A	V14	Valley	1	1	Job Reference (optional)	

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:10:32 2025 Page 1
ID:tdHS5IWyLNg?jaR9E1eBtqly9_-X0PZsb3rJ4PJUQhFJ4d1Dk05Rm62J2KK4GXBTz86lb



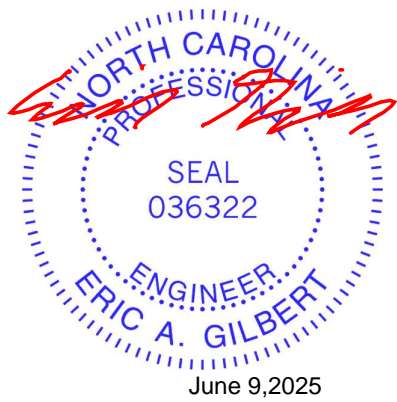
LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.24	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.16	Vert(CT)	n/a	-	n/a	999		
TCDL 10.0	Lumber DOL 1.15	WB 0.05	Horz(CT)	0.00	3	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S							
BCDL 10.0	Code IRC2018/TPI2014								
								Weight: 30 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	

REACTIONS.	(size)
1=9-0-14, 3=9-0-14, 4=9-0-14	
Max Horz 1=47(LC 15)	
Max Uplift 1=-19(LC 16), 3=-19(LC 16)	
Max Grav 1=153(LC 2), 3=153(LC 2), 4=340(LC 2)	

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 4-6-14, Exterior(2R) 4-6-14 to 7-6-14, Interior(1) 7-6-14 to 8-7-3 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) TCCL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 4) Unbalanced snow loads have been considered for this design.
 - 5) Gable requires continuous bottom chord bearing.
 - 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
 - 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



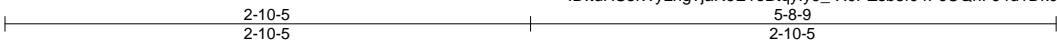
Job	Truss	Truss Type	Qty	Ply	SGR-LOT 74 ROOF	174047352
25-3703-A	V15	Valley	1	1	Job Reference (optional)	

Riverside Roof Truss, LLC,

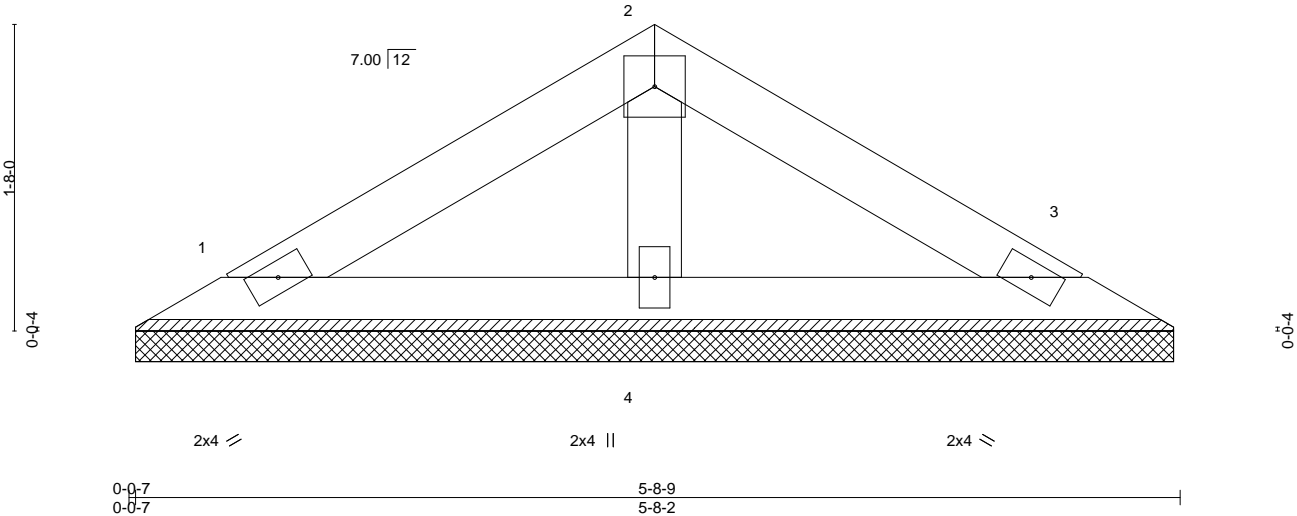
Danville, Va - 24541,

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:10:32 2025 Page 1

ID:tdHSSiWYlNg?jaR9E1eBtqly9_-X0PZsb3rJ4PJUQhFJ4d1Dk07km8kJ2jK4GXBTz86lb



Scale = 1:12.5



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
Snow (Pf/Pg) 11.6/15.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	n/a	-	n/a	999		
TCDL 10.0	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.00	3	n/a	n/a		
BCLL 0.0 *	Code IRC2018/TPI2014		Matrix-P							
BCDL 10.0									Weight: 18 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-8-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=5-7-11, 3=5-7-11, 4=5-7-11
Max Horz 1=27(LC 15)
Max Uplift 1=16(LC 16), 3=16(LC 16)
Max Grav 1=97(LC 2), 3=97(LC 2), 4=177(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 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
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 9,2025

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ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 74 ROOF	174047353
25-3703-A	V16	Valley	1	1	Job Reference (optional)	

Riverside Roof Truss, LLC,

Danville, Va - 24541,

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:10:33 2025 Page 1
ID:tdHS5iWylng?jaR9E1eBtqly9_-?Dzx4x4T4OXa6aGSto8GmxZJr9UZ2VKUJwHkQ?z86la

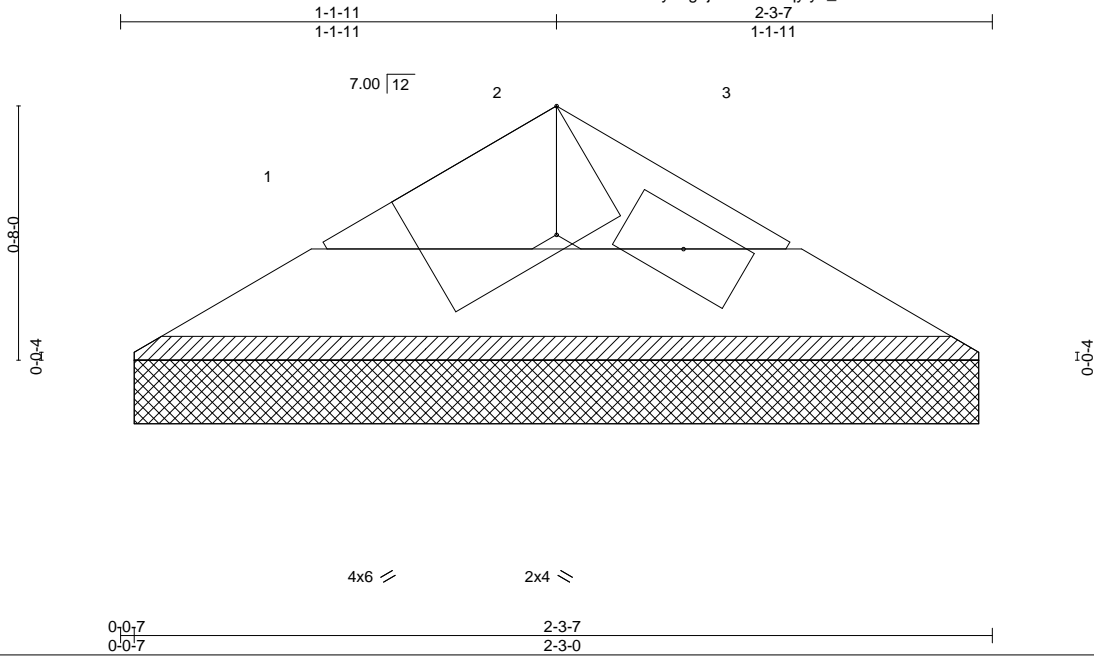


Plate Offsets (X,Y)-- [1:0-2-1,Edge]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.01	Vert(LL)	n/a	-	n/a	999	MT20 244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999	
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a	
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-P						Weight: 5 lb	FT = 20%
BCDL	10.0										

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-3-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

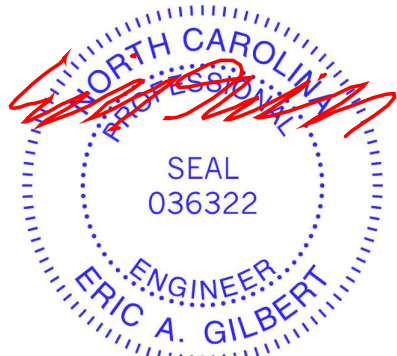
REACTIONS.

(size) 1=2-2-9, 3=2-2-9
Max Horz 1=7(LC 14)
Max Uplift 1=3(LC 16), 3=3(LC 16)
Max Grav 1=48(LC 2), 3=48(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) Gable requires continuous bottom chord bearing.
- 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 9,2025

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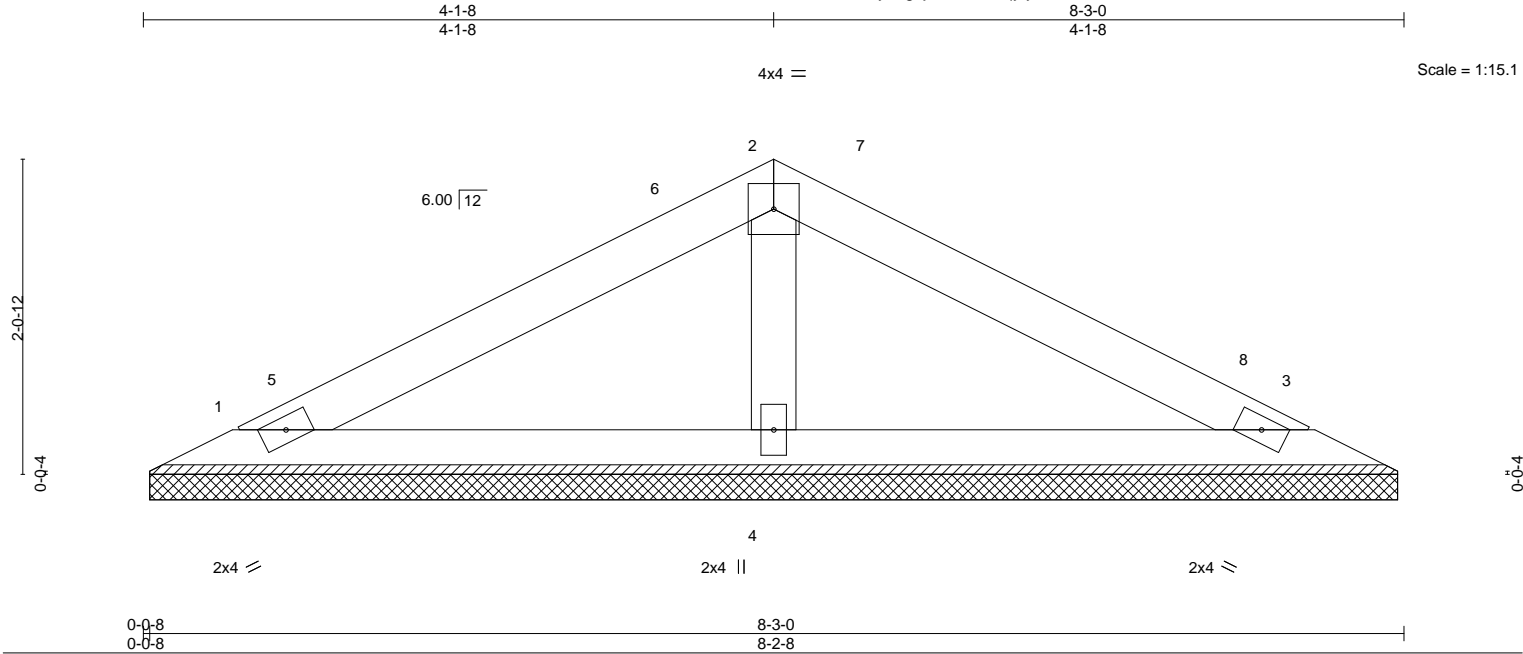
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ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 74 ROOF	174047354
25-3703-A	V17	Valley	1	1	Job Reference (optional)	

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:10:33 2025 Page 1
ID:tdHS5iWylNg?jaR9E1eBtqly9_-?Dzx4x4T4OXA6aGSto8GmxZGC9Tu2ViUJwHkQ?z86la



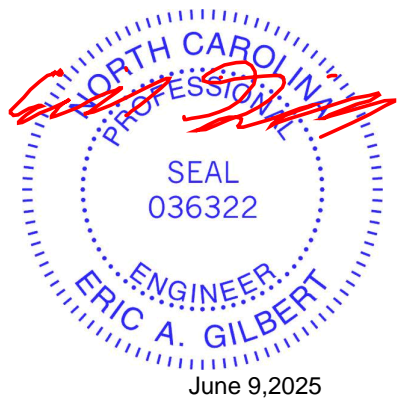
LOADING (psf)	SPACING-	CSL	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.24	Vert(LL) n/a	-	n/a	999		MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.12	Vert(CT) n/a	-	n/a	999			
TCDL 10.0	Lumber DOL 1.15	WB 0.04	Horz(CT) 0.00	3	n/a	n/a			
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P							
BCDL 10.0	Code IRC2018/TPI2014								
								Weight: 26 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	

REACTIONS.	(size) 1=8-2-0, 3=8-2-0, 4=8-2-0
	Max Horz 1=-29(LC 14)
	Max Uplift 1=-21(LC 16), 3=-21(LC 16)
	Max Grav 1=145(LC 20), 3=145(LC 21), 4=276(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 4-1-8, Exterior(2R) 4-1-8 to 7-1-8, Interior(1) 7-1-8 to 7-7-7 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 4) Unbalanced snow loads have been considered for this design.
 - 5) Gable requires continuous bottom chord bearing.
 - 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
 - 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 9,2025

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 74 ROOF	174047355
25-3703-A	V18	Valley	1	1	Job Reference (optional)	

Riverside Roof Truss, LLC, Danville, Va - 24541,

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:10:34 2025 Page 1
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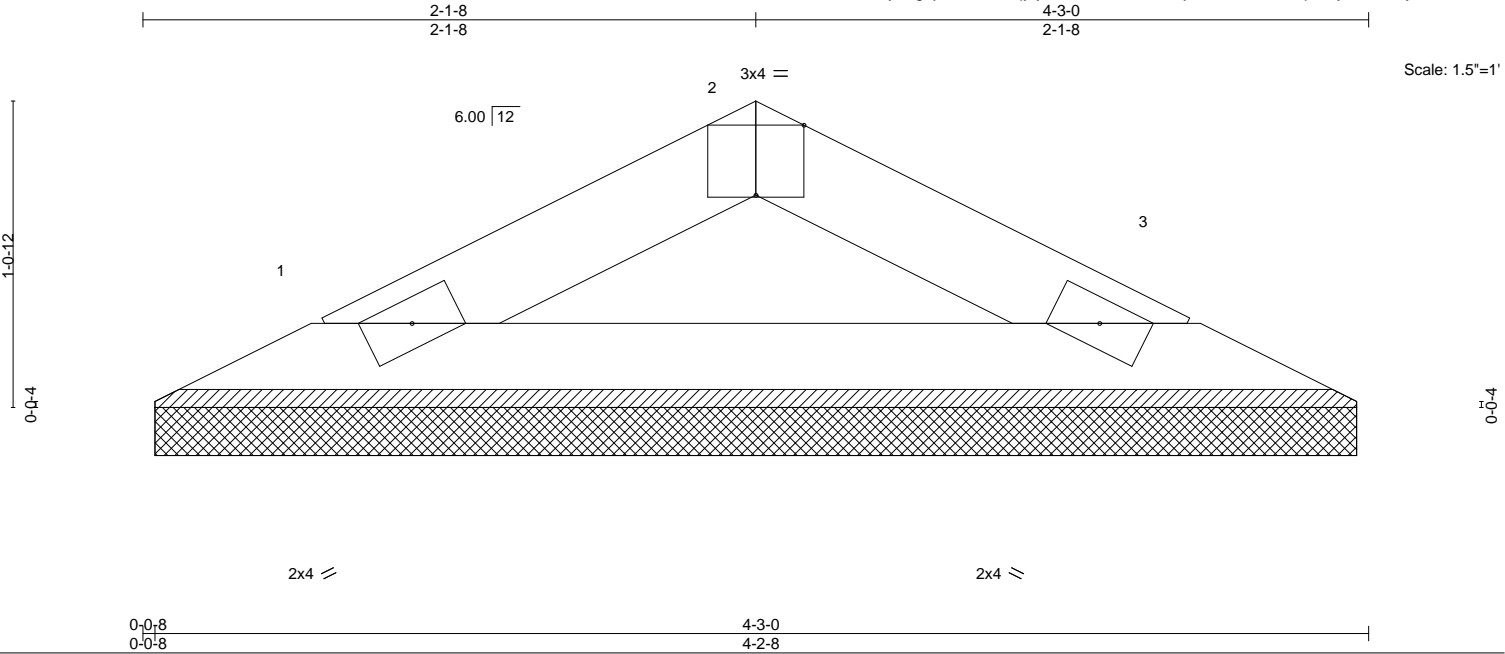


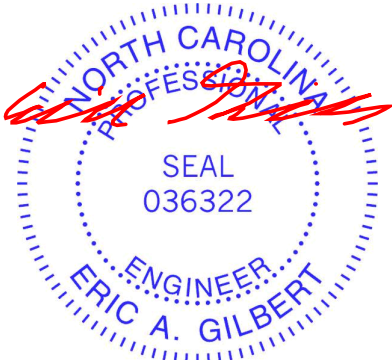
Plate Offsets (X,Y)-- [2:0-2-0,Edge]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.05	in (loc)	l/defl	L/d	GRIP
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.11	n/a	-	n/a	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	n/a	-	n/a	
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-P		0.00	3	n/a	
BCDL	10.0								
								Weight: 11 lb FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 4-3-0 oc purlins.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.	
(size)	1=4-2-0, 3=4-2-0
Max Horz	1=12(LC 15)
Max Uplift	1=7(LC 16), 3=7(LC 16)
Max Grav	1=120(LC 2), 3=120(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 4) Unbalanced snow loads have been considered for this design.
 - 5) Gable requires continuous bottom chord bearing.
 - 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
 - 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 9,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

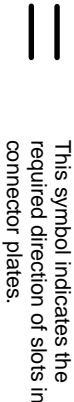
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

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TRENCO
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818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



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

PLATE SIZE

4 X 4

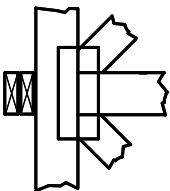
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

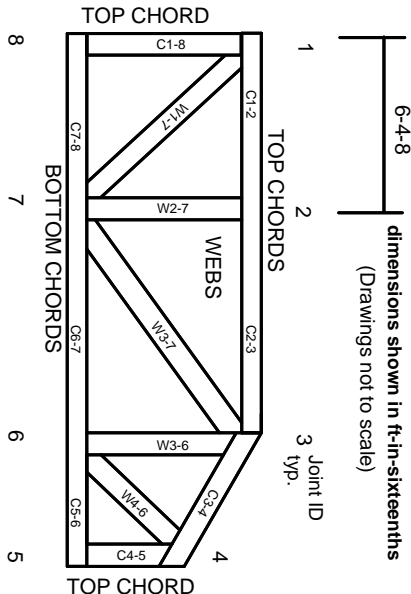


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: 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/TP1 1 section 6.3. These truss designs rely on lumber values established by others.

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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/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 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/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.

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