

Trenco

818 Soundside Rd
Edenton, NC 27932

Re: 25-3404-B
CLB-LOT #2 Roof

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

Pages or sheets covered by this seal: I74047206 thru I74047238

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

North Carolina COA: C-0844



June 9, 2025

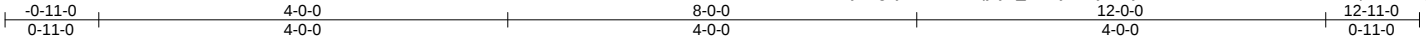
Gilbert, Eric

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

Job	Truss	Truss Type	Qty	Ply	CLB-LOT #2 Roof	174047207
25-3404-B	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 05:05:05 2025 Page 1
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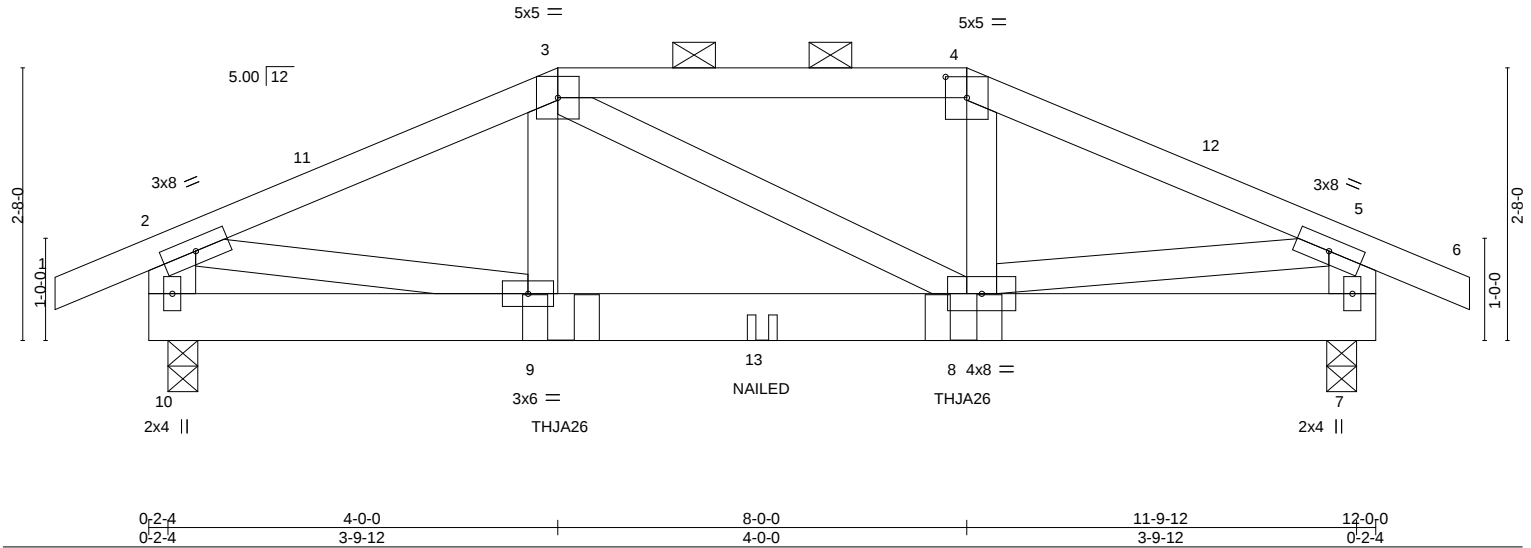


Plate Offsets (X,Y)-- [4-0-2-8,0-2-7]		0-2-4 0-2-4		4-0-0 3-9-12		8-0-0 4-0-0		11-9-12 3-9-12		12-0-0 0-2-4	
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	2-0-0		TC 0.17		in (loc) l/def L/d		MT20		244/190	
Snow (Pl/Pg)	16.5/15.0	Plate Grip DOL 1.15		BC 0.19		Vert(LL) -0.01 8-9 >999 240					
TCDL	10.0	Lumber DOL 1.15		WB 0.20		Vert(CT) -0.02 8-9 >999 180					
BCLL	0.0 *	Rep Stress Incr NO		Matrix-MS		Horz(CT) 0.00 7 n/a n/a					
BCDL	10.0	Code IRC2018/TPI2014						Weight: 148 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, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD	2x6 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3 *Except* 2-10,5-7: 2x6 SP No.2		

REACTIONS.	
(size)	10=0-3-8, 7=0-3-8
Max Horz	10=49(LC 57)
Max Uplift	10=-162(LC 12), 7=-160(LC 12)
Max Grav	10=910(LC 35), 7=901(LC 35)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-1229/221, 3-4=-1092/214, 4-5=-1224/220, 2-10=-860/179, 5-7=-849/177
BOT CHORD	8-9=-173/1079
WEBS	3-9=-49/285, 4-8=-55/310, 2-9=-163/956, 5-8=-162/943

- NOTES-**
- 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, 2x6 - 2 rows staggered 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.
 - 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.
 - 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); cantilever left and right exposed ; end vertical left and right exposed; 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=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.
 - 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.
 - Provide adequate drainage to prevent water ponding.
 - 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 162 lb uplift at joint 10 and 160 lb uplift at joint 7.
 - 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.
- (b) Graphic representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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Job	Truss	Truss Type	Qty	Ply	CLB-LOT #2 Roof
25-3404-B	HG01	HIP GIRDER	1	2	174047207

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

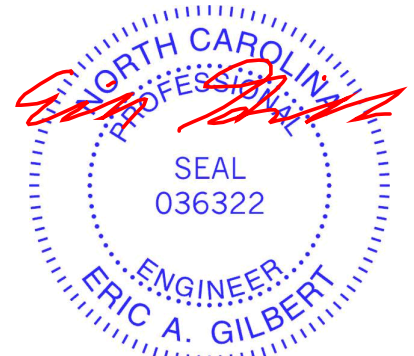
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NOTES-

- 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=-316(F) 8=-316(F) 13=-124(F)



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

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

ENGINEERING BY
TRENCO
A MiTek Affiliate

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Edenton, NC 27932

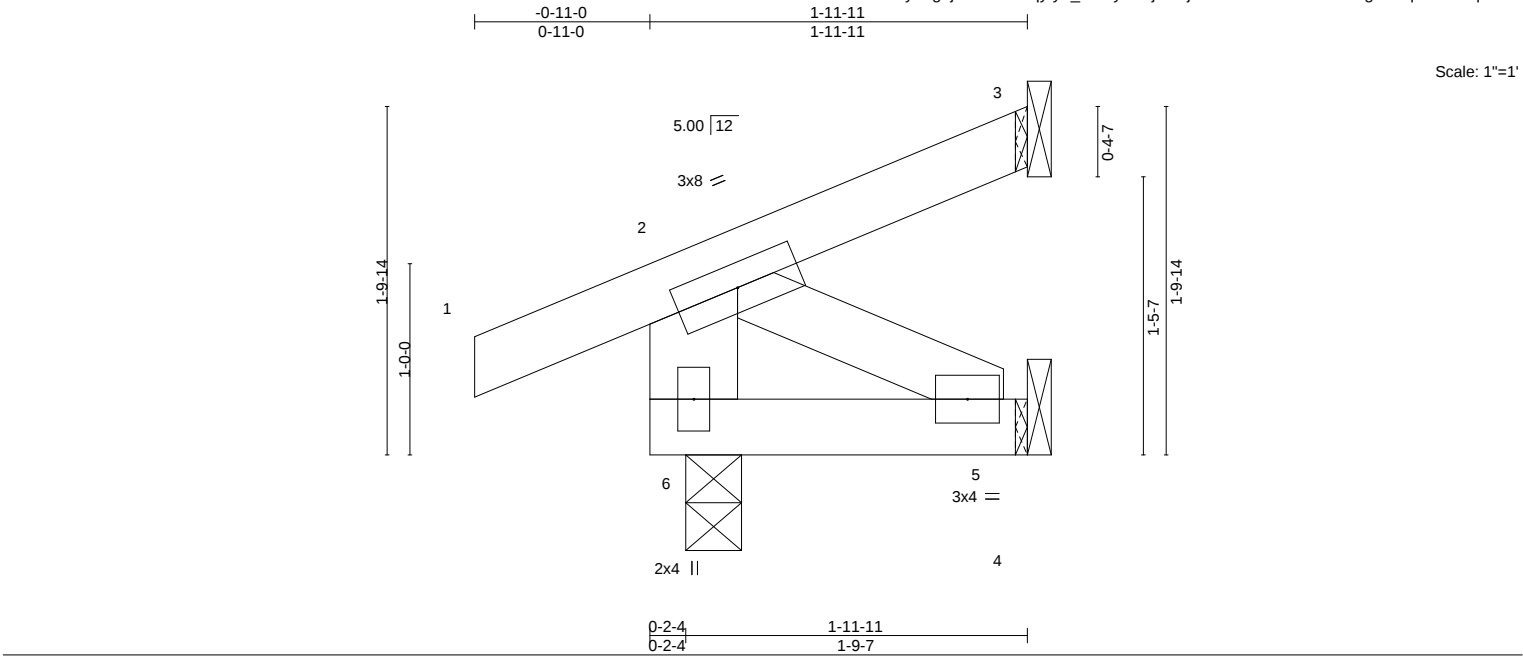
Job	Truss	Truss Type	Qty	Ply	CLB-LOT #2 Roof	174047208
25-3404-B	J01	Jack-Open	4	1	Job Reference (optional)	

Riverside Roof Truss, LLC,

Danville, Va - 24541,

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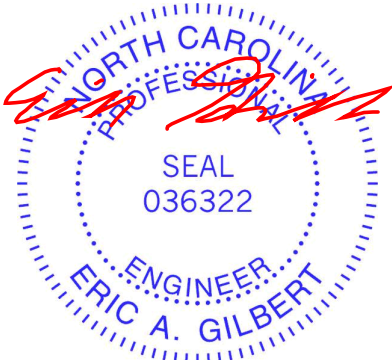
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	-0.00 6 >999 240	MT20		244/190	
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00 5 >999 180				
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	-0.00 3 n/a n/a				
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-MP							
BCDL	10.0										

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 1-11-11 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x6 SP No.2 *Except*		
	2-5: 2x4 SP No.3		

REACTIONS.	
(size)	3=Mechanical, 4=Mechanical, 6=0-3-8
Max Horz	6=60(LC 16)
Max Uplift	3=-8(LC 13), 4=-13(LC 16), 6=-28(LC 16)
Max Grav	3=29(LC 21), 4=35(LC 7), 6=161(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) 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 8 lb uplift at joint 3, 13 lb uplift at joint 4 and 28 lb uplift at joint 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

Job	Truss	Truss Type	Qty	Ply	CLB-LOT #2 Roof	174047209
25-3404-B	M01	MONOPITCH	3	1	Job Reference (optional)	

Riverside Roof Truss, LLC,

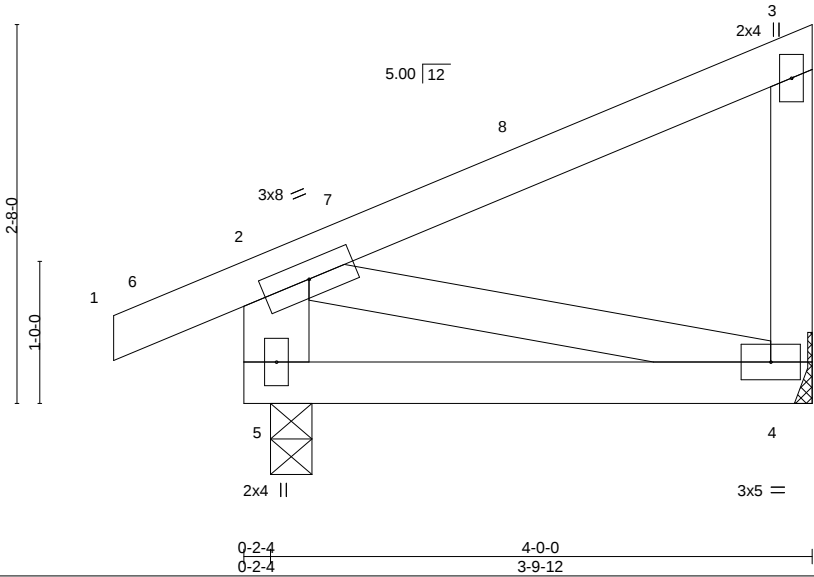
Danville, Va - 24541,

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Scale = 1:16.2



LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.22	Vert(LL)	-0.01	4-5	>999	240	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.16	Vert(CT)	-0.02	4-5	>999	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.05	Horz(CT)	-0.00	4	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MP							
BCDL 10.0	Code IRC2018/TPI2014								
								Weight: 23 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2

BOT CHORD 2x4 SP No.2

WEBS 2x4 SP No.3 *Except*

2-5: 2x6 SP No.2

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=86(LC 15)

Max Uplift 5=-43(LC 16), 4=-19(LC 13)

Max Grav 5=229(LC 21), 4=144(LC 21)

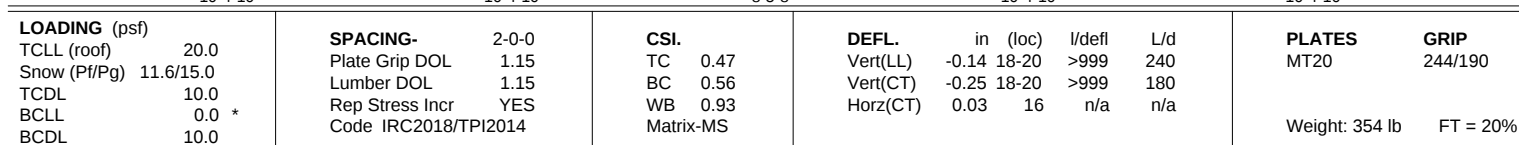
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- 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) -0-11-0 to 2-1-0, Interior(1) 2-1-0 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 43 lb uplift at joint 5 and 19 lb uplift at joint 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.



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Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:05:07 2025 Page 1
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0'-11'-0" 8'-4" 16'-8" 25'-0" 33'-4" 41'-8" 50'-0" 5'-11'-0"
0'-11'-0" 8'-4" 8'-4" 8'-4" 8'-4" 8'-4" 8'-4" 8'-4" 0'-11'-0"
Scale = 1:84.0



REACTIONS. (size) 2=0-3-8, 16=0-3-8, 12=0-3-8
 Max Horz 2=190(LC 15)
 Max Uplift 2=-89(LC 16), 16=-146(LC 16), 12=-64(LC 16)
 Max Grav 2=1167(LC 28), 16=2839(LC 30), 12=695(LC 29)

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

TOP CHORD	2-4=-1764/183, 4-6=-1638/205, 6-7=-562/200, 7-8=0/846, 8-10=-628/135, 10-12=-772/114
BOT CHORD	2-20=-75/1742, 18-20=0/936, 14-16=-333/95, 12-14=-7/713
WEBS	7-16=-1838/142, 8-16=-966/214, 8-14=-32/1055, 10-14=-467/168, 7-18=-80/1305, 6-18=-931/212, 6-20=-26/960, 4-20=-415/164

- 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=50ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior(1) 4-1-0 to 25-0-0, Exterior(2R) 25-0-0 to 30-0-0, Interior(1) 30-0-0 to 50-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) TCDL: 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 4x4 MT20 unless otherwise indicated.
 - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 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 89 lb uplift at joint 2, 146 lb uplift at joint 16 and 64 lb uplift at joint 12.
 - 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.



June 9, 2025

Job	Truss	Truss Type	Qty	Ply	CLB-LOT #2 Roof	174047211
25-3404-B	T01A	COMMON	2	1	Job Reference (optional)	

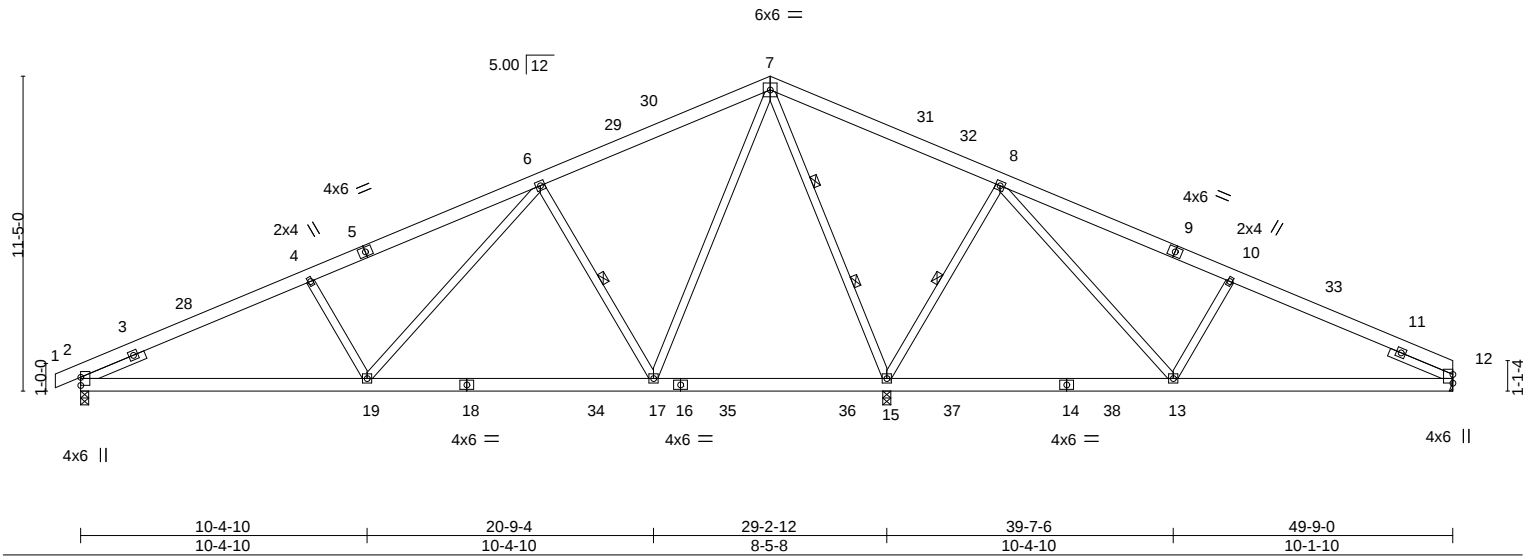
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-0-11-0 8-4-0 16-8-0 25-0-0 33-4-0 41-8-0 49-9-0

0-11-0 8-4-0 8-4-0 8-4-0 8-4-0 8-4-0 8-1-0

Scale = 1:83.5



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.48	Vert(LL)	-0.14 17-19 >999 240	MT20		244/190	
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.25 17-19 >999 180				
TCDL	10.0	Rep Stress Incr	YES	WB	0.93	Horz(CT)	0.03 15 n/a n/a				
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-MS							
BCDL	10.0										
								Weight: 351 lb		FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x6 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 5-5-0 oc purlins.
BOT CHORD	2x6 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 6-17, 8-15
SLIDER	Left 2x4 SP No.3 2-6-0, Right 2x4 SP No.3 2-6-0		2 Rows at 1/3 pts 7-15

REACTIONS.	
(size)	2=0-3-8, 15=0-3-8, 12=Mechanical
Max Horz	2=188(LC 15)
Max Uplift	2=-88(LC 16), 15=-150(LC 16), 12=-32(LC 16)
Max Grav	2=1168(LC 28), 15=2834(LC 30), 12=633(LC 29)

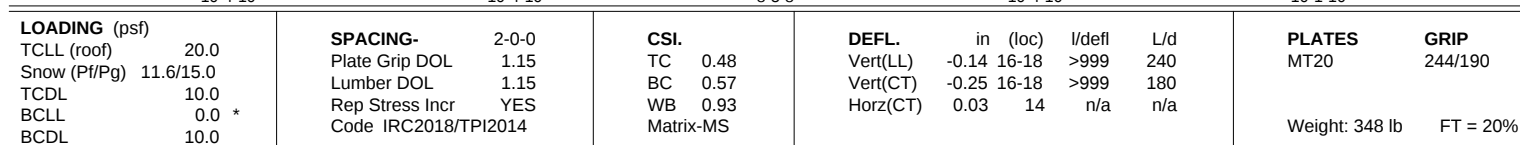
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-4=-1768/181, 4-6=-1641/203, 6-7=-566/198, 7-8=0/840, 8-10=-604/137, 10-12=-742/116
BOT CHORD	2-19=-96/1740, 17-19=-16/934, 13-15=-328/79, 12-13=-33/685
WEBS	7-17=-79/1303, 6-17=-931/212, 6-19=-26/960, 7-15=-1832/144, 4-19=-415/164, 8-15=-959/214, 8-13=-37/1032, 10-13=-455/172

- 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=50ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 4-0-11, Interior(1) 4-0-11 to 25-0-0, Exterior(2R) 25-0-0 to 29-11-11, Interior(1) 29-11-11 to 49-9-0 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=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 4x4 MT20 unless otherwise indicated.
 - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 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 88 lb uplift at joint 2, 150 lb uplift at joint 15 and 32 lb uplift at joint 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

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:05:08 2025 Page 1
ID:tdHS5IWylng?jaR9E1eBtqly9_-0hq4sp8ccXblcdw_K1p35PbfZ9RuOILeas21WLz86qf
8-4-0 16-8-0 25-0-0 33-4-0 41-8-0 49-9-0
8-4-0 8-4-0 8-4-0 8-4-0 8-4-0 8-1-0
Scale = 1:83.5

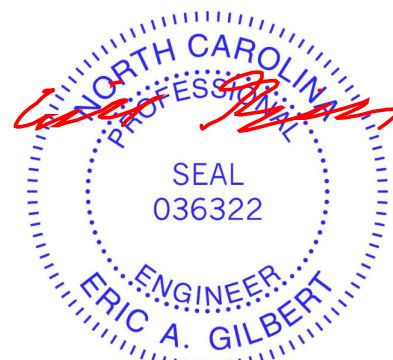


REACTIONS. (size) 1=0-3-8, 14=0-3-8, 11=Mechanical
 Max Horz 1=182(LC 15)
 Max Uplift 1=-59(LC 16), 14=-150(LC 16), 11=-33(LC 16)
 Max Grav 1=1120(LC 27), 14=2833(LC 29), 11=634(LC 28)

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

TOP CHORD	1-3=-1774/191, 3-5=-1647/212, 5-6=-568/201, 6-7=0/837, 7-9=-605/137, 9-11=-743/116
BOT CHORD	1-18=-97/1746, 16-18=-16/937, 12-14=-326/78, 11-12=-33/686
WEBS	6-16=-79/1304, 5-16=-932/212, 5-18=-32/963, 6-14=-1831/144, 3-18=-417/169, 7-14=-959/213, 7-12=-37/1032, 9-12=-455/172

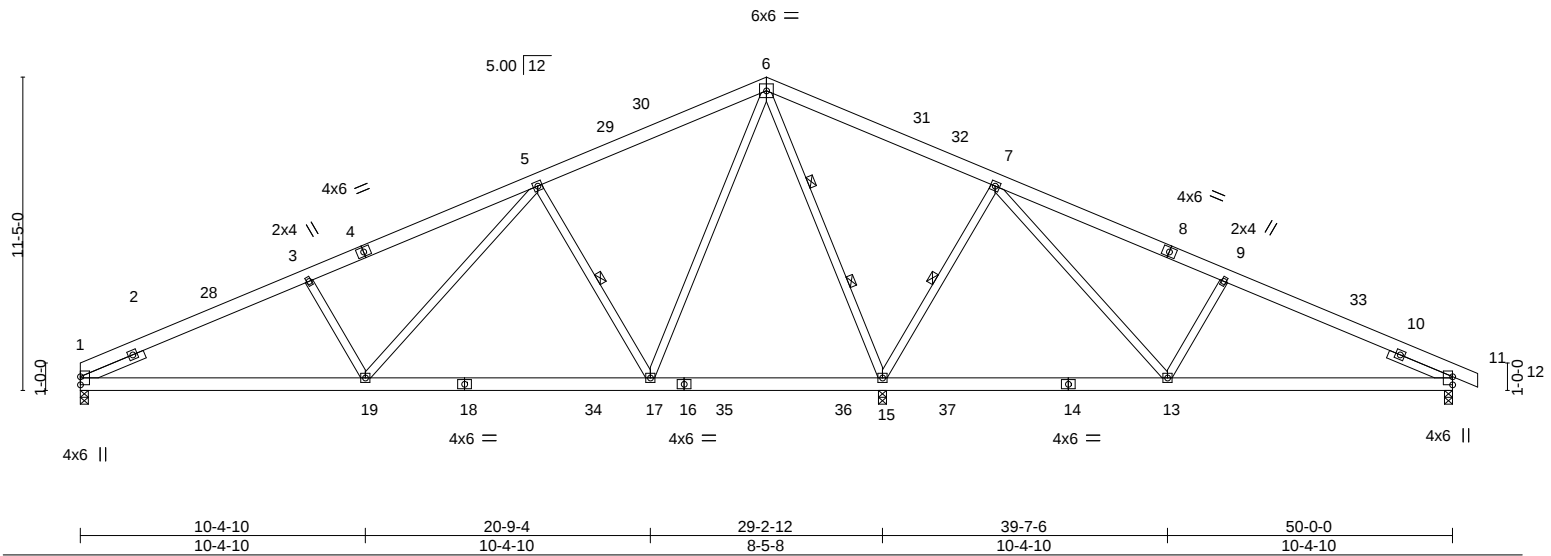
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=50ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 4-11-11, Interior(1) 4-11-11 to 25-0-0, Exterior(2R) 25-0-0 to 29-11-11, Interior(1) 29-11-11 to 49-9-0 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=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 4x4 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 59 lb uplift at joint 1, 150 lb uplift at joint 14 and 33 lb uplift at joint 11.
 - 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.
-



June 9.2025

Job	Truss	Truss Type	Qty	Ply	CLB-LOT #2 Roof	174047213
25-3404-B	T01C	COMMON	2	1	Job Reference (optional)	

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:05:09 2025 Page 1
ID:tdHSSiWMyLNg?jaR9E1eBtqly9_-UtOS489ENrj9EnVAulKlidd8qMZn87lXopWob2nz86qe
8-4-0 16-8-0 25-0-0 33-4-0 41-8-0 50-0-0 50-11-0
8-4-0 8-4-0 8-4-0 8-4-0 8-4-0 8-4-0 0-11-0
Scale = 1:84.0



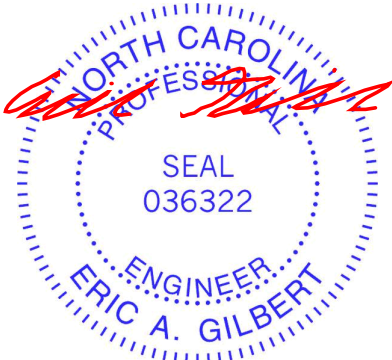
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	-0.14 17-19	>999	240	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.24 17-19	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.93	Horz(CT)	0.03 15	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-MS						Weight: 352 lb	FT = 20%
BCDL	10.0										

LUMBER-		BRACING-	
TOP CHORD	2x6 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 5-5-3 oc purlins.
BOT CHORD	2x6 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 5-17, 7-15
SLIDER	Left 2x4 SP No.3 2-6-0, Right 2x4 SP No.3 2-6-0		2 Rows at 1/3 pts 6-15

REACTIONS.	(size) 1=0-3-8, 15=0-3-8, 11=0-3-8
	Max Horz 1=-189(LC 14)
	Max Uplift 1=-60(LC 16), 15=-146(LC 16), 11=-65(LC 16)
	Max Grav 1=1119(LC 28), 15=2838(LC 30), 11=696(LC 29)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-3=-1770/193, 3-5=-1644/214, 5-6=-564/203, 6-7=0/843, 7-9=-629/135, 9-11=-773/114
BOT CHORD	1-19=-79/1748, 17-19=0/939, 13-15=-330/94, 11-13=-8/714
WEBS	6-17=-80/1305, 5-17=-932/212, 6-15=-1837/142, 7-15=-965/214, 7-13=-32/1055, 9-13=-466/168, 5-19=-32/964, 3-19=-418/169

- 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=50ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 5-0-0, Interior(1) 5-0-0 to 25-0-0, Exterior(2R) 25-0-0 to 30-0-0, Interior(1) 30-0-0 to 50-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) 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 4x4 MT20 unless otherwise indicated.
 - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 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 60 lb uplift at joint 1, 146 lb uplift at joint 15 and 65 lb uplift at joint 11.
 - 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.



June 9,2025

Job	Truss	Truss Type	Qty	Ply	CLB-LOT #2 Roof	174047214
25-3404-B	T01GE	COMMON SUPPORTED GAB	1	1	Job Reference (optional)	

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:05:10 2025 Page 1
ID:tdHSSiWYLnG?jaR9E1eBtqly9_y4yrHUA88r0sx3NSSrXAqh5iyFasOMx1AX8aDz86qd 50-0-0 50-11-0 0-11-0
Scale = 1:84.5

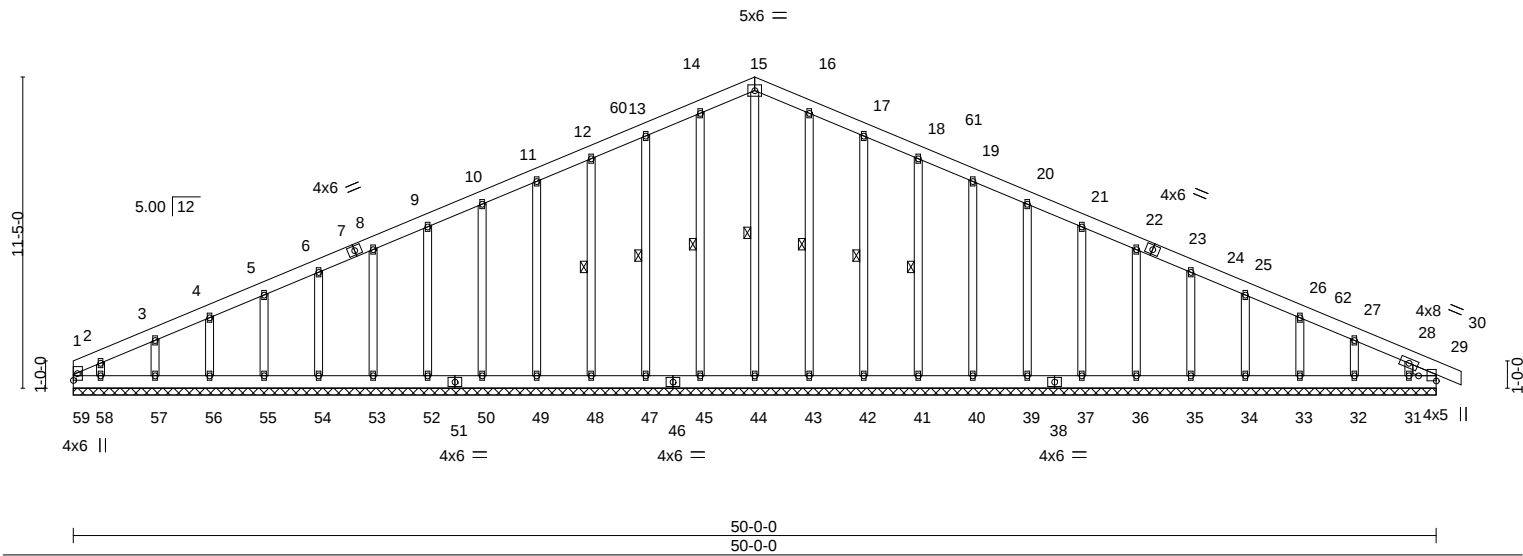


Plate Offsets (X,Y)-- [29:Edge,0-7-13]		50-0-0		50-0-0	
LOADING (psf)		SPACING-		CSI.	
TCLL (roof)	20.0	2-0-0		TC 0.11	
Snow (Pf/Pg)	11.6/15.0	Plate Grip DOL 1.15		BC 0.04	
TCDL	10.0	Lumber DOL 1.15		WB 0.13	
BCLL	0.0 *	Rep Stress Incr YES		Matrix-S	
BCDL	10.0	Code IRC2018/TPI2014		DEFL.	
				in (loc) l/defl L/d	
				Vert(LL) -0.00 29 n/r 120	
				Vert(CT) -0.00 29 n/r 120	
				Horz(CT) 0.01 29 n/a n/a	
				PLATES	
				MT20	
				GRIP	
				244/190	
				Weight: 446 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 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	WEBS	1 Row at midpt 15-44, 14-45, 13-47, 12-48, 16-43, 17-42, 18-41
OTHERS	2x4 SP No.3		
SLIDER	Right 2x4 SP No.3 0-11-5		

REACTIONS.	
All bearings 50-0-0.	
(lb) - Max Horz	59=200(LC 14)
Max Uplift	All uplift 100 lb or less at joint(s) 29, 47, 48, 49, 50, 52, 53, 54, 55, 56, 57, 58, 42, 41, 40, 39, 37, 36, 35, 34, 33, 32, 31 except 59=124(LC 14)
Max Grav	All reactions 250 lb or less at joint(s) 59, 29, 44, 45, 47, 48, 49, 50, 52, 53, 54, 55, 56, 57, 58, 43, 42, 41, 40, 39, 37, 36, 35, 34, 33, 32, 31

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	12-13=-107/264, 13-14=-123/304, 14-15=-132/327, 15-16=-132/327, 16-17=-123/304, 17-18=-107/264

- 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=50ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) 0-1-12 to 5-0-0, Exterior(2N) 5-0-0 to 25-0-0, Corner(3R) 25-0-0 to 30-0-0, Exterior(2N) 30-0-0 to 50-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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.
 - 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) 29, 47, 48, 49, 50, 52, 53, 54, 55, 56, 57, 58, 42, 41, 40, 39, 37, 36, 35, 34, 33, 32, 31 except (jt=lb) 59=124.
 - 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.

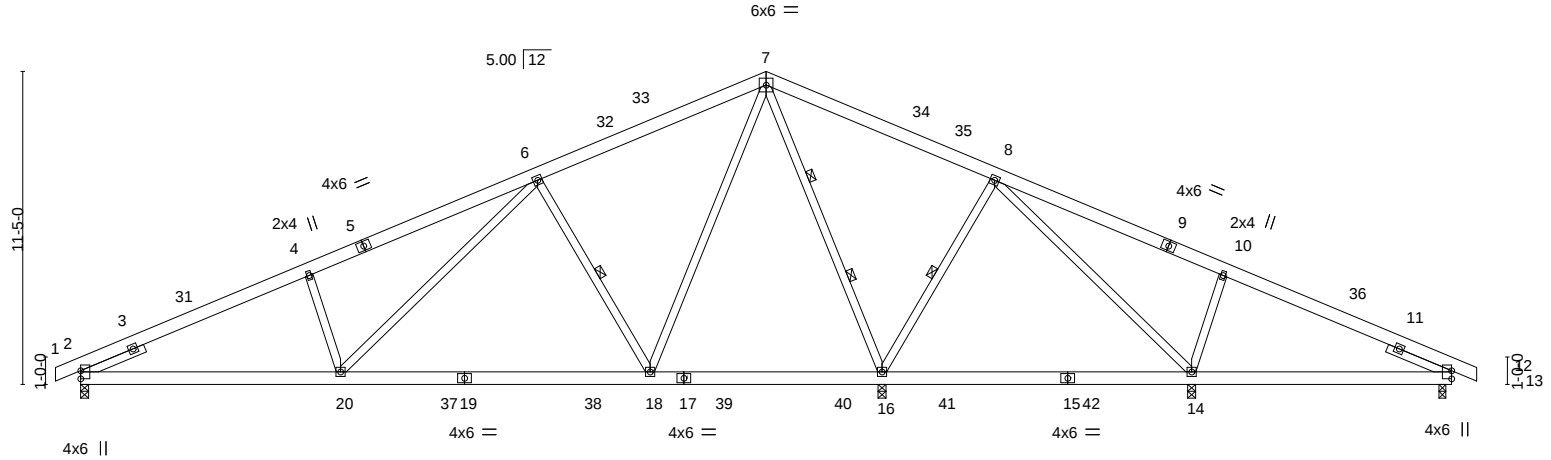
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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.sbcacomponents.com)

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	CLB-LOT #2 Roof	174047215
25-3404-B	T02	COMMON	4	1	Job Reference (optional)	

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:05:11 2025 Page 1
ID:tdHS5iWylng?jaR9E1eBtqly9_-QGWDVqBUvSzT5eZ0AMmi2DBPMS3bgn5GqHi6fz86qc
-0-11-0 8-4-0 16-8-0 25-0-0 33-4-0 41-8-0 50-0-0 50-11-0
0-11-0 8-4-0 8-4-0 8-4-0 8-4-0 8-4-0 8-4-0 0-11-0
Scale = 1:84.0



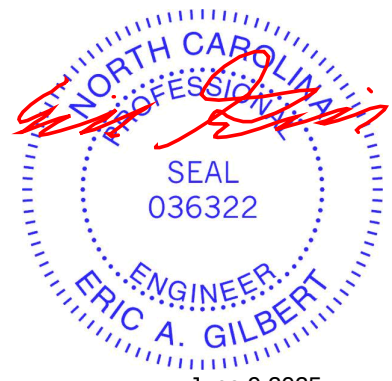
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	2-0-0		TC	0.44	in (loc)	l/defl	L/d	MT20	244/190	
Snow (Pf/Pg)	11.6/15.0	Plate Grip DOL	1.15	BC	0.60	Vert(LL)	-0.19 18-20	>999			
TCDL	10.0	Lumber DOL	1.15	WB	0.89	Vert(CT)	-0.34 18-20	>999			
BCLL	0.0 *	Rep Stress Incr	YES	Matrix-MS		Horz(CT)	0.03 16	n/a			
BCDL	10.0	Code IRC2018/TPI2014									
								Weight: 355 lb		FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x6 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 5-1-12 oc purlins.
BOT CHORD	2x6 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
WEBS	2x4 SP No.3		6-0-0 oc bracing: 14-16.
SLIDER	Left 2x4 SP No.3 2-6-0, Right 2x4 SP No.3 2-6-0	WEBS	1 Row at midpt 6-18, 8-16
			2 Rows at 1/3 pts 7-16

REACTIONS. All bearings 0-3-8 except (jt=length) 12=0-3-0.
(lb) - Max Horz 2=-190(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 14, 12 except 2=-100(LC 16), 16=-107(LC 16)
Max Grav All reactions 250 lb or less at joint(s) except 2=1213(LC 28), 16=2505(LC 28), 14=617(LC 37), 12=478(LC 35)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1938/194, 4-6=-1853/249, 6-7=-650/225, 7-8=0/700, 10-12=-278/97
BOT CHORD 2-20=-85/1864, 18-20=-20/1032, 14-16=-348/68, 12-14=0/257
WEBS 4-20=-400/167, 6-20=-46/1044, 6-18=-911/217, 7-18=-78/1317, 7-16=-1742/117, 8-16=-630/208, 8-14=-14/462, 10-14=-466/169

- 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=50ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior(1) 4-1-0 to 25-0-0, Exterior(2R) 25-0-0 to 30-0-0, Interior(1) 30-0-0 to 50-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) 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 4x4 MT20 unless otherwise indicated.
 - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 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) 14, 12 except (jt=lb) 2=100, 16=107.
 - 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.



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)

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

Job	Truss	Truss Type	Qty	Ply	CLB-LOT #2 Roof	174047216
25-3404-B	T03	COMMON	10	1		

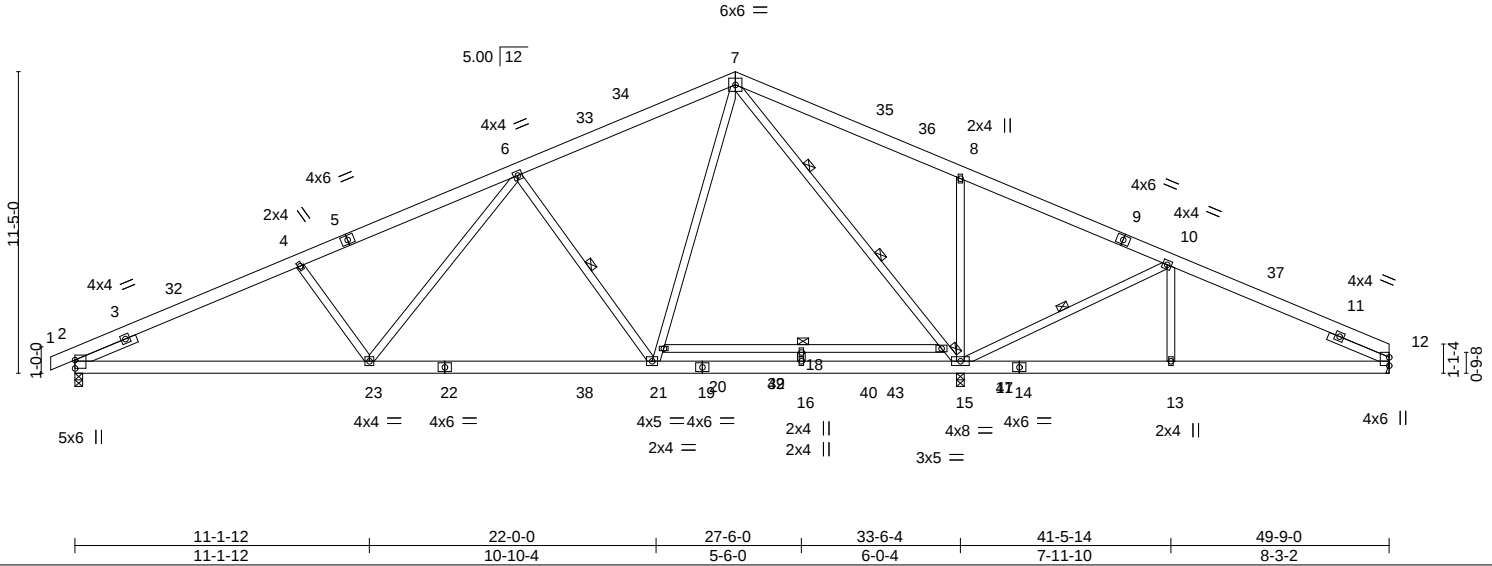
Riverside Roof Truss, LLC, Danville, Va - 24541,

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

ID:tdHS5Wylng?jaR9E1eBtqly9-uS4biAB6gm5j5FDIZtt?FFmLhmjtK83EVU0F6z86qb

-0-11-0	8-6-5	16-9-3	25-0-0	33-6-4	41-5-14	49-9-0
0-11-0	8-6-5	8-2-13	8-2-13	8-6-4	7-11-10	8-3-2

Scale = 1:87.2



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.47	Vert(LL) -0.29	18-20	>999	240	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.95	Vert(CT) -0.46	18-20	>881	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.82	Horz(CT) 0.05	15	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MS						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 367 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2 *Except*
14-19: 2x6 SP 2400F 2.0E, 17-20: 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
7-15: 2x4 SP DSS
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 4-4-3 oc purlins.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing. Except:
6-0-0 oc bracing: 17-20
WEBS 1 Row at midpt 6-21, 10-15
2 Rows at 1/3 pts 7-17

REACTIONS.

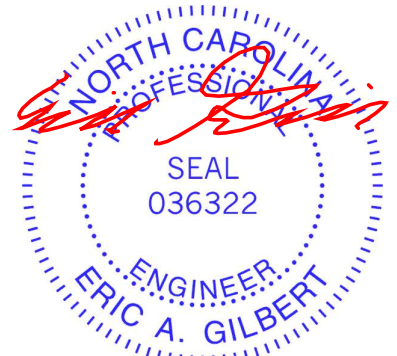
(size) 2=0-3-8, 15=0-3-8, 12=Mechanical
Max Horz 2=188(LC 15)
Max Uplift 2=-80(LC 16), 15=-33(LC 16), 12=-26(LC 16)
Max Grav 2=1536(LC 28), 15=3080(LC 30), 12=478(LC 35)

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

TOP CHORD 2-4=-2591/182, 4-6=-2393/187, 6-7=-1331/169, 7-8=0/688, 8-10=0/662, 10-12=-433/107
BOT CHORD 2-23=-96/2456, 21-23=-6/1755, 16-21=0/811, 15-16=0/811, 13-15=-61/400,
12-13=-61/400
WEBS 4-23=-398/165, 6-23=-20/824, 6-21=-924/211, 20-21=-0/1488, 7-20=0/1600,
7-17=-2116/31, 15-17=-2202/0, 8-15=-539/216, 10-15=-854/150, 16-18=-315/0

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=50ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 4-0-11, Interior(1) 4-0-11 to 25-0-0, Exterior(2R) 25-0-0 to 29-11-11, Interior(1) 29-11-11 to 49-9-0 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
- 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, with BCDL = 10.0psf.
- 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) 2, 15, 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.



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	CLB-LOT #2 Roof	174047217
25-3404-B	T03GE	COMMON SUPPORTED GAB	1	1	Job Reference (optional)	

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

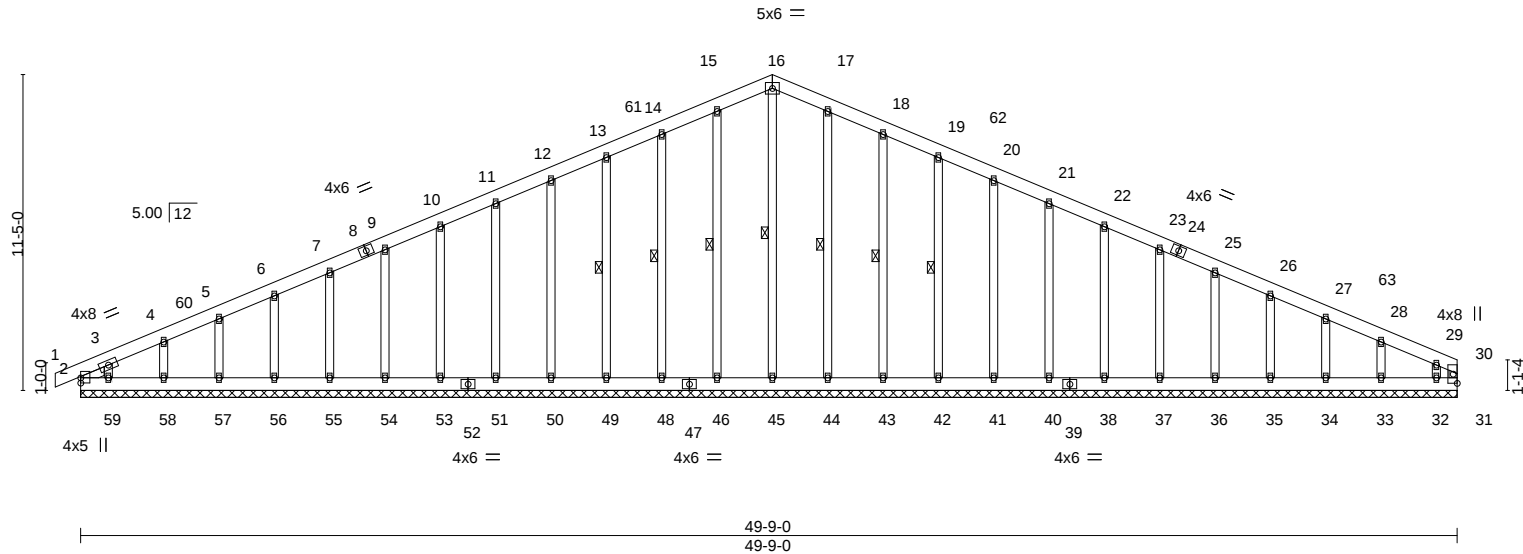
8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:05:13 2025 Page 1

ID:tdHS5IWyLNg?jaR9E1eBtqly9_-MfdzwWCKr3DajOoy7aOEnTlcrAGF3l6Nk8moBYzB6qa

-0-11-0 25-0-0 49-9-0 24-9-0

0-11-0 25-0-0 49-9-0 24-9-0

Scale = 1:83.3



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.12	Vert(LL) -0.00	1	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	1	n/r	120		
TCDL 10.0	Lumber DOL 1.15	WB 0.13	Horz(CT) 0.00	31	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 445 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 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	WEBS 1 Row at midpt 16-45, 15-46, 14-48, 13-49, 17-44, 18-43, 19-42
OTHERS 2x4 SP No.3	
SLIDER Left 2x4 SP No.3 0-11-5	

REACTIONS. All bearings 49-9-0.
(lb) - Max Horz 2=202(LC 15)
Max Uplift All uplift 100 lb or less at joint(s) 31, 48, 49, 50, 51, 53, 54, 55, 56, 57, 58, 59, 43, 42, 41, 40, 38, 37, 36, 35, 34, 33, 2 except 32=-109(LC 16)
Max Grav All reactions 250 lb or less at joint(s) 31, 45, 46, 48, 49, 50, 51, 53, 54, 55, 56, 57, 58, 59, 44, 43, 42, 41, 40, 38, 37, 36, 35, 34, 33, 32, 2

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 13-14=-107/259, 14-15=-121/299, 15-16=-130/323, 16-17=-130/323, 17-18=-121/299, 18-19=-107/259

- 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=50ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-11-0 to 4-0-11, Exterior(2N) 4-0-11 to 25-0-0, Corner(3R) 25-0-0 to 29-11-11, Exterior(2N) 29-11-11 to 49-7-4 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=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
 - 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) All plates are 2x4 MT20 unless otherwise indicated.
 - 8) Gable requires continuous bottom chord bearing.
 - 9) Gable studs spaced at 2-0-0 oc.
 - 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 11) * 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.
 - 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 31, 48, 49, 50, 51, 53, 54, 55, 56, 57, 58, 59, 43, 42, 41, 40, 38, 37, 36, 35, 34, 33, 2 except (jt=lb) 32=109.
 - 13) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
 - 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.



June 9,2025

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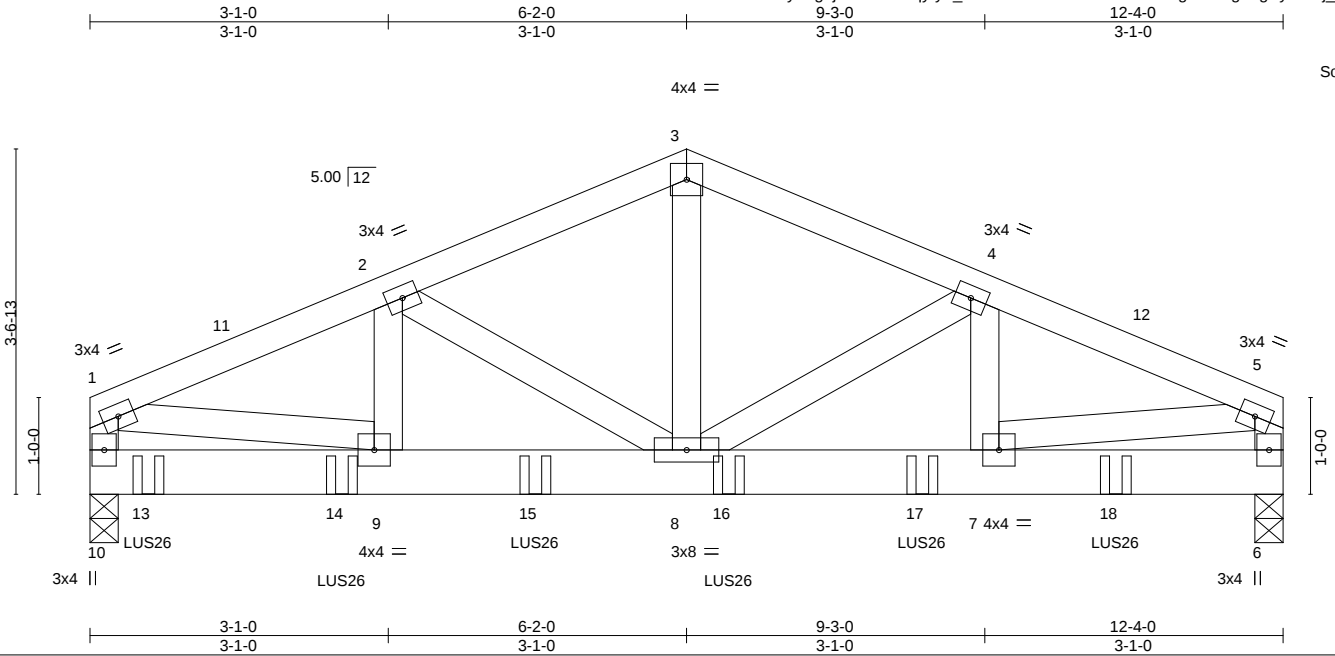
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	CLB-LOT #2 Roof	174047218
25-3404-B	T04G	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 05:05:14 2025 Page 1
ID:tdHS5iWylng?jaR9E1eBtqly9_-rrBL7sDNCNLRKYN8hlwTKgriaWgo7gXynVMj_z86qZ

Scale: 1/2"=1'



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	2-0-0		TC	0.44	in (loc)	l/defl	L/d	MT20	244/190	
Snow (Pf/Pg)	11.6/15.0	Plate Grip DOL	1.15	BC	0.42	Vert(LL)	-0.03 8-9	>999 240			
TCDL	10.0	Lumber DOL	1.15	WB	0.49	Vert(CT)	-0.05 8-9	>999 180			
BCLL	0.0 *	Rep Stress Incr	NO	Matrix-MS		Horz(CT)	0.01 6	n/a n/a			
BCDL	10.0	Code IRC2018/TPI2014							Weight: 153 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 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 10=0-3-8, 6=0-3-8
Max Horz 10=-54(LC 35)
Max Uplift 10=-172(LC 12), 6=-150(LC 12)
Max Grav 10=2460(LC 2), 6=2119(LC 2)

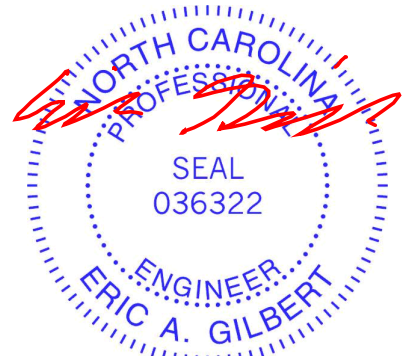
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 1-2=-2977/227, 2-3=-2486/211, 3-4=-2486/211, 4-5=-2974/227, 1-10=-1771/141, 5-6=-1774/142
BOT CHORD 9-10=-40/406, 8-9=-171/2707, 7-8=-171/2704, 6-7=-26/387
WEBS 3-8=-108/1677, 4-8=-538/62, 4-7=-74/372, 2-8=-541/61, 2-9=-73/375, 1-9=-151/2360, 5-7=-152/2377

NOTES-

- 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.
- 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.
- 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); cantilever left and right exposed ; end vertical left and right exposed; 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 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) except (jt=lb) 10=172, 6=150.
- 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.
- Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 0-7-4 from the left end to 2-7-4 to connect truss(es) to front face of bottom chord.
- Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 4-7-4 from the left end to 10-7-4 to connect truss(es) to front face of bottom chord.

Continued on page 2 where hanger is in contact with lumber.



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	CLB-LOT #2 Roof
25-3404-B	T04G	Common Girder	1	2	174047218
					Job Reference (optional)

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

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:05:14 2025 Page 2
ID:tdHS5IWyLng?jaR9E1eBtqly9_-rrBL7sDNCNLRKYN8hlwTKgriaWgo7gXynVMj_z86qZ

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: 13=-453(F) 14=-447(F) 15=-448(F) 16=-448(F) 17=-448(F) 18=-448(F)



June 9,2025

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ENGINEERING BY

TRENCO

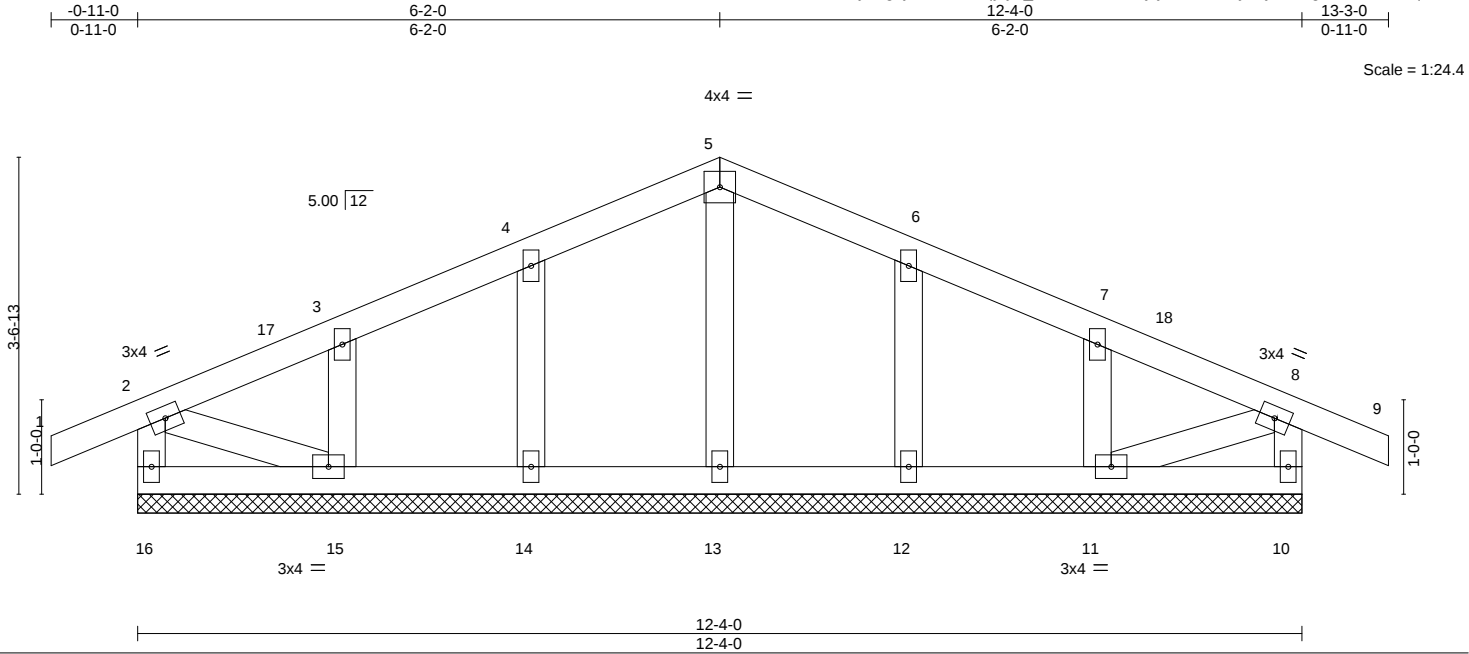
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818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	CLB-LOT #2 Roof	174047219
25-3404-B	T04GE	COMMON SUPPORTED GAB	1	1	Job Reference (optional)	

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

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:05:15 2025 Page 1
ID:tdHS5IWyLNg?jaR9E1eBtqly9_-J1lkKCE?zhTlyiyKF?RituOy2zyvXh4gBRFvFRz86qY



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	2-0-0		TC	0.08	in (loc)	l/defl	L/d	MT20	244/190	
Snow (Pf/Pg)	11.6/15.0	Plate Grip DOL	1.15	BC	0.03	Vert(LL)	-0.00 9 n/r	120			
TCDL	10.0	Lumber DOL	1.15	WB	0.03	Vert(CT)	-0.00 9 n/r	120			
BCLL	0.0 *	Rep Stress Incr	YES	Matrix-S		Horz(CT)	0.00 10 n/a	n/a			
BCDL	10.0	Code IRC2018/TPI2014									
										Weight: 63 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.

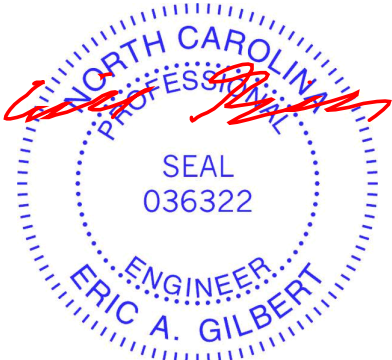
REACTIONS.

All bearings 12-4-0.
(lb) - Max Horz 16=-62(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) -0-11-0 to 2-2-0, Exterior(2N) 2-2-0 to 6-2-0, Corner(3R) 6-2-0 to 9-2-0, Exterior(2N) 9-2-0 to 13-3-0 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

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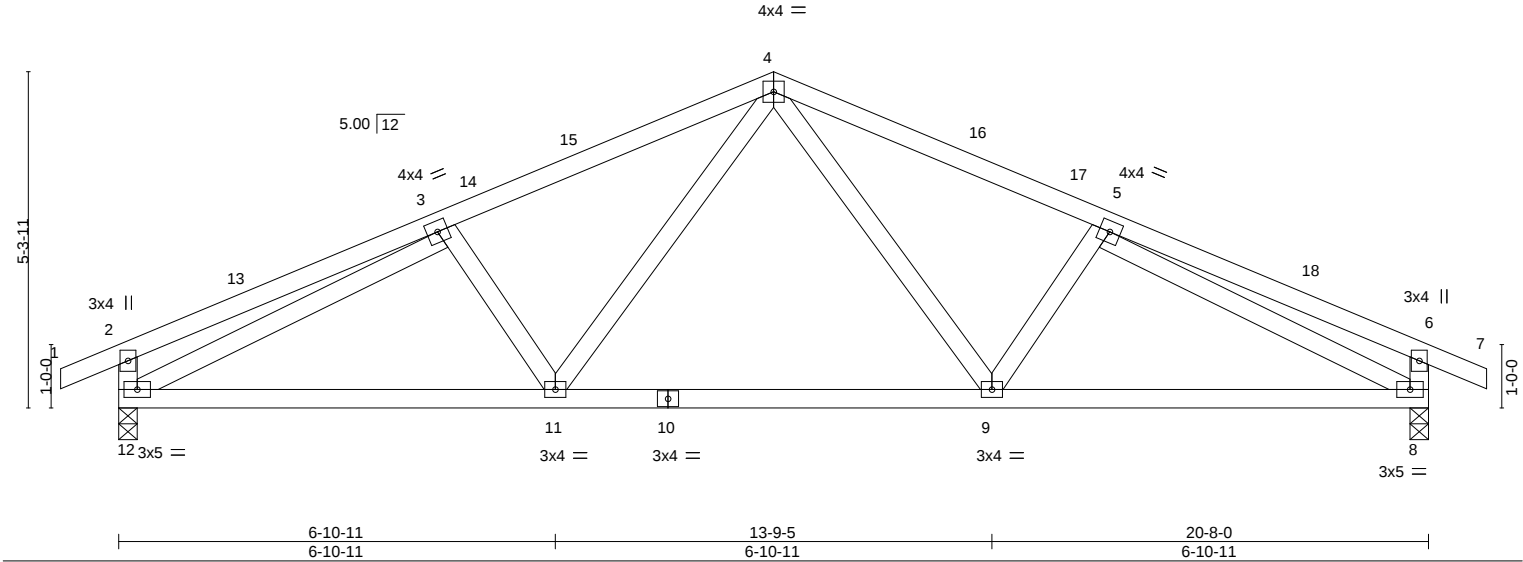
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	CLB-LOT #2 Roof	174047220
25-3404-B	T05	COMMON	2	1	Job Reference (optional)	

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:05:15 2025 Page 1
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0-11-0	5-2-0	10-4-0	15-6-0	20-8-0	21-7-0
0-11-0	5-2-0	5-2-0	5-2-0	5-2-0	0-11-0

Scale = 1:36.4



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	-0.05 11-12 >999 240	MT20		244/190	
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.11 11-12 >999 180				
TCDL	10.0	Rep Stress Incr	YES	WB	0.67	Horz(CT)	0.03 8 n/a n/a				
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-MS							
BCDL	10.0										

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 5-1-13 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)	12=0-3-8, 8=0-3-8
Max Horz	12=-85(LC 14)
Max Uplift	12=-83(LC 16), 8=-83(LC 16)
Max Grav	12=879(LC 2), 8=879(LC 2)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-266/89, 3-4=-1170/233, 4-5=-1170/233, 5-6=-266/89, 2-12=-292/132, 6-8=-292/132
BOT CHORD	11-12=-162/1110, 9-11=-68/831, 8-9=-148/1110
WEBS	4-9=-35/369, 4-11=-35/369, 3-12=-1055/159, 5-8=-1055/159

- 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) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 10-4-0, Exterior(2R) 10-4-0 to 13-4-0, Interior(1) 13-4-0 to 21-7-0 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) 12, 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

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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ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

174047221

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:05:16 2025 Page 1

ID:tdHS5IWvLnq?iaR9E1eBtavlv9 -nEJ6YYEdk b9asXXoivxP5w?qNB9G1vaO5 Sotz86aX

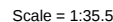


Plate Offsets (X,Y)--	[6:Edge.0-6-4], [11:Edge.0-6-4]
-----------------------	---------------------------------

[illegible]

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.

(size) 11=0-3-8, 6=0-3-8
 Max Horz 11=-76(LC 10)
 Max Uplift 11=-236(LC 12), 6=-239(LC 12)
 Max Grav 11=3086(LC 2), 6=3124(LC 2)

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

TOP CHORD 1-2=-4894/396, 2-3=-3729/337, 3-4=-3729/337, 4-5=-4896/397, 1-11=-2508/219,
5-6=-2509/219

BOT CHORD 10-11=-64/818, 8-10=-312/4460, 7-8=-312/4462, 6-7=-64/812

WEBS 3-8=-172/2511, 4-8=-1263/337, 4-7=-59/786, 2-8=-1261/137, 2-10=-59/785,
1-10=-250/3676, 5-7=-250/3682

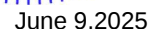
NOTES-

- 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 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) 11=236, 6=239.
- 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/TP1 1.
- 11) Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-5-4 from the left end to 19-5-4 to connect truss(es) to front face of bottom chord.
- 12) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	CLB-LOT #2 Roof
25-3404-B	T05G	Common Girder	1	3	174047221

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

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:05:16 2025 Page 2
ID:tdHS5IWyLng?jaR9E1eBtqly9_-nEJ6YYEdk_b9asXXojoyxP5w?qNB9G1vqQ5_Sotz86qX

LOAD CASE(S) Standard

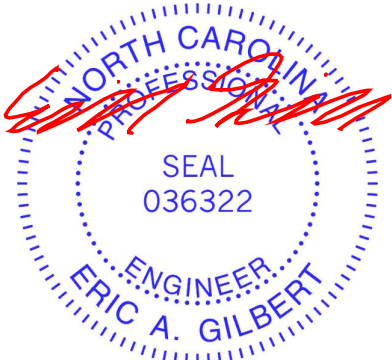
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-43, 3-5=-43, 6-11=-20

Concentrated Loads (lb)

Vert: 7=-319(F) 10=-319(F) 14=-319(F) 15=-319(F) 16=-319(F) 17=-319(F) 18=-319(F) 19=-319(F) 20=-319(F) 21=-319(F)



June 9,2025

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	CLB-LOT #2 Roof	174047222
25-3404-B	T05GE	COMMON SUPPORTED GAB	1	1	Job Reference (optional)	

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

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:05:17 2025 Page 1
ID:tdHS5IWylNg?jaR9E1eBtqly9_-FQtUluFFVlj0C06jMQTAyJTIXneJ?aHzelk0KJz86qW

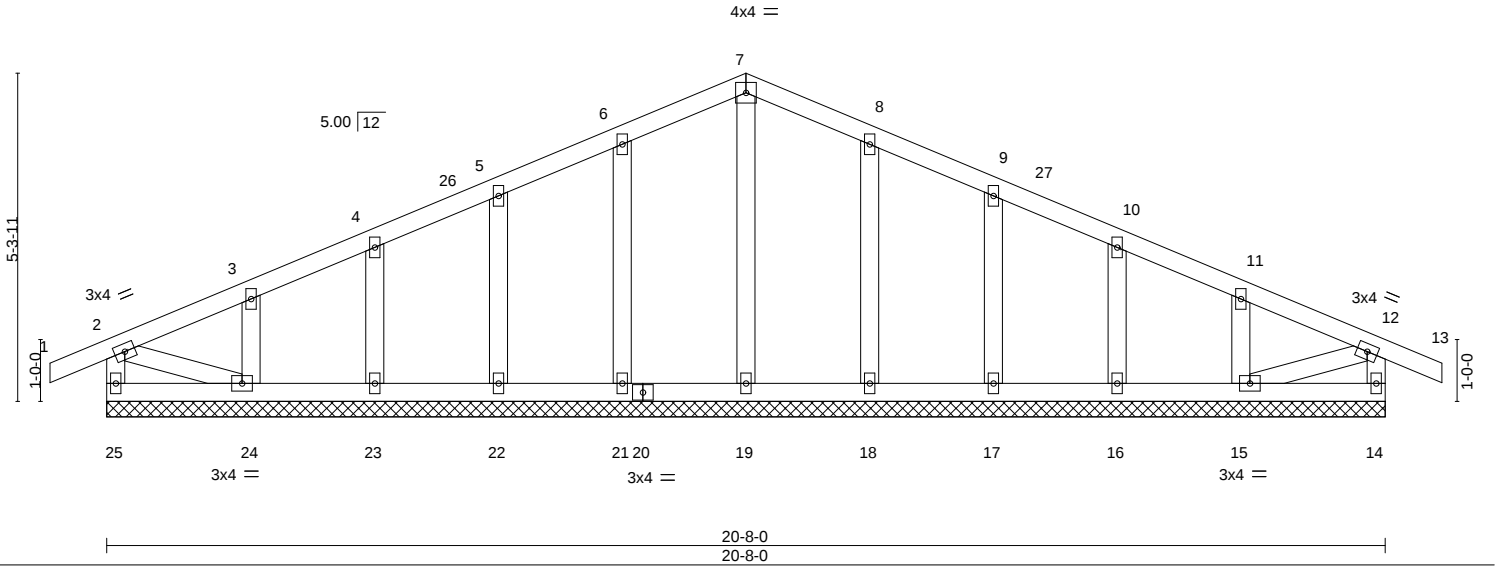
0-11-0
0-11-0

10-4-0
10-4-0

20-8-0
10-4-0

21-7-0
0-11-0

Scale = 1:37.2



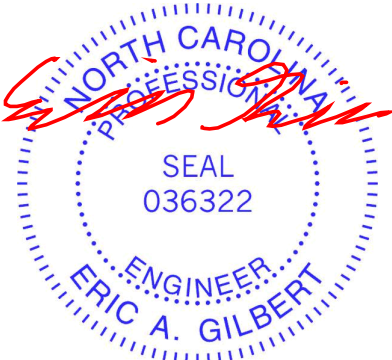
LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.08	Vert(LL) -0.00	13	n/r	120	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.04	Vert(CT) -0.00	13	n/r	120		
TCDL 10.0	Lumber DOL 1.15	WB 0.05	Horz(CT) 0.00	14	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 114 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, Except: 6-0-0 oc bracing: 24-25,14-15.
WEBS 2x4 SP No.3	
OTHERS 2x4 SP No.3	

REACTIONS. All bearings 20-8-0.
(lb) - Max Horz 25=85(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 25, 14, 21, 22, 23, 24, 18, 17, 16, 15
Max Grav All reactions 250 lb or less at joint(s) 25, 14, 19, 21, 22, 23, 24, 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) -0-11-0 to 2-4-0, Exterior(2N) 2-4-0 to 10-4-0, Corner(3R) 10-4-0 to 13-4-0, Exterior(2N) 13-4-0 to 21-7-0 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) 25, 14, 21, 22, 23, 24, 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.

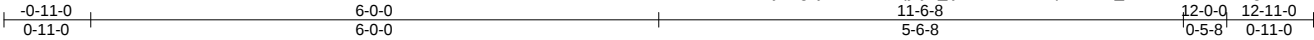


June 9,2025

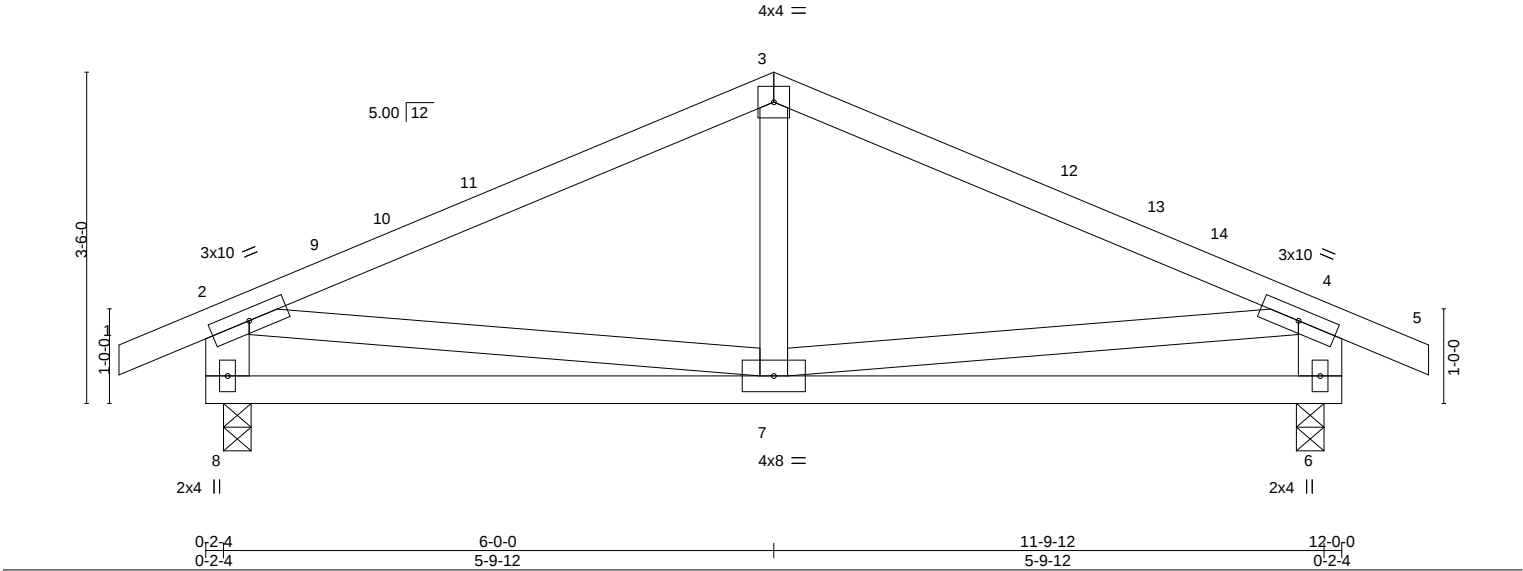
Job	Truss	Truss Type	Qty	Ply	CLB-LOT #2 Roof	174047223
25-3404-B	T06	COMMON	2	1	Job Reference (optional)	

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

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:05:18 2025 Page 1
ID:tdHS5iWyLng?jaR9E1eBtqly9_-jcRszDGtGcrtpAhvw8_PUW00TBwWk0g6tPTZslz86qV



Scale = 1:24.3



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.45	Vert(LL)	-0.02	7-8	>999	240	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.05	7-8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-MS							Weight: 64 lb	FT = 20%
BCDL	10.0											

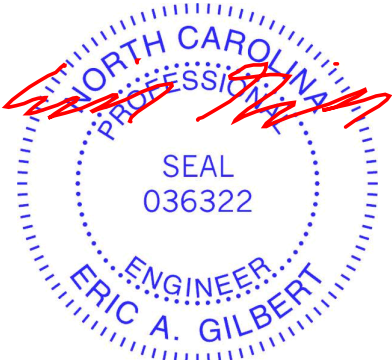
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
2-8,4-6: 2x6 SP No.2

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

REACTIONS. (size) 8=0-3-8, 6=0-3-8
Max Horz 8=-63(LC 14)
Max Uplift 8=-64(LC 16), 6=-64(LC 16)
Max Grav 8=530(LC 2), 6=530(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-562/180, 3-4=-562/180, 2-8=-478/231, 4-6=-478/231
BOT CHORD 7-8=-165/271, 6-7=-120/271
WEBS 2-7=0/260, 4-7=0/260

- 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) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 6-0-0, Exterior(2R) 6-0-0 to 9-0-0, Interior(1) 9-0-0 to 12-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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

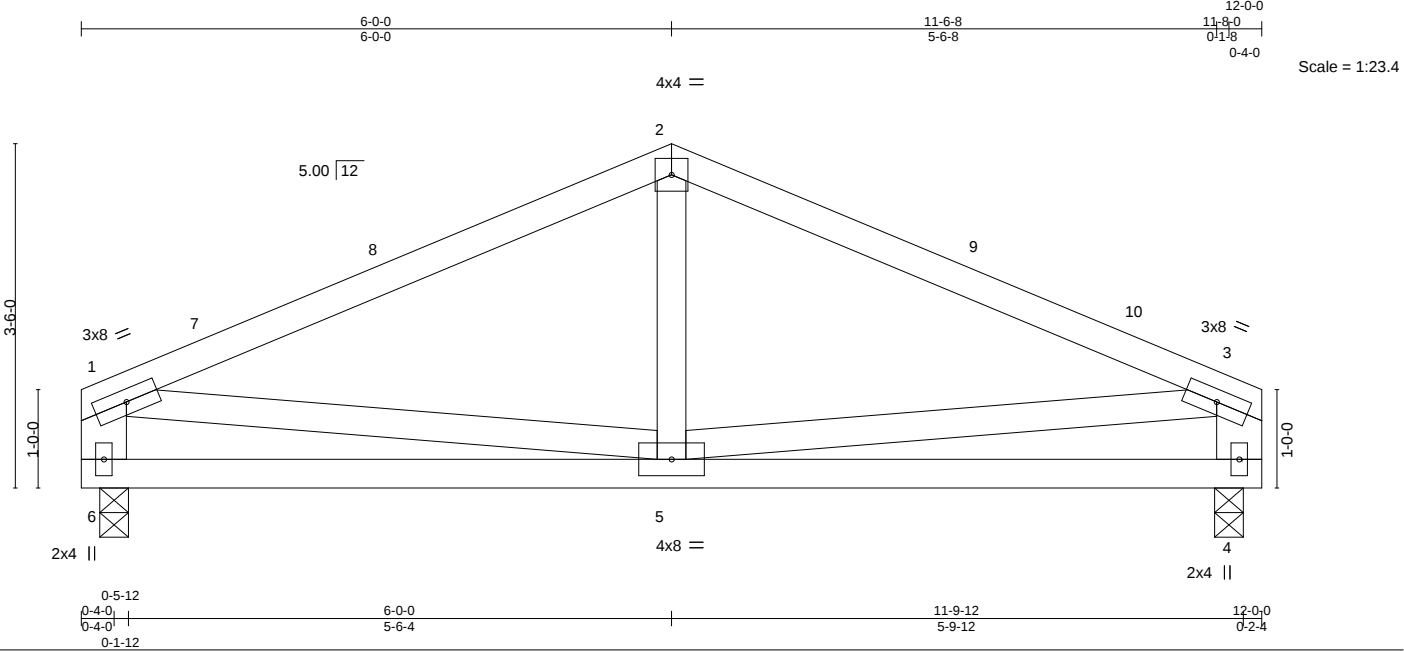
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TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	CLB-LOT #2 Roof	174047224
25-3404-B	T06A	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 05:05:18 2025 Page 1
ID:tdHS5iWyLNg?jaR9E1eBtqly9_jcRszDGtGcrpAhvw8_PUW0N8Bwck0R6tPTZslz86qV



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	2-0-0		TC	0.47	in (loc)	l/defl	L/d	MT20	244/190	
Snow (Pf/Pg)	11.6/15.0	Plate Grip DOL	1.15	BC	0.29	Vert(LL)	-0.02 5-6	>999 240			
TCDL	10.0	Lumber DOL	1.15	WB	0.12	Vert(CT)	-0.05 5-6	>999 180			
BCLL	0.0 *	Rep Stress Incr	YES	Matrix-MS		Horz(CT)	0.00 4	n/a n/a			
BCDL	10.0	Code IRC2018/TPI2014									
Weight: 61 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 *Except*		
	1-6,3-4: 2x6 SP No.2		

REACTIONS.	
(size)	6=0-3-8, 4=0-3-8
Max Horz	6=-57(LC 14)
Max Uplift	6=-28(LC 16), 4=-28(LC 16)
Max Grav	6=462(LC 2), 4=462(LC 2)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	1-2=-576/188, 2-3=-576/185, 1-6=-409/173, 3-4=-409/171
WEBS	1-5=-39/297, 3-5=-40/297

- 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) 0-2-12 to 3-2-12, Interior(1) 3-2-12 to 6-0-0, Exterior(2R) 6-0-0 to 9-0-0, Interior(1) 9-0-0 to 11-9-4 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) 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 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 4.
 - 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

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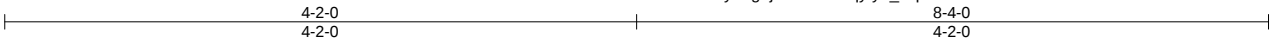
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	CLB-LOT #2 Roof	174047225
25-3404-B	V01	Valley	1	1	Job Reference (optional)	

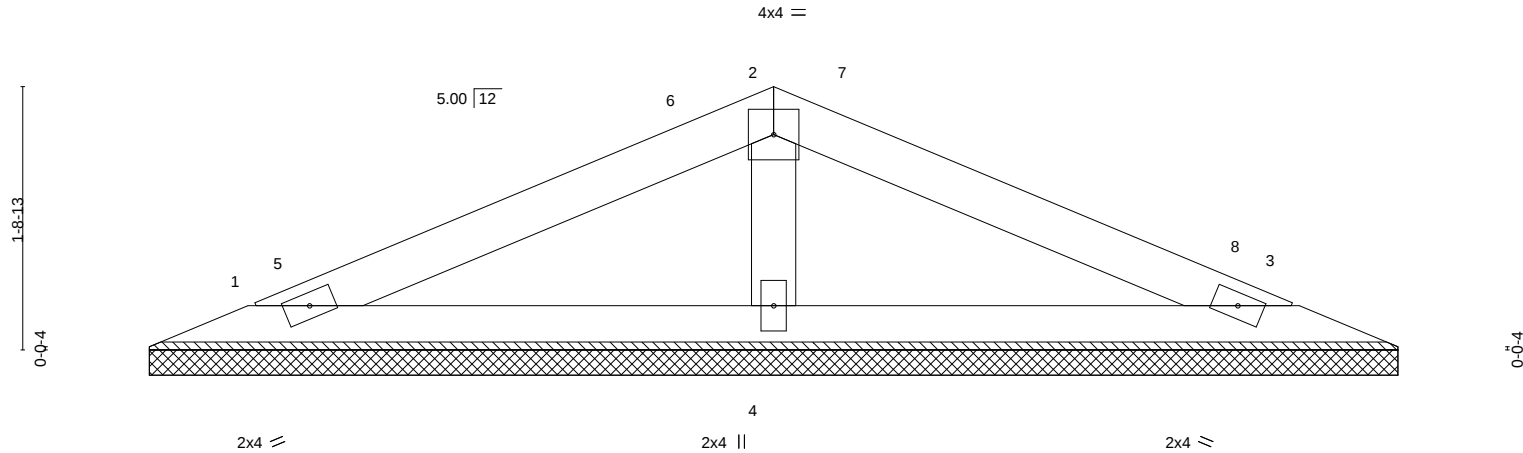
Riverside Roof Truss, LLC, Danville, Va - 24541,

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:05:19 2025 Page 1

ID:tdHS5iWylNg?jaR9E1eBtqly9_-Bp?EAAZHV1vzkRJF5UrVe1kYcmbJWtUXG63D7PCz86qU



Scale = 1:15.2



		8-3-6		8-4-0	
		8-3-6		0-0-10	
LOADING (psf)		SPACING-		CSI.	
TCLL (roof)	20.0	2-0-0		TC	0.22
Snow (Pf/Pg)	11.6/15.0	Plate Grip DOL	1.15	BC	0.12
TCDL	10.0	Lumber DOL	1.15	WB	0.04
BCLL	0.0 *	Rep Stress Incr	YES	Matrix-P	
BCDL	10.0	Code IRC2018/TPI2014			
				DEFL.	
				Vert(LL)	n/a - n/a 999
				Vert(CT)	n/a - n/a 999
				Horz(CT)	0.00 3 n/a n/a
				PLATES	GRIP
				MT20	244/190
				Weight: 25 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=8-2-13, 3=8-2-13, 4=8-2-13
Max Horz 1=18(LC 15)
Max Uplift 1=-19(LC 16), 3=-19(LC 16)
Max Grav 1=136(LC 20), 3=136(LC 21), 4=277(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) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 4-2-0, Exterior(2R) 4-2-0 to 7-2-0, Interior(1) 7-2-0 to 7-6-15 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

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

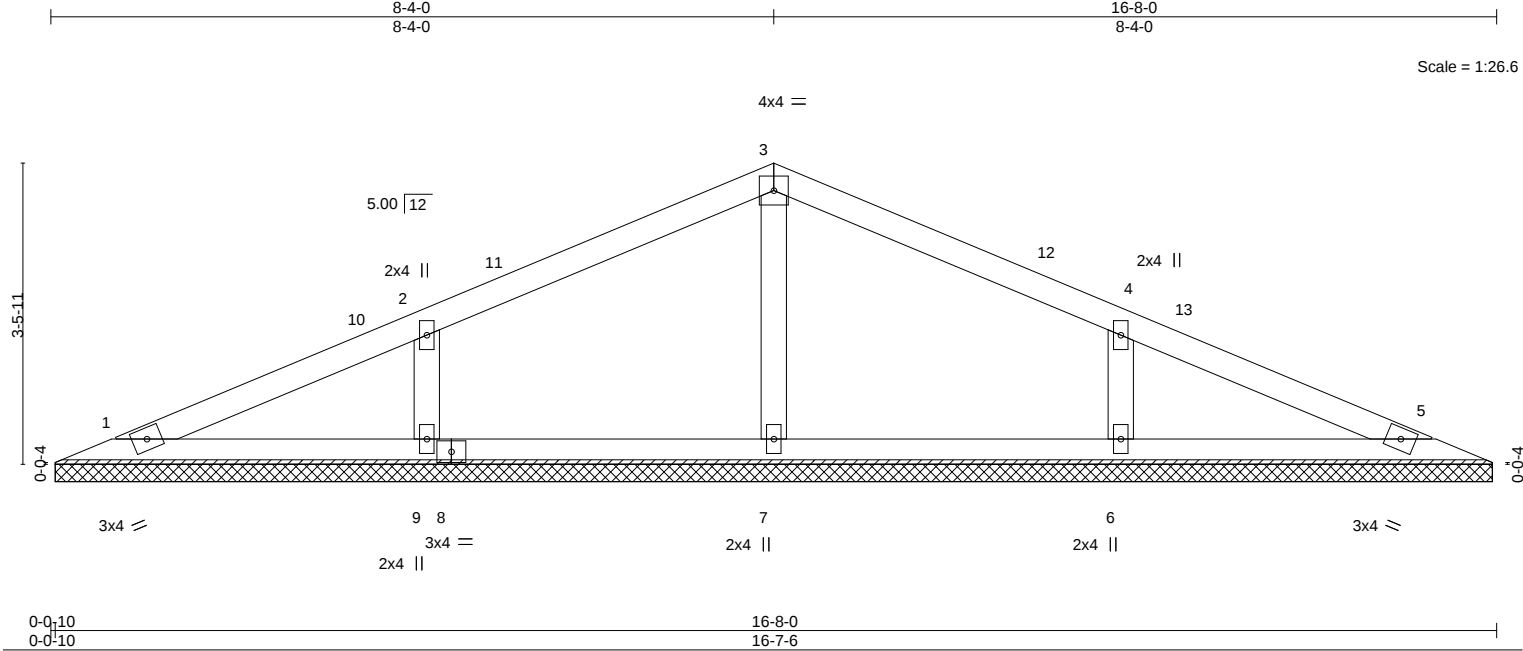
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	CLB-LOT #2 Roof	174047227
25-3404-B	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 05:05:20 2025 Page 1
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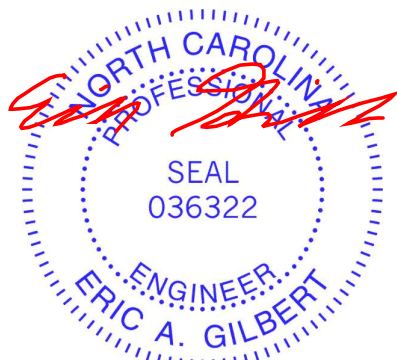
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	MT20	244/190		
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a				
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00				
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-S							
BCDL	10.0										

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.	
(lb) - Max Horz	1=41(LC 15)
Max Uplift	All uplift 100 lb or less at joint(s) 1, 5, 9, 6
Max Grav	All reactions 250 lb or less at joint(s) 1, 5 except 7=274(LC 2), 9=359(LC 33), 6=359(LC 34)

FORCES.	
(lb) - Max. Comp./Max. Ten.	- All forces 250 (lb) or less except when shown.
WEBS	2-9=-270/157, 4-6=-270/157

- 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) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 8-4-0, Exterior(2R) 8-4-0 to 11-4-0, Interior(1) 11-4-0 to 15-10-15 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, 5, 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

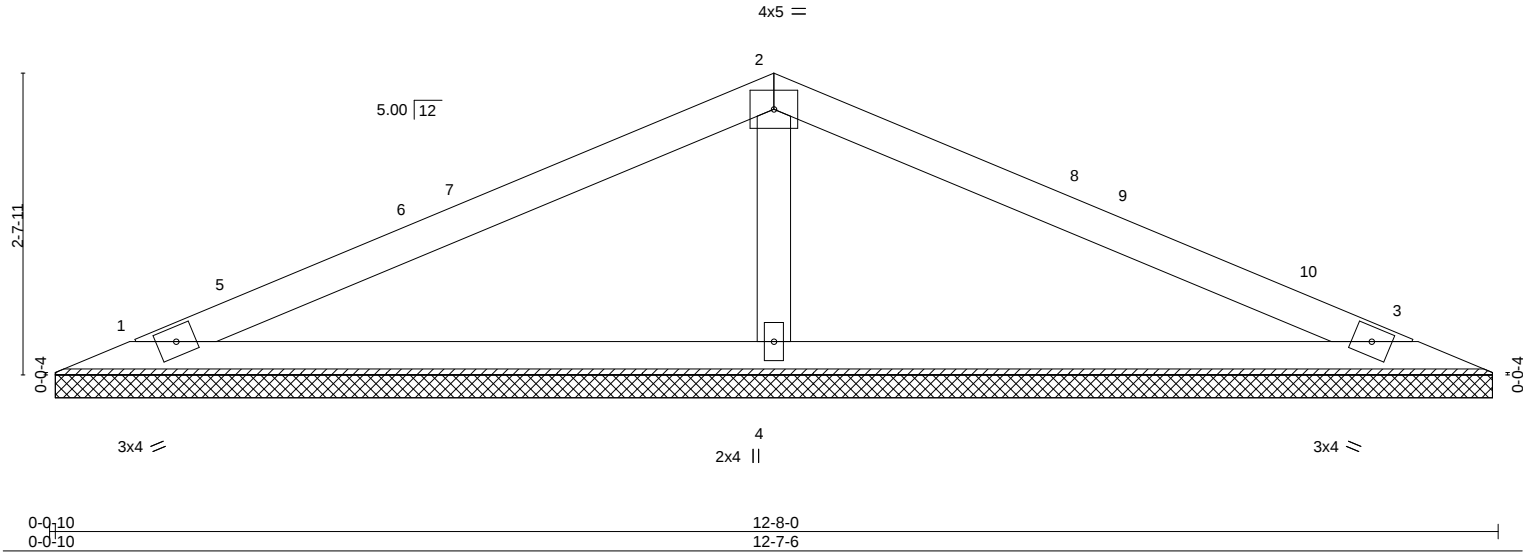
Job	Truss	Truss Type	Qty	Ply	CLB-LOT #2 Roof	174047228
25-3404-B	V04	Valley	1	1	Job Reference (optional)	

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

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:05:20 2025 Page 1
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6-4-0
6-4-0
12-8-0
6-4-0

Scale = 1:20.1



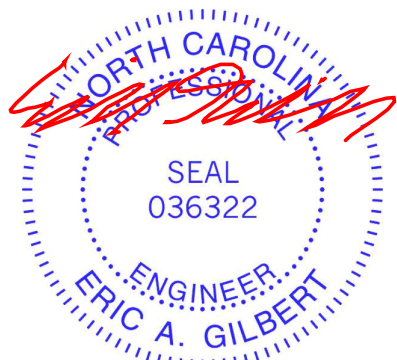
0-0-10 0-0-10	12-8-0 12-7-6								
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP				
TCLL (roof) 20.0	2-0-0	TC 0.48	in (loc) l/defl L/d	MT20	244/190				
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.31	Vert(LL) n/a - n/a 999						
TCDL 10.0	Lumber DOL 1.15	WB 0.07	Vert(CT) n/a - n/a 999						
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 3 n/a n/a						
BCDL 10.0	Code IRC2018/TPI2014								
				Weight: 40 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=12-6-13, 3=12-6-13, 4=12-6-13
	Max Horz 1=-30(LC 14)
	Max Uplift 1=-21(LC 16), 3=-21(LC 16), 4=-11(LC 16)
	Max Grav 1=201(LC 33), 3=201(LC 34), 4=500(LC 2)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS	2-4=-337/182

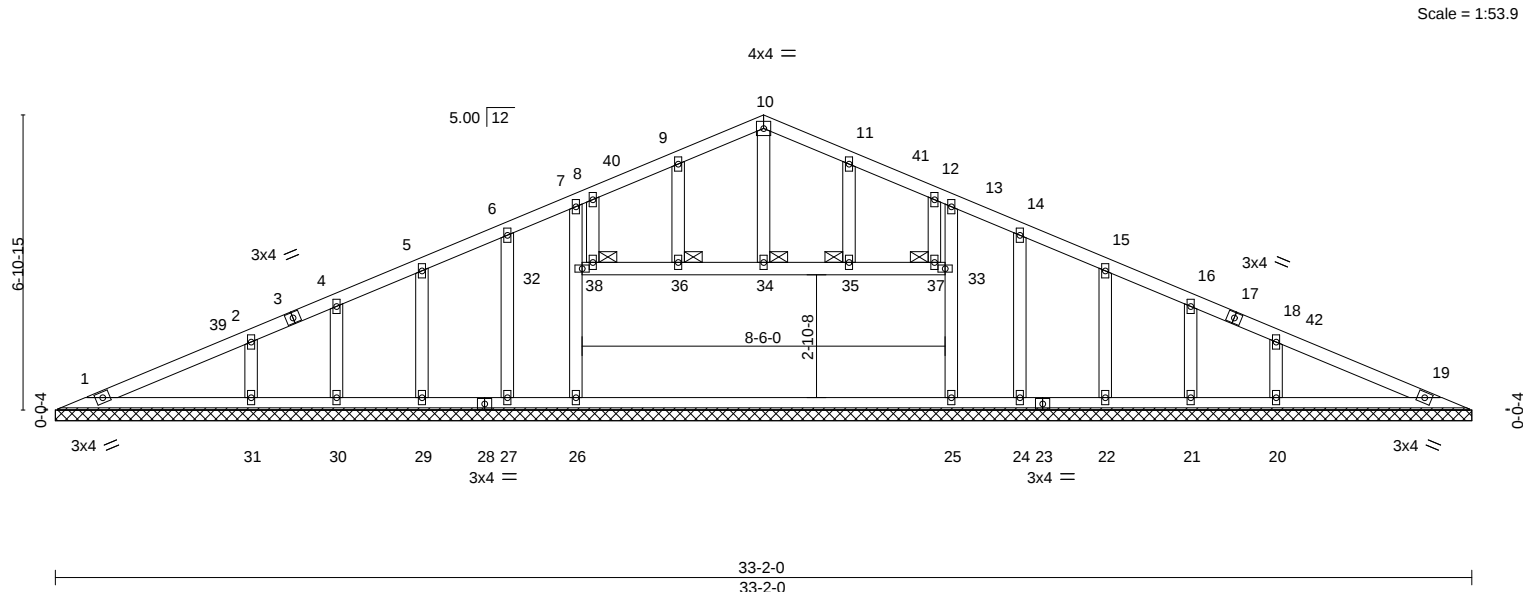
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 6-4-0, Exterior(2R) 6-4-0 to 9-4-0, Interior(1) 9-4-0 to 11-10-15 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
 - 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, 4.
 - 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	CLB-LOT #2 Roof
25-3404-B	V05GE	GABLE	1	1	174047229
Job Reference (optional)					

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:05:21 2025 Page 1
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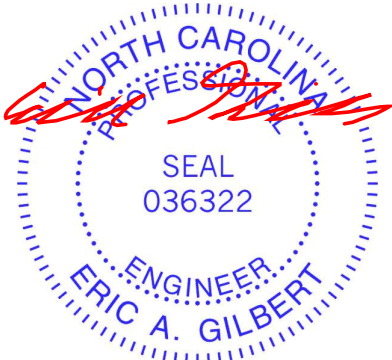
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	MT20		244/190	
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	n/a				
TCDL	10.0	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.01				
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-S							
BCDL	10.0										
Weight: 174 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.
WEBS	2x4 SP No.3	JOINTS	1 Brace at Jt(s): 34, 35, 36, 37, 38
OTHERS	2x4 SP No.3		

REACTIONS. All bearings 33-2-0.
(lb) - Max Horz 1=100(LC 15)
Max Uplift All uplift 100 lb or less at joint(s) 29, 30, 31, 22, 21, 20 except 27=-125(LC 7), 24=-125(LC 7)
Max Grav All reactions 250 lb or less at joint(s) 1, 29, 30, 22, 21, 19 except 26=465(LC 7), 25=465(LC 7), 31=314(LC 33), 20=314(LC 34)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-330/0, 2-4=-336/43, 4-5=-319/61, 5-6=-328/90, 6-7=-293/108, 7-8=-378/133, 8-9=-349/141, 9-10=-323/161, 10-11=-323/160, 11-12=-349/140, 12-13=-378/133, 13-14=-293/107, 14-15=-328/89, 15-16=-319/60, 16-18=-336/42, 18-19=-330/0
BOT CHORD 1-31=0/277, 30-31=0/277, 29-30=0/277, 27-29=0/277, 26-27=0/277, 25-26=0/270, 24-25=0/277, 22-24=0/277, 21-22=0/277, 20-21=0/277, 19-20=0/277
WEBS 26-32=-259/98, 7-32=-278/99, 25-33=-259/98, 13-33=-278/98

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=33ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-9-1 to 4-0-12, Interior(1) 4-0-12 to 16-7-0, Exterior(2R) 16-7-0 to 19-10-11, Interior(1) 19-10-11 to 32-4-15 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
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 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
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) 29, 30, 31, 22, 21, 20 except (jt=lb) 27=125, 24=125.
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.

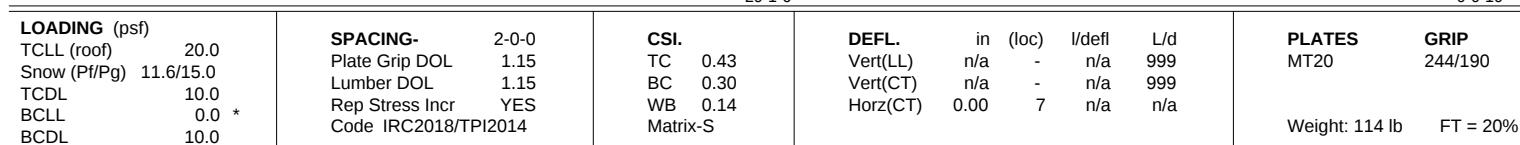


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8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:05:22 2025 Page 1
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14-7-0 29-2-0 14-7-0

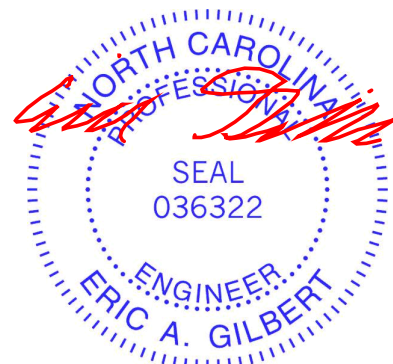
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REACTIONS. All bearings 29-0-13.
(lb) - Max Horz 1=82(LC 15)
Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 12, 13, 9, 8
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=414(LC 27), 12=333(LC 27), 13=531(LC 27),
9=332(LC 28), 8=531(LC 28)

NOTES-

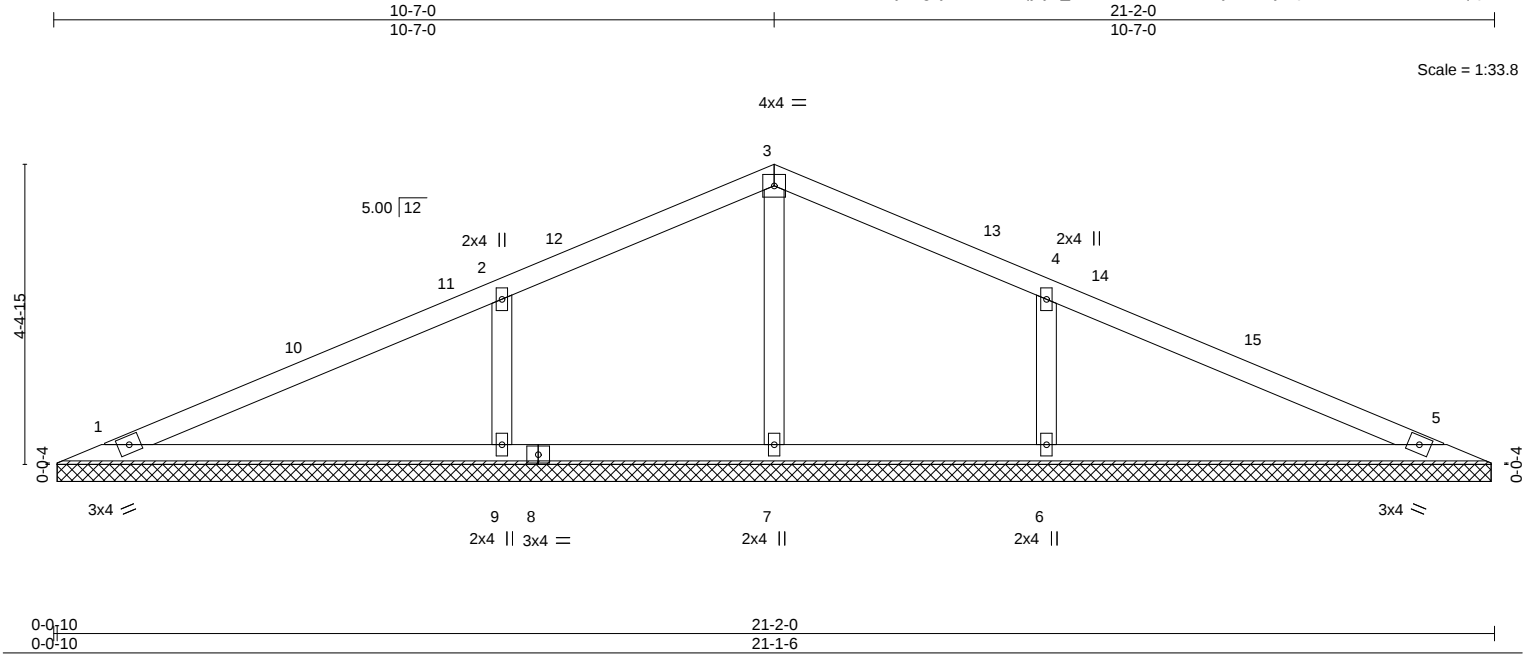
- SEAL
036322
ENGINEER
ERIC A. GILBERT
June 9, 2025



June 9, 2025

Job	Truss	Truss Type	Qty	Ply	CLB-LOT #2 Roof	174047232
25-3404-B	V08	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 05:05:23 2025 Page 1
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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 0.08	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: 75 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. All bearings 21-0-13.
(lb) - Max Horz 1=-53(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 9, 6
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 9=500(LC 33), 6=500(LC 34)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-9=-365/174, 4-6=-365/174

- 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) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 10-7-0, Exterior(2R) 10-7-0 to 13-7-0, Interior(1) 13-7-0 to 20-4-15 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, 5, 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.

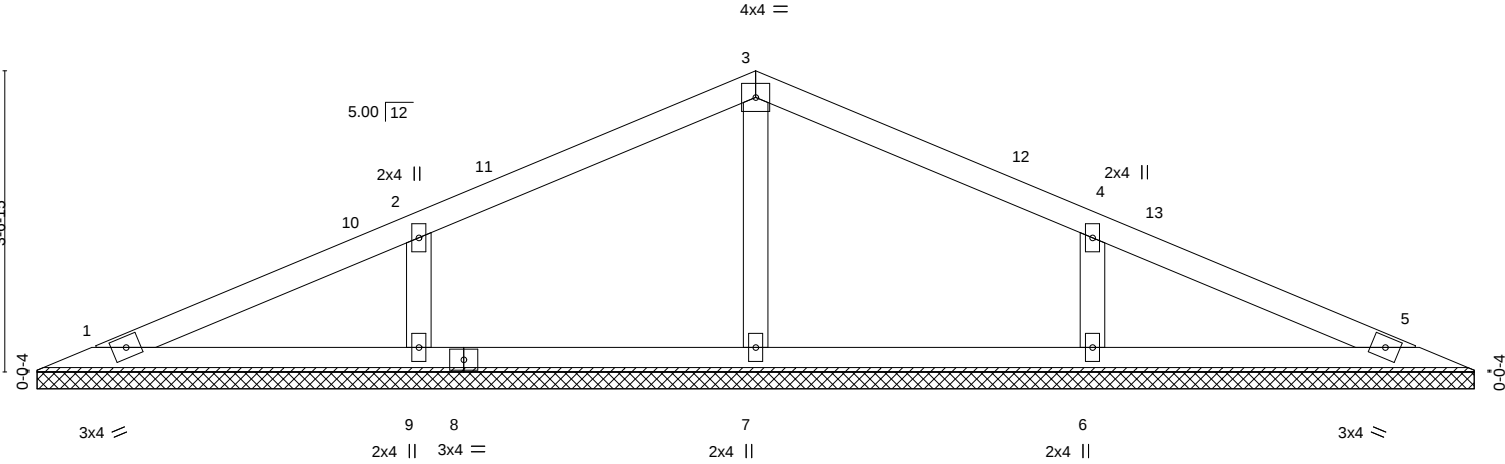
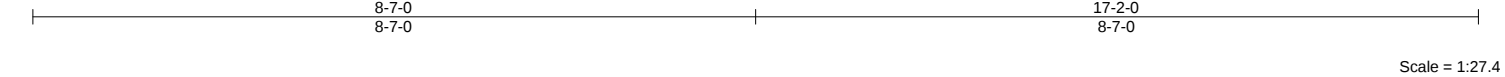


June 9,2025

Job	Truss	Truss Type	Qty	Ply	CLB-LOT #2 Roof	174047233
25-3404-B	V09	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 05:05:23 2025 Page 1
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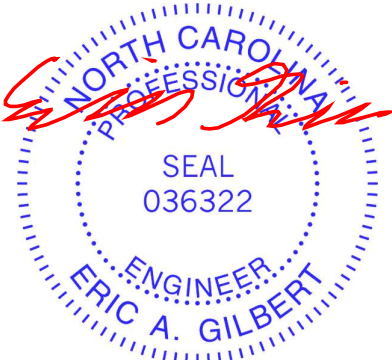
0-0-10			17-2-0													
0-0-10			17-1-6													
LOADING (psf)			SPACING-		2-0-0		CSI.		DEFL.		in (loc) l/defl L/d		PLATES		GRIP	
TCLL (roof) 20.0			Plate Grip DOL		1.15		TC 0.23		Vert(LL)		n/a - n/a 999		MT20		244/190	
Snow (Pf/Pg) 11.6/15.0			Lumber DOL		1.15		BC 0.13		Vert(CT)		n/a - n/a 999					
TCDL 10.0			Rep Stress Incr		YES		WB 0.06		Horz(CT)		0.00 5 n/a n/a					
BCLL 0.0 *			Code IRC2018/TPI2014				Matrix-S						Weight: 59 lb		FT = 20%	
BCDL 10.0																

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. All bearings 17-0-13.
(lb) - Max Horz 1=-42(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 9, 6
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=268(LC 2), 9=373(LC 33), 6=373(LC 34)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-9=-279/158, 4-6=-279/158

- 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) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 8-7-0, Exterior(2R) 8-7-0 to 11-7-0, Interior(1) 11-7-0 to 16-4-15 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
 - 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, 5, 9, 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	CLB-LOT #2 Roof	174047234
25-3404-B	V10	Valley	1	1	Job Reference (optional)	

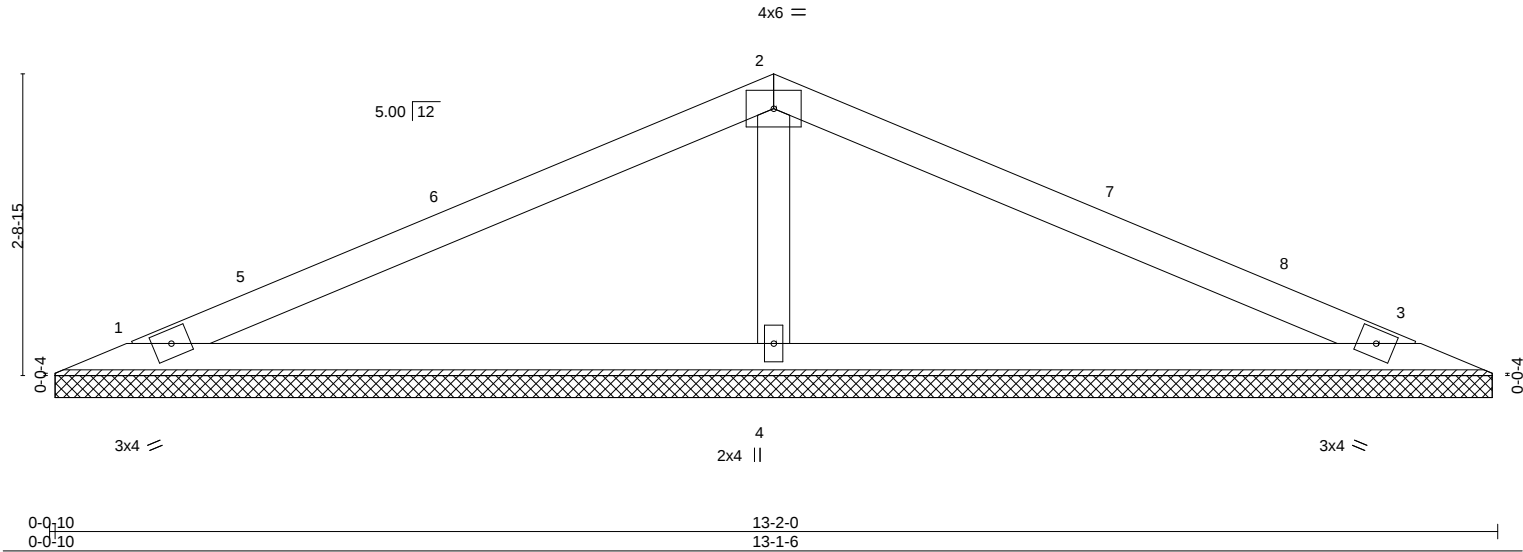
Riverside Roof Truss, LLC, Danville, Va - 24541,

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

ID:tdHS5iWylng?jaR9E1eBtqly9_-Ymo7DHLerSc0X583GO5pknGNicyH8kc?FLwu4Pz86qP

6-7-0
6-7-0
13-2-0
6-7-0

Scale = 1:20.9



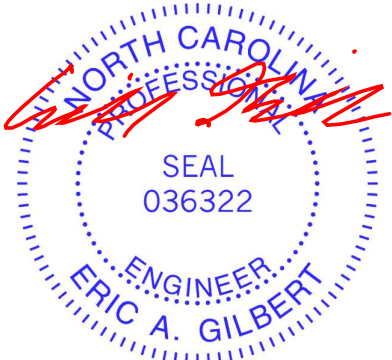
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	n/a	MT20		244/190	
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	n/a				
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00				
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-S							
BCDL	10.0										

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=13-0-13, 3=13-0-13, 4=13-0-13
Max Horz 1=-31(LC 14)
Max Uplift 1=-22(LC 16), 3=-22(LC 16), 4=-12(LC 16)
Max Grav 1=210(LC 33), 3=210(LC 34), 4=522(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-352/183

- 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) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 6-7-0, Exterior(2R) 6-7-0 to 9-7-0, Interior(1) 9-7-0 to 12-4-15 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, 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

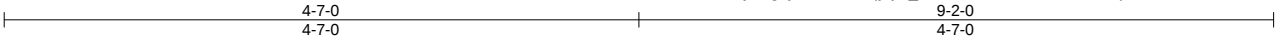
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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.sbcacompoments.com)

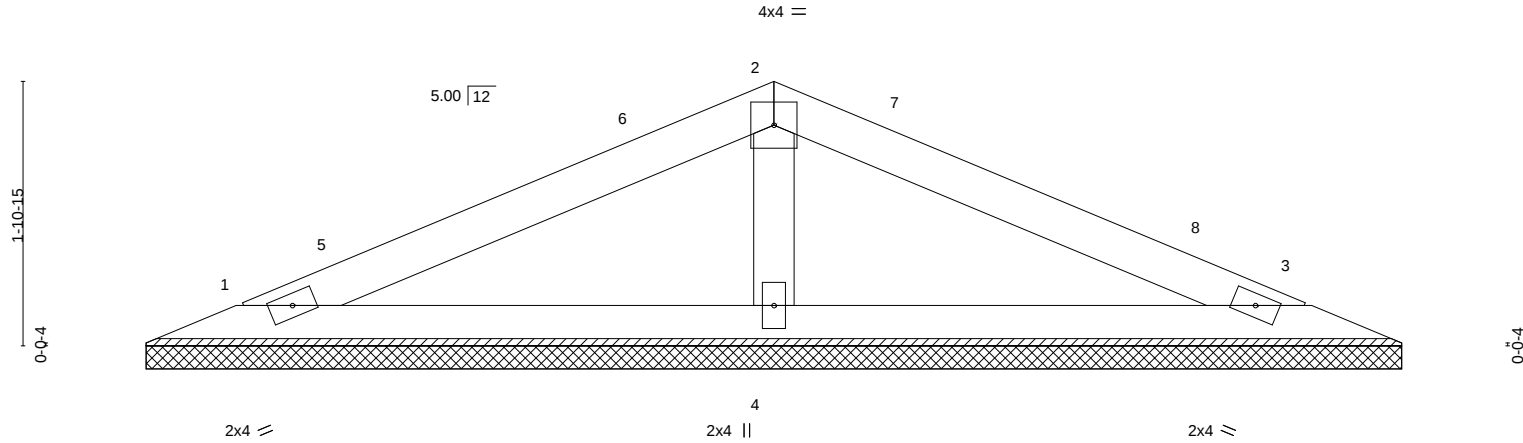
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	CLB-LOT #2 Roof
25-3404-B	V11	Valley	1	1	174047235
Job Reference (optional)					

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:05:24 2025 Page 1
ID:tdHS5iWyLNg?jaR9E1eBtqly9_-Ymo7DHLerSc0X583GO5pknGSKc?F8I5?FLwu4Pz86qP



Scale = 1:16.6



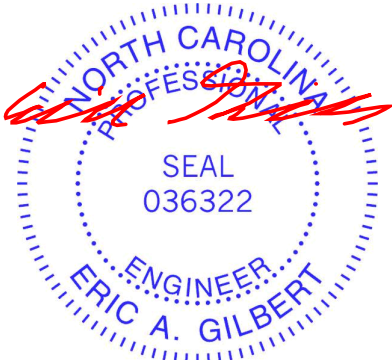
0-0-10				9-2-0															
0-0-10				9-1-6															
LOADING (psf)		SPACING-		2-0-0		CSI.		DEFL.		in (loc)		l/defl		L/d		PLATES		GRIP	
TCLL (roof) 20.0		Plate Grip DOL 1.15		TC 0.21		Vert(LL) n/a		-		n/a		999		MT20		244/190			
Snow (Pf/Pg) 11.6/15.0		Lumber DOL 1.15		BC 0.15		Vert(CT) n/a		-		n/a		999							
TCDL 10.0		Rep Stress Incr YES		WB 0.05		Horz(CT) 0.00		3		n/a		n/a							
BCLL 0.0 *		Code IRC2018/TPI2014		Matrix-S															
BCDL 10.0																		Weight: 28 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=9-0-13, 3=9-0-13, 4=9-0-13
Max Horz 1=21(LC 15)
Max Uplift 1=-15(LC 16), 3=-15(LC 16), 4=-8(LC 16)
Max Grav 1=142(LC 20), 3=142(LC 21), 4=343(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) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 4-7-0, Exterior(2R) 4-7-0 to 7-7-0, Interior(1) 7-7-0 to 8-4-15 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, 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.

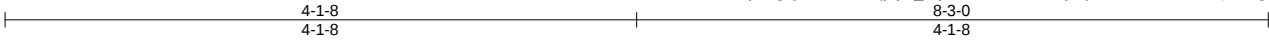


June 9,2025

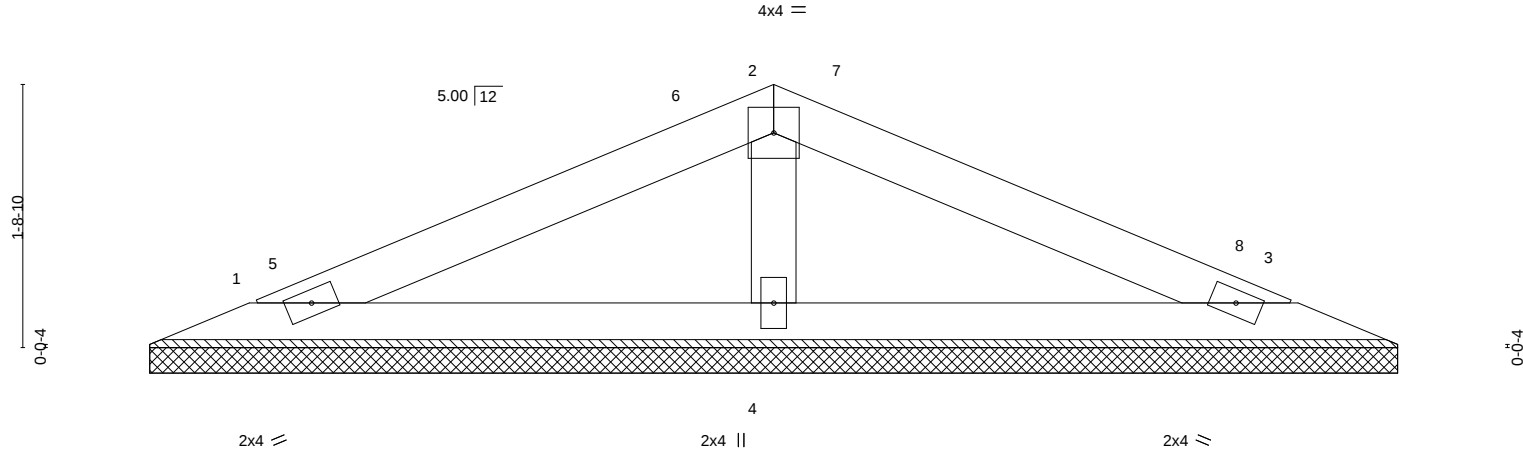
Job	Truss	Truss Type	Qty	Ply	CLB-LOT #2 Roof	174047237
25-3404-B	V13	Valley	1	1	Job Reference (optional)	

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

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:05:25 2025 Page 1
ID:tdHS5IWyLNg?jaR9E1eBtqly9_-0yMWRdLGclkt9EjFq6c2H?odL?MztCQ8U?gRcsz86qO



Scale = 1:15.0



0-0-10				8-3-0									
0-0-10				8-2-6									
LOADING (psf)		SPACING-		2-0-0		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0			Plate Grip DOL	1.15		TC 0.21	in	(loc)	l/defl	L/d	MT20	244/190
Snow (Pf/Pg)	11.6/15.0			Lumber DOL	1.15		BC 0.11	n/a	-	n/a	999		
TCDL	10.0			Rep Stress Incr	YES		WB 0.04	n/a	-	n/a	999		
BCLL	0.0 *			Code IRC2018/TPI2014			Matrix-P	0.00	3	n/a	n/a		
BCDL	10.0											Weight: 25 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.

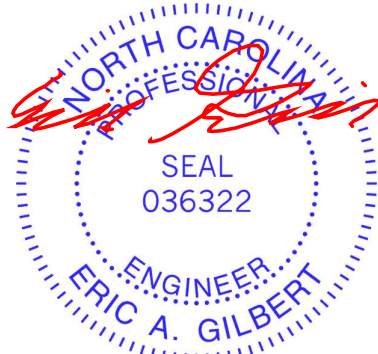
REACTIONS.

(size) 1=8-1-13, 3=8-1-13, 4=8-1-13
Max Horz 1=-18(LC 14)
Max Uplift 1=-19(LC 16), 3=-19(LC 16)
Max Grav 1=134(LC 20), 3=134(LC 21), 4=273(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) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 4-1-8, Exterior(2R) 4-1-8 to 7-1-8, Interior(1) 7-1-8 to 7-5-15 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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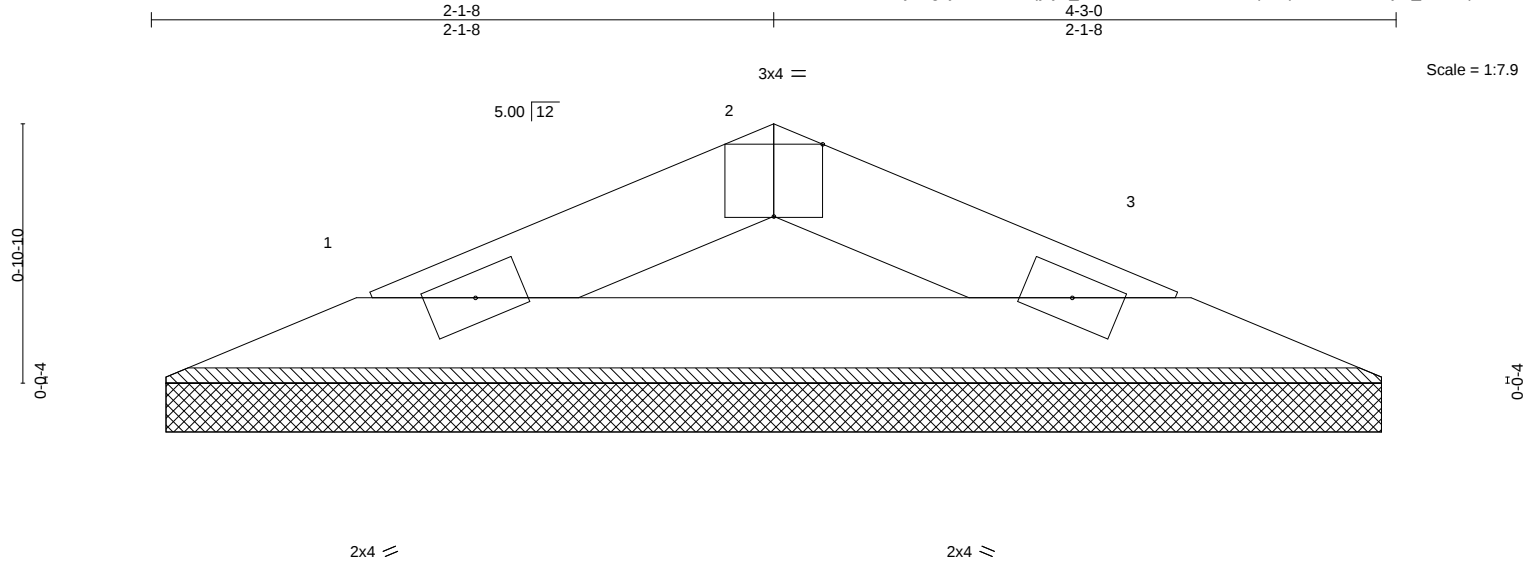
ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	CLB-LOT #2 Roof	174047238
25-3404-B	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 05:05:26 2025 Page 1
ID:tdHS5iWyLNg?jaR9E1eBtqly9_-U9wuezMuN3sknOISOp7HpCLrkPhZcfKljfP_8lz86qN



0-0-10 0-0-10	4-3-0 4-2-6
Plate Offsets (X,Y)--	[2:0-2-0,Edge]
LOADING (psf)	SPACING- 2-0-0
TCLL (roof) 20.0	Plate Grip DOL 1.15
Snow (Pf/Pg) 11.6/15.0	Lumber DOL 1.15
TCDL 10.0	Rep Stress Incr YES
BCLL 0.0 *	Code IRC2018/TPI2014
BCDL 10.0	
CSI.	DEFL.
TC 0.05	in (loc) l/defl L/d
BC 0.09	Vert(LL) n/a - n/a 999
WB 0.00	Vert(CT) n/a - n/a 999
Matrix-P	Horz(CT) 0.00 3 n/a n/a
	PLATES GRIP
	MT20 244/190
	Weight: 11 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 4-3-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=4-1-13, 3=4-1-13
Max Horz 1=-7(LC 14)
Max Uplift 1=-7(LC 16), 3=-7(LC 16)
Max Grav 1=110(LC 2), 3=110(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

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

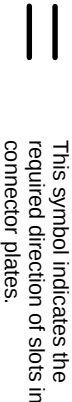
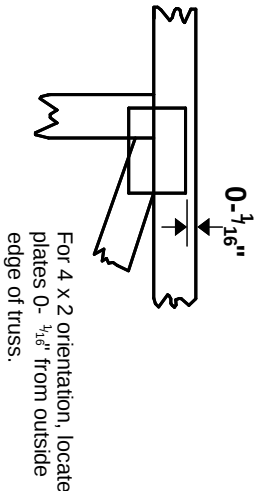
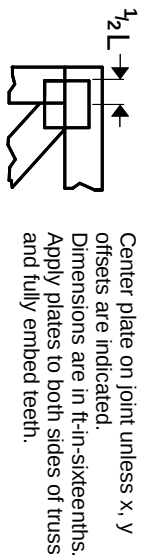
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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.sbcacompoments.com)

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



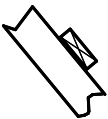
* Plate location details available in MITek software or upon request.

PLATE SIZE

4 X 4

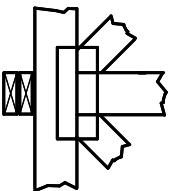
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

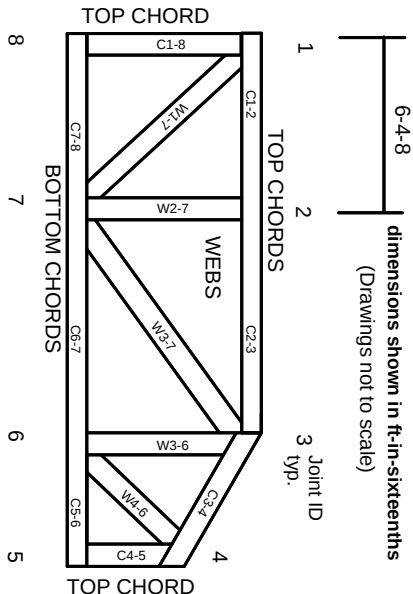


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TP1.1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

Product Code Approvals

ICC-ES Reports:

ESR-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

Design General Notes

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/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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