

Trenco

818 Soundside Rd
Edenton, NC 27932

Re: 25-5065-A
RVF-LOT #39 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: I76039712 thru I76039737

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

North Carolina COA: C-0844



September 2, 2025

Gilbert, Eric

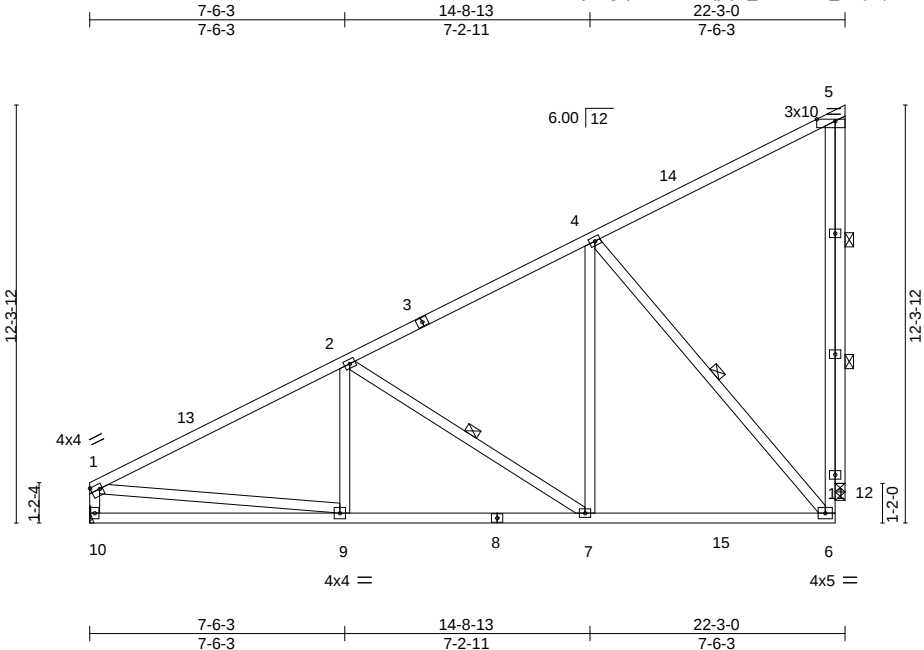
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which 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	RVF-LOT #39 ROOF
25-5065-A	M01	Monopitch	2	1	176039712

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

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Scale = 1:67.9

Plate Offsets (X,Y)-- [1:Edge,0-1-12], [5:0-6-8,Edge]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	-0.13	6-7	>999	240	MT20 244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.21	6-7	>999	180	
TCDL	10.0	Rep Stress Incr	YES	WB	0.79	Horz(CT)	-0.02	12	n/a	n/a	
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-MS						Weight: 161 lb FT = 20%	
BCDL	10.0										

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-11-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-1-8 oc bracing.
WEBS 1 Row at midpt 2-7, 4-6
2 Rows at 1/3 pts 5-12

REACTIONS.

(size) 10=Mechanical, 12=0-3-8
Max Horz 10=334(LC 16)
Max Uplift 12=-143(LC 16)
Max Grav 10=987(LC 28), 12=1022(LC 28)

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

TOP CHORD 1-2=-1343/0, 2-4=-809/0, 6-11=-119/869, 5-11=-119/869, 1-10=-866/47
BOT CHORD 9-10=-408/314, 7-9=-275/1181, 6-7=-139/679
WEBS 2-7=-596/161, 4-7=0/636, 4-6=-984/202, 1-9=0/882, 5-12=-1023/205

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 21-9-12 zone; cantilever left and right exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) All plates are 3x4 MT20 unless otherwise indicated.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Bearing at joint(s) 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=143.
- 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.



September 2,2025

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

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

ENGINEERING BY
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A MiTek Affiliate

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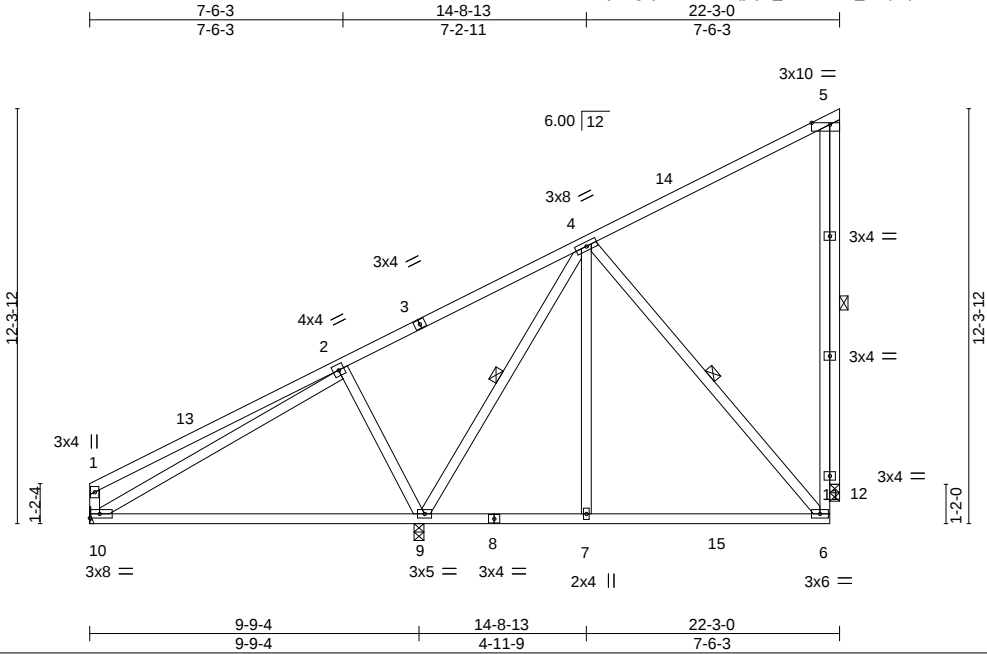
Job	Truss	Truss Type	Qty	Ply	RVF-LOT #39 ROOF
25-5065-A	M02	Monopitch	3	1	176039713

Riverside Roof Truss, LLC,

Danville, Va - 24541,

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Scale = 1:68.4

Plate Offsets (X,Y)-- [5:0-6-8,Edge]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.65	in (loc)	l/defl	MT20	GRIP
Snow (Pl/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.70	Vert(LL)	-0.23 9-10 >507		244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.48	Vert(CT)	-0.46 9-10 >254		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-MS		Horz(CT)	-0.04 12 n/a		
BCDL	10.0							Weight: 165 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-9, 4-6, 5-12

REACTIONS.

(size) 9=0-3-8, 10=Mechanical, 12=0-3-8
Max Horz 10=311(LC 16)
Max Uplift 9=-75(LC 16), 12=-109(LC 16)
Max Grav 9=1154(LC 28), 10=359(LC 28), 12=537(LC 28)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-395/101, 6-11=-59/378, 5-11=-59/378, 1-10=-322/103
WEBS 2-9=-424/229, 4-9=-570/47, 4-7=0/326, 4-6=-328/130, 5-12=-538/145

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) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 21-9-12 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 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.
- Bearing at joint(s) 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9 except (jt=lb) 12=109.
- 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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WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

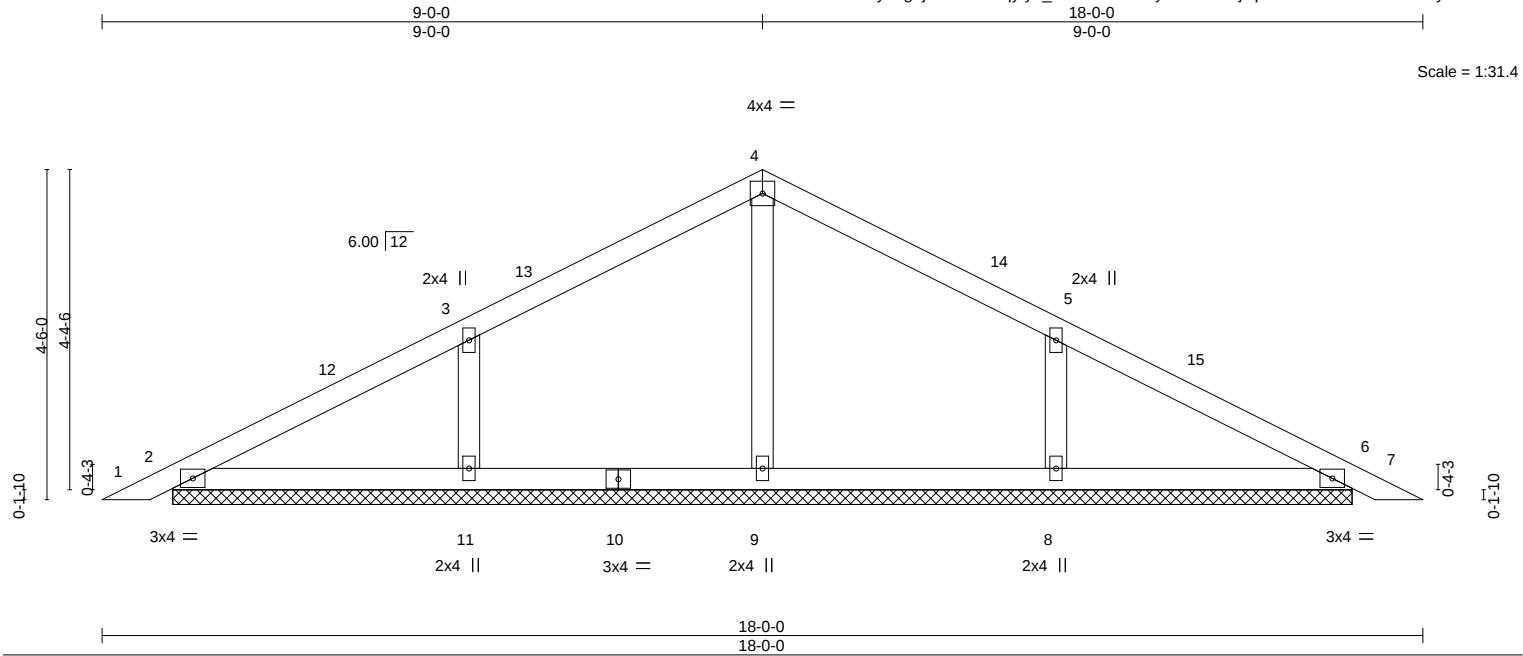
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #39 ROOF	176039714
25-5065-A	PB01	Piggyback	19	1		

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s Aug 14 2025 MiTek Industries, Inc. Tue Sep 2 08:04:24 2025 Page 1
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LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	0.00	MT20	244/190		
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	0.01				
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	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" oc purlins.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10'-0" oc bracing.
OTHERS	2x4 SP No.3		

REACTIONS.	
All bearings	16'-0" - 14'
(lb) - Max Horz	2=-72(LC 14)
Max Uplift	All uplift 100 lb or less at joint(s) 2, 11, 8, 6
Max Grav	All reactions 250 lb or less at joint(s) 2, 6 except 9=256(LC 2), 11=379(LC 34), 8=379(LC 35)

FORCES.	
(lb) - Max. Comp./Max. Ten.	- All forces 250 (lb) or less except when shown.
WEBS	
3-11	=-281/179, 5-8=-281/179

- 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) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 9-0-0, Exterior(2R) 9-0-0 to 12-0-0, Interior(1) 12-0-0 to 17-8-1 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-6" tall by 2'-0" wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 11, 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.
 - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



September 2, 2025

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #39 ROOF	176039715
25-5065-A	PB01GE	GABLE	2	1	Job Reference (optional)	

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

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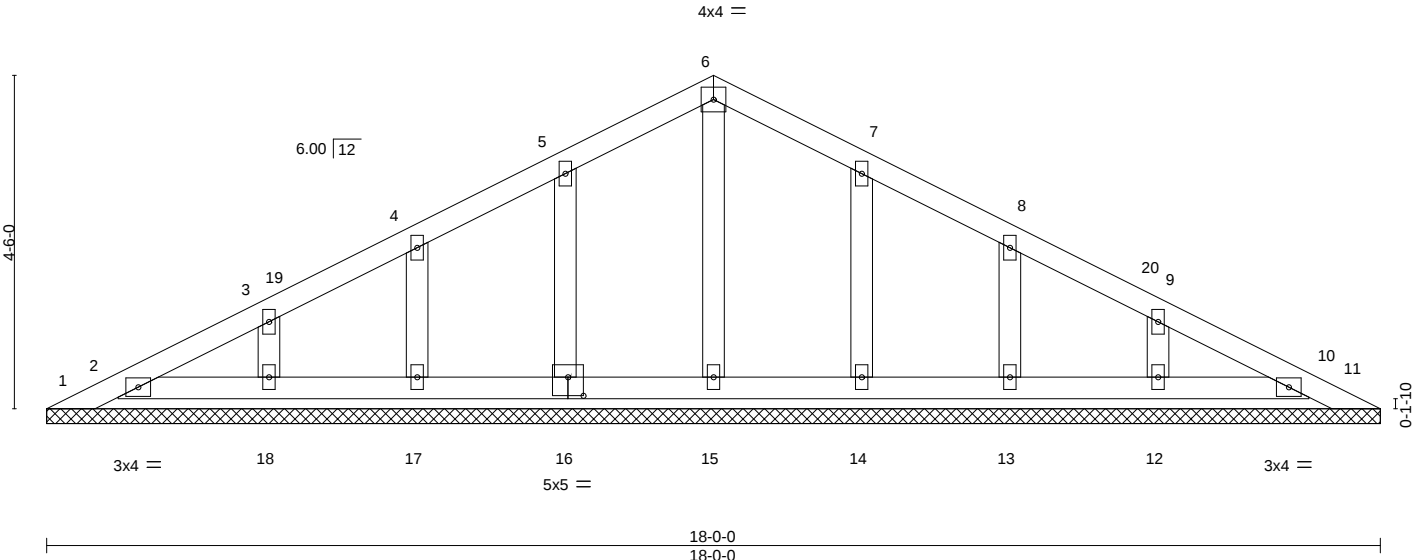


Plate Offsets (X,Y)-- [16:0-2-8,0-3-0]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.06	in (loc)	l/defl	L/d	GRIP
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.03	n/a	-	n/a	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	n/a	-	n/a	
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-S		0.00	11	n/a	
BCDL	10.0								
								Weight: 76 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 18-0-0.
(lb) - Max Horz 1=72(LC 15)
Max Uplift All uplift 100 lb or less at joint(s) 1, 11, 2, 16, 17, 18, 14, 13, 12, 10
Max Grav All reactions 250 lb or less at joint(s) 1, 11, 2, 15, 16, 17, 18, 14, 13, 12, 10

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) 0-3-15 to 3-3-15, Exterior(2N) 3-3-15 to 9-0-0, Corner(3R) 9-0-0 to 12-0-0, Exterior(2N) 12-0-0 to 17-8-1 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 11, 2, 16, 17, 18, 14, 13, 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.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



September 2,2025

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ENGINEERING BY

TRENCO

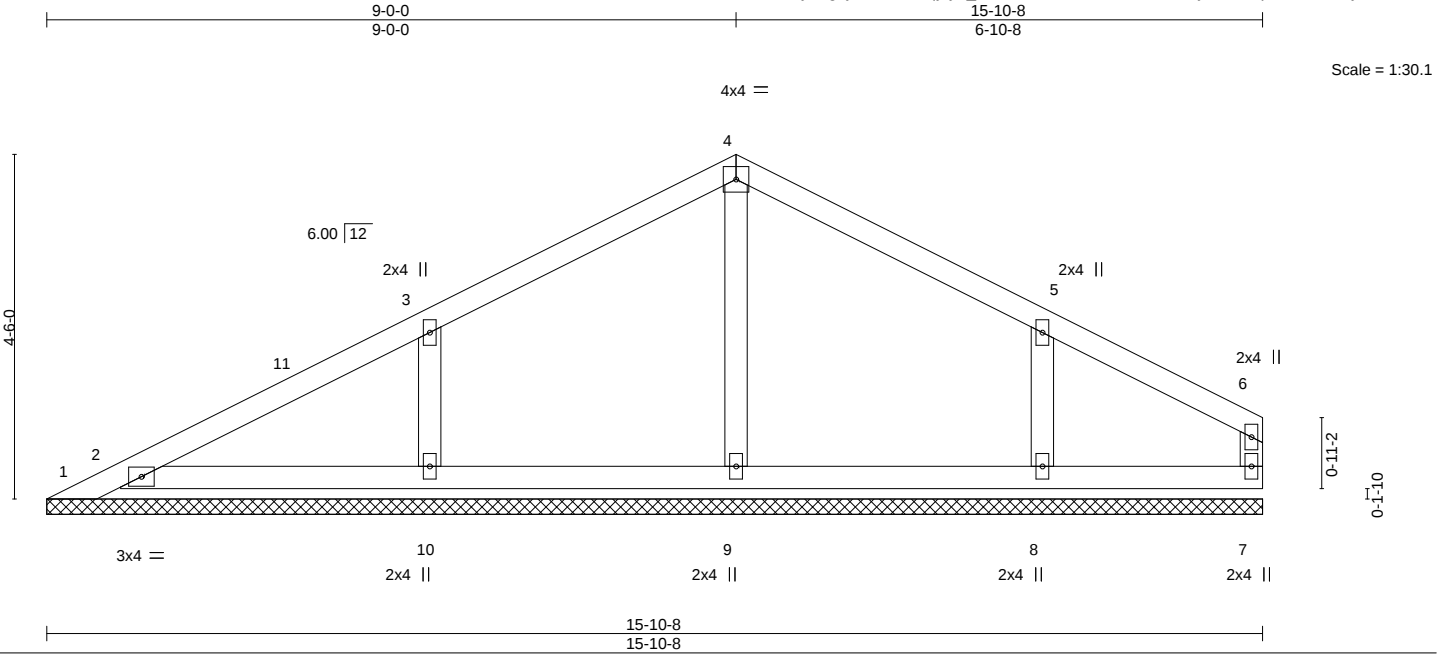
A MiTek Affiliate

818 Soundside Road
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Job	Truss	Truss Type	Qty	Ply	RVF-LOT #39 ROOF	176039716
25-5065-A	PB02	GABLE	5	1	Job Reference (optional)	

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

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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 0.21	Vert(LL) n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.12	Vert(CT) n/a	-	n/a	999		
TCDL 10.0	Lumber DOL 1.15	WB 0.07	Horz(CT) 0.00	7	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 60 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 15-10-8.
(lb) - Max Horz 1=82(LC 15)
Max Uplift All uplift 100 lb or less at joint(s) 7, 2, 10, 8 except 1=104(LC 28)
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 2=298(LC 2), 9=279(LC 2), 10=354(LC 34), 8=316(LC 35)

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

WEBS 3-10=267/226

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=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) 0-3-15 to 3-3-15, Exterior(2N) 3-3-15 to 9-0-0, Corner(3R) 9-0-0 to 12-0-0, Exterior(2N) 12-0-0 to 15-8-12 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) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 4-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 2, 10, 8 except (jt=lb) 1=104.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



September 2, 2025

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ENGINEERING BY
TRENCO
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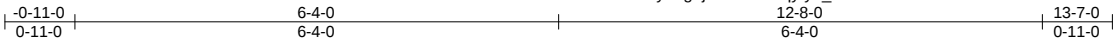
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #39 ROOF	176039717
25-5065-A	T01GE	COMMON SUPPORTED GAB	1	1	Job Reference (optional)	

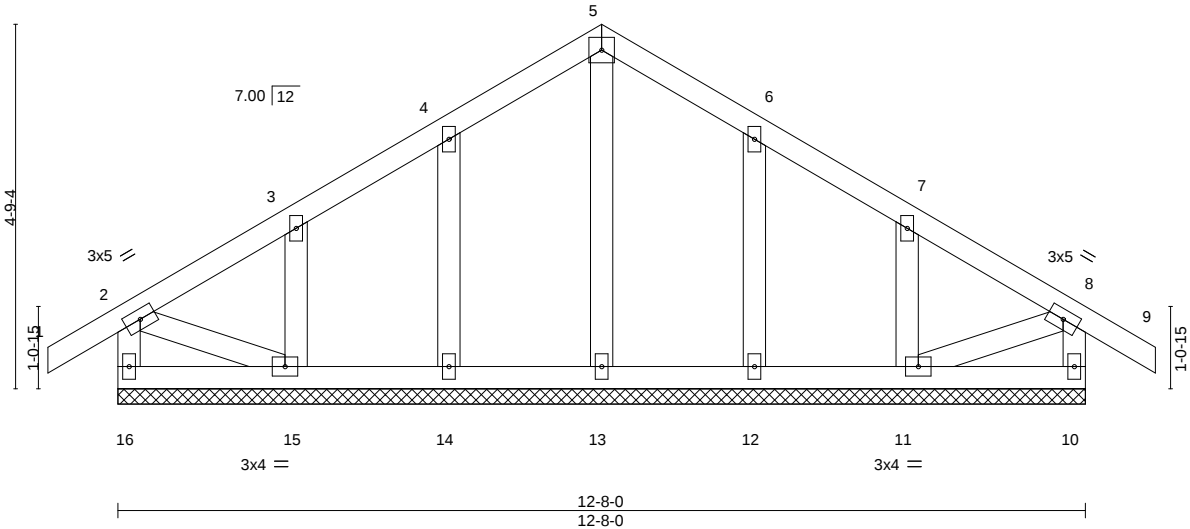
Riverside Roof Truss, LLC, Danville, Va - 24541,

8.830 s Aug 14 2025 MiTek Industries, Inc. Tue Sep 2 08:04:26 2025 Page 1

ID:tdHS5lWylng?jaR9E1eBtqly9_-1kkXkAdsOVCz9GwVlbuSrI096WGMG?EC1mMXyhk8Z



Scale = 1:30.2



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	9	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	9	n/r	120		
TCDL 10.0	Lumber DOL 1.15	WB 0.04	Horz(CT) 0.00	10	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 73 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 12-8-0.
(lb) - Max Horz 16=112(LC 15)
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 2-4-0, Exterior(2N) 2-4-0 to 6-4-0, Corner(3R) 6-4-0 to 9-4-0, Exterior(2N) 9-4-0 to 13-7-0 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) 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.



September 2,2025

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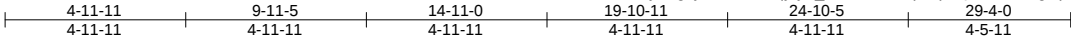
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ENGINEERING BY
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #39 ROOF	176039718
25-5065-A	T02G	COMMON GIRDER	1	3	Job Reference (optional)	

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s Aug 14 2025 MiTek Industries, Inc. Tue Sep 2 08:04:27 2025 Page 1
ID:tdHS5lWylng?jaR9E1eBtqly9_-VxlvxVeU9pKmqQVhslG8RgNpaZKP?i08SsnJvzyhk8Y



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	-0.04 14-15 >999 240	MT20		244/190	
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.07 14-15 >999 180				
TCDL	10.0	Rep Stress Incr	NO	WB	0.39	Horz(CT)	0.01 10 n/a n/a				
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-MS							
BCDL	10.0										
								Weight: 648 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 6-0-0 oc bracing.

REACTIONS.

(size) 14=0-3-8, 16=0-3-8, 10=0-6-0
Max Horz 16=201(LC 11)
Max Uplift 16=126(LC 12)
Max Grav 14=5790(LC 3), 16=1811(LC 29), 10=1166(LC 30)

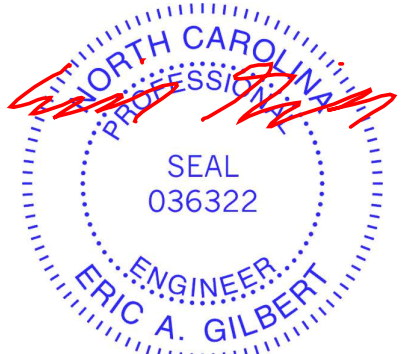
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 1-2=-725/160, 2-4=-1651/123, 4-5=0/841, 5-6=-397/134, 6-8=-1259/0, 8-9=-258/42, 1-16=-469/106
BOT CHORD 15-16=-79/1436, 11-12=0/536, 10-11=0/1044
WEBS 4-15=-52/2843, 4-14=-1707/150, 5-14=-2071/0, 5-12=0/1537, 6-12=-793/77, 6-11=0/996, 2-16=-1063/0, 8-10=-1136/0

NOTES-

- 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.
- 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=29ft; 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=126.
- 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 6-0-0 oc max. starting at 1-5-4 from the left end to 17-5-4 to connect truss(es) to back face of bottom chord.
- Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 9-5-4 from the left end to 11-5-4 to connect truss(es) to back face of bottom chord.

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



September 2, 2025

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #39 ROOF
25-5065-A	T02G	COMMON GIRDER	1	3	176039718

NOTES-
14) "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: 1-5=-43, 5-9=-43, 10-16=-20
Concentrated Loads (lb)
Vert: 13=-300(B) 12=-300(B) 11=-134(B) 19=-501(B) 20=-501(B) 21=-501(B) 22=-499(B) 24=-686(B) 26=-686(B) 27=-300(B) 30=-135(B) 31=-134(B) 32=-134(B) 33=-134(B)

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #39 ROOF	176039720
25-5065-A	T03	PIGGYBACK BASE	3	1		

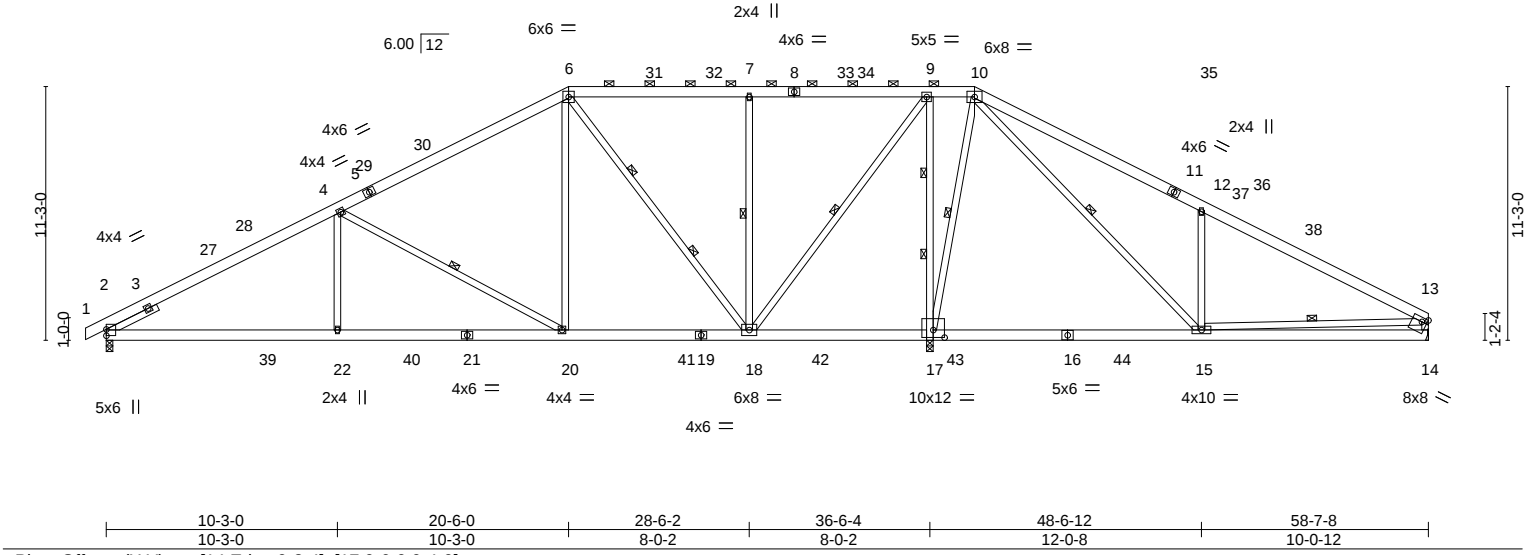
Riverside Roof Truss, LLC, Danville, Va - 24541,

8.830 s Aug 14 2025 MiTek Industries, Inc. Tue Sep 2 08:04:29 2025 Page 1

ID:tdHS5lWylng?jaR9E1eBtqly9_-SJQgMBflhQbY0kf4zJcW5T40M_jTWfRwAGQzsyhk8W

-0-11-0 10-3-0 20-6-0 28-6-2 36-6-4 38-6-0 48-6-12 58-7-8
0-11-0 10-3-0 10-3-0 8-0-2 8-0-2 1-11-12 10-0-12 10-0-12

Scale = 1:102.2



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.80			MT20	244/190
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.64				
TCDL	10.0	Rep Stress Incr	YES	WB	0.83				
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-MS					
BCDL	10.0								

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

REACTIONS.	(size) 2=0-3-8, 14=Mechanical, 17=0-3-8
	Max Horz 2=236(LC 15)
	Max Uplift 2=-115(LC 16), 14=-49(LC 16), 17=-147(LC 16)
	Max Grav 2=1562(LC 28), 14=643(LC 29), 17=3386(LC 30)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-4=-2258/236, 4-6=-1298/246, 6-7=-477/239, 7-9=-477/239, 9-10=0/853, 10-12=-746/306, 12-13=-682/121, 13-14=-522/110
BOT CHORD	2-22=-136/2151, 20-22=-136/2151, 18-20=0/1131, 17-18=-867/182, 15-17=-622/150, 14-15=-85/358
WEBS	4-22=0/507, 4-20=-1169/190, 6-20=0/963, 6-18=-1188/80, 7-18=-667/168, 9-18=-144/2020, 9-17=-1917/233, 10-17=-1356/175, 10-15=-204/1587, 12-15=-696/302, 13-15=-121/258

- 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=59ft; eave=7ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 4-11-6, Interior(1) 4-11-6 to 20-6-0, Exterior(2R) 20-6-0 to 28-6-2, Interior(1) 28-6-2 to 38-6-0, Exterior(2R) 38-6-0 to 46-9-8, Interior(1) 46-9-8 to 58-5-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - 4) Unbalanced snow loads have been considered for this design.
 - 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
 - 6) Provide adequate drainage to prevent water ponding.
 - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 9) Refer to girder(s) for truss to truss connections.
 - 10) Bearing at joint(s) 17 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14 except (jt=lb)



September 2, 2025

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #39 ROOF
25-5065-A	T03	PIGGYBACK BASE	3	1	176039720
Job Reference (optional)					

- NOTES-**
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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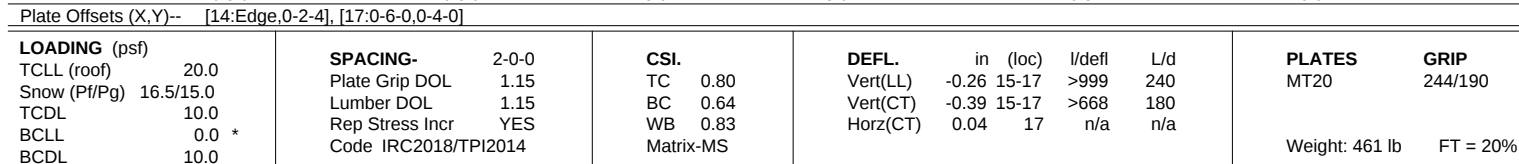
Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s Aug 14 2025 MiTek Industries, Inc. Tue Sep 2 08:04:30 2025 Page 1

ID:tdHS5IWyLNg?jaR9E1eBtqly9-wV_2aXgNSkjPeuDGXRqr2I?FmmKyCzva9q?ZVlyhk8V

0-11-0 10-3-0 20-6-0 28-6-2 36-6-4 38-6-0 48-6-12 58-7-8

0-11-0 10-3-0 10-3-0 8-0-2 8-0-2 1-11-12 10-0-12 10-0-12

Scale = 1:102.2



REACTIONS. (size) 2=0-3-8, 14=Mechanical, 17=0-3-8
 Max Horz 2=236(LC 15)
 Max Uplift 2=-115(LC 16), 14=-49(LC 16), 17=-147(LC 16)
 Max Grav 2=1562(LC 28), 14=643(LC 29), 17=3386(LC 30)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-4=-2258/236, 4-6=-1298/246, 6-7=-477/239, 7-9=-477/239, 9-10=0/853, 10-12=-746/306, 12-13=-682/121, 13-14=-522/110
BOT CHORD	2-22=-136/2151, 20-22=-136/2151, 18-20=0/1131, 17-18=-867/182, 15-17=-622/150, 14-15=-85/358
WEBS	4-22=0/507, 4-20=-1169/190, 6-20=0/963, 6-18=-1188/80, 7-18=-667/168, 9-18=-144/2020, 9-17=-1917/233, 10-17=-1356/175, 10-15=-204/1587, 12-15=-696/302, 13-15=-121/258

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=59ft; eave=7ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 4-11-6, Interior(1) 4-11-6 to 20-6-0, Exterior(2R) 20-6-0 to 28-6-2, Interior(1) 28-6-2 to 38-6-0, Exterior(2R) 38-6-0 to 46-9-8, Interior(1) 46-9-8 to 58-5-12 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) Refer to girder(s) for truss to truss connections.
- 10) Bearing at joint(s) 17 considers parallel to grain value using ANS/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14 except (jt=lb)

Continued on page 72



September 2, 2025



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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #39 ROOF
25-5065-A	T03A	PIGGYBACK BASE	1	1	176039721
Job Reference (optional)					

- NOTES-**
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

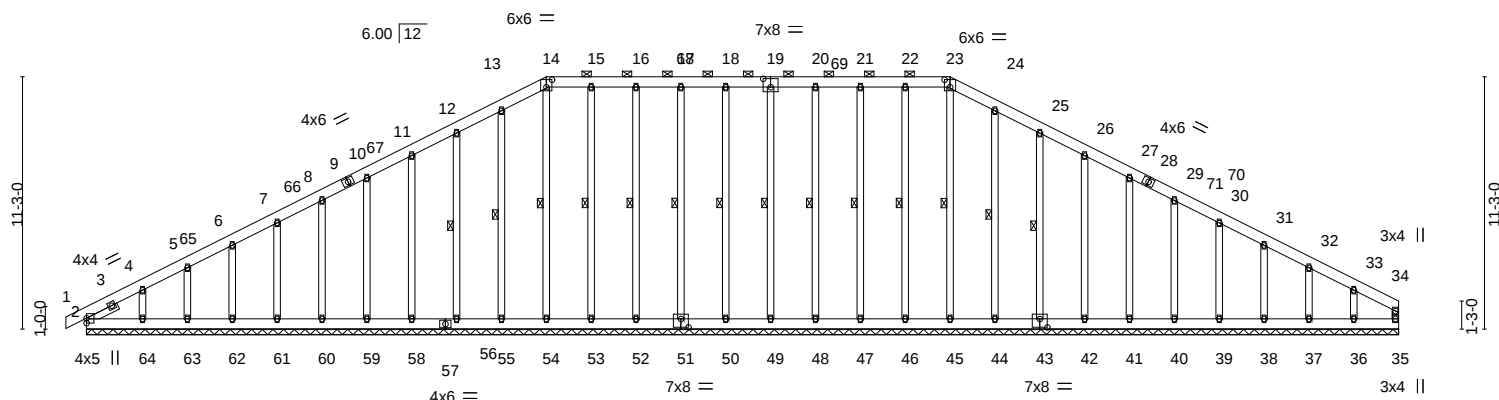
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



818 Soundside Road
Edenton, NC 27932

-0-11-0	20-6-0	38-6-0	58-6-0
0-11-0	20-6-0	18-0-0	20-0-0

Scale = 1:102.7



		58-6-0
		58-6-0
Plate Offsets (X,Y)--	[14:0-3-0-0-4-0], [19:0-4-0-0-4-8], [23:0-3-0-0-4-0], [43:0-4-0-0-4-8], [51:0-4-0-0-4-8]	

[illegible]

LUMBER-

TOP CHORD	2x6 SP No.2
BOT CHORD	2x6 SP No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3
SLIDER	Left 2x4 SP No.3 1-6-4

BRACING-		
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.):	14-23.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.	
WEBS	1 Row at midpt	23-45, 22-46, 21-47, 20-48, 19-49, 18-50, 17-51, 16-52, 15-53, 14-54, 13-55, 12-56, 24-44, 25-43

REACTIONS. All bearings 58-6-0.
(lb) - Max Horz 2=234(LC 15)
Max Uplift All uplift 100 lb or less at joint(s) 35, 2, 46, 47, 48, 49, 50, 51, 52, 55, 56, 58, 59, 60, 61, 62, 63, 64, 44, 43, 42, 41, 40, 39, 38, 37, 36
Max Grav All reactions 250 lb or less at joint(s) 35, 2, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 58, 59, 60, 61, 62, 63, 64, 44, 43, 42, 41, 40, 39, 38, 37, 36

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

TOP CHORD 11-12=-121/252, 12-13=-124/300, 13-14=-137/338, 14-15=-123/323, 15-16=-123/323,
16-17=-123/323, 17-18=-123/323, 18-19=-123/323, 19-20=-123/323, 20-21=-123/323,
21-22=-123/323, 22-23=-123/323, 23-24=-137/338, 24-25=-124/300, 25-26=-107/252

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=59ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-11-0 to 4-11-6, Exterior(2N) 4-11-6 to 20-6-0, Corner(3R) 20-6-0 to 26-6-0, Exterior(2N) 26-6-0 to 38-6-0, Corner(3R) 38-6-0 to 44-6-0, Exterior(2N) 44-6-0 to 58-4-4 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/TP1 1.
- 4) TLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 7) Provide adequate drainage to prevent water ponding.
- 8) All plates are 2x4 MT20 unless otherwise indicated.
- 9) Gable requires continuous bottom chord bearing.
- 10) Gable studs spaced at 2-0-0 oc.
- 11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

Continued on page 2



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 Components Association (www.sbcacomponents.com)



September 2, 2025



818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #39 ROOF
25-5065-A	T03GE	PIGGYBACK BASE SUPPO	1	1	176039722
Job Reference (optional)					

- NOTES-**
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 35, 2, 46, 47, 48, 49, 50, 51, 52, 55, 56, 58, 59, 60, 61, 62, 63, 64, 44, 43, 42, 41, 40, 39, 38, 37, 36.
 - 14) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
 - 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.
 - 16) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

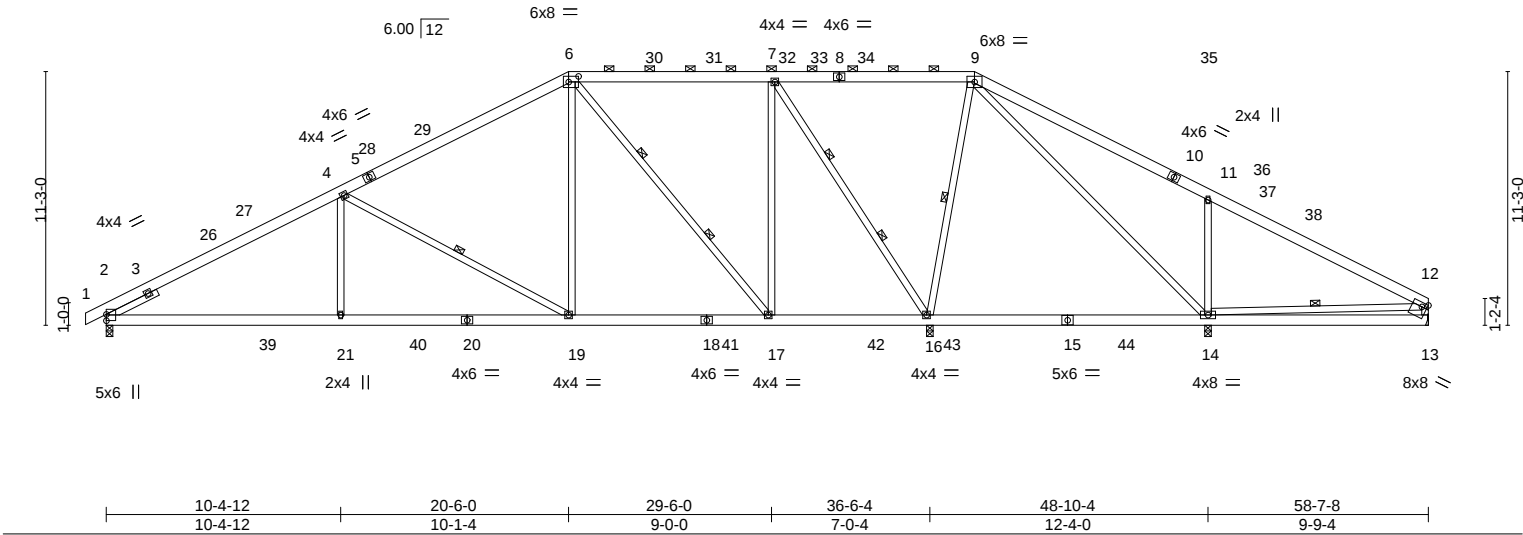
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #39 ROOF	176039723
25-5065-A	T04	PIGGYBACK BASE	4	1		

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s Aug 14 2025 MiTek Industries, Inc. Tue Sep 2 08:04:34 2025 Page 1
ID:tdHS5lWYlNg?jaR9E1eBtqly9_oHDZPvtWzDr6VX1mGunD8AxxrNhM8IEA4SzBf3yhk8R
-0-11-0 10-4-12 20-6-0 29-6-0 38-6-0 48-10-4 58-7-8
0-11-0 10-4-12 10-1-4 9-0-0 9-0-0 10-4-4 9-9-4
Scale = 1:102.2



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	Plate Grip DOL	1.15	TC	Vert(LL)	-0.21 14-16	>693	240	MT20	244/190
Snow (Pl/Pg)	Lumber DOL	1.15	BC	Vert(CT)	-0.31 14-16	>477	180		
TCDL	Rep Stress Incr	YES	WB	Horz(CT)	0.06 16	n/a	n/a		
BCLL	Code IRC2018/TPI2014		Matrix-MS						
BCDL								Weight: 445 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD	TOP CHORD
BOT CHORD	BOT CHORD
WEBS	WEBS
SLIDER	

REACTIONS. All bearings 0-3-8 except (jt=length) 13=Mechanical.
(lb) - Max Horz 2=236(LC 15)
Max Uplift All uplift 100 lb or less at joint(s) 16 except 2=-124(LC 16), 14=-135(LC 16)
Max Grav All reactions 250 lb or less at joint(s) 13 except 2=1623(LC 28), 16=2882(LC 28), 14=1062(LC 49)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-2368/257, 4-6=-1404/268, 6-7=-517/265, 7-9=0/641, 9-11=-42/489, 11-12=-83/412
BOT CHORD 2-21=-150/2245, 19-21=-150/2245, 17-19=0/1253, 16-17=0/546, 14-16=-465/137
WEBS 4-21=0/508, 4-19=-1168/190, 6-19=0/998, 6-17=-1214/61, 7-17=0/1209, 7-16=-1980/179, 9-16=-769/135, 9-14=-24/274, 11-14=-714/307, 12-14=-496/170

- 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=59ft; eave=7ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 4-11-6, Interior(1) 4-11-6 to 20-6-0, Exterior(2R) 20-6-0 to 28-9-8, Interior(1) 28-9-8 to 38-6-0, Exterior(2R) 38-6-0 to 46-9-8, Interior(1) 46-9-8 to 58-5-12 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=16.5 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - 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, 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) 16 except (jt=lb) 2=124, 14=135.
 - 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.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 2,2025

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #39 ROOF	176039724
25-5065-A	T04A	PIGGYBACK BASE	1	1	Job Reference (optional)	

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

8.830 s Aug 14 2025 MiTek Industries, Inc. Tue Sep 2 08:04:35 2025 Page 1
ID:tdHS5IWylng?jaR9E1eBtqly9_-GTnxdFkVHGlikf6DK_Q0lMj6bn1btCUJl6jkBVyhk8Q

-0-11-0	10-4-12	20-6-0	29-6-0	38-6-0	48-10-4	58-7-8
0-11-0	10-4-12	10-1-4	9-0-0	9-0-0	10-4-4	9-9-4

Scale = 1:102.2

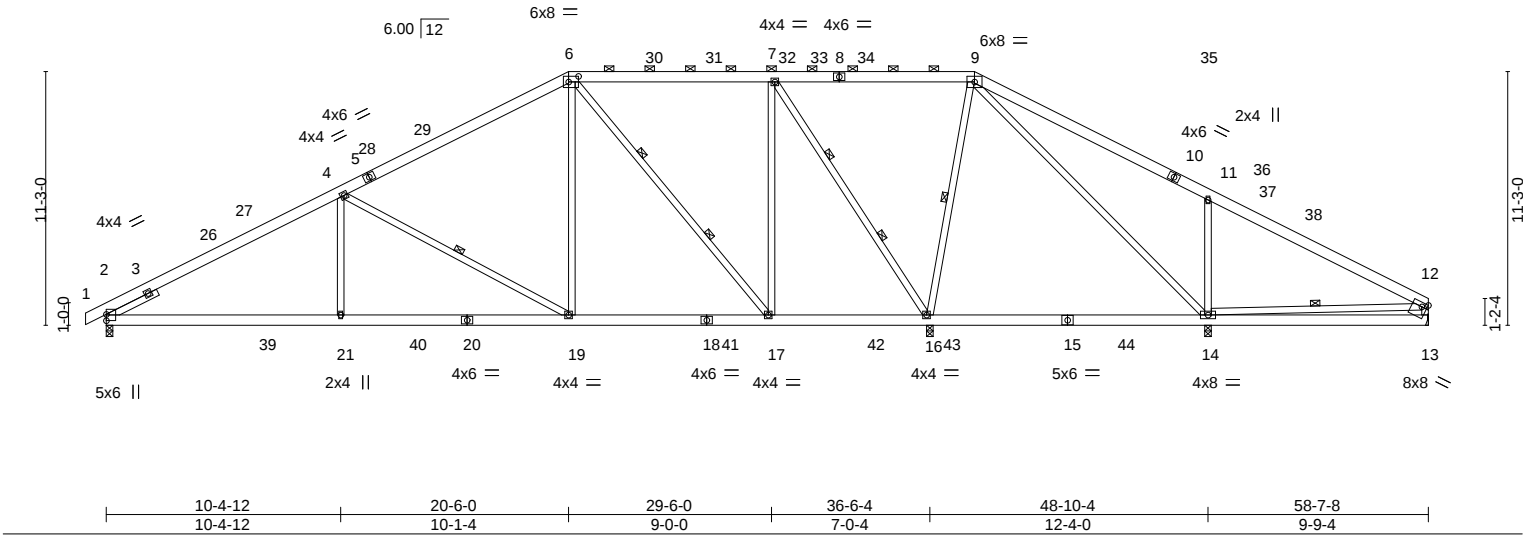


Plate Offsets (X,Y)-- [6:0-5-4,0-3-0], [13:Edge,0-2-4]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	20.0	2-0-0		TC 0.79		in (loc) l/defl L/d		MT20	
Snow (Pl/Pg)	16.5/15.0	Plate Grip DOL 1.15		BC 0.68		Vert(LL) -0.21 14-16 >693 240		244/190	
TCDL	10.0	Lumber DOL 1.15		WB 0.94		Vert(CT) -0.31 14-16 >477 180			
BCLL	0.0 *	Rep Stress Incr YES		Matrix-MS		Horz(CT) 0.06 16 n/a n/a			
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 3-11-15 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-9.
BOT CHORD	2x6 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
WEBS	2x4 SP No.3 *Except*		6-0-0 oc bracing: 14-16.
	7-16: 2x4 SP No.1		1 Row at midpt 4-19, 9-16, 12-14
SLIDER	Left 2x4 SP No.3 2-6-0	WEBS	2 Rows at 1/3 pts 6-17, 7-16

REACTIONS. All bearings 0-3-8 except (jt=length) 13=Mechanical.
(lb) - Max Horz 2=236(LC 15)
Max Uplift All uplift 100 lb or less at joint(s) 16 except 2=-124(LC 16), 14=-135(LC 16)
Max Grav All reactions 250 lb or less at joint(s) 13 except 2=1623(LC 28), 16=2882(LC 28), 14=1062(LC 49)

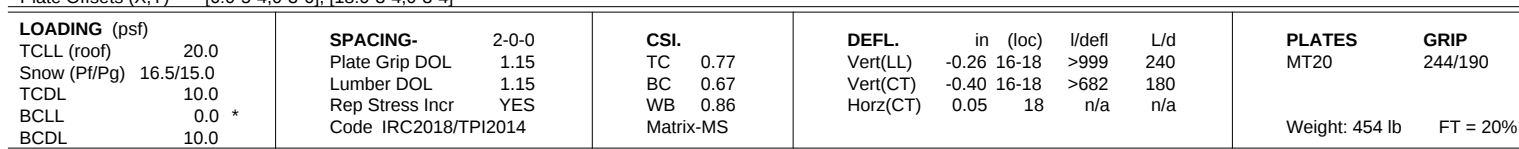
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-2368/257, 4-6=-1404/268, 6-7=-517/265, 7-9=0/641, 9-11=-42/489, 11-12=-83/412
BOT CHORD 2-21=-150/2245, 19-21=-150/2245, 17-19=0/1253, 16-17=0/546, 14-16=-465/137
WEBS 4-21=0/508, 4-19=-1168/190, 6-19=0/998, 6-17=-1214/61, 7-17=0/1209, 7-16=-1980/179, 9-16=-769/135, 9-14=-24/274, 11-14=-714/307, 12-14=-496/170

- 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=59ft; eave=7ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 4-11-6, Interior(1) 4-11-6 to 20-6-0, Exterior(2R) 20-6-0 to 28-9-8, Interior(1) 28-9-8 to 38-6-0, Exterior(2R) 38-6-0 to 46-9-8, Interior(1) 46-9-8 to 58-5-12 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=16.5 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - 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, 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) 16 except (jt=lb) 2=124, 14=135.
 - 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.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 2,2025

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s Aug 14 2025 MiTek Industries, Inc. Tue Sep 2 08:04:36 2025 Page 1
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 0-11-0 10-4-12 20-6-0 28-6-2 36-6-4 38-6-4 48-7-4 59-0-0 59-11-0
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 Scale = 1:103.4



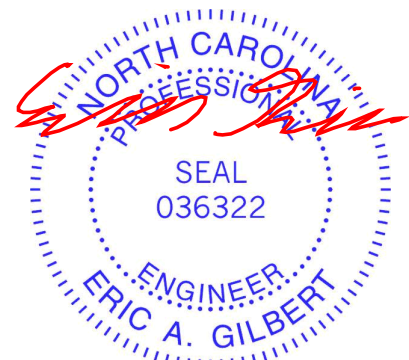
REACTIONS. (size) 2=0-3-8, 14=0-3-8, 18=0-3-8
 Max Horz 2=222(LC 15)
 Max Uplift 2=-130(LC 16), 14=-104(LC 16), 18=-109(LC 16)
 Max Grav 2=1598(LC 28), 14=828(LC 29), 18=3321(LC 28)

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

TOP CHORD	2-4=-2320/271, 4-6=-1345/276, 6-7=-532/276, 7-9=-532/276, 9-10=0/797, 10-12=-989/349, 12-14=-810/170
BOT CHORD	2-23=-128/2207, 21-23=-128/2207, 19-21=0/1203, 18-19=-771/137, 16-18=-527/115, 14-16=-38/702
WEBS	4-23=0/521, 4-21=-1184/185, 6-21=0/964, 6-19=-1174/46, 7-19=-667/170, 9-19=-124/1978, 9-18=-1897/208, 10-18=-1353/166, 10-16=-213/1706, 12-16=-698/297

- 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=59ft; eave=7ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-11-0 to 4-11-13, Interior(1) 4-11-13 to 20-6-0, Exterior(2R) 20-6-0 to 28-10-2, Interior(1) 28-10-2 to 38-6-0, Exterior(2R) 38-6-0 to 46-10-2, Interior(1) 46-10-2 to 59-11-0 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=16.5 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - 4) Unbalanced snow loads have been considered for this design.
 - 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
 - 6) Provide adequate drainage to prevent water ponding.
 - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 9) Bearing at joint(s) 18 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=130, 14=104, 18=109.
 - 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.



September 2, 2025

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #39 ROOF
25-5065-A	T05	PIGGYBACK BASE	1	1	176039725
Job Reference (optional)					

NOTES-
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

 **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)



818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #39 ROOF	176039726
25-5065-A	T05A	PIGGYBACK BASE	1	1		

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s Aug 14 2025 MiTek Industries, Inc. Tue Sep 2 08:04:37 2025 Page 1

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Scale = 1:103.3

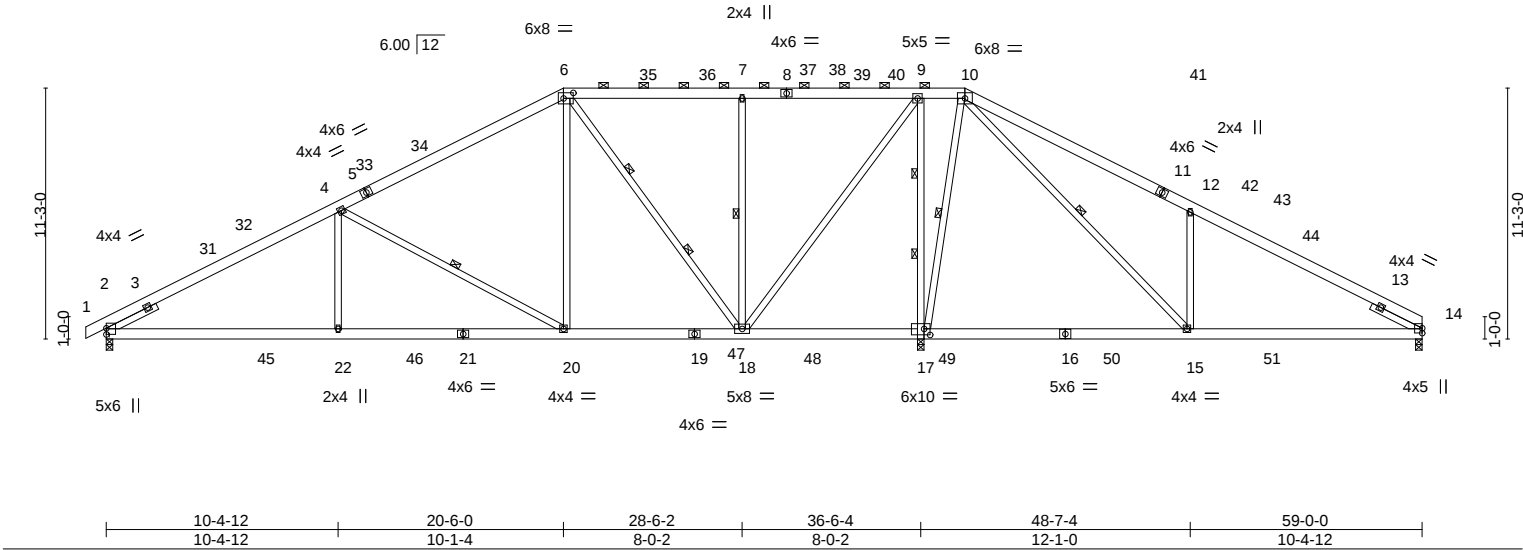


Plate Offsets (X,Y)-- [6:0-5-4,0-3-0], [17:0-3-4,0-3-4]																							
LOADING (psf)		SPACING-		2-0-0		CSI.		DEFL.		in (loc)		l/defl		L/d		PLATES		GRIP					
TCLL (roof)		20.0		Plate Grip DOL		1.15		TC		0.77		Vert(LL)		-0.26 15-17		>999		240		MT20		244/190	
Snow (Pf/Pg)		16.5/15.0		Lumber DOL		1.15		BC		0.67		Vert(CT)		-0.40 15-17		>683		180					
TCDL		10.0		Rep Stress Incr		YES		WB		0.86		Horz(CT)		0.05 17		n/a		n/a					
BCLL		0.0 *		Code IRC2018/TPI2014				Matrix-MS															
BCDL		10.0																		Weight: 452 lb		FT = 20%	

LUMBER-	BRACING-
TOP CHORD	2x6 SP No.2
BOT CHORD	2x6 SP No.2
WEBS	2x4 SP No.3
SLIDER	Left 2x4 SP No.3 2-6-0, Right 2x4 SP No.3 2-6-0
	TOP CHORD
	Structural wood sheathing directly applied or 4-5-7 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 6-10.
	BOT CHORD
	Rigid ceiling directly applied or 6-0-0 oc bracing.
	WEBS
	1 Row at midpt 4-20, 7-18, 10-17, 10-15
	2 Rows at 1/3 pts 6-18, 9-17

REACTIONS. (size) 2=0-3-8, 14=0-3-8, 17=0-3-8
Max Horz 2=220(LC 15)
Max Uplift 2=-128(LC 16), 14=-72(LC 16), 17=-114(LC 16)
Max Grav 2=1600(LC 28), 14=779(LC 29), 17=3317(LC 28)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-2324/268, 4-6=-1349/274, 6-7=-534/273, 7-9=-534/273, 9-10=0/792, 10-12=-997/351, 12-14=-818/171
BOT CHORD 2-22=-150/2206, 20-22=-150/2206, 18-20=0/1201, 17-18=-766/131, 15-17=-522/100, 14-15=-45/711
WEBS 4-22=0/521, 4-20=-1183/185, 6-20=0/964, 6-18=-1172/47, 7-18=-667/170, 9-18=-125/1975, 9-17=-1896/210, 10-17=-1352/168, 10-15=-213/1709, 12-15=-699/297

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDD=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=59ft; eave=7ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 4-11-13, Interior(1) 4-11-13 to 20-6-0, Exterior(2R) 20-6-0 to 28-10-2, Interior(1) 28-10-2 to 38-6-0, Exterior(2R) 38-6-0 to 46-10-2, Interior(1) 46-10-2 to 59-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - 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, with BCDL = 10.0psf.
 - Bearing at joint(s) 17 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14 except (jt=lb) 2=128, 17=114.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and Contr to the standard ANSI/TPI 1.



September 2,2025

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #39 ROOF
25-5065-A	T05A	PIGGYBACK BASE	1	1	176039726
Job Reference (optional)					

NOTES-
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

 **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)



818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #39 ROOF	176039727
25-5065-A	T05GE	PIGGYBACK BASE SUPPO	1	1	Job Reference (optional)	

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

8.830 s Aug 14 2025 MiTek Industries, Inc. Tue Sep 2 08:04:39 2025 Page 1

ID:tdHS5iWylNg?jaR9E1eBtqly9_-9E1STcn0Kvr7DGQ?ZqUywCt_9OYlpCVvDjhyKHyhk8M

0-11-0 20-6-0 38-6-0 59-0-0 59-11-0

0-11-0 20-6-0 18-0-0 20-6-0 0-11-0

Scale = 1:105.3

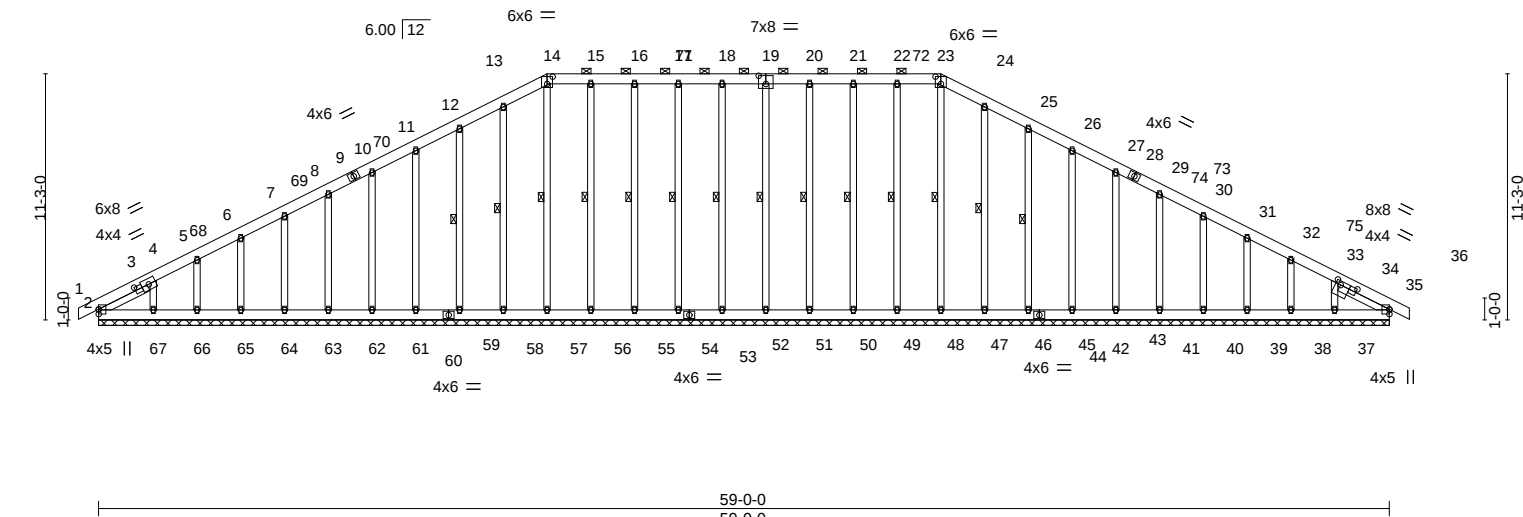


Plate Offsets (X,Y)-- [2:1-10-12,0-2-0], [14:0-3-0,0-4-0], [19:0-4-0,0-4-8], [23:0-3-0,0-4-0], [33:0-2-12,0-2-1], [35:1-8-10,0-2-0]									
LOADING (psf)		SPACING-	2-0-0	CSI.	DEFL.		PLATES		GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.05	in (loc)	l/defl	L/d	MT20
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.02	Vert(LL)	-0.00 35	n/r	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.17	Vert(CT)	-0.00 35	n/r	
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-S		Horz(CT)	0.01 35	n/a	
BCDL	10.0								
									Weight: 597 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except
BOT CHORD 2x6 SP No.2	2-0-0 oc purlins (6-0-0 max.): 14-23.
OTHERS 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
SLIDER Left 2x4 SP No.3 2-6-0, Right 2x4 SP No.3 2-6-0	WEBS 1 Row at midpt
	23-47, 22-48, 21-49, 20-50, 19-51, 18-52, 17-54, 16-55, 15-56, 14-57, 13-58, 12-59, 24-46, 25-45

REACTIONS. All bearings 59-0-0.
(lb) - Max Horz 2=-216(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 2, 48, 49, 50, 51, 52, 54, 55, 58, 59, 61, 62, 63, 64, 65, 66, 67, 46, 45, 43, 42, 41, 40, 39, 38, 37
Max Grav All reactions 250 lb or less at joint(s) 2, 47, 48, 49, 50, 51, 52, 54, 55, 56, 57, 58, 59, 61, 62, 63, 64, 65, 66, 67, 46, 45, 43, 42, 41, 40, 39, 38, 37, 35

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 12-13=-104/261, 13-14=-120/300, 14-15=-112/289, 15-16=-112/289, 16-17=-112/289, 17-18=-112/289, 18-19=-112/289, 19-20=-112/289, 20-21=-112/289, 21-22=-112/289, 22-23=-112/289, 23-24=-120/300, 24-25=-104/261

- 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=59ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-11-0 to 4-11-13, Exterior(2N) 4-11-13 to 20-6-0, Corner(3R) 20-6-0 to 26-6-0, Exterior(2N) 26-6-0 to 38-6-0, Corner(3R) 38-6-0 to 44-6-0, Exterior(2N) 44-6-0 to 59-11-0 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=16.5 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - 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.
 - 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.

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #39 ROOF
25-5065-A	T05GE	PIGGYBACK BASE SUPPO	1	1	176039727
Job Reference (optional)					

- NOTES-**
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 48, 49, 50, 51, 52, 54, 55, 58, 59, 61, 62, 63, 64, 65, 66, 67, 46, 45, 43, 42, 41, 40, 39, 38, 37.
 - 14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

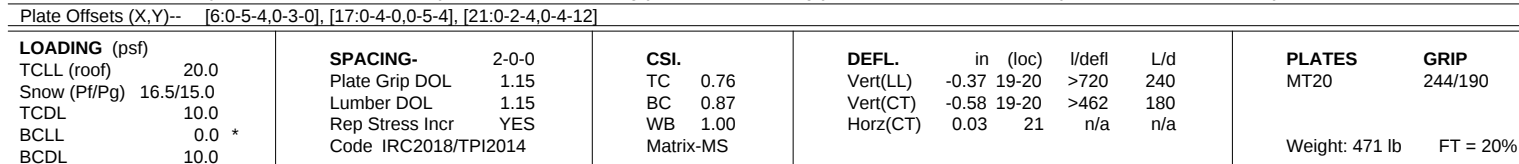
 **WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

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818 Soundside Road
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Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s Aug 14 2025 MiTek Industries, Inc. Tue Sep 2 08:04:40 2025 Page 1
 ID:tdHS5iWylng?jaR9E1eBtqly9_-dRbqgyoe5pz_qQ_B7X?BSPQ_qohlYSp3SNQV5jyhk8L
 0-11-0 10-4-12 20-6-0 28-6-2 38-6-4 38-6-0 48-7-4 59-0-0 59-11-0
 0-11-0 10-4-12 10-1-4 8-0-2 8-0-2 1-11-12 10-1-4 10-4-12 0-11-0
 Scale = 1:105.4



REACTIONS. (size) 2=0-3-8, 14=0-3-8, 21=0-3-8
 Max Horz 2=222(LC 15)
 Max Uplift 2=-141(LC 16), 14=-87(LC 16)
 Max Grav 2=1584(LC 28), 14=923(LC 29), 21=3717(LC 28)

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

TOP CHORD 2-4=-2291/291, 4-6=-1315/299, 6-7=-512/305, 7-9=-512/305, 9-10=0/801,
10-12=-1220/310, 12-14=-1048/121

BOT CHORD 2-26=-146/2182, 24-26=-146/2182, 22-24=0/1176, 21-22=-775/99, 17-21=-257/107,
16-17=-257/107, 14-16=-2/910, 19-20=-353/0, 18-19=-353/0

WEBS 4-26=0/523, 4-24=-1184/183, 6-24=0/970, 6-22=-1193/31, 7-22=-661/169,
9-22=-114/1951, 9-21=-1922/204, 20-21=-1645/66, 10-20=-1418/106, 10-18=-117/2036,
16-18=-142/1738, 12-16=-689/300, 17-19=-292/0

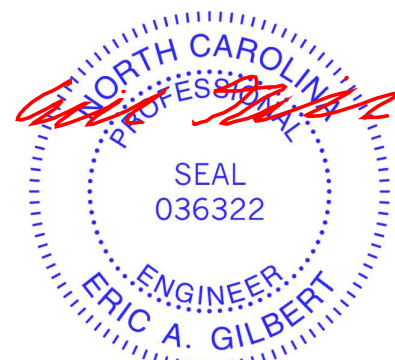
NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCFL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=59ft; eave=7ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 4-11-13, Interior(1) 4-11-13 to 20-6-0, Exterior(2R) 20-6-0 to 28-10-2, Interior(1) 28-10-2 to 38-6-0, Exterior(2R) 38-6-0 to 46-10-2, Interior(1) 46-10-2 to 59-11-0 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=16.5 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) Bearing at joint(s) 21 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.



Seal of the State of North Carolina
Professional Engineer
Eric A. Gilbert
036322
September 2, 2025

Continued on page 2



September 2, 2025



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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #39 ROOF
25-5065-A	T05S	PIGGYBACK BASE	8	1	176039728
Job Reference (optional)					

- NOTES-**
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14 except (jt=lb) 2=141.
 - 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

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818 Soundside Road
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Riverside Roof Truss, LLC.

Danville, Va - 24541,

8.830 s Aug 14 2025

MiTek Industries, Inc.

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28-5-4

7-11-4

36-4-8

7-11-4

-0-11-0

7-0-5

13-9-3

20-6-0

28-5-4

36-4-8

0-11-0

7-0-5

6-8-13

6-8-13

7-11-4

7-11-4

5x8 =

2x4 ||

4x5 = Scale = 1:67.3

6.00 | 12'

3x4 //

20

5

19

3x6 //

18

3

4

3x4 //

17

1

2

5x6 //

16

3x4 =

15

6x6 =

14

3x4 =

13

26

12

3x4 =

27

11

10

5x8 =

28

9

3x4 =

7-0-5

13-9-3

20-6-0

28-5-4

36-4-8

7-0-5

6-8-13

6-8-13

7-11-4

7-11-4

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

LOADING (psf)

TCLL (roof) 20.0

Snow (Pf/Pg) 16.5/15.0

TCDL 10.0

BCLL 0.0 *

BCDL 10.0

SPACING-

2-0-0

Plate Grip DOL 1.15

Lumber DOL 1.15

Rep Stress Incr YES

Code IRC2018/TPI2014

CSI.

TC 0.91

BC 0.89

WB 0.75

Matrix-MS

DEFL.

in (loc) l/defl L/d

Vert(LL) -0.18 9-10 >999 240

Vert(CT) -0.30 9-10 >999 180

Horz(CT) 0.07 9 n/a n/a

PLATES MT20

GRIP 244/190

Weight: 253 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2 *Except*

6-8: 2x4 SP No.1

BOT CHORD 2x4 SP No.2

WEBS 2x4 SP No.3 *Except*

8-9: 2x4 SP No.1

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-3-0 oc purlins, except end verticals, and 2-0-0 oc purlins (5-4-3 max.): 6-8.

BOT CHORD Rigid ceiling directly applied or 9-5-9 oc bracing.

WEBS 1 Row at midpt 5-12, 6-10, 7-10, 8-10

2 Rows at 1/3 pts 8-9

REACTIONS.

(size) 9=Mechanical, 16=0-3-8

Max Horz 16=335(LC 16)

Max Uplift 9=-135(LC 16), 16=-73(LC 16)

Max Grav 9=1732(LC 39), 16=1741(LC 28)

FORCES.

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

TOP CHORD 2-3=-2667/102, 3-5=-2273/131, 5-6=-1667/144, 6-7=-1011/102, 7-8=-1011/102, 8-9=-1570/211, 2-16=-1623/151

BOT CHORD 15-16=-382/498, 14-15=-335/2371, 12-14=-263/2003, 10-12=-167/1439

WEBS 3-14=-434/90, 5-14=0/502, 5-12=-913/143, 6-12=-20/993, 6-10=-782/111, 7-10=-702/176, 8-10=-174/1724, 2-15=0/1884

NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=36ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-11-0 to 2-8-10, Interior(1) 2-8-10 to 20-6-0, Exterior(2R) 20-6-0 to 25-7-12, Interior(1) 25-7-12 to 36-2-12 zone; cantilever left and right exposed ; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.

4) Unbalanced snow loads have been considered for this design.

5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.

6) Provide adequate drainage to prevent water ponding.

7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

9) Refer to girder(s) for truss to truss connections.

10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16 except (jt=lb) 9=135.

11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 036322 ERIC A. GILBERT

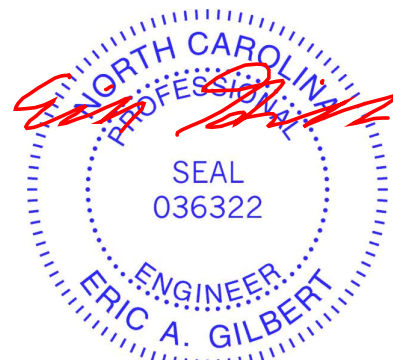
September 2,2025

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

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818 Soundside Road Edenton, NC 27932



September 2, 2025



WARNING – Verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MIT-17-19 (Rev. 1/2/2025) BEFORE USE.

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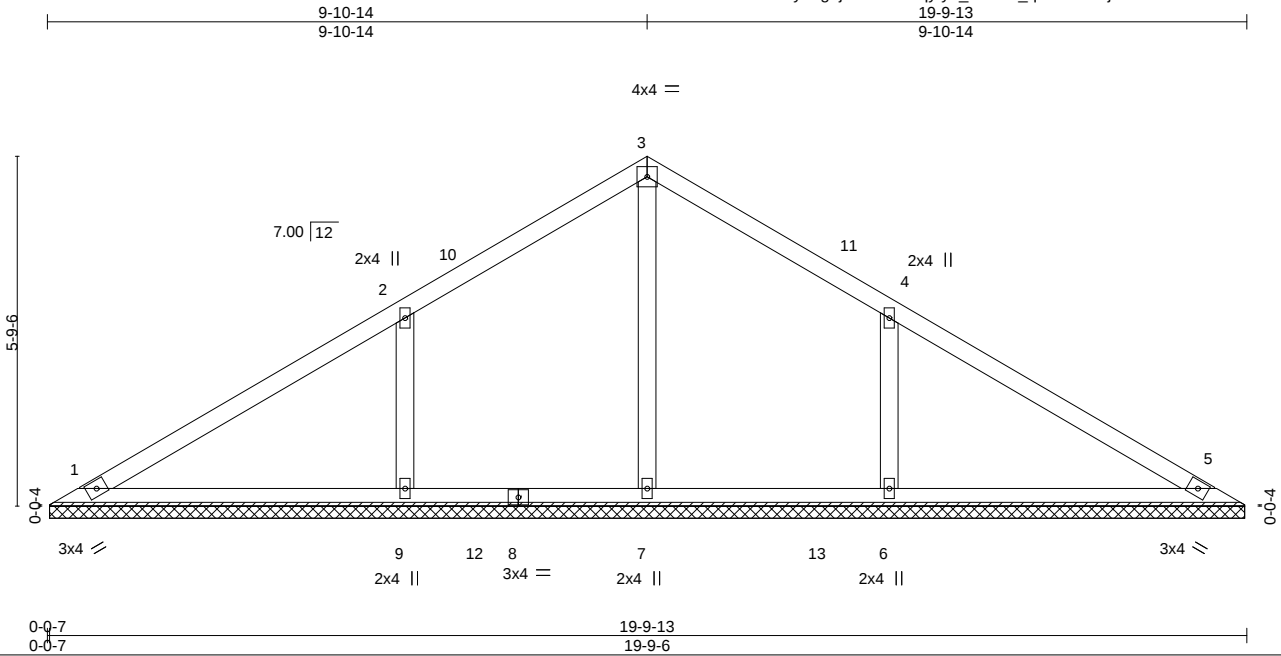


818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #39 ROOF
25-5065-A	V03	Valley	1	1	176039732
Job Reference (optional)					

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

8.830 s Aug 14 2025 MiTek Industries, Inc. Tue Sep 2 08:04:43 2025 Page 1
ID:tdHS5IWylng?jaR9E1eBtqly9_-10Gzl_qXOkLZhujmofZu422aO?t7l1kv8Lf9T2yhk8l



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	n/a	MT20	244/190		
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	n/a				
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	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.	
All bearings	19-8-15.
(lb) - Max Horz	1=109(LC 15)
Max Uplift	All uplift 100 lb or less at joint(s) 9, 6
Max Grav	All reactions 250 lb or less at joint(s) 1, 5 except 7=298(LC 27), 9=566(LC 27), 6=566(LC 28)

FORCES.	
(lb) - Max. Comp./Max. Ten.	- All forces 250 (lb) or less except when shown.
WEBS	2-9=-346/156, 4-6=-346/156

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 9-10-14, Exterior(2R) 9-10-14 to 12-10-14, Interior(1) 12-10-14 to 19-3-5 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 6.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

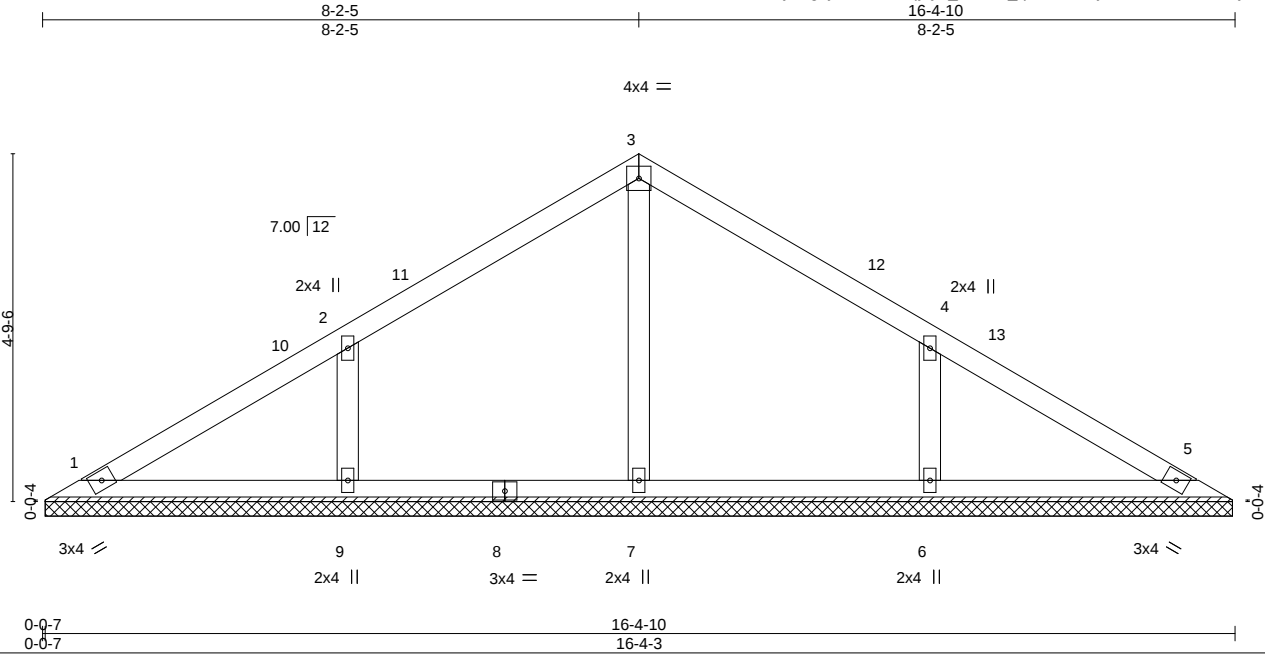


September 2, 2025

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #39 ROOF	176039733
25-5065-A	V04	Valley	1	1	Job Reference (optional)	

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

8.830 s Aug 14 2025 MiTek Industries, Inc. Tue Sep 2 08:04:43 2025 Page 1
ID:tdHS5IWyLNg?jaR9E1eBtqly9_-10Gzl_qXOkLZhujmofZu422cx?vAl1yV8Lf9T2yhk8l



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) n/a	-	n/a	999		MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.12	Vert(CT) n/a	-	n/a	999			
TCDL 10.0	Lumber DOL 1.15	WB 0.07	Horz(CT) 0.00	5	n/a	n/a			
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S							
BCDL 10.0	Code IRC2018/TPI2014								
								Weight: 62 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 16-3-13.
(lb) - Max Horz 1--89(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 9, 6
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=255(LC 2), 9=363(LC 33), 6=363(LC 34)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-9=-272/134, 4-6=-272/134

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 8-2-5, Exterior(2R) 8-2-5 to 11-2-5, Interior(1) 11-2-5 to 15-10-2 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 6.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



September 2,2025

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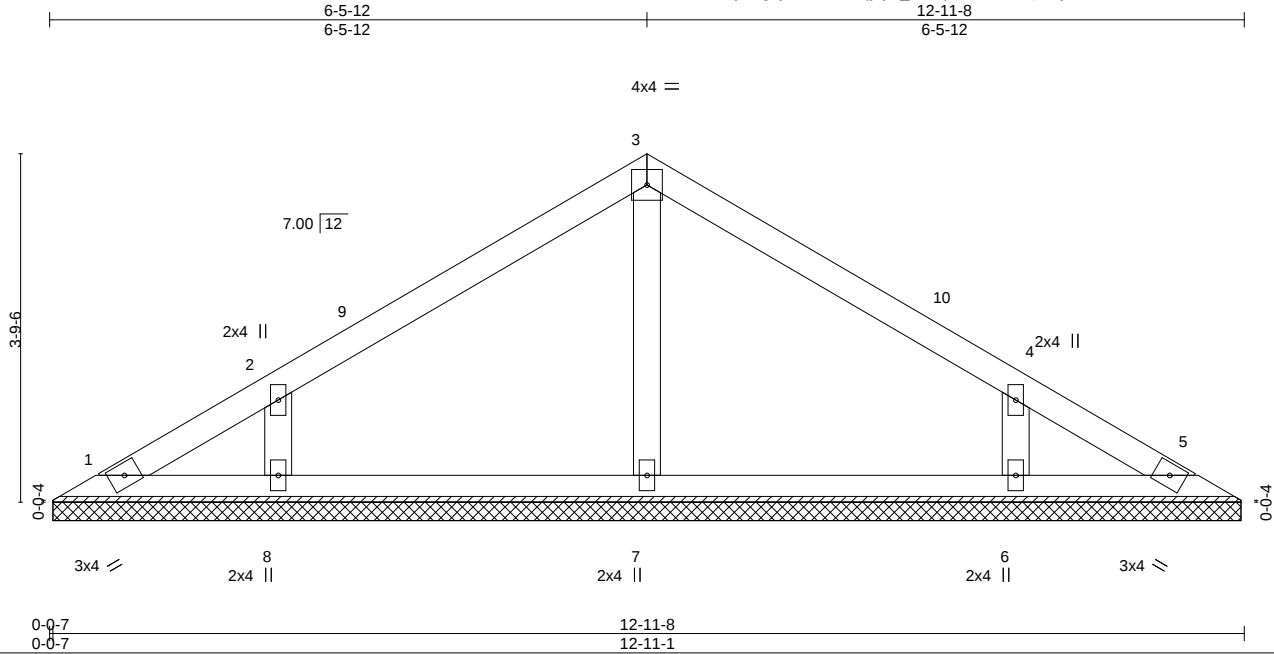
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #39 ROOF
25-5065-A	V05	Valley	1	1	176039734
Job Reference (optional)					

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

8.830 s Aug 14 2025 MiTek Industries, Inc. Tue Sep 2 08:04:44 2025 Page 1

ID:tdHS5IWYLn9?jaR9E1eBtqly9_-VCqLWJr991TQJ1lyMN47dFbnYPEOUVWeN?Oj?Uyhk8H



LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.20	Vert(LL) n/a	-	n/a	999		MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.12	Vert(CT) n/a	-	n/a	999			
TCDL 10.0	Lumber DOL 1.15	WB 0.05	Horz(CT) 0.00	5	n/a	n/a			
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S							
BCDL 10.0	Code IRC2018/TPI2014								
								Weight: 47 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 12-10-10.
(lb) - Max Horz 1=-69(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 1, 8, 6
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=277(LC 2), 8=307(LC 20), 6=307(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) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 6-5-12, Exterior(2R) 6-5-12 to 9-5-12, Interior(1) 9-5-12 to 12-5-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 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.



September 2, 2025

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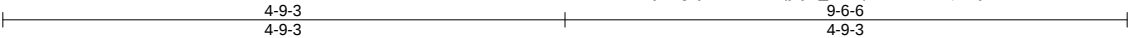
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #39 ROOF
25-5065-A	V06	Valley	1	1	176039735
Job Reference (optional)					

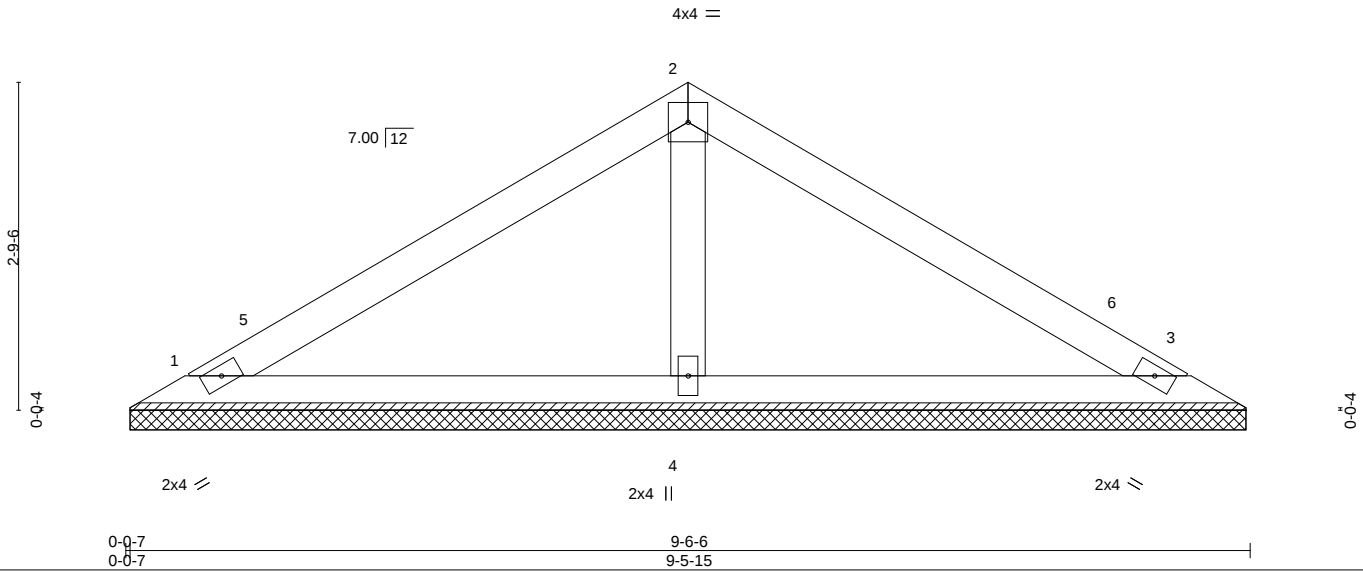
Riverside Roof Truss, LLC, Danville, Va - 24541,

8.830 s Aug 14 2025 MiTek Industries, Inc. Tue Sep 2 08:04:44 2025 Page 1

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Scale = 1:19.5



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	n/a	MT20	244/190		
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.18	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-

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=9-5-8, 3=9-5-8, 4=9-5-8
Max Horz 1=-49(LC 14)
Max Uplift 1=-20(LC 16), 3=-20(LC 16)
Max Grav 1=160(LC 2), 3=160(LC 2), 4=356(LC 2)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 4-9-3, Exterior(2R) 4-9-3 to 7-9-3, Interior(1) 7-9-3 to 8-11-14 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



September 2, 2025

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818 Soundside Road
Edenton, NC 27932

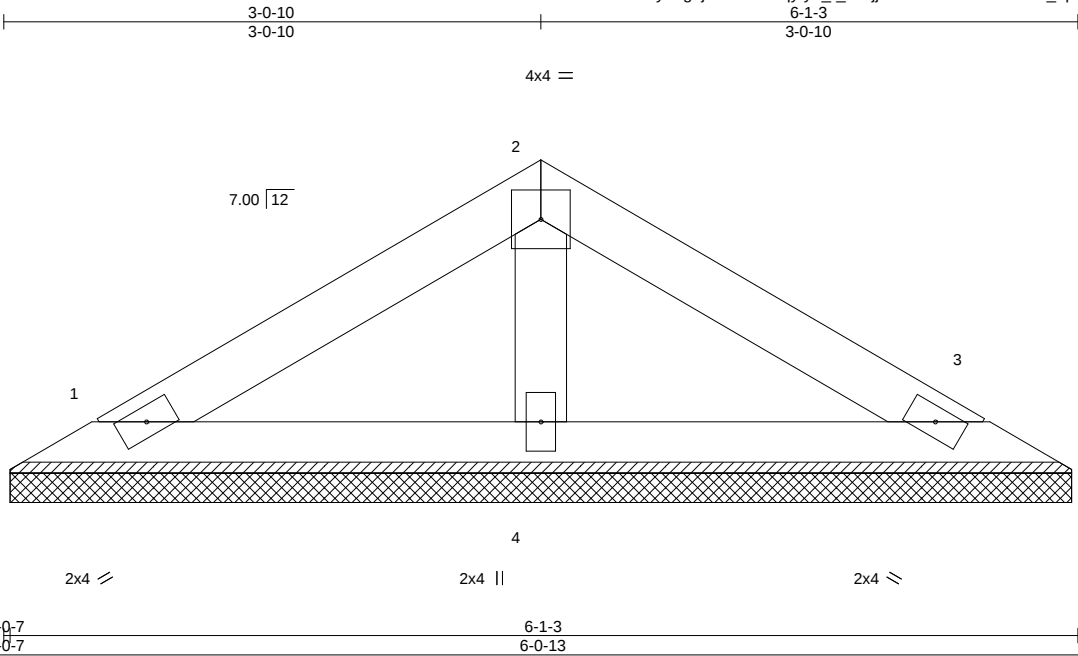
Job	Truss	Truss Type	Qty	Ply	RVF-LOT #39 ROOF
25-5065-A	V07	Valley	1	1	176039736
Job Reference (optional)					

Riverside Roof Truss, LLC,

Danville, Va - 24541,

8.830 s Aug 14 2025 MiTek Industries, Inc. Tue Sep 2 08:04:45 2025 Page 1

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LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	n/a	MT20	244/190		
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a				
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00				
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-P							
BCDL	10.0										
								Weight: 19 lb		FT = 20%	

LUMBER-

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

BRACING-

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

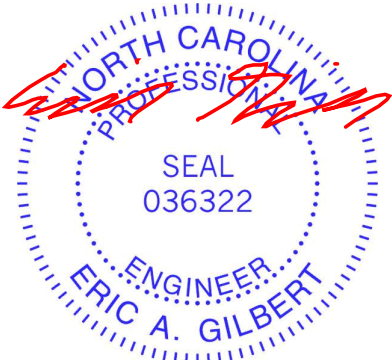
REACTIONS.

(size) 1=6-0-6, 3=6-0-6, 4=6-0-6
Max Horz 1=-29(LC 14)
Max Uplift 1=-17(LC 16), 3=-17(LC 16)
Max Grav 1=105(LC 2), 3=105(LC 2), 4=192(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.



September 2,2025

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ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #39 ROOF
25-5065-A	V08	Valley	1	1	176039737
Job Reference (optional)					

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s Aug 14 2025 MiTek Industries, Inc. Tue Sep 2 08:04:45 2025 Page 1
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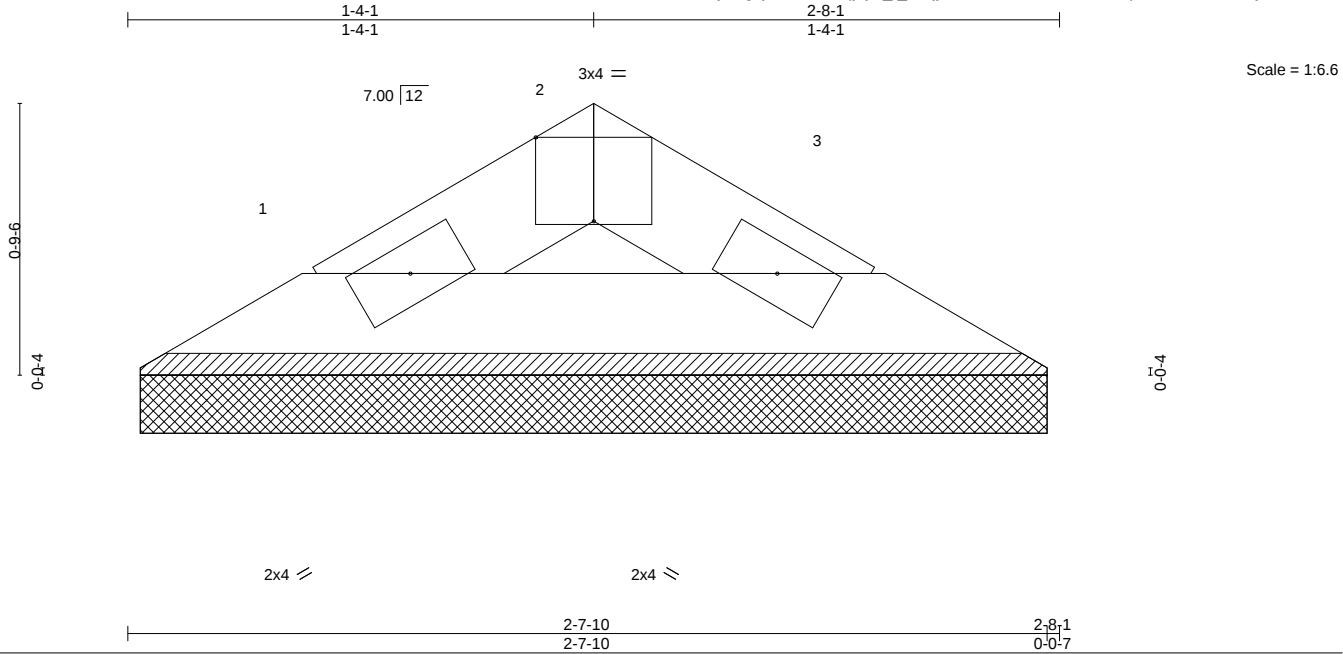


Plate Offsets (X,Y)-- [2:0-2-0,Edge]		2-7-10		2-8-1	
		2-7-10		0-0-7	
LOADING (psf)		SPACING-		CSI.	
TCLL (roof)	20.0	2-0-0		in (loc) l/defl L/d	
Snow (Pf/Pg)	11.6/15.0	Plate Grip DOL 1.15		Vert(LL) n/a - n/a 999	
TCDL	10.0	Lumber DOL 1.15		Vert(CT) n/a - n/a 999	
BCLL	0.0 *	Rep Stress Incr YES		Horz(CT) 0.00 3 n/a n/a	
BCDL	10.0	Code IRC2018/TPI2014			
		Matrix-P		PLATES MT20	
				GRIP 244/190	
				Weight: 7 lb FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 2-8-1 oc purlins.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=2-7-3, 3=2-7-3
Max Horz 1=9(LC 15)
Max Uplift 1=4(LC 16), 3=4(LC 16)
Max Grav 1=64(LC 2), 3=64(LC 2)

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

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 4) Unbalanced snow loads have been considered for this design.
 - 5) Gable requires continuous bottom chord bearing.
 - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
 - 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



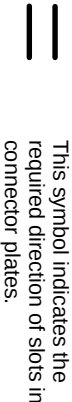
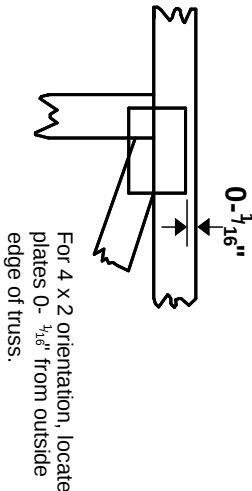
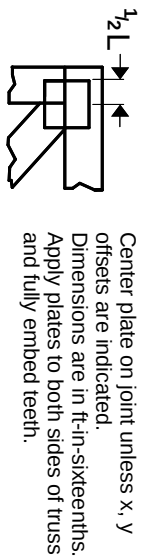
September 2,2025

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
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Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



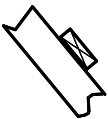
* Plate location details available in MITek software or upon request.

PLATE SIZE

4 X 4

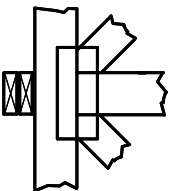
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

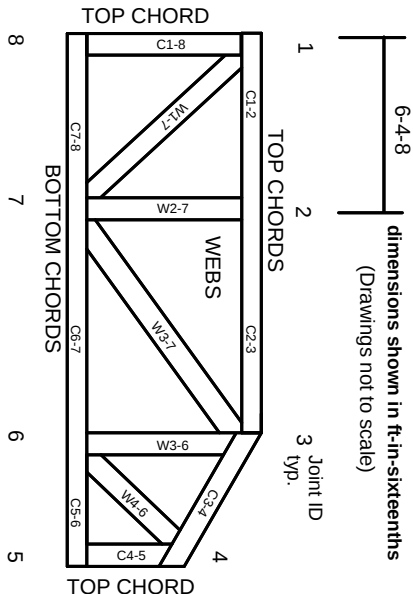


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

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