

Trenco

818 Soundside Rd
Edenton, NC 27932

Re: 25-3405-B
CLB-LOT #3 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: I75647332 thru I75647351

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

North Carolina COA: C-0844



August 15, 2025

Gilbert, Eric

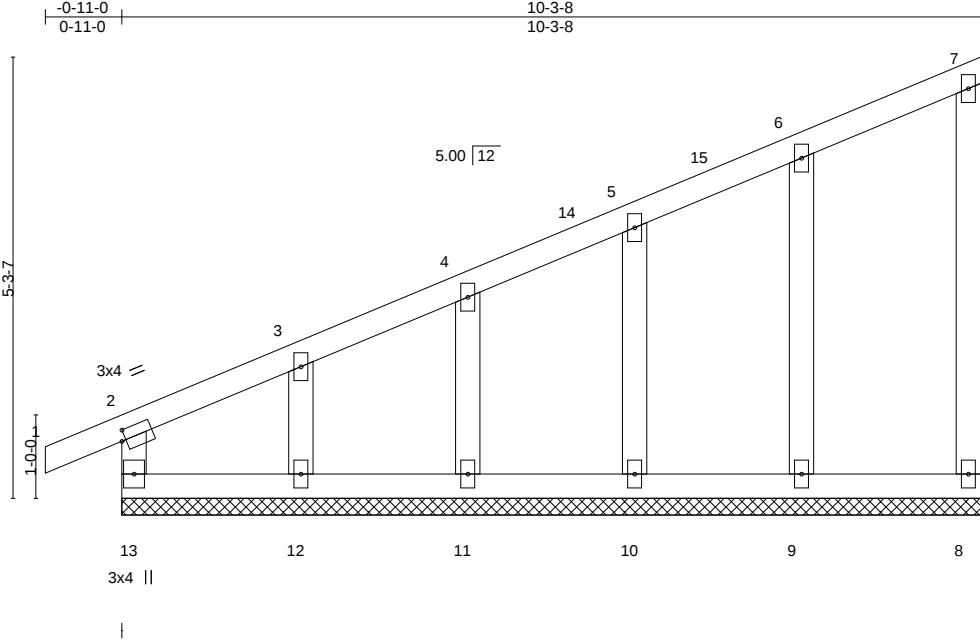
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which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

Job	Truss	Truss Type	Qty	Ply	CLB-LOT #3 Roof
25-3405-B	M01	Monopitch Supported Gable	1	1	175647332
Job Reference (optional)					

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

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Scale = 1:27.6

Plate Offsets (X,Y)-- [2:0-0-10,0-1-8]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	20.0	2-0-0		TC	0.41	in (loc)	l/defl	MT20	GRIP
Snow (Pf/Pg)	11.6/15.0	Plate Grip DOL	1.15	BC	0.19	1	n/r		244/190
TCDL	10.0	Lumber DOL	1.15	WB	0.07	1	n/r		
BCLL	0.0 *	Rep Stress Incr	YES	Matrix-R		8	n/a		
BCDL	10.0	Code IRC2018/TPI2014					n/a	Weight: 57 lb	FT = 20%

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

REACTIONS. All bearings 10-3-8.

(lb) - Max Horz 13=177(LC 13)

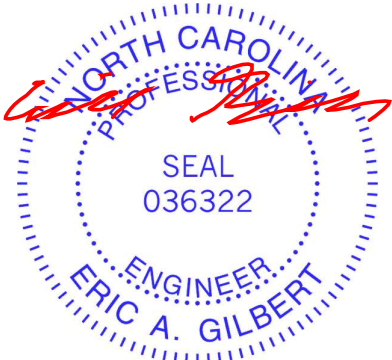
Max Uplift All uplift 100 lb or less at joint(s) 13, 8, 11, 12, 10, 9

Max Grav All reactions 250 lb or less at joint(s) 13, 8, 11, 12, 10, 9

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

TOP CHORD 2-3=-353/199, 3-4=-254/156

- 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=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-11-0 to 2-1-12, Exterior(2N) 2-1-12 to 10-1-12 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
 - 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) 13, 8, 11, 12, 10, 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.



August 15,2025

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
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s Jul 24 2025 MiTek Industries, Inc. Thu Aug 14 12:10:38 2025 Page 1
 ID:PLBu07oU64FubQJ5twPucZRqw5-YwJK_5Bfh0HCJ32NsNvdq3YJgv_ZjyQ8itXAWYynxJl
 11-2-6 22-4-13
 11-2-6 11-2-6

[illegible]

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		

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=24ft; eave=4ft; Cat II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-4-9 to 3-4-9, Interior(1) 3-4-9 to 11-2-6, Exterior(2R) 11-2-6 to 14-2-6, Interior(1) 14-2-6 to 22-0-4 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) TCELL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 6) Gable requires continuous bottom chord bearing.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 11, 8, 6.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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Job	Truss	Truss Type	Qty	Ply	CLB-LOT #3 Roof
25-3405-B	PB02	GABLE	2	1	175647334

Riverside Roof Truss, LLC,

Danville, Va - 24541,

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ID:PLBuO7oU64FfubQJ5twPuczRqw5-UIR4PnDvDdXvZNBl_oY5vUdklijvBtYRAA0HbqynxJj

Job Reference (optional)

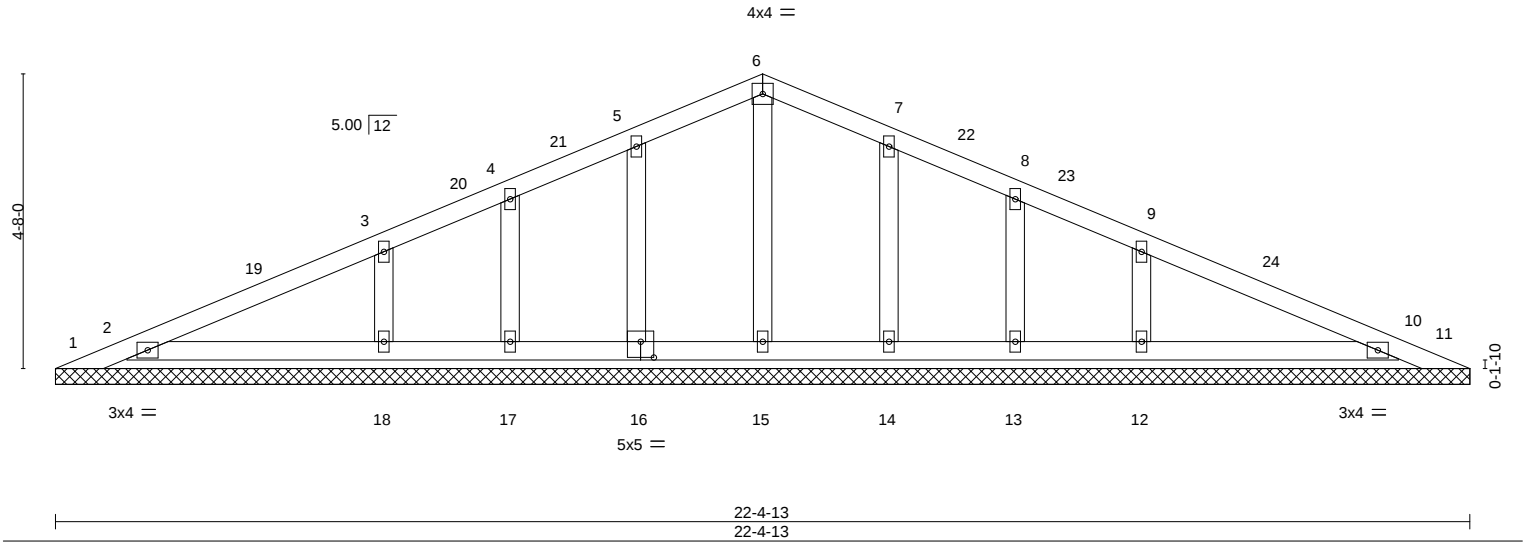


Plate Offsets (X,Y)-- [16:0-2-8,0-3-0]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a - n/a	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a - n/a		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00 10 n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S				Weight: 93 lb	FT = 20%
BCDL	10.0								

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

REACTIONS. All bearings 22-4-13.
(lb) - Max Horz 1=58(LC 14)
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, 15, 16, 17, 14, 13 except 2=306(LC 2), 18=287(LC 34), 12=287(LC 35), 10=305(LC 2)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-4-9 to 3-4-9, Interior(1) 3-4-9 to 11-2-6, Exterior(2R) 11-2-6 to 14-2-6, Interior(1) 14-2-6 to 22-0-4 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
- 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.



August 15,2025

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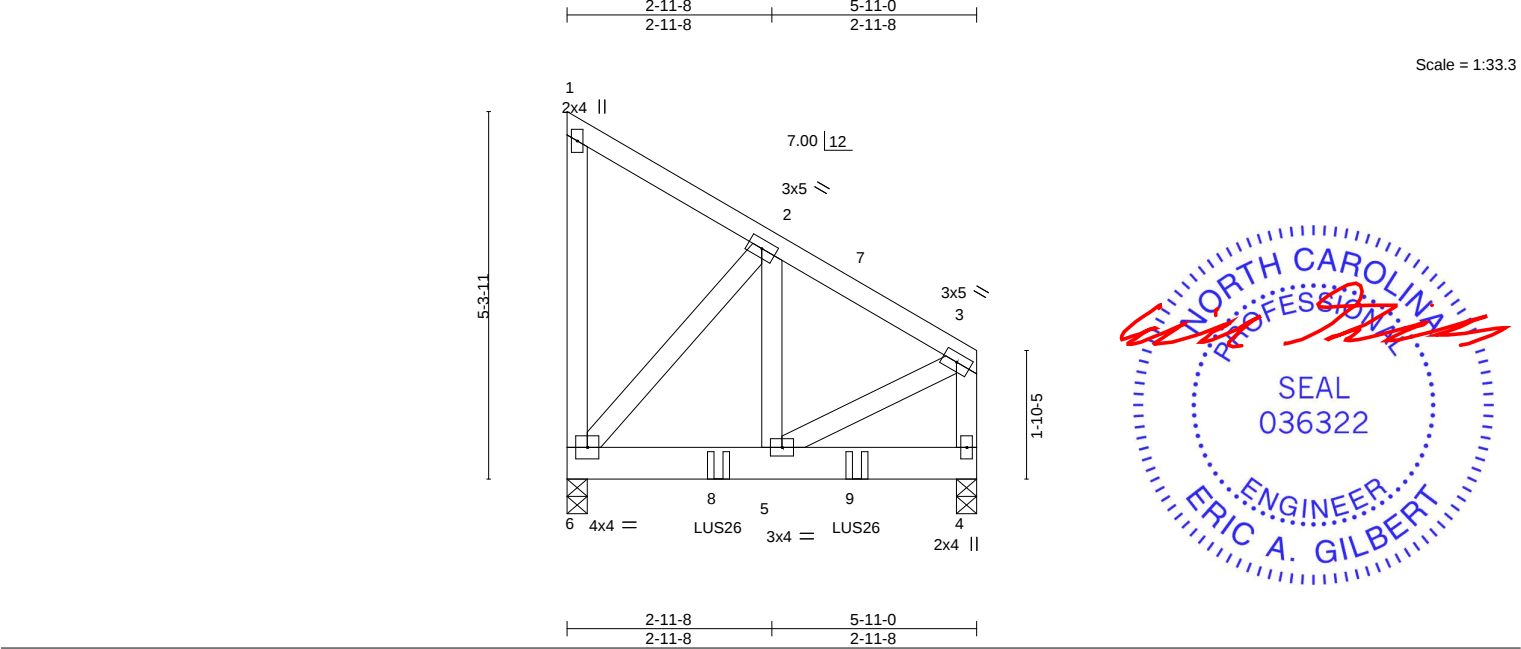
ENGINEERING BY
TRENCO
A MiTek Affiliate
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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	CLB-LOT #3 Roof
25-3405-B	T01	Roof Special Girder	1	2	175647335

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

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Job	Truss	Truss Type	Qty	Ply	CLB-LOT #3 Roof
25-3405-B	T01	Roof Special Girder	1	2	I75647335

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

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ID:PLBuO7oU64FfubQJ5twPuczRqw5-UIR4PnDvDdXvZNBi_oY5vUdk5iiZBsTRAA0HbqynxJj

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-43, 4-6=-20
Concentrated Loads (lb)
Vert: 8=-318(B) 9=-318(B)

Eric Gilbert



August 15,2025

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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	CLB-LOT #3 Roof
25-3405-B	T01GE	GABLE	1	1	175647336

Riverside Roof Truss, LLC,

Danville, Va - 24541,

8.830 s Jul 24 2025 MiTek Industries, Inc. Thu Aug 14 12:10:41 2025 Page 1

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Scale = 1:23.5

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.10	Vert(LL) -0.00	7	n/r	120	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.03	Vert(CT) -0.00	7	n/r	120		
TCDL 10.0	Lumber DOL 1.15	WB 0.04	Horz(CT) -0.00	8	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-R						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 43 lb	FT = 20%

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

REACTIONS. All bearings 8-6-0.
(lb) - Max Horz 12=-90(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 12, 8, 11, 9
Max Grav All reactions 250 lb or less at joint(s) 12, 8, 10, 11, 9

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-11-0 to 2-3-0, Exterior(2N) 2-3-0 to 4-3-0, Corner(3R) 4-3-0 to 7-3-0, Exterior(2N) 7-3-0 to 9-5-0 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
 - 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) 12, 8, 11, 9.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 15,2025

Job	Truss	Truss Type	Qty	Ply	CLB-LOT #3 Roof
25-3405-B	T03	Piggyback Base	8	1	175647337

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

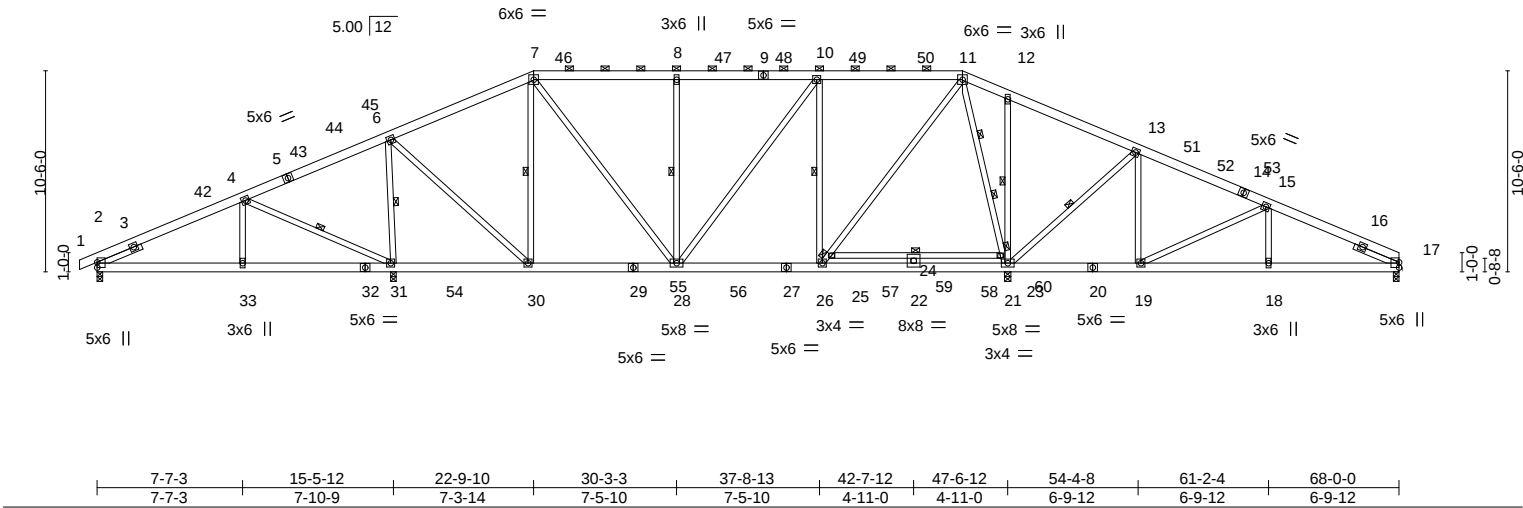
8.830 s Jul 24 2025 MiTek Industries, Inc. Thu Aug 14 12:10:42 2025 Page 1

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0-11-0 7-7-3 15-2-6 22-9-10 30-3-3 37-8-13 45-2-6 47-6-12 54-4-8 61-2-4 68-0-0

0-11-0 7-7-3 7-7-3 7-7-3 7-5-10 7-5-10 7-5-10 2-4-6 6-9-12 6-9-12 6-9-12

Scale = 1:120.3



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.42	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 16.5/15.0	Plate Grip DOL 1.15	BC 0.69	Vert(LL) -0.18 23-24 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.92	Vert(CT) -0.29 23-24 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.02 17 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 552 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 2-0-0 oc purlins (6-0-0 max.): 7-11.
BOT CHORD 2x6 SP No.2 *Except* 23-25: 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except: 6-0-0 oc bracing: 23-25
WEBS 2x4 SP No.3 *Except* 11-21: 2x4 SP No.2	WEBS 1 Row at midpt 4-31, 6-31, 7-30, 8-28, 10-26, 12-21, 13-21
SLIDER Left 2x4 SP No.3 2-6-0, Right 2x4 SP No.3 2-6-0	2 Rows at 1/3 pts 11-23

REACTIONS. All bearings 0-3-8 except (jt=length) 21=0-4-0.
(lb) - Max Horz 2=192(LC 15)
Max Uplift All uplift 100 lb or less at joint(s) 2, 31, 21, 17
Max Grav All reactions 250 lb or less at joint(s) except 2=599(LC 28), 31=2379(LC 28), 21=3210(LC 29), 17=673(LC 29)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-574/117, 4-6=0/367, 6-7=-784/196, 7-8=-1080/225, 8-10=-1080/225, 10-11=-939/188, 11-12=0/559, 12-13=0/635, 13-15=-259/117, 15-17=-892/131
BOT CHORD 2-33=-27/654, 31-33=-27/654, 30-31=-348/87, 28-30=0/757, 26-28=0/1005, 18-19=-56/812, 17-18=-56/812
WEBS 4-33=0/313, 4-31=-902/117, 6-31=-1692/207, 6-30=0/1311, 7-30=-593/88, 7-28=-25/674, 8-28=-574/165, 10-28=-83/295, 10-26=-779/208, 25-26=-75/1427, 11-25=-48/1600, 11-23=-1691/74, 21-23=-1838/44, 12-21=-425/149, 13-21=-949/154, 13-19=0/522, 15-19=-770/114, 15-18=0/289

- 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=68ft; eave=8ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 5-10-10, Interior(1) 5-10-10 to 22-9-10, Exterior(2R) 22-9-10 to 32-5-0, Interior(1) 32-5-0 to 45-2-6, Exterior(2R) 45-2-6 to 54-9-13, Interior(1) 54-9-13 to 68-0-0 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.
 - WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or

August 15,2025

Continuation page 2

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

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

Job	Truss	Truss Type	Qty	Ply	CLB-LOT #3 Roof
25-3405-B	T03	Piggyback Base	8	1	I75647337

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

8.830 s Jul 24 2025 MiTek Industries, Inc. Thu Aug 14 12:10:43 2025 Page 2
ID:PLBuO7oU64FubQJ5twPuczRqw5-ut6D1pFoWYvUQrwKfw5oX7FBpwcRO0aus8ExB9ynxJg

- NOTES-**
- 7) Provide adequate drainage to prevent water ponding.
 - 8) All plates are 5x5 MT20 unless otherwise indicated.
 - 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 31, 21, 17.
 - 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.

Eric A. Gilbert



August 15,2025

Job	Truss	Truss Type	Qty	Ply	CLB-LOT #3 Roof
25-3405-B	T03GE	Piggyback Base Supported Gable	1	1	175647338
Job Reference (optional)					

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s Jul 24 2025 MiTek Industries, Inc. Thu Aug 14 12:10:45 2025 Page 1
ID:PLBuO7oU64FubQJ5twPuczRqw5-rGEzSVH22A9Cf84jml7GcYLd4jRAS61AJSj1G2ynxJe
-0-11-0 22-9-10 45-2-6 68-0-0
0-11-0 22-9-10 22-4-13 22-9-10

Scale = 1:119.0

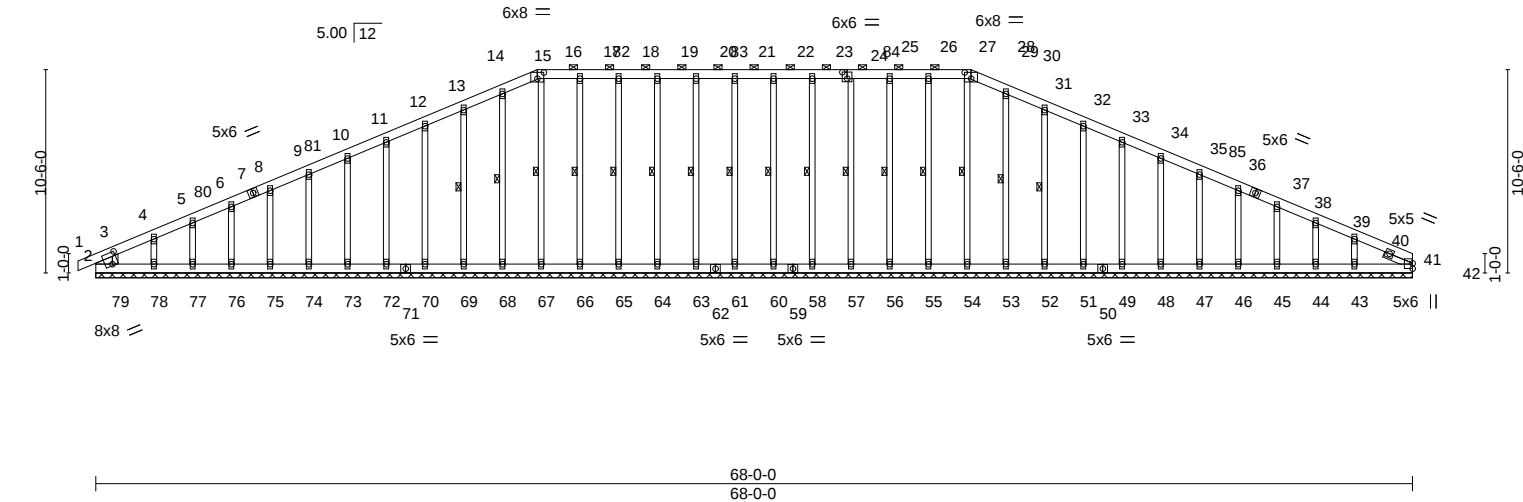


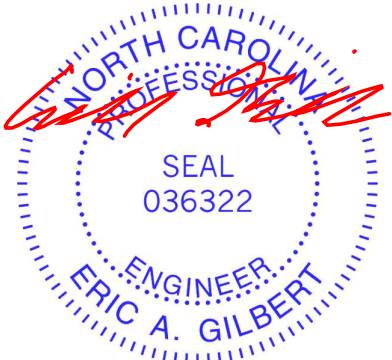
Plate Offsets (X,Y)-- [2:0-3-11,0-7-1], [15:0-4-0,0-3-13], [24:0-3-0,0-4-0], [29:0-4-0,0-3-13]					
LOADING (psf)		SPACING-	CSI.	DEFL.	PLATES
TCLL (roof)	20.0	2-0-0	TC 0.05	in (loc) l/defl L/d	MT20
Snow (Pf/Pg)	16.5/15.0	Plate Grip DOL 1.15	BC 0.04	Vert(LL) -0.00 1 n/r 120	GRIP 244/190
TCDL	10.0	Lumber DOL 1.15	WB 0.16	Vert(CT) -0.00 1 n/r 120	
BCLL	0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 42 n/a n/a	
BCDL	10.0	Code IRC2018/TPI2014			Weight: 657 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 2-0-0 oc purlins (6-0-0 max.): 15-29.
BOT CHORD	2x6 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS	2x4 SP No.3	WEBS	1 Row at midpt 21-61, 20-63, 19-64, 18-65, 17-66, 16-67, 14-68, 13-69, 22-60, 23-58, 25-57, 26-56, 27-55, 28-54, 30-53, 31-52
SLIDER	Left 2x4 SP No.3 0-11-5, Right 2x4 SP No.3 1-6-12		

REACTIONS. All bearings 68-0-0.
(lb) - Max Horz 2=-195(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 2, 61, 63, 64, 65, 66, 68, 69, 70, 72, 73, 74, 75, 76, 77, 78, 79, 60, 58, 57, 56, 55, 53, 52, 51, 49, 48, 47, 46, 45, 44, 43
Max Grav All reactions 250 lb or less at joint(s) 2, 61, 63, 64, 65, 66, 67, 68, 69, 70, 72, 73, 74, 75, 76, 77, 78, 79, 60, 58, 57, 56, 55, 54, 53, 52, 51, 49, 48, 47, 46, 45, 44, 43, 42

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 13-14=-105/273, 14-15=-117/300, 15-16=-111/294, 16-17=-111/294, 17-18=-111/294, 18-19=-111/294, 19-20=-111/294, 20-21=-111/294, 21-22=-111/294, 22-23=-111/294, 23-25=-111/294, 25-26=-111/294, 26-27=-111/294, 27-28=-111/294, 28-29=-111/294, 29-30=-117/301, 30-31=-105/273

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=68ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-11-0 to 5-10-10, Exterior(2N) 5-10-10 to 22-9-10, Corner(3R) 22-9-10 to 29-7-3, Exterior(2N) 29-7-3 to 45-2-6, Corner(3R) 45-2-6 to 52-0-0, Exterior(2N) 52-0-0 to 68-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
7) WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCE and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.



August 15,2025

Job	Truss	Truss Type	Qty	Ply	CLB-LOT #3 Roof
25-3405-B	T03GE	Piggyback Base Supported Gable	1	1	I75647338

Riverside Roof Truss, LLC,

Danville, Va - 24541,

8.830 s Jul 24 2025 MiTek Industries, Inc. Thu Aug 14 12:10:45 2025 Page 2
ID:PLBuO7oU64FubQJ5twPuczRqw5-rGEzSVH22A9Cf84jmL7GcYLd4jRAs61AJSj1G2ynxJe

NOTES-

- 9) All plates are 3x6 MT20 unless otherwise indicated.
10) Gable requires continuous bottom chord bearing.
11) Gable studs spaced at 2-0-0 oc.
12) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
13) * 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.
14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 61, 63, 64, 65, 66, 68, 69, 70, 72, 73, 74, 75, 76, 77, 78, 79, 80, 58, 57, 56, 55, 53, 52, 51, 49, 48, 47, 46, 45, 44, 43.
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.



August 15,2025

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

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	CLB-LOT #3 Roof
25-3405-B	T04	Piggyback Base	2	1	175647339

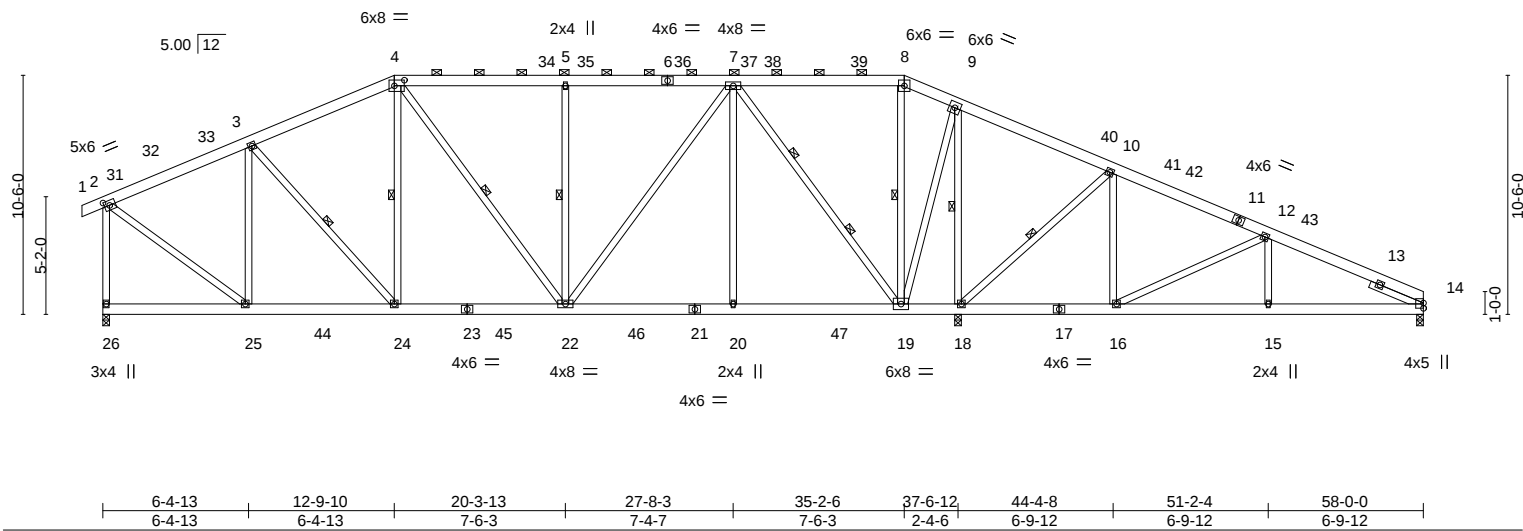
Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s Jul 24 2025 MiTek Industries, Inc. Thu Aug 14 12:10:46 2025 Page 1

ID:PLBuO7oU64FubQJ5twPuczRqw5-JSoLfqHgpTH3HlfvK3fV9ltcy7hdbMEKY6TboUynxJd

0-11-0 6-4-13 12-9-10 20-3-13 27-8-3 35-2-6 37-6-12 44-4-8 51-2-4 58-0-0

0-11-0 6-4-13 6-4-13 7-6-3 7-4-7 7-6-3 2-4-6 6-9-12 6-9-12 6-9-12

Scale = 1:101.2



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.81	Vert(LL)	-0.09 22-24 >999 240	MT20		244/190	
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.16 22-24 >999 180				
TCDL	10.0	Rep Stress Incr	YES	WB	0.99	Horz(CT)	0.04 14 n/a n/a				
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-MS							
BCDL	10.0										
								Weight: 499 lb		FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x6 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 5-9-8 oc purlins, except end verticals, and 2-0-0 oc purlins (5-6-13 max.): 4-8.
BOT CHORD	2x6 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
WEBS	2x4 SP No.3		6-0-0 oc bracing: 18-19.
SLIDER	Right 2x4 SP No.3 2-6-0	WEBS	1 Row at midpt 3-24, 4-24, 4-22, 5-22, 8-19, 9-18, 10-18
			2 Rows at 1/3 pts 7-19

REACTIONS.	
(size)	26=0-3-8, 18=0-3-8, 14=0-3-8
Max Horz	26=-261(LC 14)
Max Uplift	26=-116(LC 16), 18=-163(LC 16), 14=-34(LC 16)
Max Grav	26=1704(LC 28), 18=3021(LC 29), 14=724(LC 29)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-1391/210, 3-4=-1574/258, 4-5=-1561/266, 5-7=-1561/266, 9-10=0/527, 10-12=-382/94, 12-14=-995/112, 2-26=-1613/221
BOT CHORD	24-25=-29/1331, 22-24=0/1470, 20-22=0/1230, 19-20=0/1230, 18-19=-475/159, 16-18=0/282, 15-16=-39/907, 14-15=-39/907
WEBS	3-25=-648/162, 3-24=-25/415, 4-24=-128/266, 4-22=-101/340, 5-22=-568/159, 7-22=-54/735, 7-20=0/451, 7-19=-1750/138, 9-19=-68/1704, 9-18=-2054/180, 10-18=-997/122, 10-16=0/561, 12-16=-724/116, 12-15=0/265, 2-25=-117/1471

- 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=58ft; eave=7ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 4-10-10, Interior(1) 4-10-10 to 12-9-10, Exterior(2R) 12-9-10 to 21-0-0, Interior(1) 21-0-0 to 35-2-6, Exterior(2R) 35-2-6 to 43-4-13, Interior(1) 43-4-13 to 58-0-0 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.
 - All plates are 4x4 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14 except (jt=lb) 26=116, 18=163.

August 15,2025

Job	Truss	Truss Type	Qty	Ply	CLB-LOT #3 Roof
25-3405-B	T04	Piggyback Base	2	1	I75647339

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

8.830 s Jul 24 2025 MiTek Industries, Inc. Thu Aug 14 12:10:46 2025 Page 2
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- NOTES-**
- 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.

Eric A. Gilbert



August 15,2025

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Eden, NC 27023

Job	Truss	Truss Type	Qty	Ply	CLB-LOT #3 Roof
25-3405-B	T05	Piggyback Base	2	1	175647340
Job Reference (optional)					

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

8.830 s Jul 24 2025 MiTek Industries, Inc. Thu Aug 14 12:10:48 2025 Page 2
ID:PLBuO7oU64FfubQJ5twPuczRqw5-Frw64WJwK5XnWcplSUhzEAz?yxPc3G7d?QyitNynxJb

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

Eric Gilbert



August 15,2025

Riverside Roof Truss, LLC,		Danville, Va - 24541,		8.830 s Jul 24 2025 MiTek Industries, Inc. Thu Aug 14 12:10:49 2025 Page 1	
ID:PLBuO7oU64FfubQJ5twPuczRqw5-j1TUIsKZ5Of8mNU?BCCnOVCOkHqOkEmE4hFFpynxJa					
0-11-0	6-4-13	12-9-10	20-0-3	27-2-12	35-2-6
0-11-0	6-4-13	6-4-13	7-2-9	7-2-9	7-11-10
					42-9-10
					50-4-13
					7-7-3
					58-0-0
					58-11-0
					0-11-0

[illegible]

LUMBER-		BRACING-	
TOP CHORD	2x6 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 4-11-8 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-8.
BOT CHORD	2x6 SP No.2		
WEBS	2x4 SP No.3 *Except* 4-23,5-21,7-20,8-18: 2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 20-21,18-20.
	Right 2x4 SP No.3 2-6-0		
SLIDER		WEBS	1 Row at midpt 3-23, 4-21, 5-21, 8-18, 9-18, 11-17

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

TOP CHORD 2-3=-858/181, 3-4=-802/216, 4-5=-431/203, 5-7=-431/203, 7-8=-455/207, 8-9=-569/196,
9-11=-1461/198, 11-13=-2097/198, 2-25=-1037/192

BOT CHORD 23-24=0/844, 21-23=0/755, 20-21=-594/173, 18-20=-594/173, 17-18=-18/1258,
15-17=-90/1869, 13-15=-90/1869

WEBS 3-24=-361/144, 3-23=-261/92, 4-23=0/498, 4-21=-664/43, 5-21=-533/154,
7-21=-84/1358, 7-20=-2684/288, 7-18=-111/1547, 8-18=-258/78, 9-18=-1193/161,
9-17=0/631, 11-17=-679/102, 11-15=0/263, 2-24=-87/900

- 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=58ft; eave=7ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 4-10-10, Interior(1) 4-10-10 to 12-9-10, Exterior(2R) 12-9-10 to 21-0-0, Interior(1) 21-0-0 to 35-2-6, Exterior(2R) 35-2-6 to 43-4-13, Interior(1) 43-4-13 to 58-11-0 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 25 except (jt=lb) 20=144, 13=102.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and

Controlled standard ANSI/TPI 1.

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

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ENGINEERING BY
TRENCO
A MITek Affiliat

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	CLB-LOT #3 Roof
25-3405-B	T06	Piggyback Base	7	1	I75647341

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

8.830 s Jul 24 2025 MiTek Industries, Inc. Thu Aug 14 12:10:49 2025 Page 2
ID:PLBuO7oU64FfubQJ5twPuczRqw5-j1TUIsKZ5Of8mNU?BCCnOVC0KhQokEmE4hFPpynxJa

NOTES-

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

Eric A. Gilbert



August 15, 2025

Job	Truss	Truss Type	Qty	Ply	CLB-LOT #3 Roof
25-3405-B	T06GE	GABLE	1	1	175647342

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

8.830 s Jul 24 2025 MiTek Industries, Inc. Thu Aug 14 12:10:51 2025 Page 1
ID:PLBuO7oU64FfubQJ5twPuczRqw5-fQbEjYLPd0vMN3Xt7cEgspbaY8UJGpW3iOAMUhyxnJY

-0-11-0 12-9-10 35-2-6 58-0-0 58-11-0
0-11-0 12-9-10 22-4-13 22-9-10 0-11-0

Scale = 1:101.8

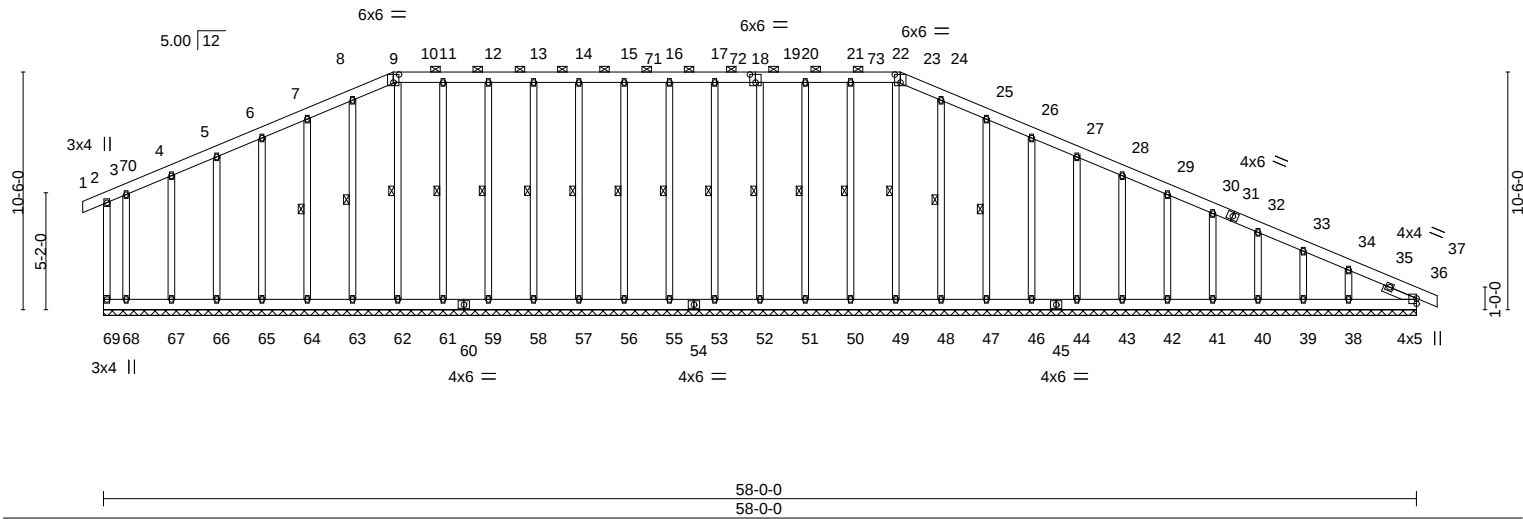


Plate Offsets (X,Y)-- [9:0-3-0,0-4-4], [18:0-3-0,0-4-4], [23:0-3-0,0-4-4]					
LOADING (psf)		SPACING-		CSI.	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.31
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.05
TCDL	10.0	Rep Stress Incr	YES	WB	0.16
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S	
BCDL	10.0				
DEF.					
Vert(LL)	0.00	in (loc)	36	l/defl	n/r
Vert(CT)	0.00	in (loc)	36	l/d	120
Horz(CT)	0.01	in (loc)	36	n/a	n/a
PLATES					
MT20					
GRIP					
244/190					
Weight: 600 lb					FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x6 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 9-23.
BOT CHORD	2x6 SP No.2	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	2x4 SP No.3	WEBS	1 Row at midpt
OTHERS	2x4 SP No.3		19-52, 17-53, 16-55, 15-56, 14-57, 13-58, 12-59, 11-61, 10-62, 8-63, 7-64, 20-51, 21-50, 22-49, 24-48, 25-47
SLIDER	Right 2x4 SP No.3 1-6-12		

REACTIONS.	All bearings 58-0-0.
(lb) - Max Horz	69=-264(LC 14)
Max Uplift	All uplift 100 lb or less at joint(s) 69, 52, 53, 55, 56, 57, 58, 59, 61, 63, 64, 65, 66, 67, 68, 51, 50, 48, 47, 46, 44, 43, 42, 41, 40, 39, 36, 38
Max Grav	All reactions 250 lb or less at joint(s) 69, 52, 53, 55, 56, 57, 58, 59, 61, 62, 63, 64, 65, 66, 67, 68, 51, 50, 49, 48, 47, 46, 44, 43, 42, 41, 40, 39, 36 except 38=254(LC 29)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	6-7=-141/282, 7-8=-155/321, 8-9=-163/346, 9-10=-151/338, 10-11=-151/338, 11-12=-151/338, 12-13=-151/338, 13-14=-151/338, 14-15=-151/338, 15-16=-151/338, 16-17=-151/338, 17-19=-151/338, 19-20=-151/338, 20-21=-151/338, 21-22=-151/338, 22-23=-151/338, 23-24=-163/347, 24-25=-155/320, 25-26=-142/282

- 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=58ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-11-0 to 5-0-0, Exterior(2N) 5-0-0 to 12-9-10, Corner(3R) 12-9-10 to 18-7-3, Exterior(2N) 18-7-3 to 35-2-6, Corner(3R) 35-2-6 to 41-0-0, Exterior(2N) 41-0-0 to 58-11-0 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

Continued on page 2

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)

August 15, 2025

ENGINEERING BY
TRENCO
A MiTek Affiliate

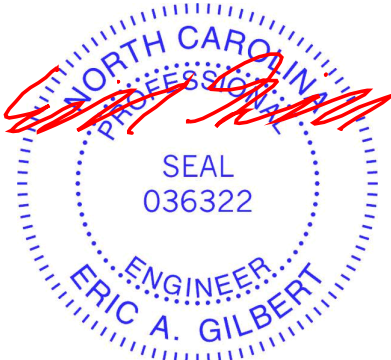
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	CLB-LOT #3 Roof
25-3405-B	T06GE	GABLE	1	1	I75647342

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

8.830 s Jul 24 2025 MiTek Industries, Inc. Thu Aug 14 12:10:51 2025 Page 2
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- NOTES-**
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 69, 52, 53, 55, 56, 57, 58, 59, 61, 63, 64, 65, 66, 67, 68, 51, 50, 48, 47, 46, 44, 43, 42, 41, 40, 39, 36, 38.
- 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.



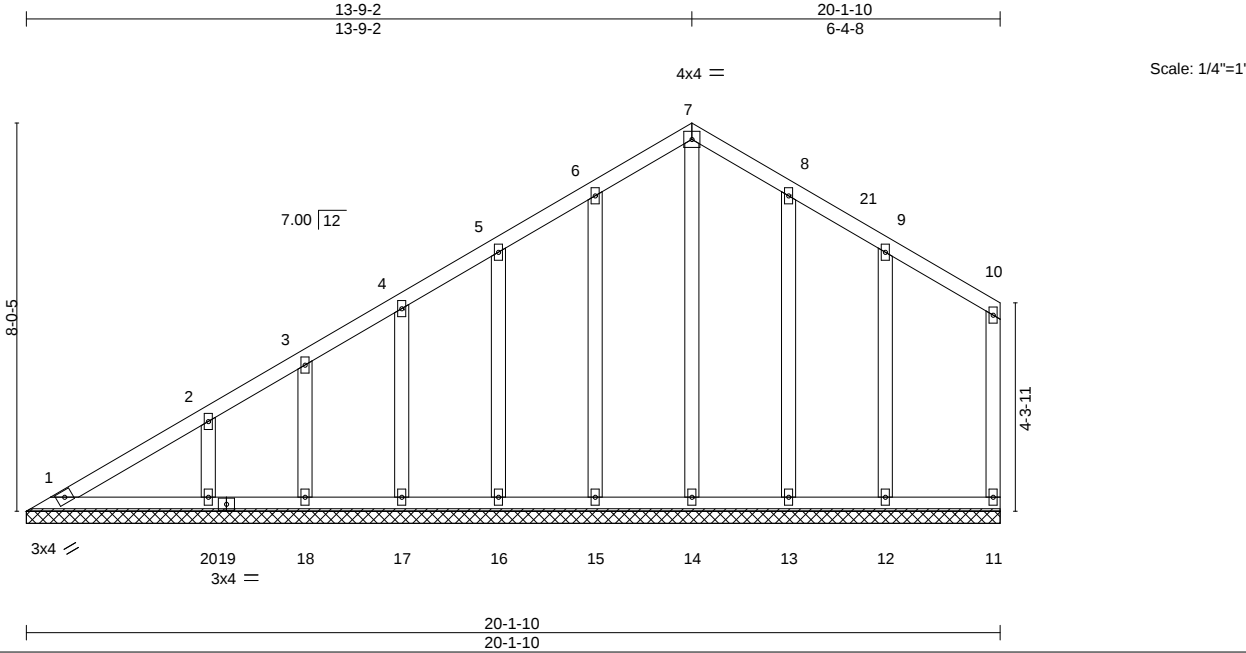
August 15,2025

Job	Truss	Truss Type	Qty	Ply	CLB-LOT #3 Roof
25-3405-B	V01	GABLE	1	1	175647343

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

8.830 s Jul 24 2025 MiTek Industries, Inc. Thu Aug 14 12:10:52 2025 Page 1

ID:PLBuO7oU64FfubQJ5twPuczRqw5-7c9dwuMROJ1C?D63hJlvP07I9YpC?FtCw2wv08ynxJX



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	GRIP
TCLL (roof)	20.0		2-0-0	TC	0.26	in	(loc)	l/defl	L/d	MT20	244/190
Snow (Pl/Pg)	11.6/15.0		Plate Grip DOL	BC	0.08	n/a	-	n/a	999		
TCDL	10.0		Lumber DOL	WB	0.21	n/a	-	n/a	999		
BCLL	0.0 *		Rep Stress Incr	Matrix-S		0.00	11	n/a	n/a		
BCDL	10.0		Code IRC2018/TPI2014							Weight: 127 lb	FT = 20%

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

REACTIONS. All bearings 20-1-10.
 (lb) - Max Horz 1=215(LC 15)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 11, 14, 15, 16, 17, 18, 20, 13, 12
 Max Grav All reactions 250 lb or less at joint(s) 1, 11, 14, 15, 16, 17, 18, 13, 12 except 20=264(LC 27)

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) 0-6-8 to 3-9-2, Exterior(2N) 3-9-2 to 13-9-2, Corner(3R) 13-9-2 to 16-9-2, Exterior(2N) 16-9-2 to 19-11-14 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
 - 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, 14, 15, 16, 17, 18, 20, 13, 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.



August 15,2025

Job	Truss	Truss Type	Qty	Ply	CLB-LOT #3 Roof
25-3405-B	V02	Valley	1	1	175647344

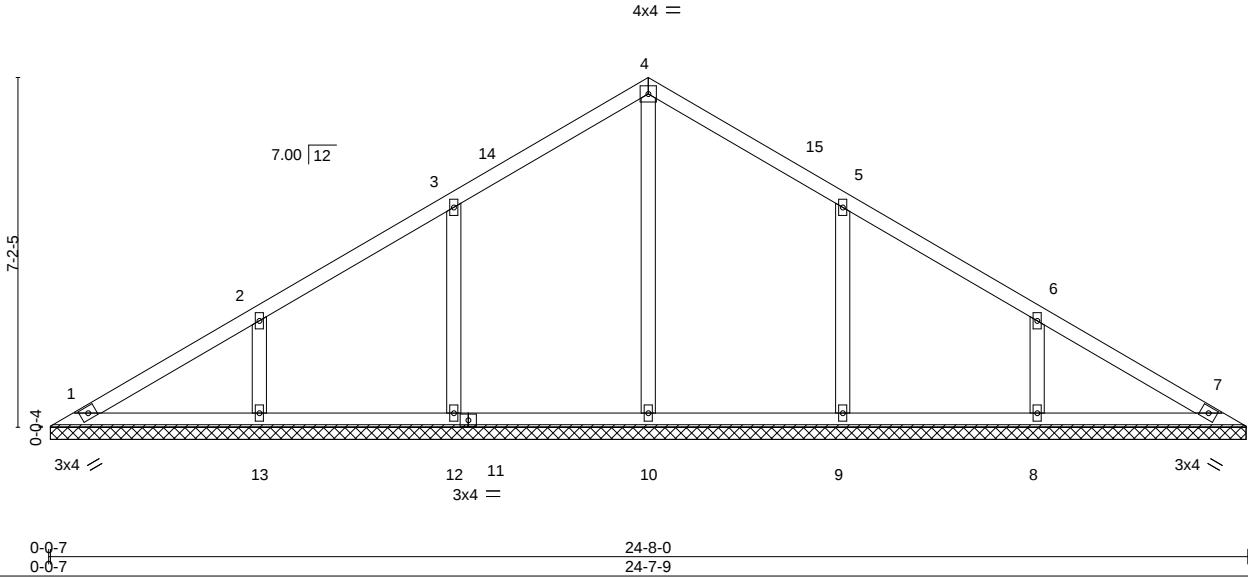
Riverside Roof Truss, LLC, Danville, Va - 24541,

8.830 s Jul 24 2025 MiTek Industries, Inc. Thu Aug 14 12:10:52 2025 Page 1

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Scale = 1:47.4



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 0.18	Vert(CT)	n/a	-	n/a	999		
TCDL 10.0	Lumber DOL 1.15	WB 0.17	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: 106 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 24-7-2.
(lb) - Max Horz 1=-137(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 12, 13, 9, 8
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=386(LC 27), 12=418(LC 27), 13=410(LC 27), 9=418(LC 28), 8=411(LC 28)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-12=-256/122, 2-13=-256/110, 5-9=-256/122, 6-8=-256/110

- 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=25ft; 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 12-4-0, Exterior(2R) 12-4-0 to 15-4-0, Interior(1) 15-4-0 to 24-1-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 13, 9, 8.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 15, 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)

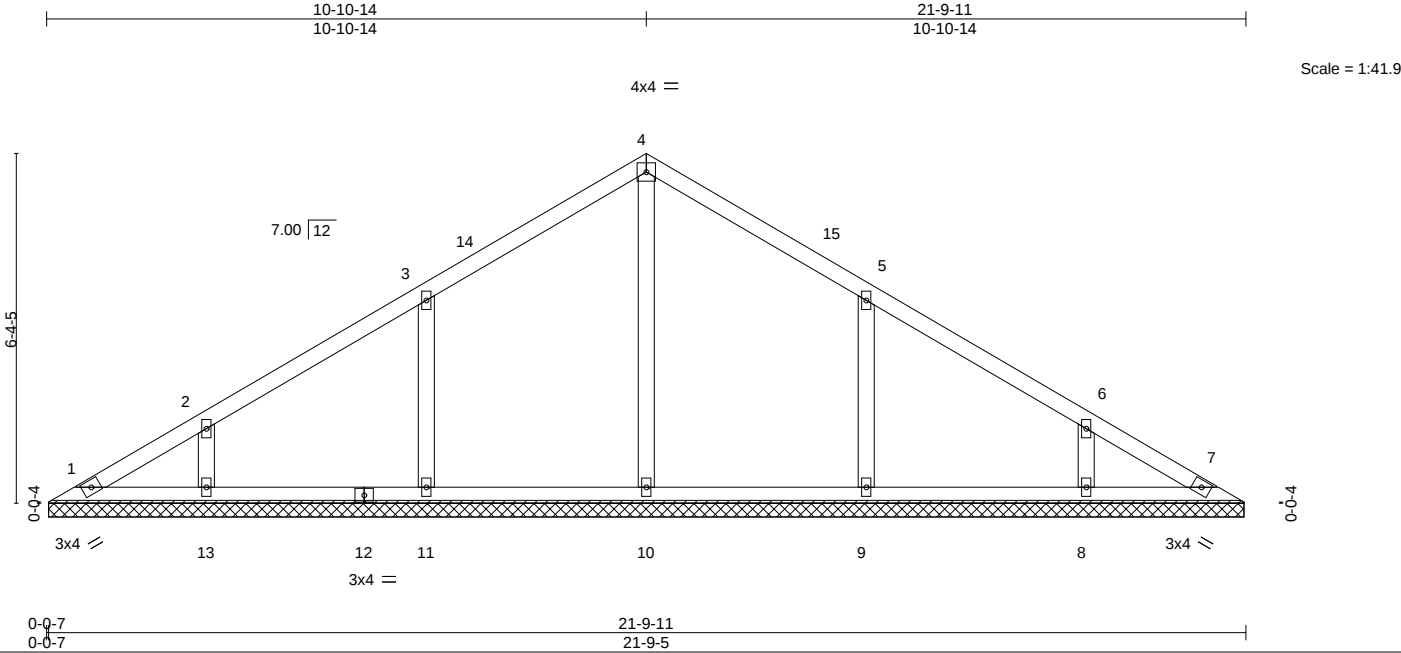
ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	CLB-LOT #3 Roof
25-3405-B	V03	Valley	1	1	175647345

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

8.830 s Jul 24 2025 MiTek Industries, Inc. Thu Aug 14 12:10:53 2025 Page 1
ID:PLBuO7oU64FubQJ5twPuczRqw5-cpj?7EN39d93cNhFE1H8xEgXly8xkjPM9ifTYaynxJW



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 0.17	Vert(CT)	n/a	-	n/a	999		
TCDL 10.0	Lumber DOL 1.15	WB 0.13	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: 90 lb	FT = 20%

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

REACTIONS. All bearings 21-8-14.
 (lb) - Max Horz 1=-121(LC 14)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 11, 13, 9, 8
 Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=375(LC 27), 11=438(LC 27), 13=329(LC 27), 9=438(LC 28), 8=329(LC 28)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 3-11=-267/127, 5-9=-267/127

- 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 10-10-14, Exterior(2R) 10-10-14 to 13-10-14, Interior(1) 13-10-14 to 21-3-3 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - 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) 1, 11, 13, 9, 8.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



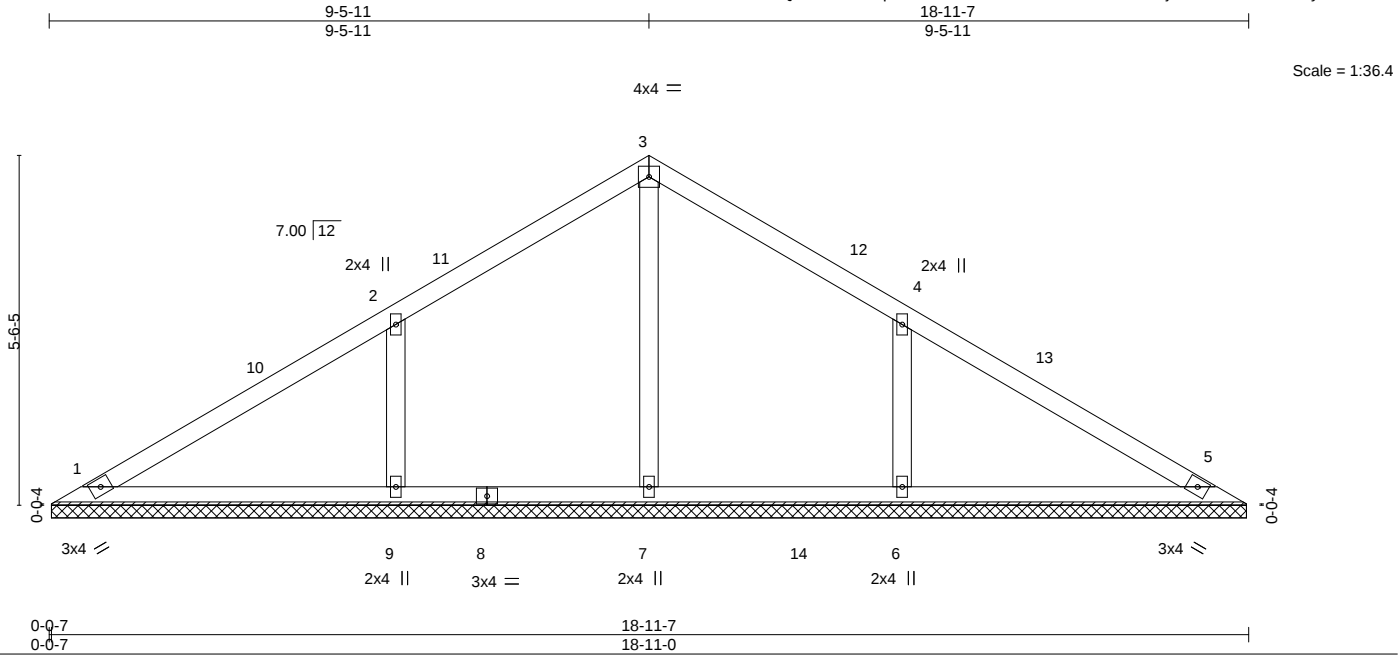
August 15,2025

Job	Truss	Truss Type	Qty	Ply	CLB-LOT #3 Roof
25-3405-B	V04	Valley	1	1	175647346

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

8.830 s Jul 24 2025 MiTek Industries, Inc. Thu Aug 14 12:10:54 2025 Page 1

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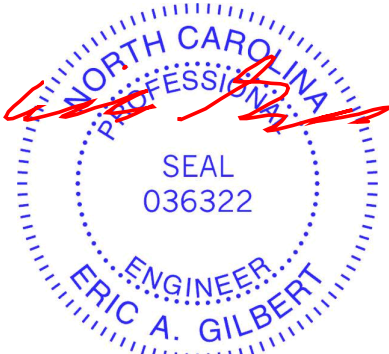
LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.32	Vert(LL)	n/a	-	n/a	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.21	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Lumber DOL 1.15	WB 0.08	Horz(CT)	0.00	5	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S					Weight: 74 lb	FT = 20%
BCDL 10.0	Code IRC2018/TPI2014							

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 18-10-9.
(lb) - Max Horz 1=-104(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=313(LC 27), 9=529(LC 27), 6=527(LC 28)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-9=-325/147, 4-6=-325/147

- 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 9-5-11, Exterior(2R) 9-5-11 to 12-5-11, Interior(1) 12-5-11 to 18-4-15 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, 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.



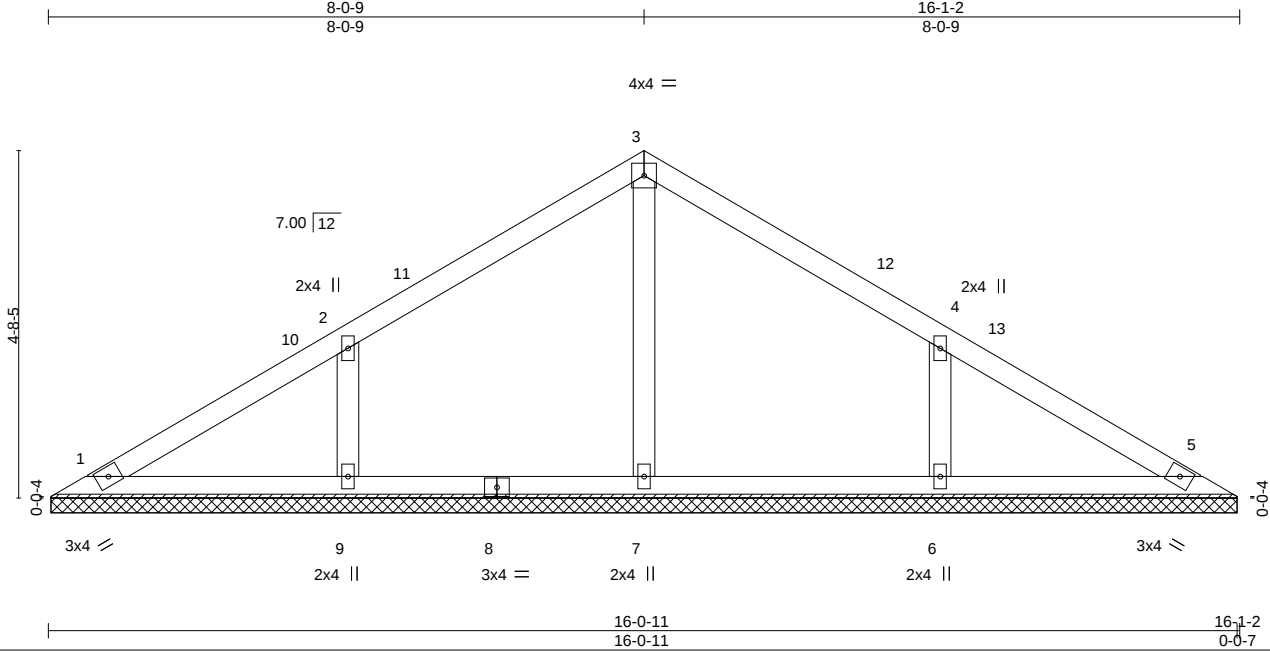
August 15,2025

Job	Truss	Truss Type	Qty	Ply	CLB-LOT #3 Roof
25-3405-B	V05	Valley	1	1	175647347

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

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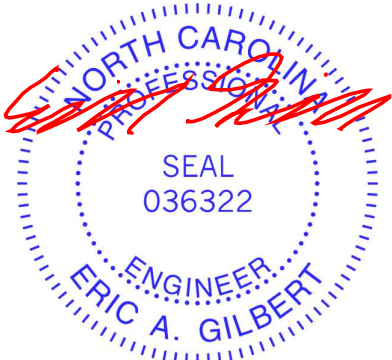
LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	L/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2'-0"-0"	TC 0.21	Vert(LL)	n/a	-	n/a	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Lumber DOL 1.15	BC 0.11	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Rep Stress Incr YES	WB 0.07	Horz(CT)	0.00	5	n/a		
BCLL 0.0 *	Code IRC2018/TPI2014	Matrix-S						
BCDL 10.0							Weight: 61 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6'-0"-0" oc purlins.
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'-0"-5.
(lb) - Max Horz 1=-87(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=259(LC 2), 9=356(LC 33), 6=356(LC 34)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-9=-267/134, 4-6=-267/134

- 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 8-0-9, Exterior(2R) 8-0-9 to 11-0-9, Interior(1) 11-0-9 to 15-6-10 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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.

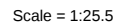


August 15,2025

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

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

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s | July 24 2025 MiTek Industries, Inc. Thu Aug 14 12:10:55 2025 Page 1
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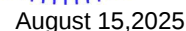
LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS	2x4 SP No.3		

REACTIONS. All bearings 13-2-0.
(lb) - Max Horz 1=-71(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 8, 6
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=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.

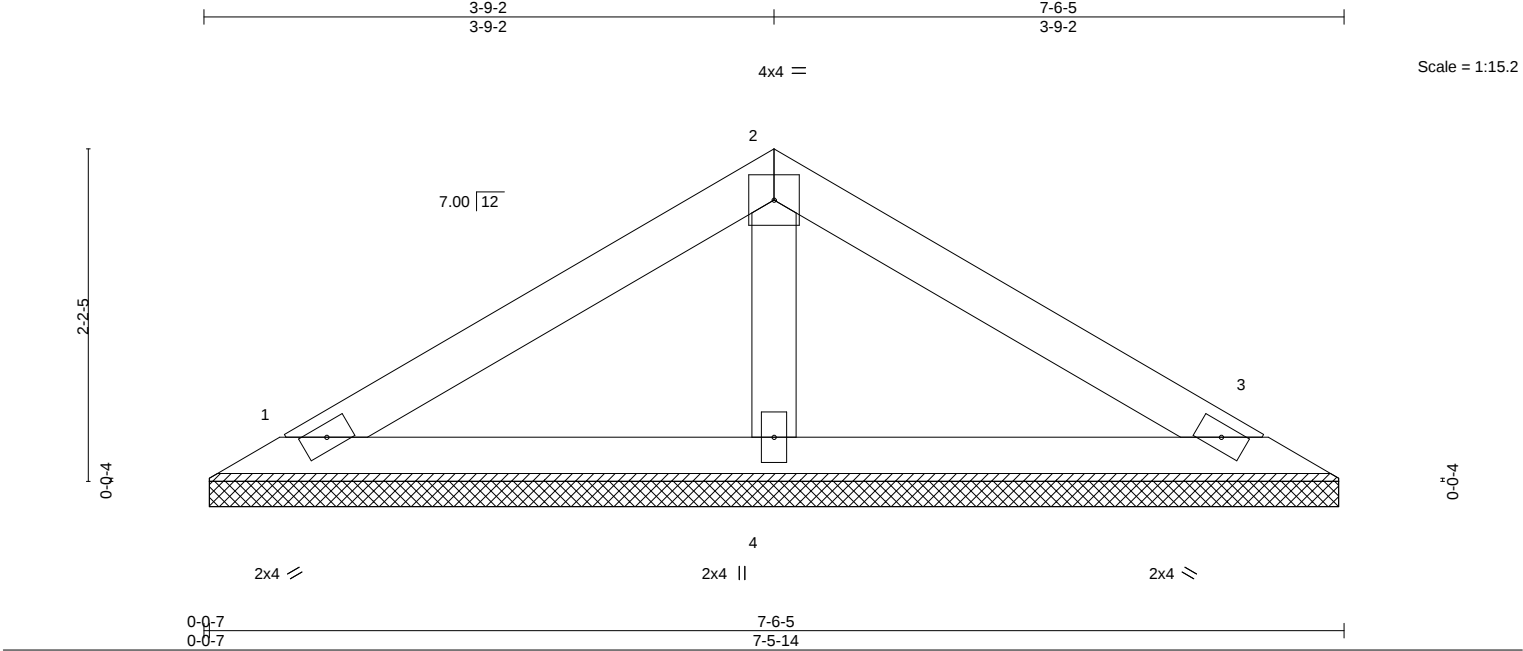
NOTES-

- 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 6-7-7, Exterior(2R) 6-7-7 to 9-7-7, Interior(1) 9-7-7 to 12-8-6 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCDL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Job	Truss	Truss Type	Qty	Ply	CLB-LOT #3 Roof
25-3405-B	V08	Valley	1	1	175647350

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s Jul 24 2025 MiTek Industries, Inc. Thu Aug 14 12:10:56 2025 Page 1
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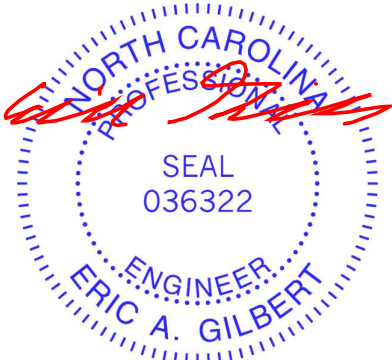
LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.21	Vert(LL)	n/a	-	n/a	MT20	244/190
Snow (Pl/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.10	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Lumber DOL 1.15	WB 0.03	Horz(CT)	0.00	3	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 25 lb	FT = 20%

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

REACTIONS. (size) 1=7-5-7, 3=7-5-7, 4=7-5-7
Max Horz 1=38(LC 15)
Max Uplift 1=-22(LC 16), 3=-22(LC 16)
Max Grav 1=138(LC 20), 3=138(LC 21), 4=246(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.



August 15,2025

Job	Truss	Truss Type	Qty	Ply	CLB-LOT #3 Roof
25-3405-B	V09	Valley	1	1	175647351

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

8.830 s Jul 24 2025 MiTek Industries, Inc. Thu Aug 14 12:10:56 2025 Page 1
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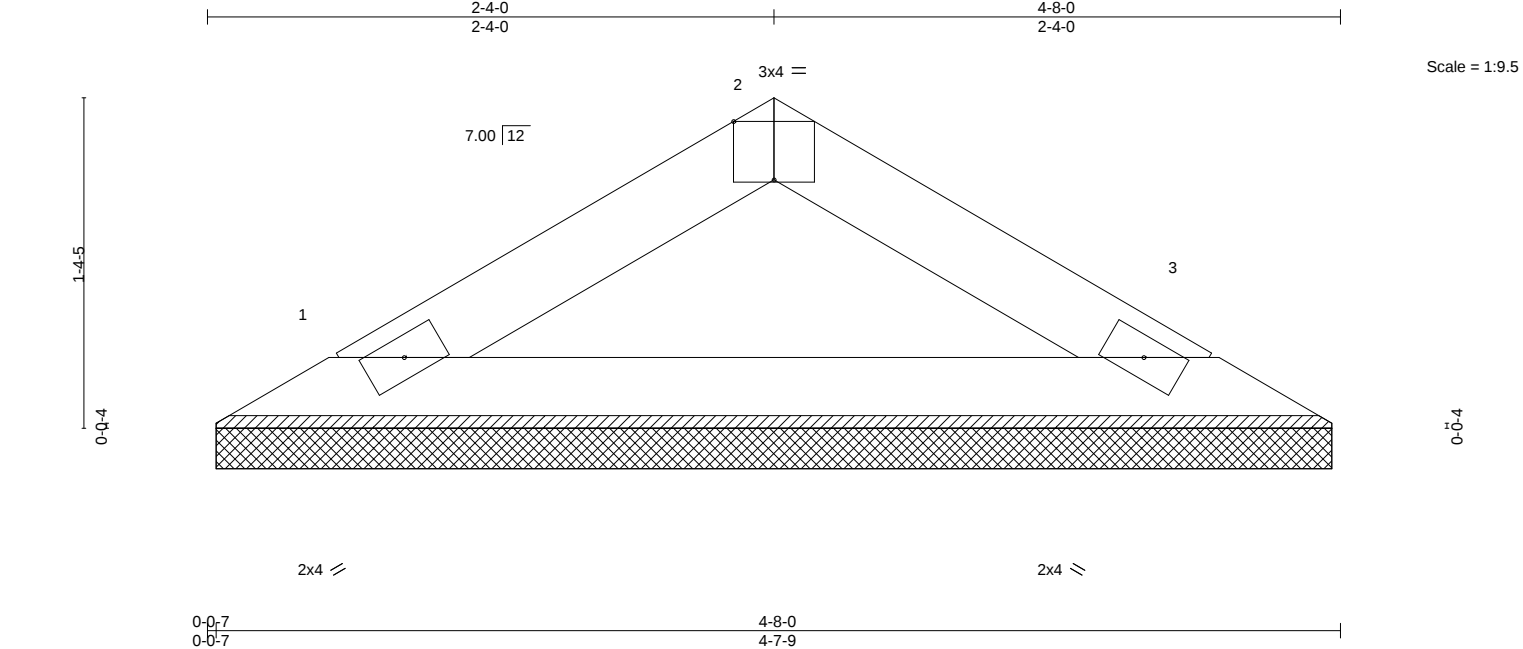


Plate Offsets (X,Y)-- [2:0-2.0,Edge]		4-8-0 4-7-9	
LOADING (psf)		SPACING-	
TCLL (roof)	20.0	Plate Grip DOL	1.15
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15
TCDL	10.0	Rep Stress Incr	YES
BCLL	0.0 *	Code	IRC2018/TPI2014
BCDL	10.0	CSL.	
		TC	0.06
		BC	0.16
		WB	0.00
		Matrix-P	
		DEFL.	
		Vert(LL)	n/a
		Vert(CT)	n/a
		Horz(CT)	0.00
		PLATES	
		MT20	
		GRIP	
		244/190	
		Weight: 13 lb	
		FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 4-8-0 oc purlins.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-7-2, 3=4-7-2
Max Horz 1=21(LC 15)
Max Uplift 1=-9(LC 16), 3=-9(LC 16)
Max Grav 1=143(LC 2), 3=143(LC 2)

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

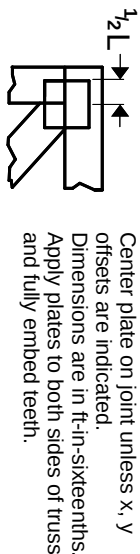
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) zone; cantilever left and right exposed ; 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.



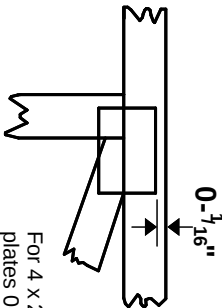
August 15,2025

Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- ¹/₁₆" from outside edge of truss.

—
This symbol indicates the required direction of slots in connector plates.

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

PLATE SIZE

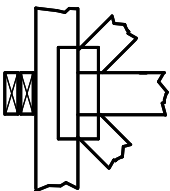
4 X 4
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

BEARING



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

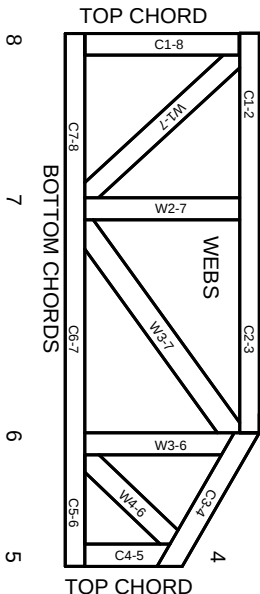
Industry Standards:

ANSI/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



1 2 3 Joint ID typ.



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: MIL-7473 rev. 1/2/2023