

RE: 25-5549-A
RVF-LOT #45 Roof

Trenco
818 Soundside Rd
Edenton, NC 27932

Site Information:

Customer: Project Name: 25-5549-A
Lot/Block: Model:
Address: Subdivision:
City: State:

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

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.7
Wind Code: ASCE 7-16 Wind Speed: 130 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 35 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I73191977	CJ01	5/5/2025	21	I73191997	T05S	5/5/2025
2	I73191978	HG01	5/5/2025	22	I73191998	T06	5/5/2025
3	I73191979	J01	5/5/2025	23	I73191999	T07	5/5/2025
4	I73191980	M01	5/5/2025	24	I73192000	T08	5/5/2025
5	I73191981	M02	5/5/2025	25	I73192001	T08GE	5/5/2025
6	I73191982	M03	5/5/2025	26	I73192002	V01	5/5/2025
7	I73191983	PB01	5/5/2025	27	I73192003	V02	5/5/2025
8	I73191984	PB01GE	5/5/2025	28	I73192004	V03	5/5/2025
9	I73191985	PB02	5/5/2025	29	I73192005	V04	5/5/2025
10	I73191986	T01GE	5/5/2025	30	I73192006	V05	5/5/2025
11	I73191987	T02G	5/5/2025	31	I73192007	V06	5/5/2025
12	I73191988	T02SGE	5/5/2025	32	I73192008	V07	5/5/2025
13	I73191989	T03	5/5/2025	33	I73192009	V08	5/5/2025
14	I73191990	T03A	5/5/2025	34	I73192010	V09	5/5/2025
15	I73191991	T03GE	5/5/2025	35	I73192011	V10	5/5/2025
16	I73191992	T04	5/5/2025				
17	I73191993	T04A	5/5/2025				
18	I73191994	T05	5/5/2025				
19	I73191995	T05A	5/5/2025				
20	I73191996	T05GE	5/5/2025				

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

Truss Design Engineer's Name: Gilbert, Eric

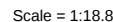
My license renewal date for the state of North Carolina is December 31, 2025.

North Carolina COA: C-0844

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



Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Feb 19 2025 MiTek Industries, Inc. Fri May 2 08:12:30 2025 Page 1
ID:tdHS5IWyLNg?jaR9E1eBtqlyl9 -M9WiY5OHHFUKwzllpMXOs?Hf?zg6KJ3 lbPs_zKbf?

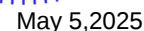


LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 5-7-2 oc purlins, except end verticals.
BOT CHORD	2x6 SP No.2		
WEBS	2x4 SP No.3	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-254/89

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 6.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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



Job	Truss	Truss Type	Qty	Ply	RVF-LOT #45 Roof
25-5549-A	HG01	HIP GIRDER	1	2	173191978

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Feb 19 2025 MiTek Industries, Inc. Fri May 2 08:12:31 2025 Page 1
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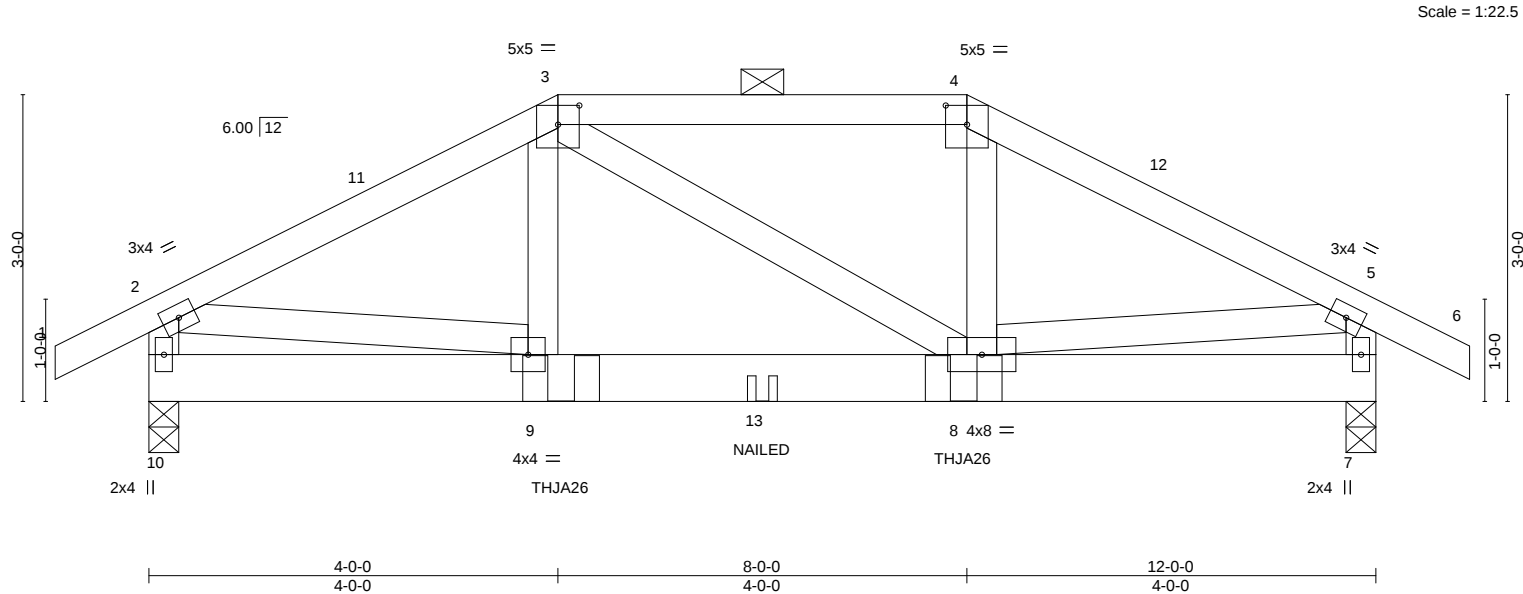


Plate Offsets (X,Y)-- [3:0-2-8,0-2-4], [4:0-2-8,0-2-4]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	-0.01 8-9 >999 240	MT20	GRIP 244/190
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.02 8-9 >999 180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.19	Horz(CT)	0.00 7 n/a n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-MS					
BCDL	10.0							Weight: 151 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD	2x6 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3		

REACTIONS. (size) 10=0-3-8, 7=0-3-8
Max Horz 10=63(LC 57)
Max Uplift 10=-174(LC 12), 7=-172(LC 12)
Max Grav 10=953(LC 35), 7=945(LC 35)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1205/233, 3-4=-1027/223, 4-5=-1199/231, 2-10=-909/192, 5-7=-899/190
BOT CHORD 8-9=-172/1014
WEBS 3-9=-59/335, 4-8=-67/363, 2-9=-161/921, 5-8=-161/912

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=-174, 7=-172.
 - 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.



Job	Truss	Truss Type	Qty	Ply	RVF-LOT #45 Roof
25-5549-A	HG01	HIP GIRDER	1	2	I73191978

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

8.730 s Feb 19 2025 MiTek Industries, Inc. Fri May 2 08:12:31 2025 Page 2
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- NOTES-**
- 14) Use Simpson Strong-Tie THJA26 (THJA26 on 2 ply, Right Hand Hip) or equivalent at 4-0-6 from the left end to connect truss(es) to back face of bottom chord.
 - 15) Use Simpson Strong-Tie THJA26 (THJA26 on 2 ply, Left Hand Hip) or equivalent at 7-11-10 from the left end to connect truss(es) to back face of bottom chord.
 - 16) Fill all nail holes where hanger is in contact with lumber.
 - 17) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-2=-43, 2-3=-43, 3-4=-53, 4-5=-43, 5-6=-43, 7-10=-20

Concentrated Loads (lb)

Vert: 9=-339(B) 8=-339(B) 13=-135(B)

 **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 #45 Roof
25-5549-A	J01	JACK-OPEN	4	1	173191979

Riverside Roof Truss, LLC,

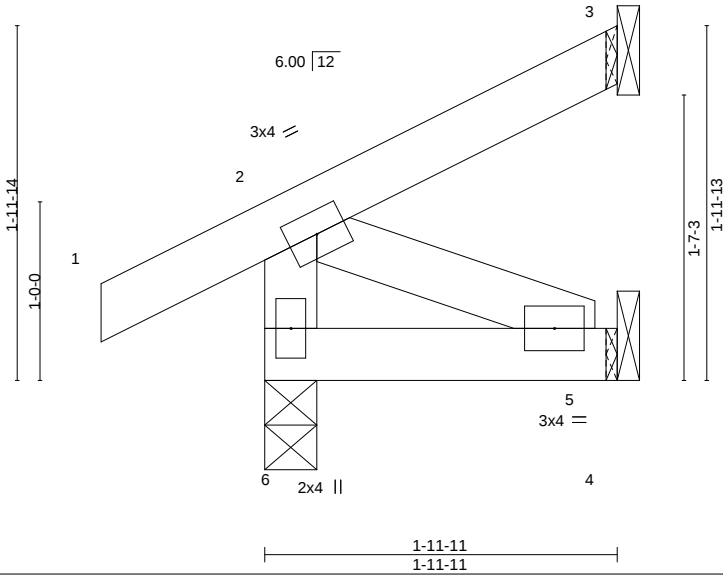
Danville, Va - 24541,

8.730 s Feb 19 2025 MiTek Industries, Inc. Fri May 2 08:12:31 2025 Page 1

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Scale = 1:12.9



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	-0.00	6	>999	240
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	5-6	>999	180
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	-0.00	3	n/a	n/a
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-MP						
BCDL	10.0								Weight: 11 lb	FT = 20%

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

REACTIONS. (size) 6=0-3-8, 3=Mechanical, 4=Mechanical
 Max Horz 6=67(LC 16)
 Max Uplift 6=-20(LC 16), 3=-10(LC 13), 4=-14(LC 16)
 Max Grav 6=159(LC 21), 3=37(LC 21), 4=36(LC 7)

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

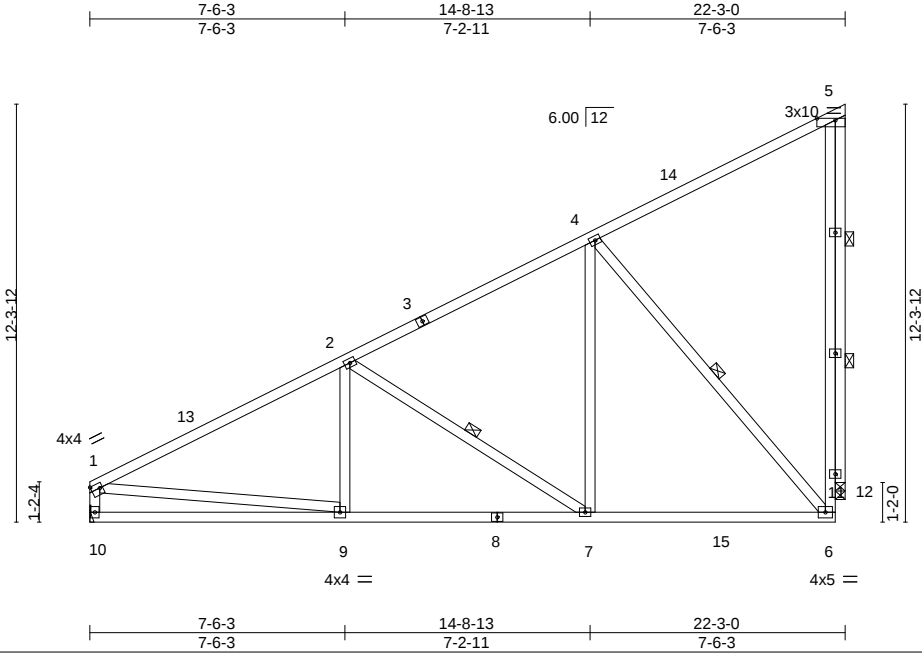
- NOTES-**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 7) Refer to girder(s) for truss to truss connections.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 3, 4.
 - 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 5,2025

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #45 Roof
25-5549-A	M01	Monopitch	2	1	173191980

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Feb 19 2025 MiTek Industries, Inc. Fri May 2 08:12:32 2025 Page 1
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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-		CSI.		DEFL.		PLATES	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	-0.13 6-7 >999	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.21 6-7 >999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.79	Horz(CT)	-0.02 12 n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-MS					
BCDL	10.0							Weight: 161 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 3-11-8 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 9-1-8 oc bracing.
WEBS	2x4 SP No.3	WEBS	1 Row at midpt 2-7, 4-6
OTHERS	2x4 SP No.3		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) 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
 - 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) All plates are 3x4 MT20 unless otherwise indicated.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 7) Refer to girder(s) for truss to truss connections.
 - 8) 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.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=143.
 - 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.



May 5,2025

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ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #45 Roof
25-5549-A	M02	Monopitch	3	1	173191981

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Feb 19 2025 MiTek Industries, Inc. Fri May 2 08:12:32 2025 Page 1
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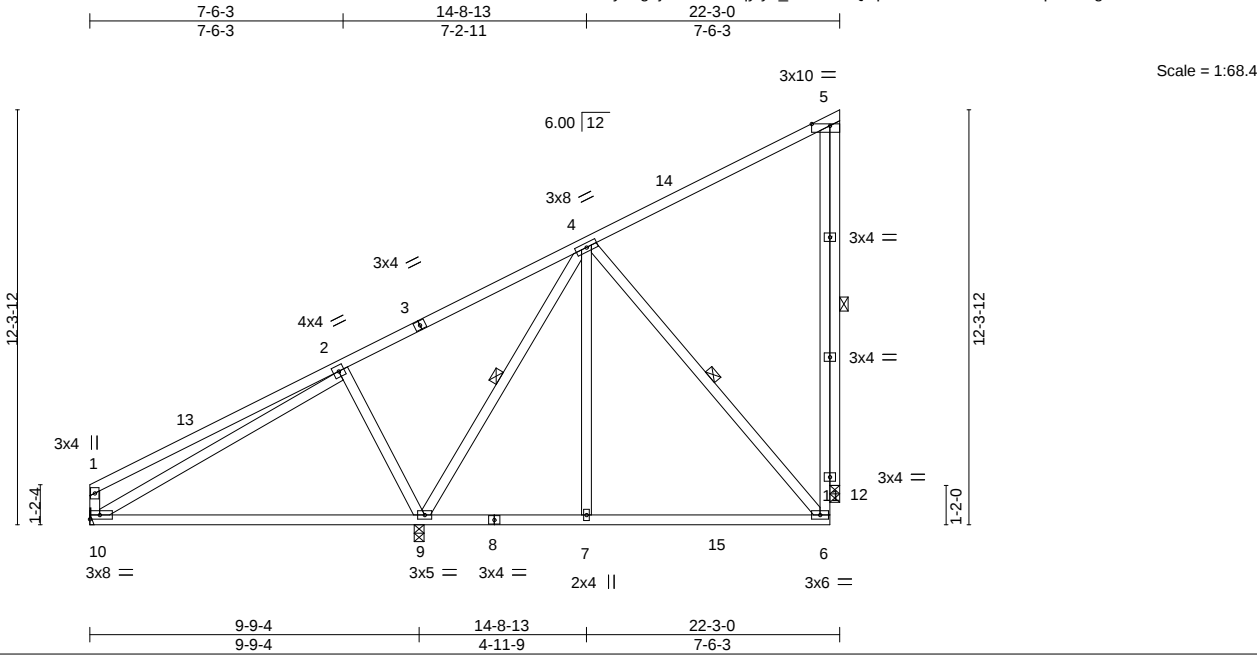


Plate Offsets (X,Y)-- [5:0-6:8,Edge]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.23 9-10 >507 240	MT20	GRIP 244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.46 9-10 >254 180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.48	Horz(CT)	-0.04 12 n/a n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-MS					
BCDL	10.0							Weight: 165 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	WEBS	1 Row at midpt 4-9, 4-6, 5-12
OTHERS	2x4 SP No.3		

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-**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) 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
 - 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 6) Refer to girder(s) for truss to truss connections.
 - 7) 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.
 - 8) 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.
 - 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.



May 5, 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	RVF-LOT #45 Roof
25-5549-A	M03	MONOPITCH	3	1	173191982

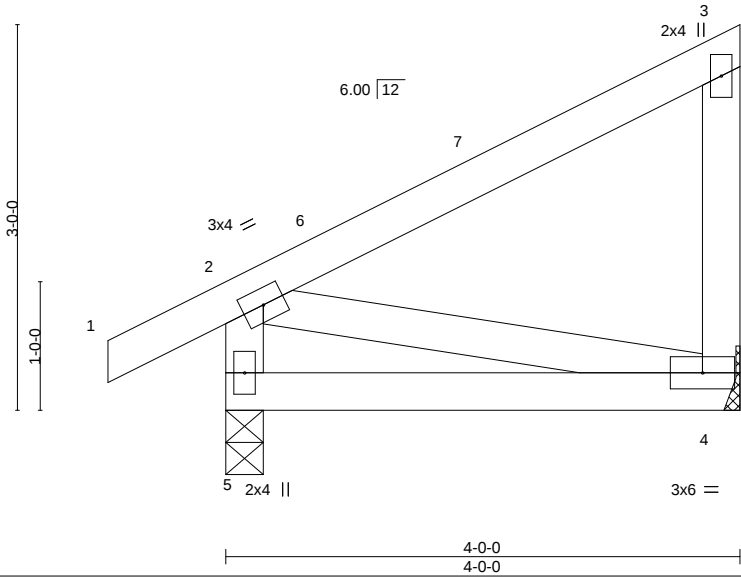
Riverside Roof Truss, LLC, Danville, Va - 24541,

8,730 s Feb 19 2025 MiTek Industries, Inc. Fri May 2 08:12:33 2025 Page 1

ID:tdHS5iWYLnG?jaR9E1eBtqly9_-mkBrB6R9aAsvnRTtdyvE0VdtsD_CJhXVhjp32JzKbey



Scale = 1:17.9



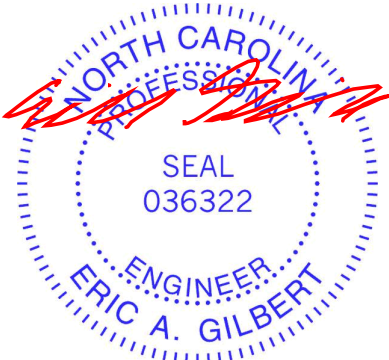
LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2'-0-0	TC 0.26	Vert(LL)	-0.01	4-5	>999	240	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.16	Vert(CT)	-0.02	4-5	>999	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.06	Horz(CT)	-0.00	4	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MP						Weight: 24 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 4-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	

REACTIONS. (size) 5=0-3-8, 4=Mechanical
Max Horz 5=97(LC 13)
Max Uplift 5=-39(LC 16), 4=-26(LC 13)
Max Grav 5=221(LC 2), 4=155(LC 21)

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

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 3-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 7) Refer to girder(s) for truss to truss connections.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 4.
 - 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 5,2025

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

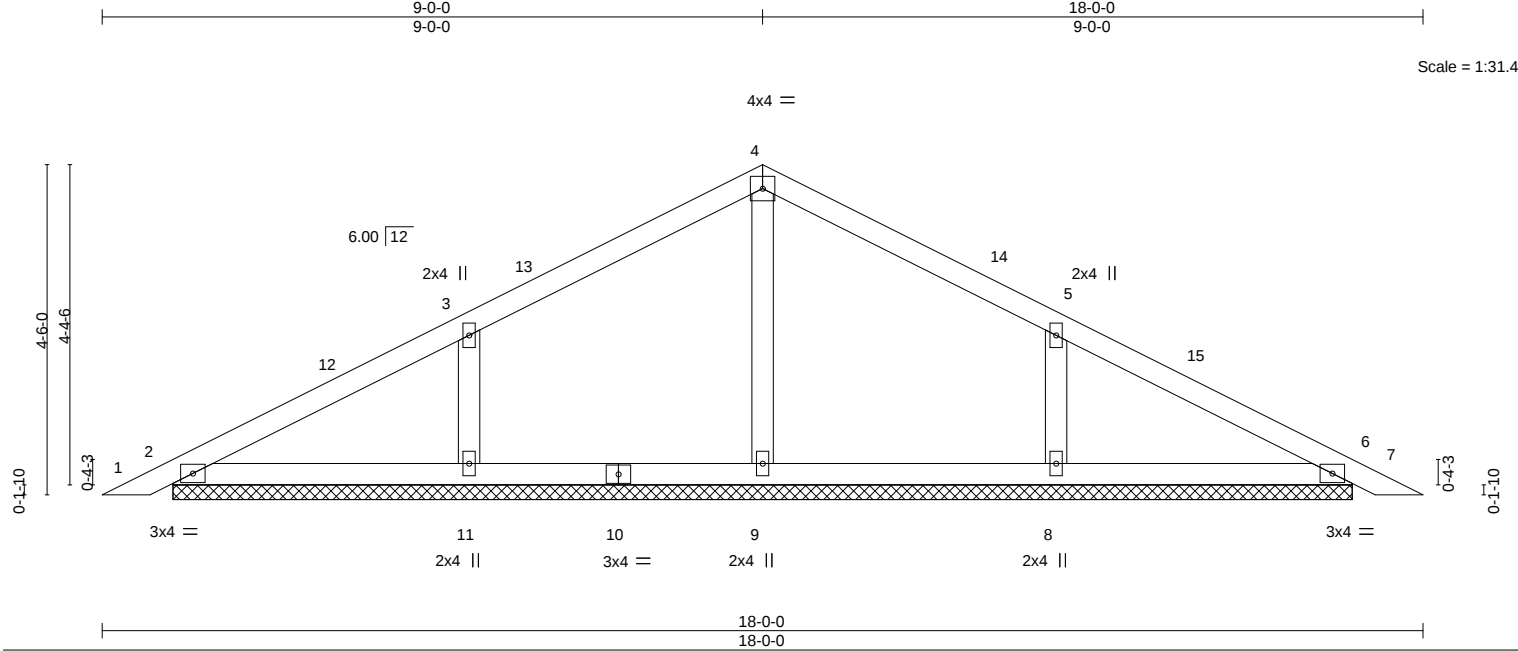
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #45 Roof
25-5549-A	PB01	Piggyback	19	1	173191983

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Feb 19 2025 MiTek Industries, Inc. Fri May 2 08:12:33 2025 Page 1
ID:tdHS5lWyLng?jaR9E1eBtqly9_-mkBrB6R9aAsvnRTdyvE0VduGD_eJgNVhjp32JzKbey



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2'-0"-0	TC 0.23	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.13	Vert(LL) 0.00 7 n/r 120		
TCDL 10.0	Lumber DOL 1.15	WB 0.07	Vert(CT) 0.01 7 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 6 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 65 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6'-0"-0 oc purlins.
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"-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; TCCL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-3-15 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
 - TCCL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-6"-0 tall by 2'-0"-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 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.



May 5, 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 #45 Roof
25-5549-A	PB01GE	GABLE	2	1	173191984

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Feb 19 2025 MiTek Industries, Inc. Fri May 2 08:12:34 2025 Page 1
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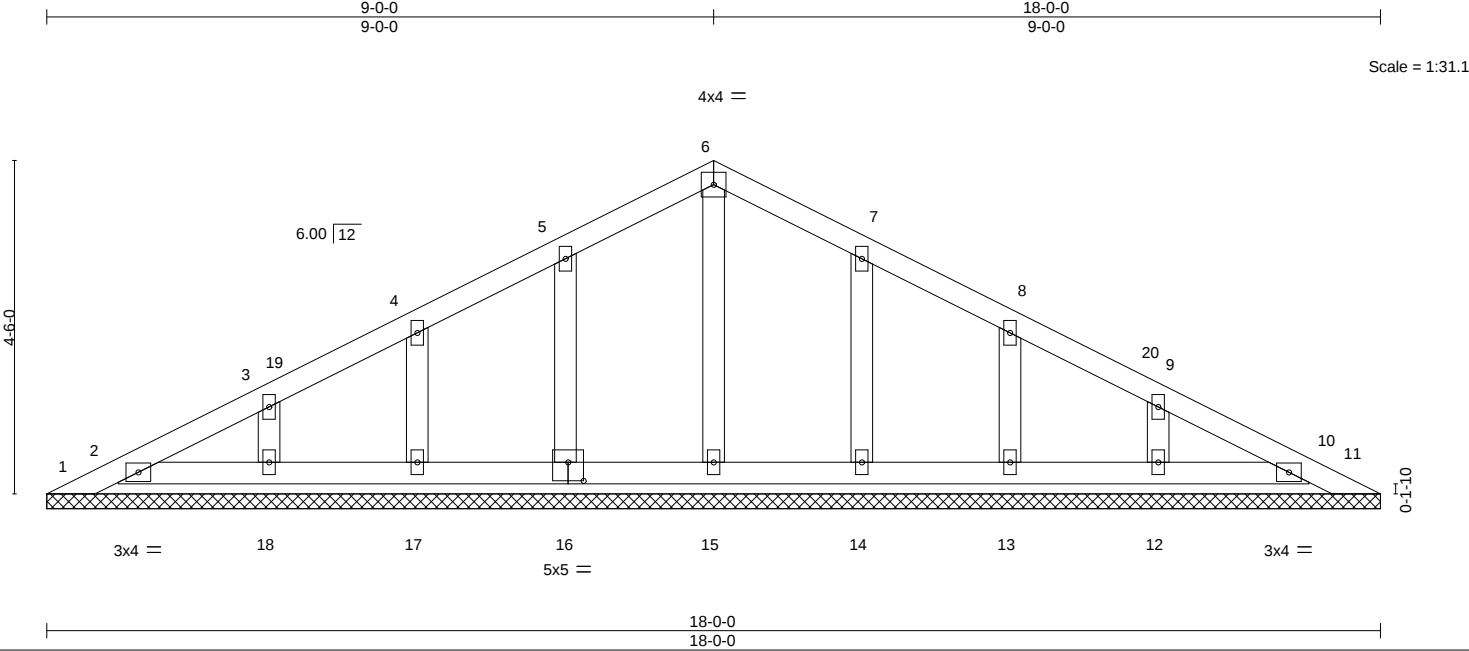


Plate Offsets (X,Y)-- [16:0-2-8,0-3-0]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a - n/a	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a - n/a		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00 11 n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-S				Weight: 76 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 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.



May 5,2025

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ENGINEERING BY
TRENCO
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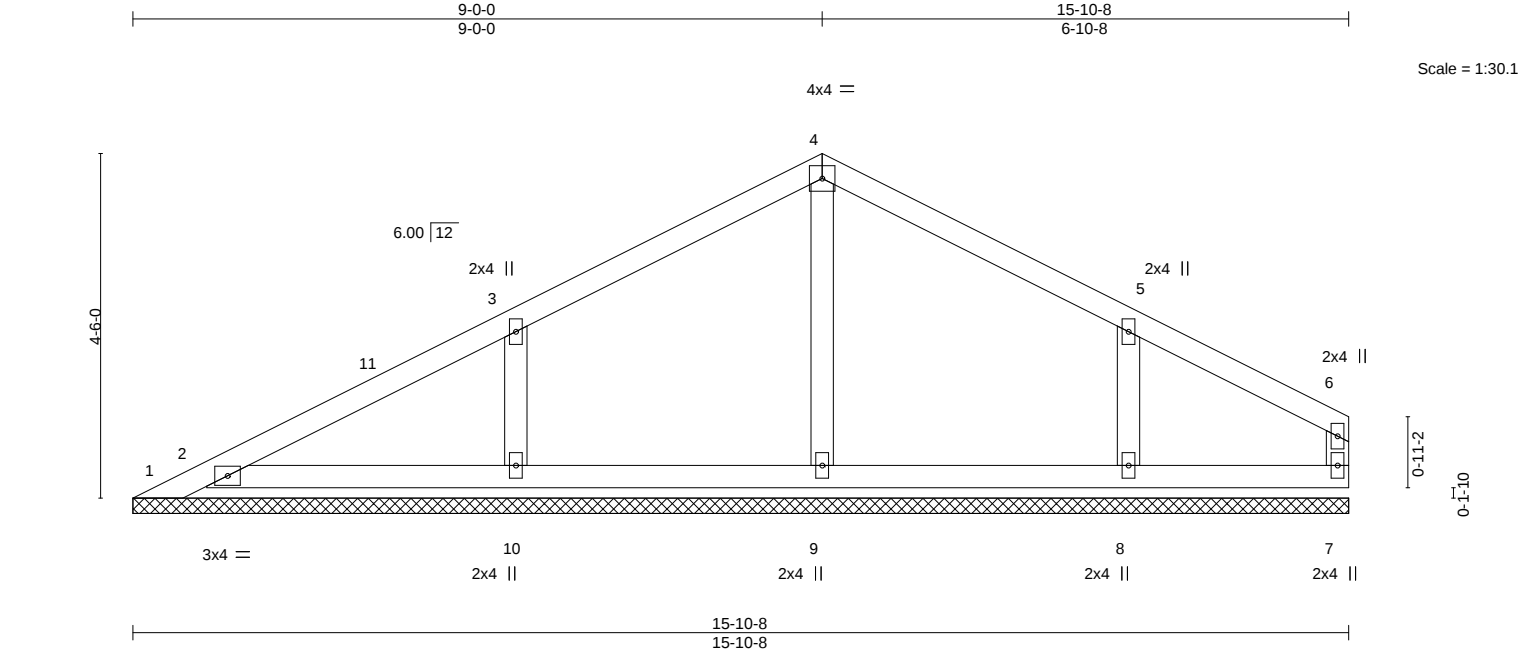
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #45 Roof	173191985
25-5549-A	PB02	GABLE	5	1	Job Reference (optional)	

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

8.730 s Feb 19 2025 MiTek Industries, Inc. Fri May 2 08:12:35 2025 Page 1

ID:tdHS5IWyLNg?jaR9E1eBtqly9_-i7JbboSP5n6c0kdGIMxi5wiD50hGnaoo81I97CzKbew



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999			
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	7	n/a	n/a			
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-S							Weight: 60 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, 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 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

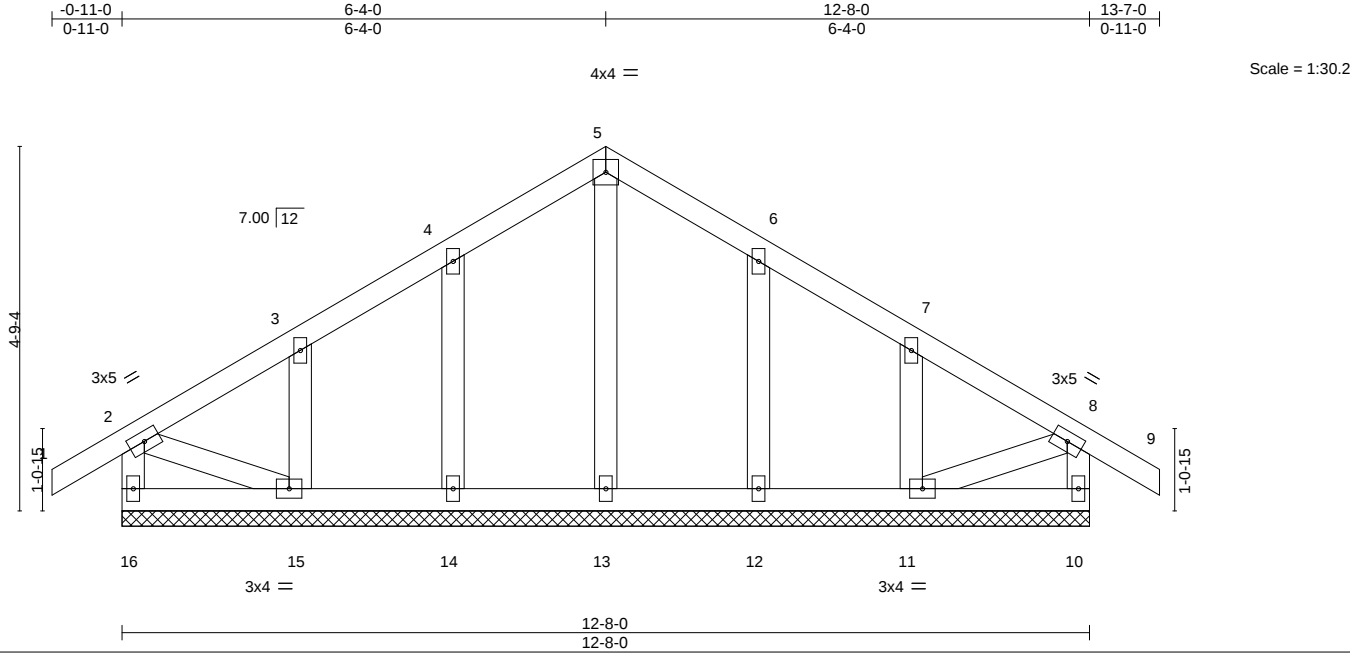
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) 0-3-15 to 3-3-15, Exterior(2N) 3-3-15 to 9-0-0, Corner(3R) 9-0-0 to 12-0-0, Exterior(2N) 12-0-0 to 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
 - 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.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 4-0-0 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) 7, 2, 10, 8 except (jt=lb) 1=104.
 - 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.



May 5,2025

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #45 Roof
25-5549-A	T01GE	COMMON SUPPORTED GAB	1	1	173191986

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Feb 19 2025 MiTek Industries, Inc. Fri May 2 08:12:36 2025 Page 1
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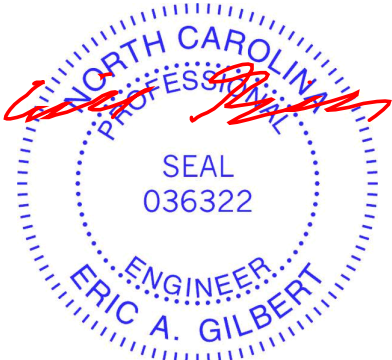
LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.08	Vert(LL)	-0.00	9	n/r	120	MT20	244/190
Snow (Pl/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.04	Vert(CT)	-0.00	9	n/r	120		
TCDL 10.0	Lumber DOL 1.15	WB 0.04	Horz(CT)	0.00	10	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S							
BCDL 10.0	Code IRC2018/TPI2014							Weight: 73 lb	FT = 20%

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

REACTIONS.	All bearings 12-8-0.
(lb) - Max Horz	16=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.



May 5,2025

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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TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

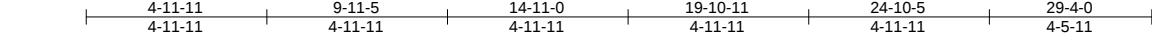
Job	Truss	Truss Type	Qty	Ply	RVF-LOT #45 Roof
25-5549-A	T02G	COMMON GIRDER	1	3	173191987

Riverside Roof Truss, LLC,

Danville, Va - 24541,

8.730 s Feb 19 2025 MiTek Industries, Inc. Fri May 2 08:12:37 2025 Page 1

ID:tdHS5iWYLnG?jaR9E1eBtqly9_-fVRL0UUgdOMKG2nesn_AALnVYqGiFPE5bLoGB4zKbeu



Scale: 3/16"=1'

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.47	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.57	Vert(LL) -0.04 14-15 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.39	Vert(CT) -0.07 14-15 >999 180		
BCLL 0.0 *	Rep Stress Incr NO	Matrix-MS	Horz(CT) 0.01 10 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 648 lb	FT = 20%

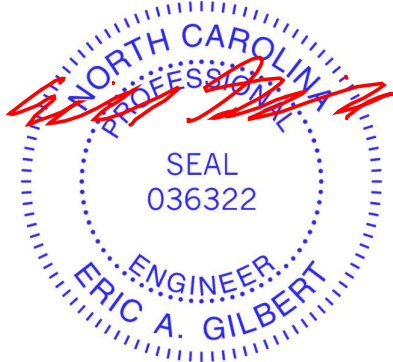
LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3	

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=5621(LC 3), 16=1812(LC 29), 10=1126(LC 30)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-723/160, 2-4=-1654/123, 4-5=0/847, 5-6=-382/164, 6-8=-1202/0, 8-9=-253/43, 1-16=-468/107
BOT CHORD 15-16=-79/1439, 11-12=0/480, 10-11=0/999
WEBS 4-15=-50/2854, 4-14=-1713/149, 5-14=-1981/0, 5-12=0/1418, 6-12=-801/75, 6-11=0/1012, 2-16=-1068/0, 8-10=-1083/0

- 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; TCCL=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, Single Ply Girder) 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) 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.

Do not fill on pages where hanger is in contact with lumber.



May 5, 2025

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #45 Roof
25-5549-A	T02G	COMMON GIRDER	1	3	Job Reference (optional)

I73191987

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

8.730 s Feb 19 2025 MiTek Industries, Inc. Fri May 2 08:12:37 2025 Page 2
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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=-247(B) 12=-247(B) 11=-132(B) 19=-501(B) 20=-501(B) 21=-501(B) 22=-499(B) 24=-686(B) 26=-686(B) 27=-247(B) 30=-133(B) 31=-132(B) 32=-132(B) 33=-132(B)

 **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 #45 Roof	173191988
25-5549-A	T02SGE	GABLE	1	1	Job Reference (optional)	

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Feb 19 2025 MiTek Industries, Inc. Fri May 2 08:12:38 2025 Page 1
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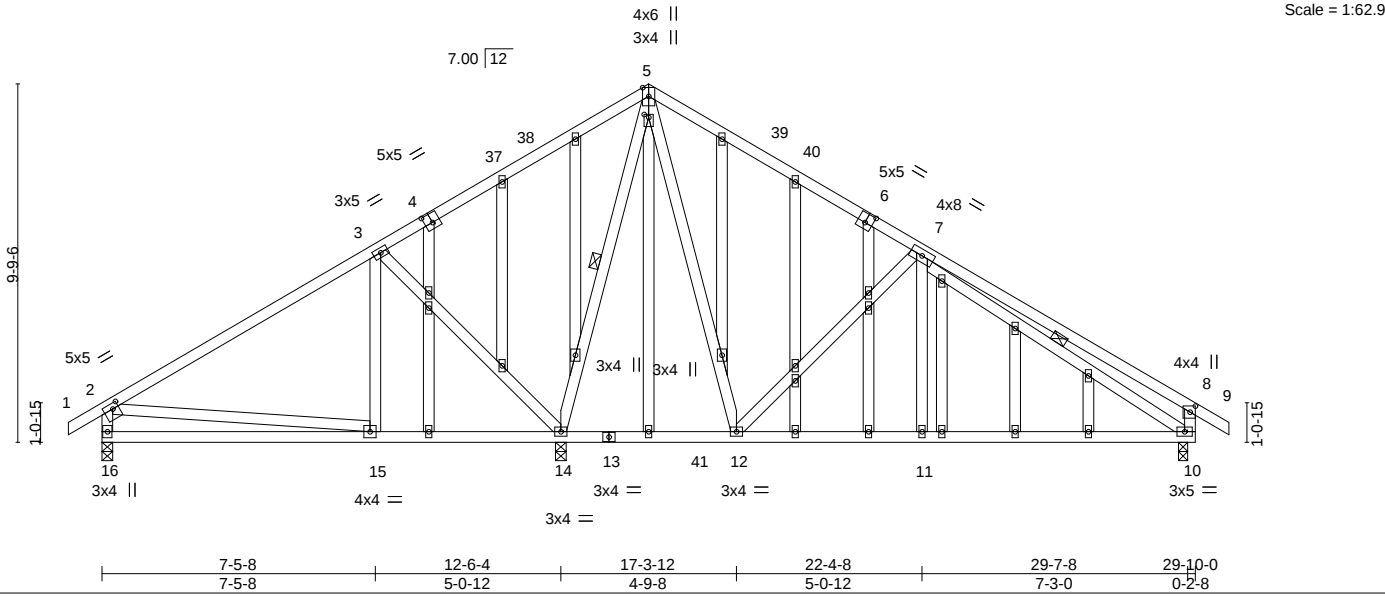


Plate Offsets (X,Y)-- [2:0-2-0,0-1-12], [4:0-2-8,0-3-0], [5:0-1-0,0-1-8], [6:0-2-8,0-3-0], [8:0-2-0,0-1-12]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	20.0	2-0-0		TC	0.73	in (loc)	l/defl	L/d	GRIP
Snow (Pf/Pg)	11.6/15.0	Plate Grip DOL	1.15	BC	0.48	Vert(LL)	-0.08 10-11	>999	240
TCDL	10.0	Lumber DOL	1.15	WB	0.66	Vert(CT)	-0.16 10-11	>999	180
BCLL	0.0 *	Rep Stress Incr	YES	Matrix-MS		Horz(CT)	0.02 10	n/a	n/a
BCDL	10.0	Code IRC2018/TPI2014							
								Weight: 267 lb	FT = 20%

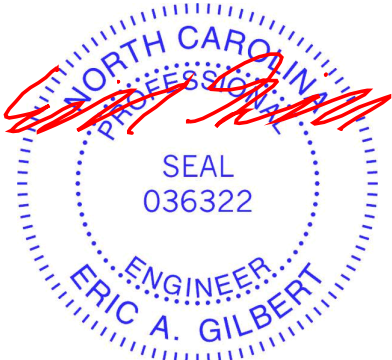
LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3	WEBS	1 Row at midpt 5-14, 7-10
OTHERS	2x4 SP No.3		

REACTIONS. (size) 16=0-3-8, 14=0-3-8, 10=0-3-0
Max Horz 16=-212(LC 14)
Max Uplift 16=-70(LC 16), 14=-60(LC 16), 10=-80(LC 16)
Max Grav 16=498(LC 28), 14=1494(LC 28), 10=771(LC 29)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-416/85, 3-5=0/303, 5-7=-364/153, 7-8=-483/175, 2-16=-425/117, 8-10=-454/164
BOT CHORD 15-16=-110/445, 14-15=-53/361, 11-12=0/590, 10-11=0/590
WEBS 3-15=0/278, 3-14=-657/132, 5-14=-920/47, 5-12=-40/630, 7-12=-620/130, 7-11=0/278, 7-10=-370/0

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=30ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 14-11-0, Exterior(2R) 14-11-0 to 17-11-0, Interior(1) 17-11-0 to 30-9-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 14, 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.



May 5, 2025

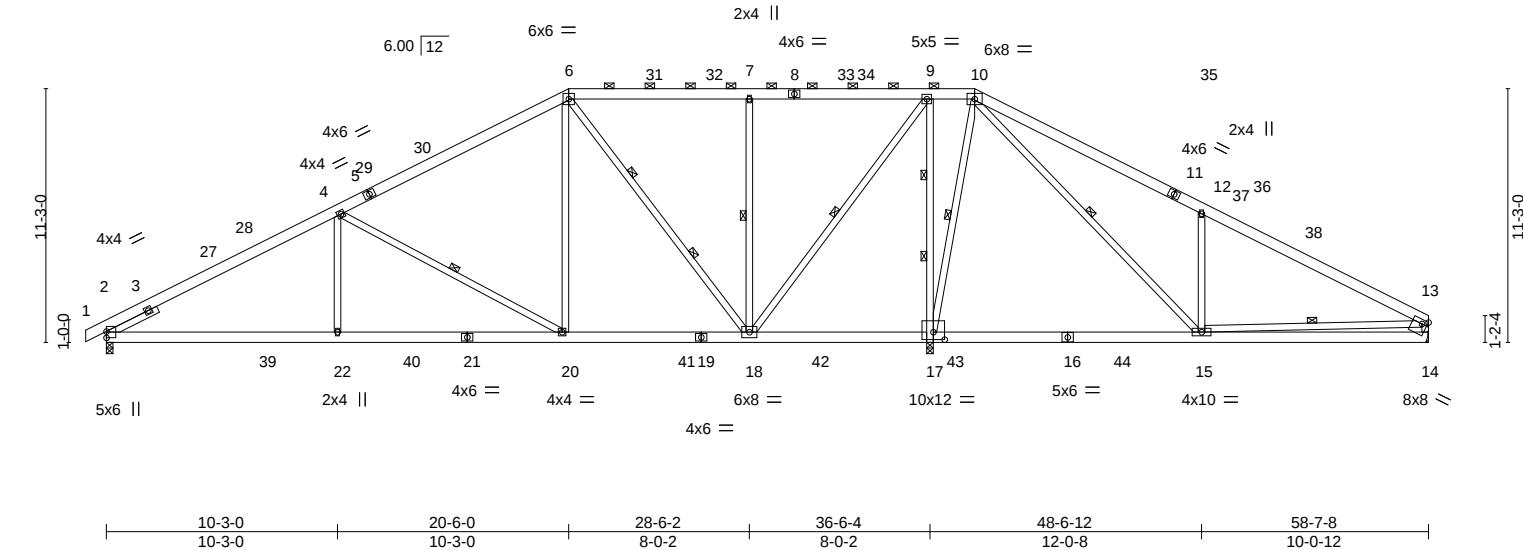
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Job	Truss	Truss Type	Qty	Ply	RVF-LOT #45 Roof
25-5549-A	T03	PIGGYBACK BASE	3	1	173191989

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Feb 19 2025 MiTek Industries, Inc. Fri May 2 08:12:39 2025 Page 1
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Scale = 1:102.2



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	-0.26 15-17 >999	MT20	244/190		
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.39 15-17 >668				
TCDL	10.0	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.04 17 n/a				
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MS				Weight: 461 lb		FT = 20%	
BCDL	10.0										

LUMBER-		BRACING-	
TOP CHORD	2x6 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 4-1-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-10.
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 4-20, 7-18, 9-18, 10-17, 10-15, 13-15
SLIDER	Left 2x4 SP No.3 2-6-0		2 Rows at 1/3 pts 6-18, 9-17

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-**
- 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 28-6-2, 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
 - 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.
 - 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)



Job	Truss	Truss Type	Qty	Ply	RVF-LOT #45 Roof
25-5549-A	T03	PIGGYBACK BASE	3	1	173191989
Job Reference (optional)					

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

8,730 s Feb 19 2025 MiTek Industries, Inc. Fri May 2 08:12:39 2025 Page 2
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- 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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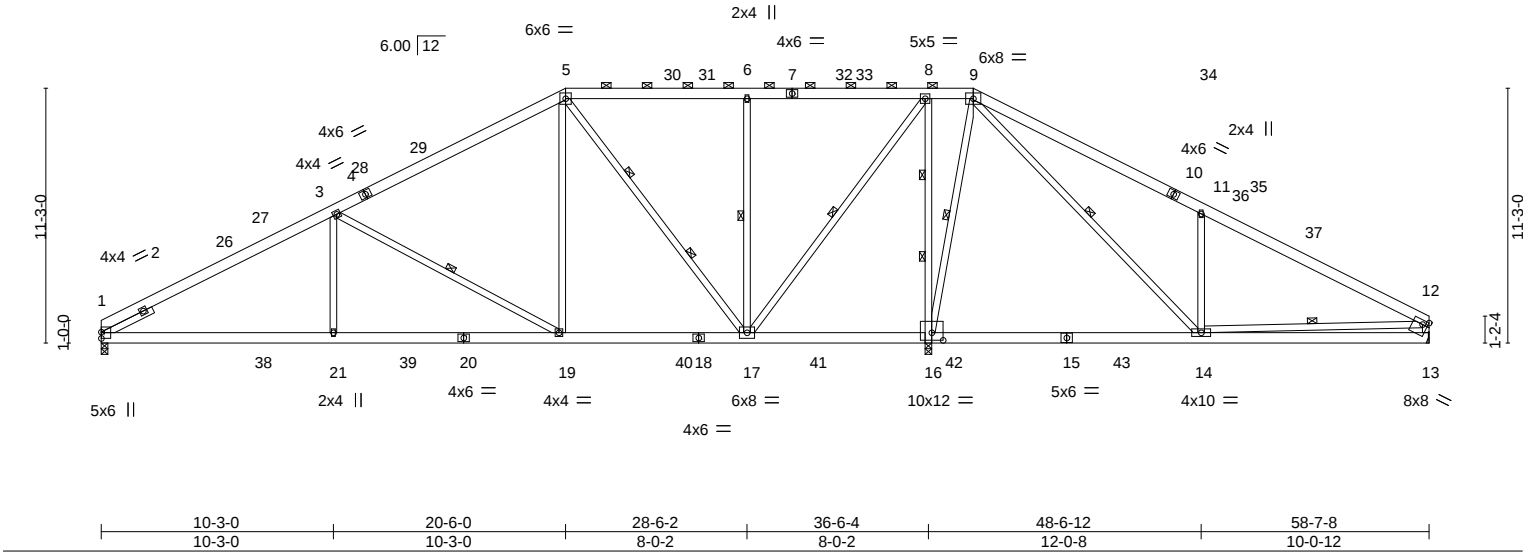


818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #45 Roof
25-5549-A	T03A	PIGGYBACK BASE	1	1	173191990

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Feb 19 2025 MiTek Industries, Inc. Fri May 2 08:12:40 2025 Page 1
ID:tdHS5lWyLNg?jaR9E1eBtqly9_-347UfVWYwJlv7WWDXwXtozPx1FJSg8XlJ0woPzKber
10-3-0 20-6-0 28-6-2 36-6-4 38-6-0 48-6-12 58-7-8
10-3-0 10-3-0 8-0-2 8-0-2 1-11-12 10-0-12 10-0-12

Scale = 1:101.7



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	-0.26 14-16 >999 240	MT20		244/190	
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.39 14-16 >668 180				
TCDL	10.0	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.04 16 n/a n/a				
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-MS							
BCDL	10.0										
								Weight: 458 lb		FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x6 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 4-1-9 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-9.
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 3-19, 6-17, 8-17, 9-16, 9-14, 12-14
SLIDER	Left 2x4 SP No.3 2-6-0		2 Rows at 1/3 pts 5-17, 8-16

REACTIONS.	
(size)	1=0-3-8, 13=Mechanical, 16=0-3-8
Max Horz	1=229(LC 15)
Max Uplift	1=-86(LC 16), 13=-50(LC 16), 16=-147(LC 16)
Max Grav	1=1513(LC 27), 13=644(LC 28), 16=3384(LC 29)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	1-3=-2255/245, 3-5=-1301/251, 5-6=-479/242, 6-8=-479/242, 8-9=0/851, 9-11=-748/309, 11-12=-683/124, 12-13=-523/110
BOT CHORD	1-21=-136/2156, 19-21=-136/2156, 17-19=0/1133, 16-17=-865/179, 14-16=-620/147, 13-14=-85/358
WEBS	3-21=0/507, 3-19=-1171/191, 5-19=0/964, 5-17=-1187/80, 6-17=-667/168, 8-17=-144/2020, 8-16=-1916/233, 9-16=-1355/174, 9-14=-204/1587, 11-14=-696/302, 12-14=-119/254

- 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) 0-0-0 to 5-10-6, Interior(1) 5-10-6 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
 - 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.
 - 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.
 - Bearing at joint(s) 16 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) 1, 13 except (jt=lb) 16=147.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and

Continue on page 2 and 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.

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)

SEAL
036322
ENGINEER
ERIC A. GILBERT
May 5, 2025

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

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #45 Roof
25-5549-A	T03A	PIGGYBACK BASE	1	1	173191990
Job Reference (optional)					

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

8.730 s Feb 19 2025 MiTek Industries, Inc. Fri May 2 08:12:40 2025 Page 2
ID:tdHS5lWyLng?jaR9E1eBtqly9_-347UfVWYwJlv7WWDXwXtozPxi1FJSg8XlJ0woPzKber

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.**

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #45 Roof
25-5549-A	T03GE	PIGGYBACK BASE SUPPO	1	1	173191991

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Feb 19 2025 MiTek Industries, Inc. Fri May 2 08:12:42 2025 Page 1
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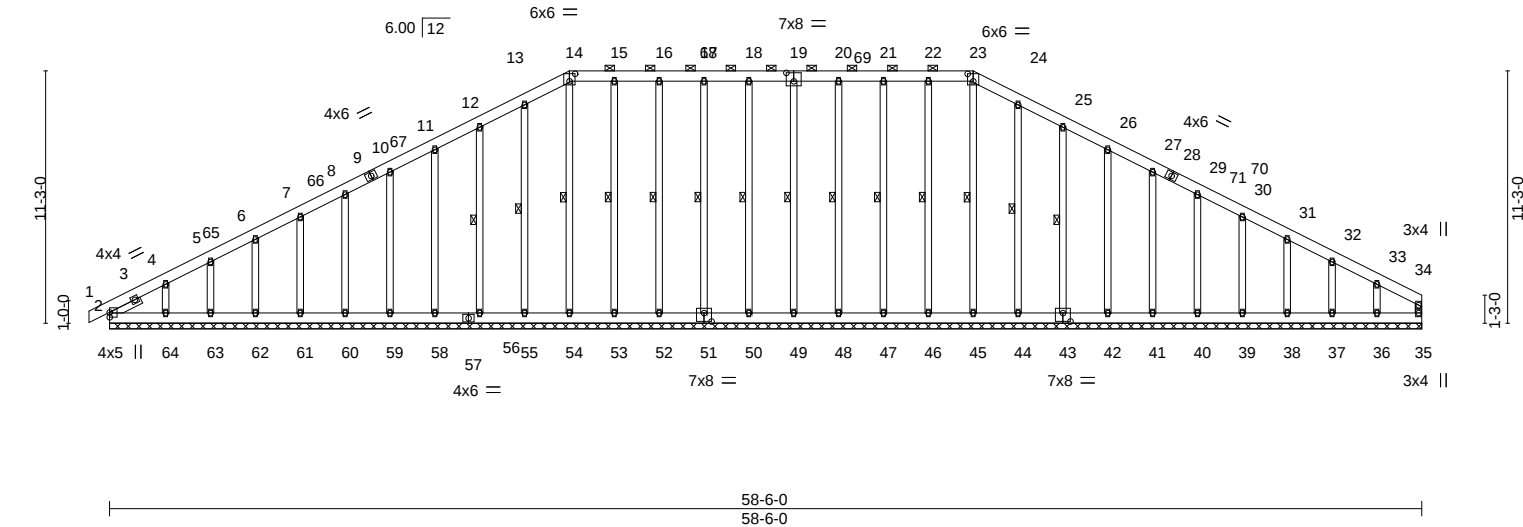


Plate Offsets (X,Y)-- [14:0-3-0,0-4-0], [19:0-4-0,0-4-8], [23:0-3-0,0-4-0], [43:0-4-0,0-4-8], [51:0-4-0,0-4-8]					
LOADING (psf)		SPACING-		CSI.	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.14
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.05
TCDL	10.0	Rep Stress Incr	YES	WB	0.17
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S	
BCDL	10.0				
				DEFL.	
				in (loc)	l/defl
				Vert(LL)	-0.00 1 n/r 120
				Vert(CT)	0.00 1 n/r 120
				Horz(CT)	0.01 35 n/a n/a
				PLATES	
				MT20	
				GRIP	
				244/190	
				Weight: 588 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.): 14-23.
BOT CHORD	2x6 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3	WEBS	1 Row at midpt
OTHERS	2x4 SP No.3		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
SLIDER	Left 2x4 SP No.3 1-6-4		

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-**
- 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 4-11-6, 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
 - 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.



May 5,2025

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #45 Roof
25-5549-A	T03GE	PIGGYBACK BASE SUPPO	1	1	I73191991
Job Reference (optional)					

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

8.730 s Feb 19 2025 MiTek Industries, Inc. Fri May 2 08:12:43 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) 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.**

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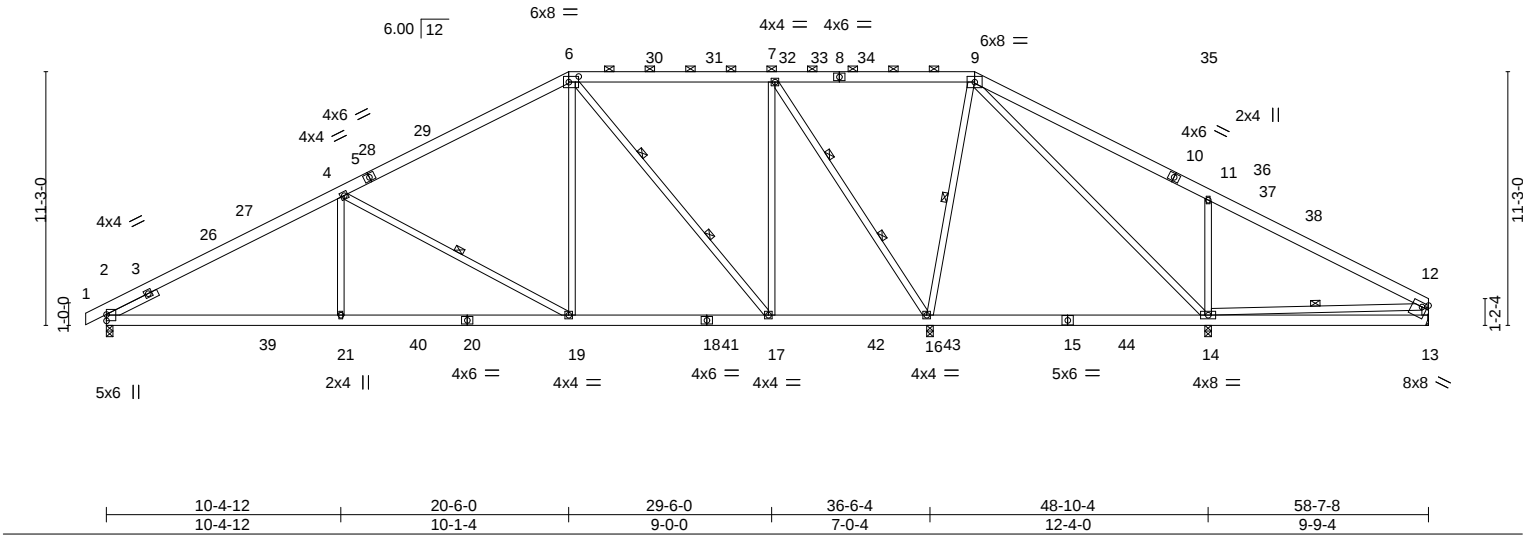


818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #45 Roof
25-5549-A	T04	PIGGYBACK BASE	4	1	173191992

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Feb 19 2025 MiTek Industries, Inc. Fri May 2 08:12:44 2025 Page 1
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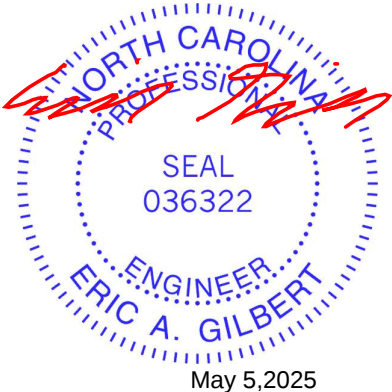
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL 1.15	TC 0.79	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 16.5/15.0	Lumber DOL 1.15	BC 0.68	Vert(LL) -0.21 14-16 >693 240		
TCDL 10.0	Rep Stress Incr YES	WB 0.94	Vert(CT) -0.31 14-16 >477 180		
BCLL 0.0 *	Code IRC2018/TPI2014	Matrix-MS	Horz(CT) 0.06 16 n/a n/a		
BCDL 10.0				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* 7-16: 2x4 SP No.1	6-0-0 oc bracing: 14-16.
SLIDER Left 2x4 SP No.3 2-6-0	WEBS 1 Row at midpt 4-19, 9-16, 12-14
	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.



May 5, 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 #45 Roof
25-5549-A	T04A	PIGGYBACK BASE	1	1	173191993

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Feb 19 2025 MiTek Industries, Inc. Fri May 2 08:12:45 2025 Page 1
ID:tdHS5IWyLng?jaR9E1eBtqly9_-Q2wNiDahlsNCDHOBKT72V17oY2y17ujGRbkhTdZKbem
10-4-12 20-6-0 29-6-0 38-6-0 48-10-4 58-7-8
10-4-12 10-1-4 9-0-0 9-0-0 10-4-4 9-9-4

Scale = 1:101.7

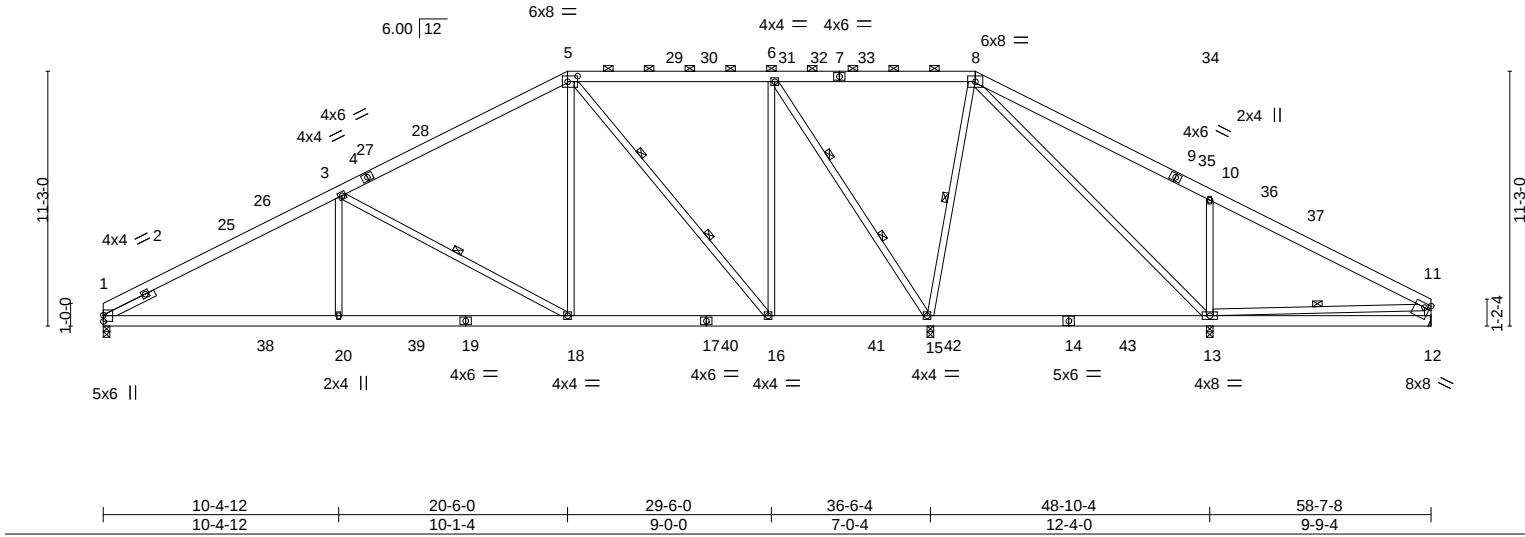


Plate Offsets (X,Y)-- [5:0-5-4,0-3-0], [12:Edge,0-2-4]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.79	in (loc)	l/defl	MT20	GRIP
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.67	Vert(LL)	-0.21 13-15	>693	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.94	Vert(CT)	-0.31 13-15	>477	
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MS		Horz(CT)	0.06 15	n/a	
BCDL	10.0								
								Weight: 443 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.): 5-8.
BOT CHORD	2x6 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
WEBS	2x4 SP No.3 *Except*		6-0-0 oc bracing: 13-15.
SLIDER	Left 2x4 SP No.3 2-6-0	WEBS	1 Row at midpt 3-18, 8-15, 11-13
			2 Rows at 1/3 pts 5-16, 6-15

REACTIONS. All bearings 0-3-8 except (jt=length) 12=Mechanical.
(lb) - Max Horz 1=229(LC 15)
Max Uplift All uplift 100 lb or less at joint(s) 1, 15 except 13=135(LC 16)
Max Grav All reactions 250 lb or less at joint(s) 12 except 1=1573(LC 27), 15=2879(LC 27), 13=1063(LC 48)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-2362/267, 3-5=-1407/273, 5-6=-518/269, 6-8=0/638, 8-10=-41/487, 10-11=-83/410
BOT CHORD 1-20=-150/2251, 18-20=-150/2251, 16-18=0/1255, 15-16=0/547, 13-15=-462/133
WEBS 3-20=0/508, 3-18=-1171/190, 5-18=0/999, 5-16=-1214/61, 6-16=0/1209, 6-15=-1980/179, 8-15=-766/134, 8-13=-24/272, 10-13=-714/307, 11-13=-495/170

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=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) 0-0-0 to 5-10-6, Interior(1) 5-10-6 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.
 - 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) 1, 15 except (jt=lb) 13=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.



May 5, 2025

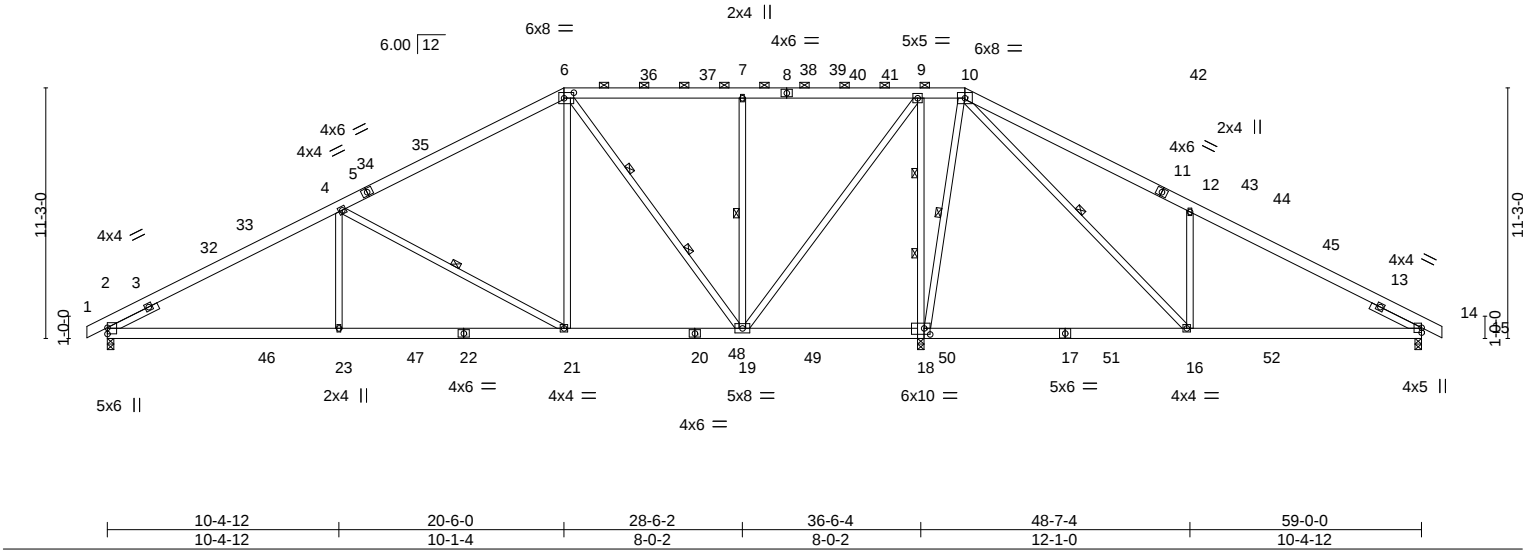
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ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #45 Roof
25-5549-A	T05	PIGGYBACK BASE	1	1	173191994

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Feb 19 2025 MiTek Industries, Inc. Fri May 2 08:12:46 2025 Page 1
ID:tdHS5lWylng?jaR9E1eBtqlyl9_uEUlvZbJW9V3rRzNuAeH1EfzZSIIsMFPgFTF03zKbel
0-11-0 10-4-12 20-6-0 28-6-2 36-6-4 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 = 1:103.4



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.77	Vert(LL)	-0.26 16-18 >999	MT20	244/190		
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.40 16-18 >682				
TCDL	10.0	Rep Stress Incr	YES	WB	0.86	Horz(CT)	0.05 18 n/a				
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MS				Weight: 454 lb		FT = 20%	
BCDL	10.0										

LUMBER-		BRACING-	
TOP CHORD	2x6 SP No.2	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	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 4-21, 7-19, 10-18, 10-16
SLIDER	Left 2x4 SP No.3 2-6-0, Right 2x4 SP No.3 2-6-0		2 Rows at 1/3 pts 6-19, 9-18

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-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=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
 - 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) 18 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) except (jt=lb) 2=130, 14=104, 18=109.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and continues to meet or exceed ANSI/TPI 1.



May 5, 2025

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #45 Roof
25-5549-A	T05	PIGGYBACK BASE	1	1	173191994
Job Reference (optional)					

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

8.730 s Feb 19 2025 MiTek Industries, Inc. Fri May 2 08:12:46 2025 Page 2
ID:tdHS5lWyLNg?jaR9E1eBtqyly9_-uEUlvZbJW9V3rRzNuAeH1EfzZSIIsMFPgFTF03zKbel

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

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #45 Roof
25-5549-A	T05A	PIGGYBACK BASE	1	1	173191995
Job Reference (optional)					

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

8.730 s Feb 19 2025 MiTek Industries, Inc. Fri May 2 08:12:48 2025 Page 2
ID:tdHS5lWyLng?jaR9E1eBtqly9_-qdbVKFcZ1nlm4k7m?bgl6flJ2G_jKGli7ZyM4xzKbej

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)

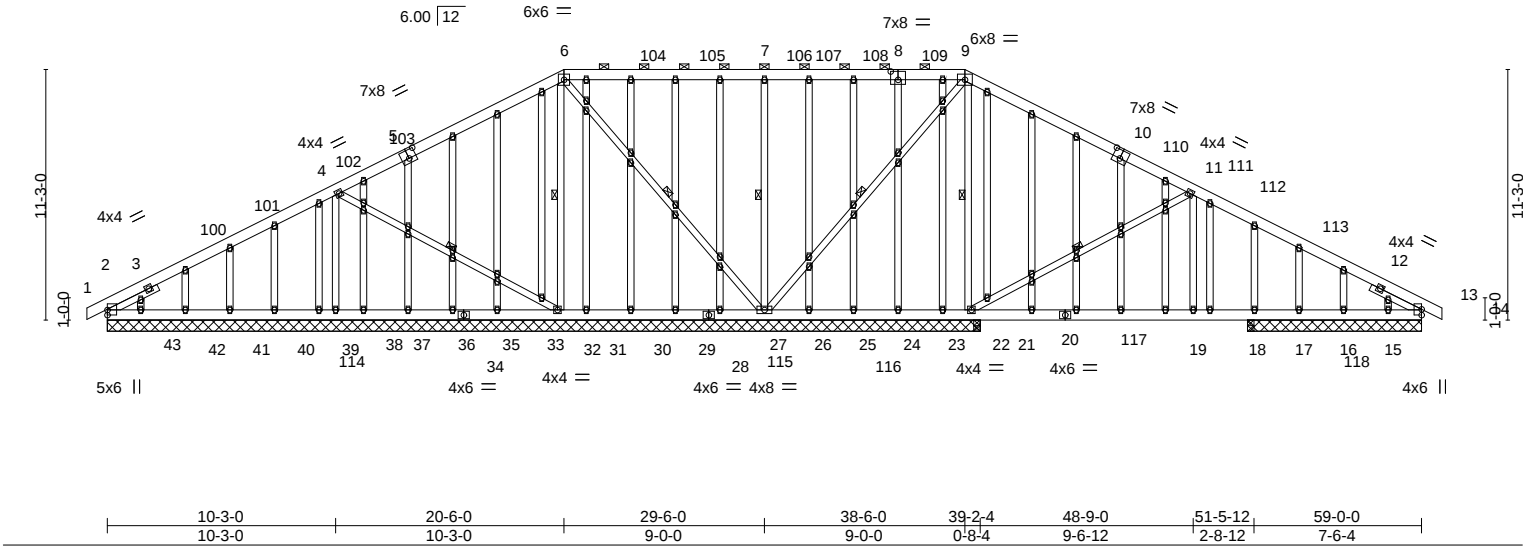


818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #45 Roof
25-5549-A	T05GE	Piggyback Base Structural Gable COMMON	1	1	173191996

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Feb 19 2025 MiTek Industries, Inc. Fri May 2 08:12:51 2025 Page 1
ID:tdHS5IWyLNg?jaR9E1eBtqly9_-ECHeyGfSKh7LxCrLhkESkiNrdT2sXgU8pXB0hGzKbeg
0-11-0 10-3-0 20-6-0 29-6-0 38-6-0 48-9-0 59-0-0 59-11-0
0-11-0 10-3-0 10-3-0 9-0-0 9-0-0 10-3-0 10-3-0 0-11-0

Scale = 1:103.4



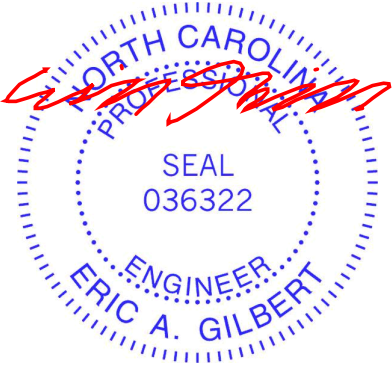
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL 1.15	TC 0.69	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 16.5/15.0	Lumber DOL 1.15	BC 0.45	Vert(LL) -0.07 19-21 >999 240		
TCDL 10.0	Rep Stress Incr YES	WB 0.66	Vert(CT) -0.13 19-21 >999 180		
BCLL 0.0 *	Code IRC2018/TPI2014	Matrix-MS	Horz(CT) 0.01 96 n/a n/a		
BCDL 10.0				Weight: 712 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 (10-0-0 max.): 6-9.
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 4-32, 6-32, 6-26, 7-26, 9-26, 9-21, 11-21
OTHERS 2x4 SP No.3	
SLIDER Left 2x4 SP No.3 2-6-0, Right 2x4 SP No.3 2-6-0	

REACTIONS.	All bearings 39-2-4 except (jt=length) 13=7-9-12, 18=7-9-12, 18=7-9-12, 17=7-9-12, 16=7-9-12, 15=7-9-12, 13=7-9-12.
(lb) - Max Horz 2=222(LC 15)	
Max Uplift All uplift 100 lb or less at joint(s) 2, 32, 42, 18, 17 except 38=-134(LC 16), 26=-228(LC 16), 43=-181(LC 16), 22=-376(LC 7), 15=-174(LC 16)	
Max Grav All reactions 250 lb or less at joint(s) 2, 27, 29, 30, 31, 33, 35, 36, 37, 39, 40, 41, 42, 25, 24, 23, 18, 18, 17, 16, 2 except 38=525(LC 39), 32=498(LC 28), 26=1066(LC 38), 21=1647(LC 49), 21=1047(LC 1), 13=484(LC 49), 43=563(LC 28), 15=354(LC 29), 13=291(LC 1)	

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-236/488, 4-6=-167/272, 6-7=0/284, 7-9=0/284, 9-11=-3/410, 11-13=-689/183	
BOT CHORD 25-26=-300/154, 24-25=-300/154, 23-24=-300/154, 22-23=-300/154, 21-22=-300/154, 19-21=-8/587, 18-19=-8/587, 17-18=-8/587, 16-17=-8/587, 15-16=-8/587, 13-15=-8/587	
WEBS 4-38=-516/167, 6-32=-338/61, 6-26=-281/78, 7-26=-788/182, 9-21=-526/77, 11-21=-1009/186, 11-19=0/374	

- 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 4-11-13, 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
 - 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.
 - Ends of truss are braced at 2-0-0 oc.



May 5, 2025

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

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ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #45 Roof
25-5549-A	T05GE	Piggyback Base Structural Gable COMMON	1	1	173191996
Job Reference (optional)					

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

8.730 s Feb 19 2025 MiTek Industries, Inc. Fri May 2 08:12:51 2025 Page 2
ID:tdHS5IWyLNg?jaR9E1eBtqly9_-ECHeyGfSKh7LxCrLhkESkiNrdT2sXgU8pXB0hGzKbeg

- NOTES-**
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 32, 42, 18, 17, 2 except (jt=lb) 38=134, 26=228, 43=181, 22=376, 15=174.
 - 13) 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.
 - 14) 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
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #45 Roof
25-5549-A	T05S	PIGGYBACK BASE	8	1	I73191997
Job Reference (optional)					

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

8.730 s Feb 19 2025 MiTek Industries, Inc. Fri May 2 08:12:52 2025 Page 2
ID:tdHSSlWyLng?jaR9E1eBtqly9_-jOr0Acf45?FCZMQXERlhHVv?GtlZG2Yl2BwZDjzKbef

- 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.**

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	RVF-LOT #45 Roof
25-5549-A	T06	PIGGYBACK BASE	5	1	173191998

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Feb 19 2025 MiTek Industries, Inc. Fri May 2 08:12:53 2025 Page 1
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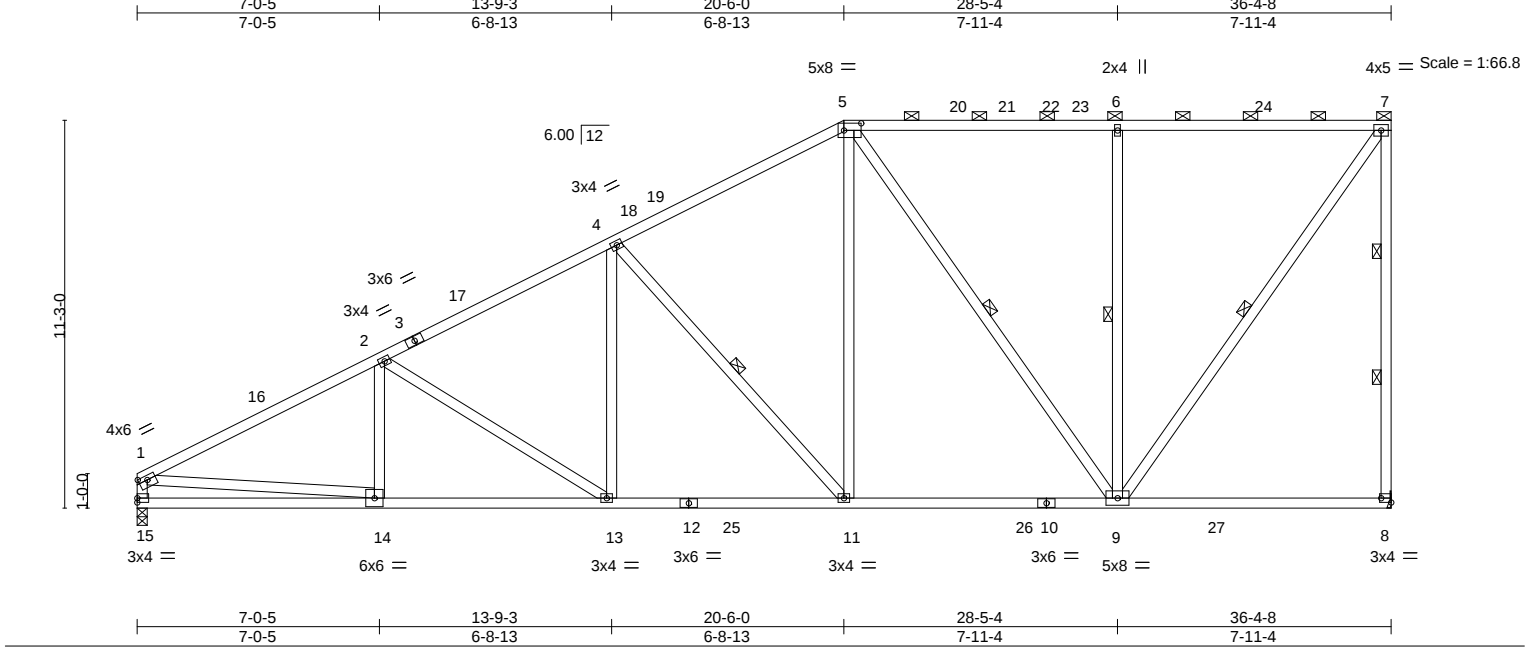


Plate Offsets (X,Y)-- [1:0-3-0-0-1-8], [5:0-6-0-0-2-8], [8:Edge,0-1-8]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.91	Vert(LL)	-0.18 8-9 >999 240	MT20	GRIP 244/190
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.30 8-9 >999 180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.79	Horz(CT)	0.07 8 n/a n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MS				Weight: 252 lb	FT = 20%
BCDL	10.0								

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

REACTIONS.	
(size)	8=Mechanical, 15=0-3-8
Max Horz	15=311(LC 16)
Max Uplift	8=-135(LC 16), 15=-39(LC 16)
Max Grav	8=1732(LC 38), 15=1685(LC 27)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	1-2=-2672/108, 2-4=-2277/131, 4-5=-1667/145, 5-6=-1012/102, 6-7=-1012/102, 7-8=-1570/211, 1-15=-1566/106
BOT CHORD	14-15=-344/402, 13-14=-337/2383, 11-13=-263/2004, 9-11=-167/1440
WEBS	2-13=-446/99, 4-13=0/508, 4-11=-913/143, 5-11=-20/993, 5-9=-783/111, 6-9=-702/176, 7-9=-174/1725, 1-14=0/1993

NOTES-	
1) Unbalanced roof live loads have been considered for this design.	
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=36ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-9-6, Interior(1) 3-9-6 to 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) TCCL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.	
4) Unbalanced snow loads have been considered for this design.	
5) Provide adequate drainage to prevent water ponding.	
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.	
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.	
8) Refer to girder(s) for truss to truss connections.	
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15 except (jt=lb) 8=135.	
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.	
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.	



May 5,2025

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #45 Roof
25-5549-A	T07	COMMON	3	1	173191999

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Feb 19 2025 MiTek Industries, Inc. Fri May 2 08:12:54 2025 Page 1
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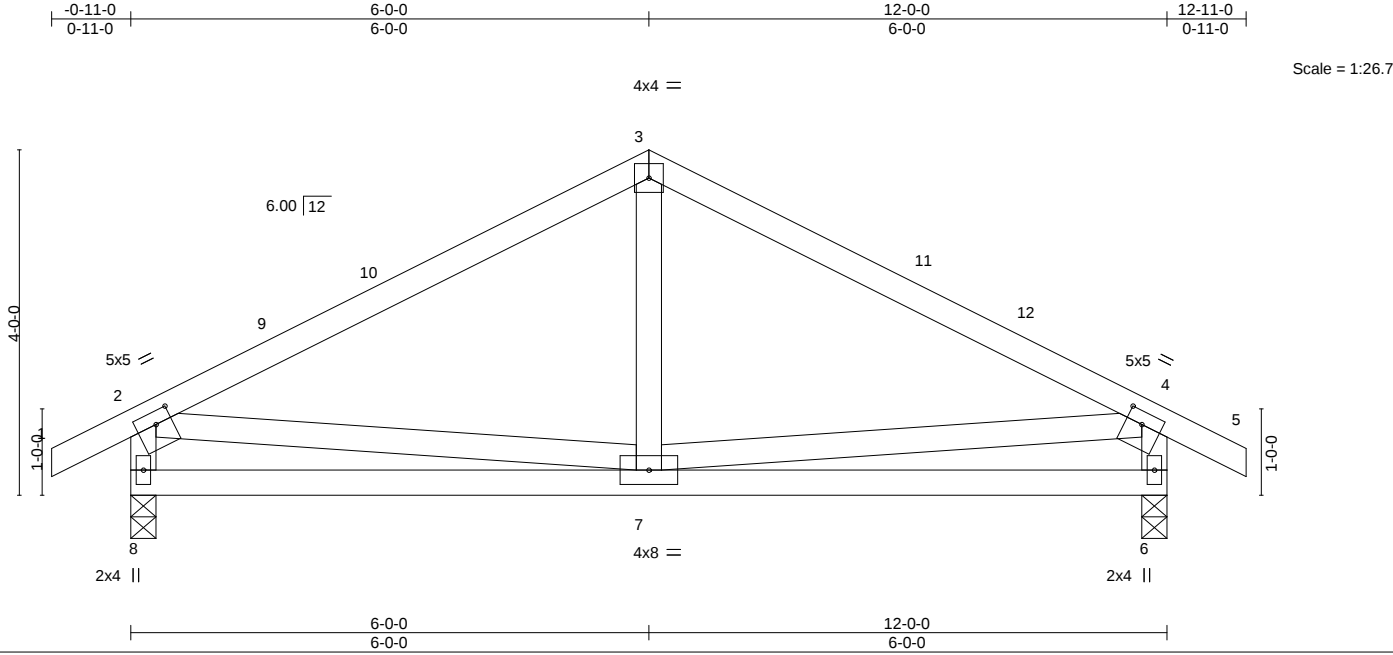


Plate Offsets (X,Y)-- [2:0-2-4,0-1-12], [4:0-2-4,0-1-12]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.62	Vert(LL)	-0.02 7-8 >999	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.05 7-8 >999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00 6 n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-MS				Weight: 64 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, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3		

REACTIONS. (size) 8=0-3-8, 6=0-3-8
Max Horz 8=-82(LC 14)
Max Uplift 8=-62(LC 16), 6=-62(LC 16)
Max Grav 8=532(LC 2), 6=532(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-538/176, 3-4=-538/176, 2-8=-479/228, 4-6=-479/228
BOT CHORD 7-8=-170/276, 6-7=-124/257

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 6-0-0, Exterior(2R) 6-0-0 to 9-0-0, Interior(1) 9-0-0 to 12-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 5,2025

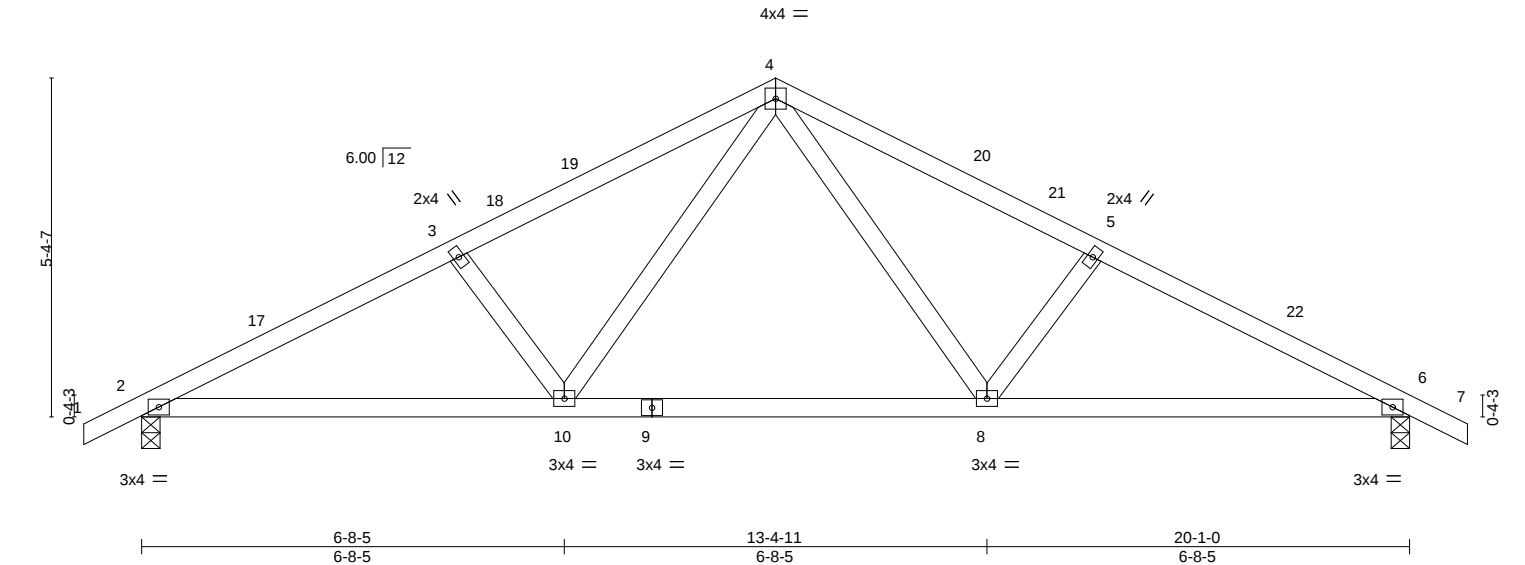
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
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ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #45 Roof
25-5549-A	T08	COMMON	5	1	173192000

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Feb 19 2025 MiTek Industries, Inc. Fri May 2 08:12:55 2025 Page 1
ID:tdHS5iWylng?jaR9E1eBtqly9_-7zX9oeiyOwenQp96wZIOv8Xc94QGtblk89Dq1zKbec

Scale = 1:36.5



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.33	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.49	Vert(LL) -0.05 10-13 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.20	Vert(CT) -0.11 10-13 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.03 6 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 92 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-8-7 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	

REACTIONS.	(size)
2=0-3-8, 6=0-3-8	
Max Horz 2=-91(LC 14)	
Max Uplift 2=-78(LC 16), 6=-78(LC 16)	
Max Grav 2=858(LC 2), 6=858(LC 2)	

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-1407/248, 3-4=-1256/253, 4-5=-1256/253, 5-6=-1407/248
BOT CHORD	2-10=-146/1230, 8-10=-31/799, 6-8=-154/1230
WEBS	4-8=-60/477, 5-8=-310/157, 4-10=-60/477, 3-10=-310/157

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 10-0-8, Exterior(2R) 10-0-8 to 13-0-8, Interior(1) 13-0-8 to 21-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 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.



May 5,2025

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #45 Roof
25-5549-A	T08GE	COMMON SUPPORTED GAB	1	1	173192001

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

8.730 s Feb 19 2025 MiTek Industries, Inc. Fri May 2 08:12:55 2025 Page 1

ID:tdHS5lWyLNg?jaR9E1eBtqly9_-7zX9oeiyOwenQp96wZIOv8Xgw4WtTe1kk89Dq1zKbec

0-11-0
0-11-0

10-0-8
10-0-8

20-1-0
10-0-8

21-0-0
0-11-0

Scale = 1:37.4

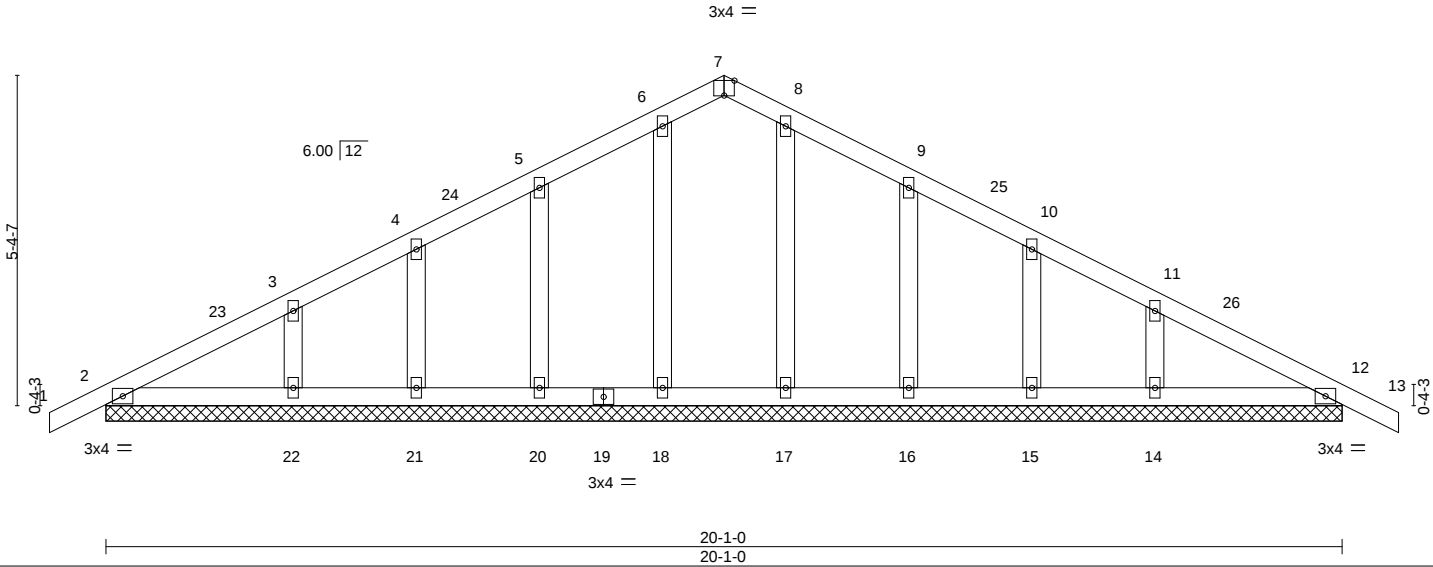


Plate Offsets (X,Y)-- [7:0-2-0,Edge]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	0.00 13 n/r 120	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	0.00 13 n/r 120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00 12 n/a n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-S					
BCDL	10.0							Weight: 100 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 20-1-0.
(lb) - Max Horz 2=91(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 2, 20, 21, 22, 16, 15, 14, 12
Max Grav All reactions 250 lb or less at joint(s) 2, 18, 20, 21, 22, 17, 16, 15, 14, 12

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 2-1-0, Exterior(2N) 2-1-0 to 10-0-8, Corner(3R) 10-0-8 to 13-0-8, Exterior(2N) 13-0-8 to 21-0-0 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
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 20, 21, 22, 16, 15, 14, 12.
 - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
 - 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.



May 5,2025

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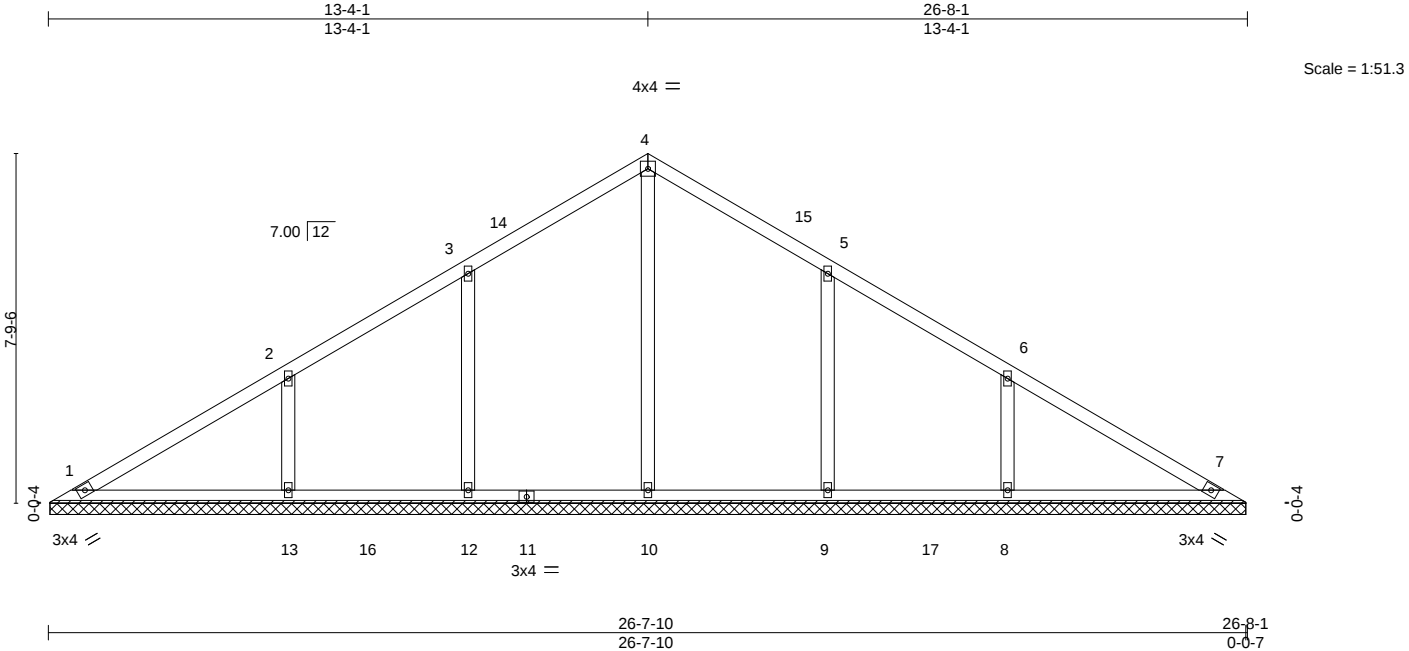
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #45 Roof
25-5549-A	V01	Valley	1	1	173192002

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

8.730 s Feb 19 2025 MiTek Industries, Inc. Fri May 2 08:12:56 2025 Page 1

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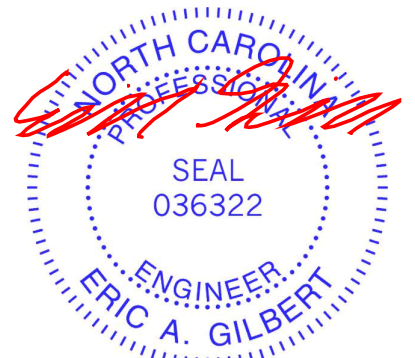
LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	n/a	-	n/a	999			
TCDL	10.0	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.00	7	n/a	n/a			
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-S									
BCDL	10.0										Weight: 116 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 26-7-3.
(lb) - Max Horz 1=-149(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=390(LC 27), 12=422(LC 27), 13=493(LC 27), 9=422(LC 28), 8=493(LC 28)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-13=-299/128, 6-8=-299/128

- 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=27ft; 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 13-4-1, Exterior(2R) 13-4-1 to 16-4-1, Interior(1) 16-4-1 to 26-1-9 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.



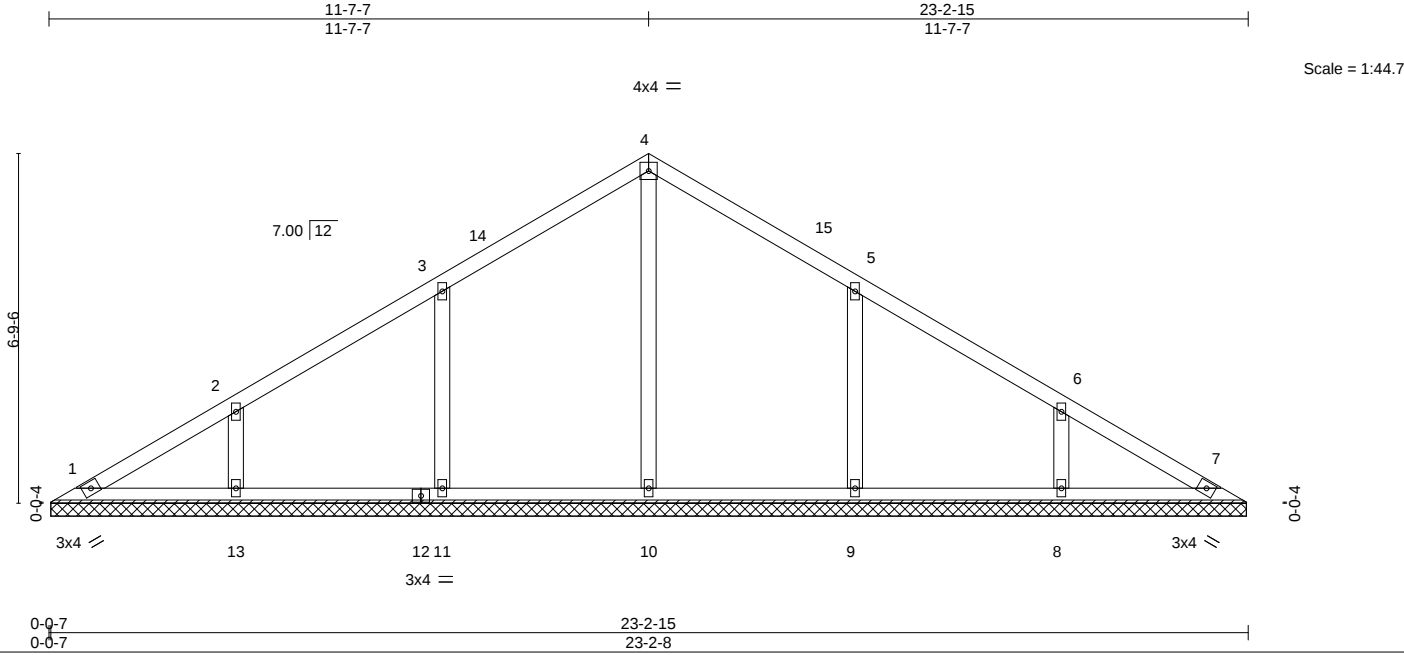
May 5, 2025

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

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #45 Roof
25-5549-A	V02	Valley	1	1	173192003

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Feb 19 2025 MiTek Industries, Inc. Fri May 2 08:12:57 2025 Page 1
ID:tdHSSiWYlNg?jaR9E1eBtqly9_-3MevDjCwXuVf7JU1_Ls_Yc_juBdxW?1CSeKwzKbea



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	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.17	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Lumber DOL 1.15	WB 0.15	Horz(CT)	0.00	7	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 98 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 23-2-1.
(lb) - Max Horz 1=129(LC 15)	
Max Uplift All uplift 100 lb or less at joint(s) 11, 13, 9, 8	
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=380(LC 27), 11=431(LC 27), 13=366(LC 27), 9=430(LC 28), 8=366(LC 28)	

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS	3-11=-263/125, 5-9=-263/125

- 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 3-7-7, Interior(1) 3-7-7 to 11-7-7, Exterior(2R) 11-7-7 to 14-7-7, Interior(1) 14-7-7 to 22-8-7 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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) 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.



May 5,2025

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

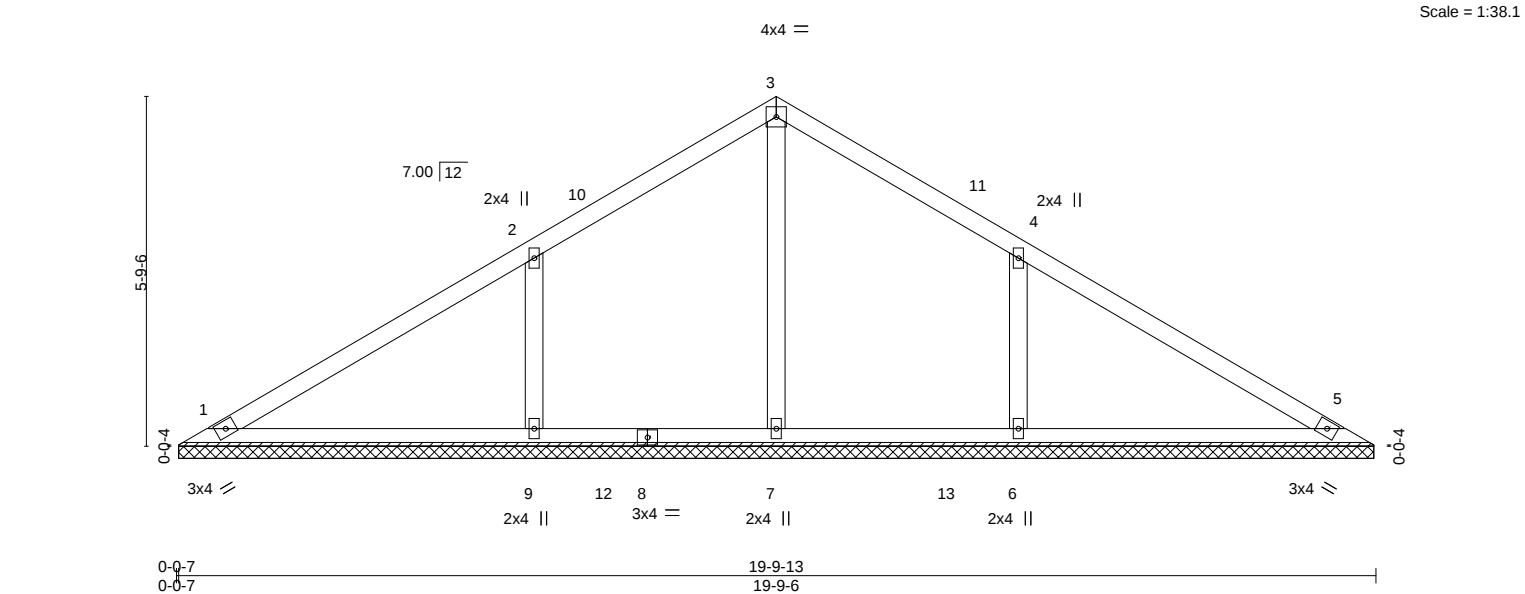
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ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #45 Roof
25-5549-A	V03	Valley	1	1	173192004

Riverside Roof Truss, LLC,
Danville, Va - 24541,
8.730 s Feb 19 2025 MiTek Industries, Inc.
Fri May 2 08:12:57 2025
Page 1
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19-9-13
19-9-13



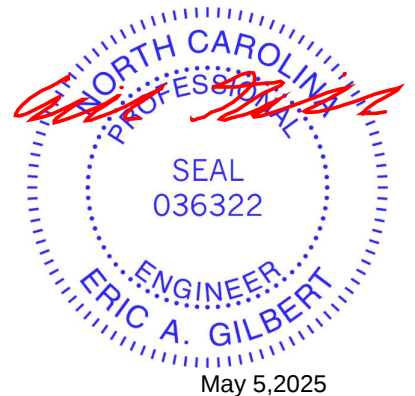
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	n/a	MT20		244/190	
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	n/a				
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00				
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S							
BCDL	10.0										

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.

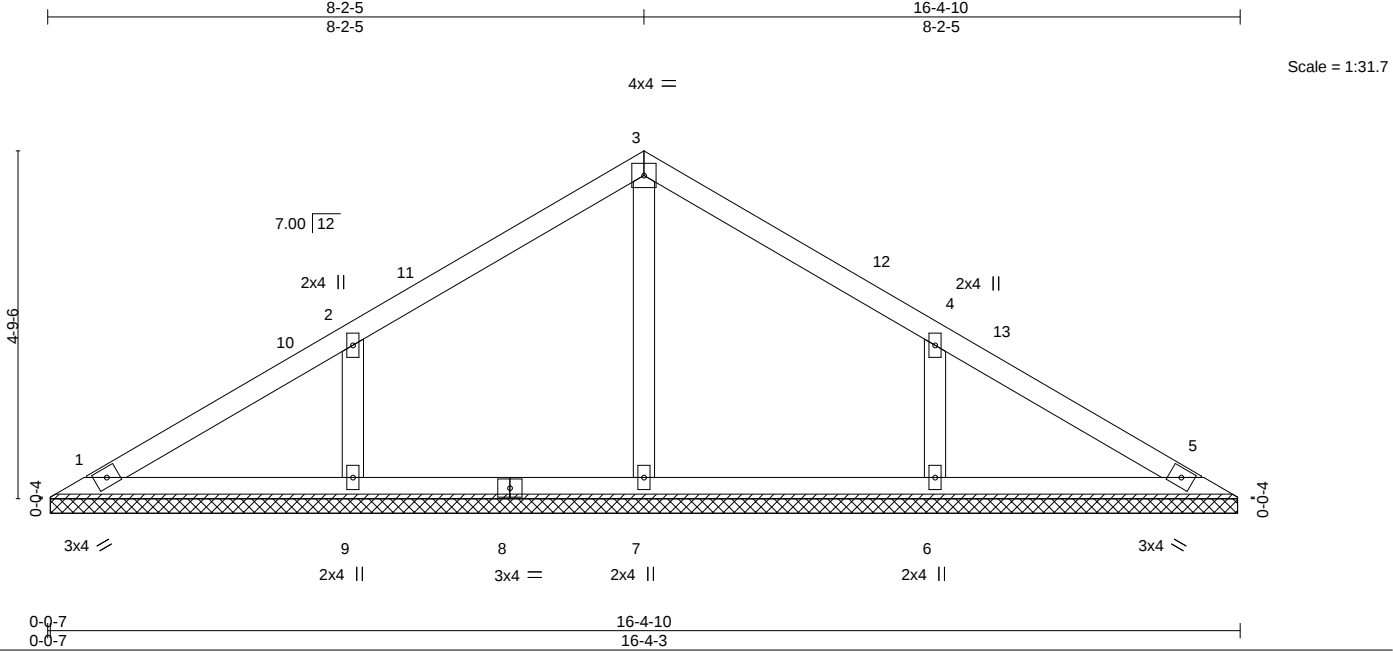


May 5,2025

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #45 Roof
25-5549-A	V04	Valley	1	1	173192005

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

8.730 s Feb 19 2025 MiTek Industries, Inc. Fri May 2 08:12:58 2025 Page 1
ID:tdHS5WylNg?jaR9E1eBtqly9_-XYCHQfkrhr0MHHuhbis5Wm99CIXig_QAR6NtRMzKbeZ



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	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.12	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Lumber DOL 1.15	WB 0.07	Horz(CT)	0.00	5	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)

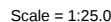
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-9=-272/134, 4-6=-272/134

- 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.



May 5, 2025

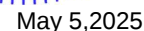
Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Feb 19 2025 MiTek Industries, Inc. Fri May 2 08:12:59 2025 Page 1
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 6-5-12 12-11-8
 6-5-12 6-5-12



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		

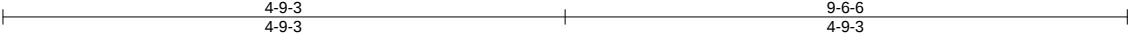
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- 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 6-5-12, 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
- 3) TCLL: ASCE 7-16; Pf=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, 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.

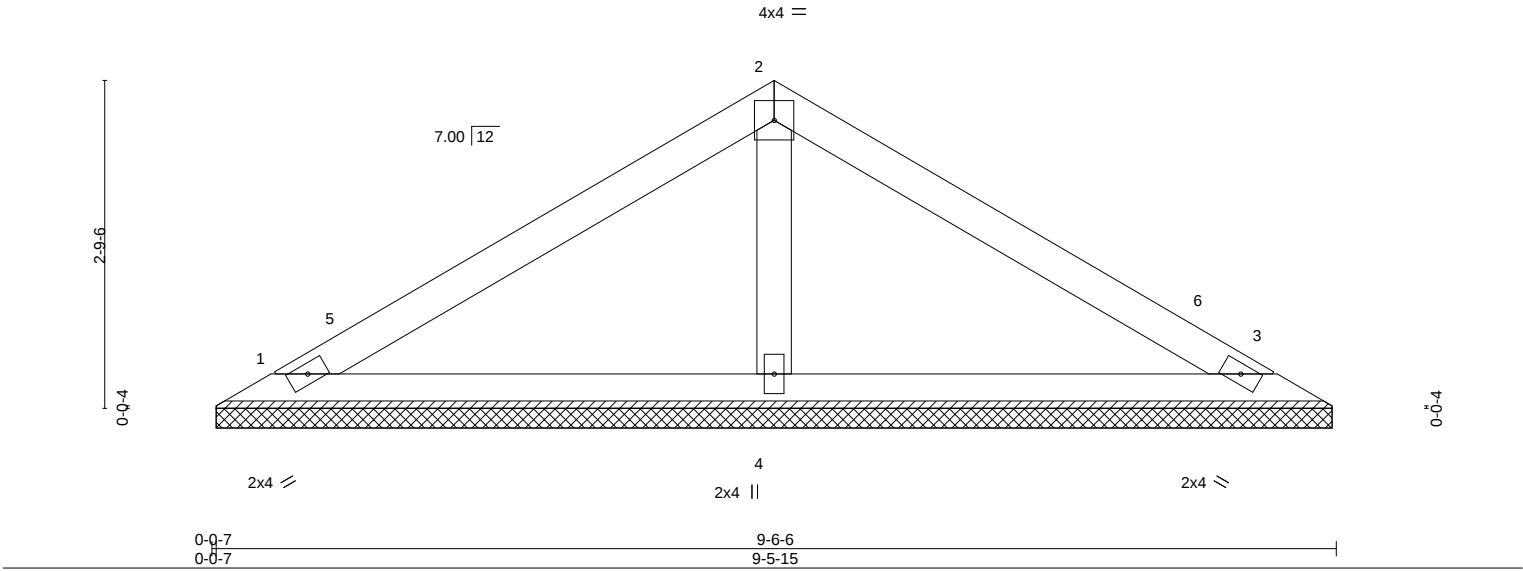


Job	Truss	Truss Type	Qty	Ply	RVF-LOT #45 Roof
25-5549-A	V06	Valley	1	1	173192007

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Feb 19 2025 MiTek Industries, Inc. Fri May 2 08:13:00 2025 Page 1
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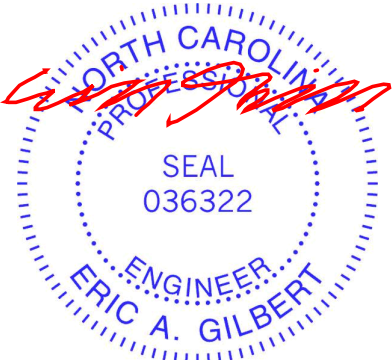
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.27	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.18	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.05	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 3 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 32 lb	FT = 20%

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

REACTIONS. (size) 1=9-5-8, 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-**
- 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 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
 - 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.



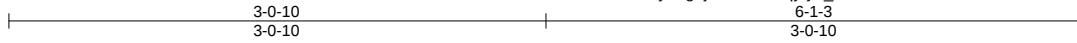
May 5,2025

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #45 Roof
25-5549-A	V07	Valley	1	1	173192008

Riverside Roof Truss, LLC,

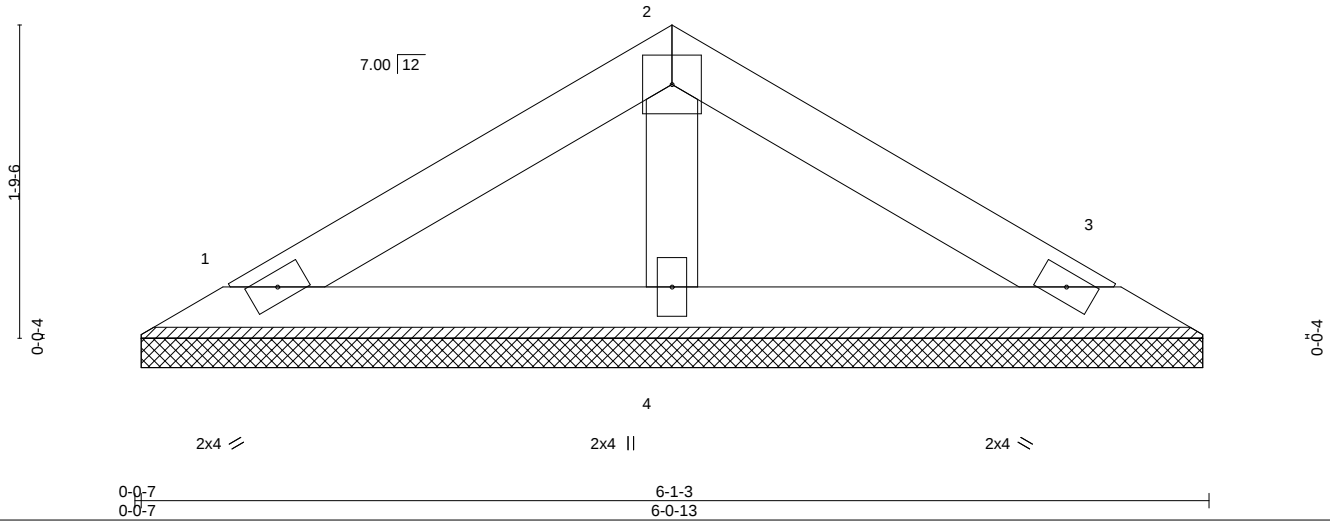
Danville, Va - 24541,

8.730 s Feb 19 2025 MiTek Industries, Inc. Fri May 2 08:13:00 2025 Page 1
ID:tdHS5IWyLNg?jaR9E1eBtqly9_-UxK2rLI5DSG3Wa13i7uZcBEXI5D28vhTuQs_VFzKbeX



4x4 =

Scale = 1:13.1



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.12	Vert(LL)	n/a	-	n/a	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.06	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: 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.



May 5, 2025

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

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

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #45 Roof
25-5549-A	V08	Valley	1	1	173192009

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

8.730 s Feb 19 2025 MiTek Industries, Inc. Fri May 2 08:13:00 2025 Page 1

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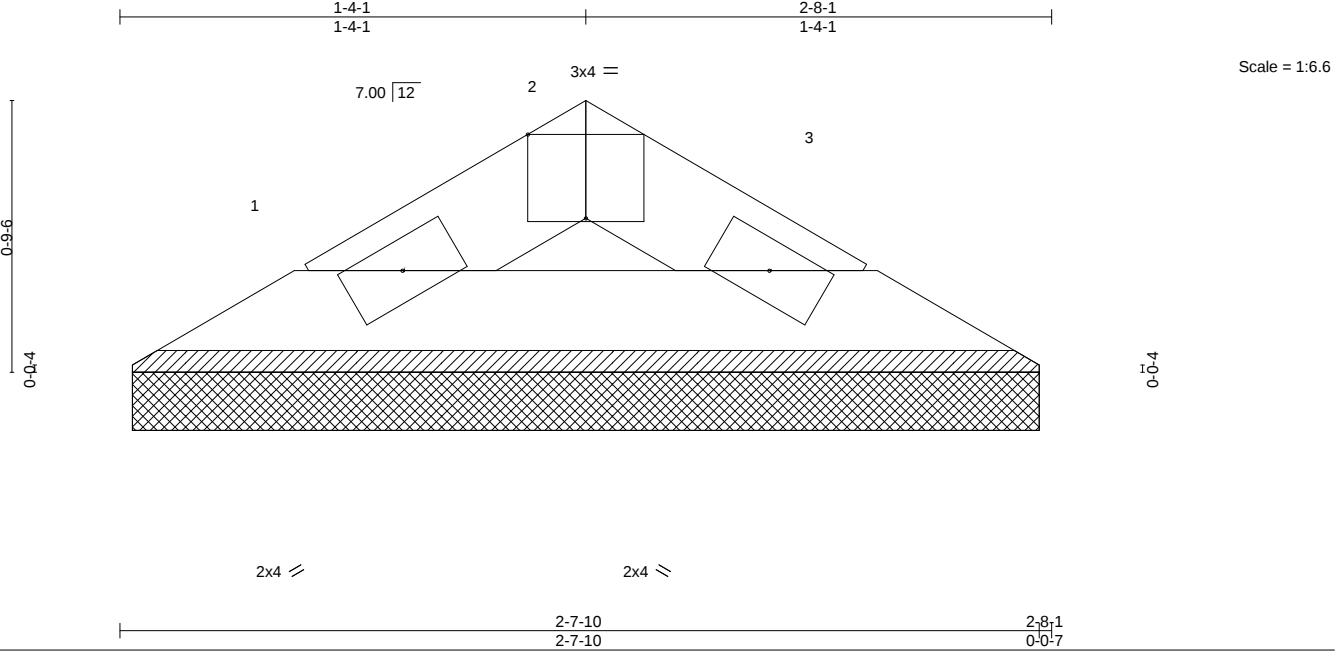


Plate Offsets (X,Y)-- [2:0-2:0,Edge]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.01	Vert(LL)	n/a	MT20	GRIP
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a		244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-P				Weight: 7 lb FT = 20%	
BCDL	10.0								

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-**
- 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.



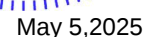
May 5,2025

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Feb 19 2025 MiTek Industries, Inc. Fri May 2 08:13:02 2025 Page 1
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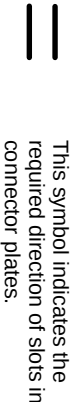
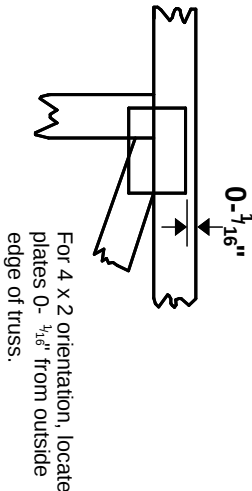
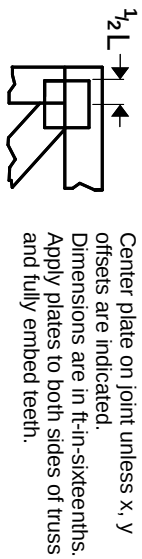
NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.00; 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.



Symbols

PLATE LOCATION AND ORIENTATION



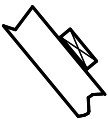
* Plate location details available in MITek software or upon request.

PLATE SIZE

4 X 4

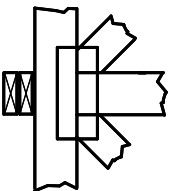
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

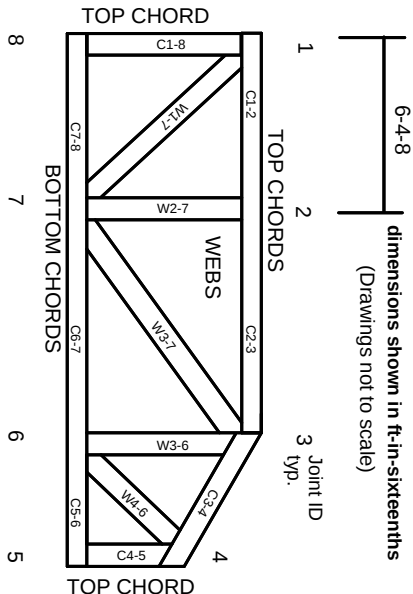


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

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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