ENGINEERING BY
TRENCO
A MiTek Affiliate

RE: 24-4826-A
RVF-LOT #6 ROOF

Site Information:
Customer: Project Name: 24-4826-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 18 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date
1	I66916454	M01	7/19/2024
2	I66916455	M01GE	7/19/2024
3	I66916456	T01	7/19/2024
4	I66916457	T01GE	7/19/2024
5	I66916458	T02G	7/19/2024
6	I66916459	T02GE	7/19/2024
7	I66916460	T03	7/19/2024
8	I66916461	T03G	7/19/2024
9	I66916462	T03GE	7/19/2024
10	I66916463	T04	7/19/2024
11	I66916464	T04GE	7/19/2024
12	I66916465	T05	7/19/2024
13	I66916466	T05A	7/19/2024
14	I66916467	V01	7/19/2024
15	I66916468	V02	7/19/2024
16	I66916469	V03	7/19/2024
17	I66916470	V04	7/19/2024
18	I66916471	V05	7/19/2024

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: Tony Miller
My license renewal date for the state of North Carolina is December 31, 2024.
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.

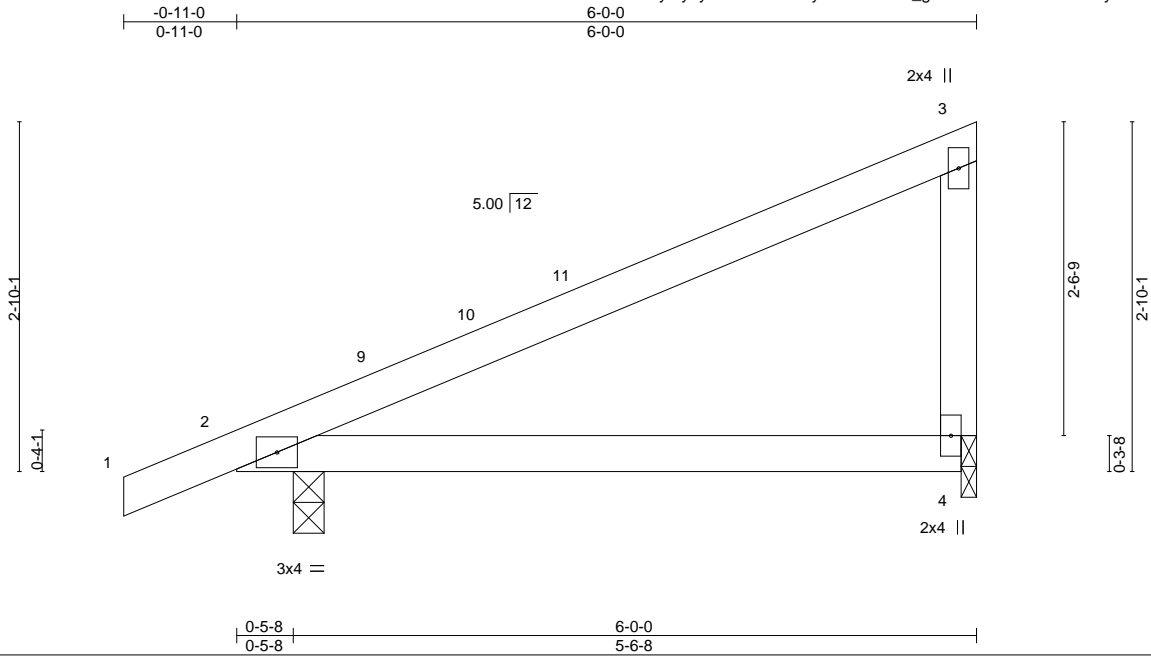*(Engineer's seal: NORTH CAROLINA PROFESSIONAL ENGINEER, SEAL 023594, TONY R. MILLER)*

July 19, 2024

Tony Miller

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #6 ROOF	
24-4826-A	M01	MONOPITCH	3	1		I66916454
					Job Reference (optional)	

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

8.730 s Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 08:07:22 2024 Page 1
ID:InVYNKydfynyZ5DaPQ61KbyAhdz-b2wx5_gU4bxeskK1oB030h4uByvcCDCgAGdgiSyxDVp

-0-11-0   6-0-0
0-11-0   6-0-0

2x4 ||

Scale = 1:18.7

5.00 |12

2-10-1   2-6-9   2-10-1

0-4-1   0-3-8

3x4 =   2x4 ||

0-5-8   6-0-0
0-5-8   5-6-8

LOADING (psf)	**SPACING-**		**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof) 20.0	Plate Grip DOL	1.15	TC	0.48	Vert(LL)	-0.03	4-8	>999	240	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.08	4-8	>934	180		
TCDL 10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL 0.0 *	Code IRC2018/TPI2014		Matrix-MP							Weight: 23 lb	FT = 20%
BCDL 10.0											

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

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

REACTIONS.   (size)   2=0-3-0, 4=0-1-8
              Max Horz 2=92(LC 15)
              Max Uplift 2=-47(LC 16), 4=-10(LC 16)
              Max Grav 2=326(LC 2), 4=216(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 5-10-4 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) Bearing at joint(s) 4 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 at joint(s) 4.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
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.

NORTH CAROLINA
PROFESSIONAL
SEAL
023594
ENGINEER
TONY R. MILLER

July 19,2024

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #6 ROOF	
24-4826-A	M01GE	GABLE	1	1		I66916455
					Job Reference (optional)	

Riverside Roof Truss, LLC,   Danville, Va - 24541,
8.730 s Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 08:07:23 2024 Page 1
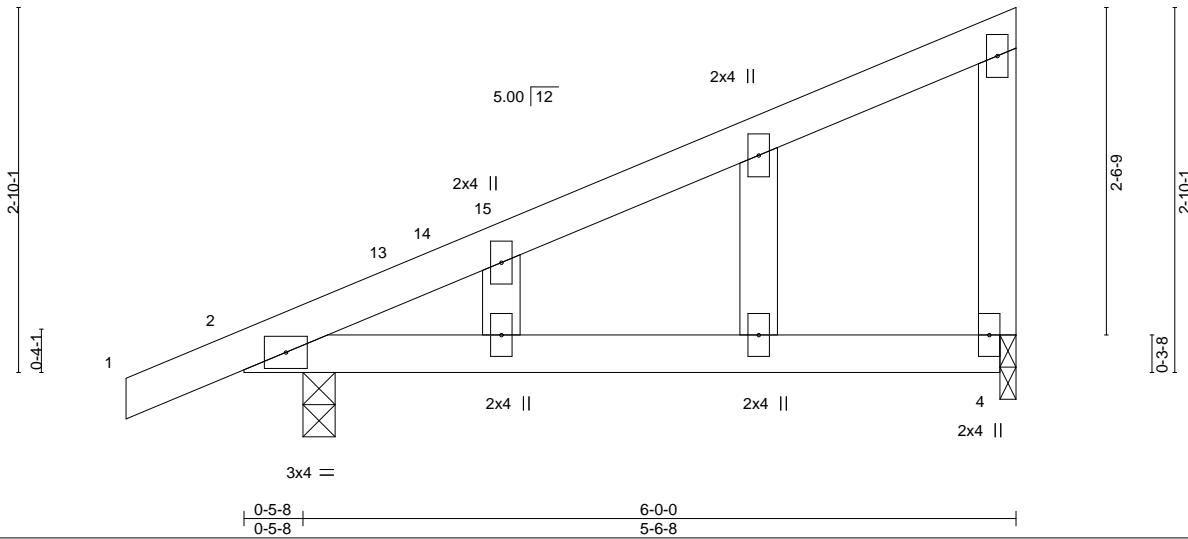ID:lnVYNKydfynyZ5DaPQ61KbyAhdz-3FUJIKg6rv3VUtvDLuXIZvd2xLFrxgSpPwMDFvyxDVo
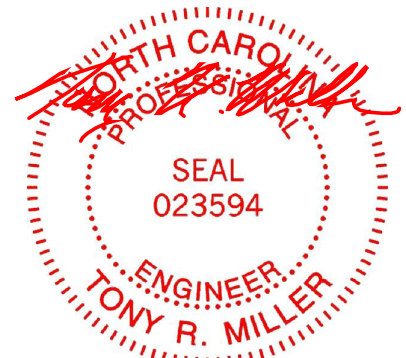
-0-11-0 / 0-11-0

6-0-0 / 6-0-0

2x4 ||

Scale = 1:17.9

5.00 ⌐12

3x4 =

0-5-8 / 0-5-8

6-0-0 / 5-6-8

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.48	Vert(LL)	-0.03	4-12	>999	240	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.08	4-12	>934	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-MP							Weight: 26 lb	FT = 20%
BCDL	10.0											

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

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

REACTIONS.   (size) 2=0-3-0, 4=0-1-8
Max Horz 2=92(LC 15)
Max Uplift 2=-47(LC 16), 4=-10(LC 16)
Max Grav 2=326(LC 2), 4=216(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 5-10-4 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) 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.
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
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.

NORTH CAROLINA
PROFESSIONAL
SEAL
023594
ENGINEER
TONY R. MILLER

July 19,2024

ENGINEERING BY
TRENCO
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818 Soundside Road
Edenton, NC 27932

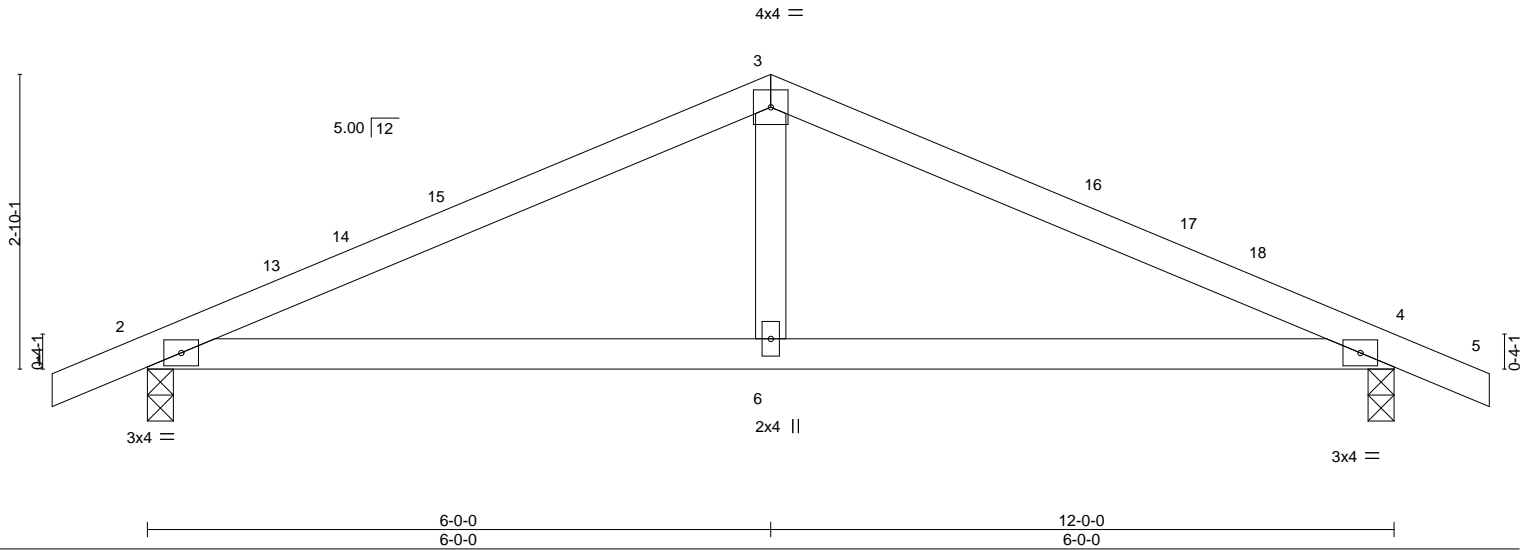| Job	Truss	Truss Type	Qty	Ply	RVF-LOT #6 ROOF	
24-4826-A	T01	COMMON	5	1		I66916456
					Job Reference (optional)	

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

8.730 s Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 08:07:23 2024 Page 1
ID:lnVYNKydfynyZ5DaPQ61KbyAhdz-3FUJIKg6rv3VUtvDLuXIZvd22LC?xfopPwMDFvyxDVo

LOADING (psf)		**SPACING-**		**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	-0.05	6-12	>999	240	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.09	6-12	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-MS							Weight: 44 lb	FT = 20%
BCDL	10.0											

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

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

REACTIONS.   (size) 2=0-3-0, 4=0-3-0
Max Horz 2=-37(LC 14)
Max Uplift 2=-58(LC 16), 4=-58(LC 16)
Max Grav 2=535(LC 2), 4=535(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-765/237, 3-4=-765/237
BOT CHORD   2-6=-119/654, 4-6=-119/654
WEBS   3-6=0/280

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 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.
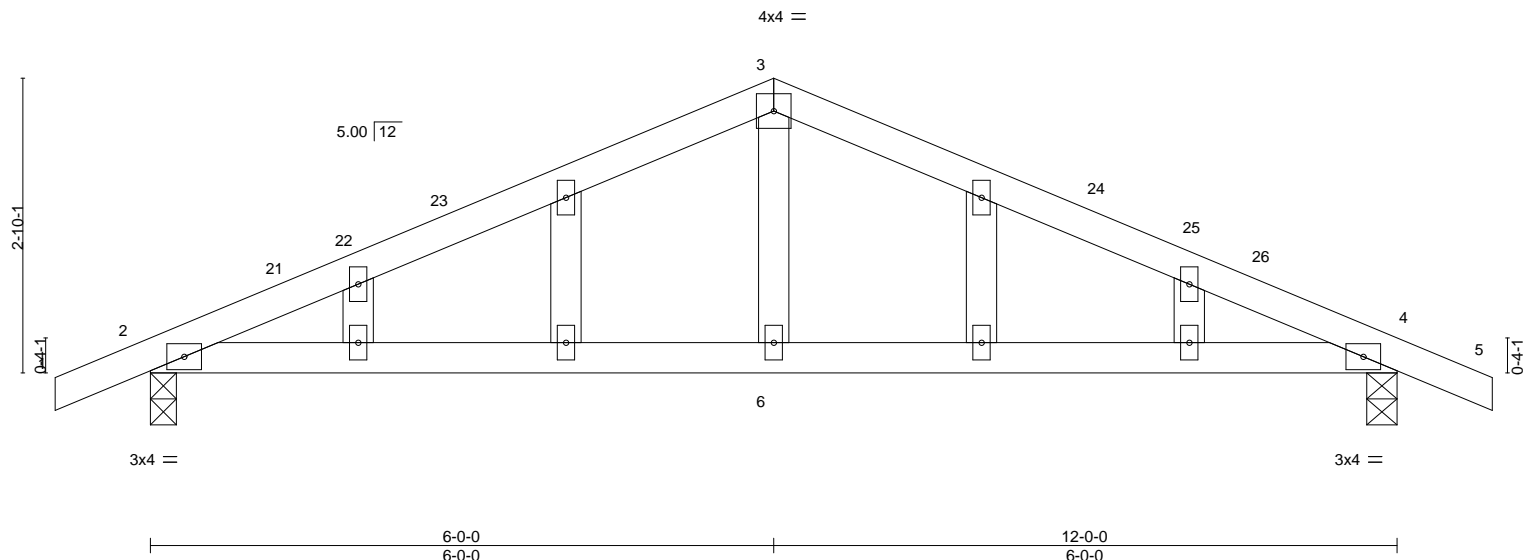
July 19,2024

TRENCO
ENGINEERING BY
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #6 ROOF	
24-4826-A	T01GE	GABLE	1	1		I66916457
					Job Reference (optional)	

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

8.730 s Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 08:07:24 2024 Page 1
ID:InVYNKydfynyZ5DaPQ61KbyAhdz-XR1hWghlbCBL51UQvc2X56ADolYEg62zea6nnLyxDVn

-0-11-0 | 0-11-0 | 6-0-0 | 6-0-0 | 12-0-0 | 6-0-0 | 12-11-0 | 0-11-0

Scale = 1:22.2

4x4 =

5.00 [12

3x4 =   3x4 =

6-0-0 | 6-0-0 | 12-0-0 | 6-0-0

LOADING (psf)	**SPACING-**		**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof) 20.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	-0.05	6-17	>999	240	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.09	6-17	>999	180		
TCDL 10.0	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.01	4	n/a	n/a		
BCLL 0.0 *	Code IRC2018/TPI2014		Matrix-MS							Weight: 50 lb	FT = 20%
BCDL 10.0											

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

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

REACTIONS.   (size)   2=0-3-0, 4=0-3-8
Max Horz 2=-37(LC 14)
Max Uplift 2=-58(LC 16), 4=-58(LC 16)
Max Grav 2=535(LC 2), 4=535(LC 2)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-765/237, 3-4=-765/237
BOT CHORD   2-6=-119/654, 4-6=-119/654
WEBS   3-6=0/280

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 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
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
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.

SEAL 023594
NORTH CAROLINA PROFESSIONAL ENGINEER
TONY R. MILLER

July 19,2024

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

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #6 ROOF	
24-4826-A	T02G	COMMON GIRDER	1	2	Job Reference (optional)	I66916458

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

8.730 s Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 08:07:25 2024 Page 1
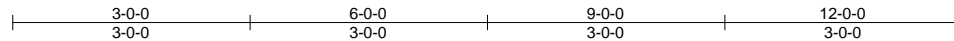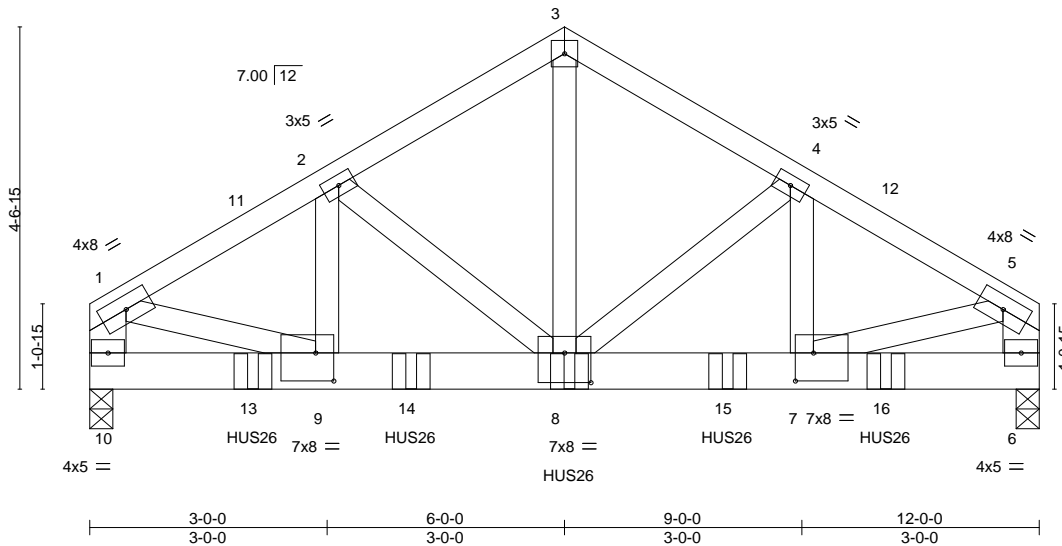ID:lnVYNKydfynyZ5DaPQ61KbyAhdz-?db3j0iNMWJCjB3cTJZmeKiRn9pHPNn6sErKJnyxDVm
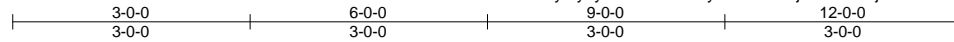
Scale = 1:29.1

Plate Offsets (X,Y)--   [7:0-2-12,0-4-4], [8:0-4-0,0-4-8], [9:0-2-12,0-4-4]

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	-0.04	8-9	>999	240	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.07	8-9	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.84	Horz(CT)	0.02	6	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-MS							Weight: 162 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD   2x4 SP No.2
BOT CHORD   2x6 SP No.2
WEBS   2x4 SP No.3 *Except*
1-10,5-6: 2x6 SP No.2

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 5-5-6 oc purlins, except end verticals.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.   (size)   10=0-3-8, 6=0-3-8
Max Horz 10=94(LC 36)
Max Uplift 10=-282(LC 12), 6=-287(LC 12)
Max Grav 10=4452(LC 3), 6=4523(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   1-2=-5235/352, 2-3=-4282/320, 3-4=-4282/320, 4-5=-5226/352, 1-10=-3856/261, 5-6=-3839/260
BOT CHORD   9-10=-97/636, 8-9=-256/4468, 7-8=-255/4461, 6-7=-38/667
WEBS   3-8=-264/4074, 4-8=-1009/100, 4-7=-81/1057, 2-8=-1020/101, 2-9=-82/1069, 1-9=-231/3996, 5-7=-229/3953

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
   Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
   Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-6-0 oc.
   Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
6) Unbalanced snow loads have been considered for this design.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=282, 6=287.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Use Simpson Strong-Tie HUS26 (14-16d Girder, 4-16d Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left end to 10-0-12 to connect truss(es) to back face of bottom chord.
12) Fill all nail holes where hanger is in contact with lumber.

Continued on page 2

July 19,2024

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

SEAL 023594
TONY R. MILLER
NORTH CAROLINA PROFESSIONAL ENGINEER

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #6 ROOF	
24-4826-A	T02G	COMMON GIRDER	1	**2**		I66916458
					Job Reference (optional)	

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

8.730 s Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 08:07:25 2024 Page 2
ID:lnVYNKydfynyZ5DaPQ61KbyAhdz-?db3j0iNMWJCjB3cTJZmeKiRn9pHPNn6sErKJnlyxDVm

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
    Uniform Loads (plf)
        Vert: 1-3=-43, 3-5=-43, 6-10=-20
    Concentrated Loads (lb)
        Vert: 8=-1161(B) 13=-1161(B) 14=-1161(B) 15=-1161(B) 16=-1161(B)

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

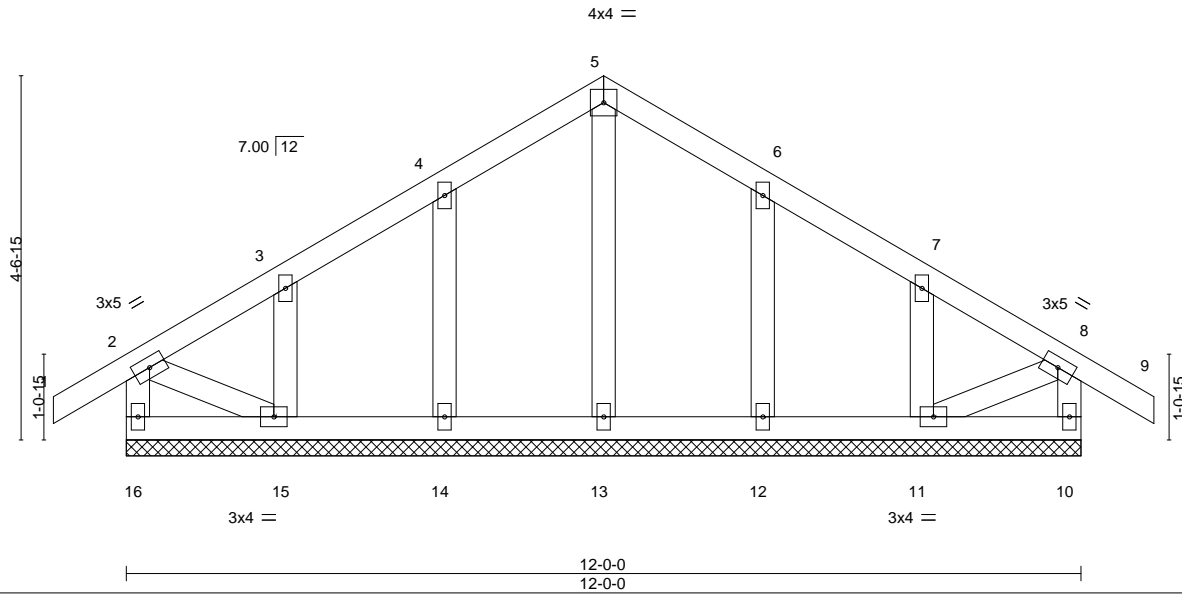| Job	Truss	Truss Type	Qty	Ply	RVF-LOT #6 ROOF	
24-4826-A	T02GE	COMMON SUPPORTED GAB	1	1		I66916459
					Job Reference (optional)	

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

8.730 s Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 08:07:25 2024 Page 1
ID:InVYNKydfynyZ5DaPQ61KbyAhdz-?db3j0iNMWJCjB3cTJZmeKiUh9?UPaL6sErKJnyxDVm

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	-0.00	9	n/r	120	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	9	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	10	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-S							Weight: 68 lb	FT = 20%
BCDL	10.0											

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

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

REACTIONS.   All bearings 12-0-0.
    (lb) - Max Horz 16=-108(LC 14)
            Max Uplift All uplift 100 lb or less at joint(s) 16, 10, 14, 15, 12, 11
            Max Grav   All reactions 250 lb or less at joint(s) 16, 10, 13, 14, 15, 12, 11

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

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

NORTH CAROLINA
PROFESSIONAL
SEAL
023594
ENGINEER
TONY R. MILLER

July 19,2024

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #6 ROOF	
24-4826-A	T03	COMMON	3	1		I66916460
					Job Reference (optional)	

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

8.730 s Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 08:07:26 2024 Page 1
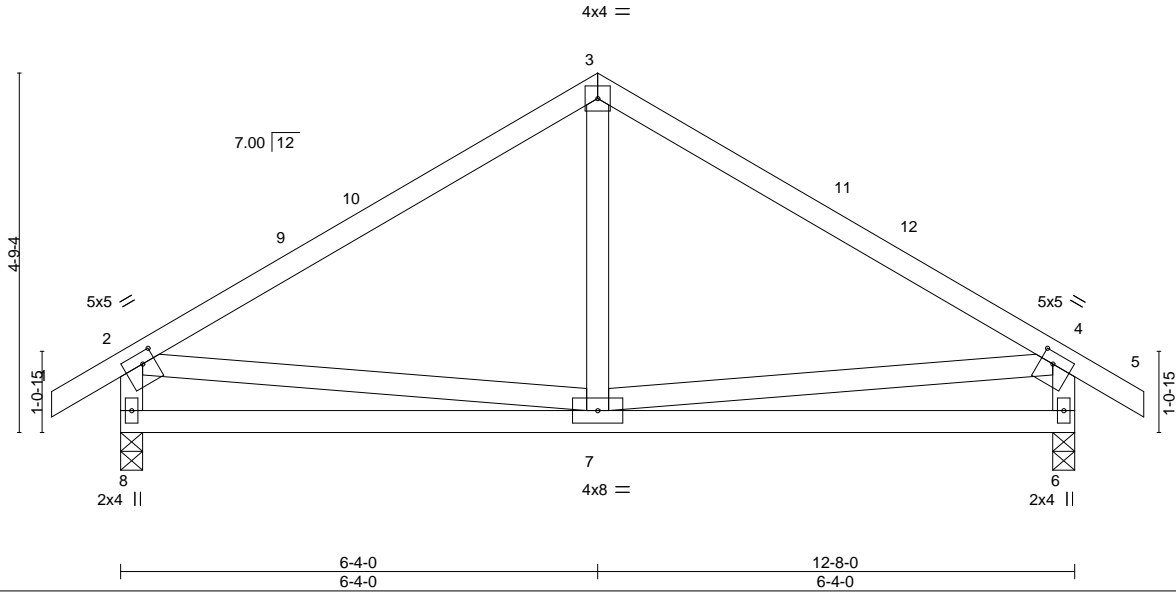ID:lnVYNKydfynyZ5DaPQ61KbyAhdz-Tq9SxMj?7qR3LLdo115?BXFWEZFp80pG5uburDyxDVI
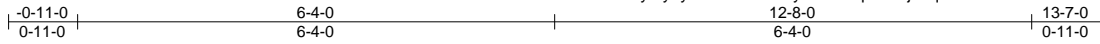
Plate Offsets (X,Y)--   [2:0-2-0,0-1-12], [4:0-2-0,0-1-12]

LOADING (psf)
TCLL (roof)	20.0	**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d
Snow (Pf/Pg)	11.6/15.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.03	7-8	>999	240
TCDL	10.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	-0.06	7-8	>999	180
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	6	n/a	n/a
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS						

PLATES **GRIP**
MT20   244/190

Weight: 70 lb   FT = 20%

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

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

REACTIONS.   (size)   8=0-3-8, 6=0-3-8
Max Horz   8=112(LC 15)
Max Uplift 8=-63(LC 16), 6=-63(LC 16)
Max Grav   8=559(LC 2), 6=559(LC 2)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-537/108, 3-4=-537/108, 2-8=-503/160, 4-6=-503/160
BOT CHORD   7-8=-123/315, 6-7=-91/251

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

July 19,2024

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

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #6 ROOF	
24-4826-A	T03G	COMMON GIRDER	1	**2**		I66916461
					Job Reference (optional)	

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

8.730 s Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 08:07:26 2024 Page 1
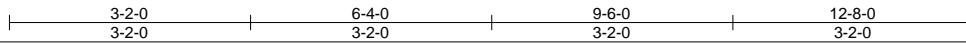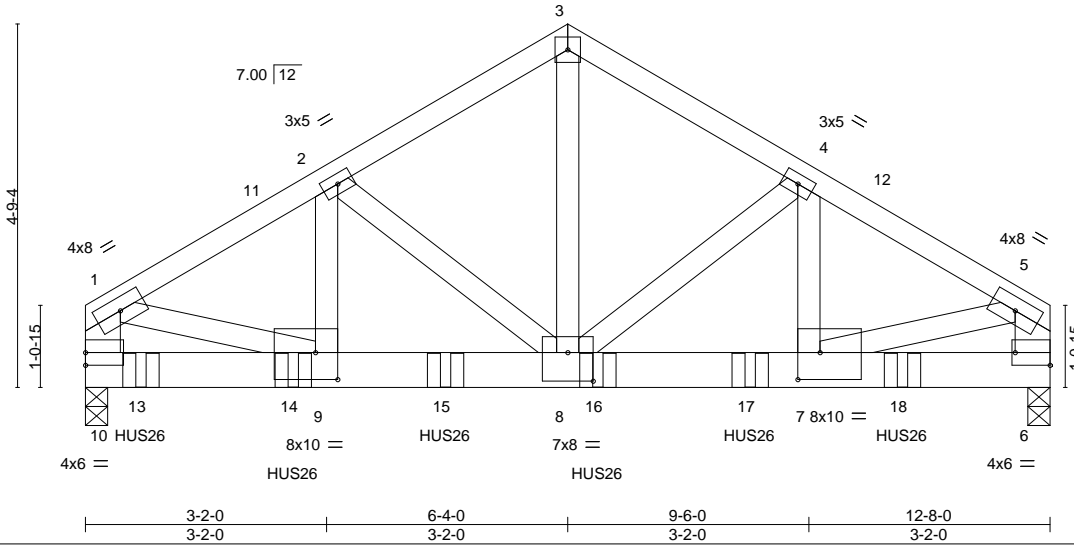ID:InVYNKydfynyZ5DaPQ61KbyAhdz-Tq9SxMj?7qR3LLdo115?BXFbSZ7Z8p0G5uburDyxDVI
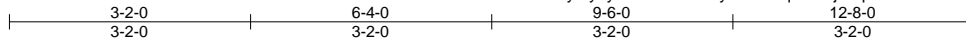
Plate Offsets (X,Y)--　　[6:Edge,0-2-0], [7:0-3-8,0-4-4], [8:0-4-0,0-4-8], [9:0-3-8,0-4-4]

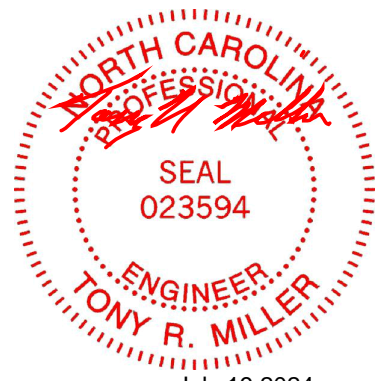| LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	-0.05	8-9	>999	240	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.09	8-9	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.91	Horz(CT)	0.02	6	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-MS							Weight: 171 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD　2x4 SP No.2
BOT CHORD　2x6 SP No.2
WEBS　　　　2x4 SP No.3 *Except*
　　　　　　　1-10,5-6: 2x6 SP No.2

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

REACTIONS.　(size)　10=0-3-8, 6=0-3-8
　　Max Horz　10=-97(LC 35)
　　Max Uplift　10=-365(LC 12), 6=-307(LC 12)
　　Max Grav　10=5818(LC 3), 6=4843(LC 3)

FORCES.　(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD　1-2=-5722/383, 2-3=-4600/342, 3-4=-4600/342, 4-5=-5692/382, 1-10=-4102/277,
　　　　　　　5-6=-4106/277
BOT CHORD　9-10=-109/829, 8-9=-281/4888, 7-8=-280/4862, 6-7=-42/733
WEBS　　　　3-8=-283/4386, 4-8=-1169/112, 4-7=-89/1216, 2-8=-1202/114, 2-9=-90/1252,
　　　　　　　1-9=-244/4212, 5-7=-248/4285

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
　　Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
　　Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-5-0 oc.
　　Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
6) Unbalanced snow loads have been considered for this design.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=365, 6=307.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Use Simpson Strong-Tie HUS26 (14-16d Girder, 4-16d Truss) or equivalent spaced at 2-0-0 oc max. starting at 0-8-12 from the left end to 10-8-12 to connect truss(es) to back face of bottom chord.
12) Fill all nail holes where hanger is in contact with lumber.
Continued on page 2

July 19,2024

T|RENCO
ENGINEERING BY
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #6 ROOF	
24-4826-A	T03G	COMMON GIRDER	1	**2**		I66916461
					Job Reference (optional)	

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
    Uniform Loads (plf)
         Vert: 1-3=-43, 3-5=-43, 6-10=-20
    Concentrated Loads (lb)
         Vert: 13=-1166(B) 14=-1161(B) 15=-1161(B) 16=-1161(B) 17=-1161(B) 18=-1161(B)

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #6 ROOF	
24-4826-A	T03GE	COMMON SUPPORTED GAB	1	1		I66916462
					Job Reference (optional)	

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

8.730 s Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 08:07:27 2024 Page 1
ID:lnVYNKydfynyZ5DaPQ61KbyAhdz-x0jq8ijdu7ZwzVC?akcEjloqAzgrtUpPKYKROgyxDVk
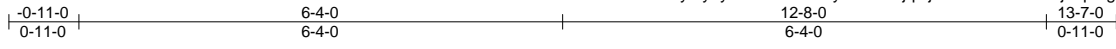
Scale = 1:30.2

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d		PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	-0.00	9	n/r	120		MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	9	n/r	120			
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	10	n/a	n/a			
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-S								Weight: 73 lb	FT = 20%
BCDL	10.0												

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

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

REACTIONS.   All bearings 12-8-0.
        (lb) - Max Horz 16=-112(LC 14)
                Max Uplift   All uplift 100 lb or less at joint(s) 16, 10, 14, 15, 12, 11
                Max Grav   All reactions 250 lb or less at joint(s) 16, 10, 13, 14, 15, 12, 11

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

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

July 19,2024

TRENCO
ENGINEERING BY
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

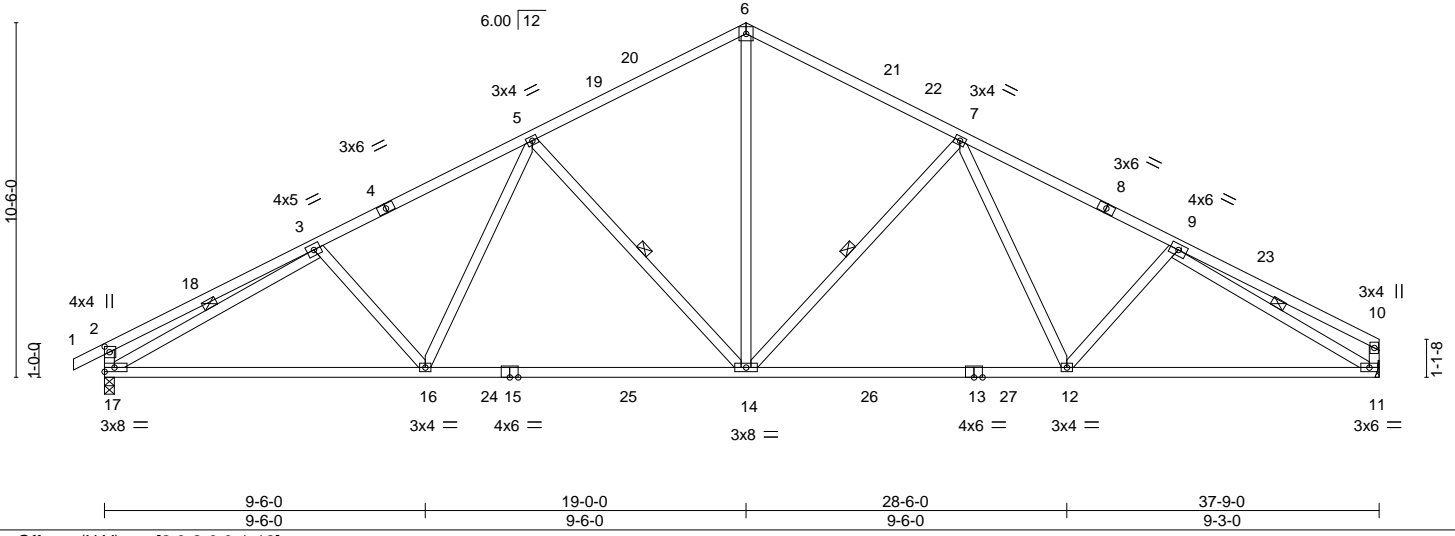| Job	Truss	Truss Type	Qty	Ply	RVF-LOT #6 ROOF
24-4826-A	T04	Common	11	1	I66916463
					Job Reference (optional)

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

8.730 s Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 08:07:28 2024 Page 1
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Scale = 1:68.2

Plate Offsets (X,Y)-- [2:0-2-0,0-1-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.69	Vert(LL)	-0.27	12-14	>999	240	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.47	12-14	>959	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.11	11	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-MS							Weight: 221 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD   2x4 SP No.2
BOT CHORD   2x4 SP No.1
WEBS   2x4 SP No.3

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 3-4-2 oc purlins, except end verticals.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS   1 Row at midpt   5-14, 7-14, 3-17, 9-11

REACTIONS.   (size)   17=0-3-8, 11=Mechanical
Max Horz 17=212(LC 15)
Max Uplift 17=-124(LC 16), 11=-91(LC 16)
Max Grav 17=1754(LC 28), 11=1695(LC 29)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-592/113, 3-5=-2559/252, 5-6=-1861/273, 6-7=-1861/275, 7-9=-2518/256,
             9-10=-401/74, 2-17=-473/150, 10-11=-309/79
BOT CHORD   16-17=-184/2404, 14-16=-117/2126, 12-14=-104/2001, 11-12=-178/2188
WEBS   5-16=0/506, 5-14=-709/150, 6-14=-97/1305, 7-14=-679/148, 7-12=0/465,
             3-17=-2151/149, 9-11=-2280/191

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=38ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-10-5, Interior(1) 2-10-5 to 19-0-0, Exterior(2R) 19-0-0 to 22-9-5, Interior(1) 22-9-5 to 37-7-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, 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) 11 except (jt=lb) 17=124.
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.

NORTH CAROLINA
PROFESSIONAL
SEAL
023594
ENGINEER
TONY R. MILLER

July 19,2024

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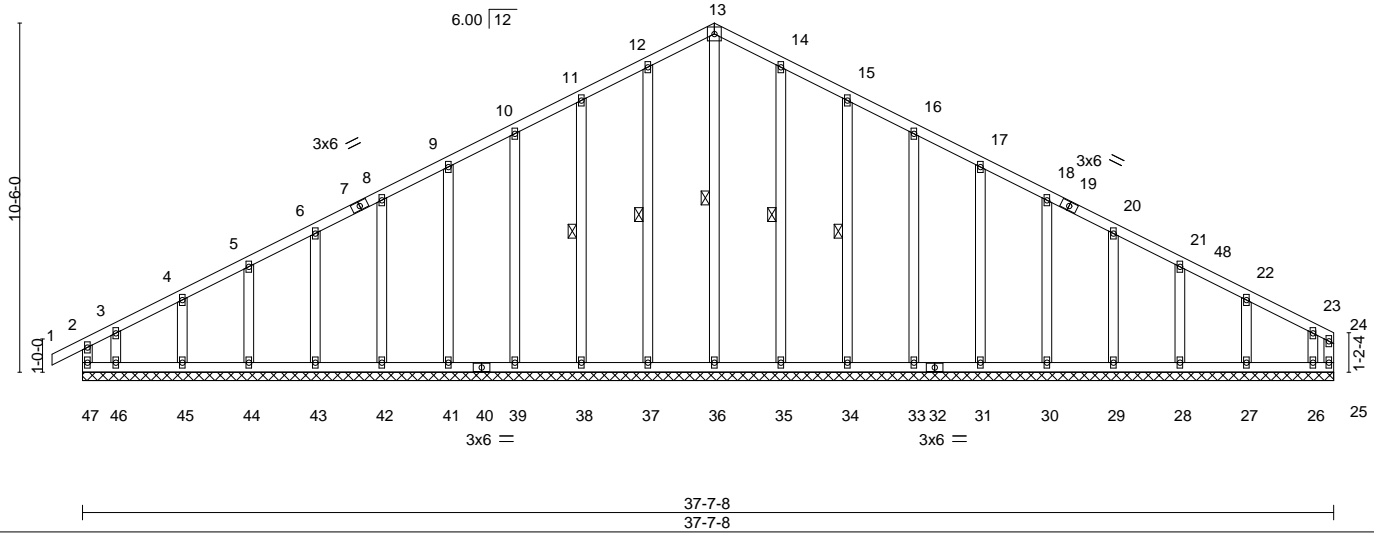Riverside Roof Truss, LLC,   Danville, Va - 24541,

8.730 s Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 08:07:29 2024 Page 1
ID:lnVYNKydfynyZ5DaPQ61KbyAhdz-uPraZNltQlpeCoMNi9eioAt9NmLfLN1inspYSYyxDVi

-0-11-0 / 0-11-0   19-0-0 / 19-0-0   37-7-8 / 18-7-8

5x5

Scale = 1:69.3

6.00 [12

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	-0.00	1	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	-0.00	25	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-R								
BCDL	10.0										Weight: 270 lb	FT = 20%

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

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD   Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS   1 Row at midpt   13-36, 12-37, 11-38, 14-35, 15-34

REACTIONS.   All bearings 37-7-8.
  (lb) -   Max Horz   47=213(LC 15)
          Max Uplift   All uplift 100 lb or less at joint(s) 37, 38, 39, 41, 42, 43, 44, 45, 35, 34, 33, 31, 30, 29, 28, 27
                       except 47=-135(LC 14), 25=-174(LC 15), 46=-101(LC 15), 26=-125(LC 16)
          Max Grav   All reactions 250 lb or less at joint(s) 47, 25, 36, 37, 38, 39, 41, 42, 43, 44, 45, 46, 35, 34, 33, 31, 30, 29, 28, 27, 26

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   10-11=-100/255, 11-12=-117/304, 12-13=-131/343, 13-14=-131/343, 14-15=-117/304, 15-16=-100/255

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=38ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-11-0 to 3-0-0, Exterior(2N) 3-0-0 to 19-0-0, Corner(3R) 19-0-0 to 23-0-0, Exterior(2N) 23-0-0 to 37-5-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
10) Gable studs spaced at 2-0-0 oc.
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 37, 38, 39, 41, 42, 43, 44, 45, 35, 34, 33, 31, 30, 29, 28, 27 except (jt=lb) 47=135, 25=174, 46=101, 26=125.
14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
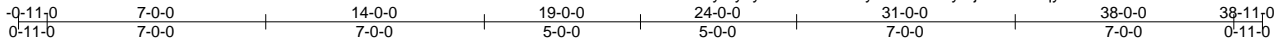
NORTH CAROLINA
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ENGINEER
TONY R. MILLER

July 19,2024

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Job	Truss	Truss Type	Qty	Ply	RVF-LOT #6 ROOF	I66916465
24-4826-A	T05	COMMON	7	1	Job Reference (optional)	

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

8.730 s Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 08:07:30 2024 Page 1
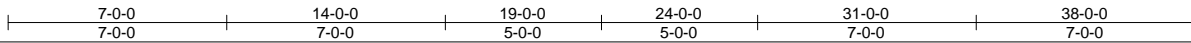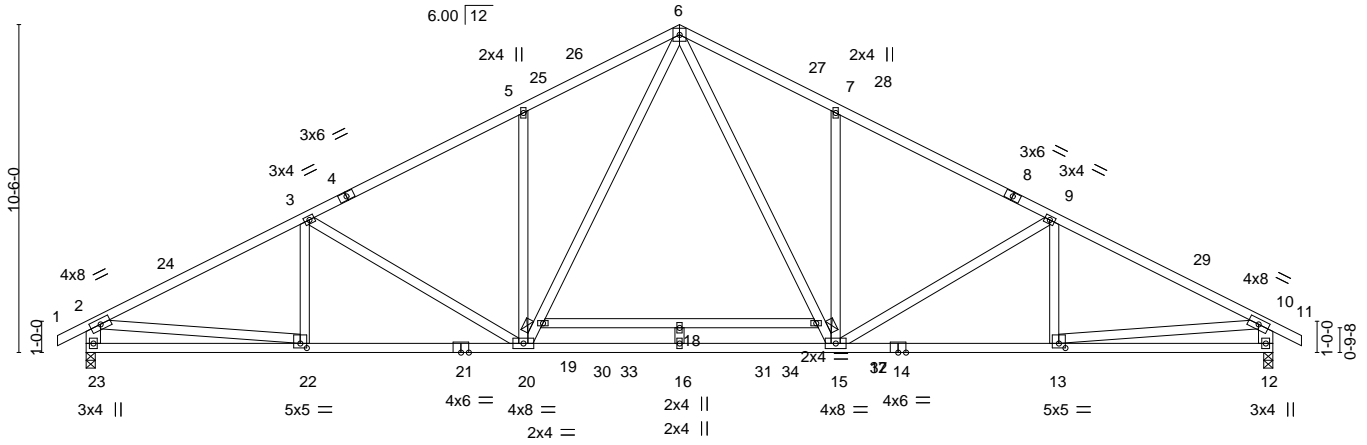ID:InVYNKydfynyZ5DaPQ61KbyAhdz-MbPymjmVB2xVqyxZGs9xLNQDDAUb4eFr0WZ5??yxDVh

-0-11-0 | 7-0-0 | 14-0-0 | 19-0-0 | 24-0-0 | 31-0-0 | 38-0-0 | 38-11-0
0-11-0 | 7-0-0 | 7-0-0 | 5-0-0 | 5-0-0 | 7-0-0 | 7-0-0 | 0-11-0

Scale = 1:73.8

Plate Offsets (X,Y)--   [13:0-2-8,0-1-12], [22:0-2-8,0-1-12]

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	2-0-0	TC	0.60	Vert(LL)	-0.54	18	>840	240	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Plate Grip DOL	1.15	BC	0.93	Vert(CT)	-0.90	18	>499	180		
TCDL	10.0	Lumber DOL	1.15	WB	0.89	Horz(CT)	0.08	12	n/a	n/a		
BCLL	0.0 *	Rep Stress Incr	YES	Matrix-MS								
BCDL	10.0	Code IRC2018/TPI2014									Weight: 249 lb	FT = 20%

LUMBER-
TOP CHORD   2x4 SP No.2
BOT CHORD   2x4 SP No.2 *Except*
14-21: 2x4 SP DSS
WEBS   2x4 SP No.3 *Except*
2-23,10-12: 2x6 SP No.2

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 2-10-6 oc purlins, except end verticals.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.   (size)   23=0-3-8, 12=0-3-8
Max Horz 23=-214(LC 14)
Max Uplift 23=-73(LC 16), 12=-73(LC 16)
Max Grav 23=1936(LC 28), 12=1936(LC 29)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-2971/127, 3-5=-2668/139, 5-6=-2678/233, 6-7=-2678/233, 7-9=-2668/139,
9-10=-2971/127, 2-23=-1807/169, 10-12=-1807/169
BOT CHORD   22-23=-80/582, 20-22=-39/2719, 16-20=0/1828, 15-16=0/1828, 13-15=-29/2566,
12-13=-46/429
WEBS   6-17=-72/1265, 15-17=-119/1160, 7-15=-390/178, 9-15=-363/111, 19-20=-119/1160,
6-19=-72/1265, 5-20=-390/178, 3-20=-363/111, 2-22=0/2167, 10-13=0/2167

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=38ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-10-10, Interior(1) 2-10-10 to 19-0-0, Exterior(2R) 19-0-0 to 22-9-10, Interior(1) 22-9-10 to 38-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces and MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 23, 12.
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.

July 19,2024

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #6 ROOF	
24-4826-A	T05A	COMMON	1	1		I66916466
					Job Reference (optional)	

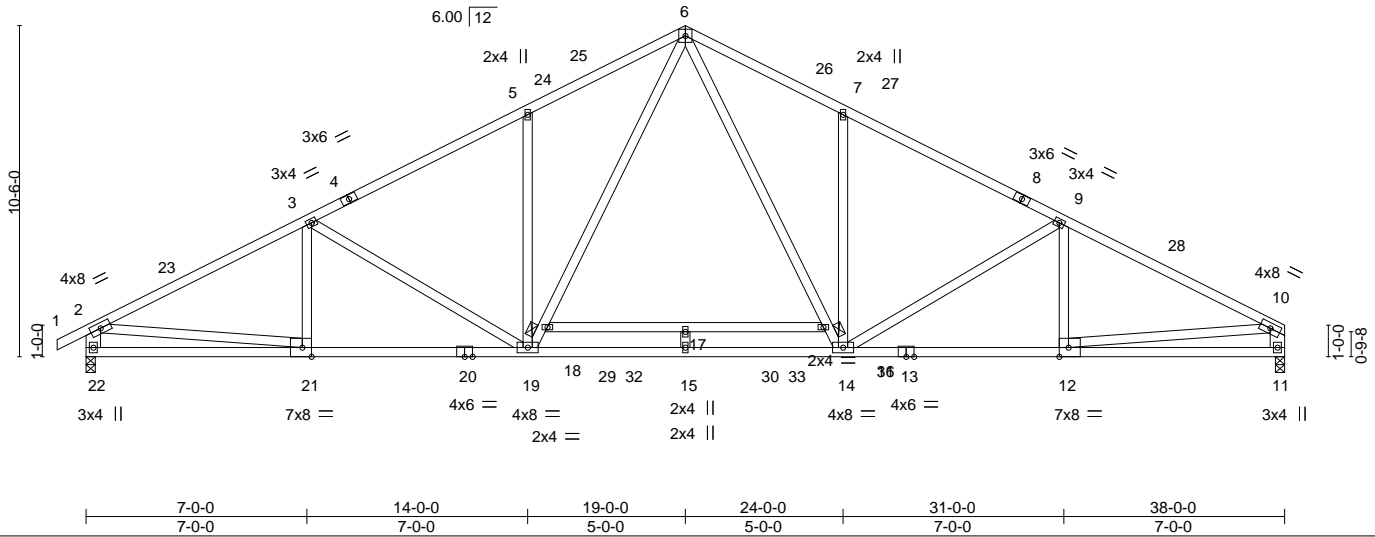Riverside Roof Truss, LLC,   Danville, Va - 24541,

8.730 s Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 08:07:30 2024 Page 1
ID:InVYNKydfynyZ5DaPQ61KbyAhdz-MbPymjmVB2xVqyxZGs9xLNQBOAUb4ddr0WZ5??yxDVh

5x5 ☰

Scale = 1:73.0

Plate Offsets (X,Y)--   [12:0-3-8,Edge], [21:0-3-8,Edge]

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	-0.54	17	>840	240	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.90	17	>499	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.93	Horz(CT)	0.08	11	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-MS							Weight: 247 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD   2x4 SP No.2
BOT CHORD   2x4 SP No.2 *Except*
   13-20: 2x4 SP DSS
WEBS   2x4 SP No.3 *Except*
   2-22,10-11: 2x6 SP No.2

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

REACTIONS.   (size)   22=0-3-8, 11=0-3-8
   Max Horz   22=212(LC 15)
   Max Uplift   22=-73(LC 16), 11=-36(LC 16)
   Max Grav   22=1937(LC 28), 11=1874(LC 29)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-2972/127, 3-5=-2670/139, 5-6=-2679/235, 6-7=-2679/235, 7-9=-2672/143,
   9-10=-2977/135, 2-22=-1808/169, 10-11=-1745/121
BOT CHORD   21-22=-109/576, 19-21=-71/2714, 15-19=0/1824, 14-15=0/1824, 12-14=-71/2577,
   11-12=-48/333
WEBS   6-16=-71/1265, 14-16=-118/1159, 7-14=-383/175, 9-14=-378/118, 18-19=-119/1160,
   6-18=-72/1265, 5-19=-390/178, 3-19=-363/111, 2-21=0/2169, 10-12=-24/2267

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=38ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-10-10, Interior(1) 2-10-10 to 19-0-0, Exterior(2R) 19-0-0 to 22-9-10, Interior(1) 22-9-10 to 37-9-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 22, 11.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

July 19,2024

ENGINEERING BY
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Edenton, NC 27932

Scale = 1:19.0

4-9-1 / 4-9-1 | 9-6-1 / 4-9-1

4x4 =

7.00 ⎡12

2-9-4

0-0-4

0-0-4

2x4 ∥ | 2x4 ∥ | 2x4 ∖∖

0-0-7 / 0-0-7 | 9-6-1 / 9-5-10

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	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	0.18	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-S							Weight: 32 lb	FT = 20%
BCDL	10.0											

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

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

REACTIONS.   (size)   1=9-5-3, 3=9-5-3, 4=9-5-3
                Max Horz 1=49(LC 15)
                Max Uplift 1=-20(LC 16), 3=-20(LC 16)
                Max Grav 1=160(LC 2), 3=160(LC 2), 4=355(LC 2)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 4-9-1, Exterior(2R) 4-9-1 to 7-9-1, Interior(1) 7-9-1 to 8-11-9 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
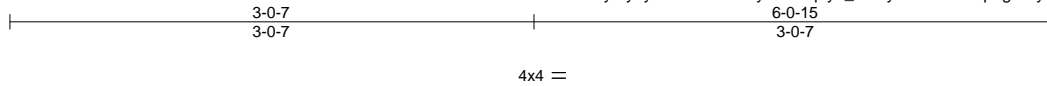
July 19,2024

TRENCO
ENGINEERING BY
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #6 ROOF	
24-4826-A	V02	Valley	1	1		I66916468
					Job Reference (optional)	

3-0-7
3-0-7
6-0-15
3-0-7

4x4 ═

7.00 ⌐12

Scale = 1:13.4

1-9-4

0-0-4

0-0-4

2
1
3
4

2x4 ╱╱   2x4 ‖   2x4 ╲╲

0-0-7
0-0-7
6-0-15
6-0-8

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
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-P							Weight: 19 lb	FT = 20%
BCDL	10.0											

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

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

REACTIONS.   (size) 1=6-0-1, 3=6-0-1, 4=6-0-1
Max Horz 1=-29(LC 14)
Max Uplift 1=-17(LC 16), 3=-17(LC 16)
Max Grav 1=104(LC 2), 3=104(LC 2), 4=191(LC 2)

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

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

NORTH CAROLINA
PROFESSIONAL
SEAL
023594
ENGINEER
TONY R. MILLER

July 19,2024

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #6 ROOF	
24-4826-A	V03	Valley	1	1		I66916469
					Job Reference (optional)	

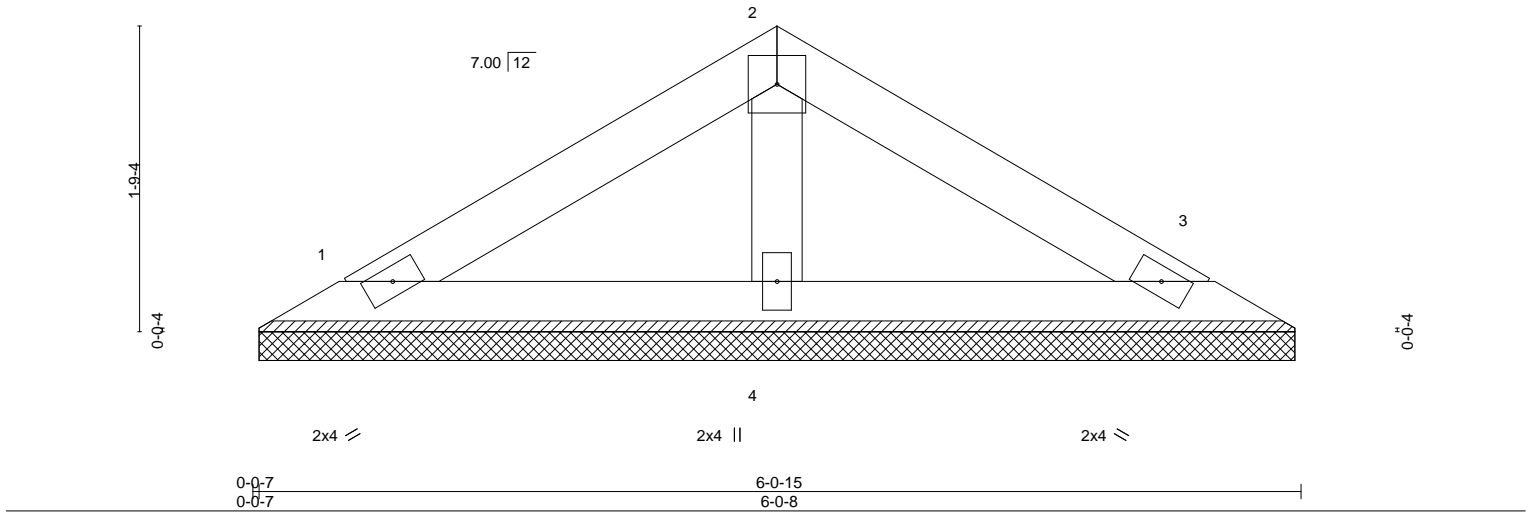Riverside Roof Truss, LLC,   Danville, Va - 24541,

8.730 s Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 08:07:32 2024 Page 1
ID:InVYNKydfynyZ5DaPQ61KbyAhdz-I_WjBPnmjgCD3G5yNHBPQoViw_N9Ylh8Tq2C3tyxDVf

1-3-14 / 1-3-14

2-7-13 / 1-3-14

Scale = 1:6.6

7.00 [12]

3x4 ═

0-9-4

0-0-4

0-0-4

2x4 ⁄⁄

2x4 ⁀

0-0-7 / 0-0-7

2-7-13 / 2-7-6

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.01	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-P							Weight: 7 lb	FT = 20%
BCDL	10.0											

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

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 2-7-13 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.   (size)   1=2-6-15, 3=2-6-15
                    Max Horz 1=-9(LC 14)
                    Max Uplift 1=-4(LC 16), 3=-4(LC 16)
                    Max Grav 1=63(LC 2), 3=63(LC 2)

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

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

July 19,2024

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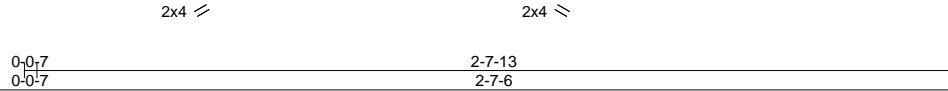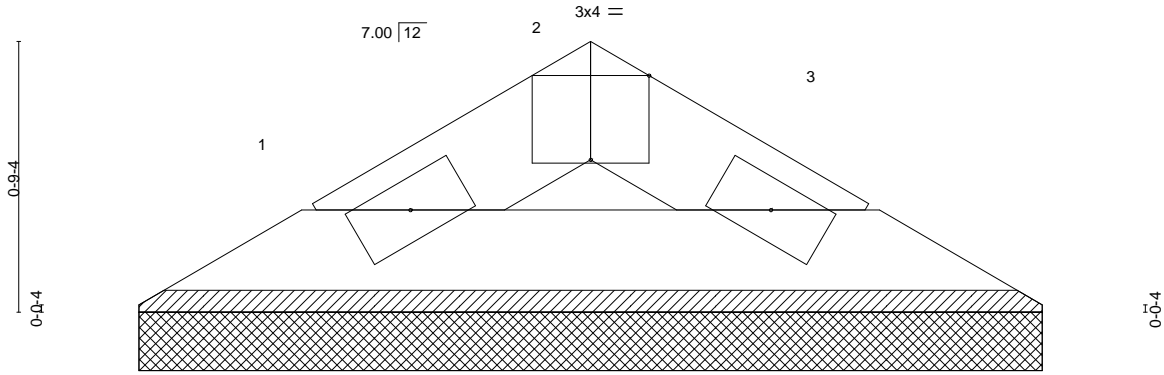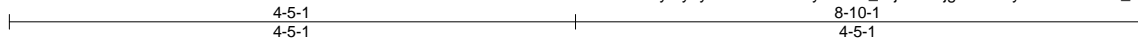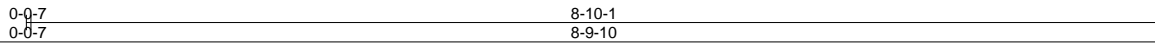| Job	Truss	Truss Type	Qty	Ply	RVF-LOT #6 ROOF	I66916470
24-4826-A	V04	Valley	1	1	Job Reference (optional)	

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

8.730 s Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 08:07:32 2024 Page 1
ID:lnVYNKydfynyZ5DaPQ61KbyAhdz-I_WjBPnmjgCD3G5yNHBPQoVeE_LDYl08Tq2C3tyxDVf

4-5-1 | 8-10-1
4-5-1 | 4-5-1

Scale = 1:18.0

0-0-7 | 8-10-1
0-0-7 | 8-9-10

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-P								
BCDL	10.0										Weight: 29 lb	FT = 20%

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

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

REACTIONS.   (size)   1=8-9-3, 3=8-9-3, 4=8-9-3
        Max Horz 1=-45(LC 14)
        Max Uplift 1=-26(LC 16), 3=-26(LC 16)
        Max Grav 1=162(LC 2), 3=162(LC 2), 4=296(LC 2)

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

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

July 19,2024

ENGINEERING BY
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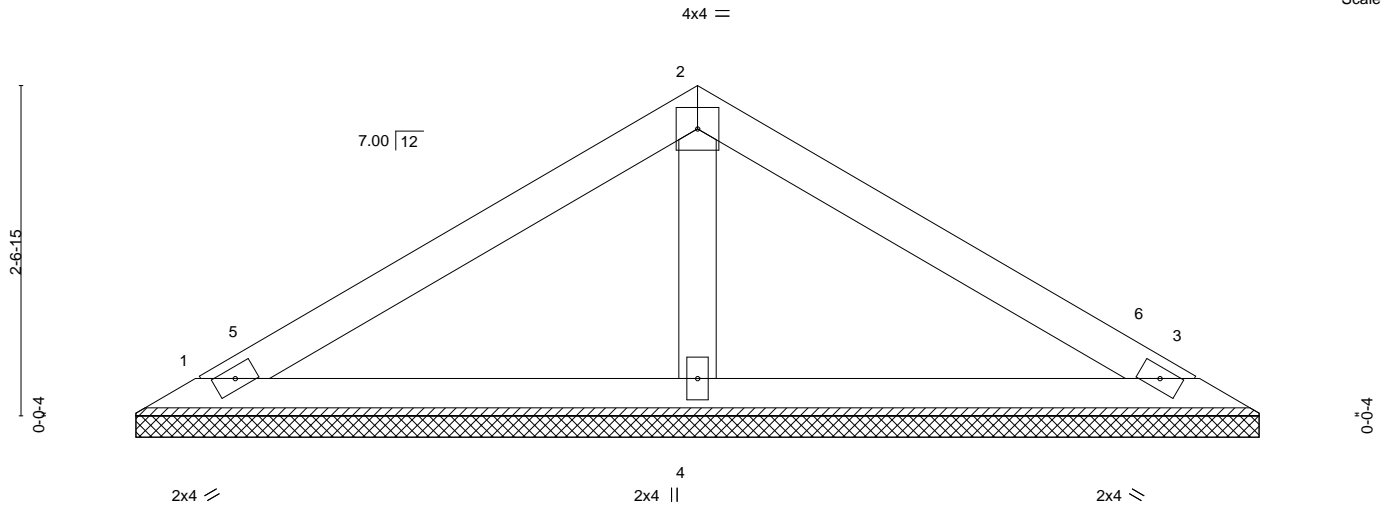| Job	Truss	Truss Type	Qty	Ply	RVF-LOT #6 ROOF	
24-4826-A	V05	Valley	1	1		I66916471
					Job Reference (optional)	

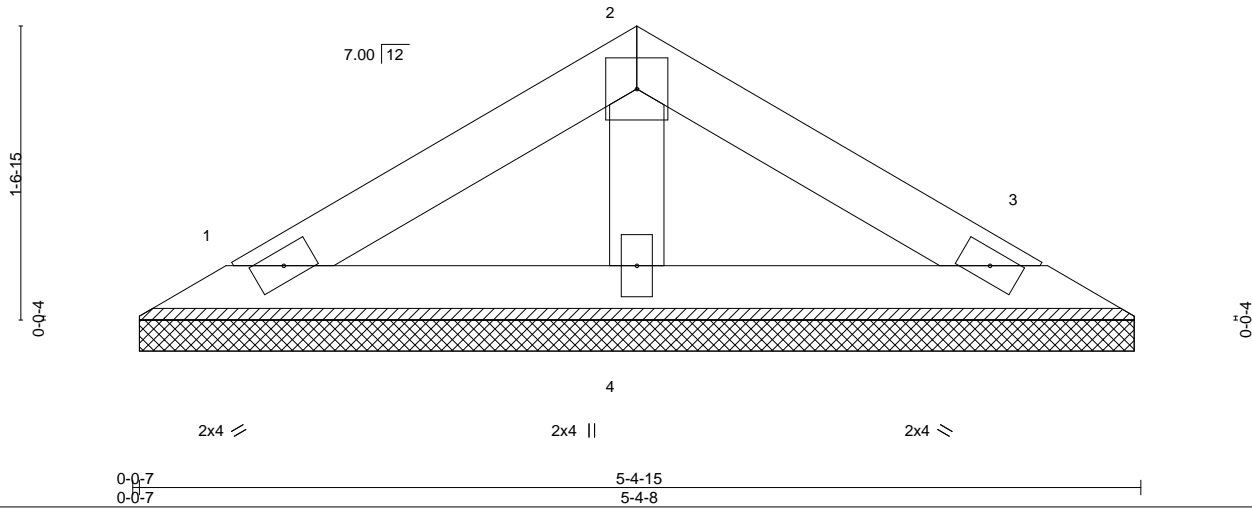Riverside Roof Truss, LLC,   Danville, Va - 24541,
8.730 s Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 08:07:33 2024 Page 1
ID:lnVYNKydfynyZ5DaPQ61KbyAhdz-mA45PloOUzK4hQg8x?jez02scNj4HCbIiUnlbJyxDVe

2-8-7   5-4-15
2-8-7   2-8-7

4x4 ═

Scale = 1:12.4

7.00 ⌐12

1-6-15

0-0-4

0-0-4

2x4 ⟋   2x4 ‖   2x4 ⟍

0-0-7   5-4-15
0-0-7   5-4-8

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-P							Weight: 17 lb	FT = 20%
BCDL	10.0											

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 5-4-15 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=5-4-1, 3=5-4-1, 4=5-4-1
               Max Horz 1=25(LC 15)
               Max Uplift 1=-15(LC 16), 3=-15(LC 16)
               Max Grav 1=90(LC 2), 3=90(LC 2), 4=165(LC 2)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
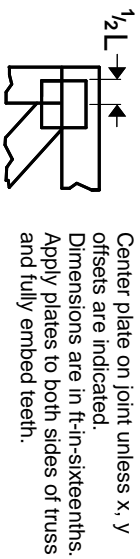
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
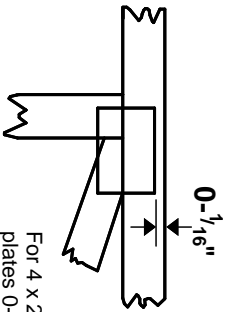
NORTH CAROLINA
PROFESSIONAL
SEAL
023594
ENGINEER
TONY R. MILLER

July 19,2024

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818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION

½"L

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

0-¹⁄₁₆"

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

=

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

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

PLATE SIZE

4 x 4

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

LATERAL BRACING LOCATION

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

BEARING

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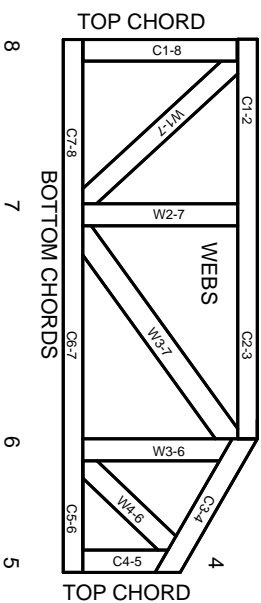
Industry Standards:

ANSI/TPI1: 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.

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

Numbering System

6-4-8   **dimensions shown in ft-in-sixteenths**
(Drawings not to scale)

1   2   3   Joint ID
TOP CHORDS   typ.

TOP CHORD
C1-8
C7-8   C1-2
WEBS
W1-7
W2-7
BOTTOM CHORDS
C6-7   C2-3
W3-7
W3-6   C3-4
C5-6   W4-6
C4-5
TOP CHORD

8   7   6   5   4

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/TPI 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 T or 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/TPI 1.

7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 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/TPI 1 Quality Criteria.

21. The design does not take into account any dynamic or other loads other than those expressly stated.