

Trenco 818 Soundside Rd Edenton, NC 27932

Re: 25-3224-A RVF-LOT #34 ROOF

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

Pages or sheets covered by this seal: I73821006 thru I73821030

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

North Carolina COA: C-0844



May 30,2025

Gilbert, Eric

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



BRACING-

TOP CHORD

BOT CHORD

Matrix-MF

WEBS

BCLL

BCDL

LUMBER-

TOP CHORD

BOT CHORD

REACTIONS.

Max Uplift 2=-70(LC 12) Max Grav 6=185(LC 17), 2=379(LC 2)

6=Mechanical, 2=0-4-4

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

Code IRC2018/TPI2014

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); 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.
- Refer to airder(s) for truss to truss connections.

0.0

10.0

2x4 SP No.2

2x6 SP No.2

2x4 SP No.3

(size)

Max Horz 2=64(LC 9)

- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2.
- 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 guidlines.
- 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Vert: 1-3=-43, 3-4=-43, 2-5=-20 Concentrated Loads (lb)





Weight: 27 lb

Structural wood sheathing directly applied or 5-10-11 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

FT = 20%

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 bilding 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)



Plate Offsets (X,Y) [2:0-1-14	,0-0-10], [2:0-1-4,0-11-14]	0-7-8	1.	-6-11				
LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 11.6/15.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2018/TPI2014	CSI. TC 0.07 BC 0.06 WB 0.00 Matrix-MP	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (le -0.00 -0.00 -0.00	loc) l/de 5 >99 5 >99 3 n/	fl L/d 9 240 9 180 a n/a	PLATES MT20 Weight: 9 lb	GRIP 244/190 FT = 20%
LUMBER-		BR	ACING-					

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEDGE Left: 2x4 SP No.3

REACTIONS.

(size) 3=Mechanical, 2=0-3-0, 4=Mechanical Max Horz 2=42(LC 16) Max Uplift 3=-4(LC 13), 2=-51(LC 16), 4=-2(LC 20) Max Grav 3=12(LC 28), 2=217(LC 21), 4=15(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.
- * 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 6) 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) 3, 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.



Structural wood sheathing directly applied or 2-2-3 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

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	0-7-8							
Plate Offsets (X,Y) [2:0-1-14	4,0-0-10], [2:0-1-4,0-11-14]							
LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 11.6/15.0 TCDL 10.0 BCI 0.0 *	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYES	CSI. TC 0.24 BC 0.19 WB 0.00	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) 0.02 4-9 -0.03 4-9 0.00 2	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 244/190
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP					Weight: 21 lb	FT = 20%
LUMBER- TOP CHORD 2x4 SP No.2		BF TC	RACING- DP CHORD S	Structural wood	l sheathin	g directly app	blied or 5-0-0 oc purlin	s,

BOT CHORD

except end verticals.

Rigid ceiling directly applied or 10-0-0 oc bracing.

 TOP CHORD
 2x4 SP No.2

 BOT CHORD
 2x4 SP No.2

 WEBS
 2x4 SP No.3

 WEDGE
 Left: 2x4 SP No.3

REACTIONS. (size) 2=0-3-0, 4=0-1-8

Max Horz 2=77(LC 15) Max Uplift 2=-47(LC 16), 4=-9(LC 13) Max Grav 2=292(LC 2), 4=168(LC 21)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 4-10-4 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
- 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) 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.
- 9) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 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.

SEAL 036322 May 30,2025

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.sbcaccomponents.com)



818 Soundside Road



Max Grav 2=342(LC 2), 4=31(LC 9)Max Grav 2=342(LC 2), 4=465(LC 17)

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

NOTES-

- 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
- 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.
- 11) Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss, Single Ply Girder) or equivalent at 4-3-4 from the left end to connect truss(es) to back face of bottom chord.
- 12) Fill all nail holes where hanger is in contact with lumber.
- 13) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Uniform Loads (plf) Vert: 1-3=-43, 2-4=-20 Concentrated Loads (lb)

Vert: 9=-350(B)

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	0-7-8								
Plate Offsets (X,Y) [2:0-1-14,0-0-10], [2:0-1-4,0-11-14]									
LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 11.6/15.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCodeIRC2018/TPI2014	CSI. TC 0.24 BC 0.19 WB 0.00 Matrix-MP	DEFL. Vert(LL) Vert(CT) Horz(CT	in (loc 0.02 4-1 -0.03 4-1) 0.00	i) l/defl 1 >999 1 >999 2 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 22 lb	GRIP 244/190 FT = 20%	
LUMBER- TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2		E	BRACING- TOP CHORD	Structural wo except end vo	od sheathir erticals.	ig directly ap	plied or 5-0-0 oc purlir	۱S,	

 TOP CHORD
 2x4 SP No.2
 TOP CHORD
 Structural wood sheathing directly applied or 5-0-0 oc purlins, except end verticals.

 BOT CHORD
 2x4 SP No.2
 BOT CHORD
 BOT CHORD

 WEBS
 2x4 SP No.3
 BOT CHORD
 Rigid ceiling directly applied or 10-0-0 oc bracing.

 OTHERS
 2x4 SP No.3
 BOT CHORD
 Rigid ceiling directly applied or 10-0-0 oc bracing.

Left: 2x4 SP No.3

REACTIONS. (size) 2=0-3-0, 4=0-1-8 Max Horz 2=77(LC 15) Max Uplift 2=-47(LC 16), 4=-9(LC 13) Max Grav 2=292(LC 2), 4=168(LC 21)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) 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) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 4-10-4 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
- 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) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 10) 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.
- 11) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 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.

SEAL 036322 May 30,2025

ENGINEERING BY RENCO A MiTek Affiliate

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	0-7-8		5-8-0			1			
	0-7-8		5-0-8		1				
Plate Offsets (X,Y) [2:0-0-10,0-0-0], [2:0-1-4,0-11-14]									
LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 11.6/15.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.35 BC 0.27 WB 0.00	DEFL. in Vert(LL) -0.03 Vert(CT) -0.06 Horz(CT) 0.00	(loc) l/defl 4-9 >999 4-9 >999 2 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 244/190		

BCDL	

BCLL

 LUMBER BRACING

 TOP CHORD
 2x4 SP No.2
 TOP CHORD
 Structural wood sheathing directly applied or 5-8-0 oc purlins, except end verticals.

 BOT CHORD
 2x4 SP No.2
 BOT CHORD
 Rigid ceiling directly applied or 10-0 oc bracing.

 WEBS
 2x4 SP No.3
 BOT CHORD
 Rigid ceiling directly applied or 10-0 oc bracing.

Matrix-MF

Left: 2x4 SP No.3

REACTIONS. (size) 2=0-3-0, 4=0-1-8

0.0 *

10.0

Max Horz 2=87(LC 15) Max Uplift 2=-48(LC 16), 4=-10(LC 13) Max Grav 2=316(LC 2), 4=199(LC 21)

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

Code IRC2018/TPI2014

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 5-6-4 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.
- 8) 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.
- 9) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 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.



FT = 20%

Weight: 23 lb

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A MiTek Affilia 818 Soundside Road



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LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 11.6/15.0 TCDL 10.0 BCLL 0.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code JPC/2018/TPI2014	CSI. TC 0.14 BC 0.10 WB 0.00 Matrix-MP	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) -0.01 4-9 -0.01 4-9 0.00 2) l/defl 9 >999 9 >999 2 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 244/190
BCDL 10.0		IVIAUIX-IVIF					weight. 18 b	F I = 20 / 6
LUMBER- TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2		BR TO	ACING- P CHORD	Structural woo	od sheathing	directly ap	plied or 4-2-8 oc purlin	IS,

BOT CHORD

Rigid ceiling directly applied or 10-0-0 oc bracing.

WEDGE Left: 2x4 SP No.3

WEBS

REACTIONS. (size) 4=Mechanical, 2=0-3-0

2x4 SP No.3

Max Horz 2=66(LC 15) Max Uplift 4=-8(LC 13), 2=-48(LC 16) Max Grav 4=127(LC 21), 2=268(LC 21)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 4-0-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=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) 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) 4, 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.



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.sbcaccomponents.com)



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 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)

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #34 ROOF	
						173821013
25-3224-A	SM01G	HALF HIP GIRDER	1	1		
					Job Reference (optional)	
Riverside Roof Truss, LLC.	Danville, Va - 24541.		8	.830 s Apr	24 2025 MiTek Industries, Inc. Thu May 29 08:11:34 2025	Page 2

ID:InVYNKydfynyZ5DaPQ61KbyAhdz-dnskEbBwntW3FeFk7NP4?PCkSH91zPsZfhlzjczBi7t

LOAD CASE(S) Standard

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

Uniform Loads (plf) Vert: 1-3=-43, 3-4=-53, 2-5=-20 Concentrated Loads (Ib)

Vert: 6=-263(F)



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- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
- will fit between the bottom chord and any other members.
 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8, 13, 14, 11, 10.
- 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.



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.sbcaccomponents.com)



and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

Job	Truss	Truss Type Q		Ply	RVF-LOT #34 ROOF		
25-3224-A	T02G	Common Girder	1	_		173	821016
				Z	Job Reference (optional)		
Riverside Roof Truss LLC	Danville Va - 24541		8	830 s Apr	24 2025 MiTek Industries Inc	Thu May 29 08:11:36 2025 Pa	ne 2

ID:InVYNKydfynyZ5DaPQ61KbyAhdz-Z9_VfHDAJUmnUyP7FoRY4qH_T5mTRBvs6?E4oUzBi7r

NOTES-

13) Fill all nail holes where hanger is in contact with lumber.

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, 6-9=-20 Concentrated Loads (lb)

Vert: 7=-1160(B) 8=-1160(B) 12=-1160(B) 13=-1160(B) 14=-1160(B)



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BRACING-

TOP CHORD

BOT CHORD

BCDL	
LUMBER-	

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

REACTIONS. All bearings 12-0-0.

10.0

- Max Horz 16=-61(LC 14) (lb) -
 - 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.
- * 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 12) 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.



Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 6-0-0 oc bracing.

except end verticals.

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May 30,2025

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A MiTek Affili: 818 Soundside Road



Job	Truss	Truss Type	Qty	Ply	RVF-LOT #34 ROOF	
						173821019
25-3224-A	T03G	Common Girder	1	2		
				-	Job Reference (optional)	
Riverside Roof Truss, LLC,	Danville, Va - 24541,		8	.830 s Apr	24 2025 MiTek Industries, Inc. Thu May 29 08:11:38 2025	Page 2

ID:InVYNKydfynyZ5DaPQ61KbyAhdz-VY5F4yEQr51VkGZWMDU0AFMHouR2v4c9ZJjBsNzBi7p

NOTES-

13) Fill all nail holes where hanger is in contact with lumber.

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, 6-9=-20 Concentrated Loads (lb)

Vert: 12=-1164(B) 13=-1160(B) 14=-1160(B) 15=-1160(B) 16=-1160(B) 17=-1160(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/TP11 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)





					120	•						
12-8-0												
LOADING (psf) TCLL (roof) Snow (Pf/Pg) 11.6/ TCDL BCLL BCDL	20.0 15.0 10.0 0.0 * 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TP	2-0-0 1.15 1.15 YES 12014	CSI. TC BC WB Matrix	0.08 0.04 0.03 x-S	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.00 -0.00 0.00	(loc) 9 9 10	l/defl n/r n/r n/a	L/d 120 120 n/a	PLATES MT20 Weight: 65 lb	GRIP 244/190 FT = 20%
					Dr							

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

 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=63(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-

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.



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May 30,2025



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- 11) 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 12) 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) 46, 36, 37, 38, 40, 41, 42, 43, 44, 45, 34, 33, 32, 30, 29, 28, 27, 26.
- 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.

WWWWWWWW GILB 11111111 May 30,2025



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7-0-0 7-0-0	<u> </u>	<u>14-0-0 19-0-0</u> 7-0-0 5-0-0		<u>31-0-0</u> 7-0-0	
LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 11.6/15.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2018/TPI2014	CSI. TC 0.67 BC 0.90 WB 0.62 Matrix-MS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) l/defl l -0.52 18 >858 2 -0.92 18 >490 1 0.10 12 n/a r	/d PLATES GRIP 40 MT20 244/190 80 v/a Weight: 236 lb FT = 20%

LUMBER- TOP CHORD BOT CHORD WEBS	2x4 SP No.2 2x4 SP No.2 *Except* 14-21: 2x4 SP DSS 2x4 SP No.3 *Except* 2-23,10-12: 2x6 SP No.2, 2-22,10-13: 2x4 SP No.2	BRACING- TOP CHORD BOT CHORD	Structural wood sheathing directly applied or 2-7-0 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 6-0-0 oc bracing: 17-19
REACTIONS.	(size) 23=0-3-8, 12=0-3-8 Max Horz 23=159(LC 15) Max Uplift 23=-73(LC 16), 12=-73(LC 16) Max Grav 23=1897(LC 28), 12=1897(LC 29)		
FORCES. (Ib TOP CHORD	 Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. 2-3=-3253/131, 3-5=-2987/128, 5-6=-2978/208, 6-7=-2978/208, 7-9=-2987/ 2-0 2-20 2-20	128,	

9-10=-3253/131, 2-23=-1768/168, 10-12=-1767/168 BOT CHORD 22-23=-75/557, 20-22=-63/3036, 16-20=0/2112, 15-16=0/2112, 13-15=-52/2945, 12-13=-41/443 WEBS 6-17=-47/1238, 15-17=-94/1133, 7-15=-392/163, 9-15=-372/103, 19-20=-94/1133, 6-19=-47/1238, 5-20=-392/163, 3-20=-372/103, 2-22=-8/2524, 10-13=-10/2524

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 & 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. SEAL 036322 May 30,2025

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	7-0-0	<u> </u>		+ <u>19-0-0</u> + <u>5-0-0</u>		24-0-0		31-0-0				38-0-0		
	7-0-0					5-0-0	7-0-0				7-0-0			
LOADING TCLL (root Snow (Pf/F TCDL BCLL BCDL	(psf) f) 20.0 ² g) 11.6/15.0 10.0 0.0 * 10.0	SP Pla Lur Rep Coo	ACING- te Grip DOL nber DOL p Stress Incr de IRC2018/TF	2-0-0 1.15 1.15 YES Pl2014	CSI. TC BC WB Matri	0.78 0.91 0.64 x-MS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.53 -0.92 0.10	(loc) 17 17 11	l/defl >858 >489 n/a	L/d 240 180 n/a		PLATES MT20 Weight: 235 lb	GRIP 244/190 FT = 20%

BRACING-

TOP CHORD

BOT CHORD

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, 2-21,10-12: 2x4 SP No.2

2-22,10-11: 2x6 SP No.2, 2-21,10-12: 2x4 SP N **REACTIONS.** (size) 22=0-3-8, 11=0-3-8 Max Horz 22=159(LC 15) Max Uplift 22=-74(LC 16), 11=-37(LC 16)

Max Opint 22=-74(LC 16), 11=-37(LC 16) Max Grav 22=1898(LC 28), 11=1838(LC 29)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-3254/131, 3-5=-2989/129, 5-6=-2980/211, 6-7=-2979/208, 7-9=-2991/133,

9-10=-3261/141, 2-22=-1768/168, 10-11=-1708/120 BOT CHORD 21-22=-100/552, 19-21=-91/3032, 15-19=0/2109, 14-15=0/2109, 12-14=-90/2958, 11-12=-43/344 WEBS 6-16=-46/1238, 14-16=-93/1132, 7-14=-384/160, 9-14=-388/110, 18-19=-94/1133, 6-18=-46/1238, 5-19=-392/162, 3-19=-372/103, 2-21=-9/2525, 10-12=-48/2632

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.



818 Soundside Road

Edenton, NC 27932

Structural wood sheathing directly applied, except end verticals.

Rigid ceiling directly applied or 10-0-0 oc bracing. Except:

6-0-0 oc bracing: 16-18

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May 30,2025

.org) 818 Soundside Road

Edenton, NC 27932

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Max Grav All reactions 250 lb or less at joint(s) 2, 18, 29, 21, 22, 17, 10, 16, 17, 12

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) 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 2-0-8, Exterior(2N) 2-0-8 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

3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10

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

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

7) All plates are 2x4 MT20 unless otherwise indicated.

8) Gable requires continuous bottom chord bearing.

9) Gable studs spaced at 2-0-0 oc.

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

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

- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 19, 20, 21, 22, 17, 16, 15, 14, 12.
- 13) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
- 14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

SEAL 036322 May 30,2025

TRENCO

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

REACTIONS. 1=8-5-13, 3=8-5-13, 4=8-5-13 (size) Max Horz 1=-19(LC 14) Max Uplift 1=-20(LC 16), 3=-20(LC 16) Max Grav 1=141(LC 20), 3=141(LC 21), 4=287(LC 2)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) 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) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 4-3-8, Exterior(2R) 4-3-8 to 7-3-8, Interior(1) 7-3-8 to 7-9-15 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10

- 4) Unbalanced snow loads have been considered for this design.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

* 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 7) 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.



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- 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.



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REACTIONS. (size) 1=7-9-13, 3=7-9-13, 4=7-9-13 Max Horz 1=17(LC 15) Max Uplift 1=-18(LC 16), 3=-18(LC 16) Max Grav 1=126(LC 2), 3=126(LC 2), 4=260(LC 2)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) 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.



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818 Soundside Road



2x4 ⋍

2x4 🗢

	<u> </u>								<u> </u>		
Plate Offsets (X,Y) [2:0-2-0,	Edge]										
LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 11.6/15.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2018/TPI2014	CSI. TC 0.04 BC 0.07 WB 0.00 Matrix-P	DEFL. Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 3	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 10 lb	GRIP 244/190 FT = 20%		
LUMBER- TOP CHORD 2x4 SP No.2		BR TO	ACING- P CHORD S	Structural	wood	sheathin	g directly app	blied or 3-11-0 oc purl	ins.		

BOT CHORD

Structural wood sheathing directly applied or 3-11-0 oc purling Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-9-13, 3=3-9-13 Max Horz 1=7(LC 15) Max Uplift 1=-6(LC 16), 3=-6(LC 16) Max Grav 1=96(LC 2), 3=96(LC 2)

BOT CHORD 2x4 SP No.2

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) 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.



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