

RE: 24-5685-A  
 RVF-LOT #7 ROOF

Trenco  
 818 Soundside Rd  
 Edenton, NC 27932

**Site Information:**

Customer: Project Name: 24-5685-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 28 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I66008039	GE01	6/5/2024	21	I66008059	V01	6/5/2024
2	I66008040	M01	6/5/2024	22	I66008060	V02	6/5/2024
3	I66008041	M01GE	6/5/2024	23	I66008061	V03	6/5/2024
4	I66008042	M02	6/5/2024	24	I66008062	V04	6/5/2024
5	I66008043	M03	6/5/2024	25	I66008063	V05	6/5/2024
6	I66008044	M03GE	6/5/2024	26	I66008064	V06	6/5/2024
7	I66008045	M04	6/5/2024	27	I66008065	V07	6/5/2024
8	I66008046	M04SGE	6/5/2024	28	I66008066	V08	6/5/2024
9	I66008047	T01	6/5/2024				
10	I66008048	T01GE	6/5/2024				
11	I66008049	T02	6/5/2024				
12	I66008050	T02G	6/5/2024				
13	I66008051	T02SGE	6/5/2024				
14	I66008052	T03	6/5/2024				
15	I66008053	T03A	6/5/2024				
16	I66008054	T03AGE	6/5/2024				
17	I66008055	T03GE	6/5/2024				
18	I66008056	T04	6/5/2024				
19	I66008057	T05	6/5/2024				
20	I66008058	T05GE	6/5/2024				

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: Gilbert, Eric

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.



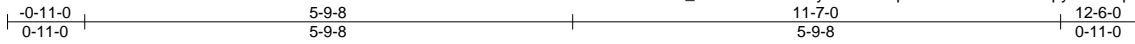
June 05, 2024

Job 24-5685-A	Truss GE01	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	RVF-LOT #7 ROOF	166008039
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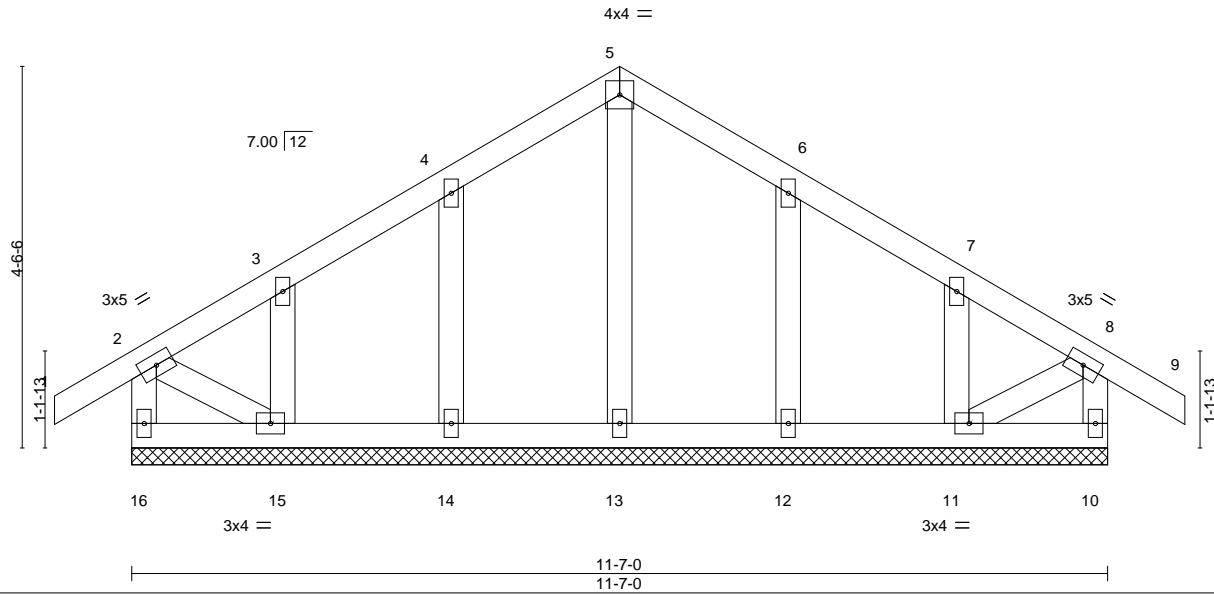
Riverside Roof Truss, LLC, Danville, Va - 24541,

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Scale = 1:27.3



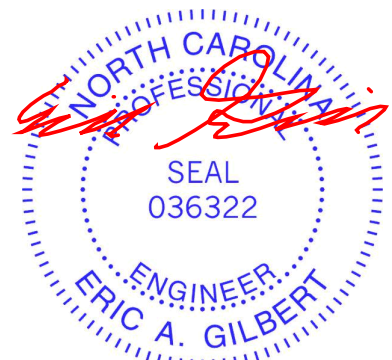
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	2-0-0	TC 0.08	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.03	Vert(LL) -0.00 9 n/r 120		
TCDL 10.0	Lumber DOL 1.15	WB 0.04	Vert(CT) -0.00 9 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 10 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 66 lb	FT = 20%

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

**REACTIONS.** All bearings 11-7-0.  
 (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-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-11-0 to 1-9-8, Exterior(2N) 1-9-8 to 5-9-8, Corner(3R) 5-9-8 to 8-9-8, Exterior(2N) 8-9-8 to 12-6-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
  - Unbalanced snow loads have been considered for this design.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 10, 14, 15, 12, 11.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



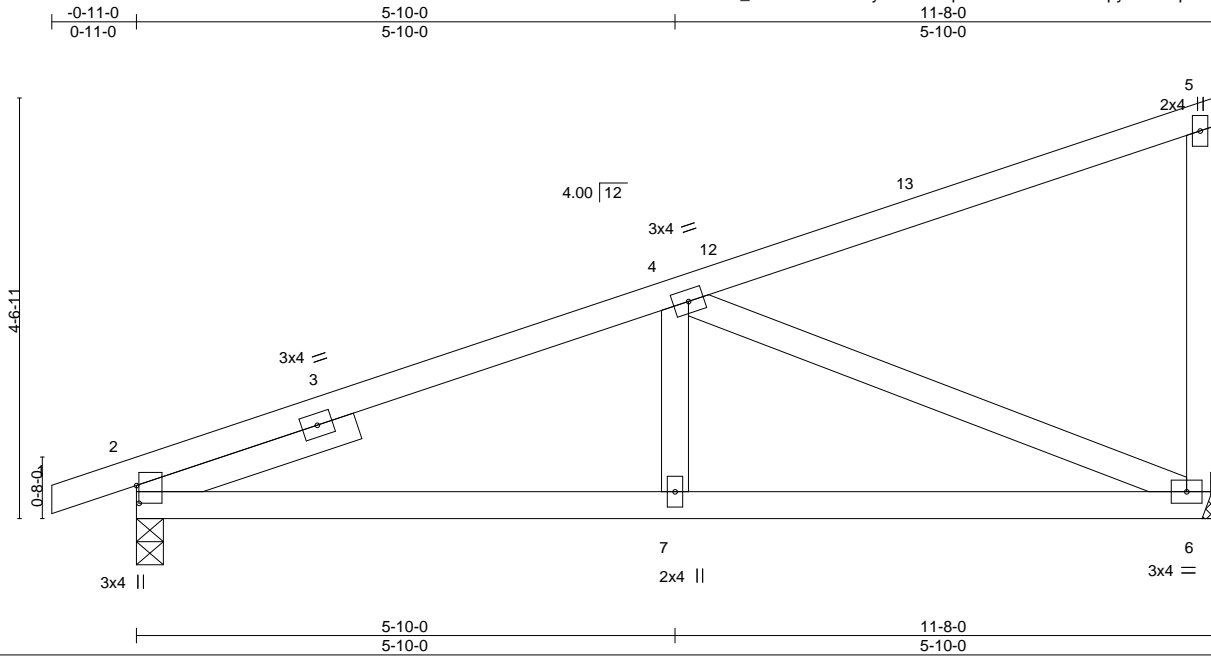
June 5, 2024

Job 24-5685-A	Truss M01	Truss Type MONOPICH	Qty 6	Ply 1	RVF-LOT #7 ROOF	166008040
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Riverside Roof Truss, LLC, Danville, Va - 24541,

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Scale = 1:25.0

Plate Offsets (X,Y)-- [2:0-2-5,0-0-5]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.39	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.34	Vert(LL) -0.03 6-7 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.51	Vert(CT) -0.06 6-7 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.01 6 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 58 lb	FT = 20%

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

**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=0-3-8, 6=Mechanical  
Max Horz 2=148(LC 15)  
Max Uplift 2=-53(LC 16), 6=-32(LC 16)  
Max Grav 2=518(LC 2), 6=459(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=-661/180  
BOT CHORD 2-7=-274/668, 6-7=-274/668  
WEBS 4-6=-700/233

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



June 5, 2024

**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/TPH Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



818 Soundside Road  
Edenton, NC 27932

Job 24-5685-A	Truss M01GE	Truss Type MONOPITCH SUPPORTED	Qty 1	Ply 1	RVF-LOT #7 ROOF	166008041
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Riverside Roof Truss, LLC, Danville, Va - 24541,

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Job Reference (optional)

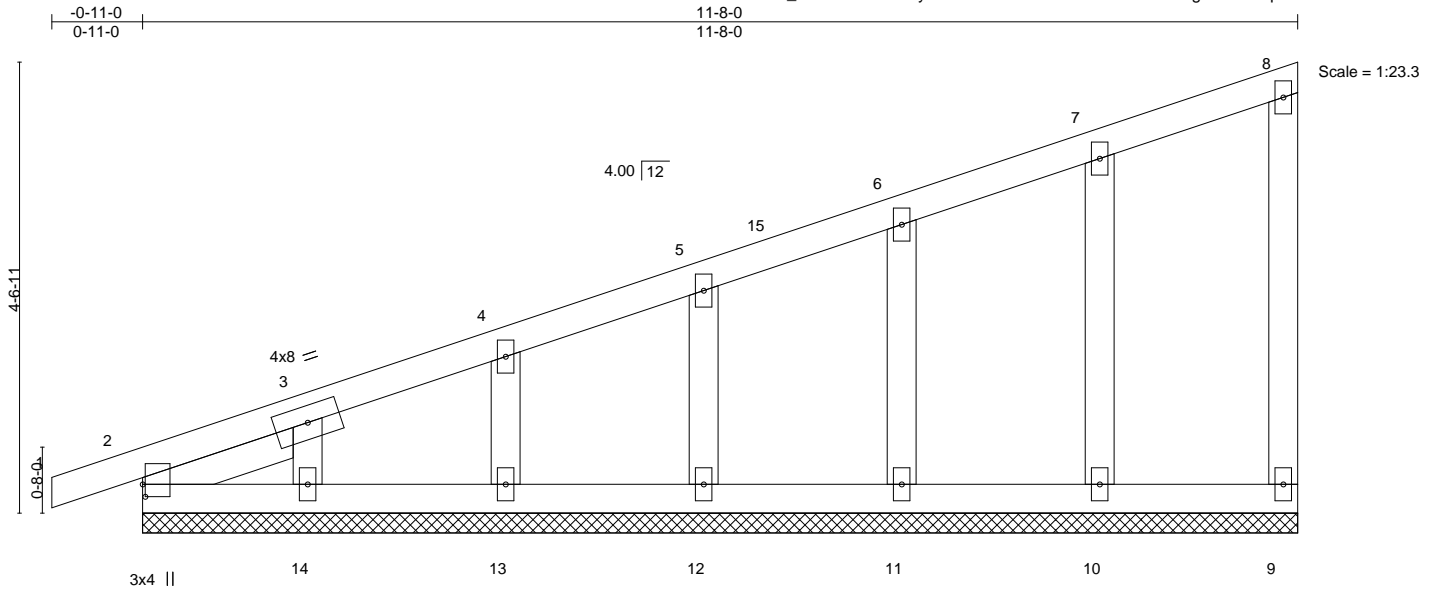


Plate Offsets (X,Y)-- [2:0-1-8,0-0-5]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.24	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.07	Vert(LL) 0.00 1 n/r 120		
TCDL 10.0	Lumber DOL 1.15	WB 0.05	Vert(CT) -0.00 1 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 9 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 60 lb	FT = 20%

**LUMBER-**

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3
SLIDER	Left 2x4 SP No.3 1-7-8

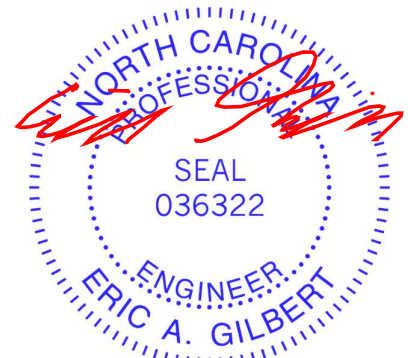
**BRACING-**

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

**REACTIONS.** All bearings 11-8-0.  
 (lb) - Max Horz 2=146(LC 13)  
 Max Uplift All uplift 100 lb or less at joint(s) 9, 2, 10, 11, 12, 13, 14  
 Max Grav All reactions 250 lb or less at joint(s) 9, 2, 10, 11, 12, 13, 14

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-342/173, 3-4=-261/141

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-11-0 to 2-1-0, Exterior(2N) 2-1-0 to 11-6-4 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
  - 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) All plates are 2x4 MT20 unless otherwise indicated.
  - 7) Gable requires continuous bottom chord bearing.
  - 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) 9, 2, 10, 11, 12, 13, 14.
  - 12) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
  - 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/TPI Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

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

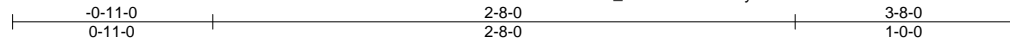
Job 24-5685-A	Truss M02	Truss Type HALF HIP	Qty 3	Ply 1	RVF-LOT #7 ROOF	166008042
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Riverside Roof Truss, LLC,

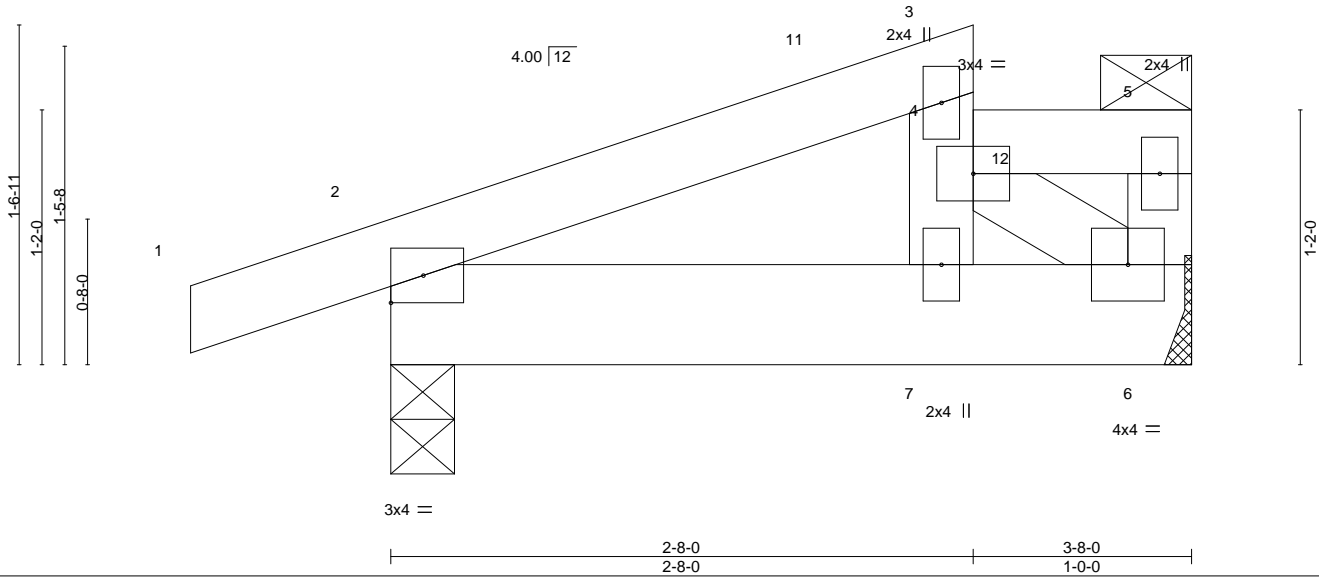
Danville, Va - 24541,

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Scale = 1:10.5



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	2-0-0	TC 0.18	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 16.5/15.0	Plate Grip DOL 1.15	BC 0.07	Vert(LL) -0.00 10 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.05	Vert(CT) -0.00 7 >999 180		
BCLL 0.0 *	Rep Stress Incr NO	Matrix-MP	Horz(CT) 0.00 2 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 19 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x6 SP No.2  
 WEBS 2x4 SP No.3

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 3-8-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 4-7, 4-5.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 6=Mechanical  
 Max Horz 2=42(LC 13)  
 Max Uplift 2=5(LC 16)  
 Max Grav 2=256(LC 36), 6=326(LC 3)

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 3-6-4 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
  - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
  - Unbalanced snow loads have been considered for this design.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 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.
  - Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard  
 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-3=-43, 6-8=-20, 4-5=-83



Continued on page 2

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



Job	Truss	Truss Type	Qty	Ply	RVF-LOT #7 ROOF	I66008042
24-5685-A	M02	HALF HIP	3	1	Job Reference (optional)	

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

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**LOAD CASE(S)** Standard

- Concentrated Loads (lb)  
Vert: 12=-160
- 2) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-60, 6-8=-20, 4-5=-90  
Concentrated Loads (lb)  
Vert: 12=-160
- 3) Dead + 0.75 Roof Live (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-50, 6-8=-20, 4-5=-139  
Concentrated Loads (lb)  
Vert: 12=-160
- 4) Dead + 0.75 Snow (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-37, 6-8=-20, 4-5=-133  
Concentrated Loads (lb)  
Vert: 12=-160
- 5) Dead + 0.75 Snow (Unbal. Left) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-42, 6-8=-20, 4-5=-114  
Concentrated Loads (lb)  
Vert: 12=-160
- 6) Dead + 0.75 Snow (Unbal. Right) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-25, 6-8=-20, 4-5=-135  
Concentrated Loads (lb)  
Vert: 12=-160
- 7) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-3=-20, 6-8=-40, 4-5=-50  
Concentrated Loads (lb)  
Vert: 12=-160
- 8) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=60, 2-11=50, 3-11=34, 6-8=-12, 4-5=16  
Horz: 1-2=-72, 2-11=-62, 3-11=-46, 3-4=10, 5-6=38  
Concentrated Loads (lb)  
Vert: 12=-160
- 9) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=45, 2-3=50, 6-8=-12, 4-5=32  
Horz: 1-2=-57, 2-3=-62, 3-4=-51, 5-6=-24  
Concentrated Loads (lb)  
Vert: 12=-160
- 10) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=1, 2-3=-46, 6-8=-20, 4-5=-64  
Horz: 1-2=-21, 2-3=26, 3-4=-30, 5-6=-35  
Concentrated Loads (lb)  
Vert: 12=-160
- 11) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-41, 2-3=-46, 6-8=-20, 4-5=-64  
Horz: 1-2=21, 2-3=26, 3-4=31, 5-6=27  
Concentrated Loads (lb)  
Vert: 12=-160
- 12) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=28, 2-3=13, 6-8=-12, 4-5=8  
Horz: 1-2=-40, 2-3=-25, 3-4=-11, 5-6=18  
Concentrated Loads (lb)  
Vert: 12=-160
- 13) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=3, 2-3=8, 6-8=-12, 4-5=8  
Horz: 1-2=-15, 2-3=-20, 3-4=-26, 5-6=-15  
Concentrated Loads (lb)  
Vert: 12=-160
- 14) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-16, 2-3=-21, 6-8=-20, 4-5=-39  
Horz: 1-2=-4, 2-3=1, 3-4=31, 5-6=7  
Concentrated Loads (lb)  
Vert: 12=-160
- 15) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60

Continued on page 3

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818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #7 ROOF	I66008042
24-5685-A	M02	HALF HIP	3	1	Job Reference (optional)	

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

8.730 s Apr 25 2024 MiTek Industries, Inc. Tue Jun 4 09:18:52 2024 Page 3  
ID:Bxl2MwYau\_NHkbraGcmHloyOvst-ASbBRIHcWUaYIeHe6nLBEh?hNDVX4nvs4mzOcJz9ian

**LOAD CASE(S)** Standard

- Uniform Loads (plf)
  - Vert: 1-2=-5, 2-3=-10, 6-8=-20, 4-5=-39
  - Horz: 1-2=-15, 2-3=-10, 3-4=-4, 5-6=-25
- Concentrated Loads (lb)
  - Vert: 12=-160
- 16) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=32, 2-3=17, 6-8=-12, 4-5=-1
    - Horz: 1-2=-44, 2-3=-29, 3-4=-34, 5-6=23
  - Concentrated Loads (lb)
    - Vert: 12=-160
- 17) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=21, 2-3=6, 6-8=-12, 4-5=-12
    - Horz: 1-2=-33, 2-3=-18, 3-4=-24, 5-6=23
  - Concentrated Loads (lb)
    - Vert: 12=-160
- 18) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=-16, 2-3=-21, 6-8=-20, 4-5=-39
    - Horz: 1-2=-4, 2-3=1, 3-4=6, 5-6=12
  - Concentrated Loads (lb)
    - Vert: 12=-160
- 19) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=-16, 2-3=-21, 6-8=-20, 4-5=-39
    - Horz: 1-2=-4, 2-3=1, 3-4=6, 5-6=12
  - Concentrated Loads (lb)
    - Vert: 12=-160
- 20) Dead + Snow on Overhangs: Lumber Increase=1.15, Plate Increase=1.15
  - Uniform Loads (plf)
    - Vert: 1-2=-43, 2-3=-20, 6-8=-20, 4-5=-50
  - Concentrated Loads (lb)
    - Vert: 12=-160
- 21) Dead + Snow (Unbal. Left): Lumber Increase=1.15, Plate Increase=1.15
  - Uniform Loads (plf)
    - Vert: 1-3=-49, 6-8=-20, 4-5=-57
  - Concentrated Loads (lb)
    - Vert: 12=-160
- 22) Dead + Snow (Unbal. Right): Lumber Increase=1.15, Plate Increase=1.15
  - Uniform Loads (plf)
    - Vert: 1-3=-27, 6-8=-20, 4-5=-85
  - Concentrated Loads (lb)
    - Vert: 12=-160
- 23) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
  - Uniform Loads (plf)
    - Vert: 1-3=-20, 6-8=-20, 4-5=-50
  - Concentrated Loads (lb)
    - Vert: 12=-160
- 24) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=-34, 2-3=-38, 6-8=-20, 4-5=-124
    - Horz: 1-2=-3, 2-3=1, 3-4=23, 5-6=5
  - Concentrated Loads (lb)
    - Vert: 12=-160
- 25) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=-26, 2-3=-30, 6-8=-20, 4-5=-124
    - Horz: 1-2=-11, 2-3=-7, 3-4=-3, 5-6=-19
  - Concentrated Loads (lb)
    - Vert: 12=-160
- 26) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=-34, 2-3=-38, 6-8=-20, 4-5=-124
    - Horz: 1-2=-3, 2-3=1, 3-4=5, 5-6=9
  - Concentrated Loads (lb)
    - Vert: 12=-160
- 27) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=-34, 2-3=-38, 6-8=-20, 4-5=-124
    - Horz: 1-2=-3, 2-3=1, 3-4=5, 5-6=9
  - Concentrated Loads (lb)
    - Vert: 12=-160

Continued on page 4

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818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #7 ROOF	I66008042
24-5685-A	M02	HALF HIP	3	1	Job Reference (optional)	

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

8.730 s Apr 25 2024 MiTek Industries, Inc. Tue Jun 4 09:18:52 2024 Page 4  
ID:Bxl2MwYau\_NHkbraGcmHloyOvst-ASbBRIHcwUaYIeHe6nLBEh?hNDVX4nvs4mzOcJz9ian

**LOAD CASE(S)** Standard

- 28) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-47, 2-3=-51, 6-8=-20, 4-5=-129  
Horz: 1-2=-3, 2-3=1, 3-4=23, 5-6=5  
Concentrated Loads (lb)  
Vert: 12=-160
- 29) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-39, 2-3=-43, 6-8=-20, 4-5=-129  
Horz: 1-2=-11, 2-3=-7, 3-4=-3, 5-6=-19  
Concentrated Loads (lb)  
Vert: 12=-160
- 30) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-47, 2-3=-51, 6-8=-20, 4-5=-129  
Horz: 1-2=-3, 2-3=1, 3-4=5, 5-6=9  
Concentrated Loads (lb)  
Vert: 12=-160
- 31) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-47, 2-3=-51, 6-8=-20, 4-5=-129  
Horz: 1-2=-3, 2-3=1, 3-4=5, 5-6=9  
Concentrated Loads (lb)  
Vert: 12=-160
- 32) Dead + Minimum Snow: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-20, 6-8=-20, 4-5=-80  
Concentrated Loads (lb)  
Vert: 12=-160
- 33) Dead + 0.6 C-C Wind Min. Down: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=4, 2-3=-28, 6-8=-12, 4-5=-46  
Horz: 1-2=-16, 2-3=16, 3-4=-16, 5-6=-16  
Concentrated Loads (lb)  
Vert: 12=-160
- 34) Dead + 0.6 C-C Wind Min. Upward: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-3=4, 6-8=-12, 4-5=-14  
Horz: 1-3=-16, 3-4=16, 5-6=16  
Concentrated Loads (lb)  
Vert: 12=-160
- 35) 3rd Unbal.Dead + Snow (balanced) + Parallel: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-27, 6-8=-20, 4-5=-100  
Concentrated Loads (lb)  
Vert: 12=-160
- 36) 4th Unbal.Dead + Snow (balanced) + Parallel: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-70, 6-8=-20, 4-5=-57  
Concentrated Loads (lb)  
Vert: 12=-160
- 37) 5th Unbal.Dead + 0.75 Snow (balanced) + 0.75 Attic Floor + Parallel: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-25, 6-8=-20, 4-5=-146  
Concentrated Loads (lb)  
Vert: 12=-160
- 38) 6th Unbal.Dead + 0.75 Snow (balanced) + 0.75 Attic Floor + Parallel: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-57, 6-8=-20, 4-5=-114  
Concentrated Loads (lb)  
Vert: 12=-160
- 39) 7th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left) + Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-22, 2-3=-26, 6-8=-20, 4-5=-137  
Horz: 1-2=-3, 2-3=1, 3-4=23, 5-6=5  
Concentrated Loads (lb)  
Vert: 12=-160
- 40) 8th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left) + Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-54, 2-3=-58, 6-8=-20, 4-5=-105  
Horz: 1-2=-3, 2-3=1, 3-4=23, 5-6=5  
Concentrated Loads (lb)  
Vert: 12=-160

Continued on page 5

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818 Soundside Road  
Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	RVF-LOT #7 ROOF	I66008042
24-5685-A	M02	HALF HIP	3	1	Job Reference (optional)	

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

8.730 s Apr 25 2024 MiTek Industries, Inc. Tue Jun 4 09:18:52 2024 Page 5  
ID:Bxl2MwYau\_NHkbraGcmHloyOvst-ASbBRIHcwUaYlehe6nLBEh?hNDVX4nvs4mzOcJz9ian

**LOAD CASE(S)** Standard

- 41) 9th Unbal.Death + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right) + Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-14, 2-3=-18, 6-8=-20, 4-5=-137  
Horz: 1-2=-11, 2-3=-7, 3-4=-3, 5-6=-19  
Concentrated Loads (lb)  
Vert: 12=-160
- 42) 10th Unbal.Death + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right) + Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-46, 2-3=-50, 6-8=-20, 4-5=-105  
Horz: 1-2=-11, 2-3=-7, 3-4=-3, 5-6=-19  
Concentrated Loads (lb)  
Vert: 12=-160
- 43) 11th Unbal.Death + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-22, 2-3=-26, 6-8=-20, 4-5=-137  
Horz: 1-2=-3, 2-3=1, 3-4=5, 5-6=9  
Concentrated Loads (lb)  
Vert: 12=-160
- 44) 12th Unbal.Death + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-54, 2-3=-58, 6-8=-20, 4-5=-105  
Horz: 1-2=-3, 2-3=1, 3-4=5, 5-6=9  
Concentrated Loads (lb)  
Vert: 12=-160
- 45) 13th Unbal.Death + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-22, 2-3=-26, 6-8=-20, 4-5=-137  
Horz: 1-2=-3, 2-3=1, 3-4=5, 5-6=9  
Concentrated Loads (lb)  
Vert: 12=-160
- 46) 14th Unbal.Death + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-54, 2-3=-58, 6-8=-20, 4-5=-105  
Horz: 1-2=-3, 2-3=1, 3-4=5, 5-6=9  
Concentrated Loads (lb)  
Vert: 12=-160
- 47) 15th Unbal.Death + Minimum Snow + Parallel: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-27, 6-8=-20, 4-5=-100  
Concentrated Loads (lb)  
Vert: 12=-160
- 48) 16th Unbal.Death + Minimum Snow + Parallel: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-70, 6-8=-20, 4-5=-57  
Concentrated Loads (lb)  
Vert: 12=-160
- 49) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-60, 6-8=-20, 4-5=-50  
Concentrated Loads (lb)  
Vert: 12=-160
- 50) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-20, 6-8=-20, 4-5=-90  
Concentrated Loads (lb)  
Vert: 12=-160
- 51) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-50, 6-8=-20, 4-5=-109  
Concentrated Loads (lb)  
Vert: 12=-160
- 52) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-20, 6-8=-20, 4-5=-139  
Concentrated Loads (lb)  
Vert: 12=-160

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818 Soundside Road  
Edenton, NC 27932



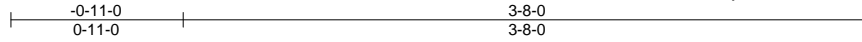
Job 24-5685-A	Truss M03GE	Truss Type MONOPITCH SUPPORTED	Qty 1	Ply 1	RVF-LOT #7 ROOF	166008044
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Riverside Roof Truss, LLC,

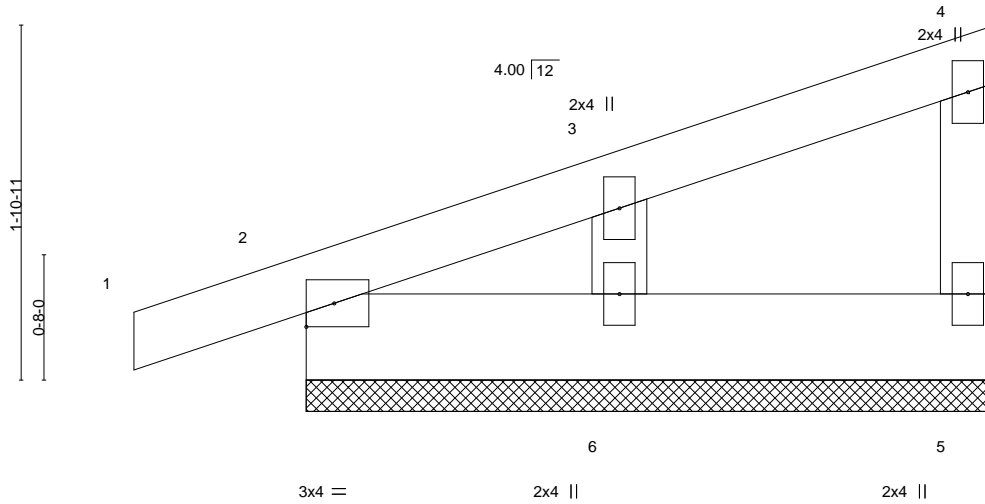
Danville, Va - 24541,

8.730 s Apr 25 2024 MiTek Industries, Inc. Tue Jun 4 09:18:53 2024 Page 1

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Scale = 1:12.3



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	2-0-0	TC 0.07	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.01	Vert(LL) 0.00 1 n/r 120		
TCDL 10.0	Lumber DOL 1.15	WB 0.06	Vert(CT) -0.00 1 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 5 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 18 lb	FT = 20%

**LUMBER-**

TOP CHORD	2x4 SP No.2
BOT CHORD	2x6 SP No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3

**BRACING-**

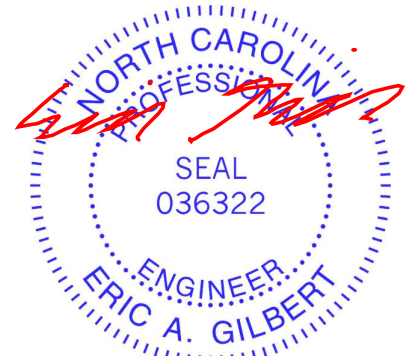
TOP CHORD	Structural wood sheathing directly applied or 3-8-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 5=3-8-0, 2=3-8-0, 6=3-8-0  
 Max Horz 2=51(LC 13)  
 Max Uplift 5=-2(LC 13), 2=-34(LC 16), 6=-10(LC 16)  
 Max Grav 5=62(LC 21), 2=126(LC 21), 6=157(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=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-11-0 to 2-1-0, Exterior(2N) 2-1-0 to 3-6-4 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
- 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 requires continuous bottom chord bearing.
- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2, 6.
- 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.



June 5, 2024

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

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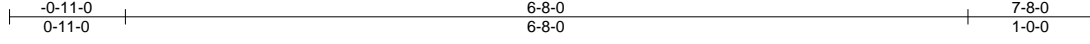
818 Soundside Road  
 Edenton, NC 27932

Job 24-5685-A	Truss M04	Truss Type HALF HIP	Qty 3	Ply 1	RVF-LOT #7 ROOF	166008045
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Riverside Roof Truss, LLC, Danville, Va - 24541,

8.730 s Apr 25 2024 MiTek Industries, Inc. Tue Jun 4 09:18:54 2024 Page 1

ID:BxI2MwYau\_NHkbraGCmHloyOvst-6rjxsR.JsS5qGYxq1DCNfJC4sE08bYgd9Y4SUhBz9ial



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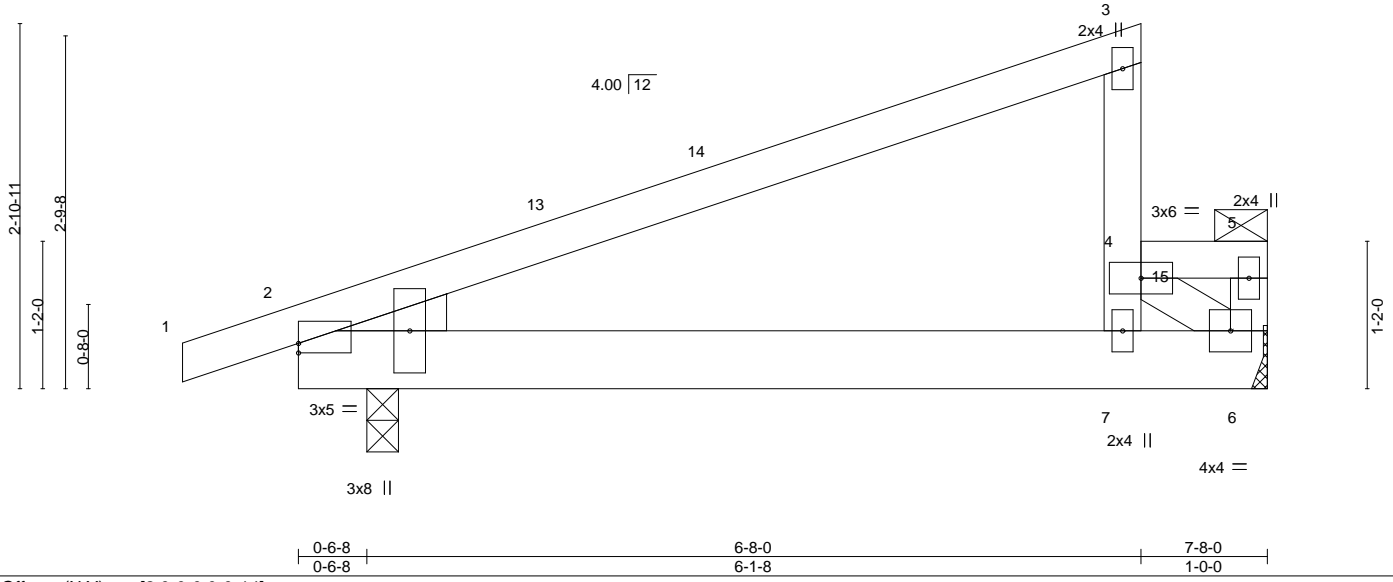


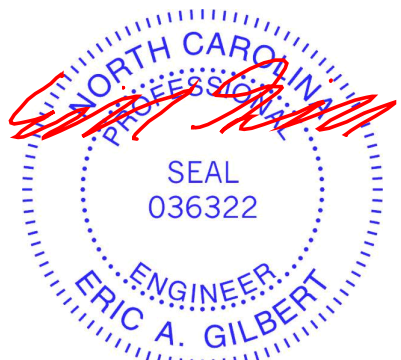
Plate Offsets (X, Y)-- [2:0-0-0,0-0-14]												
<b>LOADING</b> (psf)		<b>SPACING-</b>	2-0-0	<b>CSI.</b>		<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.03	7-12	>999	240	MT20	244/190
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.06	7-12	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.10	Horz(CT)	0.01	2	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-MP								
BCDL	10.0											
												Weight: 38 lb FT = 20%

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 4-7, 4-5.
BOT CHORD	2x6 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3		
WEDGE			
Left:	2x4 SP No.3		

**REACTIONS.** (size) 6=Mechanical, 2=0-3-0  
 Max Horz 2=115(LC 16)  
 Max Uplift 2=-13(LC 16)  
 Max Grav 6=467(LC 28), 2=449(LC 36)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 BOT CHORD 6-7=-138/385  
 WEBS 4-6=-488/165

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - C-C wind load user defined.
  - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
  - Unbalanced snow loads have been considered for this design.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 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.
  - Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).



June 5, 2024

Continued on page 2

**LOAD CASE(S)**

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**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate

818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #7 ROOF	I66008045
24-5685-A	M04	HALF HIP	3	1	Job Reference (optional)	

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

8.730 s Apr 25 2024 MiTek Industries, Inc. Tue Jun 4 09:18:54 2024 Page 2  
ID:Bxl2MwYau\_NHkbraGCmHloyOvst-6rjxsRJsS5qGYxq1DCNfJC4sE08bYgd9Y4SUhBz9ial

**LOAD CASE(S)**

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-43, 4-5=-83(F=-30), 6-8=-20  
Concentrated Loads (lb)  
Vert: 15=-160
- 2) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-60, 4-5=-90(F=-30), 6-8=-20  
Concentrated Loads (lb)  
Vert: 15=-160
- 3) Dead + 0.75 Roof Live (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-50, 4-5=-139(F=-89), 6-8=-20  
Concentrated Loads (lb)  
Vert: 15=-160
- 4) Dead + 0.75 Snow (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-37, 4-5=-133(F=-89), 6-8=-20  
Concentrated Loads (lb)  
Vert: 15=-160
- 5) Dead + 0.75 Snow (Unbal. Left) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-14=-37, 3-14=-42, 4-5=-114(F=-89), 6-8=-20  
Concentrated Loads (lb)  
Vert: 15=-160
- 6) Dead + 0.75 Snow (Unbal. Right) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-25, 4-5=-137(F=-89), 6-8=-20  
Concentrated Loads (lb)  
Vert: 15=-160
- 7) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-3=-20, 4-5=-50(F=-30), 6-8=-40  
Concentrated Loads (lb)  
Vert: 15=-160
- 8) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=58, 2-13=45, 3-13=34, 4-5=16(F=-18), 6-8=-12  
Horz: 1-2=-70, 2-13=-57, 3-13=-46, 3-4=7, 5-6=36  
Concentrated Loads (lb)  
Vert: 15=-160
- 9) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=29, 2-13=34, 3-13=45, 4-5=27(F=-18), 6-8=-12  
Horz: 1-2=-41, 2-13=-46, 3-13=-57, 3-4=-51, 5-6=-23  
Concentrated Loads (lb)  
Vert: 15=-160
- 10) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-3, 2-3=-42, 4-5=-60(F=-18), 6-8=-20  
Horz: 1-2=-17, 2-3=22, 3-4=-30, 5-6=-33  
Concentrated Loads (lb)  
Vert: 15=-160
- 11) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-37, 2-3=-42, 4-5=-60(F=-18), 6-8=-20  
Horz: 1-2=17, 2-3=22, 3-4=28, 5-6=25  
Concentrated Loads (lb)  
Vert: 15=-160
- 12) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=28, 2-3=13, 4-5=8(F=-18), 6-8=-12  
Horz: 1-2=-40, 2-3=-25, 3-4=-11, 5-6=18  
Concentrated Loads (lb)  
Vert: 15=-160
- 13) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=3, 2-3=8, 4-5=8(F=-18), 6-8=-12  
Horz: 1-2=-15, 2-3=-20, 3-4=-26, 5-6=-15  
Concentrated Loads (lb)  
Vert: 15=-160
- 14) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-16, 2-3=-21, 4-5=-39(F=-18), 6-8=-20  
Horz: 1-2=-4, 2-3=1, 3-4=31, 5-6=7

Continued on page 3

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818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #7 ROOF	166008045
24-5685-A	M04	HALF HIP	3	1	Job Reference (optional)	

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

8.730 s Apr 25 2024 MiTek Industries, Inc. Tue Jun 4 09:18:54 2024 Page 3  
ID:Bxl2MwYau\_NHKbraGCmHloyOvst-6rjxsRJsS5qGYxq1DCNfJC4sE08bYgd9Y4SUhBz9ial

**LOAD CASE(S)**

- Concentrated Loads (lb)  
Vert: 15=-160
- 15) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-5, 2-3=-10, 4-5=-39(F=-18), 6-8=-20  
Horz: 1-2=-15, 2-3=-10, 3-4=-4, 5-6=-25  
Concentrated Loads (lb)  
Vert: 15=-160
- 16) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=32, 2-3=17, 4-5=-1(F=-18), 6-8=-12  
Horz: 1-2=-44, 2-3=-29, 3-4=-34, 5-6=23  
Concentrated Loads (lb)  
Vert: 15=-160
- 17) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=21, 2-3=6, 4-5=-12(F=-18), 6-8=-12  
Horz: 1-2=-33, 2-3=-18, 3-4=-24, 5-6=23  
Concentrated Loads (lb)  
Vert: 15=-160
- 18) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-16, 2-3=-21, 4-5=-39(F=-18), 6-8=-20  
Horz: 1-2=-4, 2-3=1, 3-4=6, 5-6=12  
Concentrated Loads (lb)  
Vert: 15=-160
- 19) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-16, 2-3=-21, 4-5=-39(F=-18), 6-8=-20  
Horz: 1-2=-4, 2-3=1, 3-4=6, 5-6=12  
Concentrated Loads (lb)  
Vert: 15=-160
- 20) Dead + Snow on Overhangs: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-2=-43, 2-3=-20, 4-5=-50(F=-30), 6-8=-20  
Concentrated Loads (lb)  
Vert: 15=-160
- 21) Dead + Snow (Unbal. Left): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-14=-43, 3-14=-49, 4-5=-57(F=-30), 6-8=-20  
Concentrated Loads (lb)  
Vert: 15=-160
- 22) Dead + Snow (Unbal. Right): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-27, 4-5=-88(F=-30), 6-8=-20  
Concentrated Loads (lb)  
Vert: 15=-160
- 23) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90  
Uniform Loads (plf)  
Vert: 1-3=-20, 4-5=-50(F=-30), 6-8=-20  
Concentrated Loads (lb)  
Vert: 15=-160
- 24) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-34, 2-3=-38, 4-5=-124(F=-79), 6-8=-20  
Horz: 1-2=-3, 2-3=1, 3-4=23, 5-6=5  
Concentrated Loads (lb)  
Vert: 15=-160
- 25) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-26, 2-3=-30, 4-5=-124(F=-79), 6-8=-20  
Horz: 1-2=-11, 2-3=-7, 3-4=-3, 5-6=-19  
Concentrated Loads (lb)  
Vert: 15=-160
- 26) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-34, 2-3=-38, 4-5=-124(F=-79), 6-8=-20  
Horz: 1-2=-3, 2-3=1, 3-4=5, 5-6=9  
Concentrated Loads (lb)  
Vert: 15=-160
- 27) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60

Continued on page 4

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818 Soundside Road  
Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	RVF-LOT #7 ROOF	166008045
24-5685-A	M04	HALF HIP	3	1	Job Reference (optional)	

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

8.730 s Apr 25 2024 MiTek Industries, Inc. Tue Jun 4 09:18:54 2024 Page 4  
ID:Bxl2MwYau\_NHkbraGCmHloyOvst-6rjxsRJsS5qGYxq1DCNfJC4sE08bYgd9Y4SUhBz9ial

**LOAD CASE(S)**

- Uniform Loads (plf)
  - Vert: 1-2=-34, 2-3=-38, 4-5=-124(F=-79), 6-8=-20
  - Horz: 1-2=-3, 2-3=1, 3-4=5, 5-6=9
- Concentrated Loads (lb)
  - Vert: 15=-160
- 28) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=-47, 2-3=-51, 4-5=-129(F=-79), 6-8=-20
    - Horz: 1-2=-3, 2-3=1, 3-4=23, 5-6=5
  - Concentrated Loads (lb)
    - Vert: 15=-160
- 29) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=-39, 2-3=-43, 4-5=-129(F=-79), 6-8=-20
    - Horz: 1-2=-11, 2-3=-7, 3-4=-3, 5-6=-19
  - Concentrated Loads (lb)
    - Vert: 15=-160
- 30) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=-47, 2-3=-51, 4-5=-129(F=-79), 6-8=-20
    - Horz: 1-2=-3, 2-3=1, 3-4=5, 5-6=9
  - Concentrated Loads (lb)
    - Vert: 15=-160
- 31) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=-47, 2-3=-51, 4-5=-129(F=-79), 6-8=-20
    - Horz: 1-2=-3, 2-3=1, 3-4=5, 5-6=9
  - Concentrated Loads (lb)
    - Vert: 15=-160
- 32) Dead + Minimum Snow: Lumber Increase=1.15, Plate Increase=1.15
  - Uniform Loads (plf)
    - Vert: 1-3=-20, 4-5=-80(F=-30), 6-8=-20
  - Concentrated Loads (lb)
    - Vert: 15=-160
- 33) Dead + 0.6 C-C Wind Min. Down: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=4, 2-3=-28, 4-5=-46(F=-18), 6-8=-12
    - Horz: 1-2=-16, 2-3=16, 3-4=-16, 5-6=-16
  - Concentrated Loads (lb)
    - Vert: 15=-160
- 34) Dead + 0.6 C-C Wind Min. Upward: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-3=4, 4-5=-14(F=-18), 6-8=-12
    - Horz: 1-3=-16, 3-4=16, 5-6=16
  - Concentrated Loads (lb)
    - Vert: 15=-160
- 35) 3rd Unbal.Dead + Snow (balanced) + Parallel: Lumber Increase=1.15, Plate Increase=1.15
  - Uniform Loads (plf)
    - Vert: 1-3=-27, 4-5=-100(F=-30), 6-8=-20
  - Concentrated Loads (lb)
    - Vert: 15=-160
- 36) 4th Unbal.Dead + Snow (balanced) + Parallel: Lumber Increase=1.15, Plate Increase=1.15
  - Uniform Loads (plf)
    - Vert: 1-3=-70, 4-5=-57(F=-30), 6-8=-20
  - Concentrated Loads (lb)
    - Vert: 15=-160
- 37) 5th Unbal.Dead + 0.75 Snow (balanced) + 0.75 Attic Floor + Parallel: Lumber Increase=1.15, Plate Increase=1.15
  - Uniform Loads (plf)
    - Vert: 1-3=-25, 4-5=-146(F=-89), 6-8=-20
  - Concentrated Loads (lb)
    - Vert: 15=-160
- 38) 6th Unbal.Dead + 0.75 Snow (balanced) + 0.75 Attic Floor + Parallel: Lumber Increase=1.15, Plate Increase=1.15
  - Uniform Loads (plf)
    - Vert: 1-3=-57, 4-5=-114(F=-89), 6-8=-20
  - Concentrated Loads (lb)
    - Vert: 15=-160
- 39) 7th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left) + Parallel: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=-22, 2-3=-26, 4-5=-137(F=-79), 6-8=-20
    - Horz: 1-2=-3, 2-3=1, 3-4=23, 5-6=5
  - Concentrated Loads (lb)
    - Vert: 15=-160

Continued on page 5

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

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818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #7 ROOF	I66008045
24-5685-A	M04	HALF HIP	3	1	Job Reference (optional)	

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

8.730 s Apr 25 2024 MiTek Industries, Inc. Tue Jun 4 09:18:54 2024 Page 5  
ID:Bxl2MwYau\_NHkbraGCmHloyOvst-6rjxsRJsS5qGYxq1DCNFJC4sE08bYgd9Y4SUhBz9ial

**LOAD CASE(S)**

- 40) 8th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left) + Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-54, 2-3=-58, 4-5=-105(F=-79), 6-8=-20  
Horz: 1-2=-3, 2-3=1, 3-4=23, 5-6=5  
Concentrated Loads (lb)  
Vert: 15=-160
- 41) 9th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right) + Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-14, 2-3=-18, 4-5=-137(F=-79), 6-8=-20  
Horz: 1-2=-11, 2-3=-7, 3-4=-3, 5-6=-19  
Concentrated Loads (lb)  
Vert: 15=-160
- 42) 10th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right) + Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-46, 2-3=-50, 4-5=-105(F=-79), 6-8=-20  
Horz: 1-2=-11, 2-3=-7, 3-4=-3, 5-6=-19  
Concentrated Loads (lb)  
Vert: 15=-160
- 43) 11th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-22, 2-3=-26, 4-5=-137(F=-79), 6-8=-20  
Horz: 1-2=-3, 2-3=1, 3-4=5, 5-6=9  
Concentrated Loads (lb)  
Vert: 15=-160
- 44) 12th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-54, 2-3=-58, 4-5=-105(F=-79), 6-8=-20  
Horz: 1-2=-3, 2-3=1, 3-4=5, 5-6=9  
Concentrated Loads (lb)  
Vert: 15=-160
- 45) 13th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-22, 2-3=-26, 4-5=-137(F=-79), 6-8=-20  
Horz: 1-2=-3, 2-3=1, 3-4=5, 5-6=9  
Concentrated Loads (lb)  
Vert: 15=-160
- 46) 14th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-54, 2-3=-58, 4-5=-105(F=-79), 6-8=-20  
Horz: 1-2=-3, 2-3=1, 3-4=5, 5-6=9  
Concentrated Loads (lb)  
Vert: 15=-160
- 47) 15th Unbal.Dead + Minimum Snow + Parallel: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-27, 4-5=-100(F=-30), 6-8=-20  
Concentrated Loads (lb)  
Vert: 15=-160
- 48) 16th Unbal.Dead + Minimum Snow + Parallel: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-70, 4-5=-57(F=-30), 6-8=-20  
Concentrated Loads (lb)  
Vert: 15=-160
- 49) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-60, 4-5=-50(F=-30), 6-8=-20  
Concentrated Loads (lb)  
Vert: 15=-160
- 50) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-20, 4-5=-90(F=-30), 6-8=-20  
Concentrated Loads (lb)  
Vert: 15=-160
- 51) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-50, 4-5=-109(F=-89), 6-8=-20  
Concentrated Loads (lb)  
Vert: 15=-160
- 52) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-20, 4-5=-139(F=-89), 6-8=-20  
Concentrated Loads (lb)  
Vert: 15=-160

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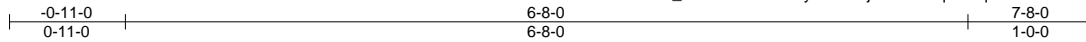
818 Soundside Road  
Edenton, NC 27932

Job 24-5685-A	Truss M04SGE	Truss Type GABLE	Qty 1	Ply 1	RVF-LOT #7 ROOF	166008046
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Riverside Roof Truss, LLC, Danville, Va - 24541,

8.730 s Apr 25 2024 MiTek Industries, Inc. Tue Jun 4 09:18:54 2024 Page 1

ID: Bxl2MwYau\_NHkbraGcmHloyOvst-6rjxsRJsS5qGYxq1DCNFJC4xZ081Yhe9Y4SUhBz9ial



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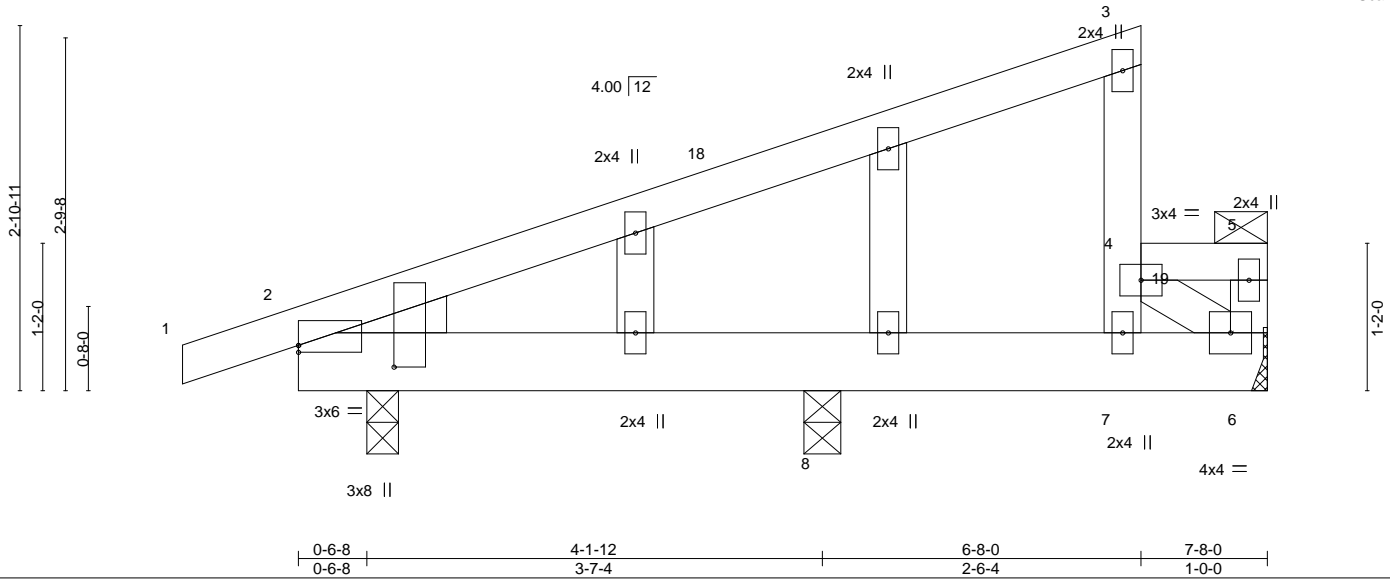


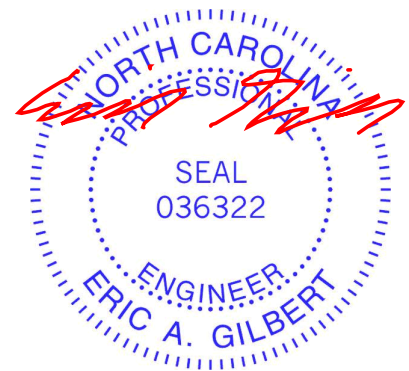
Plate Offsets (X,Y)--	[2:0-0-0,0-0-10], [2:0-2-1,0-9-1]								
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	Plate Grip DOL 1.15		TC 0.52	Vert(LL) -0.01	8-17	>999	240	MT20	244/190
Snow (Pf/Pg) 16.5/15.0	Lumber DOL 1.15		BC 0.26	Vert(CT) -0.01	8-17	>999	180		
TCDL 10.0	Rep Stress Incr NO		WB 0.03	Horz(CT) 0.00	2	n/a	n/a		
BCLL 0.0 *	Code IRC2018/TPI2014		Matrix-MP						
BCDL 10.0								Weight: 41 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 4-7, 4-5.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	
OTHERS 2x4 SP No.3	
WEDGE	
Left: 2x4 SP No.3	

**REACTIONS.** (size) 6=Mechanical, 2=0-3-0, 8=0-3-8  
 Max Horz 2=115(LC 16)  
 Max Uplift 2=-25(LC 16)  
 Max Grav 6=337(LC 28), 2=310(LC 36), 8=289(LC 36)

**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; TC DL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) C-C wind load user defined.
  - 4) 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.
  - 5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
  - 6) Unbalanced snow loads have been considered for this design.
  - 7) 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.
  - 8) Provide adequate drainage to prevent water ponding.
  - 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) Refer to girder(s) for truss to truss connections.
  - 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift 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.
  - 15) Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.



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

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

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #7 ROOF	I66008046
24-5685-A	M04SGE	GABLE	1	1	Job Reference (optional)	

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

8.730 s Apr 25 2024 MiTek Industries, Inc. Tue Jun 4 09:18:54 2024 Page 2  
ID:Bxl2MwYau\_NHkbraGCmHloyOvst-6rjxsRJsS5qGYxq1DCNFJC4xZ081Yhe9Y4SUhBz9ial

**LOAD CASE(S)**

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-43, 4-5=-83, 6-13=-20  
Concentrated Loads (lb)  
Vert: 19=-160
- 2) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-60, 4-5=-90, 6-13=-20  
Concentrated Loads (lb)  
Vert: 19=-160
- 3) Dead + 0.75 Roof Live (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-50, 4-5=-139, 6-13=-20  
Concentrated Loads (lb)  
Vert: 19=-160
- 4) Dead + 0.75 Snow (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-37, 4-5=-133, 6-13=-20  
Concentrated Loads (lb)  
Vert: 19=-160
- 5) Dead + 0.75 Snow (Unbal. Left) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-18=-37, 3-18=-42, 4-5=-114, 6-13=-20  
Concentrated Loads (lb)  
Vert: 19=-160
- 6) Dead + 0.75 Snow (Unbal. Right) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-25, 4-5=-137, 6-13=-20  
Concentrated Loads (lb)  
Vert: 19=-160
- 7) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-3=-20, 4-5=-50, 6-13=-40  
Concentrated Loads (lb)  
Vert: 19=-160
- 8) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=61, 2-3=52, 4-5=34, 6-13=-12  
Horz: 1-2=-73, 2-3=-64, 3-4=7, 5-6=36  
Concentrated Loads (lb)  
Vert: 19=-160
- 9) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=47, 2-3=52, 4-5=34, 6-13=-12  
Horz: 1-2=-59, 2-3=-64, 3-4=-69, 5-6=-23  
Concentrated Loads (lb)  
Vert: 19=-160
- 10) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-3, 2-3=-42, 4-5=-60, 6-13=-20  
Horz: 1-2=-17, 2-3=22, 3-4=-48, 5-6=-33  
Concentrated Loads (lb)  
Vert: 19=-160
- 11) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-37, 2-3=-42, 4-5=-60, 6-13=-20  
Horz: 1-2=17, 2-3=22, 3-4=28, 5-6=25  
Concentrated Loads (lb)  
Vert: 19=-160
- 12) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=28, 2-3=13, 4-5=8, 6-13=-12  
Horz: 1-2=-40, 2-3=-25, 3-4=-11, 5-6=18  
Concentrated Loads (lb)  
Vert: 19=-160
- 13) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=3, 2-3=8, 4-5=8, 6-13=-12  
Horz: 1-2=-15, 2-3=-20, 3-4=-26, 5-6=-15  
Concentrated Loads (lb)  
Vert: 19=-160
- 14) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-16, 2-3=-21, 4-5=-39, 6-13=-20  
Horz: 1-2=-4, 2-3=1, 3-4=31, 5-6=7

Continued on page 3

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818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #7 ROOF	166008046
24-5685-A	M04SGE	GABLE	1	1	Job Reference (optional)	

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

8.730 s Apr 25 2024 MiTek Industries, Inc. Tue Jun 4 09:18:54 2024 Page 3  
ID:Bxl2MwYau\_NHkbraGCmHloyOvst-6rjxsRJsS5qGYxq1DCNfJC4xZ081Yhe9Y4SUhBz9ial

**LOAD CASE(S)**

- Concentrated Loads (lb)  
Vert: 19=-160
- 15) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-5, 2-3=-10, 4-5=-39, 6-13=-20  
Horz: 1-2=-15, 2-3=-10, 3-4=-4, 5-6=-25  
Concentrated Loads (lb)  
Vert: 19=-160
- 16) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=32, 2-3=17, 4-5=-1, 6-13=-12  
Horz: 1-2=-44, 2-3=-29, 3-4=-34, 5-6=23  
Concentrated Loads (lb)  
Vert: 19=-160
- 17) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=21, 2-3=6, 4-5=-12, 6-13=-12  
Horz: 1-2=-33, 2-3=-18, 3-4=-24, 5-6=23  
Concentrated Loads (lb)  
Vert: 19=-160
- 18) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-16, 2-3=-21, 4-5=-39, 6-13=-20  
Horz: 1-2=-4, 2-3=1, 3-4=6, 5-6=12  
Concentrated Loads (lb)  
Vert: 19=-160
- 19) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-16, 2-3=-21, 4-5=-39, 6-13=-20  
Horz: 1-2=-4, 2-3=1, 3-4=6, 5-6=12  
Concentrated Loads (lb)  
Vert: 19=-160
- 20) Dead + Snow on Overhangs: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-2=-43, 2-3=-20, 4-5=-50, 6-13=-20  
Concentrated Loads (lb)  
Vert: 19=-160
- 21) Dead + Snow (Unbal. Left): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-18=-43, 3-18=-49, 4-5=-57, 6-13=-20  
Concentrated Loads (lb)  
Vert: 19=-160
- 22) Dead + Snow (Unbal. Right): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-27, 4-5=-88, 6-13=-20  
Concentrated Loads (lb)  
Vert: 19=-160
- 23) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90  
Uniform Loads (plf)  
Vert: 1-3=-20, 4-5=-50, 6-13=-20  
Concentrated Loads (lb)  
Vert: 19=-160
- 24) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-34, 2-3=-38, 4-5=-124, 6-13=-20  
Horz: 1-2=-3, 2-3=1, 3-4=23, 5-6=5  
Concentrated Loads (lb)  
Vert: 19=-160
- 25) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-26, 2-3=-30, 4-5=-124, 6-13=-20  
Horz: 1-2=-11, 2-3=-7, 3-4=-3, 5-6=-19  
Concentrated Loads (lb)  
Vert: 19=-160
- 26) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-34, 2-3=-38, 4-5=-124, 6-13=-20  
Horz: 1-2=-3, 2-3=1, 3-4=5, 5-6=9  
Concentrated Loads (lb)  
Vert: 19=-160
- 27) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60

Continued on page 4

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

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818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #7 ROOF	166008046
24-5685-A	M04SGE	GABLE	1	1	Job Reference (optional)	

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

8.730 s Apr 25 2024 MiTek Industries, Inc. Tue Jun 4 09:18:54 2024 Page 4  
ID:Bxl2MwYau\_NHkbraGCmHloyOvst-6rjxsRJsS5qGYxq1DCNFJC4xZ081Yhe9Y4SUhBz9ial

**LOAD CASE(S)**

- Uniform Loads (plf)
  - Vert: 1-2=-34, 2-3=-38, 4-5=-124, 6-13=-20
  - Horz: 1-2=-3, 2-3=1, 3-4=5, 5-6=9
- Concentrated Loads (lb)
  - Vert: 19=-160
- 28) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=-47, 2-3=-51, 4-5=-129, 6-13=-20
    - Horz: 1-2=-3, 2-3=1, 3-4=23, 5-6=5
  - Concentrated Loads (lb)
    - Vert: 19=-160
- 29) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=-39, 2-3=-43, 4-5=-129, 6-13=-20
    - Horz: 1-2=-11, 2-3=-7, 3-4=-3, 5-6=-19
  - Concentrated Loads (lb)
    - Vert: 19=-160
- 30) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=-47, 2-3=-51, 4-5=-129, 6-13=-20
    - Horz: 1-2=-3, 2-3=1, 3-4=5, 5-6=9
  - Concentrated Loads (lb)
    - Vert: 19=-160
- 31) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=-47, 2-3=-51, 4-5=-129, 6-13=-20
    - Horz: 1-2=-3, 2-3=1, 3-4=5, 5-6=9
  - Concentrated Loads (lb)
    - Vert: 19=-160
- 32) Dead + Minimum Snow: Lumber Increase=1.15, Plate Increase=1.15
  - Uniform Loads (plf)
    - Vert: 1-3=-20, 4-5=-80, 6-13=-20
  - Concentrated Loads (lb)
    - Vert: 19=-160
- 33) Dead + 0.6 C-C Wind Min. Down: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=4, 2-3=-28, 4-5=-46, 6-13=-12
    - Horz: 1-2=-16, 2-3=16, 3-4=-16, 5-6=-16
  - Concentrated Loads (lb)
    - Vert: 19=-160
- 34) Dead + 0.6 C-C Wind Min. Upward: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-3=4, 4-5=-14, 6-13=-12
    - Horz: 1-3=-16, 3-4=16, 5-6=16
  - Concentrated Loads (lb)
    - Vert: 19=-160
- 35) 3rd Unbal.Dead + Snow (balanced) + Parallel: Lumber Increase=1.15, Plate Increase=1.15
  - Uniform Loads (plf)
    - Vert: 1-3=-27, 4-5=-100, 6-13=-20
  - Concentrated Loads (lb)
    - Vert: 19=-160
- 36) 4th Unbal.Dead + Snow (balanced) + Parallel: Lumber Increase=1.15, Plate Increase=1.15
  - Uniform Loads (plf)
    - Vert: 1-3=-70, 4-5=-57, 6-13=-20
  - Concentrated Loads (lb)
    - Vert: 19=-160
- 37) 5th Unbal.Dead + 0.75 Snow (balanced) + 0.75 Attic Floor + Parallel: Lumber Increase=1.15, Plate Increase=1.15
  - Uniform Loads (plf)
    - Vert: 1-3=-25, 4-5=-146, 6-13=-20
  - Concentrated Loads (lb)
    - Vert: 19=-160
- 38) 6th Unbal.Dead + 0.75 Snow (balanced) + 0.75 Attic Floor + Parallel: Lumber Increase=1.15, Plate Increase=1.15
  - Uniform Loads (plf)
    - Vert: 1-3=-57, 4-5=-114, 6-13=-20
  - Concentrated Loads (lb)
    - Vert: 19=-160
- 39) 7th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left) + Parallel: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 1-2=-22, 2-3=-26, 4-5=-137, 6-13=-20
    - Horz: 1-2=-3, 2-3=1, 3-4=23, 5-6=5
  - Concentrated Loads (lb)
    - Vert: 19=-160

Continued on page 5

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

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818 Soundside Road  
Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	RVF-LOT #7 ROOF	I66008046
24-5685-A	M04SGE	GABLE	1	1	Job Reference (optional)	

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

8.730 s Apr 25 2024 MiTek Industries, Inc. Tue Jun 4 09:18:54 2024 Page 5  
ID:Bxl2MwYau\_NHkbraGCmHloyOvst-6rjxsRJsS5qGYxq1DCNFJC4xZ081Yhe9Y4SUhBz9ial

**LOAD CASE(S)**

- 40) 8th Unbal.Death + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left) + Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-54, 2-3=-58, 4-5=-105, 6-13=-20  
Horz: 1-2=-3, 2-3=1, 3-4=23, 5-6=5  
Concentrated Loads (lb)  
Vert: 19=-160
- 41) 9th Unbal.Death + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right) + Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-14, 2-3=-18, 4-5=-137, 6-13=-20  
Horz: 1-2=-11, 2-3=-7, 3-4=-3, 5-6=-19  
Concentrated Loads (lb)  
Vert: 19=-160
- 42) 10th Unbal.Death + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right) + Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-46, 2-3=-50, 4-5=-105, 6-13=-20  
Horz: 1-2=-11, 2-3=-7, 3-4=-3, 5-6=-19  
Concentrated Loads (lb)  
Vert: 19=-160
- 43) 11th Unbal.Death + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-22, 2-3=-26, 4-5=-137, 6-13=-20  
Horz: 1-2=-3, 2-3=1, 3-4=5, 5-6=9  
Concentrated Loads (lb)  
Vert: 19=-160
- 44) 12th Unbal.Death + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-54, 2-3=-58, 4-5=-105, 6-13=-20  
Horz: 1-2=-3, 2-3=1, 3-4=5, 5-6=9  
Concentrated Loads (lb)  
Vert: 19=-160
- 45) 13th Unbal.Death + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-22, 2-3=-26, 4-5=-137, 6-13=-20  
Horz: 1-2=-3, 2-3=1, 3-4=5, 5-6=9  
Concentrated Loads (lb)  
Vert: 19=-160
- 46) 14th Unbal.Death + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-54, 2-3=-58, 4-5=-105, 6-13=-20  
Horz: 1-2=-3, 2-3=1, 3-4=5, 5-6=9  
Concentrated Loads (lb)  
Vert: 19=-160
- 47) 15th Unbal.Death + Minimum Snow + Parallel: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-27, 4-5=-100, 6-13=-20  
Concentrated Loads (lb)  
Vert: 19=-160
- 48) 16th Unbal.Death + Minimum Snow + Parallel: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-70, 4-5=-57, 6-13=-20  
Concentrated Loads (lb)  
Vert: 19=-160
- 49) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-60, 4-5=-50, 6-13=-20  
Concentrated Loads (lb)  
Vert: 19=-160
- 50) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-20, 4-5=-90, 6-13=-20  
Concentrated Loads (lb)  
Vert: 19=-160
- 51) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-50, 4-5=-109, 6-13=-20  
Concentrated Loads (lb)  
Vert: 19=-160
- 52) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-20, 4-5=-139, 6-13=-20  
Concentrated Loads (lb)  
Vert: 19=-160

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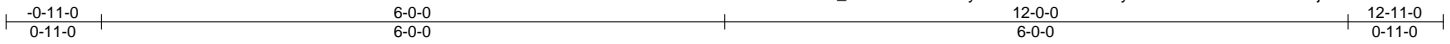
818 Soundside Road  
Edenton, NC 27932

Job 24-5685-A	Truss T01	Truss Type COMMON	Qty 5	Ply 1	RVF-LOT #7 ROOF	166008047
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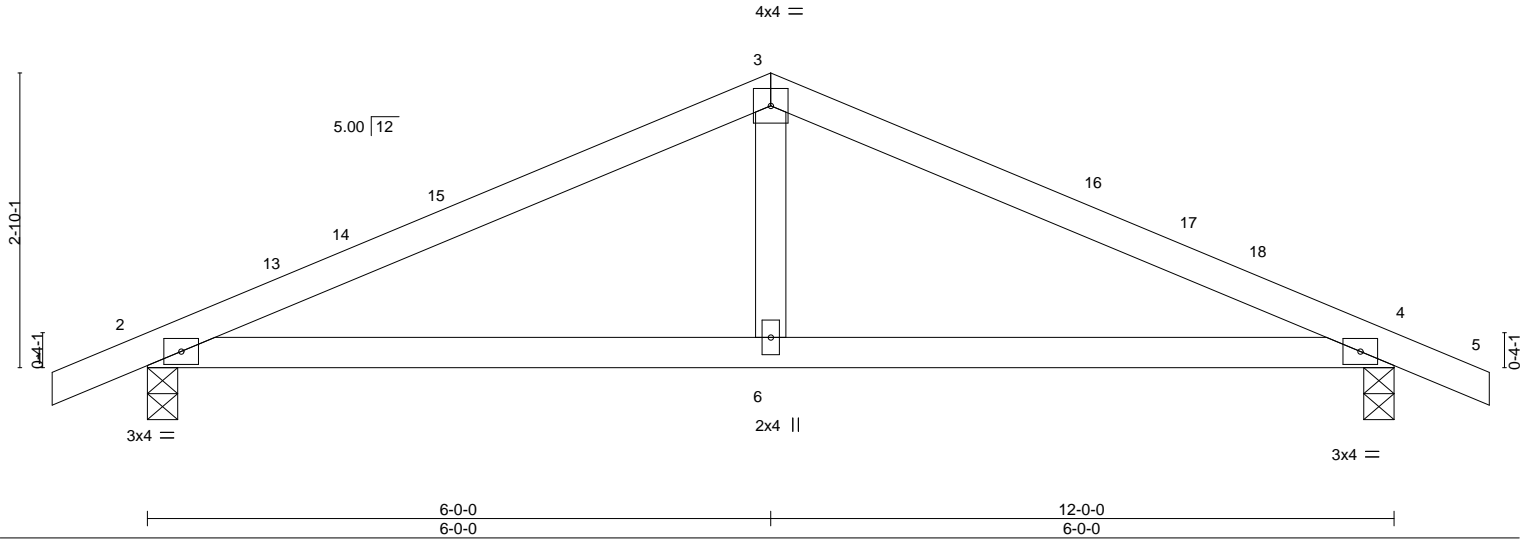
Riverside Roof Truss, LLC, Danville, Va - 24541,

8.730 s Apr 25 2024 MiTek Industries, Inc. Tue Jun 4 09:18:55 2024 Page 1

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Scale = 1:22.2



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	2-0-0	TC 0.47	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.48	Vert(LL) -0.05 6-12 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.11	Vert(CT) -0.09 6-12 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.01 4 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 44 lb	FT = 20%

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

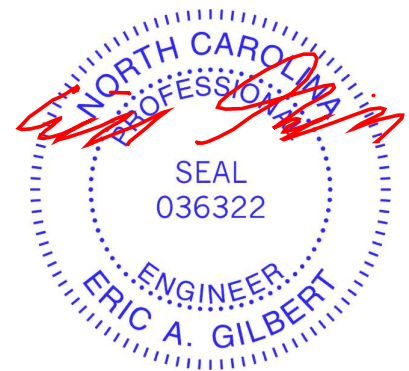
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 4=0-3-8  
Max Horz 2=37(LC 15)  
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-**

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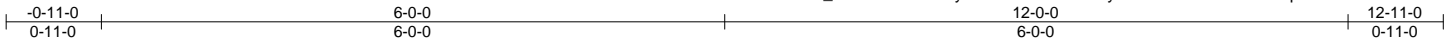


Job 24-5685-A	Truss T01GE	Truss Type GABLE	Qty 1	Ply 1	RVF-LOT #7 ROOF Job Reference (optional)	166008048
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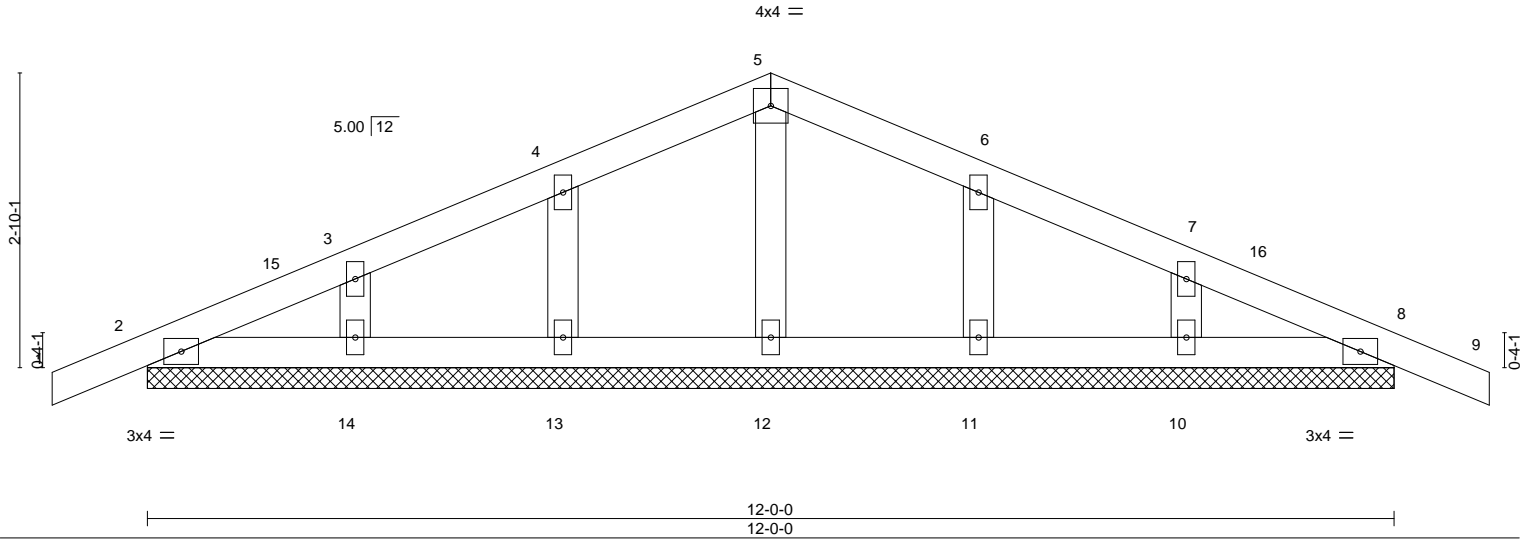
Riverside Roof Truss, LLC, Danville, Va - 24541,

8.730 s Apr 25 2024 MiTek Industries, Inc. Tue Jun 4 09:18:55 2024 Page 1

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Scale = 1:22.2



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	2-0-0	TC 0.06	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.03	Vert(LL) -0.00 8 n/r 120		
TCDL 10.0	Lumber DOL 1.15	WB 0.03	Vert(CT) -0.00 9 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 8 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 50 lb	FT = 20%

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

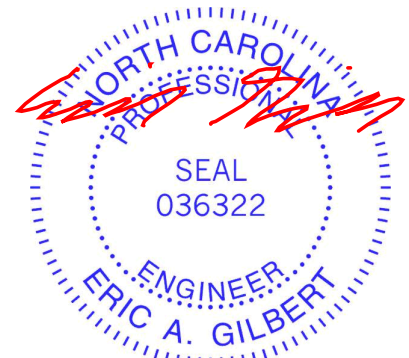
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 12-0-0.  
(lb) - Max Horz 2=-37(LC 14)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 13, 14, 11, 10  
Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=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
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8, 13, 14, 11, 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.



June 5, 2024

**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/TPH Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



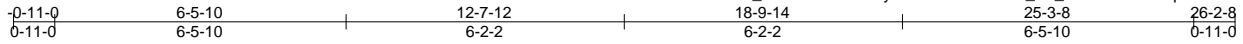
818 Soundside Road  
Edenton, NC 27932

Job 24-5685-A	Truss T02	Truss Type COMMON	Qty 1	Ply 1	RVF-LOT #7 ROOF	166008049
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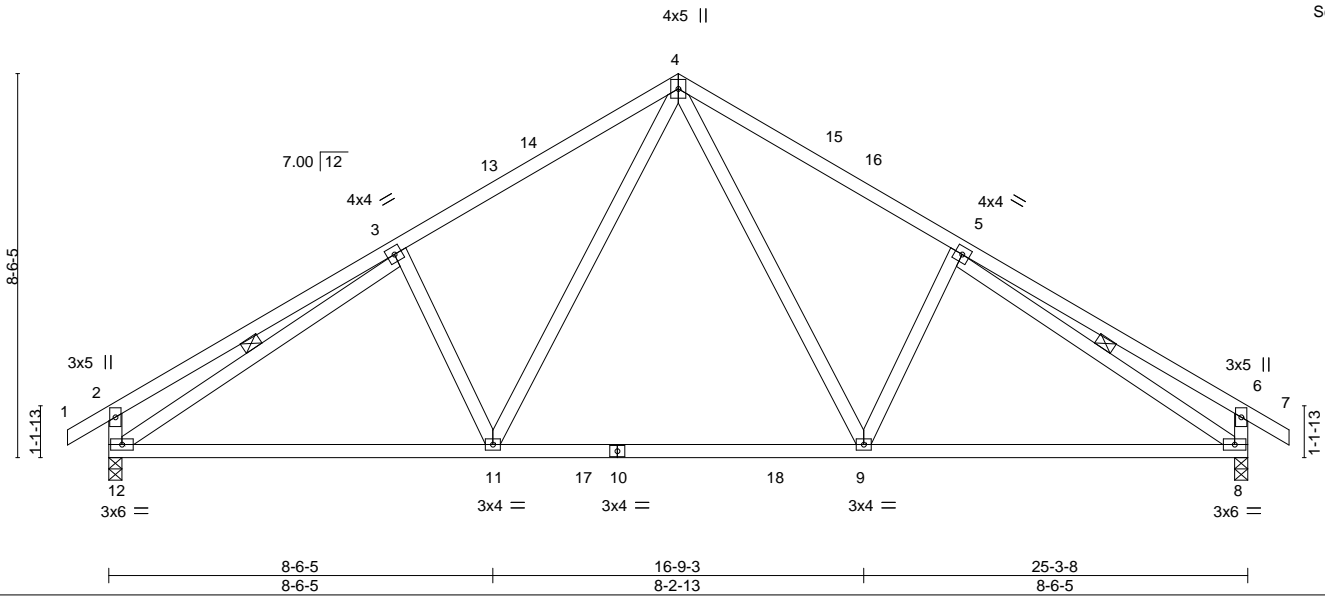
Riverside Roof Truss, LLC, Danville, Va - 24541,

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ID: Bxl2MwYau\_NHkbraGCmHloyOvst-2DriH7K6zi4\_nF\_PLdP7Od9HnqhwoUcS?Oxbl4z9iaj



Scale = 1:51.2



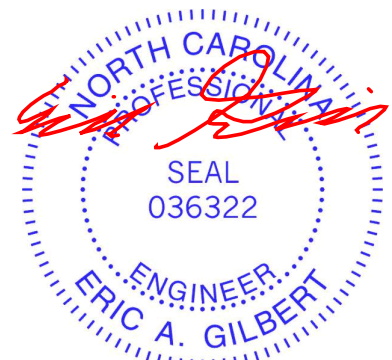
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	2-0-0	TC 0.54	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.81	Vert(LL) -0.16 9-11 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.39	Vert(CT) -0.25 11-12 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.04 8 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 149 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-7-7 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 3-12, 5-8

**REACTIONS.** (size) 12=0-3-8, 8=0-3-8  
 Max Horz 12=-188(LC 14)  
 Max Uplift 12=-94(LC 16), 8=-94(LC 16)  
 Max Grav 12=1181(LC 28), 8=1181(LC 29)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-425/126, 3-4=-1373/197, 4-5=-1373/197, 5-6=-425/126, 2-12=-406/133, 6-8=-406/133  
 BOT CHORD 11-12=-62/1290, 9-11=0/912, 8-9=-52/1178  
 WEBS 4-9=-46/616, 5-9=-267/162, 4-11=-46/616, 3-11=-267/162, 3-12=-1146/47, 5-8=-1145/47

- 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=25ft; 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 12-7-12, Exterior(2R) 12-7-12 to 15-7-12, Interior(1) 15-7-12 to 26-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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) 12, 8.
  - 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.



June 5, 2024

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Job 24-5685-A	Truss T02G	Truss Type COMMON GIRDER	Qty 1	Ply 3	RVF-LOT #7 ROOF	166008050
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Riverside Roof Truss, LLC, Danville, Va - 24541,

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ID:Bxl2MwYau\_NHkbraGCMHloyOvst-WQP4UTLkk0CqPPZcuKwMxqiM3E7AlpRbE2g8HWz9iai



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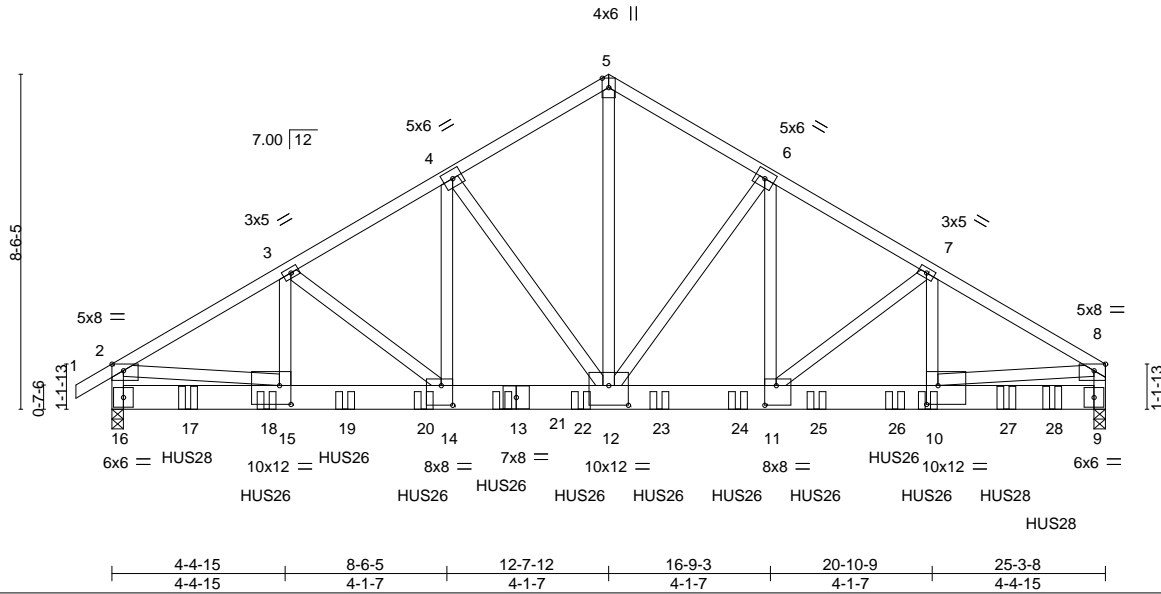


Plate Offsets (X, Y)--	[2:0-3-8,Edge], [8:0-3-8,Edge], [10:0-3-8,0-5-12], [11:0-3-8,0-6-0], [12:0-6-0,0-6-0], [14:0-3-8,0-6-0], [15:0-3-8,0-5-12]
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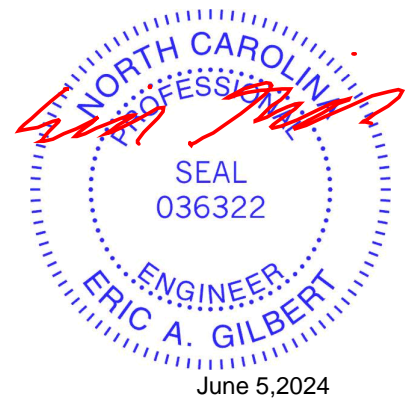
LOADING (psf)	SPACING-	CS.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.95	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.42	Vert(LL) -0.16 11-12 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.92	Vert(CT) -0.30 11-12 >999 180		
BCLL 0.0 *	Rep Stress Incr NO	Matrix-MS	Horz(CT) 0.04 9 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 617 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-4-9 oc purlins, except end verticals.
BOT CHORD 2x8 SP DSS	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 5-12: 2x4 SP No.2, 2-16,2-15,8-9,8-10: 2x4 SP No.1	

REACTIONS.	(size)
Max Horz	16=0-3-8, 9=0-3-8
Max Uplift	16=530(LC 12), 9=480(LC 12)
Max Grav	16=11320(LC 3), 9=13280(LC 3)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-15179/664, 3-4=-14142/591, 4-5=-11493/507, 5-6=-11493/506, 6-7=-14703/565, 7-8=-16962/598, 2-16=-9868/473, 8-9=-10936/395
BOT CHORD	15-16=-170/1826, 14-15=-507/13019, 12-14=-377/12192, 11-12=-353/12674, 10-11=-453/14572, 9-10=-83/2008
WEBS	5-12=-434/11298, 6-12=-4724/206, 6-11=-124/5232, 7-11=-2442/127, 7-10=-120/2553, 4-12=-3904/246, 4-14=-168/4283, 3-14=-1078/166, 3-15=-159/1115, 2-15=-409/11372, 8-10=-376/12765

- NOTES-**
- 1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.  
Bottom chords connected as follows: 2x8 - 3 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; TC DL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=25ft; 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 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.
  - 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) 16, 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.



Continued on page 2

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</b></p> <p>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 <b>ANSI/TPI1 Quality Criteria and DSB-22</b> available from Truss Plate Institute (www.tpinst.org) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (www.sbcacomponents.com)</p>	<p><b>ENGINEERING BY</b> <b>TRENCO</b> A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job 24-5685-A	Truss T02G	Truss Type COMMON GIRDER	Qty 1	Ply <b>3</b>	RVF-LOT #7 ROOF Job Reference (optional)	I66008050
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Riverside Roof Truss, LLC, Danville, Va - 24541,

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**NOTES-**

- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=530, 9=480.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 13) Use Simpson Strong-Tie HUS28 (22-10d Girder, 4-10d Truss, Single Ply Girder) or equivalent spaced at 20-10-0 oc max. starting at 1-11-4 from the left end to 23-11-4 to connect truss(es) to front face of bottom chord.
- 14) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 3-11-4 from the left end to 20-9-4 to connect truss(es) to front face of bottom chord.
- 15) 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: 1-2=-43, 2-5=-43, 5-8=-43, 9-16=-20

Concentrated Loads (lb)

Vert: 10=-1259(F) 17=-1174(F) 18=-1174(F) 19=-1174(F) 20=-1259(F) 21=-1259(F) 22=-1259(F) 23=-1259(F) 24=-1259(F) 25=-1259(F) 26=-1259(F) 27=-1259(F) 28=-1174(F)

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

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818 Soundside Road  
Edenton, NC 27932



Job 24-5685-A	Truss T02SGE	Truss Type COMMON STRUCTURAL GA	Qty 1	Ply 1	RVF-LOT #7 ROOF	166008051
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Riverside Roof Truss, LLC, Danville, Va - 24541,

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ID:Bxl2MwYau\_NHkbraGCmHloyOvst\_czSipMMVKKh0Z8oS2RbT2FeheQeUNgITiQiqyz9iah

0-11-0	6-5-10	12-7-12	18-9-14	25-3-8	26-2-8
0-11-0	6-5-10	6-2-2	6-2-2	6-5-10	0-11-0

Scale = 1:56.7

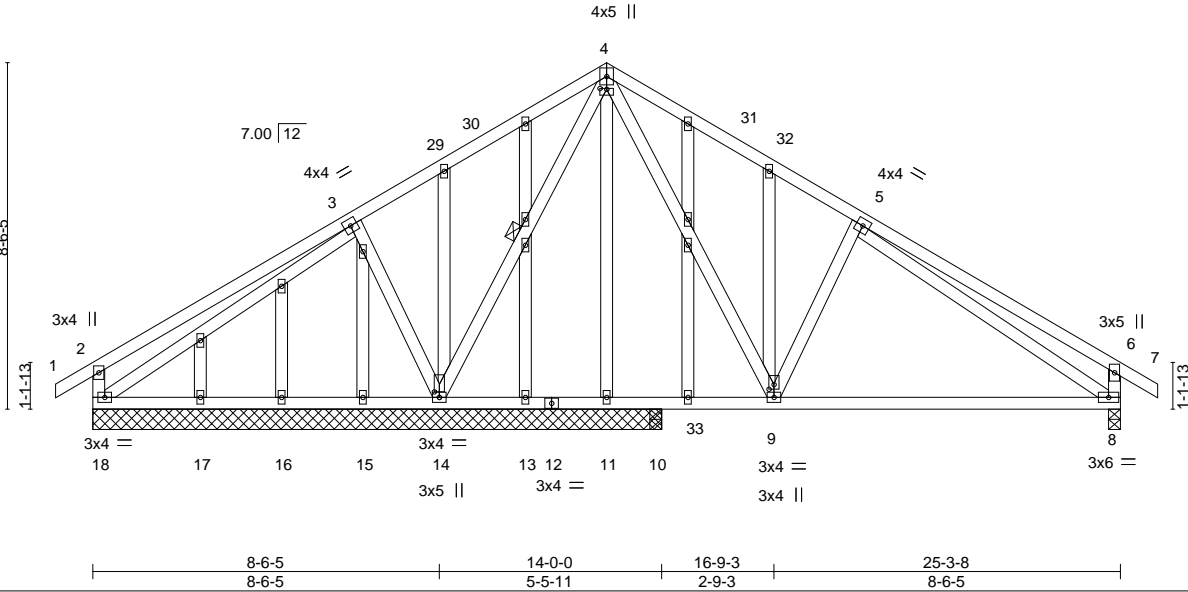


Plate Offsets (X,Y)-- [4:0-2-0,0-0-4], [9:0-1-6,0-1-8], [14:0-1-10,0-1-8]

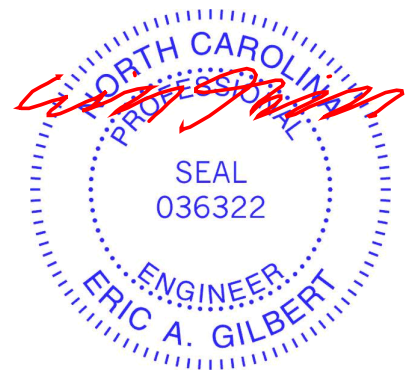
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.51	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.60	Vert(LL) -0.13 8-9 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.48	Vert(CT) -0.26 8-9 >528 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.01 8 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 209 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 4-14
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 14-0-0 except (jt=length) 8=0-3-8, 10=0-3-8.  
 (lb) - Max Horz 18=188(LC 14)  
 Max Uplift All uplift 100 lb or less at joint(s) 18, 8, 10 except 14=123(LC 16)  
 Max Grav All reactions 250 lb or less at joint(s) 11, 13, 15, 16, 17, 10 except 18=322(LC 34), 8=765(LC 29), 14=933(LC 28)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 4-5=-666/168, 5-6=-404/123, 2-18=-305/148, 6-8=-392/131  
 BOT CHORD 13-14=0/255, 11-13=0/255, 10-11=0/255, 9-10=0/255, 8-9=-21/577  
 WEBS 4-9=-51/616, 5-9=-316/165, 4-14=-633/24, 3-14=-375/174, 5-8=-420/12

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=25ft; 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 12-7-12, Exterior(2R) 12-7-12 to 15-7-12, Interior(1) 15-7-12 to 26-2-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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, with BCDL = 10.0psf.
  - 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18, 8, 10 except (jt=lb) 14=123.
  - 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.



June 5, 2024

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**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate

818 Soundside Road  
 Edenton, NC 27932

Job 24-5685-A	Truss T03	Truss Type COMMON	Qty 6	Ply 1	RVF-LOT #7 ROOF	166008052
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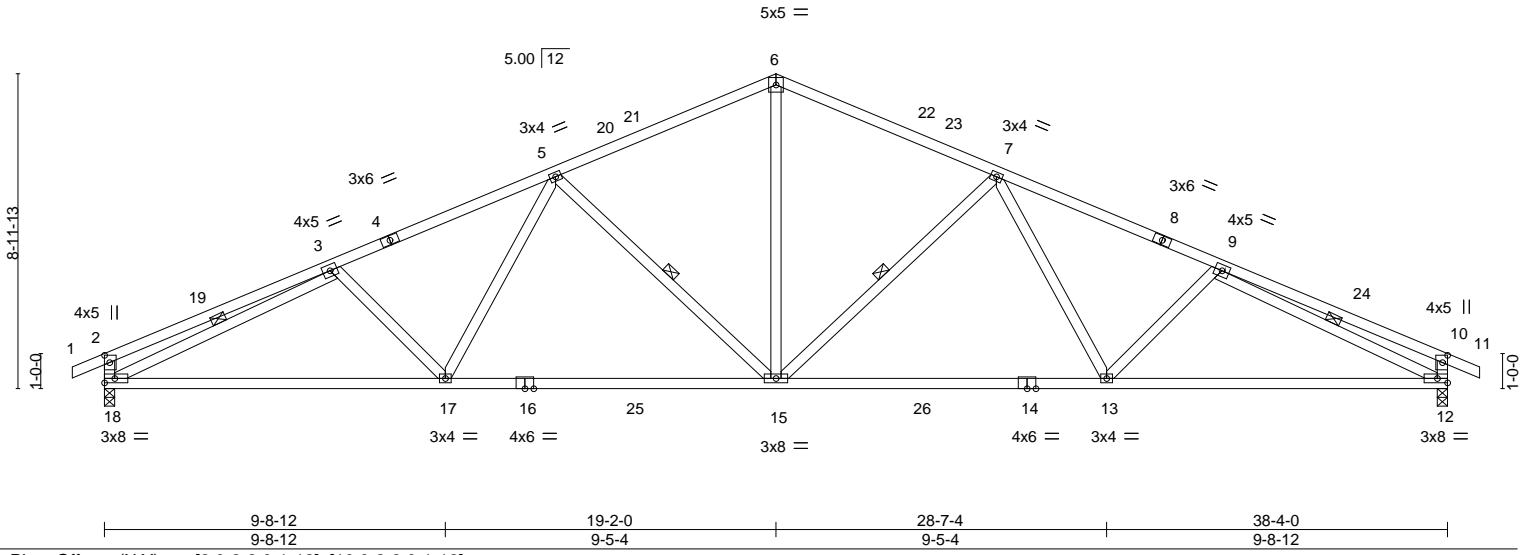
Riverside Roof Truss, LLC, Danville, Va - 24541,

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ID:Bxl2MwYau\_NHkbraGcmHloyOvst-SoWqv9N?GdSYejj\_0lzq0Fnj51iKdMpuhM9FMPz9Iag

-0-11-0	6-7-0	12-10-8	19-2-0	25-5-8	31-9-0	38-4-0	39-3-0
0-11-0	6-7-0	6-3-8	6-3-8	6-3-8	6-3-8	6-7-0	0-11-0

Scale = 1:65.8



<b>LOADING (psf)</b>	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	2-0-0	TC 0.79	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.89	Vert(LL) -0.29 13-15 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.77	Vert(CT) -0.52 13-15 >885 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.13 12 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 215 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-1-4 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 7-15, 5-15, 3-18, 9-12

<b>REACTIONS.</b>	(size) 18=0-3-8, 12=0-3-8
	Max Horz 18=159(LC 15)
	Max Uplift 18=-126(LC 16), 12=-126(LC 16)
	Max Grav 18=1739(LC 28), 12=1739(LC 29)

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-616/102, 3-5=-2860/257, 5-6=-2123/272, 6-7=-2123/272, 7-9=-2860/257, 9-10=-616/102, 2-18=-455/144, 10-12=-454/145
BOT CHORD	17-18=-189/2716, 15-17=-129/2441, 13-15=-114/2383, 12-13=-179/2622
WEBS	6-15=-66/1294, 7-15=-723/136, 7-13=0/483, 5-15=-723/136, 5-17=0/483, 3-18=-2425/184, 9-12=-2425/183

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=38ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-11-0, Interior(1) 2-11-0 to 19-2-0, Exterior(2R) 19-2-0 to 23-0-0, Interior(1) 23-0-0 to 39-3-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
  - Unbalanced snow loads have been considered for this design.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 18=126, 12=126.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 5, 2024

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

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

Job 24-5685-A	Truss T03A	Truss Type Common	Qty 4	Ply 1	RVF-LOT #7 ROOF	166008053
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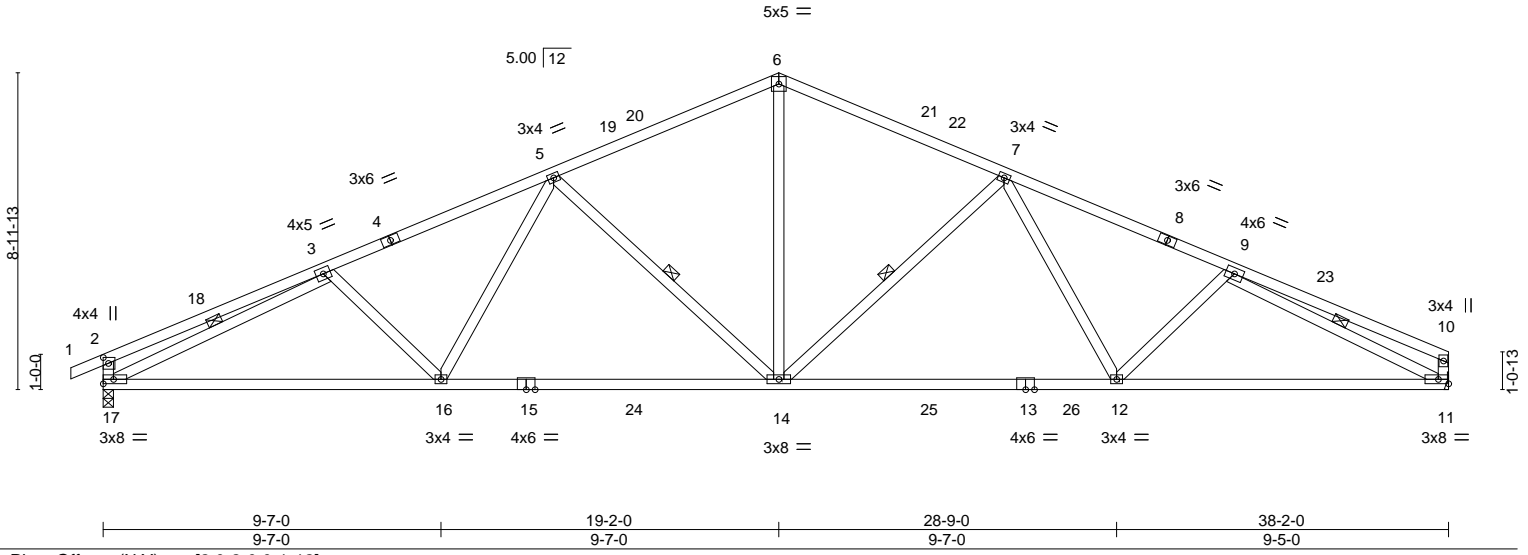
Riverside Roof Truss, LLC, Danville, Va - 24541,

8.730 s Apr 25 2024 MiTek Industries, Inc. Tue Jun 4 09:18:59 2024 Page 1

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Scale = 1:65.4



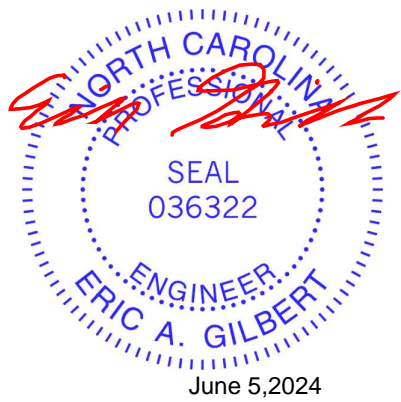
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.74	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.89	Vert(LL) -0.30 12-14 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.76	Vert(CT) -0.53 12-14 >851 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.13 11 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 212 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-0-15 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 5-14, 7-14, 3-17, 9-11

**REACTIONS.** (size) 17=0-3-8, 11=Mechanical  
 Max Horz 17=160(LC 15)  
 Max Uplift 17=-125(LC 16), 11=-92(LC 16)  
 Max Grav 17=1733(LC 28), 11=1678(LC 29)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-587/97, 3-5=-2851/255, 5-6=-2112/270, 6-7=-2111/272, 7-9=-2828/260, 9-10=-428/61, 2-17=-438/140, 10-11=-302/74  
 BOT CHORD 16-17=-217/2696, 14-16=-159/2430, 12-14=-144/2362, 11-12=-214/2563  
 WEBS 5-16=0/472, 5-14=-722/138, 6-14=-64/1280, 7-14=-705/137, 7-12=0/452, 3-17=-2437/189, 9-11=-2558/226

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=38ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-10-13, Interior(1) 2-10-13 to 19-2-0, Exterior(2R) 19-2-0 to 22-11-13, Interior(1) 22-11-13 to 38-0-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
  - Unbalanced snow loads have been considered for this design.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11 except (jt=lb) 17=125.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Job 24-5685-A	Truss T03AGE	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	RVF-LOT #7 ROOF	166008054
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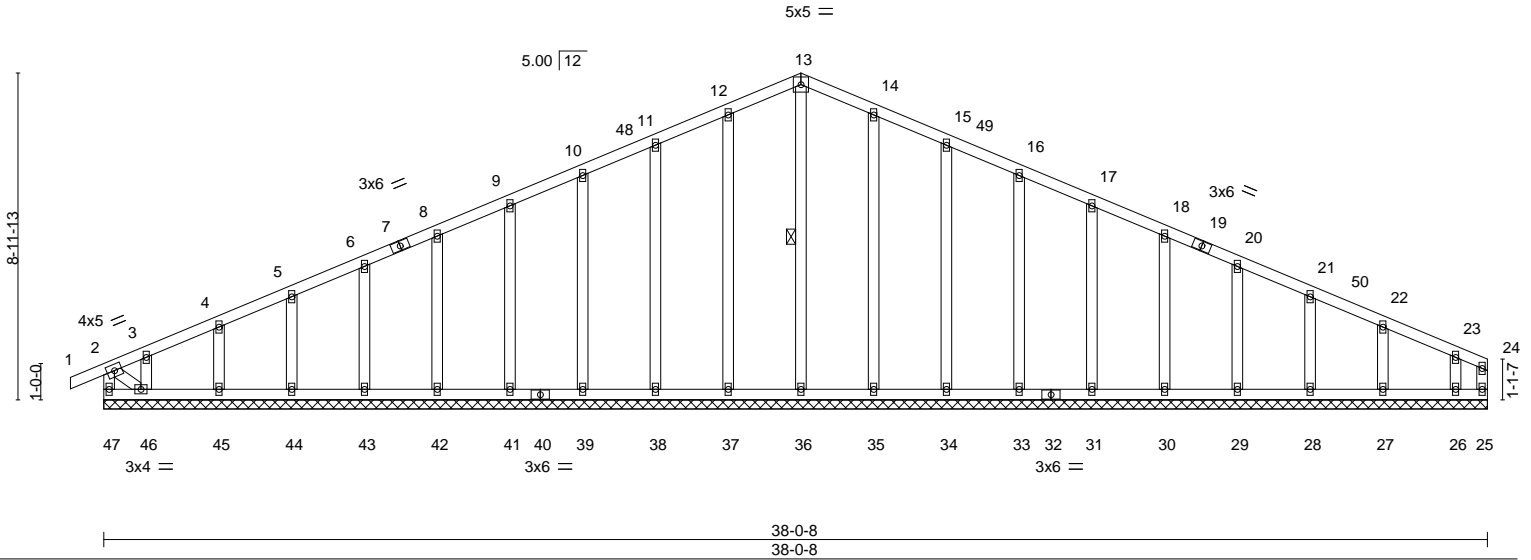
Riverside Roof Truss, LLC, Danville, Va - 24541,

8.730 s Apr 25 2024 MiTek Industries, Inc. Tue Jun 4 09:19:00 2024 Page 1

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Scale = 1:63.3



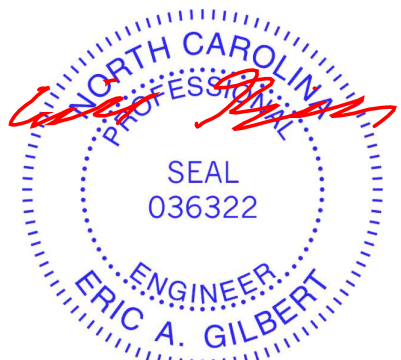
<b>LOADING (psf)</b>	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	2-0-0	TC 0.09	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.06	Vert(LL) -0.00 1 n/r 120		
TCDL 10.0	Lumber DOL 1.15	WB 0.17	Vert(CT) -0.00 1 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 25 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 250 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
WEBS 2x4 SP No.3	6-0-0 oc bracing: 46-47.
OTHERS 2x4 SP No.3	WEBS 1 Row at midpt 13-36

**REACTIONS.** All bearings 38-0-8.  
 (lb) - Max Horz 47=161(LC 15)  
 Max Uplift All uplift 100 lb or less at joint(s) 47, 25, 37, 38, 39, 41, 42, 43, 44, 45, 46, 35, 34, 33, 31, 30, 29, 28, 27, 26  
 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 12-13=-113/277, 13-14=-113/277

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=38ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-11-0 to 3-2-0, Exterior(2N) 3-2-0 to 19-2-0, Corner(3R) 19-2-0 to 23-2-0, Exterior(2N) 23-2-0 to 37-10-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
  - Unbalanced snow loads have been considered for this design.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 47, 25, 37, 38, 39, 41, 42, 43, 44, 45, 46, 35, 34, 33, 31, 30, 29, 28, 27, 26.
  - 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.



June 5, 2024

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**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate

818 Soundside Road  
 Edenton, NC 27932

Job 24-5685-A	Truss T03GE	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	RVF-LOT #7 ROOF	166008055
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Riverside Roof Truss, LLC, Danville, Va - 24541,

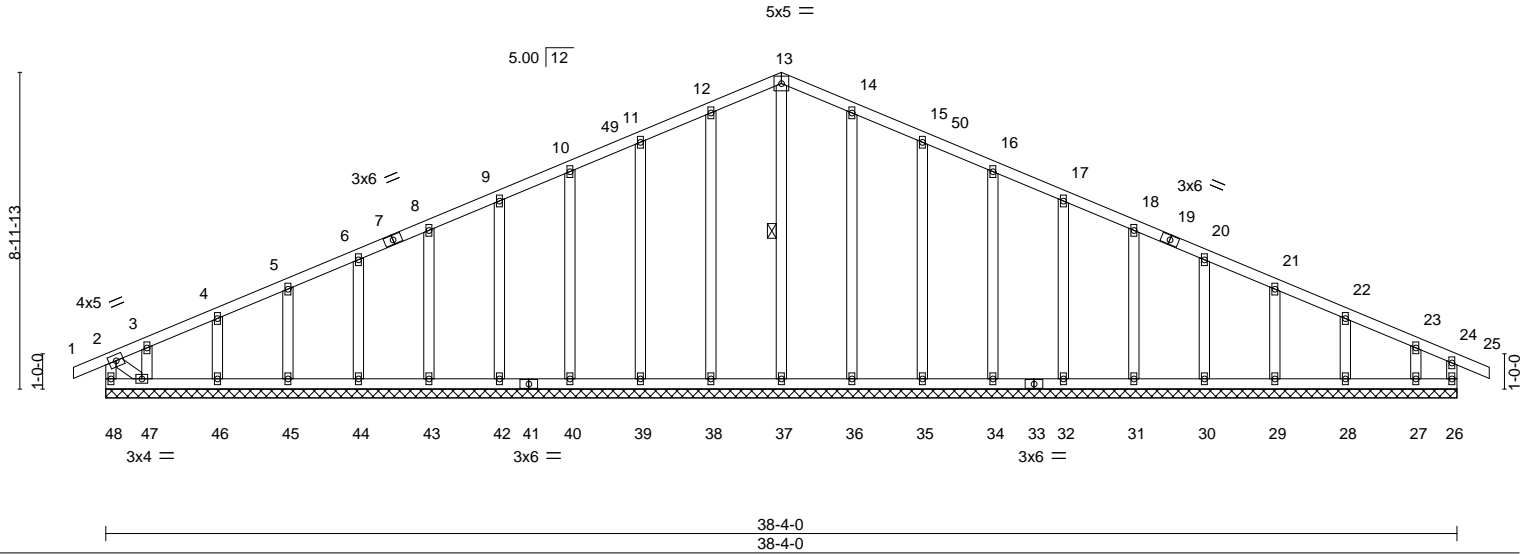
8.730 s Apr 25 2024 MiTek Industries, Inc. Tue Jun 4 09:19:01 2024 Page 1

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Job Reference (optional)

-0-11-0 19-2-0 38-4-0 39-3-0  
0-11-0 19-2-0 19-2-0 0-11-0

Scale = 1:65.4



<b>LOADING (psf)</b>	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	2-0-0	TC 0.13	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.06	Vert(LL) -0.00 25 n/r 120		
TCDL 10.0	Lumber DOL 1.15	WB 0.17	Vert(CT) -0.00 25 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 26 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 252 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 13-37
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 38-4-0.  
 (lb) - Max Horz 48--159(LC 14)  
 Max Uplift All uplift 100 lb or less at joint(s) 48, 38, 39, 40, 42, 43, 44, 45, 46, 47, 36, 35, 34, 32, 31, 30, 29, 28, 27  
 Max Grav All reactions 250 lb or less at joint(s) 48, 26, 37, 38, 39, 40, 42, 43, 44, 45, 46, 47, 36, 35, 34, 32, 31, 30, 29, 28, 27

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 12-13=-106/276, 13-14=-106/276

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=38ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-11-0 to 3-2-0, Exterior(2N) 3-2-0 to 19-2-0, Corner(3R) 19-2-0 to 23-2-0, Exterior(2N) 23-2-0 to 39-3-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
  - Unbalanced snow loads have been considered for this design.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 48, 38, 39, 40, 42, 43, 44, 45, 46, 47, 36, 35, 34, 32, 31, 30, 29, 28, 27.
  - 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.



June 5, 2024

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

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**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate

818 Soundside Road  
 Edenton, NC 27932



Job 24-5685-A	Truss T04	Truss Type Common	Qty 9	Ply 1	RVF-LOT #7 ROOF	166008056
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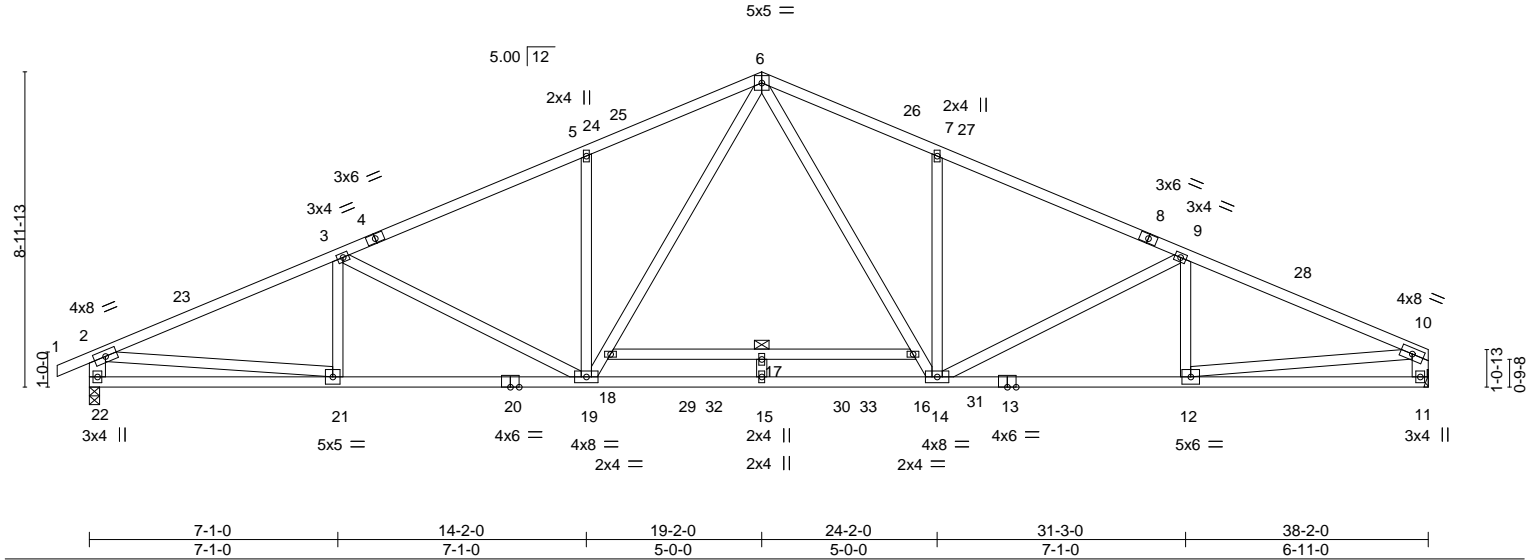
Riverside Roof Truss, LLC, Danville, Va - 24541,

8.730 s Apr 25 2024 MiTek Industries, Inc. Tue Jun 4 09:19:02 2024 Page 1

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Scale = 1:65.7



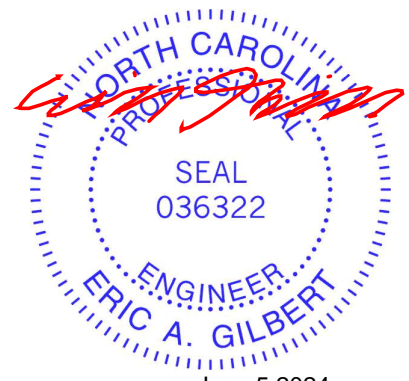
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	2-0-0	TC 0.73	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.90	Vert(LL) -0.53 17 >860 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.64	Vert(CT) -0.92 17 >492 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.10 11 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 236 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2 *Except* 13-20: 2x4 SP DSS	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 6-0-0 oc bracing: 16-18
WEBS 2x4 SP No.3 *Except* 2-22,10-11: 2x6 SP No.2, 2-21,10-12: 2x4 SP No.2	

**REACTIONS.** (size) 22=0-3-8, 11=Mechanical  
 Max Horz 22=161(LC 15)  
 Max Uplift 22=74(LC 16), 11=37(LC 16)  
 Max Grav 22=1906(LC 28), 11=1847(LC 29)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3274/132, 3-5=-2993/130, 5-6=-2984/213, 6-7=-2970/210, 7-9=-2982/134, 9-10=-3217/140, 2-22=-1775/169, 10-11=-1719/119  
 BOT CHORD 21-22=-105/561, 19-21=-95/3050, 15-19=0/2111, 14-15=0/2111, 12-14=-92/2919, 11-12=-40/303  
 WEBS 3-19=-384/104, 5-19=-395/164, 18-19=-96/1143, 6-18=-48/1248, 6-16=-47/1224, 14-16=-94/1119, 7-14=-389/162, 9-14=-363/109, 2-21=-8/2534, 10-12=-52/2638

- 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 2-10-13, Interior(1) 2-10-13 to 19-2-0, Exterior(2R) 19-2-0 to 22-11-13, Interior(1) 22-11-13 to 37-11-4 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) 22, 11.
  - 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.





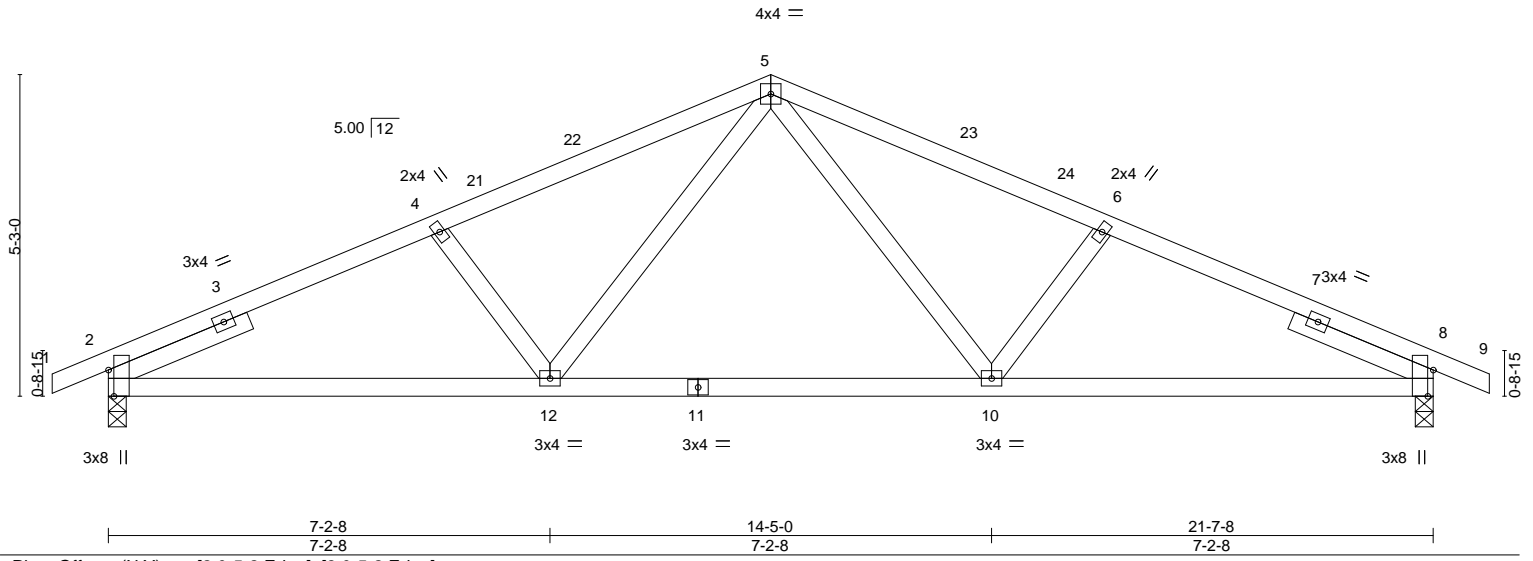
Job 24-5685-A	Truss T05	Truss Type COMMON	Qty 5	Ply 1	RVF-LOT #7 ROOF	166008057
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Riverside Roof Truss, LLC, Danville, Va - 24541,

8.730 s Apr 25 2024 MiTek Industries, Inc. Tue Jun 4 09:19:03 2024 Page 1

ID:Bxl2MwYau\_NHkbraGcmHloyOvst-LamLIWQVKsz\_7K0mFb1mA5yUYf769jaUc\_7TVAz9iac  
16-2-10 21-7-8 22-6-8  
5-4-14 5-4-14 5-4-14

Scale = 1:37.6



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.50	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.58	Vert(LL) -0.08 10-12 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.18	Vert(CT) -0.19 10-12 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.04 8 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 104 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.3  
 SLIDER Left 2x4 SP No.3 2-6-0, Right 2x4 SP No.3 2-6-0

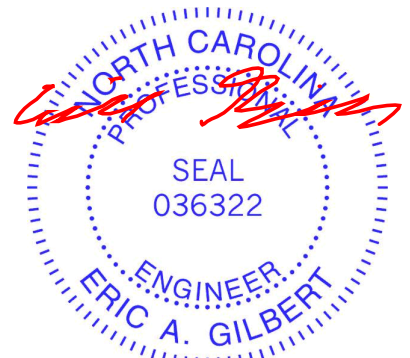
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-4-10 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 8=0-3-8  
 Max Horz 2=63(LC 15)  
 Max Uplift 2=81(LC 16), 8=81(LC 16)  
 Max Grav 2=920(LC 2), 8=920(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-1471/245, 4-5=-1343/240, 5-6=-1343/240, 6-8=-1471/245  
 BOT CHORD 2-12=-156/1321, 10-12=-63/948, 8-10=-162/1321  
 WEBS 5-10=-32/431, 6-10=-266/139, 5-12=-32/431, 4-12=-266/139

**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 10-9-12, Exterior(2R) 10-9-12 to 13-9-12, Interior(1) 13-9-12 to 22-6-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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, 8.
- 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.



June 5, 2024

**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/TPH Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

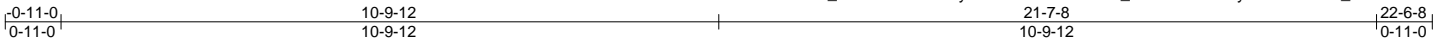


818 Soundside Road  
 Edenton, NC 27932

Job 24-5685-A	Truss T05GE	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	RVF-LOT #7 ROOF	166008058
Riverside Roof Truss, LLC, Danville, Va - 24541,					Job Reference (optional)	

8.730 s Apr 25 2024 MiTek Industries, Inc. Tue Jun 4 09:19:03 2024 Page 1

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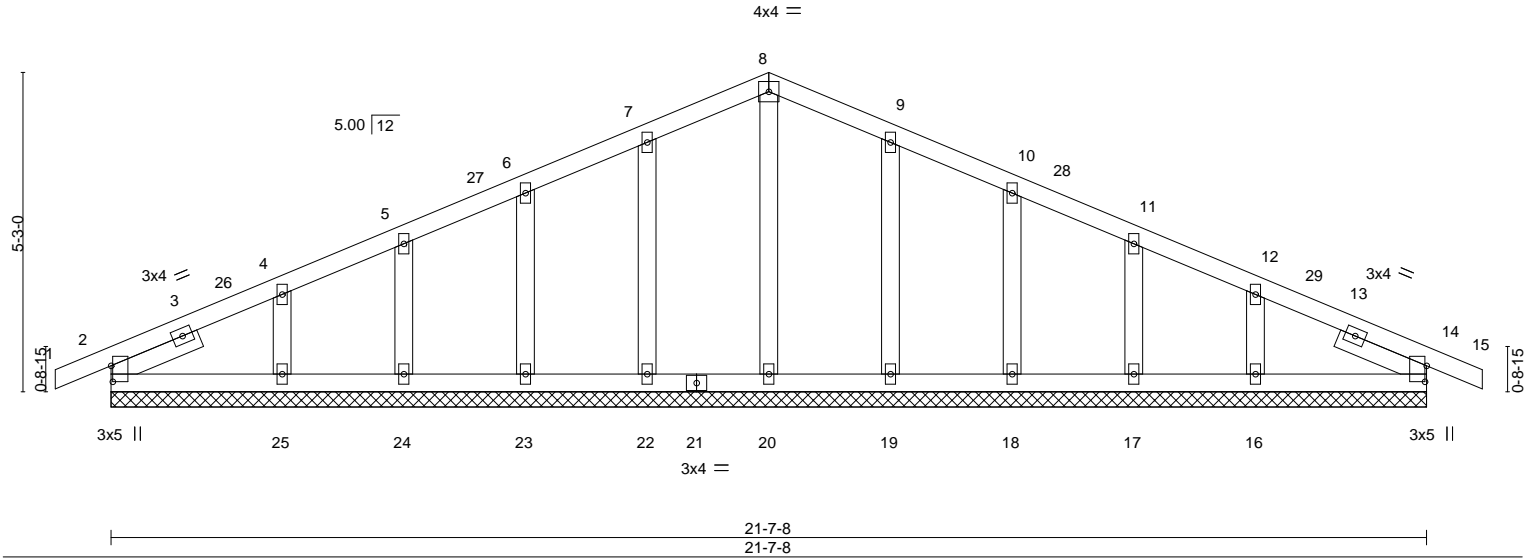


Plate Offsets (X,Y)-- [2:0-3-2,0-0-5], [14:0-3-2,0-0-5]

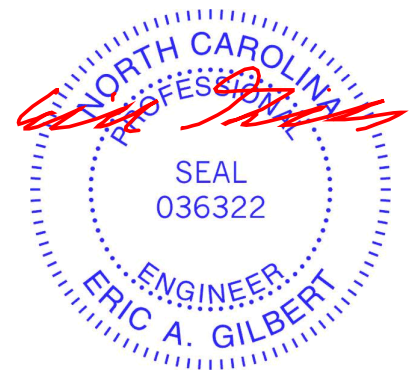
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.07	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.05	Vert(LL) 0.00 14 n/r 120		
TCDL 10.0	Lumber DOL 1.15	WB 0.05	Vert(CT) 0.00 14 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 14 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 113 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	
SLIDER Left 2x4 SP No.3 1-6-15, Right 2x4 SP No.3 1-6-15	

**REACTIONS.** All bearings 21-7-8.  
 (lb) - Max Horz 2=63(LC 14)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 22, 23, 24, 25, 19, 18, 17, 16, 14  
 Max Grav All reactions 250 lb or less at joint(s) 2, 20, 22, 23, 24, 25, 19, 18, 17, 16, 14

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

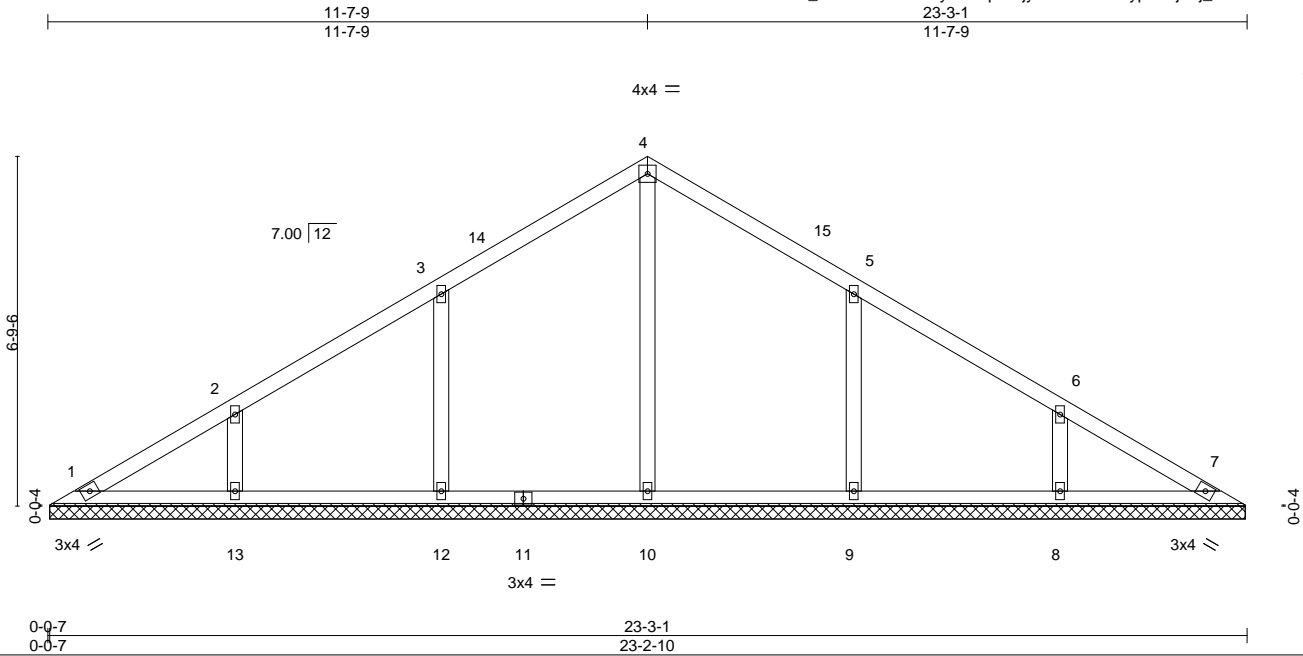
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-11-0 to 2-1-0, Exterior(2N) 2-1-0 to 10-9-12, Corner(3R) 10-9-12 to 13-9-12, Exterior(2N) 13-9-12 to 22-6-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); ls=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
  - Unbalanced snow loads have been considered for this design.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 22, 23, 24, 25, 19, 18, 17, 16, 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.



Job 24-5685-A	Truss V01	Truss Type Valley	Qty 1	Ply 1	RVF-LOT #7 ROOF	166008059
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Riverside Roof Truss, LLC, Danville, Va - 24541,

8.730 s Apr 25 2024 MiTek Industries, Inc. Tue Jun 4 09:19:04 2024 Page 1  
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Scale = 1:44.7

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	2-0-0	TC 0.20	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.17	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.15	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 7 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 98 lb	FT = 20%

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

**REACTIONS.** All bearings 23-2-3.  
 (lb) - Max Horz 1=129(LC 15)  
 Max Uplift All uplift 100 lb or less at joint(s) 12, 13, 9, 8  
 Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=380(LC 27), 12=431(LC 27), 13=366(LC 27), 9=430(LC 28), 8=366(LC 28)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 3-12=-263/125, 5-9=-263/125

- 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 3-7-9, Interior(1) 3-7-9 to 11-7-9, Exterior(2R) 11-7-9 to 14-7-9, Interior(1) 14-7-9 to 22-8-9 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) All plates are 2x4 MT20 unless otherwise indicated.
  - 6) Gable requires continuous bottom chord bearing.
  - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 13, 9, 8.
  - 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.



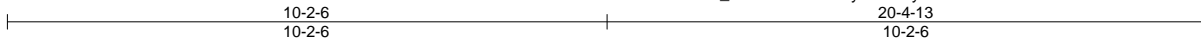
June 5, 2024

Job 24-5685-A	Truss V02	Truss Type Valley	Qty 1	Ply 1	RVF-LOT #7 ROOF	166008060
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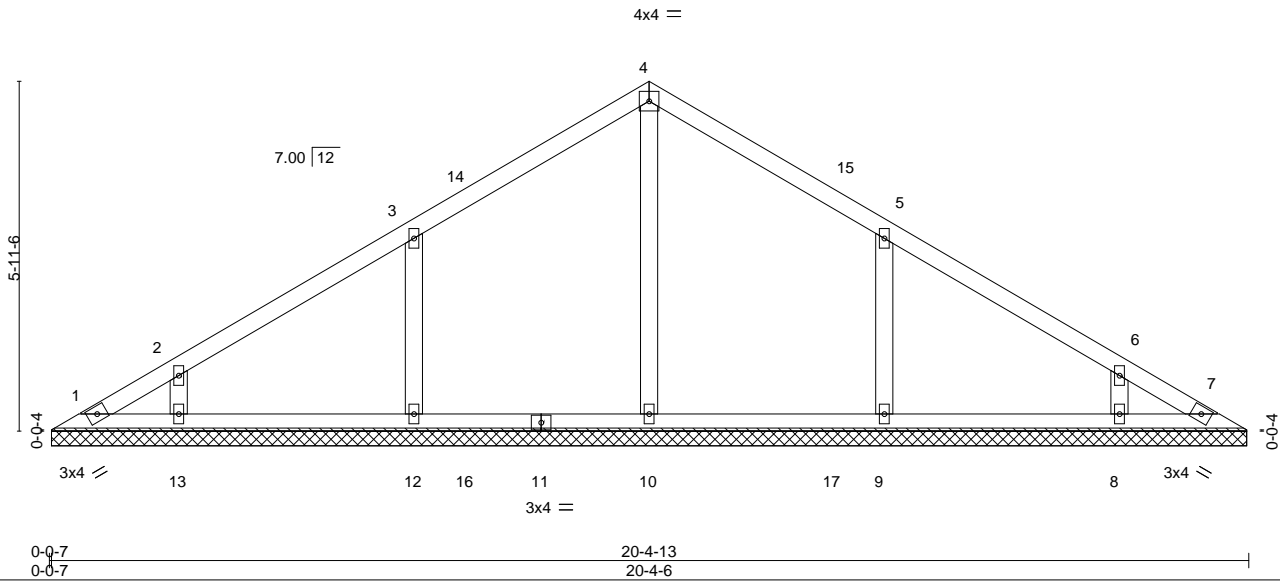
Riverside Roof Truss, LLC, Danville, Va - 24541,

8.730 s Apr 25 2024 MiTek Industries, Inc. Tue Jun 4 09:19:05 2024 Page 1

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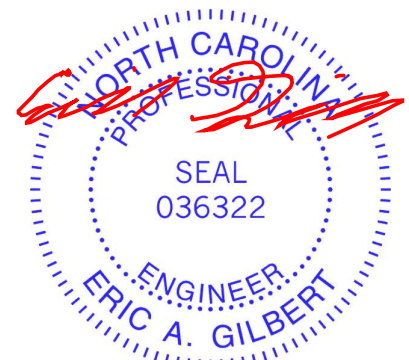
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	2-0-0	TC 0.20	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.17	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.11	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 7 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 83 lb	FT = 20%

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

**REACTIONS.** All bearings 20-3-15.  
 (lb) - Max Horz 1=112(LC 14)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 12, 13, 9, 8  
 Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=370(LC 27), 12=429(LC 27), 13=308(LC 27), 9=429(LC 28), 8=308(LC 28)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 3-12=268/127, 5-9=268/127

- 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 10-2-6, Exterior(2R) 10-2-6 to 13-2-6, Interior(1) 13-2-6 to 19-10-5 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
  - 4) Unbalanced snow loads have been considered for this design.
  - 5) All plates are 2x4 MT20 unless otherwise indicated.
  - 6) Gable requires continuous bottom chord bearing.
  - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 12, 13, 9, 8.
  - 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.



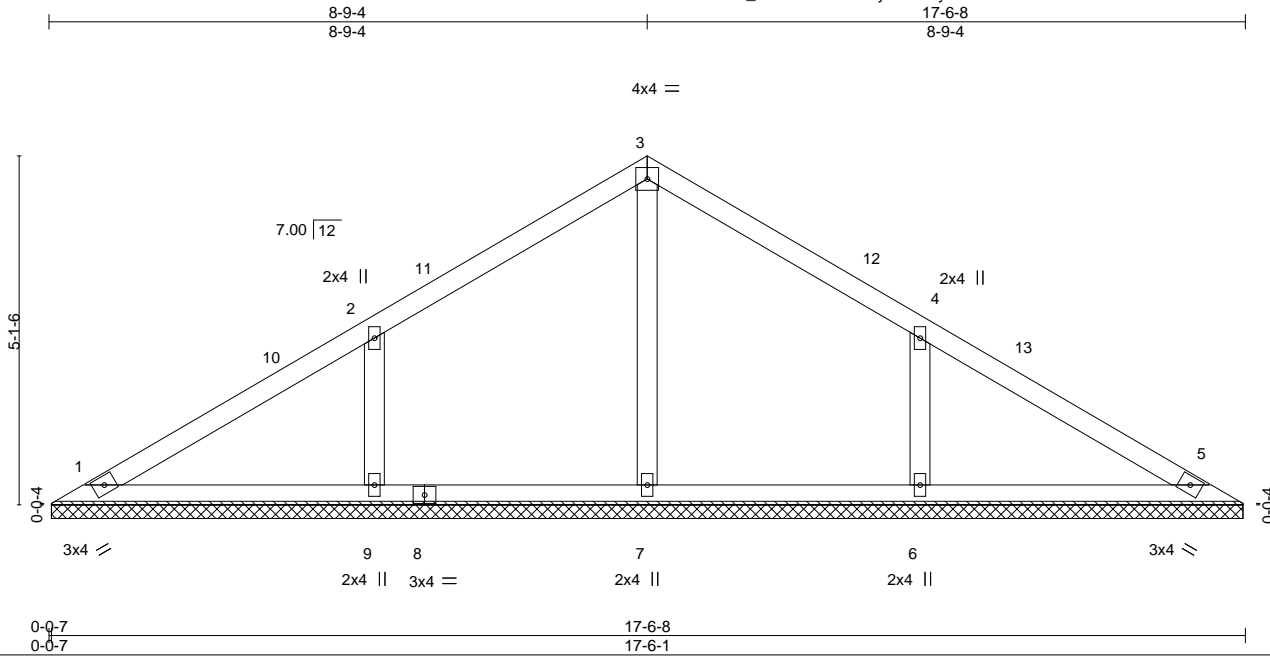
June 5, 2024

Job 24-5685-A	Truss V03	Truss Type Valley	Qty 1	Ply 1	RVF-LOT #7 ROOF	166008061
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Riverside Roof Truss, LLC, Danville, Va - 24541,

8.730 s Apr 25 2024 MiTek Industries, Inc. Tue Jun 4 09:19:05 2024 Page 1

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Scale = 1:33.8

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	2-0-0	TC 0.25	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.15	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.08	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 5 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 68 lb	FT = 20%

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

**REACTIONS.** All bearings 17-5-10.  
 (lb) - Max Horz 1=-96(LC 14)  
 Max Uplift All uplift 100 lb or less at joint(s) 9, 6  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 9=395(LC 33), 6=395(LC 34)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 2-9=-294/135, 4-6=-294/135

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 8-9-4, Exterior(2R) 8-9-4 to 11-9-4, Interior(1) 11-9-4 to 17-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
  - Unbalanced snow loads have been considered for this design.
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 6.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 5, 2024



Job 24-5685-A	Truss V04	Truss Type Valley	Qty 1	Ply 1	RVF-LOT #7 ROOF Job Reference (optional)	166008062
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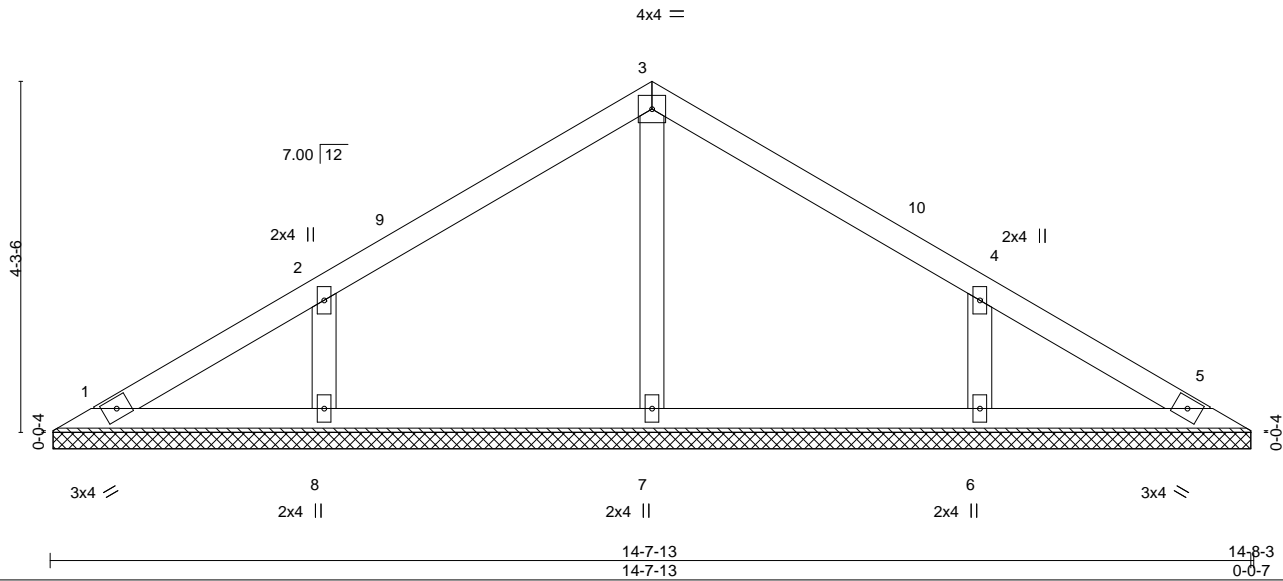
Riverside Roof Truss, LLC, Danville, Va - 24541,

8.730 s Apr 25 2024 MiTek Industries, Inc. Tue Jun 4 09:19:06 2024 Page 1

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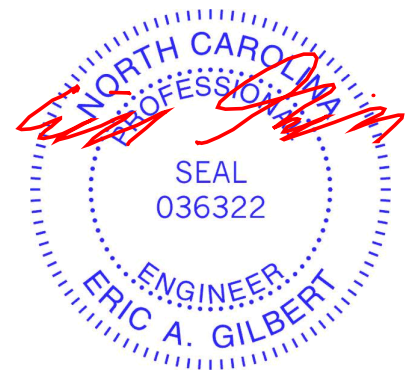
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	2-0-0	TC 0.20	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.12	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.06	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 5 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 55 lb	FT = 20%

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

**REACTIONS.** All bearings 14-7-6.  
 (lb) - Max Horz 1=79(LC 14)  
 Max Uplift All uplift 100 lb or less at joint(s) 8, 6  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=271(LC 2), 8=324(LC 33), 6=324(LC 34)

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-6-8 to 3-4-2, Interior(1) 3-4-2 to 7-4-2, Exterior(2R) 7-4-2 to 10-4-2, Interior(1) 10-4-2 to 14-1-11 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
  - Unbalanced snow loads have been considered for this design.
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 5, 2024

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</b></p> <p>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 <b>ANSI/TPH Quality Criteria and DSB-22</b> available from Truss Plate Institute (www.tpinst.org) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (www.sbcacomponents.com)</p>	<p>818 Soundside Road Edenton, NC 27932</p>
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Job 24-5685-A	Truss V05	Truss Type Valley	Qty 1	Ply 1	RVF-LOT #7 ROOF	166008063
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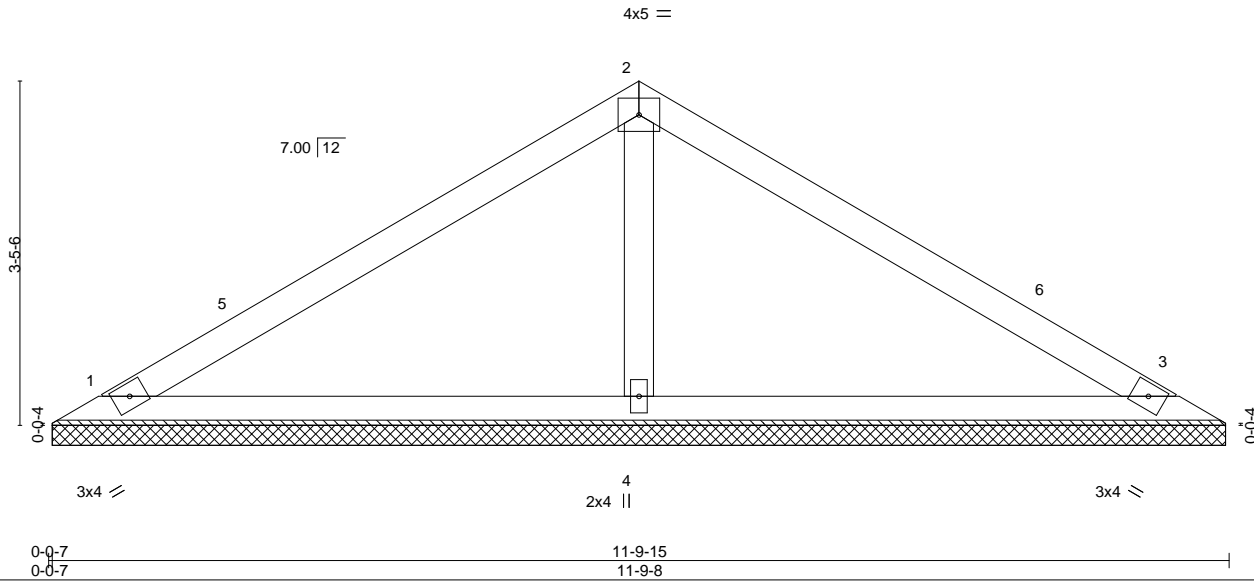
Riverside Roof Truss, LLC, Danville, Va - 24541,

8.730 s Apr 25 2024 MiTek Industries, Inc. Tue Jun 4 09:19:06 2024 Page 1

ID:BxI2MwYau\_NHkbraGcmHloyOvst-I9RUNYSOdnLZ\_nIKwjbToka?VsEOM5wwlxM76Vz9iaZ



Scale = 1:23.1



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	2-0-0	TC 0.46	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.29	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.08	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 3 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 40 lb	FT = 20%

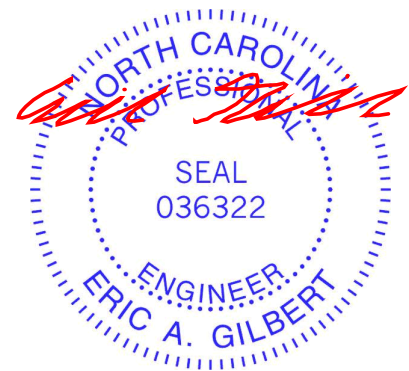
<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	

**REACTIONS.** (size) 1=11-9-1, 3=11-9-1, 4=11-9-1  
 Max Horz 1=63(LC 14)  
 Max Uplift 1=26(LC 16), 3=26(LC 16)  
 Max Grav 1=203(LC 2), 3=203(LC 2), 4=453(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 2-4=-294/106

**NOTES-**

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

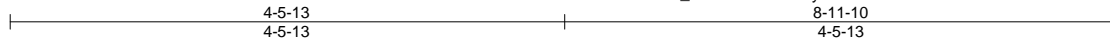


Job 24-5685-A	Truss V06	Truss Type Valley	Qty 1	Ply 1	RVF-LOT #7 ROOF Job Reference (optional)	166008064
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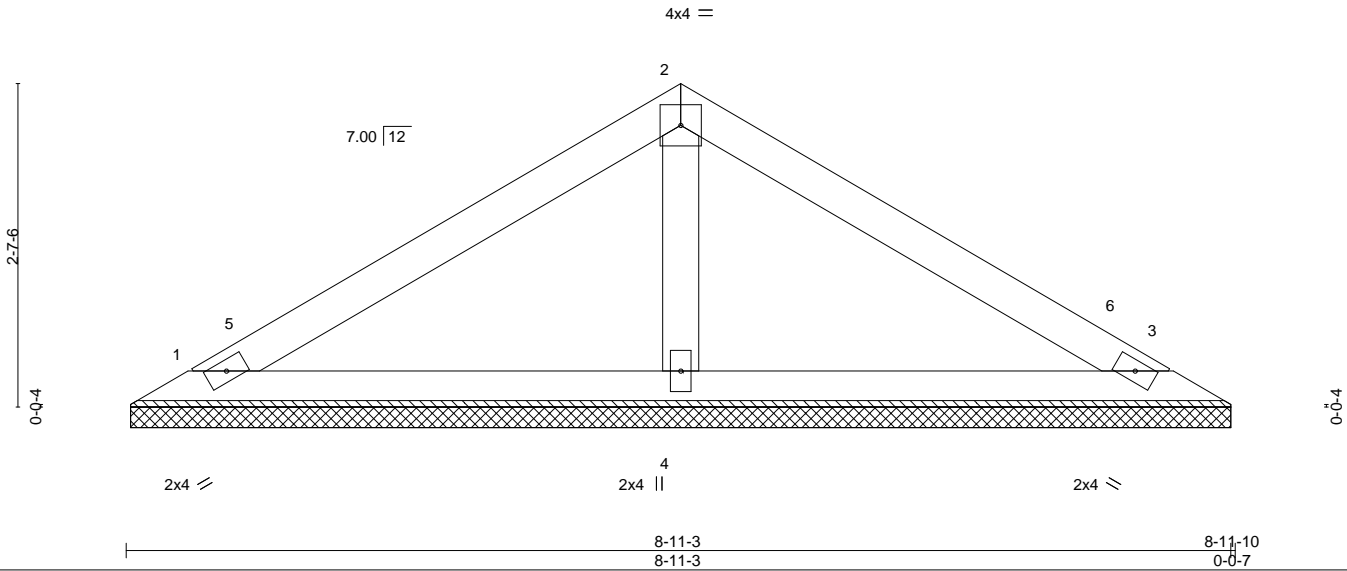
Riverside Roof Truss, LLC, Danville, Va - 24541,

8.730 s Apr 25 2024 MiTek Industries, Inc. Tue Jun 4 09:19:07 2024 Page 1

ID:Bxl2MwYau\_NHkbraGcmHloyOvst-DL?sbuT005TQbxKXUR6iKx7CHGcg5Zf4Xb5gez9iaY



Scale = 1:18.6



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	2-0-0	TC 0.33	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.16	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.04	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 3 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 30 lb	FT = 20%

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

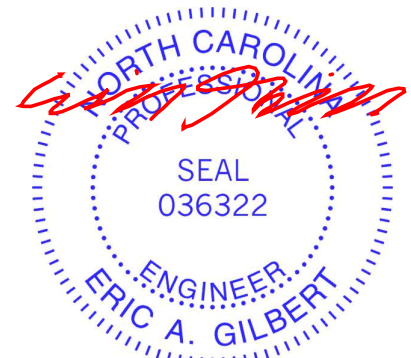
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=8-10-13, 3=8-10-13, 4=8-10-13  
Max Horz 1=-46(LC 14)  
Max Uplift 1=-27(LC 16), 3=-27(LC 16)  
Max Grav 1=165(LC 2), 3=165(LC 2), 4=301(LC 2)

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 4-5-13, Exterior(2R) 4-5-13 to 7-5-13, Interior(1) 7-5-13 to 8-5-2 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.



June 5, 2024

**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/TPH Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



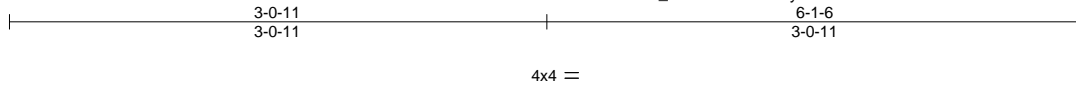
818 Soundside Road  
Edenton, NC 27932

Job 24-5685-A	Truss V07	Truss Type Valley	Qty 1	Ply 1	RVF-LOT #7 ROOF Job Reference (optional)	I66008065
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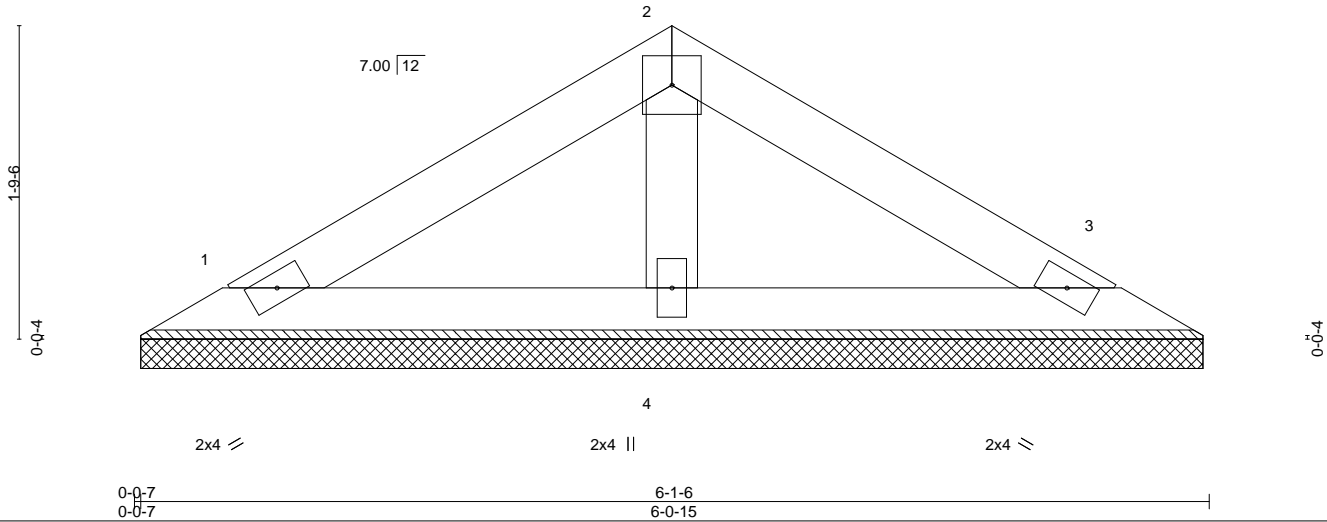
Riverside Roof Truss, LLC, Danville, Va - 24541,

8.730 s Apr 25 2024 MiTek Industries, Inc. Tue Jun 4 09:19:07 2024 Page 1

ID:BxI2MwYau\_NHkbraGcmHloyOvst-DL?sbuT005TQbxKXUR6iKx7GZGd65Zy4Xb5gez9iaY



Scale = 1:13.1



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	2-0-0	TC 0.12	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.06	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.03	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 3 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 19 lb	FT = 20%

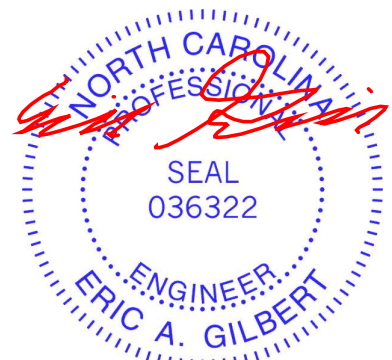
<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	

**REACTIONS.** (size) 1=6-0-8, 3=6-0-8, 4=6-0-8  
 Max Horz 1=29(LC 15)  
 Max Uplift 1=-17(LC 16), 3=-17(LC 16)  
 Max Grav 1=105(LC 2), 3=105(LC 2), 4=192(LC 2)

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

**NOTES-**

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



June 5, 2024

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</b></p> <p>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 <b>ANSI/TPH Quality Criteria and DSB-22</b> available from Truss Plate Institute (www.tpinst.org) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (www.sbcacomponents.com)</p>	<p>818 Soundside Road Edenton, NC 27932</p>
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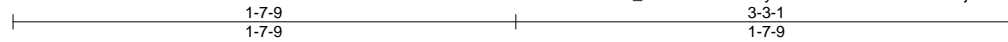
Job 24-5685-A	Truss V08	Truss Type Valley	Qty 1	Ply 1	RVF-LOT #7 ROOF	166008066
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Riverside Roof Truss, LLC,

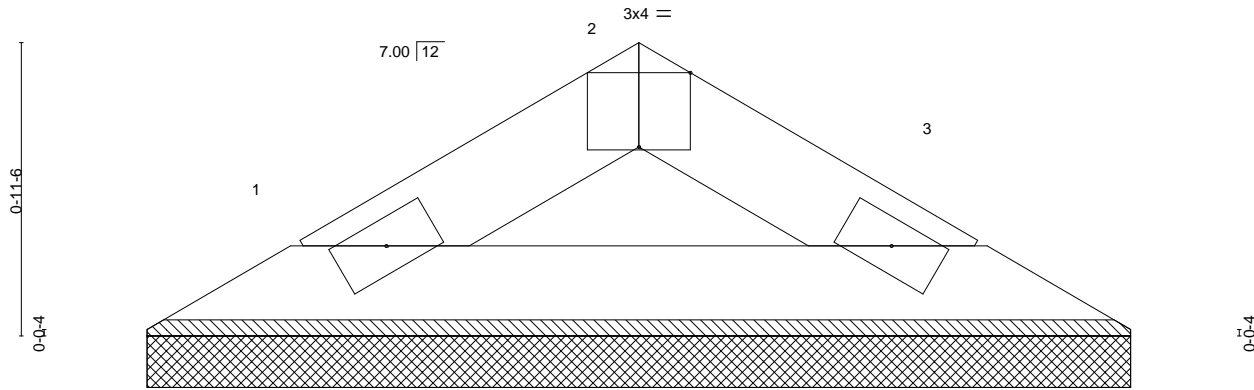
Danville, Va - 24541,

8.730 s Apr 25 2024 MiTek Industries, Inc. Tue Jun 4 09:19:08 2024 Page 1

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Scale = 1:7.5



2x4

2x4

0-0-7  
0-0-7

3-3-1  
3-2-10

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL 1.15	TC 0.02	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 0.00	Horz(CT) 0.00	3	n/a	n/a		
BCLL 0.0 *	Code IRC2018/TPI2014	Matrix-P					Weight: 9 lb	FT = 20%
BCDL 10.0								

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

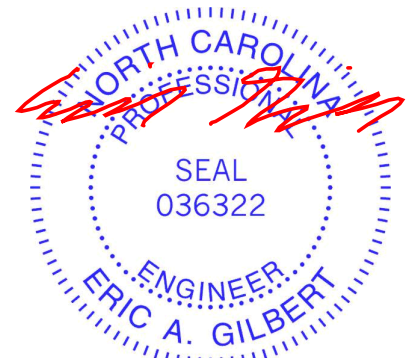
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 3-3-1 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=3-2-3, 3=3-2-3  
Max Horz 1=13(LC 14)  
Max Uplift 1=5(LC 16), 3=5(LC 16)  
Max Grav 1=87(LC 2), 3=87(LC 2)

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

**NOTES-**

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



June 5, 2024

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

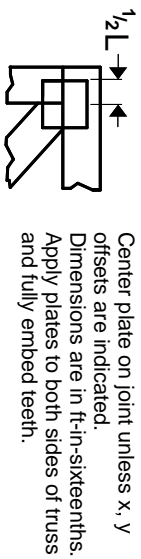
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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/TPH Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



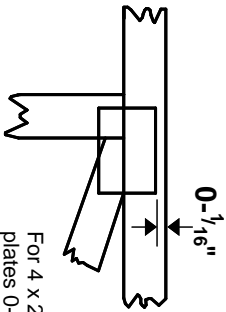
818 Soundside Road  
Edenton, NC 27932

# Symbols

## PLATE LOCATION AND ORIENTATION



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



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



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

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

## PLATE SIZE

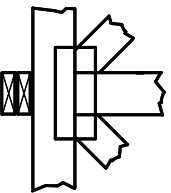
**4 X 4**  
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



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

## BEARING

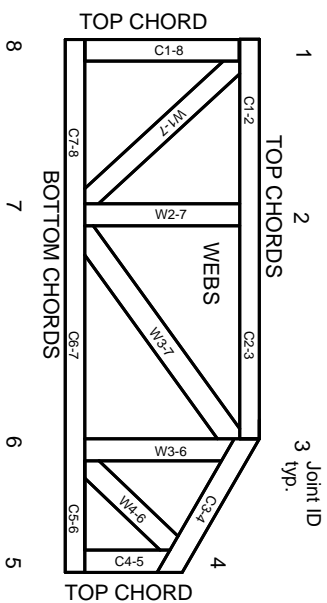


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

## Industry Standards:

ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-22: Design Standard for Bracing.  
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System



**JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.**

**CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.**

# Product Code Approvals

ICC-ES Reports:

ESR-1988, ESR-2362, ESR-2685, ESR-3282  
ESR-4722, ESL-1388

# Design General Notes

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TP1 section 6.3. These truss designs rely on Lumber values established by others.

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ENGINEERING BY  
**TRENGO**  
A MITek Affiliate

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

# General Safety Notes

## Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability/bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.