ENGINEERING BY TRENCO
A MiTek Affiliate

RE: 24-5686-A
RVF-LOT #17 ROOF

Trenco
818 Soundside Rd
Edenton, NC 27932

Site Information:

Customer: Project Name: 24-5686-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 23 individual, dated Truss Design Drawings and 0 Additional Drawings.

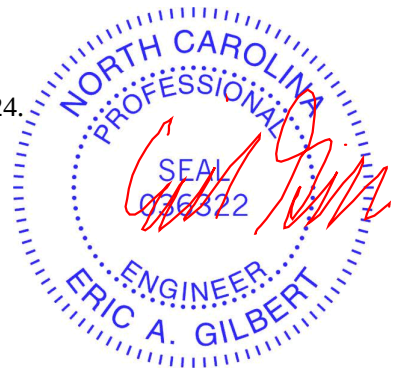
No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I65708172	M01	5/22/2024	21	I65708192	V04	5/22/2024
2	I65708173	M01GE	5/22/2024	22	I65708193	V05	5/22/2024
3	I65708174	M02	5/22/2024	23	I65708194	V06	5/22/2024
4	I65708175	PB01	5/22/2024				
5	I65708176	T01	5/22/2024				
6	I65708177	T01GE	5/22/2024				
7	I65708178	T02	5/22/2024				
8	I65708179	T02G	5/22/2024				
9	I65708180	T02GE	5/22/2024				
10	I65708181	T03	5/22/2024				
11	I65708182	T03A	5/22/2024				
12	I65708183	T03AGE	5/22/2024				
13	I65708184	T03GE	5/22/2024				
14	I65708185	T04	5/22/2024				
15	I65708186	T04A	5/22/2024				
16	I65708187	T05	5/22/2024				
17	I65708188	T05GE	5/22/2024				
18	I65708189	V01	5/22/2024				
19	I65708190	V02	5/22/2024				
20	I65708191	V03	5/22/2024				

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.

May 22, 2024

Gilbert, Eric

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #17 ROOF
24-5686-A	M01	MONOPITCH	8	1	I65708172
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Apr 25 2024 MiTek Industries, Inc. Mon May 20 16:21:13 2024 Page 1
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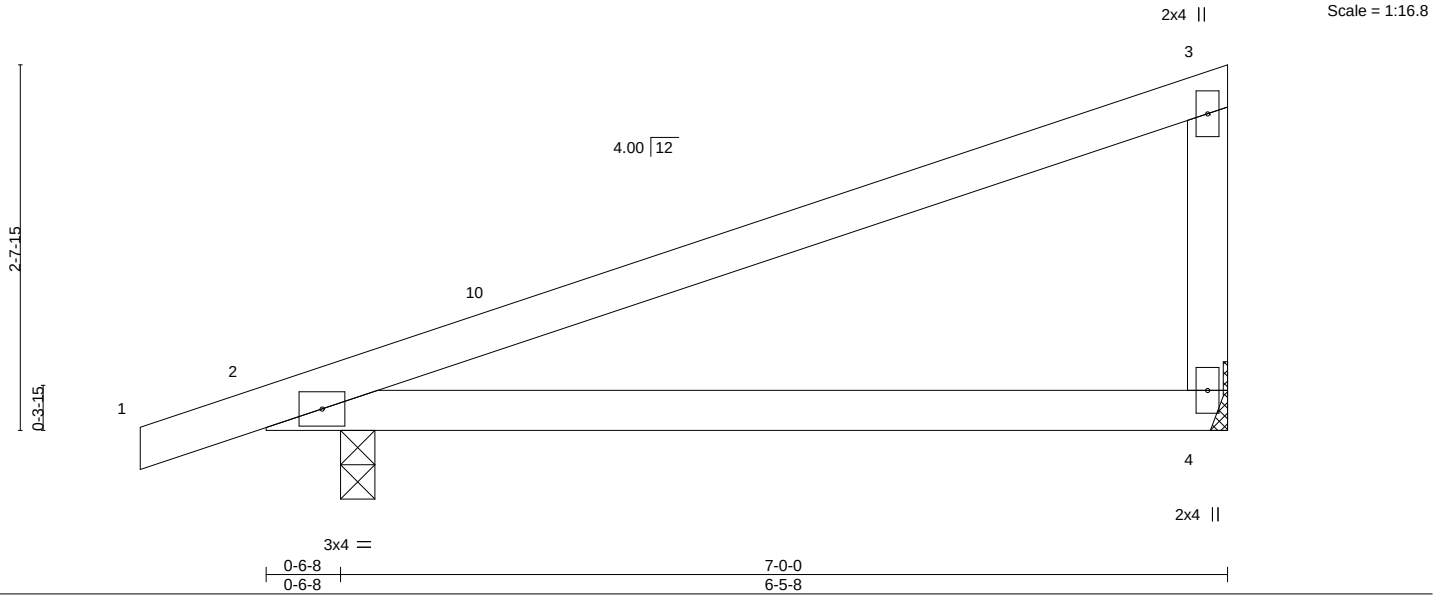

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	0.08	4-9	>999	240	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.15	4-9	>535	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 26 lb	FT = 20%

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

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

REACTIONS. (size) 4=Mechanical, 2=0-3-0
Max Horz 2=85(LC 15)
Max Uplift 4=-13(LC 16), 2=-49(LC 16)
Max Grav 4=254(LC 21), 2=361(LC 2)

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

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

May 22,2024

ENGINEERING BY TRENCO
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #17 ROOF
24-5686-A	M01GE	MONOPITCH STRUCTURAL	1	1	I65708173
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Apr 25 2024 MiTek Industries, Inc. Mon May 20 16:21:13 2024 Page 1
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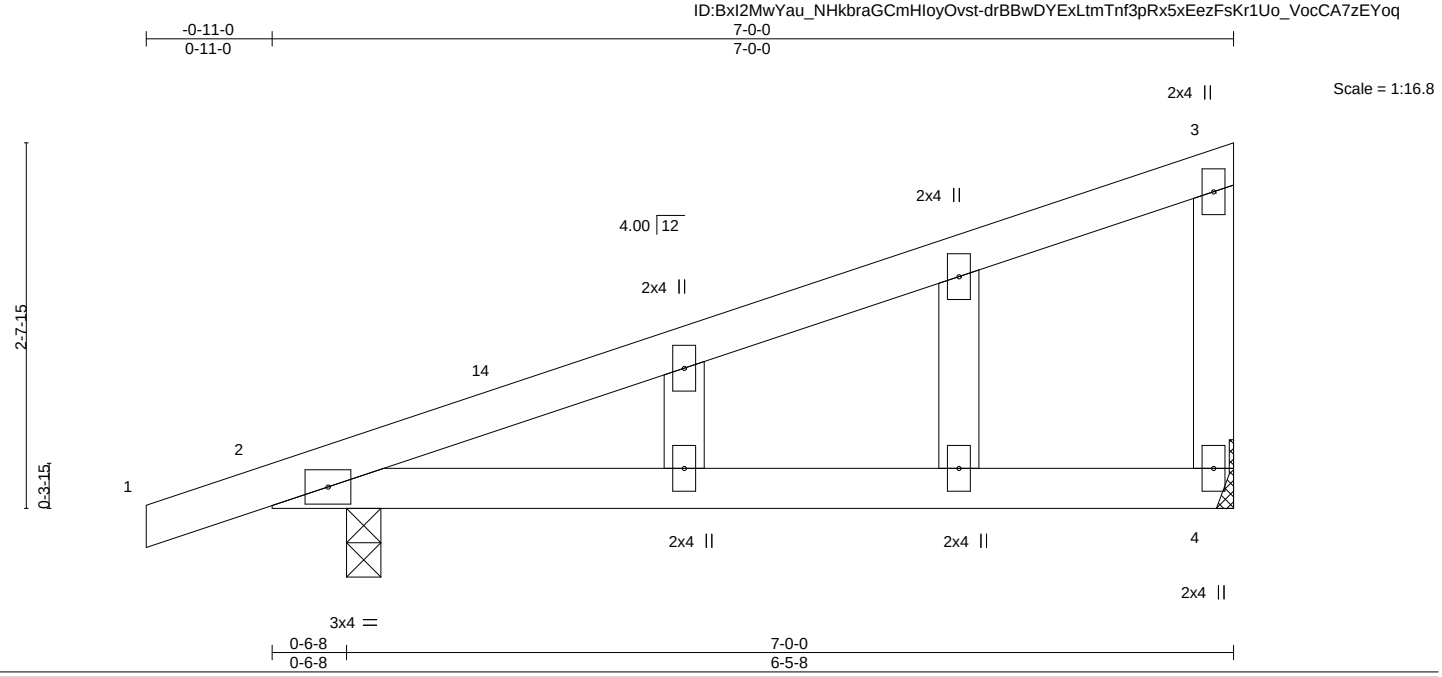

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	0.08	4-13	>999	240	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.15	4-13	>535	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 29 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 4=Mechanical, 2=0-3-0
Max Horz 2=85(LC 15)
Max Uplift 4=-13(LC 16), 2=-49(LC 16)
Max Grav 4=254(LC 21), 2=361(LC 2)

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

NOTES-

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

May 22,2024

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #17 ROOF
24-5686-A	M02	MONOPITCH STRUCTURAL	1	1	I65708174

Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Apr 25 2024 MiTek Industries, Inc. Mon May 20 16:21:14 2024 Page 1
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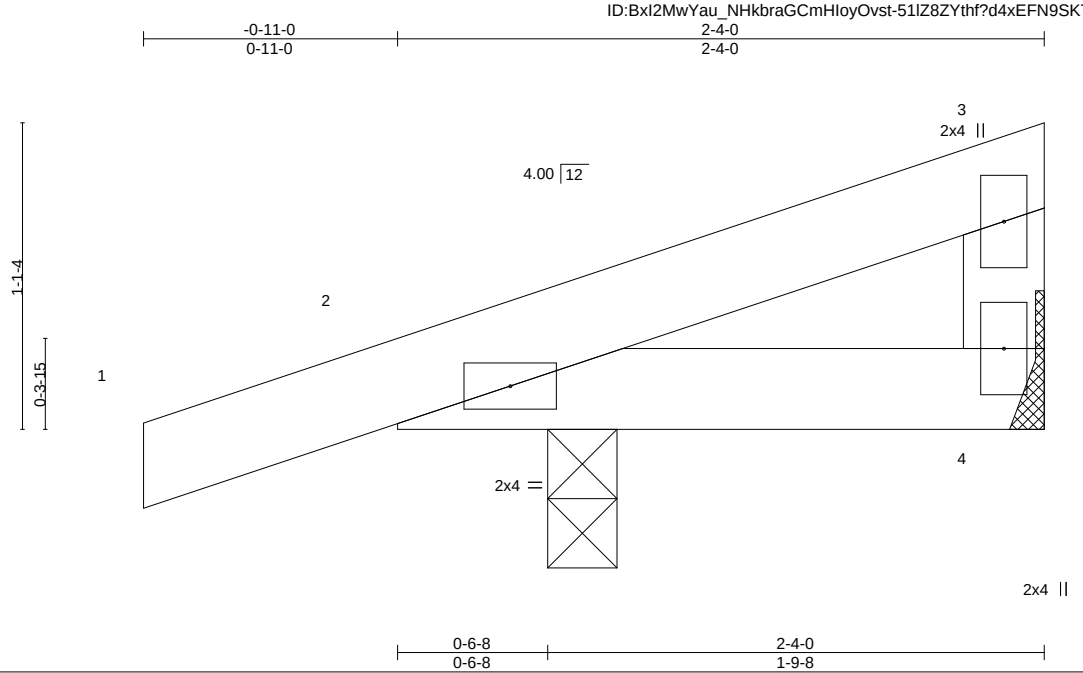

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	240	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	-0.00	5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 9 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 2-4-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 2=0-3-0
Max Horz 2=31(LC 15)
Max Uplift 4=-1(LC 13), 2=-53(LC 16)
Max Grav 4=33(LC 7), 2=205(LC 2)

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

NOTES-

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

May 22,2024

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #17 ROOF
24-5686-A	PB01	Piggyback	21	1	I65708175
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Apr 25 2024 MiTek Industries, Inc. Mon May 20 16:21:14 2024 Page 1
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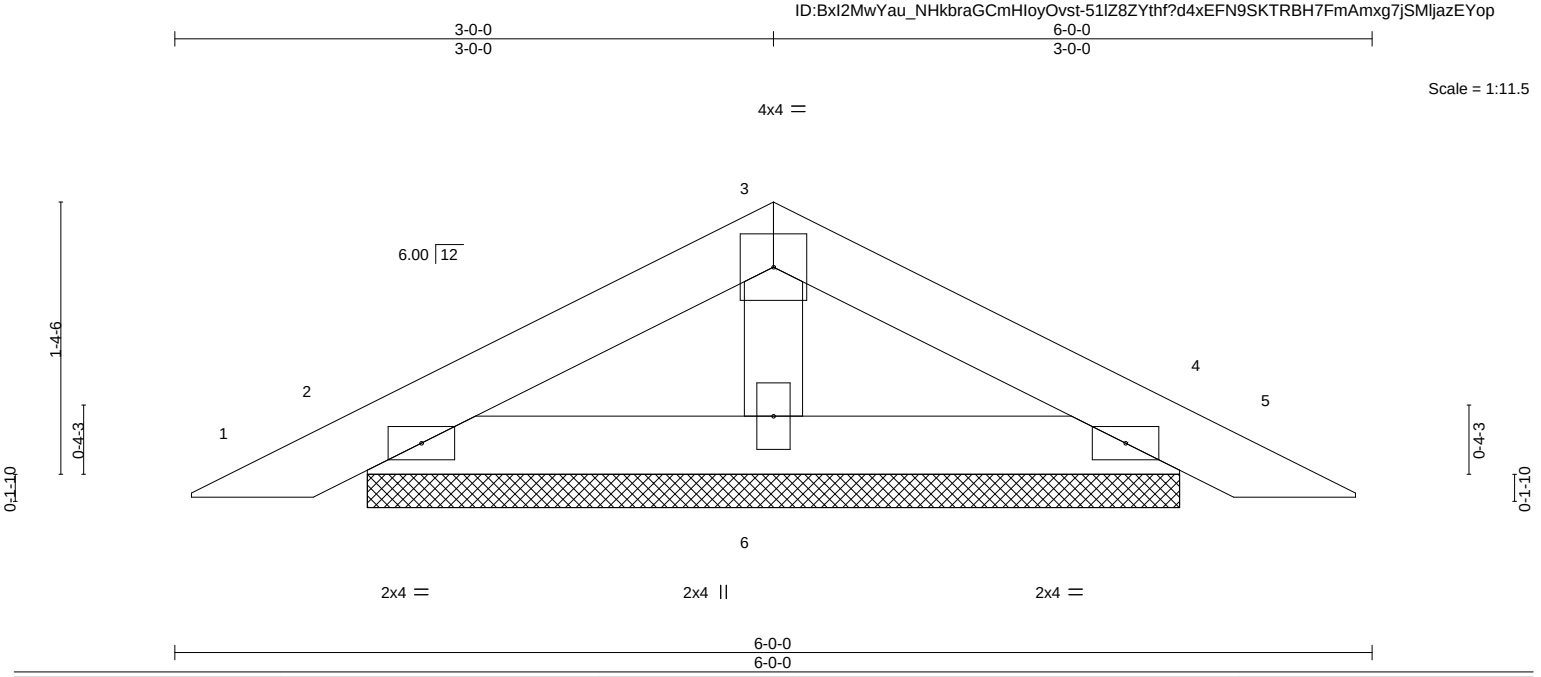

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	0.00	4	n/r	120	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	5	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-P							Weight: 17 lb	FT = 20%
BCDL	10.0											

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

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

REACTIONS. (size) 2=4-0-14, 4=4-0-14, 6=4-0-14
Max Horz 2=22(LC 15)
Max Uplift 2=-36(LC 16), 4=-36(LC 16)
Max Grav 2=121(LC 2), 4=121(LC 2), 6=152(LC 2)

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

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

May 22,2024

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #17 ROOF
24-5686-A	T01	COMMON	5	1	I65708176
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Apr 25 2024 MiTek Industries, Inc. Mon May 20 16:21:15 2024 Page 1
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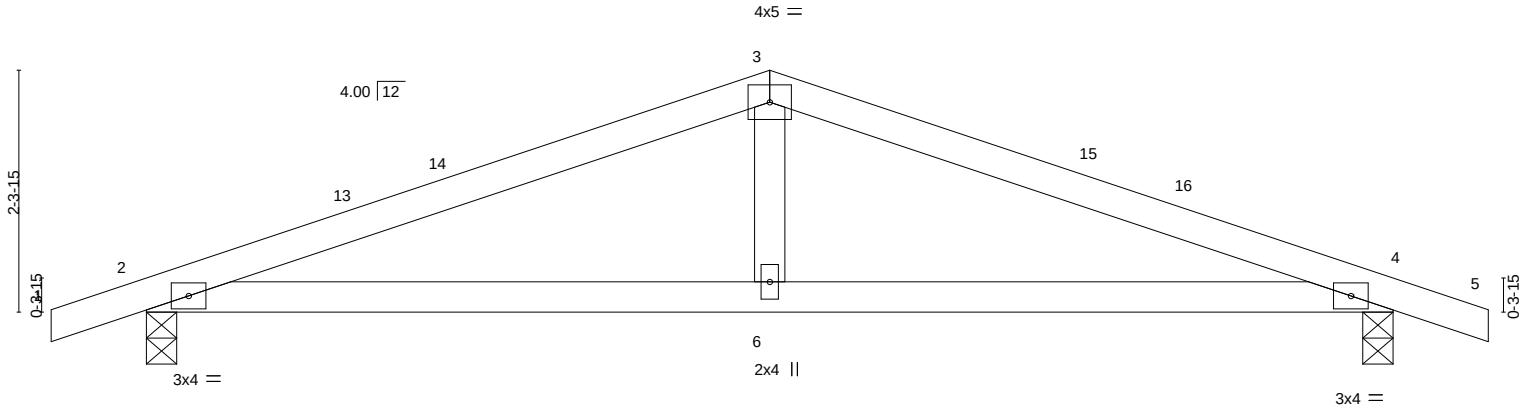

6-0-0 / 6-0-0 | 12-0-0 / 6-0-0

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	-0.05	6-12	>999	240	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.10	6-12	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MS							Weight: 42 lb	FT = 20%
BCDL	10.0											

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-5-14 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=24(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=-892/294, 3-4=-892/294
BOT CHORD 2-6=-198/813, 4-6=-198/813
WEBS 3-6=0/277

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

May 22,2024

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #17 ROOF
24-5686-A	T01GE	COMMON STRUCTURAL GA	1	1	I65708177

Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Apr 25 2024 MiTek Industries, Inc. Mon May 20 16:21:15 2024 Page 1

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

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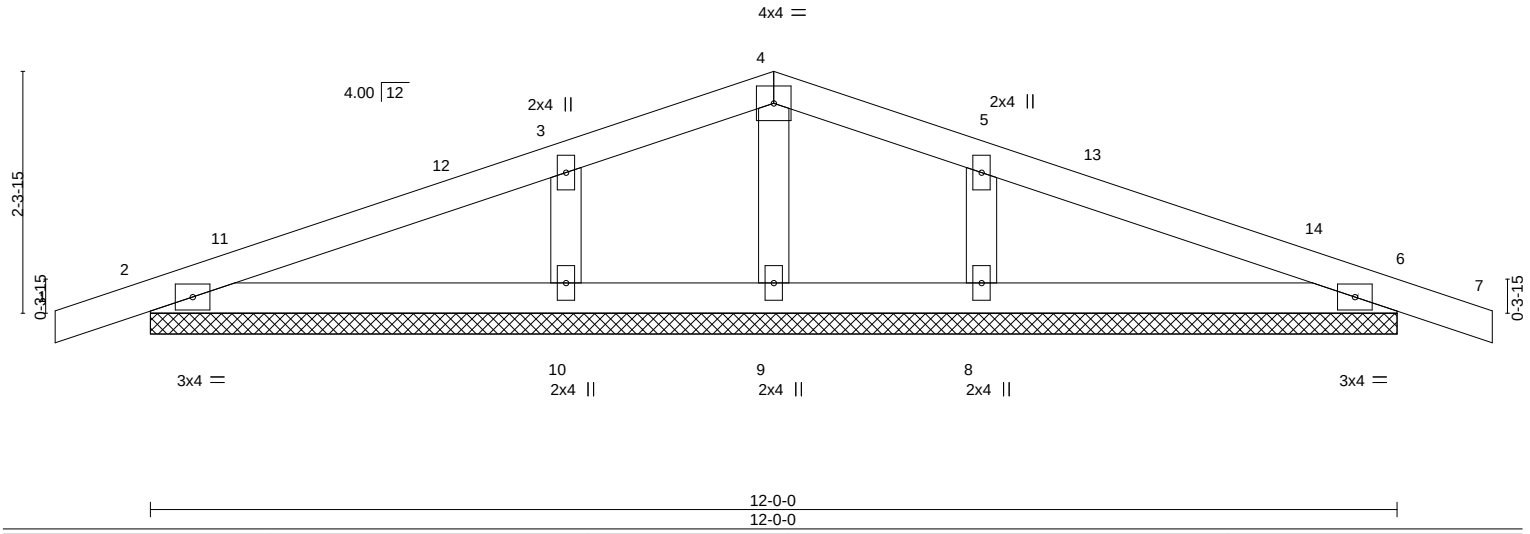

12-0-0

12-0-0

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	0.00	7	n/r	120	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	0.01	7	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 46 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=24(LC 15)

Max Uplift All uplift 100 lb or less at joint(s) 2, 6, 10, 8

Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9 except 10=338(LC 21), 8=338(LC 22)

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

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-11-0 to 2-1-0, Exterior(2N) 2-1-0 to 6-0-0, Corner(3R) 6-0-0 to 9-0-0, Exterior(2N) 9-0-0 to 12-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
7) 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) 2, 6, 10, 8.
12) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 6.
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.

May 22,2024

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

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #17 ROOF
24-5686-A	T02	COMMON	2	1	I65708178
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Apr 25 2024 MiTek Industries, Inc. Mon May 20 16:21:16 2024 Page 1
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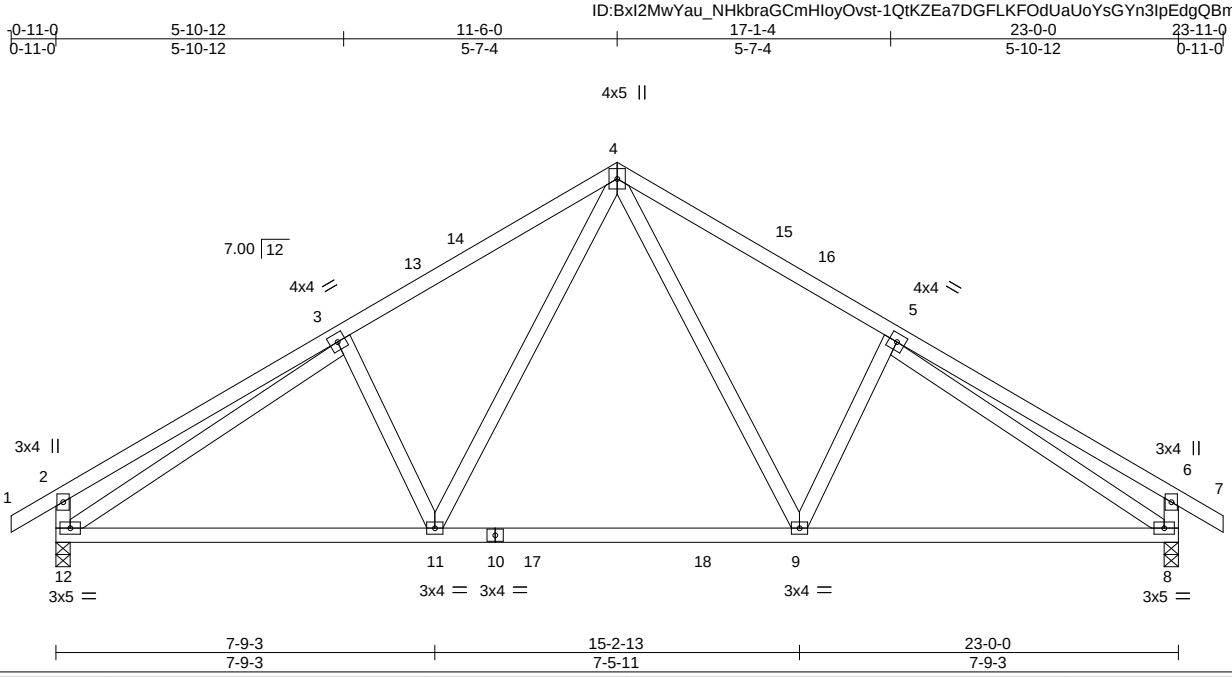

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	-0.11	9-11	>999	240	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.17	8-9	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.95	Horz(CT)	0.04	8	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MS							Weight: 136 lb	FT = 20%
BCDL	10.0											

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-1-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 12=0-3-8, 8=0-3-8
Max Horz 12=-172(LC 14)
Max Uplift 12=-88(LC 16), 8=-88(LC 16)
Max Grav 12=1075(LC 28), 8=1075(LC 29)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-386/112, 3-4=-1236/180, 4-5=-1236/180, 5-6=-386/112, 2-12=-375/122, 6-8=-375/122
BOT CHORD 11-12=-56/1163, 9-11=0/824, 8-9=-45/1061
WEBS 4-9=-43/552, 4-11=-43/552, 3-12=-1028/47, 5-8=-1028/46

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 11-6-0, Exterior(2R) 11-6-0 to 14-6-0, Interior(1) 14-6-0 to 23-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 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.

May 22,2024

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

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #17 ROOF
24-5686-A	T02G	COMMON GIRDER	1	3	I65708179

Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Apr 25 2024 MiTek Industries, Inc. Mon May 20 16:21:17 2024 Page 1

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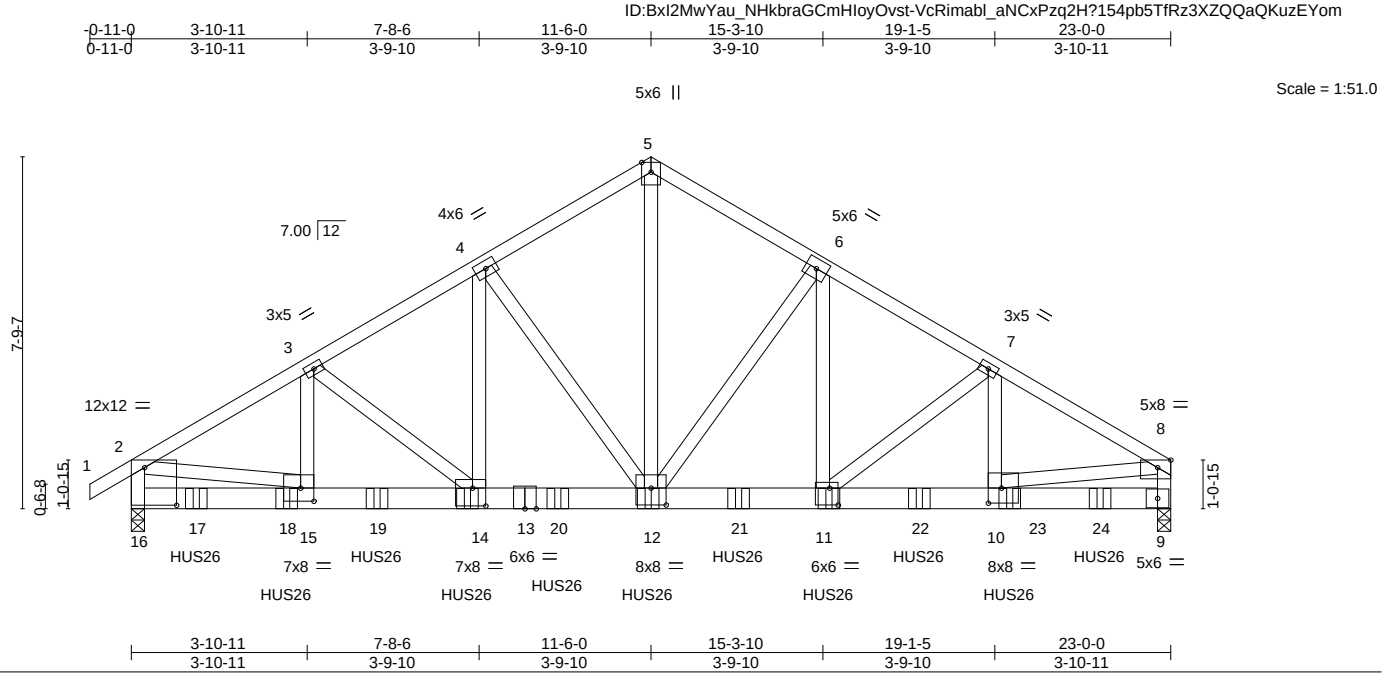


Plate Offsets (X,Y)-- [2:0-8-8,0-10-0], [8:0-3-8,Edge], [10:0-3-8,0-4-0], [11:0-2-4,0-4-8], [12:0-4-0,0-4-8], [14:0-3-8,0-4-12], [15:0-3-8,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.92	Vert(LL)	-0.16	11-12	>999	240	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.29	11-12	>947	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.98	Horz(CT)	0.05	9	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MS							Weight: 512 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except*
5-12,2-16: 2x4 SP No.2, 2-15,8-9,8-10: 2x4 SP No.1

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-4-9 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

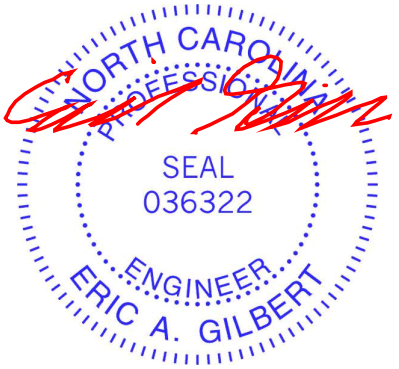
REACTIONS. (size) 16=0-3-8, 9=0-3-8
Max Horz 16=166(LC 37)
Max Uplift 16=-554(LC 12), 9=-371(LC 12)
Max Grav 16=12532(LC 3), 9=12860(LC 3)

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

TOP CHORD 2-3=-16110/658, 3-4=-15067/569, 4-5=-12131/474, 5-6=-12130/474, 6-7=-15276/518, 7-8=-16649/508, 2-16=-10822/481, 8-9=-11112/347
BOT CHORD 15-16=-173/1646, 14-15=-508/13819, 12-14=-370/12995, 11-12=-325/13172, 10-11=-381/14303, 9-10=-48/1629
WEBS 5-12=-406/11943, 6-12=-4589/175, 6-11=-96/5102, 7-11=-1454/71, 7-10=-60/1513, 4-12=-4292/251, 4-14=-182/4749, 3-14=-1064/174, 3-15=-176/1144, 2-15=-430/12425, 8-10=-340/12936

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: 2x6 - 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; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
6) Unbalanced snow loads have been considered for this design.
7) This truss has been designed for 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.



May 22,2024

Continued on page 2

ENGINEERING BY TRENCO
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818 Soundside Road
Edenton, NC 27932

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=554, 9=371.
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 HUS26 (14-10d Girder, 6-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 1-5-4 from the left end to 5-5-4 to connect truss(es) to front face of bottom chord.
14) Use Simpson Strong-Tie HUS26 (14-10d Girder, 6-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 7-5-4 from the left end to 21-5-4 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: 12=-1818(F) 11=-1818(F) 14=-1818(F) 17=-1703(F) 18=-1703(F) 19=-1703(F) 20=-1818(F) 21=-1818(F) 22=-1818(F) 23=-1818(F) 24=-1818(F)

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #17 ROOF
24-5686-A	T02GE	COMMON SUPPORTED GAB	1	1	I65708180

Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Apr 25 2024 MiTek Industries, Inc. Mon May 20 16:21:18 2024 Page 1

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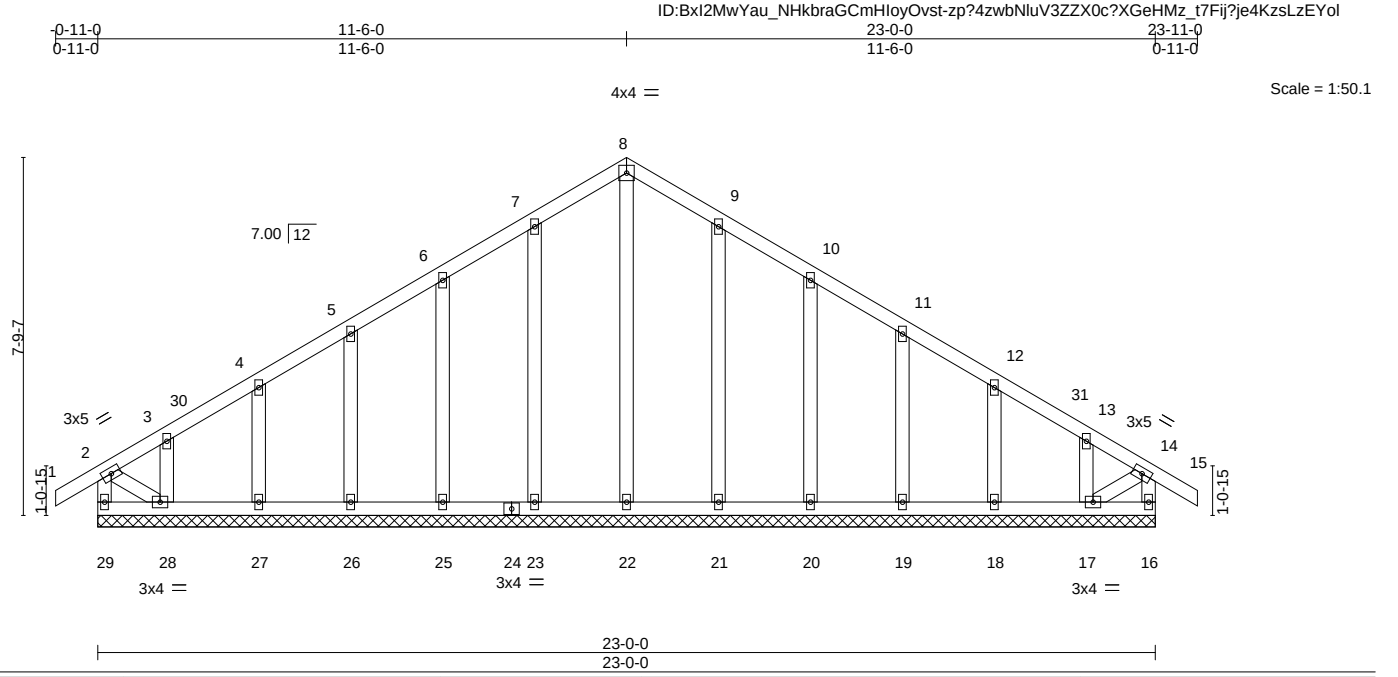

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	-0.00	15	n/r	120	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	15	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.00	16	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S							Weight: 149 lb	FT = 20%
BCDL	10.0											

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 28-29,16-17.

REACTIONS. All bearings 23-0-0.

(lb) - Max Horz 29=-172(LC 14)

Max Uplift All uplift 100 lb or less at joint(s) 29, 23, 25, 26, 27, 28, 21, 20, 19, 18, 17

Max Grav All reactions 250 lb or less at joint(s) 29, 16, 22, 23, 25, 26, 27, 28, 21, 20, 19, 18, 17

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

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-11-0 to 2-1-0, Exterior(2N) 2-1-0 to 11-6-0, Corner(3R) 11-6-0 to 14-6-0, Exterior(2N) 14-6-0 to 23-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
10) Gable studs spaced at 2-0-0 oc.
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 29, 23, 25, 26, 27, 28, 21, 20, 19, 18, 17.
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.

May 22,2024

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

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #17 ROOF
24-5686-A	T03	PIGGYBACK BASE	7	1	I65708181
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Apr 25 2024 MiTek Industries, Inc. Mon May 20 16:21:19 2024 Page 1
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-0-11-0 6-9-0 13-2-8 19-8-0 25-8-0 32-1-8 38-7-0 45-4-0 46-3-0
0-11-0 6-9-0 6-5-8 6-5-8 6-0-0 6-5-8 6-5-8 6-9-0 0-11-0

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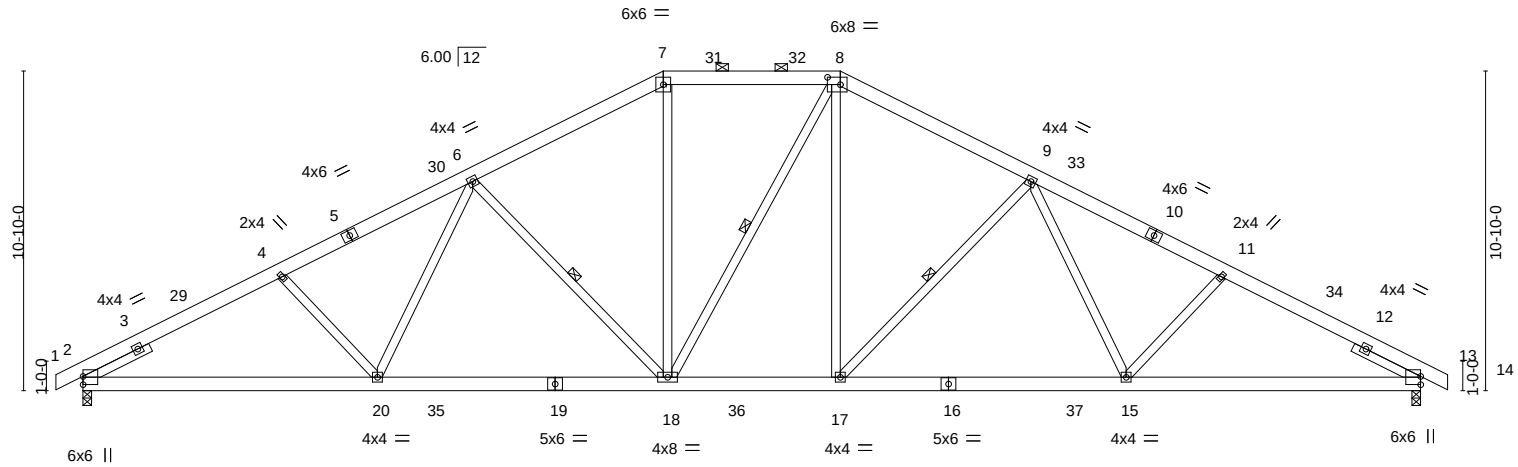


9-11-12 19-8-0 25-8-0 35-4-0 45-4-0
9-11-12 9-8-4 6-0-0 9-8-4 9-11-12

Plate Offsets (X,Y)-- [8:0-5-4,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.62	Vert(LL)	-0.26	15-17	>999	240	MT20	244/190
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.45	15-17	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.39	Horz(CT)	0.13	13	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MS							Weight: 346 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 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 3-0-3 oc purlins, except 2-0-0 oc purlins (4-8-12 max.): 7-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-18, 8-18, 9-17

REACTIONS. (size) 2=0-3-8, 13=0-3-8
Max Horz 2=202(LC 15)
Max Uplift 2=-139(LC 16), 13=-139(LC 16)
Max Grav 2=2131(LC 28), 13=2133(LC 29)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-3501/314, 4-6=-3339/316, 6-7=-2592/341, 7-8=-2263/341, 8-9=-2595/341, 9-11=-3345/316, 11-13=-3507/314
BOT CHORD 2-20=-188/3176, 18-20=-128/2870, 17-18=-28/2295, 15-17=-136/2726, 13-15=-196/3029
WEBS 6-20=0/511, 6-18=-826/160, 7-18=-31/883, 8-17=-29/942, 9-17=-830/159, 9-15=0/514

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=45ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 3-7-6, Interior(1) 3-7-6 to 19-8-0, Exterior(2E) 19-8-0 to 25-8-0, Exterior(2R) 25-8-0 to 32-1-8, Interior(1) 32-1-8 to 46-3-0 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=139, 13=139.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 22,2024

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

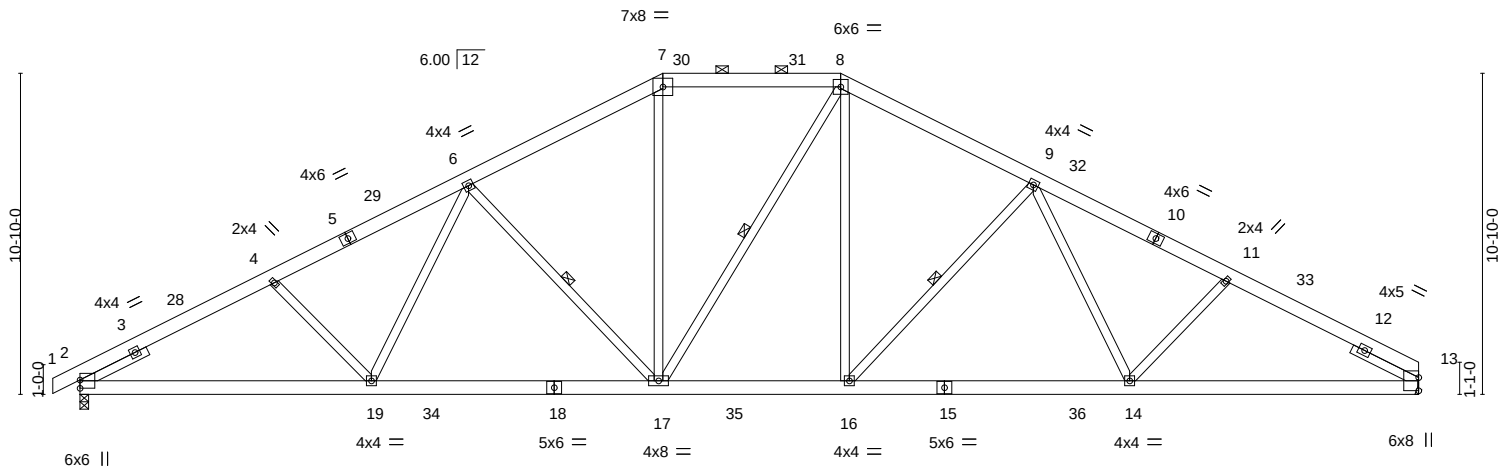
Job	Truss	Truss Type	Qty	Ply	RVF-LOT #17 ROOF
24-5686-A	T03A	Piggyback Base	3	1	I65708182
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Apr 25 2024 MiTek Industries, Inc. Mon May 20 16:21:19 2024 Page 1

ID:BxI2MwYau_NHkbraGCmHIoyOvst-R?ZSBGc?WBdwBi6C9i2VAVu_dGEpR7Vstk3WOnzEYok

-0-11-0	6-6-11	13-1-5	19-8-0	25-8-0	32-2-0	38-8-0	45-2-0
0-11-0	6-6-11	6-6-11	6-6-11	6-0-0	6-6-0	6-6-0	6-6-0

Scale = 1:77.7



9-10-0	19-8-0	25-8-0	35-5-0	45-2-0
9-10-0	9-10-0	6-0-0	9-9-0	9-9-0

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	-0.26	14-16	>999	240	MT20	244/190
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.44	14-16	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.37	Horz(CT)	0.14	13	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 342 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.2
BOT CHORD	2x6 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

REACTIONS. (size) 2=0-3-8, 13=Mechanical
Max Horz 2=199(LC 15)
Max Uplift 2=-138(LC 16), 13=-109(LC 16)
Max Grav 2=2129(LC 28), 13=2082(LC 29)

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-8-1 oc purlins, except 2-0-0 oc purlins (4-8-14 max.): 7-8.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 13-14.
WEBS	1 Row at midpt 6-17, 8-17, 9-16

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

TOP CHORD	2-4=-3498/314, 4-6=-3340/316, 6-7=-2614/344, 7-8=-2257/344, 8-9=-2613/342, 9-11=-3292/319, 11-13=-3438/318
BOT CHORD	2-19=-218/3168, 17-19=-158/2869, 16-17=-41/2278, 14-16=-148/2708, 13-14=-207/2957
WEBS	6-19=0/495, 6-17=-816/162, 7-17=-31/886, 8-16=-29/947, 9-16=-797/159, 9-14=0/450

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=45ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 3-7-3, Interior(1) 3-7-3 to 19-8-0, Exterior(2E) 19-8-0 to 25-8-0, Exterior(2R) 25-8-0 to 32-2-0, Interior(1) 32-2-0 to 45-2-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=138, 13=109.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 22,2024

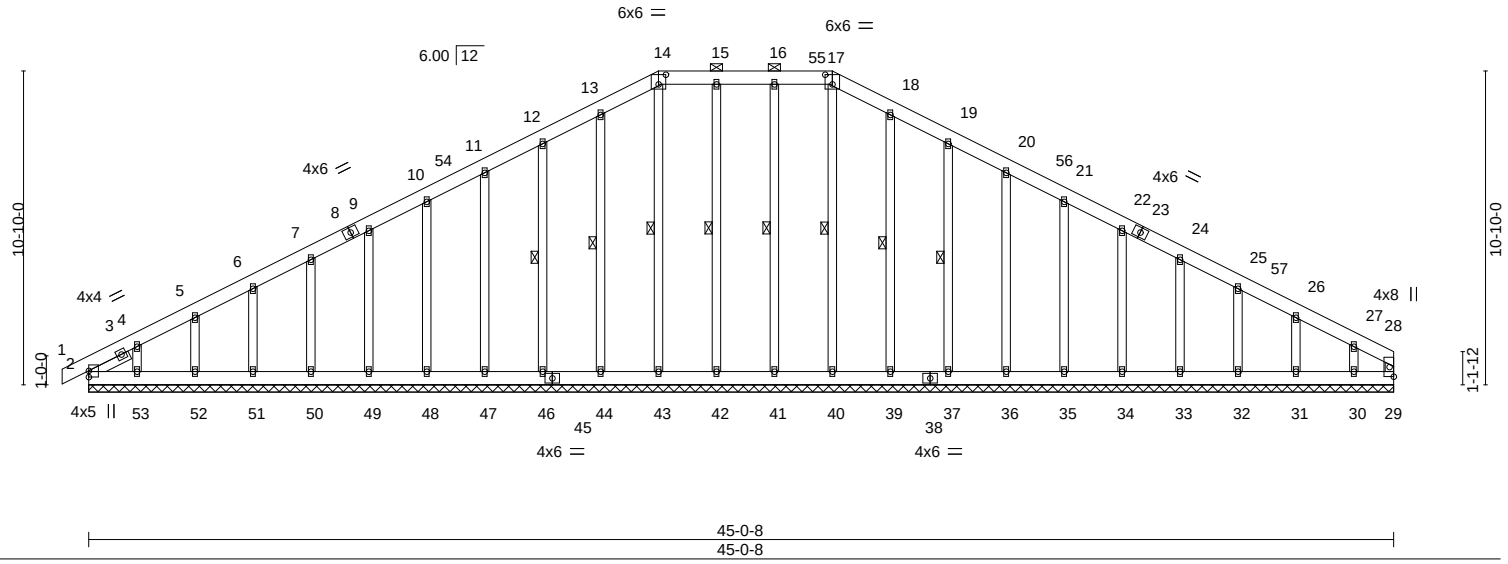
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #17 ROOF
24-5686-A	T03AGE	PIGGYBACK BASE SUPPO	1	1	I65708183
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Apr 25 2024 MiTek Industries, Inc. Mon May 20 16:21:21 2024 Page 1
ID:BxI2MwYau_NHkbraGCmHIoyOvst-OOgDcyeG2pteQ0GbH74zFw_Ue49pv4Q9K2YdTgzEYoi

-0-11-0 19-8-0 25-8-0 45-0-8
0-11-0 19-8-0 6-0-0 19-4-8

Scale = 1:79.5



45-0-8
45-0-8

Plate Offsets (X,Y)-- [14:0-3-0,0-4-0], [17:0-3-0,0-4-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	1	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.00	29	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 419 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.2
BOT CHORD	2x6 SP No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3
SLIDER	Left 2x4 SP No.3 1-6-5

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 14-17.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 17-40, 16-41, 15-42, 14-43, 13-44, 12-46, 18-39, 19-37

REACTIONS. All bearings 45-0-8.
(lb) - Max Horz 2=213(LC 15)
Max Uplift All uplift 100 lb or less at joint(s) 29, 2, 41, 42, 44, 46, 47, 48, 49, 50, 51, 52, 53, 39, 37, 36, 35, 34, 33, 32, 31, 30
Max Grav All reactions 250 lb or less at joint(s) 29, 2, 40, 41, 42, 43, 44, 46, 47, 48, 49, 50, 51, 52, 53, 39, 37, 36, 35, 34, 33, 32, 31, 30

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 12-13=-118/281, 13-14=-132/320, 14-15=-118/307, 15-16=-118/307, 16-17=-118/307, 17-18=-132/320, 18-19=-118/281

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=45ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-11-0 to 3-8-0, Exterior(2N) 3-8-0 to 19-8-0, Corner(3R) 19-8-0 to 24-2-1, Exterior(2N) 24-2-1 to 25-8-0, Corner(3R) 25-8-0 to 30-2-1, Exterior(2N) 30-2-1 to 44-10-12 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
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) All plates are 2x4 MT20 unless otherwise indicated.
9) Gable requires continuous bottom chord bearing.
10) Gable studs spaced at 2-0-0 oc.
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 29, 2, 41, 42, 44, 46, 47, 48, 49, 50, 51, 52, 53, 39, 37, 36, 35, 34, 33, 32, 31, 30.

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May 22,2024

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

NOTES-

14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #17 ROOF
24-5686-A	T03GE	PIGGYBACK BASE SUPPO	1	1	I65708184

Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Apr 25 2024 MiTek Industries, Inc. Mon May 20 16:21:23 2024 Page 1

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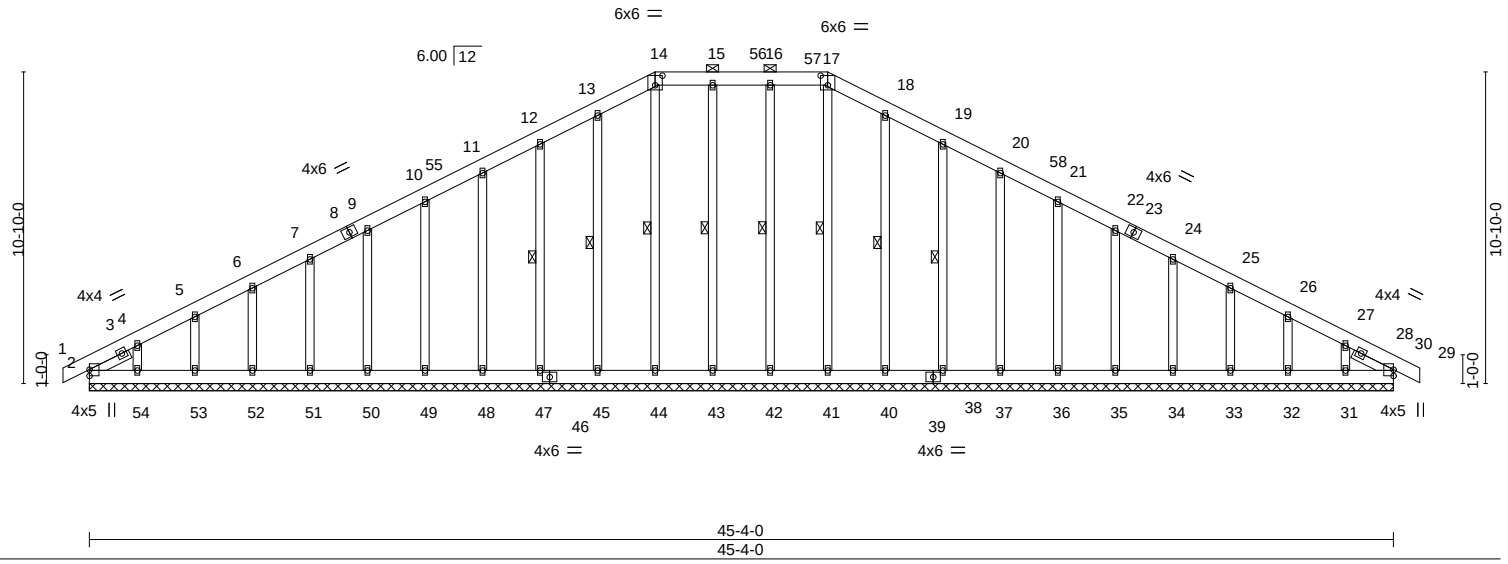
Scale = 1:80.1



45-4-0

45-4-0

Plate Offsets (X,Y)-- [14:0-3-0,0-4-0], [17:0-3-0,0-4-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	-0.00	29	n/r	120	MT20	244/190
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	29	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.01	29	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S							Weight: 424 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x6 SP No.2
BOT CHORD	2x6 SP No.2
OTHERS	2x4 SP No.3
SLIDER	Left 2x4 SP No.3 1-6-5, Right 2x4 SP No.3 1-6-5

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 14-17.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 17-41, 16-42, 15-43, 14-44, 13-45, 12-47, 18-40, 19-38

REACTIONS. All bearings 45-4-0.

(lb) - Max Horz 2=202(LC 15)

Max Uplift All uplift 100 lb or less at joint(s) 2, 42, 45, 47, 48, 49, 50, 51, 52, 53, 54, 40, 38, 37, 36, 35, 34, 33, 32, 31

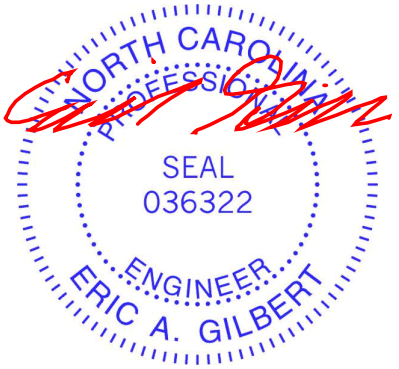
Max Grav All reactions 250 lb or less at joint(s) 2, 41, 42, 43, 44, 45, 47, 48, 49, 50, 51, 52, 53, 54, 40, 38, 37, 36, 35, 34, 33, 32, 31, 29

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

TOP CHORD 12-13=-109/266, 13-14=-125/305, 14-15=-117/293, 15-16=-117/293, 16-17=-117/293, 17-18=-125/305, 18-19=-109/266

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=45ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-11-0 to 3-8-0, Exterior(2N) 3-8-0 to 19-8-0, Corner(3R) 19-8-0 to 24-2-6, Exterior(2N) 24-2-6 to 25-8-0, Corner(3R) 25-8-0 to 30-2-6, Exterior(2N) 30-2-6 to 46-3-0 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
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) All plates are 2x4 MT20 unless otherwise indicated.
9) Gable requires continuous bottom chord bearing.
10) Gable studs spaced at 2-0-0 oc.
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 42, 45, 47, 48, 49, 50, 51, 52, 53, 54, 40, 38, 37, 36, 35, 34, 33, 32, 31.



May 22,2024

Continued on page 2

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

NOTES-

14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #17 ROOF
24-5686-A	T04	PIGGYBACK BASE	1	1	I65708185
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Apr 25 2024 MiTek Industries, Inc. Mon May 20 16:21:24 2024 Page 1
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-0-11-0 6-6-11 13-1-5 19-8-0 25-8-0 32-2-11 38-9-5 45-4-0
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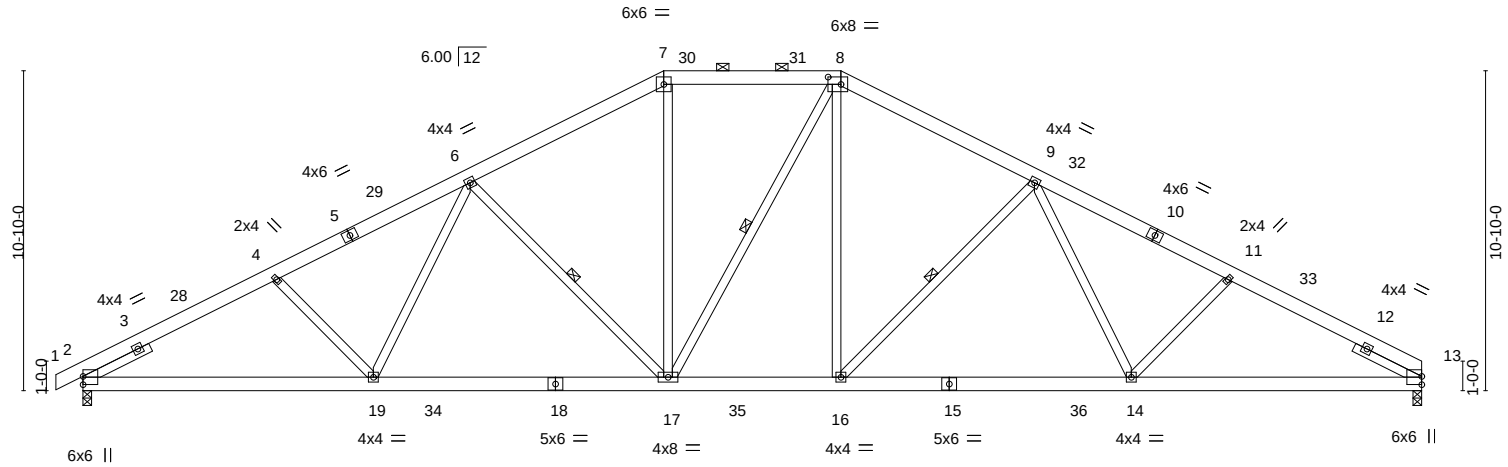

9-10-0 19-8-0 25-8-0 35-6-0 45-4-0
9-10-0 9-10-0 6-0-0 9-10-0 9-10-0

Plate Offsets (X,Y)-- [8:0-5-4,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.62	Vert(LL)	-0.26	14-16	>999	240	MT20	244/190
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.46	14-16	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.39	Horz(CT)	0.13	13	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 343 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 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 3-0-3 oc purlins, except 2-0-0 oc purlins (4-8-12 max.): 7-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-17, 8-17, 9-16

REACTIONS. (size) 2=0-3-8, 13=0-3-8
Max Horz 2=200(LC 15)
Max Uplift 2=-139(LC 16), 13=-110(LC 16)
Max Grav 2=2133(LC 28), 13=2086(LC 29)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-3509/314, 4-6=-3351/316, 6-7=-2597/343, 7-8=-2267/343, 8-9=-2600/342, 9-11=-3361/322, 11-13=-3520/324
BOT CHORD 2-19=-216/3177, 17-19=-157/2876, 16-17=-39/2293, 14-16=-150/2737, 13-14=-211/3042
WEBS 6-19=0/503, 6-17=-827/162, 7-17=-31/882, 8-16=-28/941, 9-16=-833/162, 9-14=0/509

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=45ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 3-7-6, Interior(1) 3-7-6 to 19-8-0, Exterior(2E) 19-8-0 to 25-8-0, Exterior(2R) 25-8-0 to 32-2-11, Interior(1) 32-2-11 to 45-4-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=139, 13=110.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 22,2024

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

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #17 ROOF
24-5686-A	T04A	Piggyback Base	8	1	I65708186
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Apr 25 2024 MiTek Industries, Inc. Mon May 20 16:21:26 2024 Page 1
ID:BxI2MwYau_NHkbraGCmHIoyOvst-kLU6ffiOtLWwWn9Y4gg8yzhB_5jWaD2uUKGO8tzEYod

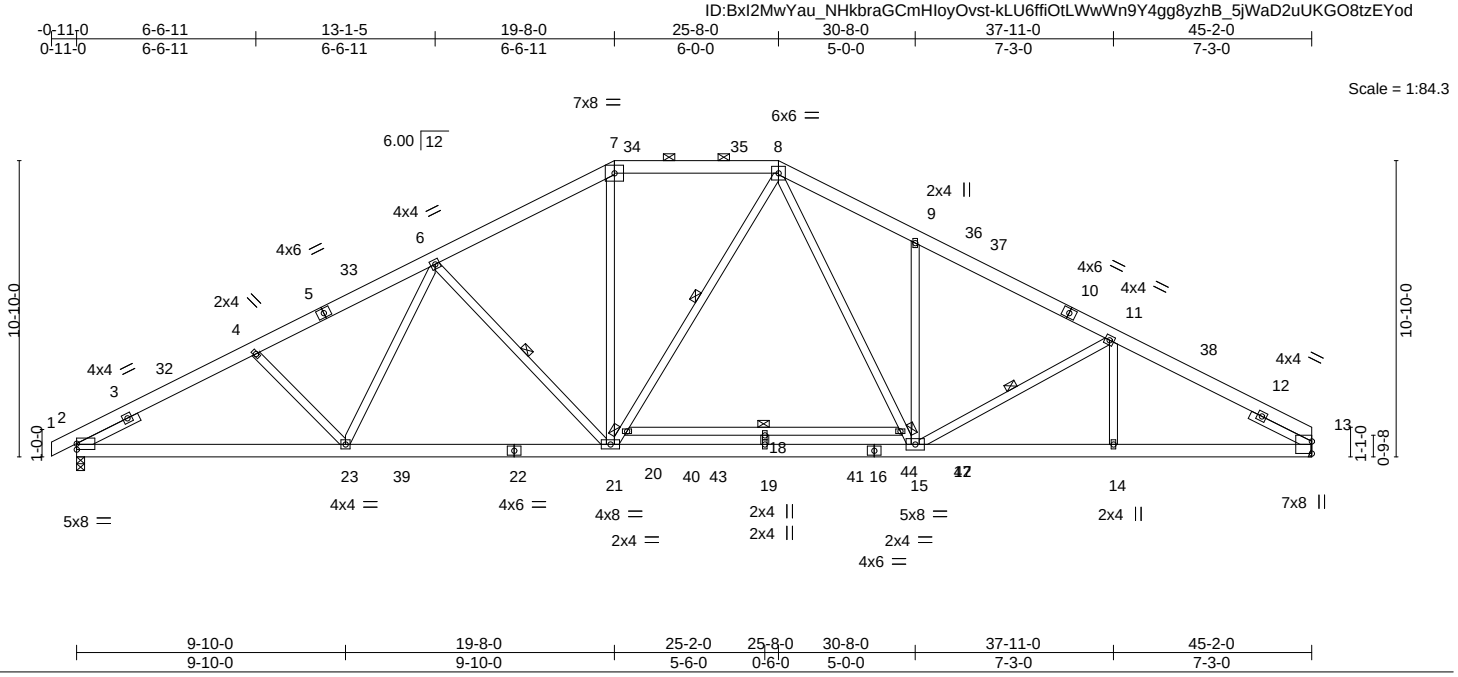

Plate Offsets (X,Y)-- [2:0-0-0,0-2-10]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	-0.33	18	>999	240	MT20	244/190
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.58	18-20	>939	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.64	Horz(CT)	0.11	13	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 357 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.2
BOT CHORD	2x6 SP 2400F 2.0E *Except*
	17-20: 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 2-7-0 oc purlins, except 2-0-0 oc purlins (4-4-2 max.): 7-8.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 6-0-0 oc bracing: 17-20
WEBS	1 Row at midpt 6-21, 8-20, 11-15

REACTIONS. (size) 2=0-3-8, 13=Mechanical
Max Horz 2=199(LC 15)
Max Uplift 2=-83(LC 16), 13=-40(LC 16)
Max Grav 2=2321(LC 28), 13=2308(LC 29)

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

TOP CHORD	2-4=-3853/212, 4-6=-3694/213, 6-7=-3069/215, 7-8=-2660/230, 8-9=-3659/274, 9-11=-3592/165, 11-13=-3821/180
BOT CHORD	2-23=-129/3485, 21-23=-54/3230, 19-21=0/2597, 15-19=0/2597, 14-15=-80/3313, 13-14=-80/3313
WEBS	6-23=0/390, 6-21=-748/178, 7-21=0/1086, 8-20=-123/319, 8-17=-59/1484, 15-17=-93/1398, 9-15=-556/185, 11-15=-298/141, 18-19=-303/0

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=45ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 3-7-3, Interior(1) 3-7-3 to 19-8-0, Exterior(2E) 19-8-0 to 25-8-0, Exterior(2R) 25-8-0 to 32-0-10, Interior(1) 32-0-10 to 45-2-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 13.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 22,2024

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

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #17 ROOF
24-5686-A	T05	COMMON	5	1	I65708187
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Apr 25 2024 MiTek Industries, Inc. Mon May 20 16:21:26 2024 Page 1
ID:BxI2MwYau_NHkbraGCmHIoyOvst-kLU6ffiOtLWwWn9Y4gg8yzhGi5h9aIruUKGO8tzEYod

0-11-0	5-7-0	11-2-0	16-9-0	22-4-0	23-3-0
0-11-0	5-7-0	5-7-0	5-7-0	5-7-0	0-11-0

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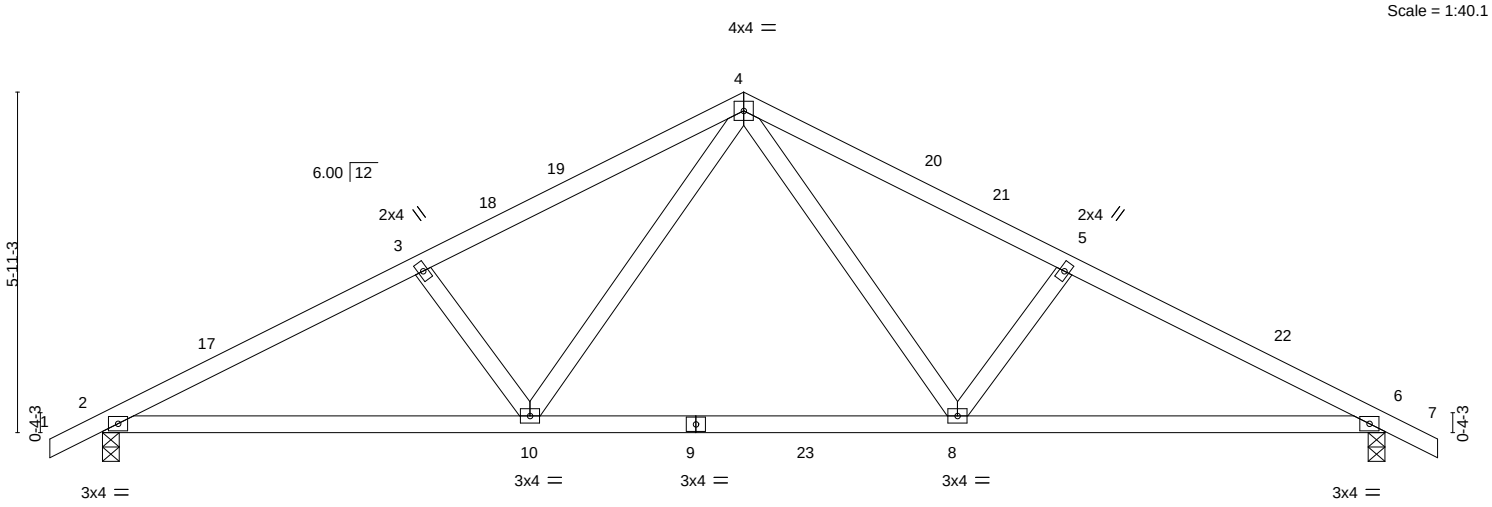

7-5-5	14-10-11	22-4-0
7-5-5	7-5-5	7-5-5

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.41	Vert(LL)	-0.11	8-10	>999	240	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.20	8-10	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.04	6	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 102 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 4-1-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 6=0-3-8
Max Horz 2=-100(LC 14)
Max Uplift 2=-83(LC 16), 6=-83(LC 16)
Max Grav 2=1025(LC 28), 6=1025(LC 29)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1690/242, 3-4=-1547/250, 4-5=-1548/250, 5-6=-1691/242
BOT CHORD 2-10=-138/1553, 8-10=-22/991, 6-8=-145/1490
WEBS 4-8=-55/676, 5-8=-348/163, 4-10=-55/674, 3-10=-348/163

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 11-2-0, Exterior(2R) 11-2-0 to 14-2-0, Interior(1) 14-2-0 to 23-3-0 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
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) 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.

May 22,2024

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

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #17 ROOF
24-5686-A	T05GE	COMMON SUPPORTED GAB	1	1	I65708188

Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Apr 25 2024 MiTek Industries, Inc. Mon May 20 16:21:27 2024 Page 1
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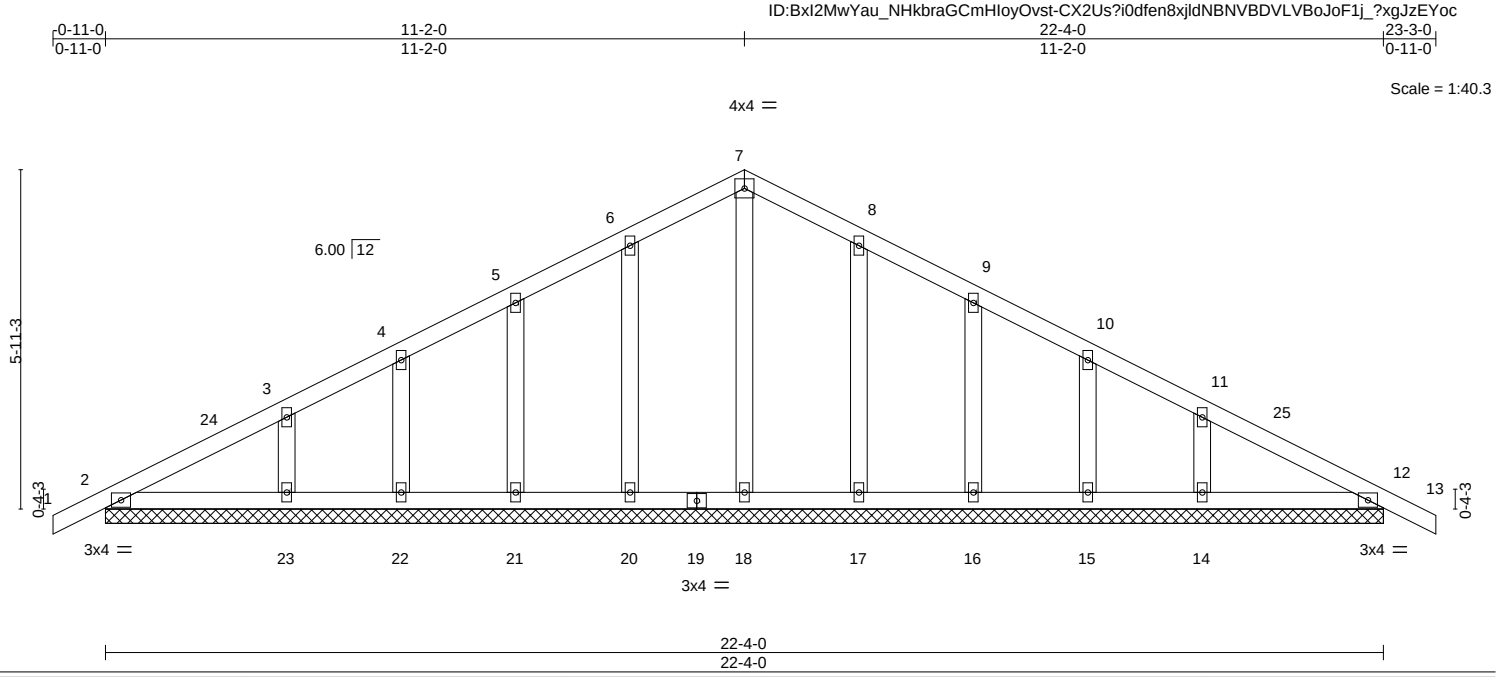

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	0.00	13	n/r	120	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	0.00	13	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	12	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 116 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 22-4-0.
(lb) - Max Horz 2=-100(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 2, 20, 21, 22, 23, 17, 16, 15, 14, 12
Max Grav All reactions 250 lb or less at joint(s) 2, 18, 20, 21, 22, 23, 17, 16, 15, 14, 12

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-11-0 to 2-1-0, Exterior(2N) 2-1-0 to 11-2-0, Corner(3R) 11-2-0 to 14-2-0, Exterior(2N) 14-2-0 to 23-3-0 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
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Gable studs spaced at 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 20, 21, 22, 23, 17, 16, 15, 14, 12.
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.

May 22,2024

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

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #17 ROOF
24-5686-A	V01	Valley	1	1	I65708189
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Apr 25 2024 MiTek Industries, Inc. Mon May 20 16:21:28 2024 Page 1
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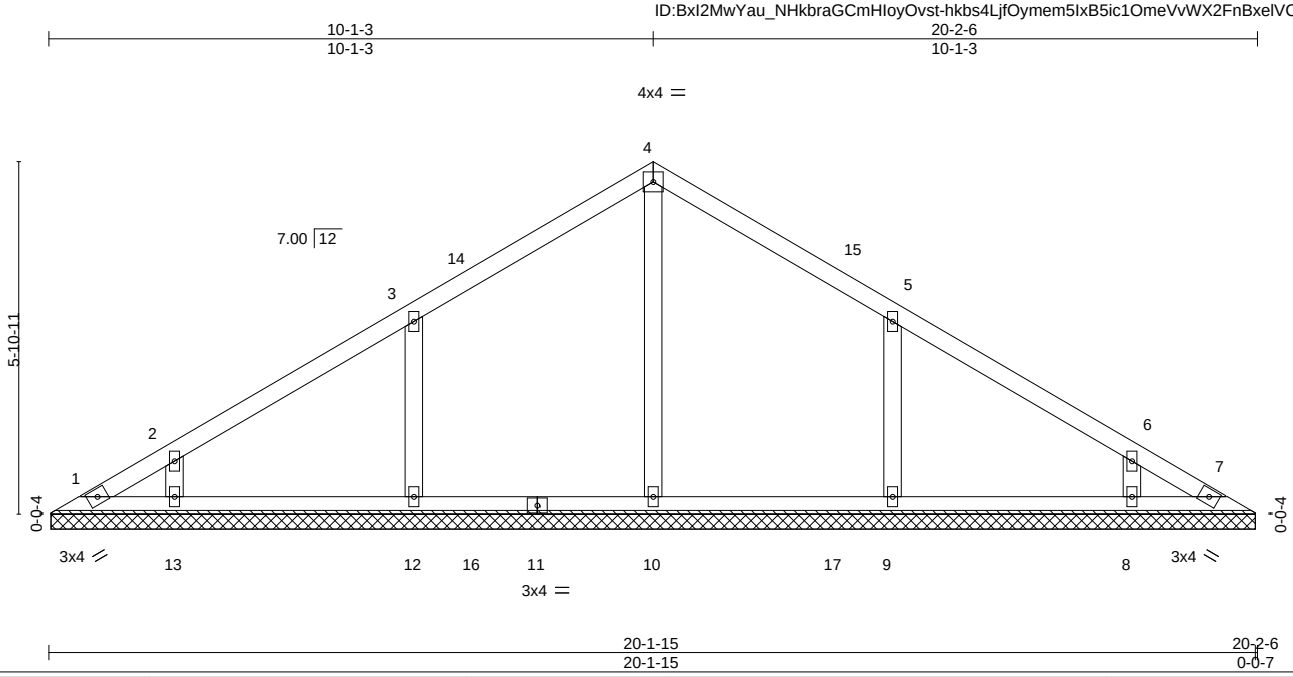

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.00	7	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 82 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 20-1-8.
(lb) - Max Horz 1=-111(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=369(LC 27), 12=427(LC 27), 13=307(LC 27), 9=427(LC 28), 8=307(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 10-1-3, Exterior(2R) 10-1-3 to 13-1-3, Interior(1) 13-1-3 to 19-7-14 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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.

May 22,2024

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

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #17 ROOF
24-5686-A	V02	Valley	1	1	I65708190
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Apr 25 2024 MiTek Industries, Inc. Mon May 20 16:21:28 2024 Page 1
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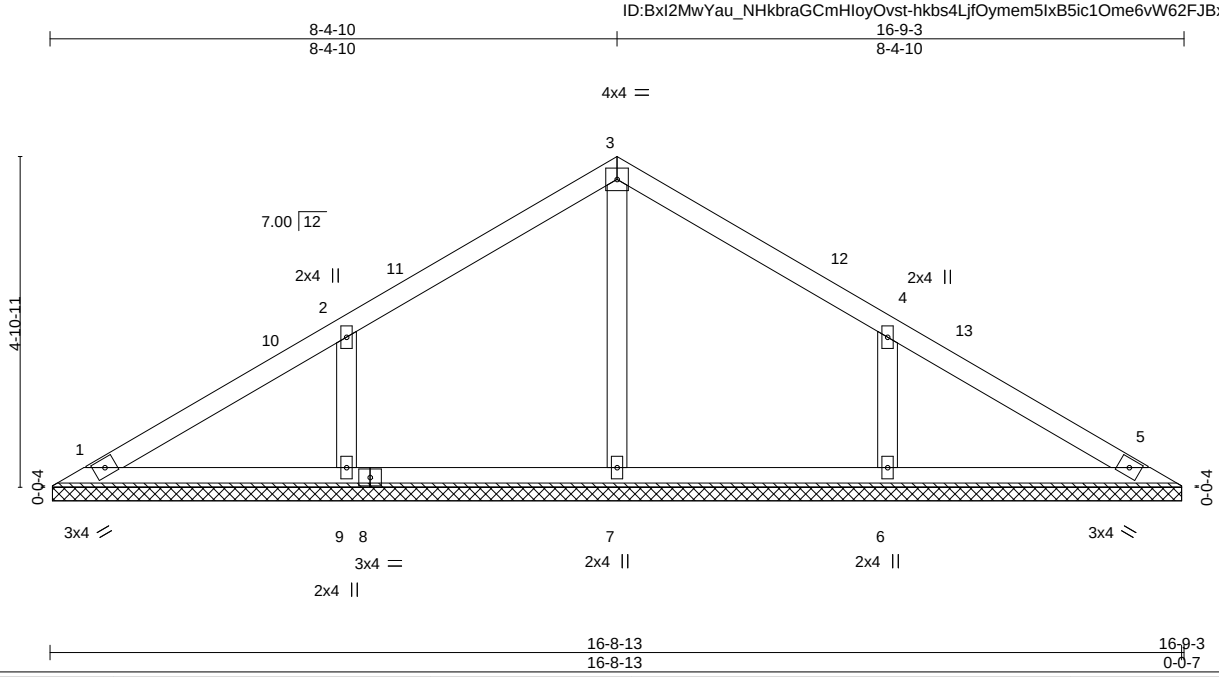

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S							Weight: 64 lb	FT = 20%
BCDL	10.0											

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

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

REACTIONS. All bearings 16-8-6.
(lb) - Max Horz 1=-91(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 9, 6
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=251(LC 2), 9=373(LC 33), 6=373(LC 34)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-9=-279/134, 4-6=-279/134

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 8-4-10, Exterior(2R) 8-4-10 to 11-4-10, Interior(1) 11-4-10 to 16-2-11 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
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) 9, 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.

May 22,2024

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

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #17 ROOF
24-5686-A	V03	Valley	1	1	I65708191

Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Apr 25 2024 MiTek Industries, Inc. Mon May 20 16:21:29 2024 Page 1
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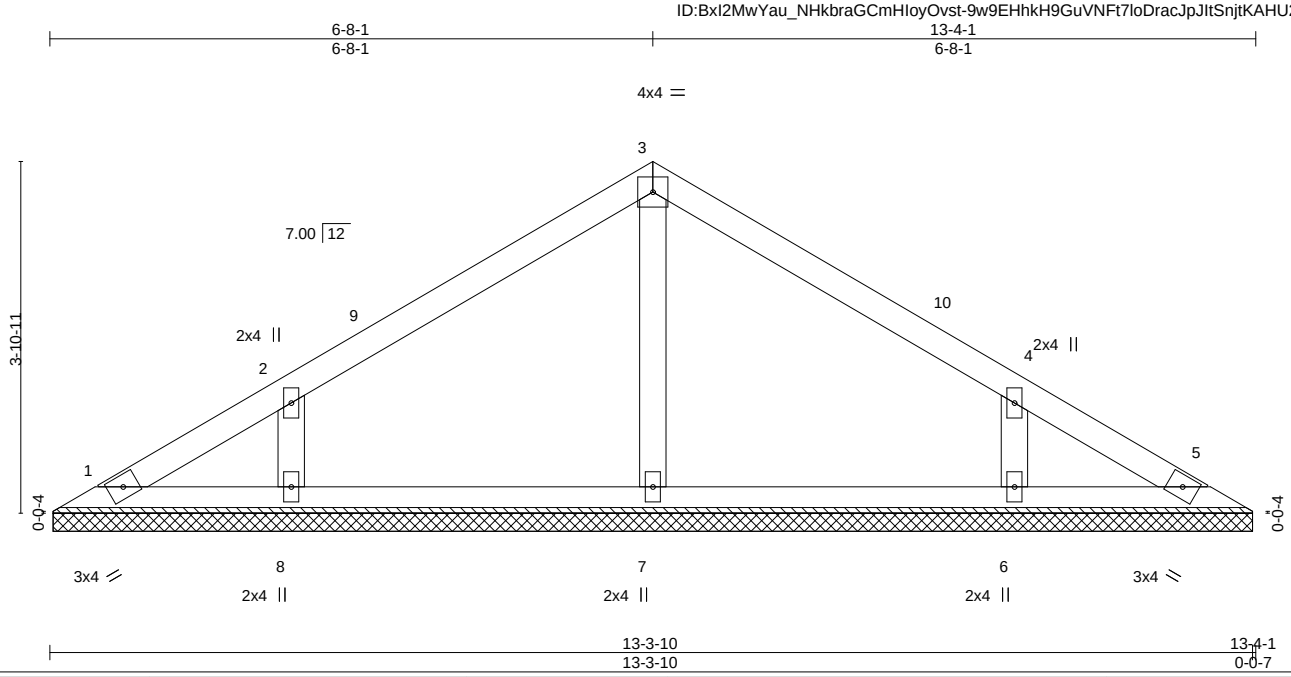

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 49 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 13-3-3.
(lb) - Max Horz 1=71(LC 15)
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=276(LC 2), 8=307(LC 20), 6=307(LC 21)

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

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

May 22,2024

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

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #17 ROOF
24-5686-A	V04	Valley	1	1	I65708192
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Apr 25 2024 MiTek Industries, Inc. Mon May 20 16:21:29 2024 Page 1
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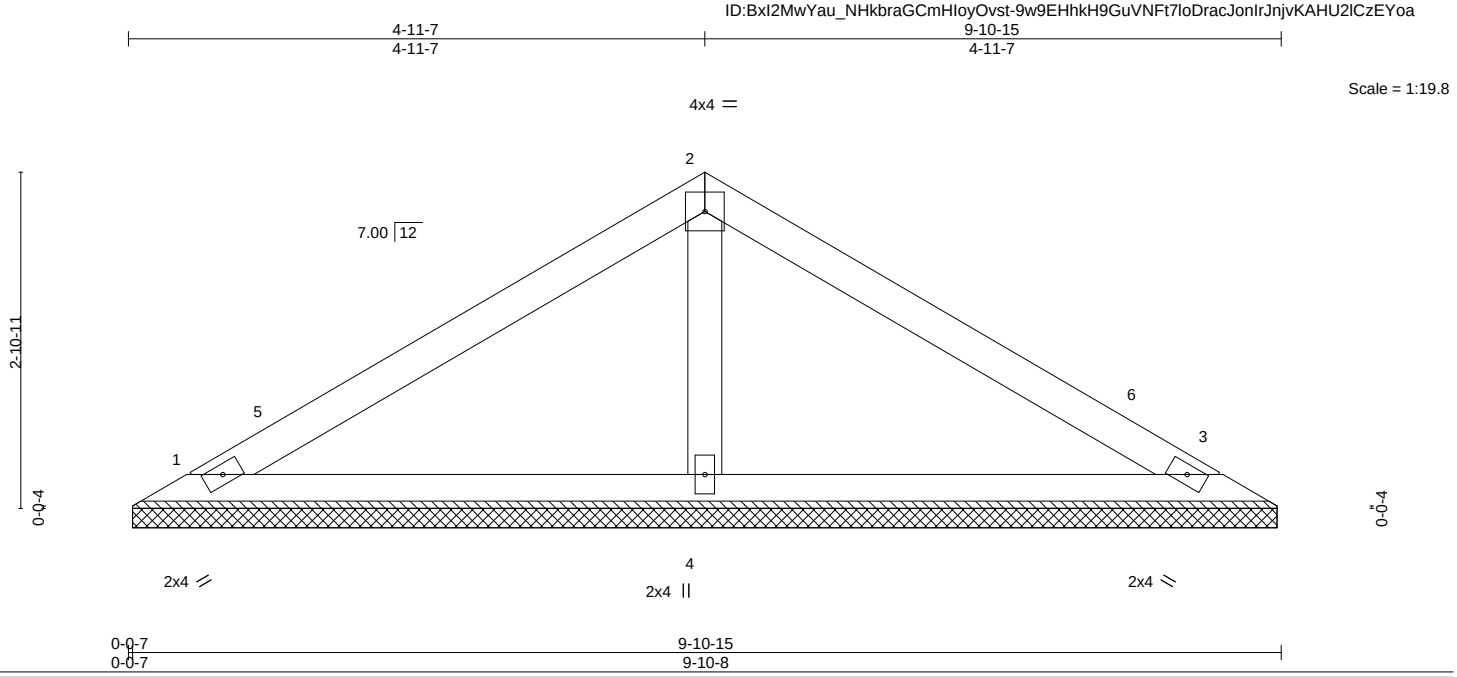

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 33 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=9-10-1, 3=9-10-1, 4=9-10-1
Max Horz 1=51(LC 15)
Max Uplift 1=-21(LC 16), 3=-21(LC 16)
Max Grav 1=167(LC 2), 3=167(LC 2), 4=372(LC 2)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 4-11-7, Exterior(2R) 4-11-7 to 7-11-7, Interior(1) 7-11-7 to 9-4-7 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
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.

May 22,2024

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

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #17 ROOF
24-5686-A	V05	Valley	1	1	I65708193
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Apr 25 2024 MiTek Industries, Inc. Mon May 20 16:21:30 2024 Page 1
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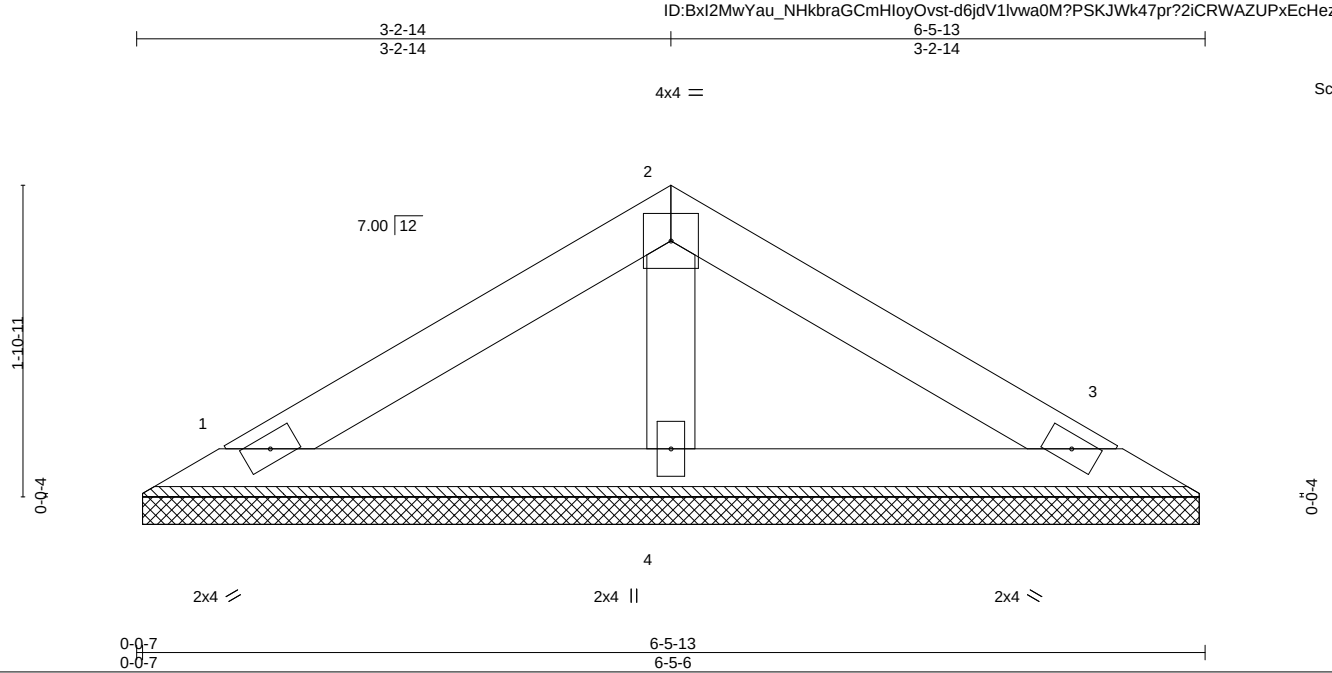

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-P								
BCDL	10.0										Weight: 21 lb	FT = 20%

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

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

REACTIONS. (size) 1=6-4-15, 3=6-4-15, 4=6-4-15
Max Horz 1=31(LC 15)
Max Uplift 1=-18(LC 16), 3=-18(LC 16)
Max Grav 1=113(LC 20), 3=113(LC 21), 4=206(LC 2)

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

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

May 22,2024

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #17 ROOF
24-5686-A	V06	Valley	1	1	I65708194
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Apr 25 2024 MiTek Industries, Inc. Mon May 20 16:21:30 2024 Page 1
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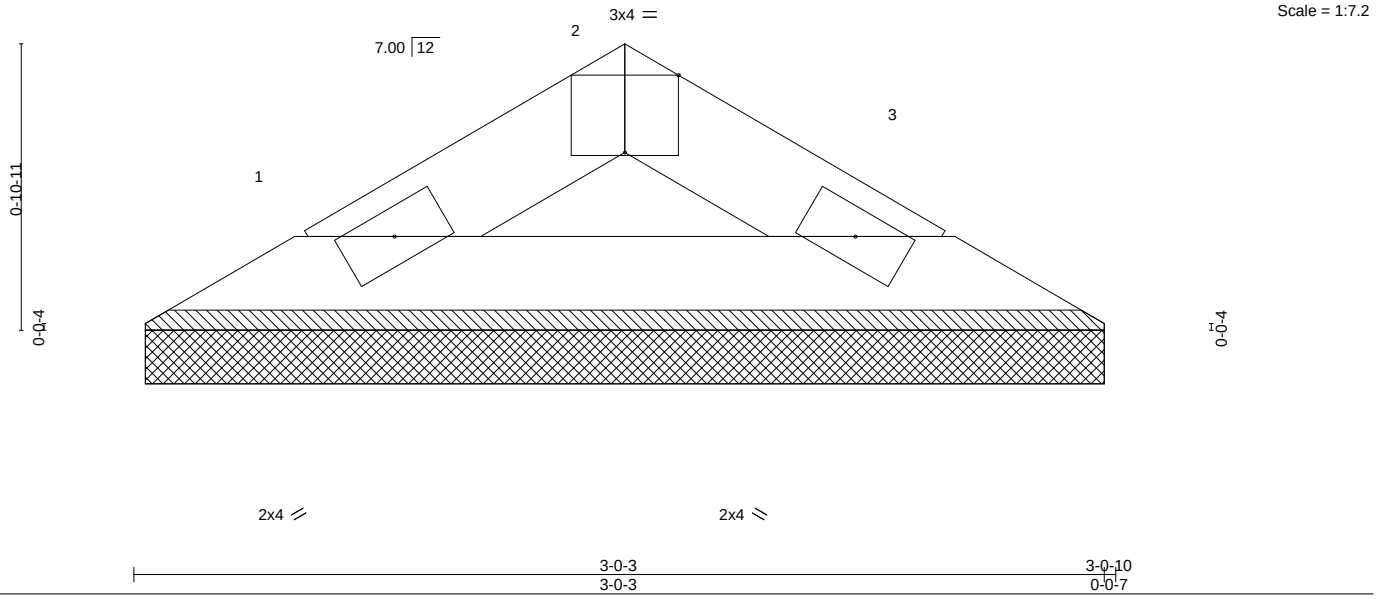

Plate Offsets (X,Y)-- [2:0-2-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.02	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.04	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								
BCDL	10.0										Weight: 8 lb	FT = 20%

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

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

REACTIONS. (size) 1=2-11-13, 3=2-11-13
Max Horz 1=11(LC 15)
Max Uplift 1=-5(LC 16), 3=-5(LC 16)
Max Grav 1=79(LC 2), 3=79(LC 2)

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

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

May 22,2024

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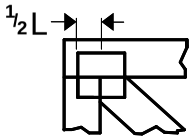
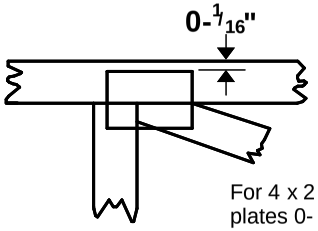
Symbols

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.

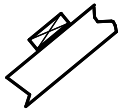
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

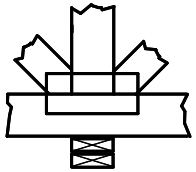
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

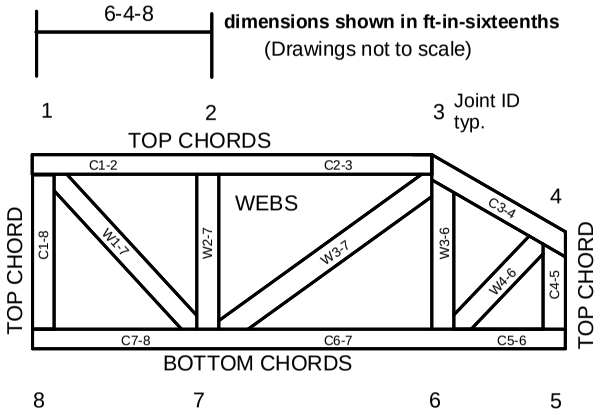


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

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/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

MiTek®

ENGINEERING BY TRENCO
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MiTek Engineering Reference Sheet: MII-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/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.