ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 24-4221-A
SGR-LOT 89 ROOF

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

Pages or sheets covered by this seal: I74276525 thru I74276556

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

North Carolina COA: C-0844

June 18,2025

Gilbert, Eric

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

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 89 ROOF
24-4221-A	CJ01	DIAGONAL HIP GIRDER	2	1	I74276525
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Tue Jun 17 13:51:24 2025 Page 1
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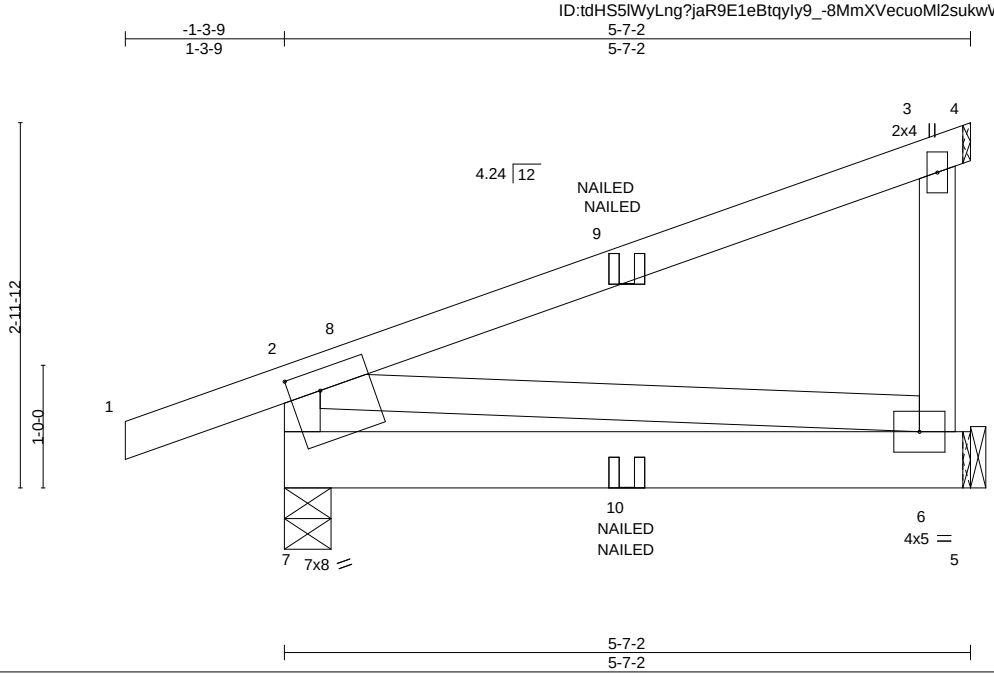

Plate Offsets (X,Y)-- [7:0-3-0,0-2-0]

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	0.58	Vert(LL)	-0.01	6-7	>999	240	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.02	6-7	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.02	Horz(CT)	-0.00	6	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MP							Weight: 35 lb	FT = 20%
BCDL	10.0											

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 5-7-2 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=0-4-9, 6=Mechanical
Max Horz 7=95(LC 9)
Max Uplift 7=-83(LC 12), 6=-38(LC 12)
Max Grav 7=305(LC 2), 6=232(LC 17)

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

NOTES-
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 83 lb uplift at joint 7 and 38 lb uplift at joint 6.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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

June 18,2025

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 89 ROOF
24-4221-A	HG01	HIP GIRDER	1	2	I74276526
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Tue Jun 17 13:51:25 2025 Page 1
ID:tdHS5lWyLng?jaR9E1eBtqyIy9_-cYKvi_dXZftvT1J64h77vjKBYyH3mus5uBakEaz5MNG

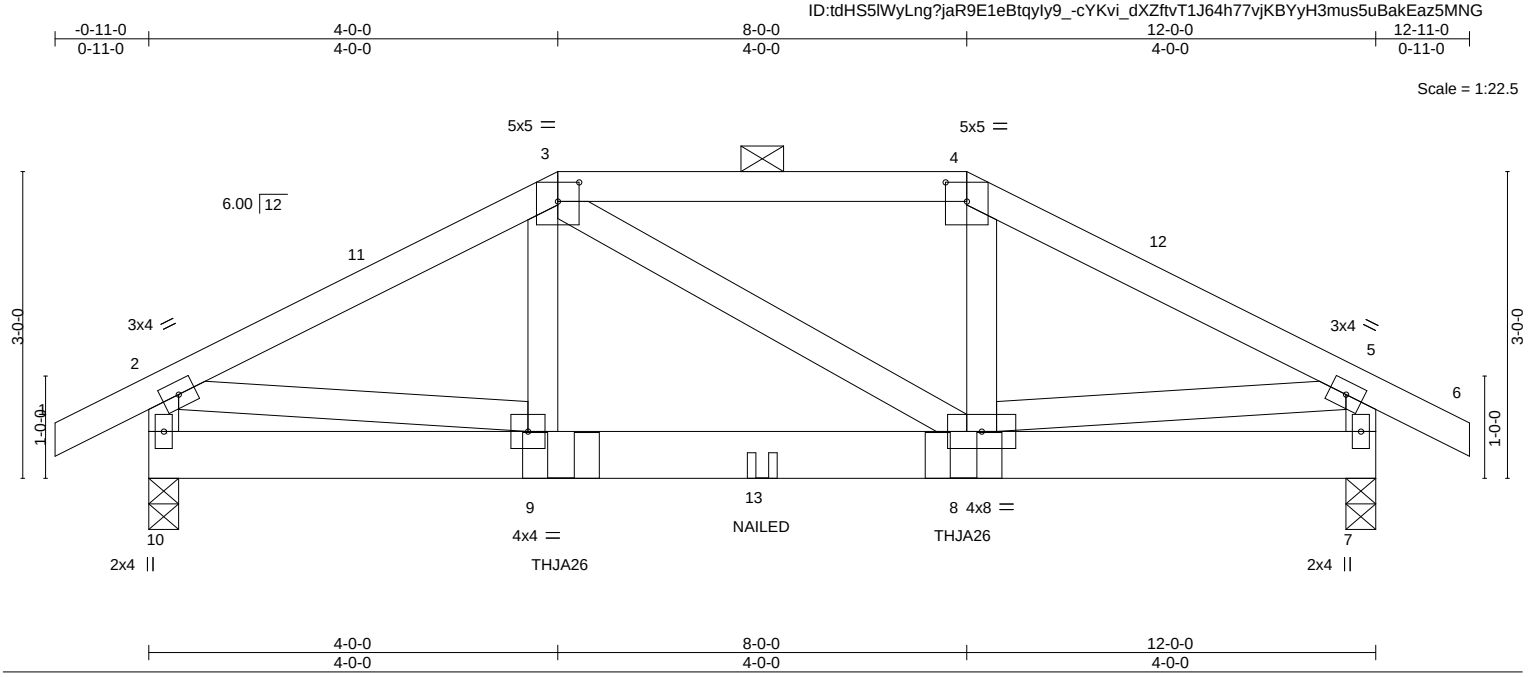

Plate Offsets (X,Y)-- [3:0-2-8,0-2-4], [4:0-2-8,0-2-4]

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

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 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 10=0-3-8, 7=0-3-8
Max Horz 10=63(LC 11)
Max Uplift 10=-175(LC 12), 7=-172(LC 12)
Max Grav 10=952(LC 35), 7=943(LC 35)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1203/234, 3-4=-1024/224, 4-5=-1196/232, 2-10=-907/193, 5-7=-897/191
BOT CHORD 8-9=-173/1012
WEBS 3-9=-59/334, 4-8=-68/361, 2-9=-162/919, 5-8=-162/910

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
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=16.5 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
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) 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 175 lb uplift at joint 10 and 172 lb uplift at joint 7.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Continued on page 2

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NOTES-

14) Use Simpson Strong-Tie THJA26 (THJA26 on 2 ply, Left Hand Hip) or equivalent at 4-0-6 from the left end to connect truss(es) to front face of bottom chord.
15) Use Simpson Strong-Tie THJA26 (THJA26 on 2 ply, Right Hand Hip) or equivalent at 7-11-10 from the left end to connect truss(es) to front face of bottom chord.
16) Fill all nail holes where hanger is in contact with lumber.
17) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-43, 2-3=-43, 3-4=-53, 4-5=-43, 5-6=-43, 7-10=-20
   Concentrated Loads (lb)
   Vert: 9=-338(F) 8=-338(F) 13=-134(F)

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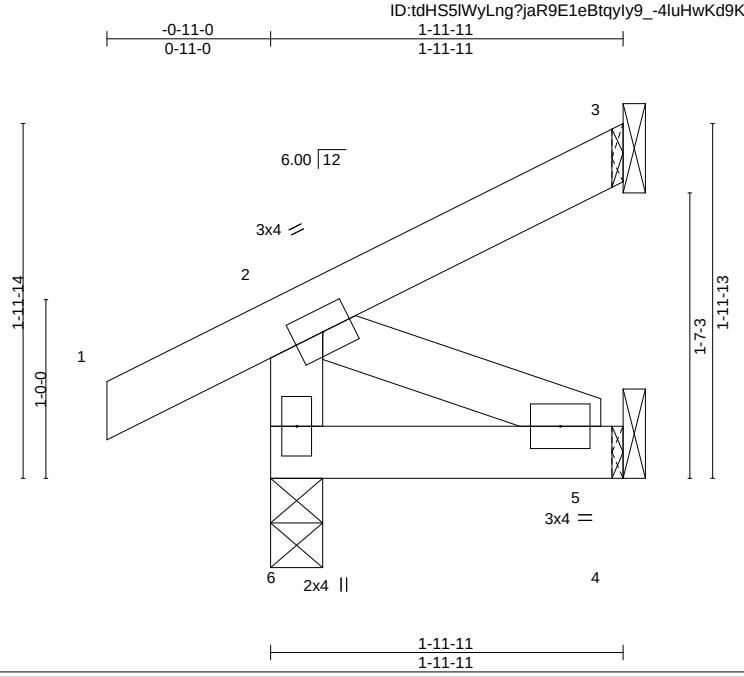
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 89 ROOF
24-4221-A	J01	JACK-OPEN	4	1	I74276527
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Tue Jun 17 13:51:26 2025 Page 1
ID:tdHS5lWyLng?jaR9E1eBtqyly9_-4luHwKd9Kz?m5BuJeOeMRwtNnMfdVNZE7rJHm1z5MNF



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	6	>999	240	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	5-6	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	-0.00	3	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 11 lb	FT = 20%

LUMBER-

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 1-11-11 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

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

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

NOTES-

1) 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 20 lb uplift at joint 6, 10 lb uplift at joint 3 and 14 lb uplift at joint 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.

June 18,2025

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 89 ROOF
24-4221-A	M01	Monopitch	2	1	I74276528
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Tue Jun 17 13:51:26 2025 Page 1
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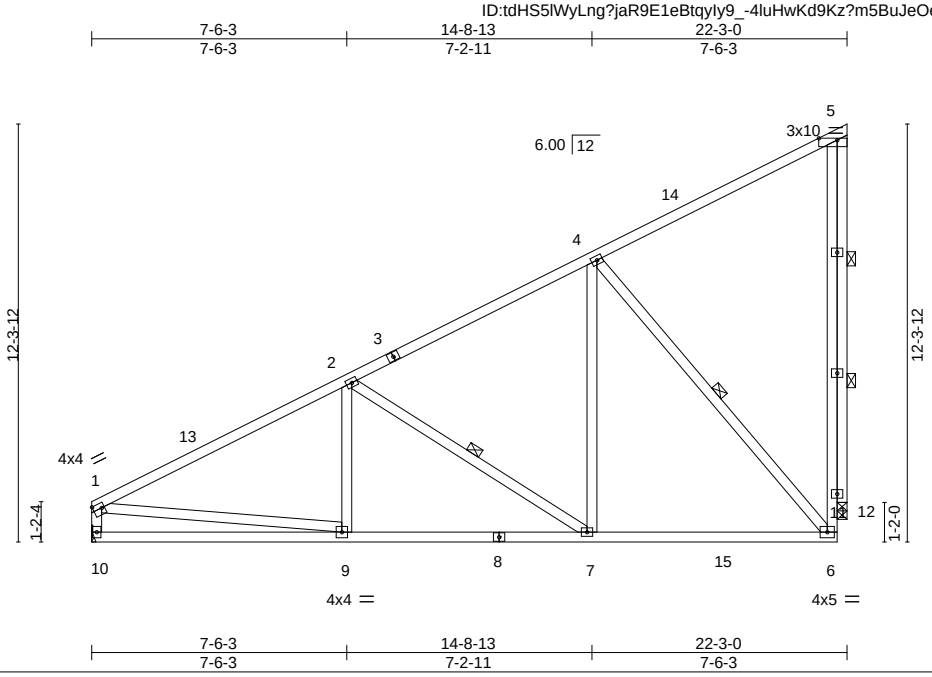

Plate Offsets (X,Y)-- [1:Edge,0-1-12], [5:0-6-8,Edge]

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	0.64	Vert(LL)	-0.13	6-7	>999	240	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.21	6-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.79	Horz(CT)	-0.02	12	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MS							Weight: 161 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 3-11-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 9-1-8 oc bracing.
WEBS	1 Row at midpt 2-7, 4-6 2 Rows at 1/3 pts 5-12

REACTIONS. (size) 10=Mechanical, 12=0-3-8
Max Horz 10=334(LC 16)
Max Uplift 12=-143(LC 16)
Max Grav 10=987(LC 28), 12=1022(LC 28)

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

TOP CHORD	1-2=-1343/0, 2-4=-809/0, 6-11=-119/869, 5-11=-119/869, 1-10=-866/47
BOT CHORD	9-10=-408/314, 7-9=-275/1181, 6-7=-139/679
WEBS	2-7=-596/161, 4-7=0/636, 4-6=-984/202, 1-9=0/882, 5-12=-1023/205

NOTES-

1) 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) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 21-9-12 zone; cantilever left and right exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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 3x4 MT20 unless otherwise indicated.
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) Bearing at joint(s) 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 143 lb uplift at joint 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.

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Job	Truss	Truss Type	Qty	Ply	SGR-LOT 89 ROOF
24-4221-A	M02	Monopitch	3	1	I74276529
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Tue Jun 17 13:51:27 2025 Page 1
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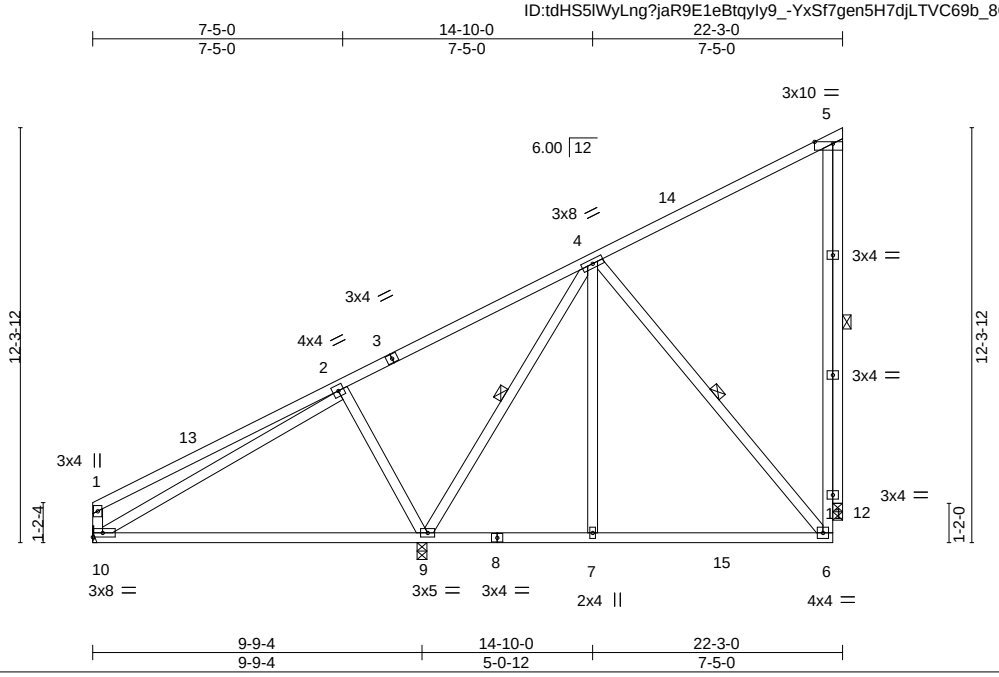

Plate Offsets (X,Y)-- [5:0-6-8,Edge]

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	0.66	Vert(LL)	-0.23	9-10	>507	240	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.46	9-10	>254	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.47	Horz(CT)	-0.04	12	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MS							Weight: 165 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.
WEBS	1 Row at midpt 4-9, 4-6, 5-12

REACTIONS. (size) 9=0-3-8, 10=Mechanical, 12=0-3-8
Max Horz 10=311(LC 16)
Max Uplift 9=-76(LC 16), 12=-109(LC 16)
Max Grav 9=1157(LC 28), 10=358(LC 28), 12=537(LC 28)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-386/96, 6-11=-61/382, 5-11=-61/382, 1-10=-314/99
WEBS 2-9=-427/231, 4-9=-574/50, 4-7=0/326, 4-6=-332/130, 5-12=-537/145

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) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 21-9-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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 a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Refer to girder(s) for truss to truss connections.
8) Bearing at joint(s) 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 76 lb uplift at joint 9 and 109 lb uplift at joint 12.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

June 18,2025

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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 89 ROOF
24-4221-A	M03	MONOPITCH	3	1	I74276530
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Tue Jun 17 13:51:27 2025 Page 1
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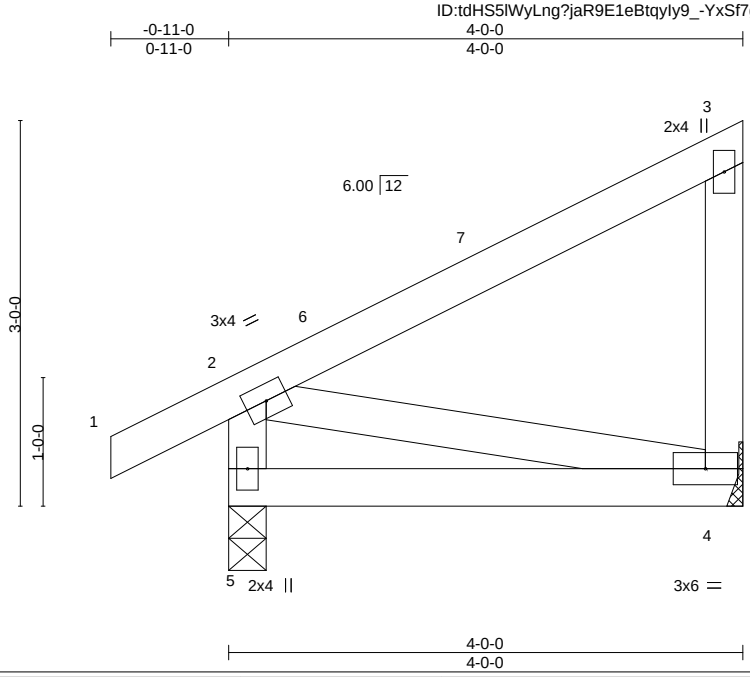

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	-0.01	4-5	>999	240	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.02	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	-0.00	4	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MP							Weight: 24 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 4-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

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

NOTES-
1) 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 3-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 39 lb uplift at joint 5 and 26 lb uplift at joint 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.

June 18,2025

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

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 89 ROOF
24-4221-A	PB01	Piggyback	19	1	I74276531
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Tue Jun 17 13:51:28 2025 Page 1
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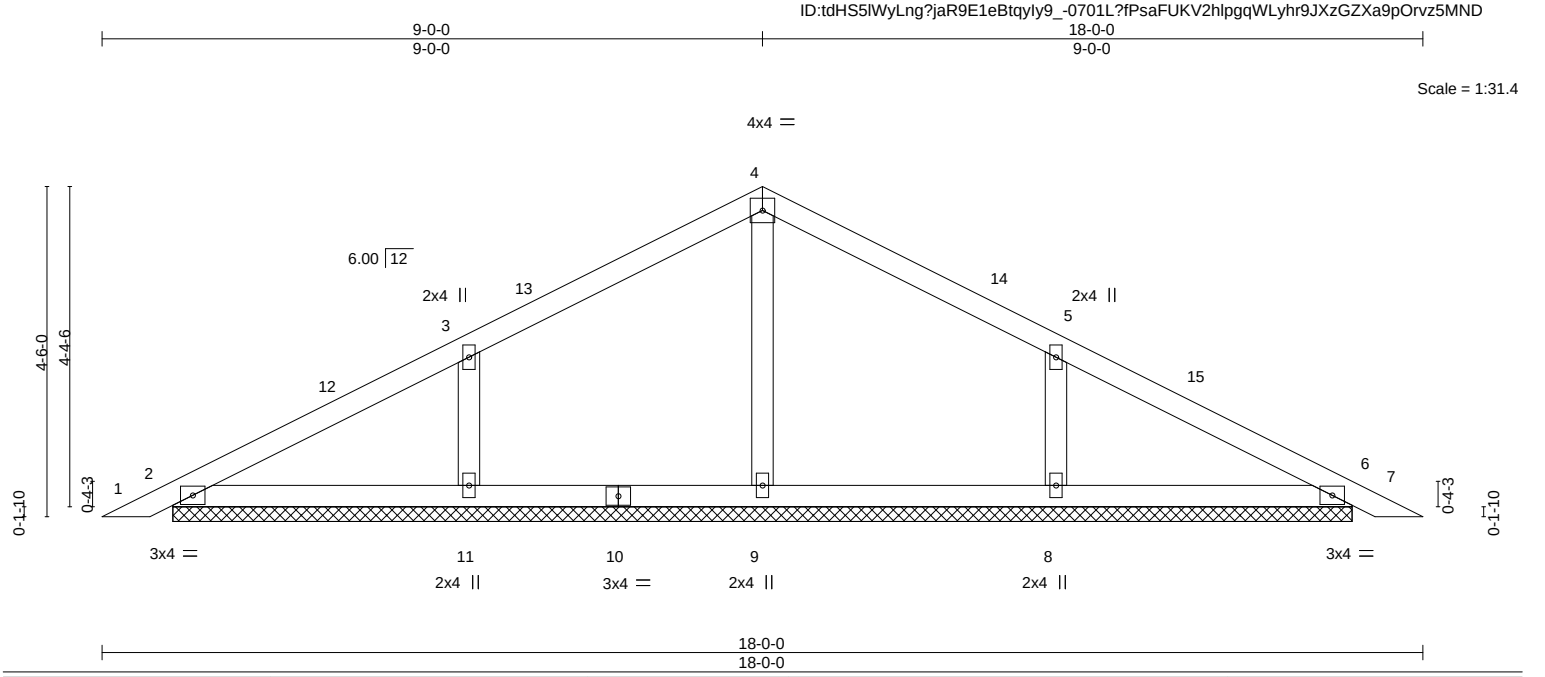

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	0.00	7	n/r	120	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	0.01	7	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S							Weight: 65 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 16-0-14.
(lb) - Max Horz 2=-72(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 2, 11, 8, 6
Max Grav All reactions 250 lb or less at joint(s) 2, 6 except 9=256(LC 2), 11=379(LC 34), 8=379(LC 35)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-11=-281/179, 5-8=-281/179

NOTES-
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) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 9-0-0, Exterior(2R) 9-0-0 to 12-0-0, Interior(1) 12-0-0 to 17-8-1 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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, 11, 8, 6.
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.

June 18,2025

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

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 89 ROOF
24-4221-A	PB01GE	GABLE	2	1	I74276532
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Tue Jun 17 13:51:29 2025 Page 1
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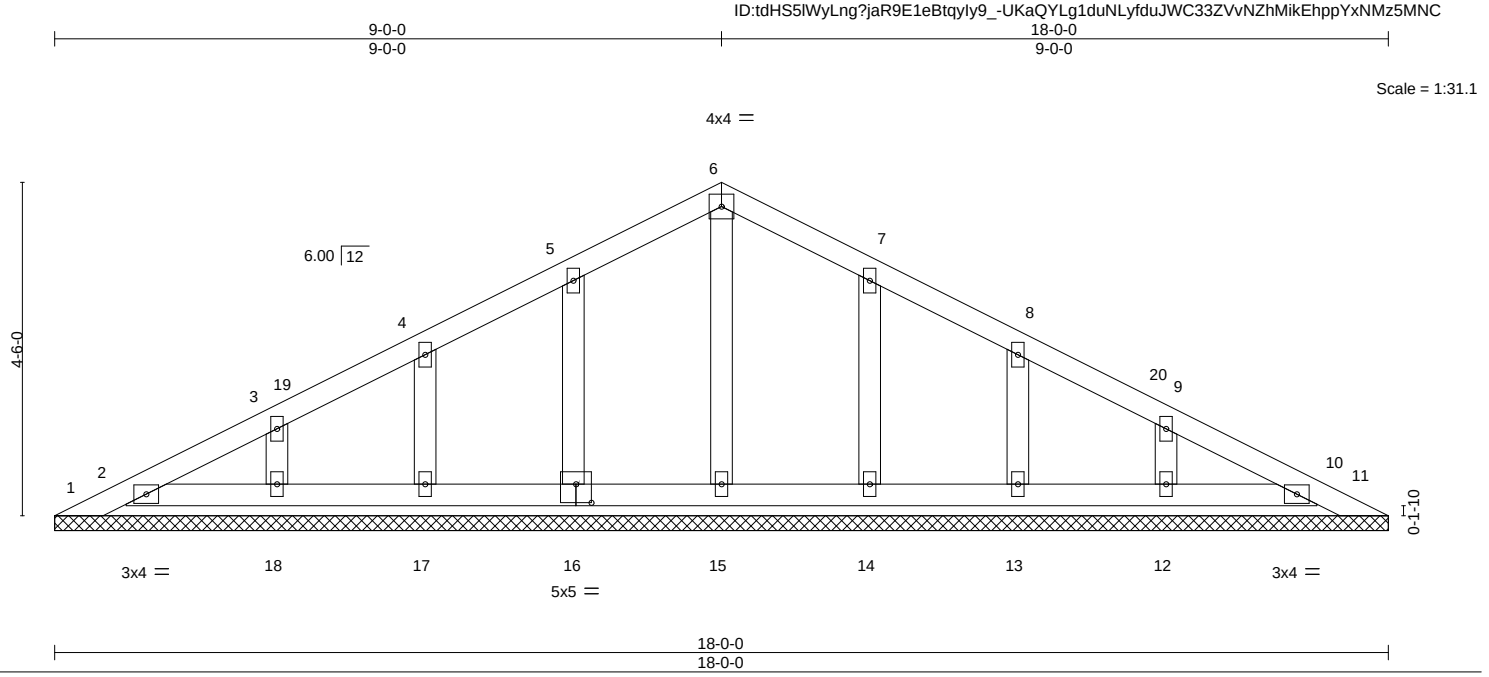

Plate Offsets (X,Y)-- [16:0-2-8,0-3-0]

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	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	11	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 76 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 18-0-0.
(lb) - Max Horz 1=72(LC 15)
Max Uplift All uplift 100 lb or less at joint(s) 1, 11, 2, 16, 17, 18, 14, 13, 12, 10
Max Grav All reactions 250 lb or less at joint(s) 1, 11, 2, 15, 16, 17, 18, 14, 13, 12, 10

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

NOTES-
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) 0-3-15 to 3-3-15, Exterior(2N) 3-3-15 to 9-0-0, Corner(3R) 9-0-0 to 12-0-0, Exterior(2N) 12-0-0 to 17-8-1 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) 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) 1, 11, 2, 16, 17, 18, 14, 13, 12, 10.
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) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

June 18,2025

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

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 89 ROOF
24-4221-A	PB02	GABLE	5	1	I74276533
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Tue Jun 17 13:51:30 2025 Page 1
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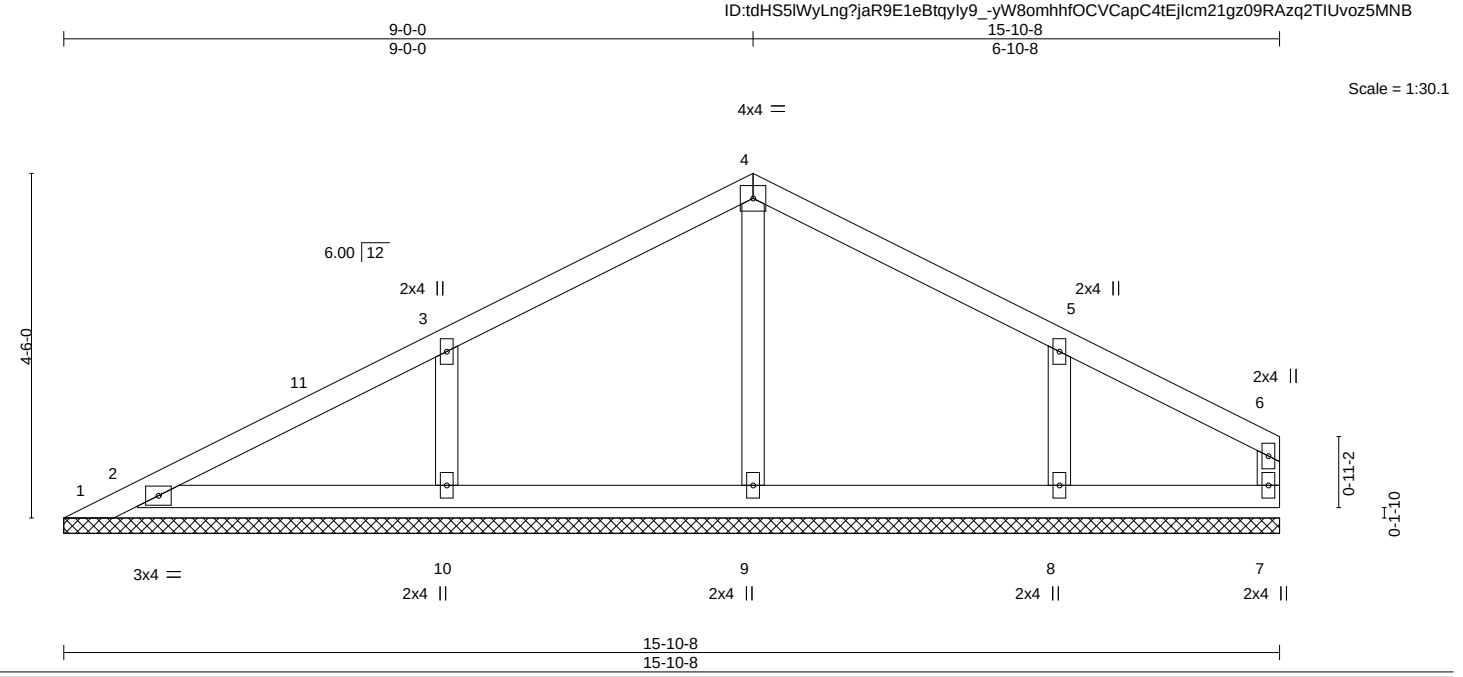

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	7	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										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

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 15-10-8.
(lb) - Max Horz 1=82(LC 15)
Max Uplift All uplift 100 lb or less at joint(s) 7, 2, 10, 8 except 1=-104(LC 28)
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 2=298(LC 2), 9=279(LC 2), 10=354(LC 34), 8=316(LC 35)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-10=-267/226

NOTES-

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) 0-3-15 to 3-3-15, Exterior(2N) 3-3-15 to 9-0-0, Corner(3R) 9-0-0 to 12-0-0, Exterior(2N) 12-0-0 to 15-8-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 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) 7, 2, 10, 8 except (jt=lb) 1=104.
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) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

June 18,2025

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

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 89 ROOF
24-4221-A	T01GE	COMMON SUPPORTED GAB	1	1	I74276534
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Tue Jun 17 13:51:30 2025 Page 1
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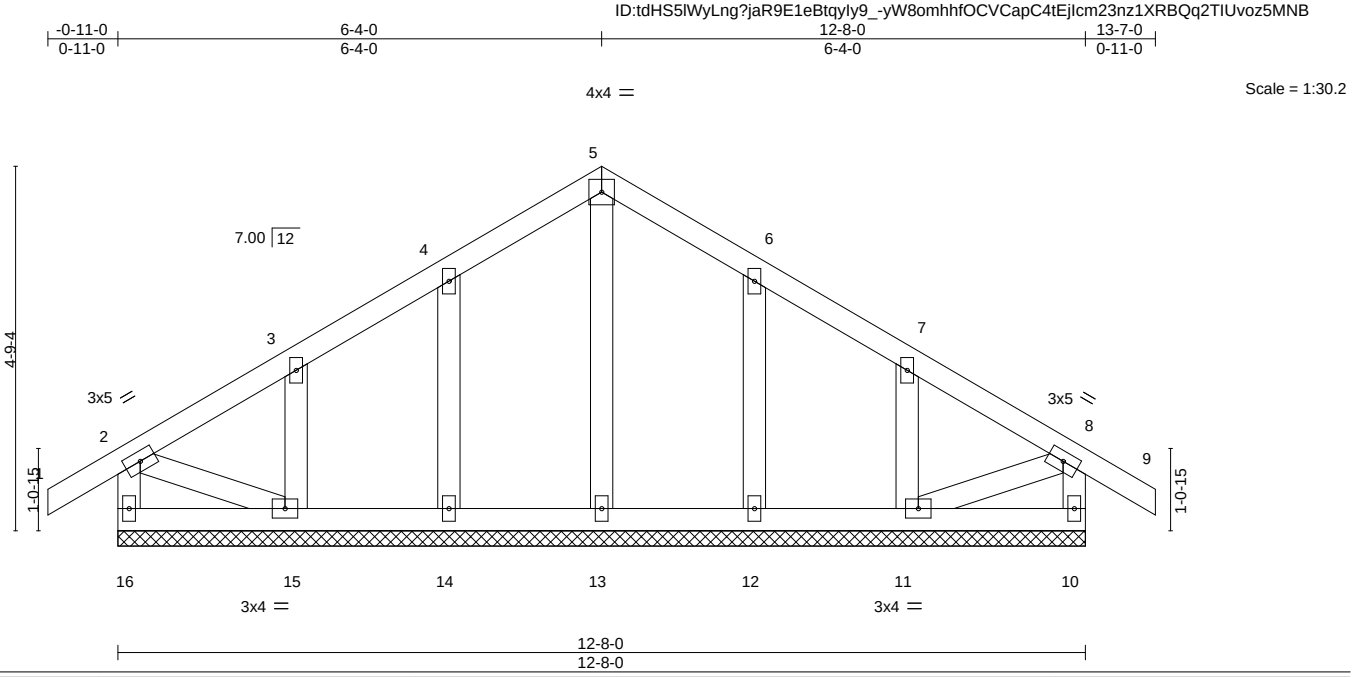

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	-0.00	9	n/r	120	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	9	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	10	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 73 lb	FT = 20%

LUMBER-

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

BRACING-

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

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

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

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-11-0 to 2-4-0, Exterior(2N) 2-4-0 to 6-4-0, Corner(3R) 6-4-0 to 9-4-0, Exterior(2N) 9-4-0 to 13-7-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
10) Gable studs spaced at 2-0-0 oc.
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 10, 14, 15, 12, 11.
14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

June 18,2025

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

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 89 ROOF
24-4221-A	T02G	Common Girder	1	3	I74276535

Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Tue Jun 17 13:51:31 2025 Page 1
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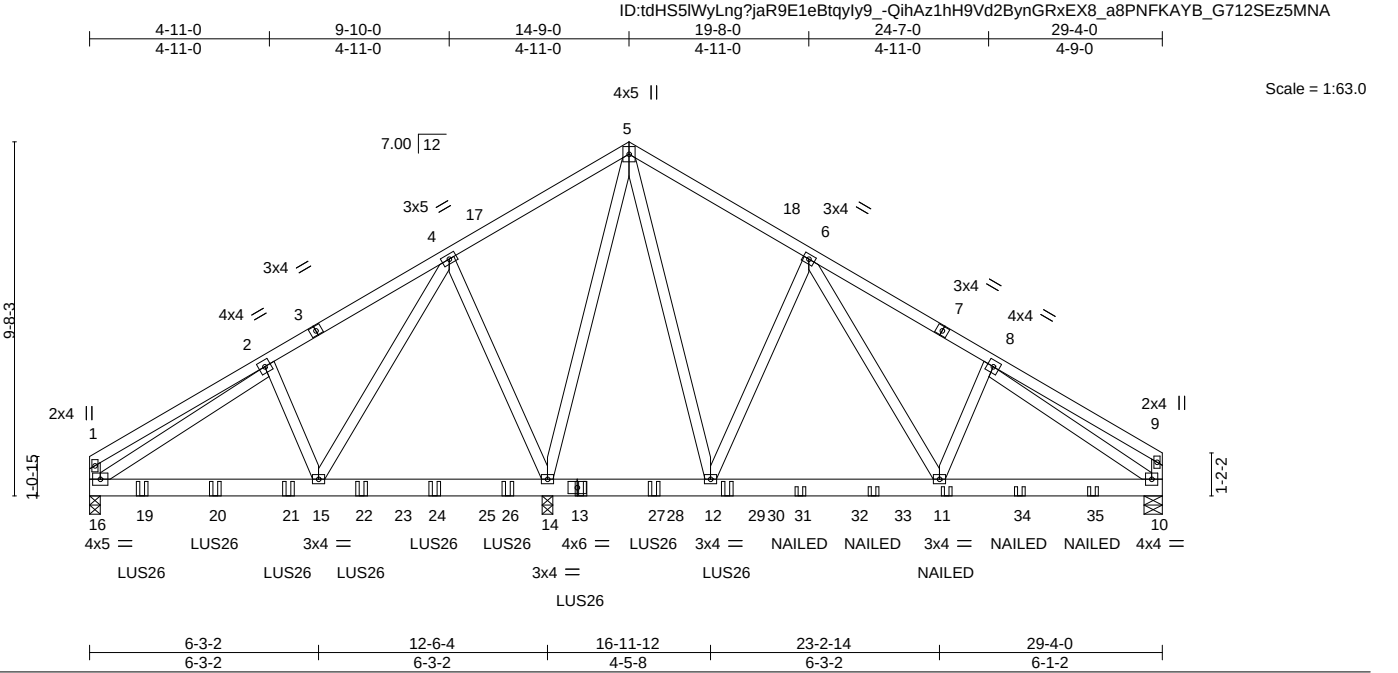

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	-0.04	14-15	>999	240	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.07	14-15	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.39	Horz(CT)	0.01	10	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 645 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 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 16=0-3-8, 10=0-6-0, 14=0-3-8
Max Horz 16=197(LC 36)
Max Uplift 16=-128(LC 12)
Max Grav 16=1802(LC 29), 10=1115(LC 30), 14=5638(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-718/160, 2-4=-1639/124, 4-5=0/872, 5-6=-338/183, 6-8=-1217/0, 8-9=-341/37, 1-16=-464/106, 9-10=-266/42
BOT CHORD 15-16=-84/1424, 12-14=-274/154, 11-12=0/455, 10-11=0/1034
WEBS 4-15=-46/2841, 6-12=-850/63, 6-11=0/1105, 2-16=-1058/0, 8-10=-1006/0, 5-14=-2024/0, 5-12=0/1413, 4-14=-1719/145

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 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
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=29ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
6) Unbalanced snow loads have been considered for this design.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, 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) 16=128.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-5-4 from the left end to 7-5-4 to connect truss(es) to front face of bottom chord.
12) Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 9-5-4 from the left end to 11-5-4 to connect truss(es) to front face of bottom chord.

June 18,2025

Continued on page 2

ENGINEERING BY TRENCO
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NOTES-

13) Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 13-5-4 from the left end to 17-5-4 to connect truss(es) to front face of bottom chord.
14) Fill all nail holes where hanger is in contact with lumber.
15) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-5=-43, 5-9=-43, 10-16=-20
   Concentrated Loads (lb)
   Vert: 13=-246(F) 11=-132(F) 19=-501(F) 20=-501(F) 21=-501(F) 22=-499(F) 24=-686(F) 26=-686(F) 27=-246(F) 29=-246(F) 31=-133(F) 33=-132(F) 34=-132(F) 35=-132(F)

June 18,2025

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

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 89 ROOF
24-4221-A	T02SGE	GABLE	1	1	I74276536
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Tue Jun 17 13:51:32 2025 Page 1
ID:tdHS5lWyLng?jaR9E1eBtqyIy9_-vvFYANiwwplvp6MT_flmhB7FTnXnvy37Vnnb_hz5MN9

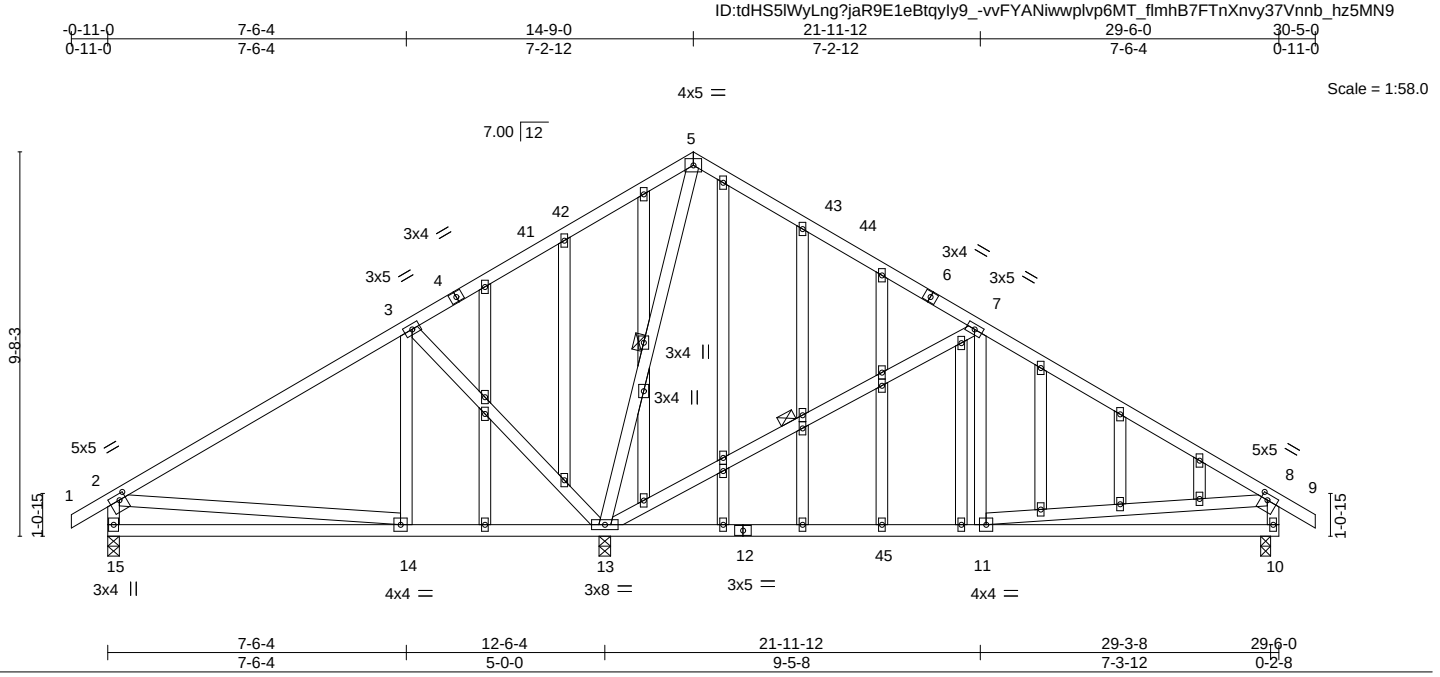

Plate Offsets (X,Y)-- [2:0-2-0,0-1-12], [8:0-2-0,0-1-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.71	Vert(LL)	-0.19	11-13	>999	240	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.35	11-13	>577	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.61	Horz(CT)	0.02	10	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MS							Weight: 256 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.
WEBS	1 Row at midpt 5-13, 7-13

REACTIONS. (size) 15=0-3-8, 13=0-3-8, 10=0-3-0
Max Horz 15=-210(LC 14)
Max Uplift 15=-59(LC 16), 13=-78(LC 16), 10=-71(LC 16)
Max Grav 15=466(LC 34), 13=1559(LC 28), 10=719(LC 29)

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

TOP CHORD	2-3=-362/68, 3-5=0/372, 7-8=-746/78, 2-15=-394/108, 8-10=-619/111
BOT CHORD	14-15=-104/461, 13-14=-111/271, 11-13=0/544, 10-11=-66/284
WEBS	5-13=-569/37, 7-13=-823/118, 7-11=0/396, 3-13=-629/143, 8-11=0/303

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=30ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 14-9-0, Exterior(2R) 14-9-0 to 17-9-0, Interior(1) 17-9-0 to 30-5-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) 15, 13, 10.
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 18,2025

ENGINEERING BY TRENCO
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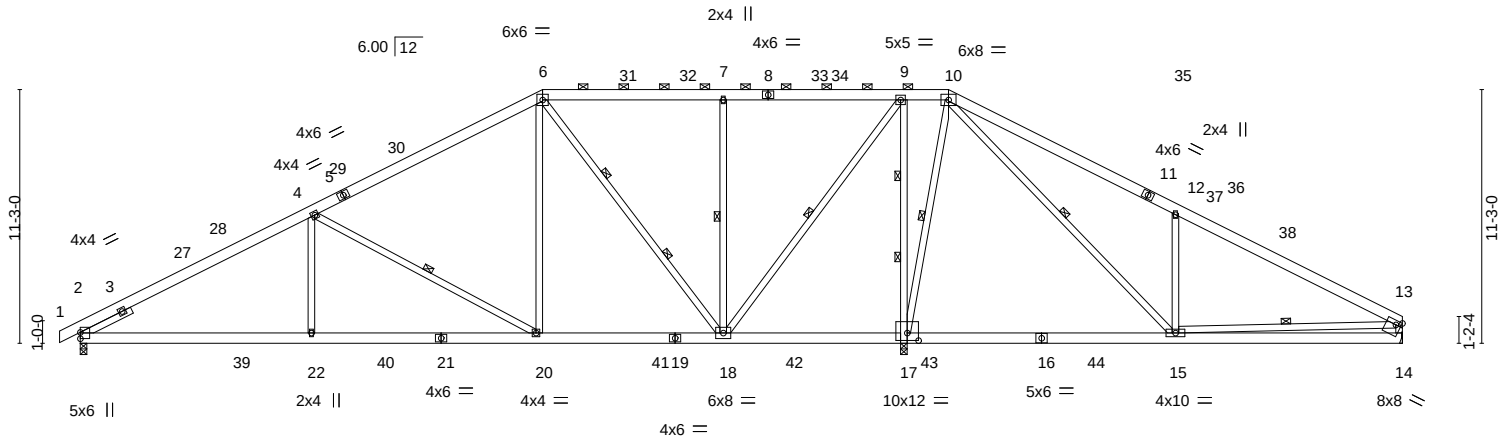
Job	Truss	Truss Type	Qty	Ply	SGR-LOT 89 ROOF
24-4221-A	T03	PIGGYBACK BASE	3	1	I74276537
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Tue Jun 17 13:51:33 2025 Page 1
ID:tdHS5lWyLng?jaR9E1eBtqyIy9_-N5pwOjjYh7tmRGwfYMG?DPgPnAujeMqGkRW9W7z5MN8

-0-11-0	10-3-0	20-6-0	28-6-2	36-6-4	38-6-0	48-6-12	58-7-8
0-11-0	10-3-0	10-3-0	8-0-2	8-0-2	1-11-12	10-0-12	10-0-12

Scale = 1:102.2



10-3-0	20-6-0	28-6-2	36-6-4	48-6-12	58-7-8
10-3-0	10-3-0	8-0-2	8-0-2	12-0-8	10-0-12

Plate Offsets (X,Y)-- [14:Edge,0-2-4], [17:0-6-0,0-4-0]

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	0.80	Vert(LL)	-0.26	15-17	>999	240	MT20	244/190
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.39	15-17	>668	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.04	17	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 461 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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-1-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-10.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 4-20, 7-18, 9-18, 10-17, 10-15, 13-15 2 Rows at 1/3 pts 6-18, 9-17

REACTIONS. (size) 2=0-3-8, 14=Mechanical, 17=0-3-8
Max Horz 2=236(LC 15)
Max Uplift 2=-115(LC 16), 14=-49(LC 16), 17=-147(LC 16)
Max Grav 2=1562(LC 28), 14=643(LC 29), 17=3386(LC 30)

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

TOP CHORD	2-4=-2258/236, 4-6=-1298/246, 6-7=-477/239, 7-9=-477/239, 9-10=0/853, 10-12=-746/306, 12-13=-682/121, 13-14=-522/110
BOT CHORD	2-22=-136/2151, 20-22=-136/2151, 18-20=0/1131, 17-18=-867/182, 15-17=-622/150, 14-15=-85/358
WEBS	4-22=0/507, 4-20=-1169/190, 6-20=0/963, 6-18=-1188/80, 7-18=-667/168, 9-18=-144/2020, 9-17=-1917/233, 10-17=-1356/175, 10-15=-204/1587, 12-15=-696/302, 13-15=-121/258

NOTES-

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=59ft; eave=7ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 4-11-6, Interior(1) 4-11-6 to 20-6-0, Exterior(2R) 20-6-0 to 28-6-2, Interior(1) 28-6-2 to 38-6-0, Exterior(2R) 38-6-0 to 46-9-8, Interior(1) 46-9-8 to 58-5-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) Bearing at joint(s) 17 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14 except (jt=lb) 2=115, 17=147.

June 18,2025

Continued on page 2

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Edenton, NC 27932

NOTES-

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

June 18,2025

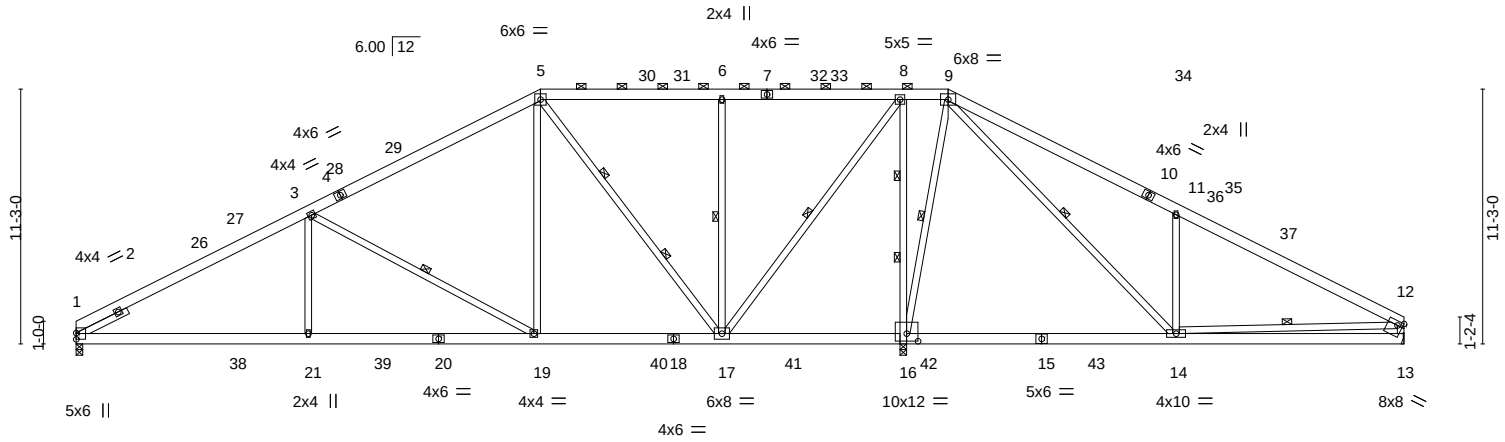
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 89 ROOF
24-4221-A	T03A	PIGGYBACK BASE	1	1	I74276538
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Tue Jun 17 13:51:35 2025 Page 1
ID:tdHS5lWyLng?jaR9E1eBtqyly9_-JTxhpPkoDk8Uga41gnlTJqllH_aB6GKZBl?Fb?z5MN6

10-3-0	20-6-0	28-6-2	36-6-4	38-6-0	48-6-12	58-7-8
10-3-0	10-3-0	8-0-2	8-0-2	1-11-12	10-0-12	10-0-12

Scale = 1:101.7



10-3-0	20-6-0	28-6-2	36-6-4	48-6-12	58-7-8
10-3-0	10-3-0	8-0-2	8-0-2	12-0-8	10-0-12

Plate Offsets (X,Y)-- [13:Edge,0-2-4], [16:0-6-0,0-4-0]

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

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-1-9 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-9.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 3-19, 6-17, 8-17, 9-16, 9-14, 12-14 2 Rows at 1/3 pts 5-17, 8-16

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

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

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

NOTES-

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=59ft; eave=7ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 5-10-6, Interior(1) 5-10-6 to 20-6-0, Exterior(2R) 20-6-0 to 28-6-2, Interior(1) 28-6-2 to 38-6-0, Exterior(2R) 38-6-0 to 46-9-8, Interior(1) 46-9-8 to 58-5-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Refer to girder(s) for truss to truss connections.
9) Bearing at joint(s) 16 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 13 except (jt=lb) 16=147.
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.

Continued on page 2

June 18,2025

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NOTES-

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

June 18,2025

ENGINEERING BY TRENCO
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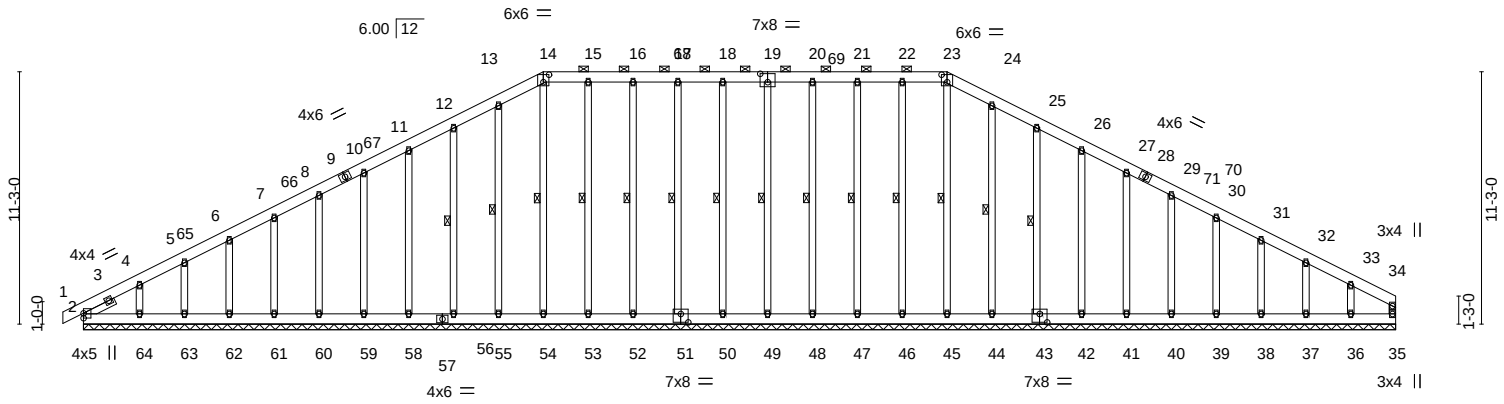
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 89 ROOF
24-4221-A	T03GE	PIGGYBACK BASE SUPPO	1	1	I74276539
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Tue Jun 17 13:51:37 2025 Page 1
ID:tdHS5lWyLng?jaR9E1eBtqyly9_-Fs3RE4m2kLOCvtEQnCLxOFqE?oQxaKAsf3UMfuz5MN4

-0-11-0 20-6-0 38-6-0 58-6-0
0-11-0 20-6-0 18-0-0 20-0-0

Scale = 1:102.7



58-6-0
58-6-0

Plate Offsets (X,Y)-- [14:0-3-0,0-4-0], [19:0-4-0,0-4-8], [23:0-3-0,0-4-0], [43:0-4-0,0-4-8], [51:0-4-0,0-4-8]

LOADING (psf)		SPACING-	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)	-0.00	1	n/r	120	MT20	244/190
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	0.00	1	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.01	35	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 588 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 1-6-4

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.): 14-23.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 23-45, 22-46, 21-47, 20-48, 19-49, 18-50, 17-51, 16-52, 15-53, 14-54, 13-55, 12-56, 24-44, 25-43

REACTIONS. All bearings 58-6-0.
(lb) - Max Horz 2=234(LC 15)
Max Uplift All uplift 100 lb or less at joint(s) 35, 2, 46, 47, 48, 49, 50, 51, 52, 55, 56, 58, 59, 60, 61, 62, 63, 64, 44, 43, 42, 41, 40, 39, 38, 37, 36
Max Grav All reactions 250 lb or less at joint(s) 35, 2, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 58, 59, 60, 61, 62, 63, 64, 44, 43, 42, 41, 40, 39, 38, 37, 36

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 11-12=-122/253, 12-13=-125/301, 13-14=-138/339, 14-15=-124/324, 15-16=-124/324, 16-17=-124/324, 17-18=-123/324, 18-19=-123/324, 19-20=-123/324, 20-21=-123/324, 21-22=-123/324, 22-23=-124/323, 23-24=-138/339, 24-25=-124/300, 25-26=-106/252

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=59ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-11-0 to 4-11-6, Exterior(2N) 4-11-6 to 20-6-0, Corner(3R) 20-6-0 to 26-6-0, Exterior(2N) 26-6-0 to 38-6-0, Corner(3R) 38-6-0 to 44-6-0, Exterior(2N) 44-6-0 to 58-4-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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.

June 18,2025

Continued on page 2

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

NOTES-

13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 35, 2, 46, 47, 48, 49, 50, 51, 52, 55, 56, 58, 59, 60, 61, 62, 63, 64, 44, 43, 42, 41, 40, 39, 38, 37, 36.
14) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
15) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
16) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

June 18,2025

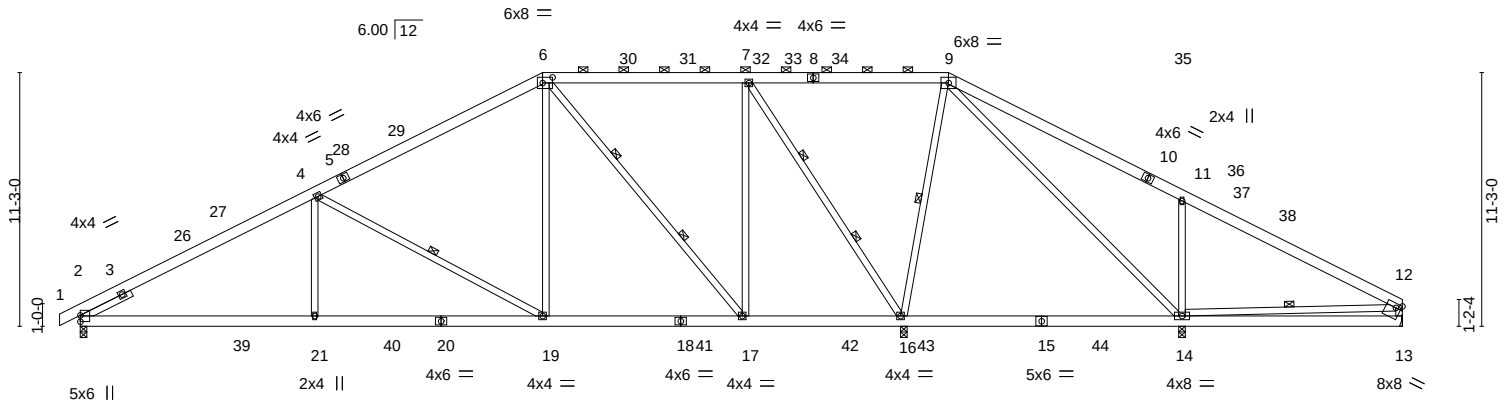
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 89 ROOF
24-4221-A	T04	PIGGYBACK BASE	4	1	I74276540
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Tue Jun 17 13:51:38 2025 Page 1
ID:tdHS5lWyLng?jaR9E1eBtqyIy9_-j2dpRQngVfW3X1pcLvsAwSNFcBbMJbP0tjEwCKz5MN3

-0-11-0	10-4-12	20-6-0	29-6-0	38-6-0	48-10-4	58-7-8
0-11-0	10-4-12	10-1-4	9-0-0	9-0-0	10-4-4	9-9-4

Scale = 1:102.2



10-4-12	20-6-0	29-6-0	36-6-4	48-10-4	58-7-8
10-4-12	10-1-4	9-0-0	7-0-4	12-4-0	9-9-4

Plate Offsets (X,Y)-- [6:0-5-4,0-3-0], [13:Edge,0-2-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.79	Vert(LL)	-0.21	14-16	>693	240	MT20	244/190
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.31	14-16	>477	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.94	Horz(CT)	0.06	16	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 445 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.2
BOT CHORD	2x6 SP No.2
WEBS	2x4 SP No.3 *Except* 7-16: 2x4 SP No.1
SLIDER	Left 2x4 SP No.3 2-6-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-11-15 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-9.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 14-16.
WEBS	1 Row at midpt 4-19, 9-16, 12-14 2 Rows at 1/3 pts 6-17, 7-16

REACTIONS. All bearings 0-3-8 except (jt=length) 13=Mechanical.
(lb) - Max Horz 2=236(LC 15)
Max Uplift All uplift 100 lb or less at joint(s) 16 except 2=-124(LC 16), 14=-135(LC 16)
Max Grav All reactions 250 lb or less at joint(s) 13 except 2=1623(LC 28), 16=2882(LC 28), 14=1062(LC 49)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-2368/257, 4-6=-1404/268, 6-7=-517/265, 7-9=0/641, 9-11=-42/489, 11-12=-83/412
BOT CHORD 2-21=-150/2245, 19-21=-150/2245, 17-19=0/1253, 16-17=0/546, 14-16=-465/137
WEBS 4-21=0/508, 4-19=-1168/190, 6-19=0/998, 6-17=-1214/61, 7-17=0/1209, 7-16=-1980/179, 9-16=-769/135, 9-14=-24/274, 11-14=-714/307, 12-14=-496/170

NOTES-
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=59ft; eave=7ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 4-11-6, Interior(1) 4-11-6 to 20-6-0, Exterior(2R) 20-6-0 to 28-9-8, Interior(1) 28-9-8 to 38-6-0, Exterior(2R) 38-6-0 to 46-9-8, Interior(1) 46-9-8 to 58-5-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) 16 except (jt=lb) 2=124, 14=135.
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.

June 18,2025

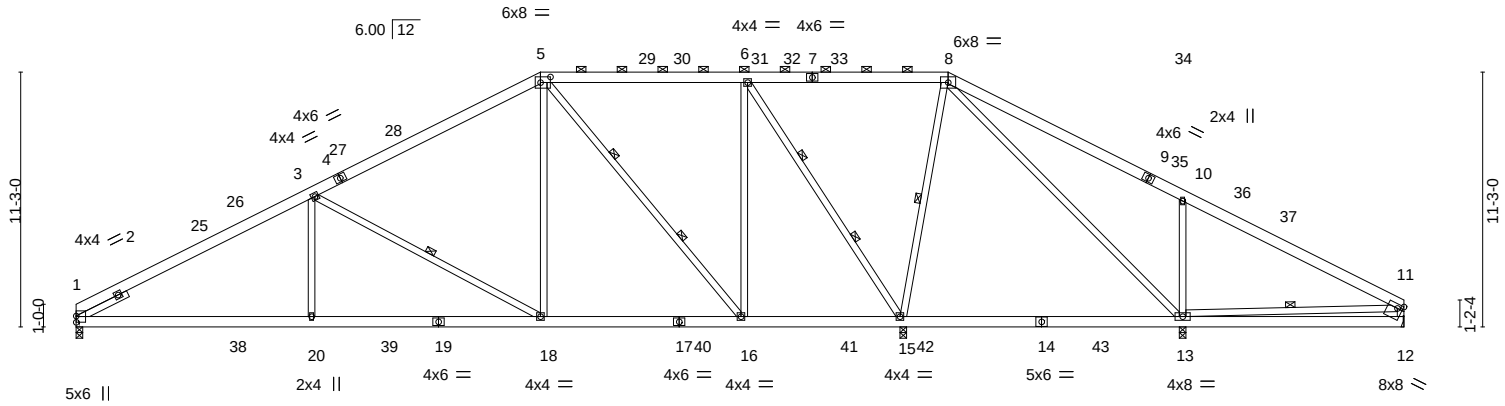
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 89 ROOF
24-4221-A	T04A	PIGGYBACK BASE	1	1	I74276541
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Tue Jun 17 13:51:39 2025 Page 1
ID:tdHS5lWyLng?jaR9E1eBtqyIy9_-BFACemoJGzew9BOpvdNPTgvQNbxg22f96NzTknz5MN2

10-4-12	20-6-0	29-6-0	38-6-0	48-10-4	58-7-8
10-4-12	10-1-4	9-0-0	9-0-0	10-4-4	9-9-4

Scale = 1:101.7



10-4-12	20-6-0	29-6-0	36-6-4	48-10-4	58-7-8
10-4-12	10-1-4	9-0-0	7-0-4	12-4-0	9-9-4

Plate Offsets (X,Y)-- [5:0-5-4,0-3-0], [12:Edge,0-2-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.79	Vert(LL)	-0.21	13-15	>693	240	MT20	244/190
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.31	13-15	>477	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.94	Horz(CT)	0.06	15	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 443 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.2
BOT CHORD	2x6 SP No.2
WEBS	2x4 SP No.3 *Except* 6-15: 2x4 SP No.1
SLIDER	Left 2x4 SP No.3 2-6-0

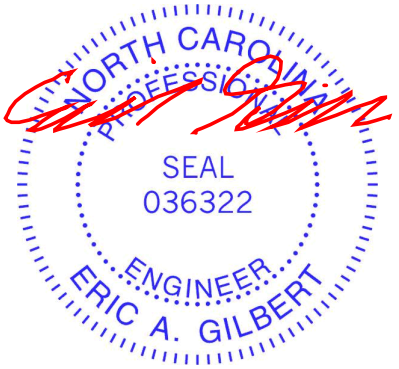
BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-11-15 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-8.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 13-15.
WEBS	1 Row at midpt 3-18, 8-15, 11-13 2 Rows at 1/3 pts 5-16, 6-15

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

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

NOTES-
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=59ft; eave=7ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 5-10-6, Interior(1) 5-10-6 to 20-6-0, Exterior(2R) 20-6-0 to 28-9-8, Interior(1) 28-9-8 to 38-6-0, Exterior(2R) 38-6-0 to 46-9-8, Interior(1) 46-9-8 to 58-5-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 15 except (jt=lb) 13=135.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



June 18,2025

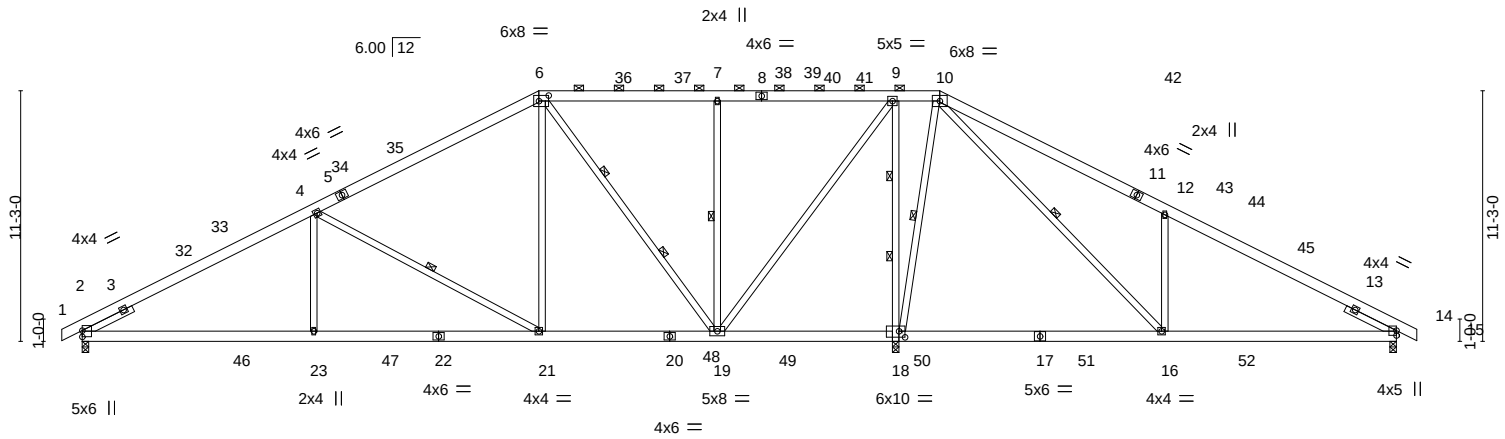
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 89 ROOF
24-4221-A	T05	PIGGYBACK BASE	2	1	I74276542
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Tue Jun 17 13:51:41 2025 Page 1
ID:tdHS5lWyLng?jaR9E1eBtqyly9_-8dIy3SpZoaueOVYB02PtY5?m8PdAWzRSahSaofz5MN0

-0-11-0	10-4-12	20-6-0	28-6-2	36-6-4	38-6-0	48-7-4	59-0-0	59-11-0
0-11-0	10-4-12	10-1-4	8-0-2	8-0-2	1-11-12	10-1-4	10-4-12	0-11-0

Scale = 1:103.4



10-4-12	20-6-0	28-6-2	36-6-4	48-7-4	59-0-0
10-4-12	10-1-4	8-0-2	8-0-2	12-1-0	10-4-12

Plate Offsets (X,Y)-- [6:0-5-4,0-3-0], [18:0-3-4,0-3-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.77	Vert(LL)	-0.26	16-18	>999	240	MT20	244/190
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.40	16-18	>682	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.86	Horz(CT)	0.05	18	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 454 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 4-5-7 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 6-10.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 4-21, 7-19, 10-18, 10-16 2 Rows at 1/3 pts 6-19, 9-18

REACTIONS. (size) 2=0-3-8, 14=0-3-8, 18=0-3-8
Max Horz 2=222(LC 15)
Max Uplift 2=-130(LC 16), 14=-104(LC 16), 18=-109(LC 16)
Max Grav 2=1598(LC 28), 14=828(LC 29), 18=3321(LC 28)

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

TOP CHORD	2-4=-2320/271, 4-6=-1345/276, 6-7=-532/276, 7-9=-532/276, 9-10=0/797, 10-12=-989/349, 12-14=-810/170
BOT CHORD	2-23=-128/2207, 21-23=-128/2207, 19-21=0/1203, 18-19=-771/137, 16-18=-527/115, 14-16=-38/702
WEBS	4-23=0/521, 4-21=-1184/185, 6-21=0/964, 6-19=-1174/46, 7-19=-667/170, 9-19=-124/1978, 9-18=-1897/208, 10-18=-1353/166, 10-16=-213/1706, 12-16=-698/297

NOTES-

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=59ft; eave=7ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 4-11-13, Interior(1) 4-11-13 to 20-6-0, Exterior(2R) 20-6-0 to 28-10-2, Interior(1) 28-10-2 to 38-6-0, Exterior(2R) 38-6-0 to 46-10-2, Interior(1) 46-10-2 to 59-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) Bearing at joint(s) 18 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=130, 14=104, 18=109.
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.

Continued on page 2

NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT

June 18,2025

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

NOTES-

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

June 18,2025

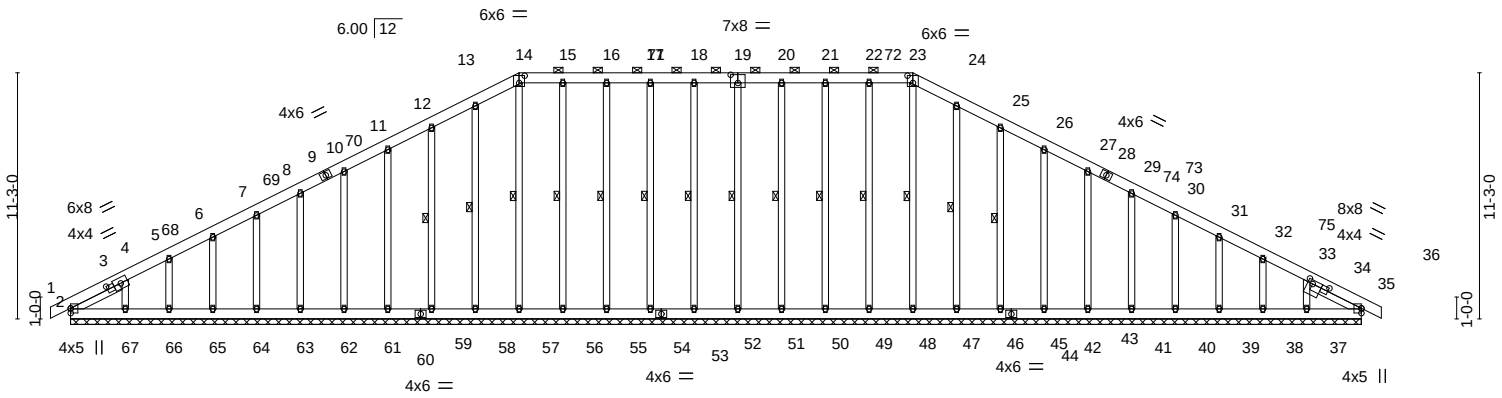
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 89 ROOF
24-4221-A	T05GE	PIGGYBACK BASE SUPPO	1	1	I74276543
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Tue Jun 17 13:51:43 2025 Page 1
ID:tdHS5lWyLng?jaR9E1eBtqyly9_-40QiU8rpKB8Mdpha8TSLdW4lwCTl_1fl1?xgtYz5MN_

-0-11-0 20-6-0 38-6-0 59-0-0 59-11-0
0-11-0 20-6-0 18-0-0 20-6-0 0-11-0

Scale = 1:105.3



59-0-0
59-0-0

Plate Offsets (X,Y)-- [2:1-10-12,0-2-0], [14:0-3-0,0-4-0], [19:0-4-0,0-4-8], [23:0-3-0,0-4-0], [33:0-2-12,0-2-1], [35:1-8-10,0-2-0]

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	35	n/r	120	MT20	244/190
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	35	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.01	35	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 597 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.2
BOT CHORD	2x6 SP No.2
OTHERS	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 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 14-23.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 23-47, 22-48, 21-49, 20-50, 19-51, 18-52, 17-54, 16-55, 15-56, 14-57, 13-58, 12-59, 24-46, 25-45

REACTIONS. All bearings 59-0-0.
(lb) - Max Horz 2=-216(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 2, 48, 49, 50, 51, 52, 54, 55, 58, 59, 61, 62, 63, 64, 65, 66, 67, 46, 45, 43, 42, 41, 40, 39, 38, 37
Max Grav All reactions 250 lb or less at joint(s) 2, 47, 48, 49, 50, 51, 52, 54, 55, 56, 57, 58, 59, 61, 62, 63, 64, 65, 66, 67, 46, 45, 43, 42, 41, 40, 39, 38, 37, 35

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 12-13=-104/261, 13-14=-120/300, 14-15=-112/289, 15-16=-112/289, 16-17=-112/289, 17-18=-112/289, 18-19=-112/289, 19-20=-112/289, 20-21=-112/289, 21-22=-112/289, 22-23=-112/289, 23-24=-120/300, 24-25=-104/261

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=59ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-11-0 to 4-11-13, Exterior(2N) 4-11-13 to 20-6-0, Corner(3R) 20-6-0 to 26-6-0, Exterior(2N) 26-6-0 to 38-6-0, Corner(3R) 38-6-0 to 44-6-0, Exterior(2N) 44-6-0 to 59-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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.

June 18,2025

Continued on page 2

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NOTES-

13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 48, 49, 50, 51, 52, 54, 55, 58, 59, 61, 62, 63, 64, 65, 66, 67, 46, 45, 43, 42, 41, 40, 39, 38, 37.
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.

June 18,2025

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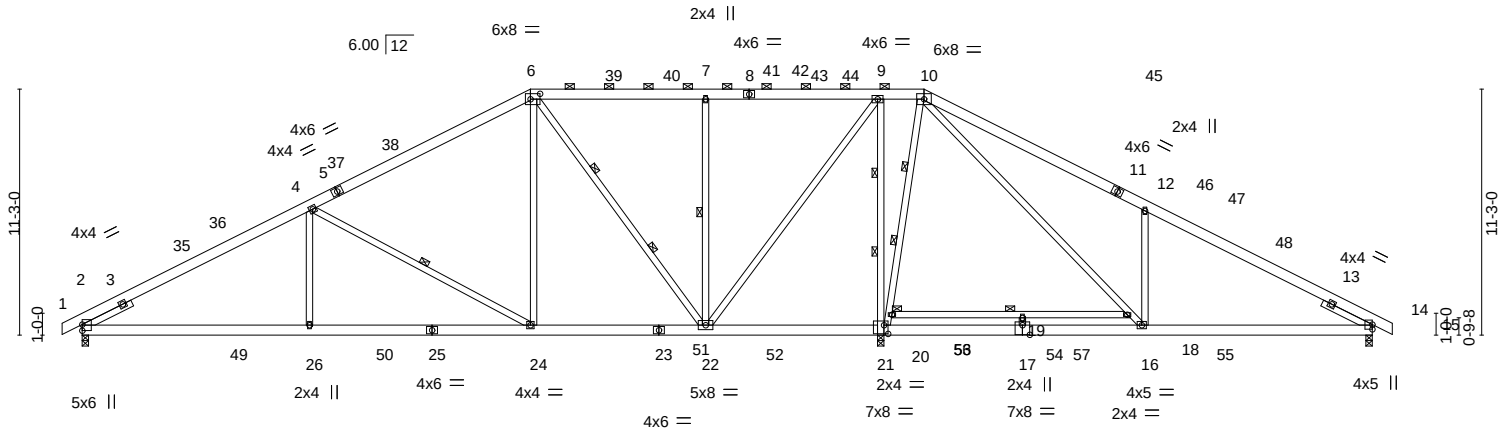
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 89 ROOF
24-4221-A	T05S	PIGGYBACK BASE	8	1	I74276544
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Tue Jun 17 13:51:44 2025 Page 1
ID:tdHS5lWyLng?jaR9E1eBtqyly9_-YC_5iUrR5VGCFyGmhAzaAjdIbcbljH_uGfhEO_z5MMz

-0-11-0	10-4-12	20-6-0	28-6-2	36-6-4	38-6-0	48-7-4	59-0-0	59-11-0
0-11-0	10-4-12	10-1-4	8-0-2	8-0-2	1-11-12	10-1-4	10-4-12	0-11-0

Scale = 1:105.4



10-4-12	20-6-0	28-6-2	36-6-4	48-7-4	59-0-0
10-4-12	10-1-4	8-0-2	8-0-2	12-1-0	10-4-12

Plate Offsets (X,Y)-- [6:0-5-4,0-3-0], [17:0-4-0,0-5-4], [21:0-2-4,0-4-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.76	Vert(LL)	-0.37	19-20	>720	240	MT20	244/190
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.58	19-20	>462	180		
TCDL	10.0	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.03	21	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 471 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.2
BOT CHORD	2x6 SP 2400F 2.0E *Except*
	21-23,23-25: 2x6 SP No.2, 18-20: 2x4 SP No.1
WEBS	2x4 SP No.3 *Except*
	10-21,10-16: 2x4 SP No.2
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 4-6-8 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 6-10.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing. Except: 6-0-0 oc bracing: 18-20
WEBS	1 Row at midpt 4-24, 7-22
	2 Rows at 1/3 pts 6-22, 9-21, 10-20

REACTIONS. (size) 2=0-3-8, 14=0-3-8, 21=0-3-8
Max Horz 2=222(LC 15)
Max Uplift 2=-141(LC 16), 14=-87(LC 16)
Max Grav 2=1584(LC 28), 14=923(LC 29), 21=3717(LC 28)

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

TOP CHORD	2-4=-2291/291, 4-6=-1315/299, 6-7=-512/305, 7-9=-512/305, 9-10=0/801, 10-12=-1220/310, 12-14=-1048/121
BOT CHORD	2-26=-146/2182, 24-26=-146/2182, 22-24=0/1176, 21-22=-775/99, 17-21=-257/107, 16-17=-257/107, 14-16=-2/910, 19-20=-353/0, 18-19=-353/0
WEBS	4-26=0/523, 4-24=-1184/183, 6-24=0/970, 6-22=-1193/31, 7-22=-661/169, 9-22=-114/1951, 9-21=-1922/204, 20-21=-1645/66, 10-20=-1418/106, 10-18=-117/2036, 16-18=-142/1738, 12-16=-689/300, 17-19=-292/0

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=59ft; eave=7ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 4-11-13, Interior(1) 4-11-13 to 20-6-0, Exterior(2R) 20-6-0 to 28-10-2, Interior(1) 28-10-2 to 38-6-0, Exterior(2R) 38-6-0 to 46-10-2, Interior(1) 46-10-2 to 59-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) Bearing at joint(s) 21 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

June 18,2025

Continued on page 2

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NOTES-

10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14 except (jt=lb) 2=141.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

June 18,2025

ENGINEERING BY TRENCO
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 89 ROOF
24-4221-A	T06	PIGGYBACK BASE	5	1	I74276545
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Tue Jun 17 13:51:45 2025 Page 1
ID:tdHS5lWyLng?jaR9E1eBtqyly9_-0PYTvps3spO3t6ryFtUpix9Q?0xkSnP1VJQnwQz5MMy

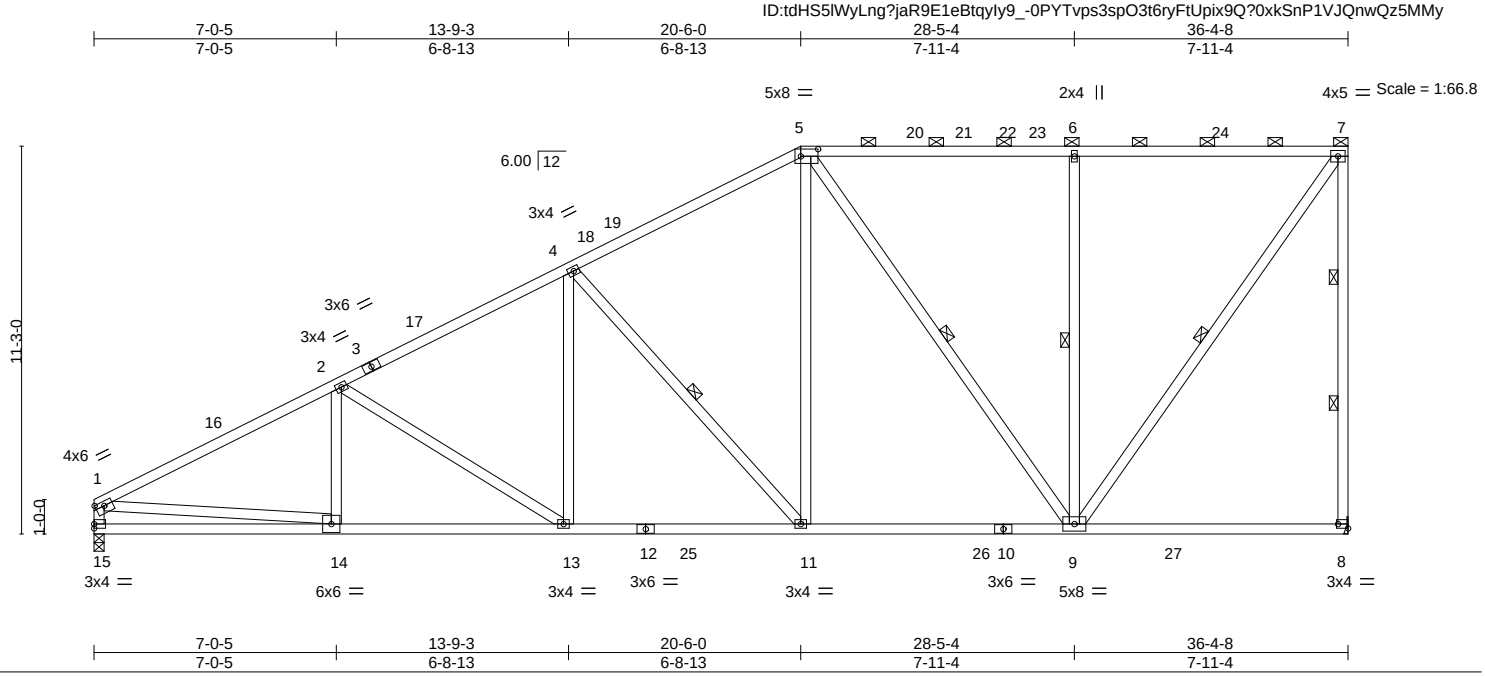

Plate Offsets (X,Y)-- [1:0-3-0,0-1-8], [5:0-6-0,0-2-8], [8:Edge,0-1-8]

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

LUMBER-

TOP CHORD	2x4 SP No.2 *Except* 5-7: 2x4 SP No.1
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3 *Except* 7-8: 2x4 SP No.1

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (5-4-3 max.): 5-7.
BOT CHORD	Rigid ceiling directly applied or 9-11-9 oc bracing.
WEBS	1 Row at midpt 4-11, 5-9, 6-9, 7-9 2 Rows at 1/3 pts 7-8

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

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

TOP CHORD	1-2=-2672/108, 2-4=-2277/131, 4-5=-1667/145, 5-6=-1012/102, 6-7=-1012/102, 7-8=-1570/211, 1-15=-1566/106
BOT CHORD	14-15=-344/402, 13-14=-337/2383, 11-13=-263/2004, 9-11=-167/1440
WEBS	2-13=-446/99, 4-13=0/508, 4-11=-913/143, 5-11=-20/993, 5-9=-783/111, 6-9=-702/176, 7-9=-174/1725, 1-14=0/1993

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=36ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-9-6, Interior(1) 3-9-6 to 20-6-0, Exterior(2R) 20-6-0 to 25-7-12, Interior(1) 25-7-12 to 36-2-12 zone; cantilever left and right exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15 except (jt=lb) 8=135.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

June 18,2025

ENGINEERING BY TRENCO
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 89 ROOF
24-4221-A	T07	COMMON	3	1	I74276546
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Tue Jun 17 13:51:46 2025 Page 1
ID:tdHS5lWyLng?jaR9E1eBtqyIy9_-Ub5r79tid6WwVGQ9pb?2F8igLQQ1BPYBjzALTtz5MMx

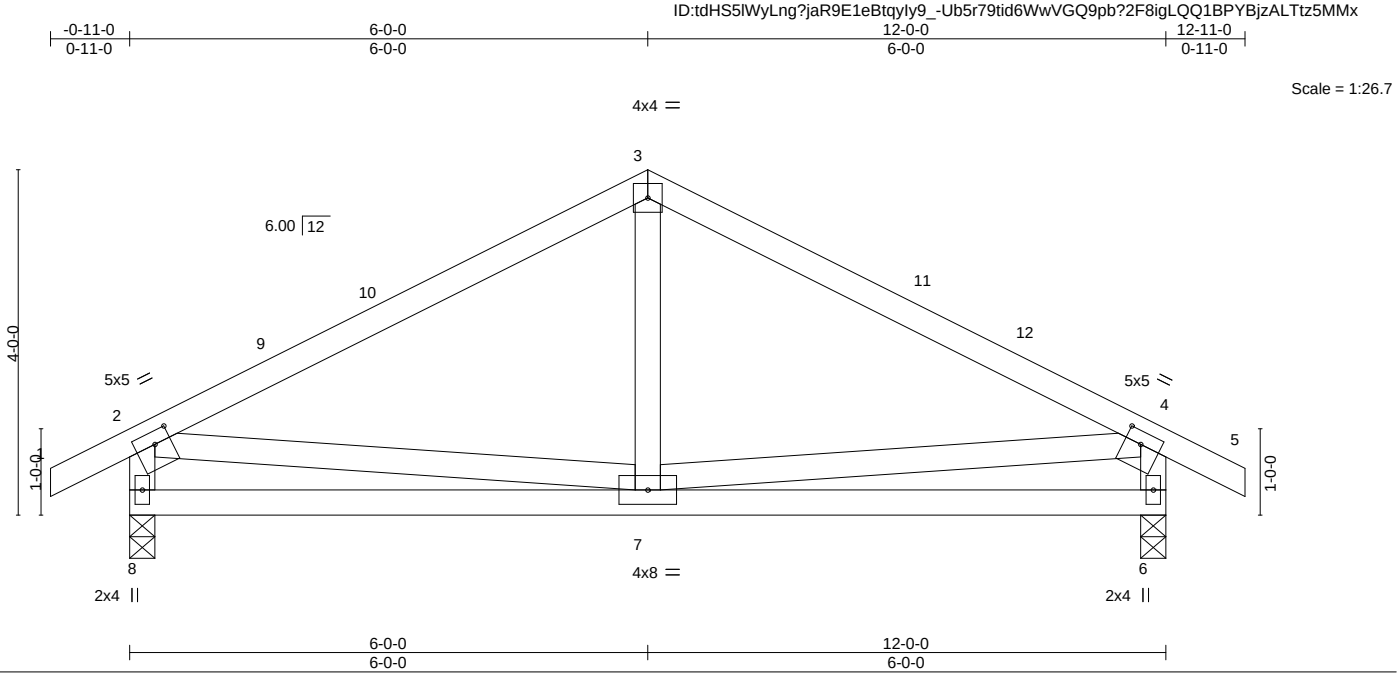

Plate Offsets (X,Y)-- [2:0-2-4,0-1-12], [4:0-2-4,0-1-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.62	Vert(LL)	-0.02	7-8	>999	240	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.05	7-8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 64 lb	FT = 20%

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

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

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

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

NOTES-
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) 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.

June 18,2025

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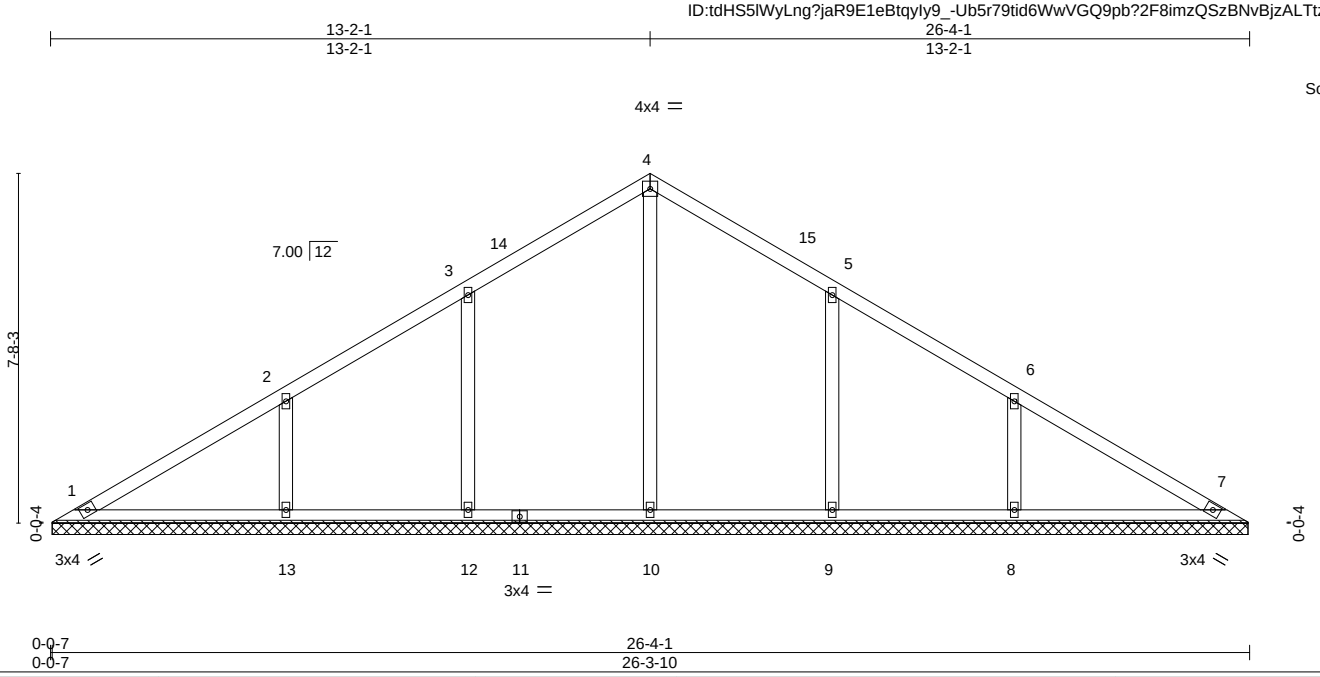
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 89 ROOF
24-4221-A	V01	Valley	1	1	I74276547
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Tue Jun 17 13:51:46 2025 Page 1
ID:tdHS5lWyLng?jaR9E1eBtqyIy9_-Ub5r79tid6WwVGQ9pb?2F8imzQSzBNvBjzALTtz5MMx



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	0.26	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.00	7	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 115 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 26-3-3.
(lb) - Max Horz 1=-147(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 12, 13, 9, 8
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=395(LC 27), 12=398(LC 27), 13=470(LC 27), 9=397(LC 28), 8=471(LC 28)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-13=-292/125, 6-8=-292/125

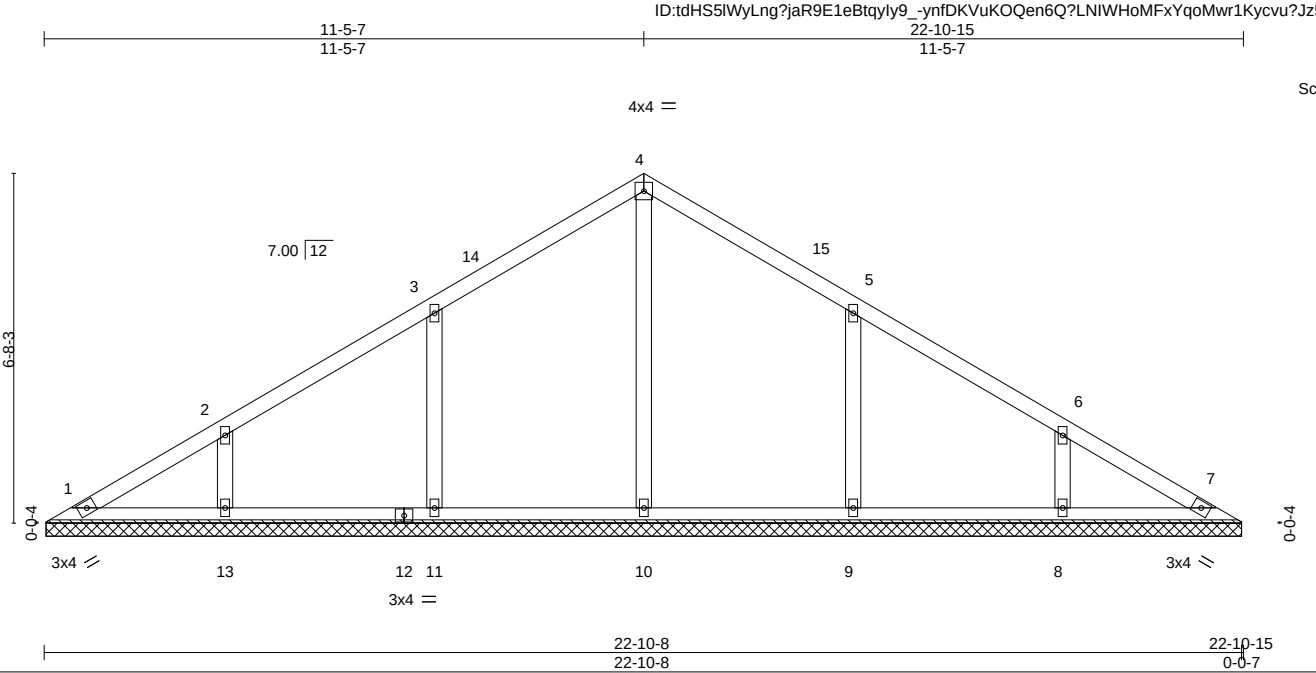
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=26ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 13-2-1, Exterior(2R) 13-2-1 to 16-2-1, Interior(1) 16-2-1 to 25-9-9 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) 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 18,2025

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

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 89 ROOF
24-4221-A	V02	Valley	1	1	I74276548
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Tue Jun 17 13:51:47 2025 Page 1
ID:tdHS5lWyLng?jaR9E1eBtqyIy9_-ynfDKVuKOQen6Q?LNIWHoMFxYqoMwr1Kycvu?Jz5MMw



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	0.14	Horz(CT)	0.00	7	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 96 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 22-10-1.
(lb) - Max Horz 1=-127(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 11, 13, 9, 8
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=379(LC 27), 11=433(LC 27), 13=357(LC 27), 9=433(LC 28), 8=357(LC 28)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-11=-264/125, 5-9=-264/125

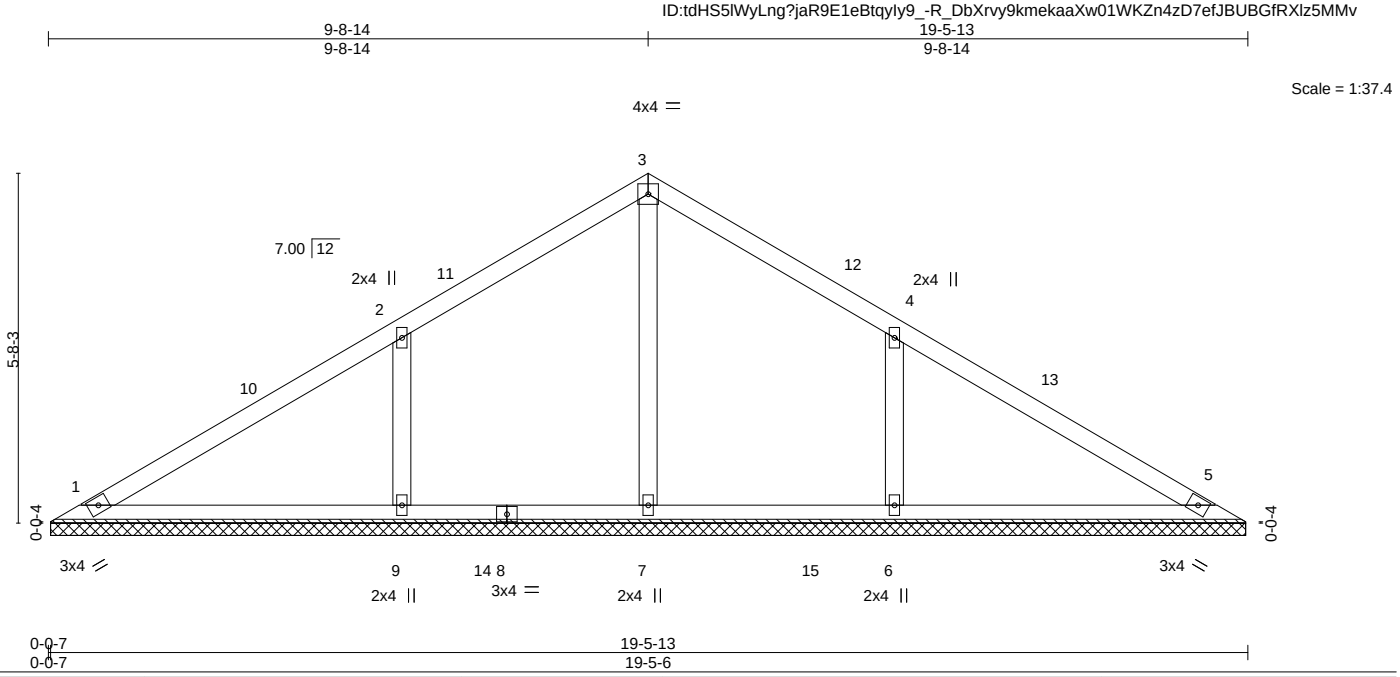
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-6-8 to 3-5-7, Interior(1) 3-5-7 to 11-5-7, Exterior(2R) 11-5-7 to 14-5-7, Interior(1) 14-5-7 to 22-4-7 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) 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) 11, 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 18,2025

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

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 89 ROOF
24-4221-A	V03	Valley	1	1	I74276549
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Tue Jun 17 13:51:48 2025 Page 1
ID:tdHS5lWyLng?jaR9E1eBtqyIy9_-R_DbXrvy9kmekaaXw01WKZn4zD7efJBUBGfRXlz5MMv



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	0.35	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 76 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 19-4-15.
(lb) - Max Horz 1=-107(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=304(LC 27), 9=551(LC 27), 6=551(LC 28)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-9=-338/152, 4-6=-338/152

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 9-8-14, Exterior(2R) 9-8-14 to 12-8-14, Interior(1) 12-8-14 to 18-11-5 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) 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, with BCDL = 10.0psf.
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.

June 18,2025

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

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 89 ROOF
24-4221-A	V04	Valley	1	1	I74276550
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Tue Jun 17 13:51:48 2025 Page 1
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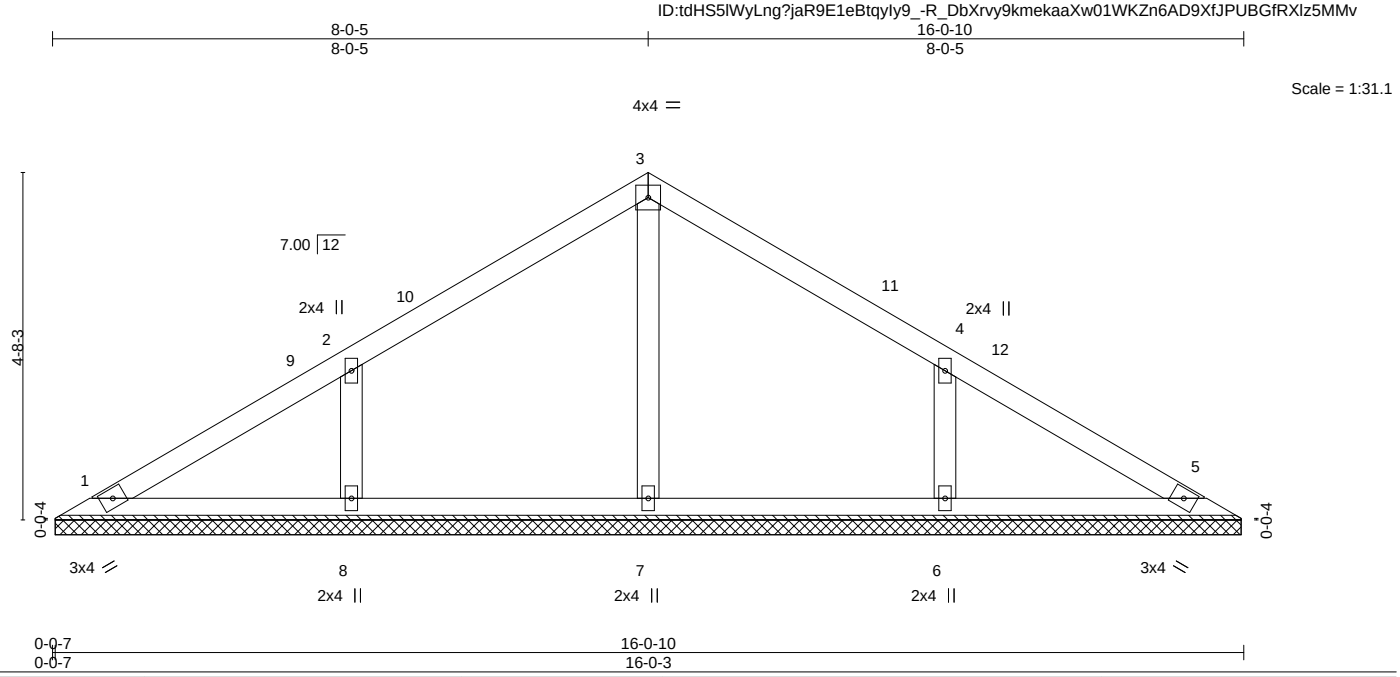


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 61 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 15-11-13.
(lb) - Max Horz 1=-87(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=259(LC 2), 8=355(LC 33), 6=355(LC 34)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-267/134, 4-6=-267/134

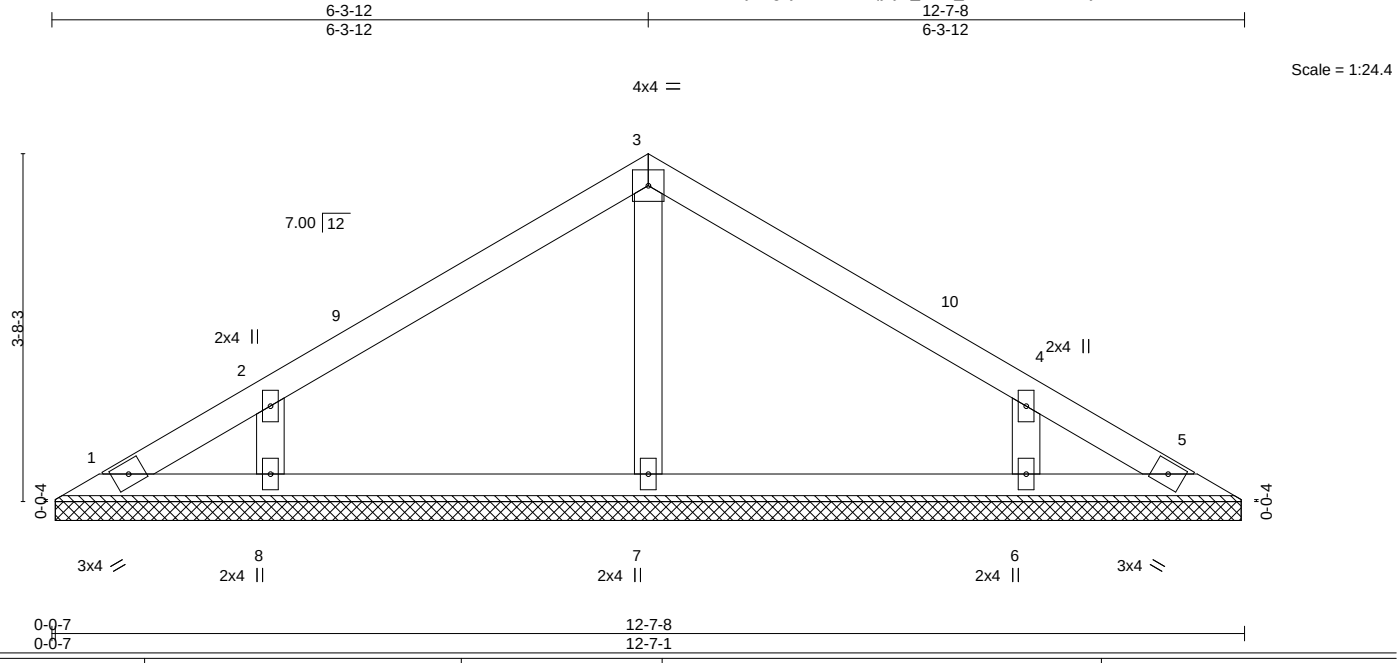
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 8-0-5, Exterior(2R) 8-0-5 to 11-0-5, Interior(1) 11-0-5 to 15-6-2 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) 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.

June 18,2025

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

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 89 ROOF
24-4221-A	V05	Valley	1	1	I74276551
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Tue Jun 17 13:51:49 2025 Page 1
ID:tdHS5lWyLng?jaR9E1eBtqyly9_-vAn_lBvaw1uVMk9kUjZmtnKH3dVdOnxdPwO?3Bz5MMu



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	0.05	Horz(CT)	0.00	5	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 12-6-10.
(lb) - Max Horz 1=-67(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 1, 8, 6
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=277(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 6-3-12, Exterior(2R) 6-3-12 to 9-3-12, Interior(1) 9-3-12 to 12-1-0 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) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 8, 6.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

June 18,2025

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

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 89 ROOF
24-4221-A	V06	Valley	1	1	I74276552
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Tue Jun 17 13:51:49 2025 Page 1
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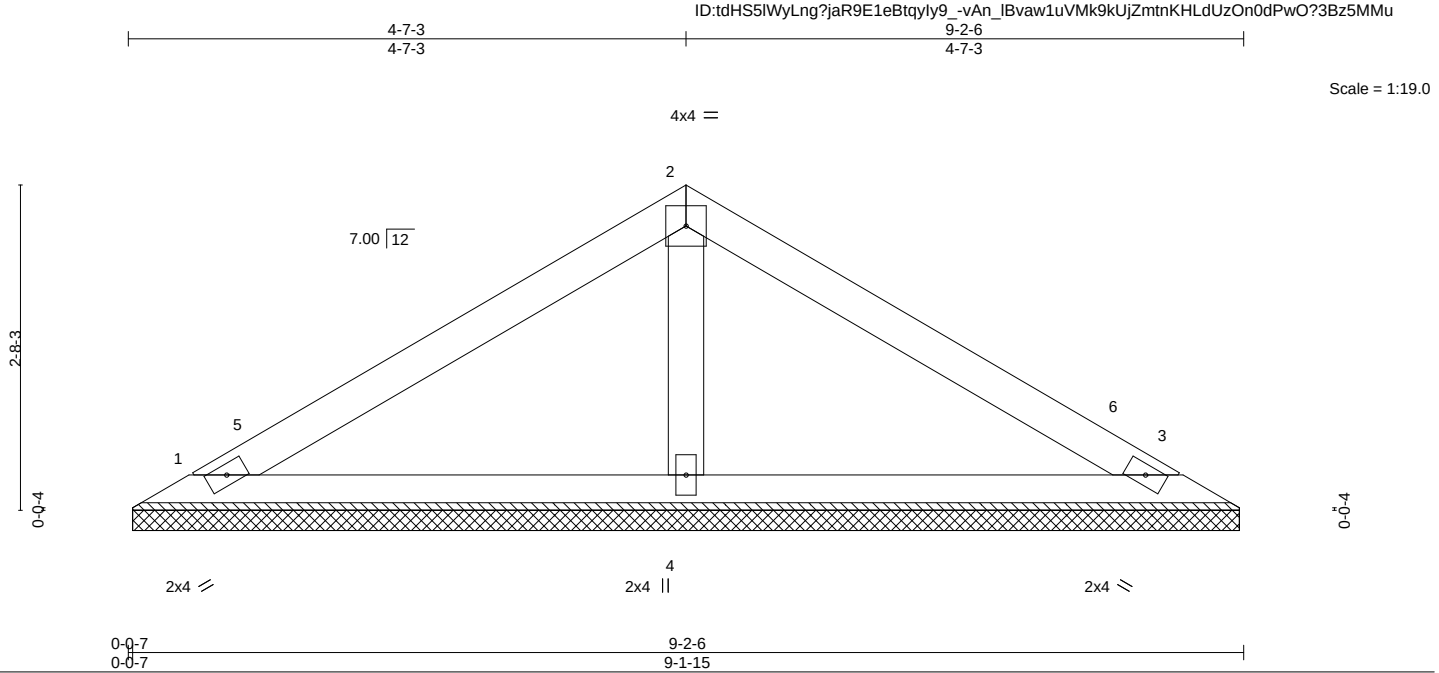

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 31 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=9-1-8, 3=9-1-8, 4=9-1-8
Max Horz 1=47(LC 15)
Max Uplift 1=-19(LC 16), 3=-19(LC 16)
Max Grav 1=154(LC 2), 3=154(LC 2), 4=342(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 4-7-3, Exterior(2R) 4-7-3 to 7-7-3, Interior(1) 7-7-3 to 8-7-14 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) 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 18,2025

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

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 89 ROOF
24-4221-A	V07	Valley	1	1	I74276553
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Tue Jun 17 13:51:50 2025 Page 1
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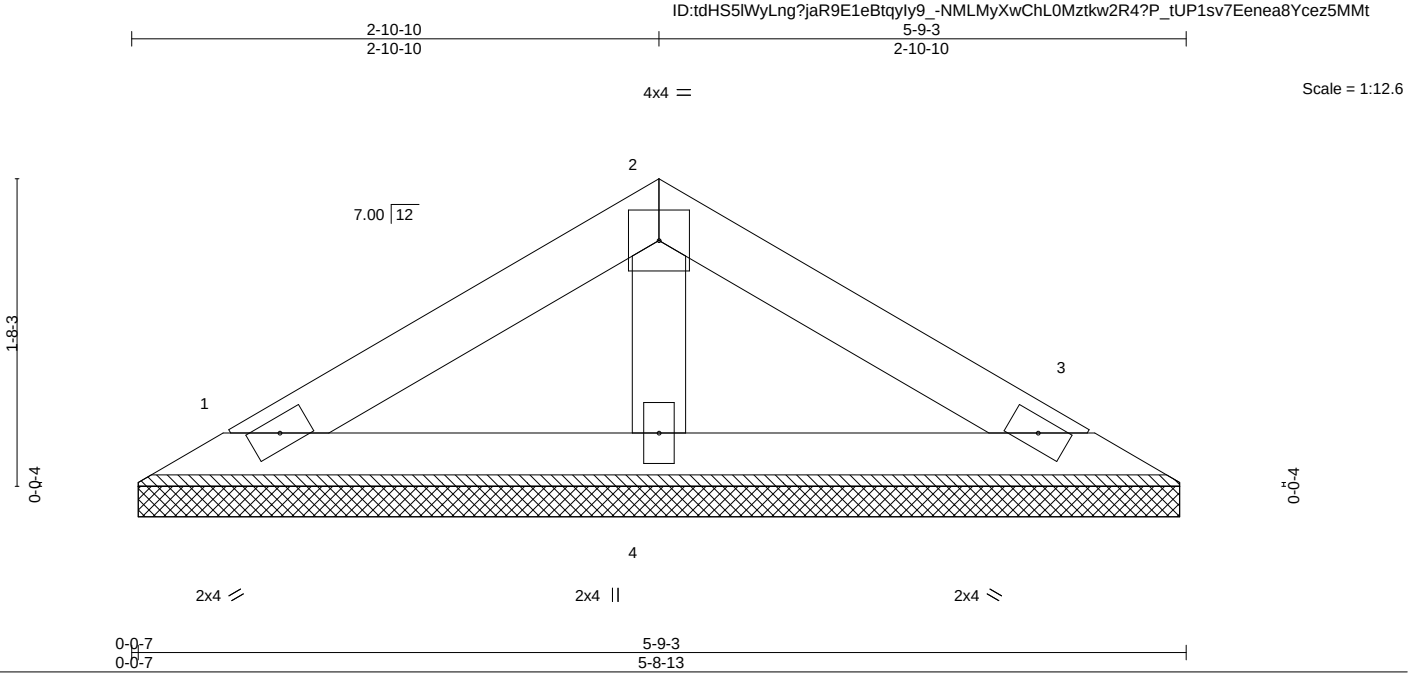

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-P								
BCDL	10.0										Weight: 18 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 5-9-3 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=5-8-6, 3=5-8-6, 4=5-8-6
Max Horz 1=27(LC 15)
Max Uplift 1=-16(LC 16), 3=-16(LC 16)
Max Grav 1=98(LC 2), 3=98(LC 2), 4=179(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.

June 18,2025

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

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 89 ROOF
24-4221-A	V08	Valley	1	1	I74276554
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Tue Jun 17 13:51:50 2025 Page 1
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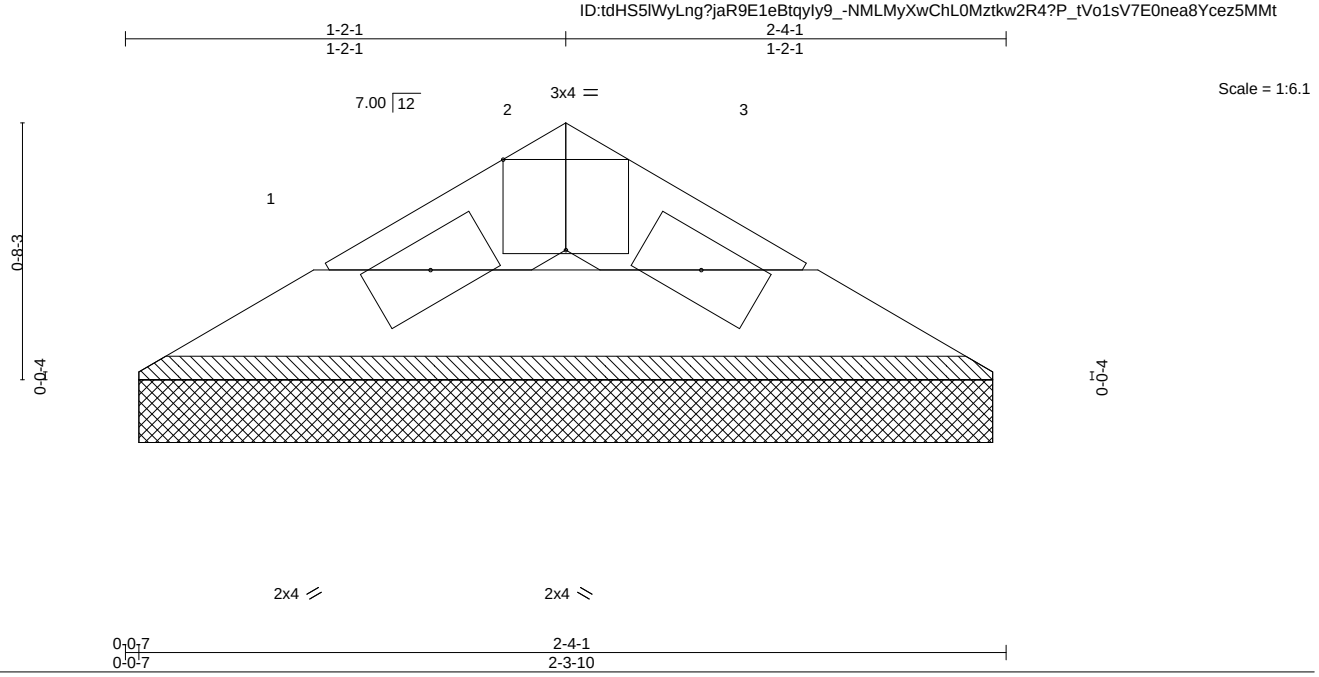

Plate Offsets (X,Y)-- [2:0-2-0,Edge]

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	0.01	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.02	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: 6 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 2-4-1 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=2-3-3, 3=2-3-3
Max Horz 1=-7(LC 14)
Max Uplift 1=-3(LC 16), 3=-3(LC 16)
Max Grav 1=50(LC 2), 3=50(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.

June 18,2025

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

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 89 ROOF
24-4221-A	V09	Valley	1	1	I74276555
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Tue Jun 17 13:51:51 2025 Page 1
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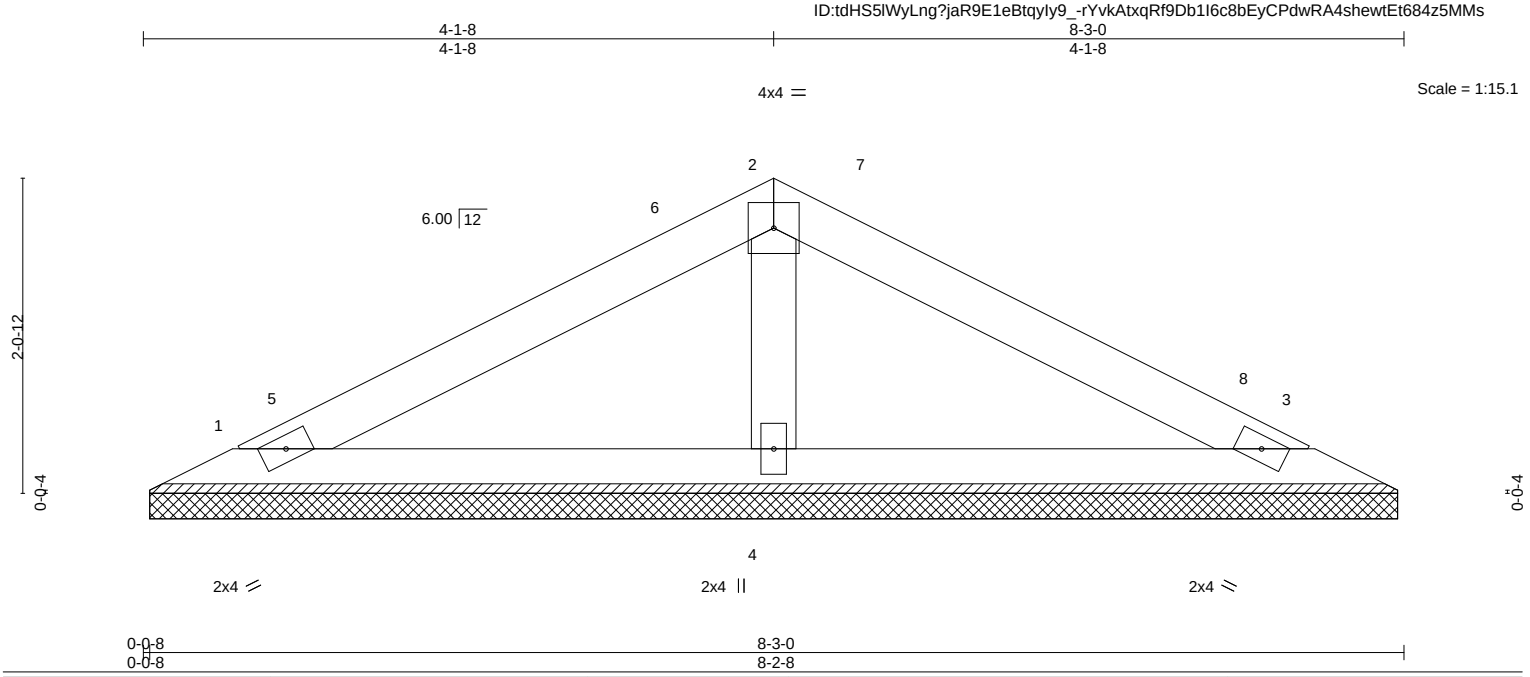


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-P								
BCDL	10.0										Weight: 26 lb	FT = 20%

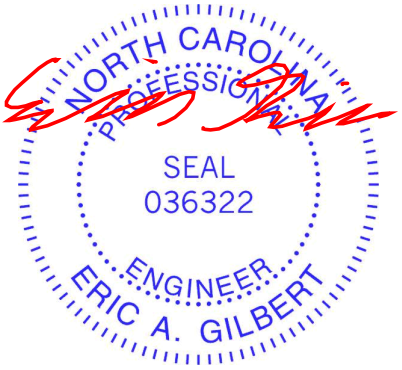
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3

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=8-2-0, 3=8-2-0, 4=8-2-0
Max Horz 1=29(LC 15)
Max Uplift 1=-21(LC 16), 3=-21(LC 16)
Max Grav 1=145(LC 20), 3=145(LC 21), 4=276(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) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 4-1-8, Exterior(2R) 4-1-8 to 7-1-8, Interior(1) 7-1-8 to 7-7-7 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.



June 18,2025

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

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 89 ROOF
24-4221-A	V10	Valley	1	1	I74276556
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Tue Jun 17 13:51:51 2025 Page 1
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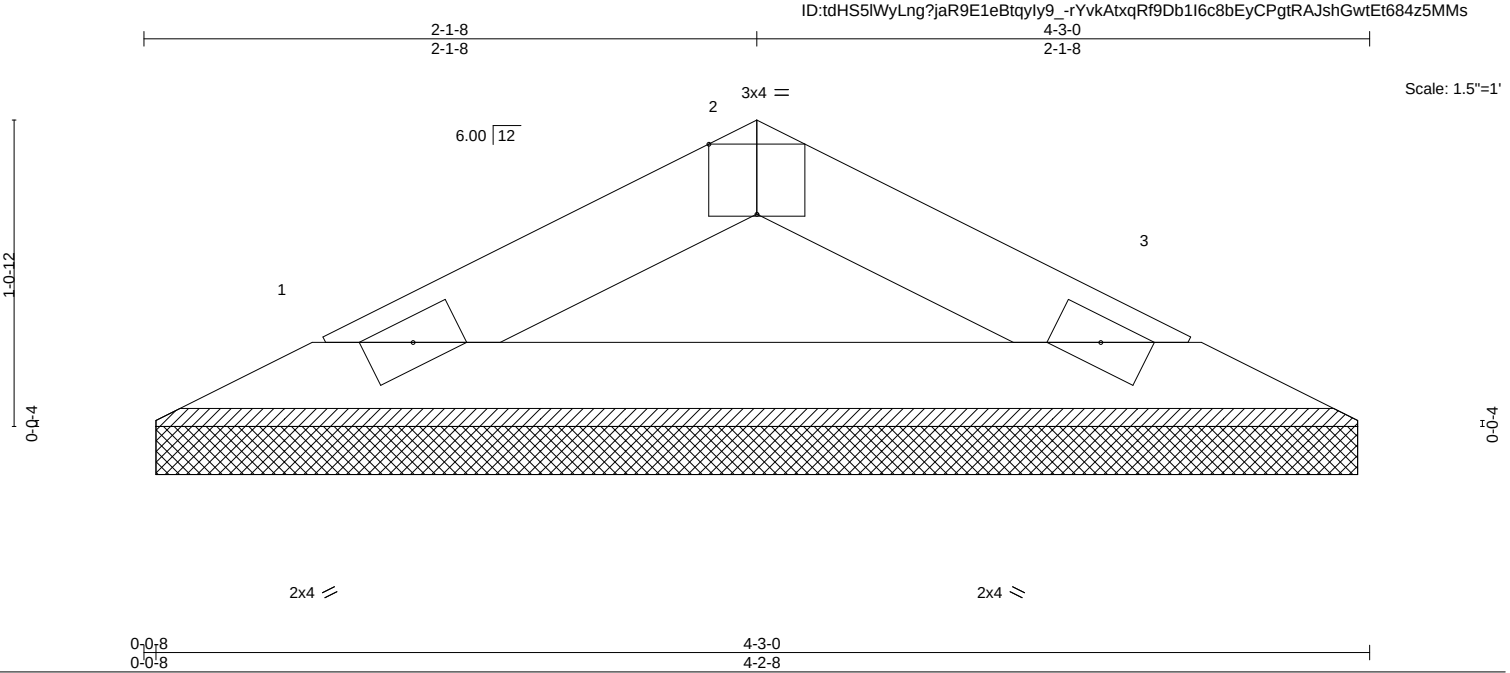

Plate Offsets (X,Y)-- [2:0-2-0,Edge]

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	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.11	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: 11 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 4-3-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-2-0, 3=4-2-0
Max Horz 1=12(LC 15)
Max Uplift 1=-7(LC 16), 3=-7(LC 16)
Max Grav 1=120(LC 2), 3=120(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.

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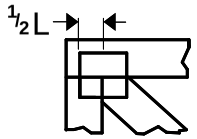
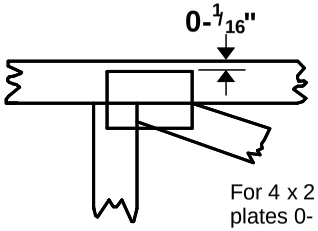
Symbols

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.

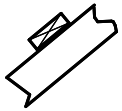
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

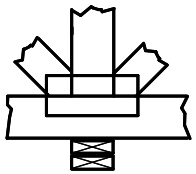
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

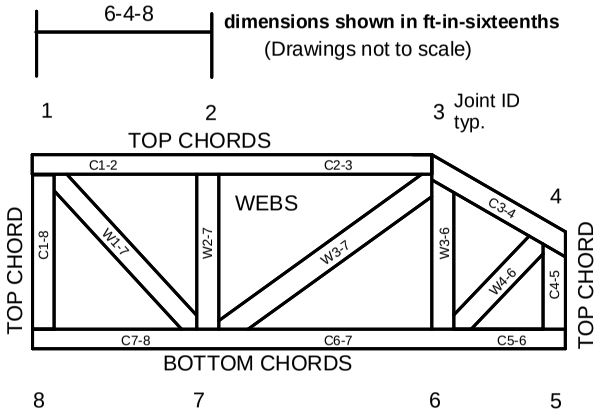


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

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.