

RE: 25-3704-A
SGR-LOT 88 ROOF

Trenco
818 Soundside Rd
Edenton, NC 27932

Site Information:

Customer: Project Name: 25-3704-A
Lot/Block:

Address:

City:

Model:

Subdivision:

State:

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: IRC2018/TPI2014

Wind Code: ASCE 7-16

Roof Load: 40.0 psf

Design Program: MiTek 20/20 8.7

Wind Speed: 130 mph

Floor Load: N/A psf

This package includes 34 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I66910372	CJ01	7/18/2024	21	I66910392	T01	7/18/2024
2	I66910373	HG01	7/18/2024	22	I66910393	T01A	7/18/2024
3	I66910374	J01	7/18/2024	23	I66910394	T01GE	7/18/2024
4	I66910375	J02	7/18/2024	24	I66910395	T02GE	7/18/2024
5	I66910376	M01	7/18/2024	25	I66910396	T03	7/18/2024
6	I66910377	M01A	7/18/2024	26	I66910397	T03A	7/18/2024
7	I66910378	M01GE	7/18/2024	27	I66910398	T03SGE	7/18/2024
8	I66910379	M02	7/18/2024	28	I66910399	T04	7/18/2024
9	I66910380	M02GE	7/18/2024	29	I66910400	T04GE	7/18/2024
10	I66910381	M03	7/18/2024	30	I66910401	T04S	7/18/2024
11	I66910382	M03A	7/18/2024	31	I66910402	T05	7/18/2024
12	I66910383	M04	7/18/2024	32	I66910403	T05GE	7/18/2024
13	I66910384	M04G	7/18/2024	33	I66910404	V01	7/18/2024
14	I66910385	PB01	7/18/2024	34	I66910405	V02	7/18/2024
15	I66910386	SD01	7/18/2024				
16	I66910387	SD02	7/18/2024				
17	I66910388	SD03	7/18/2024				
18	I66910389	SD04	7/18/2024				
19	I66910390	SD05	7/18/2024				
20	I66910391	SD06	7/18/2024				

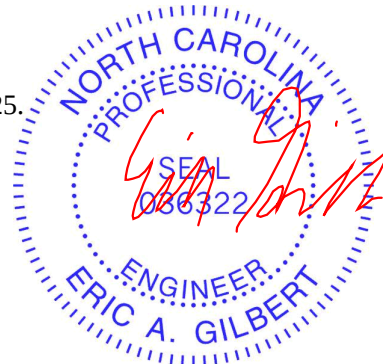
The truss drawing(s) referenced above have been prepared by
Truss Engineering Co. under my direct supervision
based on the parameters provided by Riverside Roof Truss.

Truss Design Engineer's Name: Gilbert, Eric

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

North Carolina COA: C-0844

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



July 18, 2024

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 88 ROOF	166910372
25-3704-A	CJ01	DIAGONAL HIP GIRDER	1	1	Job Reference (optional)	

Riverside Roof Truss, LLC,

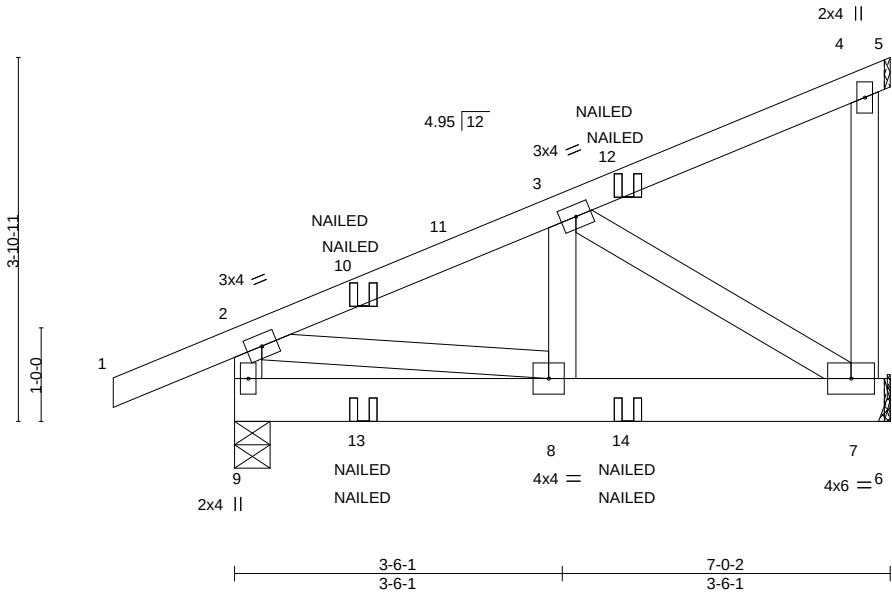
Danville, Va - 24541,

8.730 s Jun 13 2024 MiTek Industries, Inc. Tue Jul 16 16:42:40 2024 Page 1

ID:BxI2MwYau_NHkbraGCmHloyOvst-kjRY6awy9GUi8OC2xWci2fBRrp22hRiC6MmpOHYxR2j



Scale = 1:24.6



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.35	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.06	Vert(LL) 0.00 8 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.09	Vert(CT) -0.00 8 >999 180		
BCLL 0.0 *	Rep Stress Incr NO	Matrix-MP	Horz(CT) -0.00 7 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 47 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 10-0-0 oc bracing.

REACTIONS. (size) 9=0-4-9, 7=Mechanical
Max Horz 9=127(LC 9)
Max Uplift 9=-163(LC 12), 7=-80(LC 9)
Max Grav 9=337(LC 52), 7=280(LC 17)

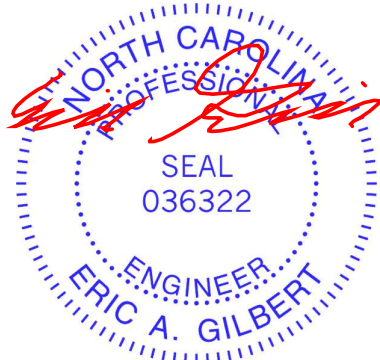
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-9=-296/146, 2-3=-323/102
WEBS 2-8=-57/288, 3-7=-280/127

NOTES-

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 163 lb uplift at joint 9 and 80 lb uplift at joint 7.
- 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.
- "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 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

- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-43, 2-4=-43, 4-5=-43, 6-9=-20
Concentrated Loads (lb)
Vert: 10=68(F=34, B=34) 12=-51(F=-25, B=-25) 14=-3(F=-1, B=-1)



July 18,2024

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



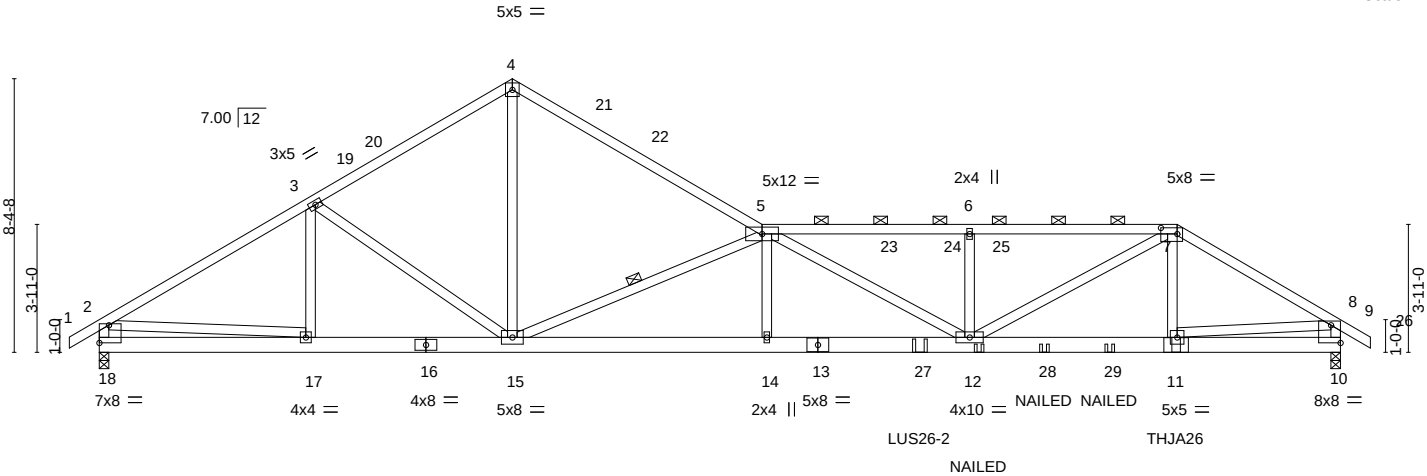
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 88 ROOF	166910373
25-3704-A	HG01	ROOF SPECIAL GIRDER	1	2	Job Reference (optional)	

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Jun 13 2024 MiTek Industries, Inc. Tue Jul 16 16:42:41 2024 Page 1
ID: BxI2MwYau_NHkbraGcmHloyOvst-Cv_wJwxawZccmYnFVEkxatkSXDC8Qj1ML0WNwjyxR2i

0-11-0 6-5-10 12-7-12 20-3-8 26-7-12 33-0-0 38-0-0 38-11-0
0-11-0 6-5-10 6-2-2 7-7-12 6-4-4 6-4-4 5-0-0 0-11-0

Scale = 1:70.5



	6-5-10	12-7-12	20-3-8	26-7-12	33-0-0	38-0-0						
	6-5-10	6-2-2	7-7-12	6-4-4	6-4-4	5-0-0						
Plate Offsets (X,Y)--	[7:0-6-0,0-2-4], [10:Edge,0-6-8], [18:Edge,0-6-8]											
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	0.99	Vert(LL)	-0.24	12-14	>999	240	MT20	244/190
Snow (Pf/Pg) 16.5/15.0	Lumber DOL		1.15	BC	0.78	Vert(CT)	-0.48	12-14	>952	180		
TCDL 10.0	Rep Stress Incr		NO	WB	0.79	Horz(CT)	0.06	10	n/a	n/a		
BCLL 0.0 *	Code IRC2018/TPI2014			Matrix-MS							Weight: 493 lb	FT = 20%
BCDL 10.0												

LUMBER-

TOP CHORD 2x4 SP No.2 *Except*
4-5: 2x4 SP No.1
BOT CHORD 2x6 SP No.2 *Except*
10-13: 2x6 SP 2400F 2.0E
WEBS 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-9-10 oc purlins, except end verticals, and 2-0-0 oc purlins (3-10-7 max.): 5-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-15

REACTIONS.

(size) 18=0-3-8, 10=0-3-8
Max Horz 18=-181(LC 10)
Max Uplift 18=-215(LC 12), 10=-434(LC 12)
Max Grav 18=2062(LC 2), 10=2909(LC 2)

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

TOP CHORD 2-3=-3045/316, 3-4=-2844/369, 4-5=-2860/357, 5-6=-6766/904, 6-7=-6766/904, 7-8=-4348/654, 2-18=-1967/246, 8-10=-2824/458
BOT CHORD 17-18=-96/604, 15-17=-161/2543, 14-15=-683/6829, 12-14=-680/6842, 11-12=-467/3680, 10-11=-75/554
WEBS 3-15=-332/143, 4-15=-229/2345, 5-15=-4908/641, 5-14=0/413, 5-12=-781/487, 6-12=-566/127, 7-12=-357/3533, 7-11=-181/321, 2-17=-100/2038, 8-11=-392/3172

NOTES-

- 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.
- 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.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=38ft; eave=5ft; 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
- 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.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

Continued on page 2



July 18, 2024

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ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 88 ROOF
25-3704-A	HG01	ROOF SPECIAL GIRDER	1	2	I66910373

- NOTES-**
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 215 lb uplift at joint 18 and 434 lb uplift at joint 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - 14) Use Simpson Strong-Tie LUS26-2 (4-10d Girder, 4-10d Truss) or equivalent at 25-1-8 from the left end to connect truss(es) to front face of bottom chord, skewed 0.0 deg.to the right, sloping 0.0 deg. down.
 - 15) Use Simpson Strong-Tie THJA26 (THJA26 on 2 ply, Right Hand Hip) or equivalent at 32-11-10 from the left end to connect truss(es) to front face of bottom chord, skewed 0.0 deg.to the right, sloping 0.0 deg. down.
 - 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 guidelines.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-2=-43, 2-4=-43, 4-5=-43, 5-7=-53, 7-8=-43, 8-9=-43, 10-18=-20

Concentrated Loads (lb)

Vert: 12=-185(F) 11=-437(F) 27=-812(F) 28=-185(F) 29=-185(F)

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 88 ROOF	166910374
25-3704-A	J01	Jack-Open	2	1	Job Reference (optional)	

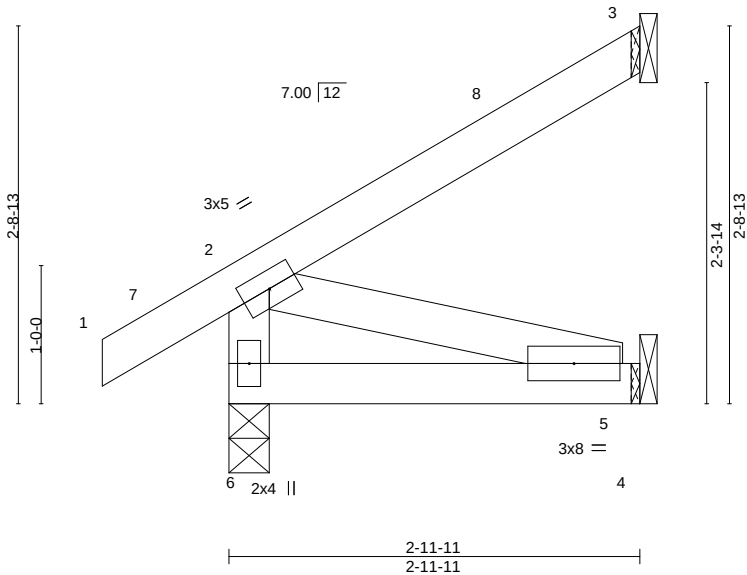
Riverside Roof Truss, LLC, Danville, Va - 24541,

8.730 s Jun 13 2024 MiTek Industries, Inc. Tue Jul 16 16:42:42 2024 Page 1

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Scale = 1:16.7



LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.12	Vert(LL)	-0.00	5-6	>999	240	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.08	Vert(CT)	-0.01	5-6	>999	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.04	Horz(CT)	-0.00	3	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MP							
BCDL 10.0	Code IRC2018/TPI2014							Weight: 16 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-11-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

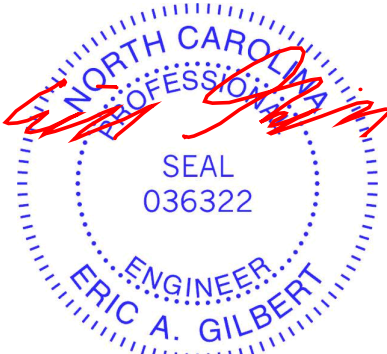
REACTIONS.

(size) 6=0-3-8, 3=Mechanical, 5=Mechanical
Max Horz 6=91(LC 16)
Max Uplift 6=-13(LC 16), 3=-27(LC 16), 5=-6(LC 16)
Max Grav 6=187(LC 21), 3=82(LC 21), 5=59(LC 7)

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

NOTES-

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 2-10-15 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 13 lb uplift at joint 6, 27 lb uplift at joint 3 and 6 lb uplift at joint 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



July 18,2024

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ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 88 ROOF
25-3704-A	J02	Jack-Open	2	1	166910375
					Job Reference (optional)

Riverside Roof Truss, LLC,

Danville, Va - 24541,

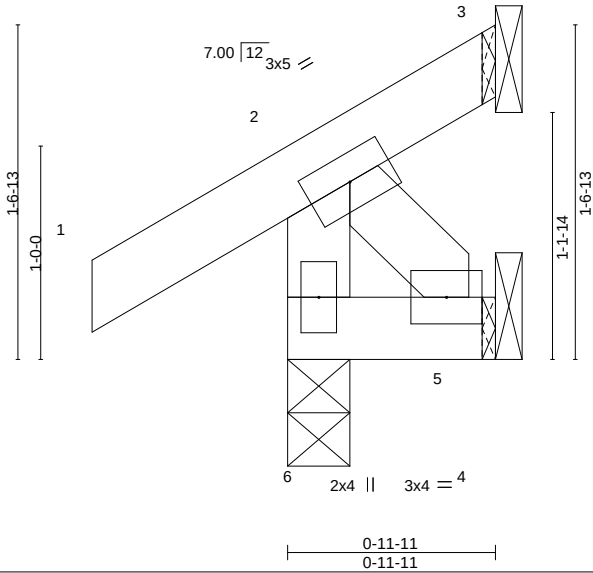
8.730 s Jun 13 2024 MiTek Industries, Inc. Tue Jul 16 16:42:42 2024 Page 1

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-0-11-0
0-11-0

0-11-11
0-11-11

Scale = 1:10.8



LOADING (psf)		SPACING-		CSI.		DEFL.		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	0.01	Vert(CT)	-0.00 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: 7 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 0-11-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

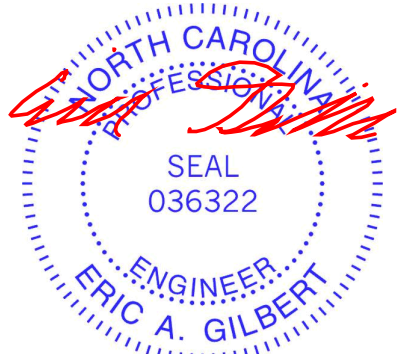
REACTIONS.

(size) 6=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 6=33(LC 15)
Max Uplift 6=33(LC 16), 3=-22(LC 20), 4=-25(LC 16)
Max Grav 6=138(LC 2), 3=21(LC 16), 4=18(LC 14)

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

NOTES-

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 33 lb uplift at joint 6, 22 lb uplift at joint 3 and 25 lb uplift at joint 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



July 18, 2024

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A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 88 ROOF	166910376
25-3704-A	M01	MONOPITCH	5	1	Job Reference (optional)	

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

8.730 s Jun 13 2024 MiTek Industries, Inc. Tue Jul 16 16:42:43 2024 Page 1
ID:Bxl2MwYau_NHkbraGCmHloyOvst-9l6gkcyqSBsJ?sxdcfmPflpxJ1_LuhgeoK?T?cyxR2g

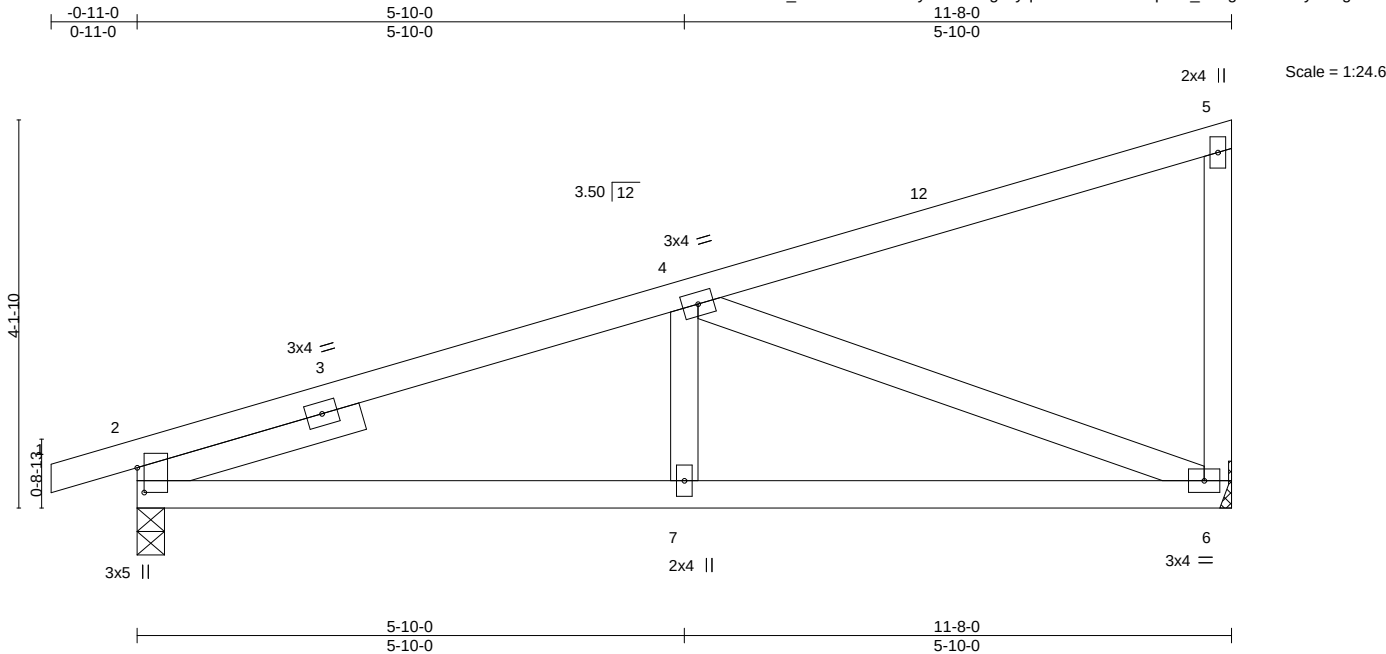


Plate Offsets (X,Y)-- [2:0-3-3,0-0-14]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	-0.03	6-7	>999	240	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.07	6-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-MS							Weight: 57 lb	FT = 20%
BCDL	10.0											

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 6=Mechanical
Max Horz 2=132(LC 15)
Max Uplift 2=-54(LC 16), 6=-31(LC 16)
Max Grav 2=518(LC 2), 6=459(LC 2)

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

TOP CHORD 2-4=-706/189
BOT CHORD 2-7=-275/712, 6-7=-275/712
WEBS 4-6=-735/237

NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 11-6-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 54 lb uplift at joint 2 and 31 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.



July 18,2024

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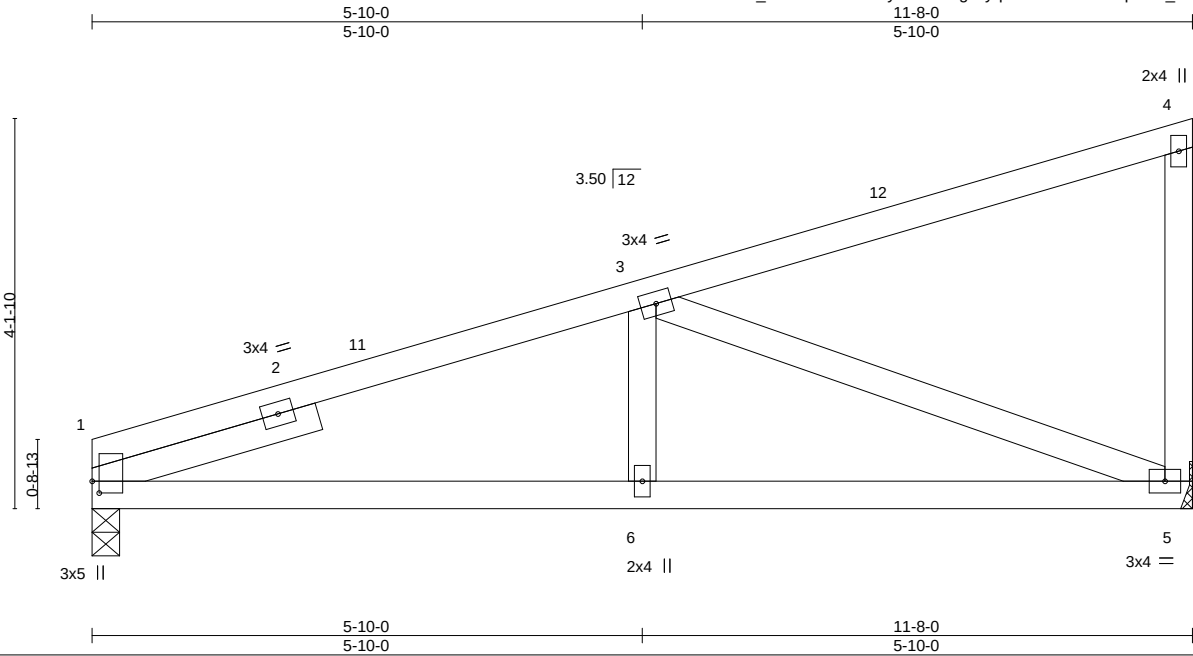
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 88 ROOF	166910377
25-3704-A	M01A	MONOPITCH	1	1	Job Reference (optional)	

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

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ID:Bxl2MwYau_NHkbraGcmHloyOvst-9l6gkcyqSBsJ?sxdcfmPflpxM1_KuhZeok?T?cyxR2g



Scale = 1:24.4

Plate Offsets (X,Y)-- [1:0-1-8,0-0-14]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.40	in (loc)	l/defl	MT20	GRIP
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.35	Vert(LL)	>999		244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.53	Vert(CT)	>999		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-MS		Horz(CT)	n/a		
BCDL	10.0							Weight: 56 lb	FT = 20%

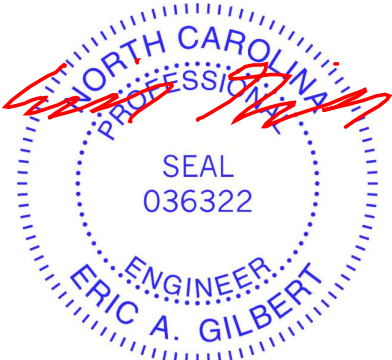
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x4 SP No.3 2-6-0

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

REACTIONS. (size) 1=0-3-8, 5=Mechanical
Max Horz 1=128(LC 15)
Max Uplift 1=24(LC 16), 5=31(LC 16)
Max Grav 1=461(LC 2), 5=461(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-753/201
BOT CHORD 1-6=-278/720, 5-6=-278/720
WEBS 3-5=-745/240

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 11-6-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * 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.
 - 6) Refer to girder(s) for truss to truss connections.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 24 lb uplift at joint 1 and 31 lb uplift at joint 5.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



July 18,2024

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

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 88 ROOF	166910378
25-3704-A	M01GE	GABLE	1	1	Job Reference (optional)	

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

8.730 s Jun 13 2024 MiTek Industries, Inc. Tue Jul 16 16:42:43 2024 Page 1
ID:Bxl2MwYau_NHkbraGcmHloyOvst-9l6gkcyqSBsJ?sxdcfmPflp_Q13qup?eoK?T?cyxR2g
11-8-0
11-8-0

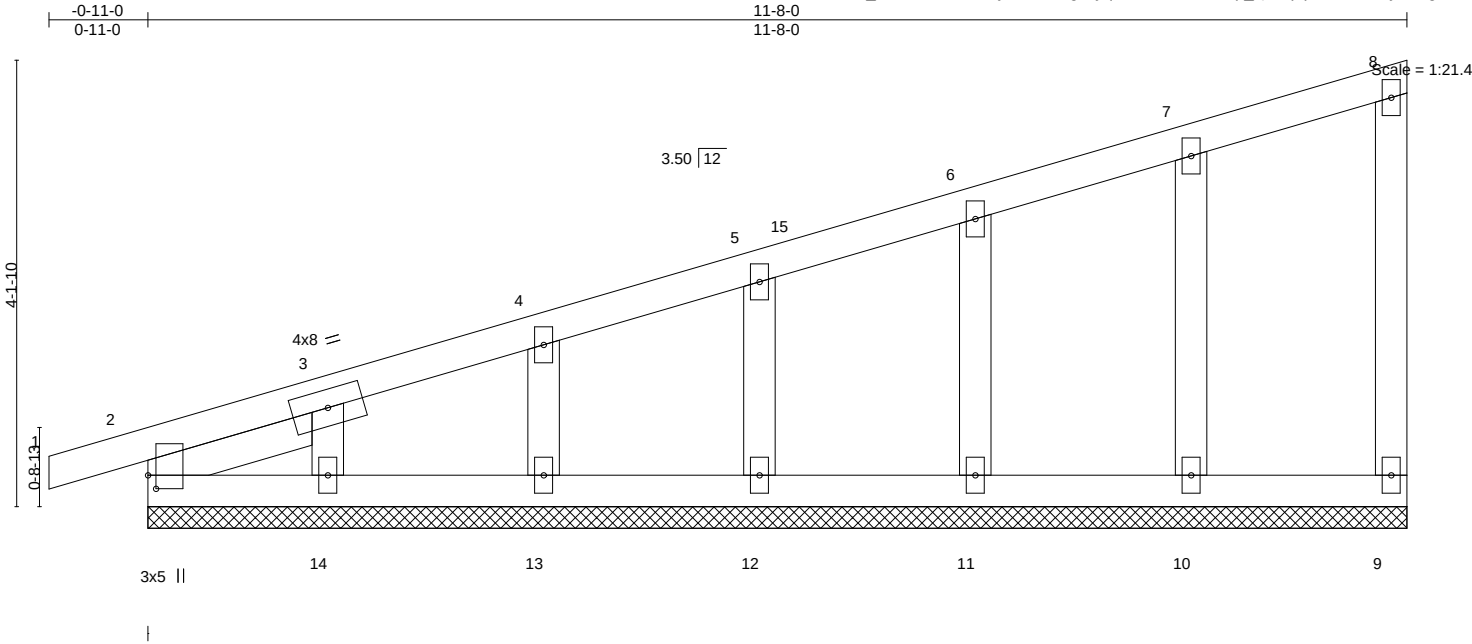


Plate Offsets (X,Y)-- [2:0-1-8,0-0-14]

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL 1.15	TC 0.20	Vert(LL) 0.00	1	n/r	120		MT20	244/190
Snow (Pl/Pg) 11.6/15.0	Lumber DOL 1.15	BC 0.06	Vert(CT) -0.00	1	n/r	120			
TCDL 10.0	Rep Stress Incr YES	WB 0.05	Horz(CT) 0.00	9	n/a	n/a			
BCLL 0.0 *	Code IRC2018/TPI2014	Matrix-S							
BCDL 10.0								Weight: 58 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 11-8-0.
(lb) - Max Horz 2=130(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 9, 2, 10, 11, 12, 13, 14
Max Grav All reactions 250 lb or less at joint(s) 9, 2, 10, 11, 12, 13, 14

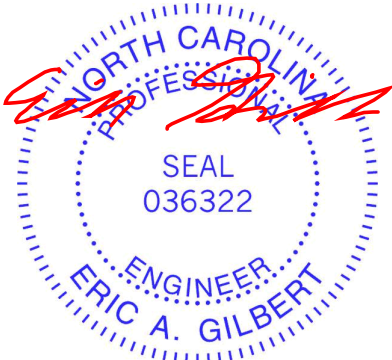
FORCES.

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

TOP CHORD 2-3=-304/156

NOTES-

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



July 18,2024

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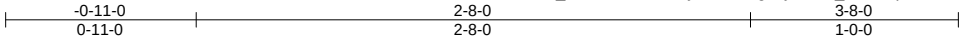
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 88 ROOF	166910379
25-3704-A	M02	HALF HIP	7	1		

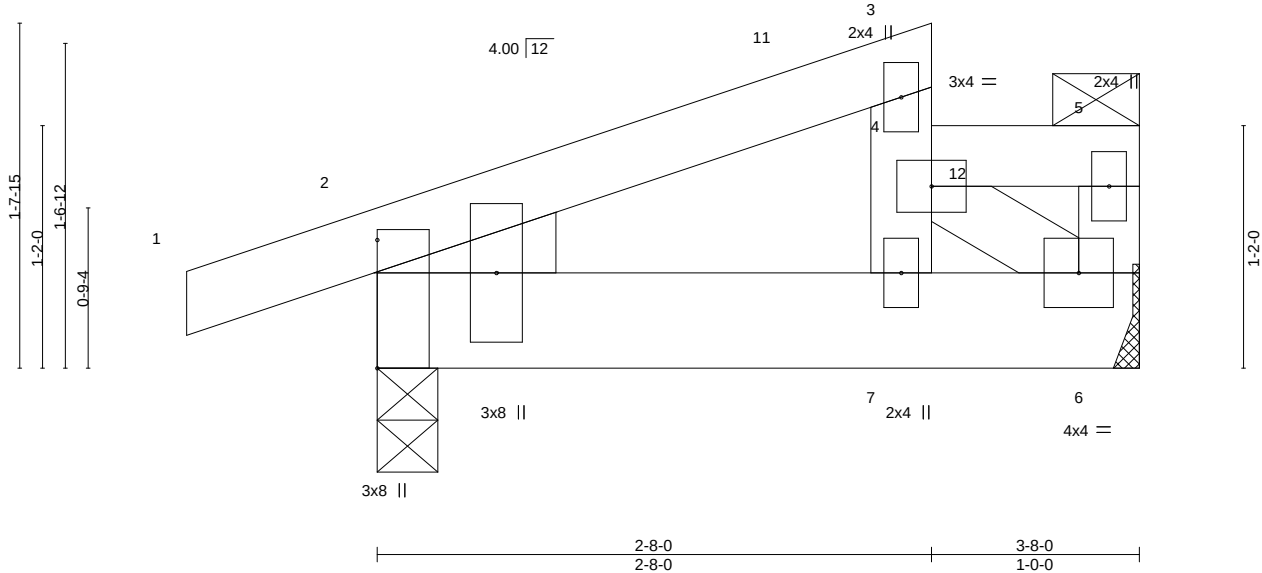
Riverside Roof Truss, LLC., Danville, Va - 24541,

8.730 s Jun 13 2024 MiTek Industries, Inc. Tue Jul 16 16:42:44 2024 Page 1

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Scale = 1:11.1



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	-0.00 10 >999 240	MT20		244/190	
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	-0.00 10 >999 180				
TCDL	10.0	Rep Stress Incr	NO	WB	0.05	Horz(CT)	0.00 2 n/a n/a				
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-MP							
BCDL	10.0										
								Weight: 20 lb		FT = 20%	

LUMBER-

TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
WEDGE
Left: 2x4 SP No.3

BRACING-

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

REACTIONS. (size) 6=Mechanical, 2=0-3-8
Max Horz 2=44(LC 13)
Max Uplift 2=-2(LC 16)
Max Grav 6=326(LC 3), 2=256(LC 36)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 3-6-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 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



July 18,2024

Continued on page 2

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

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 88 ROOF
25-3704-A	M02	HALF HIP	7	1	I66910379
					Job Reference (optional)

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

8.730 s Jun 13 2024 MiTek Industries, Inc. Tue Jul 16 16:42:44 2024 Page 2
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LOAD CASE(S) Standard

- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-43, 4-5=-83(F=-30), 6-8=-20
Concentrated Loads (lb)
Vert: 12=-160
- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 4-5=-90(F=-30), 6-8=-20
Concentrated Loads (lb)
Vert: 12=-160
- Dead + 0.75 Roof Live (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-50, 4-5=-139(F=-89), 6-8=-20
Concentrated Loads (lb)
Vert: 12=-160
- Dead + 0.75 Snow (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-37, 4-5=-133(F=-89), 6-8=-20
Concentrated Loads (lb)
Vert: 12=-160
- Dead + 0.75 Snow (Unbal. Left) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-42, 4-5=-114(F=-89), 6-8=-20
Concentrated Loads (lb)
Vert: 12=-160
- Dead + 0.75 Snow (Unbal. Right) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-25, 4-5=-135(F=-89), 6-8=-20
Concentrated Loads (lb)
Vert: 12=-160
- Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-3=-20, 4-5=-50(F=-30), 6-8=-40
Concentrated Loads (lb)
Vert: 12=-160
- Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=60, 2-11=50, 3-11=34, 4-5=16(F=-18), 6-8=-12
Horz: 1-2=-72, 2-11=-62, 3-11=-46, 3-4=10, 5-6=38
Concentrated Loads (lb)
Vert: 12=-160
- Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=45, 2-3=50, 4-5=32(F=-18), 6-8=-12
Horz: 1-2=-57, 2-3=-62, 3-4=-51, 5-6=-24
Concentrated Loads (lb)
Vert: 12=-160
- Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=1, 2-3=-46, 4-5=-64(F=-18), 6-8=-20
Horz: 1-2=-21, 2-3=26, 3-4=-30, 5-6=-35
Concentrated Loads (lb)
Vert: 12=-160
- Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-41, 2-3=-46, 4-5=-64(F=-18), 6-8=-20
Horz: 1-2=21, 2-3=26, 3-4=31, 5-6=27
Concentrated Loads (lb)
Vert: 12=-160
- Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=28, 2-3=13, 4-5=8(F=-18), 6-8=-12
Horz: 1-2=-40, 2-3=-25, 3-4=-11, 5-6=18
Concentrated Loads (lb)
Vert: 12=-160
- Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=3, 2-3=8, 4-5=8(F=-18), 6-8=-12
Horz: 1-2=-15, 2-3=-20, 3-4=-26, 5-6=-15
Concentrated Loads (lb)
Vert: 12=-160
- Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-16, 2-3=-21, 4-5=-39(F=-18), 6-8=-20
Horz: 1-2=-4, 2-3=1, 3-4=31, 5-6=7

Continued on page 3

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 88 ROOF
25-3704-A	M02	HALF HIP	7	1	i66910379
					Job Reference (optional)

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

8.730 s Jun 13 2024 MiTek Industries, Inc. Tue Jul 16 16:42:44 2024 Page 3

ID:Bxl2MwYau_NHkbraGcMhloyOvst-dUg2xyzTDU_Ad0WqAMHeCVM9?QOsdGKo1_k1X2yxR2f

- LOAD CASE(S)** Standard

Concentrated Loads (lb)

Vert: 12=-160
- 15) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-5, 2-3=-10, 4-5=-39(F=-18), 6-8=-20

Horz: 1-2=-15, 2-3=-10, 3-4=-4, 5-6=-25

 Concentrated Loads (lb)

Vert: 12=-160
- 16) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=32, 2-3=17, 4-5=-1(F=-18), 6-8=-12

Horz: 1-2=-44, 2-3=-29, 3-4=-34, 5-6=23

 Concentrated Loads (lb)

Vert: 12=-160
- 17) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=21, 2-3=6, 4-5=-12(F=-18), 6-8=-12

Horz: 1-2=-33, 2-3=-18, 3-4=-24, 5-6=23

 Concentrated Loads (lb)

Vert: 12=-160
- 18) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-16, 2-3=-21, 4-5=-39(F=-18), 6-8=-20

Horz: 1-2=-4, 2-3=1, 3-4=6, 5-6=12

 Concentrated Loads (lb)

Vert: 12=-160
- 19) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-16, 2-3=-21, 4-5=-39(F=-18), 6-8=-20

Horz: 1-2=-4, 2-3=1, 3-4=6, 5-6=12

 Concentrated Loads (lb)

Vert: 12=-160
- 20) Dead + Snow on Overhangs: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-43, 2-3=-20, 4-5=-50(F=-30), 6-8=-20

 Concentrated Loads (lb)

Vert: 12=-160
- 21) Dead + Snow (Unbal. Left): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-49, 4-5=-57(F=-30), 6-8=-20

 Concentrated Loads (lb)

Vert: 12=-160
- 22) Dead + Snow (Unbal. Right): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-27, 4-5=-85(F=-30), 6-8=-20

 Concentrated Loads (lb)

Vert: 12=-160
- 23) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90

Uniform Loads (plf)

Vert: 1-3=-20, 4-5=-50(F=-30), 6-8=-20

 Concentrated Loads (lb)

Vert: 12=-160
- 24) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-34, 2-3=-38, 4-5=-124(F=-79), 6-8=-20

Horz: 1-2=-3, 2-3=1, 3-4=23, 5-6=5

 Concentrated Loads (lb)

Vert: 12=-160
- 25) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-26, 2-3=-30, 4-5=-124(F=-79), 6-8=-20

Horz: 1-2=-11, 2-3=-7, 3-4=-3, 5-6=-19

 Concentrated Loads (lb)

Vert: 12=-160
- 26) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-34, 2-3=-38, 4-5=-124(F=-79), 6-8=-20

Horz: 1-2=-3, 2-3=1, 3-4=5, 5-6=9

 Concentrated Loads (lb)

Vert: 12=-160
- 27) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60

Continued on page 4

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 88 ROOF
25-3704-A	M02	HALF HIP	7	1	I66910379
Job Reference (optional)					

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

8.730 s Jun 13 2024 MiTek Industries, Inc. Tue Jul 16 16:42:44 2024 Page 4

ID:Bxl2MwYau_NHkbraGcMhloyOvst-dUg2xyzTDU_Ad0WqAMHeCVM9?QOsdGKo1_k1X2yxR2f

LOAD CASE(S) Standard

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

Continued on page 5

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 88 ROOF
25-3704-A	M02	HALF HIP	7	1	I66910379
					Job Reference (optional)

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

8.730 s Jun 13 2024 MiTek Industries, Inc. Tue Jul 16 16:42:44 2024 Page 5
ID:Bxl2MwYau_NHkbraGcmHloyOvst-dUg2xyzTDU_Ad0WqAMHeCVM9?QOsdGKo1_k1X2yxR2f

LOAD CASE(S) Standard

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

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

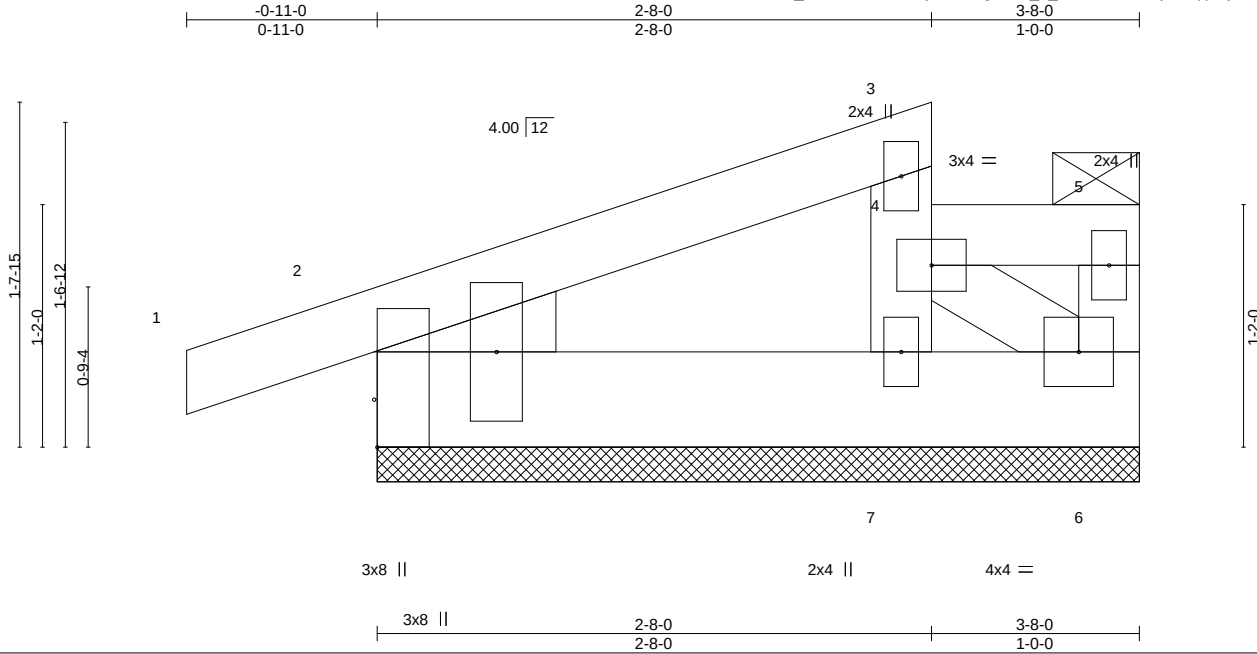
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacompnents.com)



818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 88 ROOF	166910380
25-3704-A	M02GE	HALF HIP	1	1	Job Reference (optional)	

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Jun 13 2024 MiTek Industries, Inc. Tue Jul 16 16:42:45 2024 Page 1
ID:Bxl2MwYau_NHkbraGcmHloyOvst-5gER9l_5_o61FA50k4otjuLzqlpMj8xGeUa3UyxR2e



Scale = 1:11.1

Plate Offsets (X,Y)-- [2:Edge,0-0-3]											
LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	
TCLL (roof)	20.0	Plate Grip DOL	2-0-0	TC	0.13	in (loc)	l/defl	L/d		MT20	GRIP
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.03	0.00	1	n/r	120		244/190
TCDL	10.0	Rep Stress Incr	NO	WB	0.01	0.00	1	n/r	120		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-P		0.00	6	n/a	n/a		
BCDL	10.0									Weight: 20 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 3-8-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 4-7, 4-5.
BOT CHORD	2x6 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3		
WEDGE			
Left: 2x4 SP No.3			

REACTIONS.	
(size)	7=3-8-0, 6=3-8-0, 2=3-8-0
Max Horz	2=46(LC 13)
Max Uplift	2=32(LC 16)
Max Grav	7=201(LC 3), 6=120(LC 37), 2=187(LC 36)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
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- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-11-0 to 2-1-0, Exterior(2N) 2-1-0 to 3-6-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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) Gable requires continuous bottom chord bearing.
 - 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) 2.
 - 11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
 - 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) Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
 - 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard	July 18,2024
Continued on page 2	



Job	Truss	Truss Type	Qty	Ply	SGR-LOT 88 ROOF
25-3704-A	M02GE	HALF HIP	1	1	i66910380
Job Reference (optional)					

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

8.730 s Jun 13 2024 MiTek Industries, Inc. Tue Jul 16 16:42:45 2024 Page 2
ID:Bxl2MwYau_NHkbraGcmHloyOvst-5gER9I_5_o61FA50k4otjuLzqlpMj8xGeUa3UyxR2e

- LOAD CASE(S)** Standard
- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-43, 4-5=-163, 2-6=-20
 - Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 4-5=-170, 2-6=-20
 - Dead + 0.75 Roof Live (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-50, 4-5=-219, 2-6=-20
 - Dead + 0.75 Snow (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-37, 4-5=-213, 2-6=-20
 - Dead + 0.75 Snow (Unbal. Left) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-42, 4-5=-194, 2-6=-20
 - Dead + 0.75 Snow (Unbal. Right) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-25, 4-5=-215, 2-6=-20
 - Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-3=-20, 4-5=-130, 2-6=-40
 - Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=108, 2-3=81, 4-5=-17, 2-6=-12
Horz: 1-2=120, 2-3=-93, 3-4=10, 5-6=46
 - Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=76, 2-3=81, 4-5=-17, 2-6=-12
Horz: 1-2=88, 2-3=-93, 3-4=-11, 5-6=-24
 - Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=1, 2-3=-46, 4-5=-144, 2-6=-20
Horz: 1-2=21, 2-3=26, 3-4=11, 5-6=-35
 - Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-41, 2-3=-46, 4-5=-144, 2-6=-20
Horz: 1-2=-21, 2-3=26, 3-4=31, 5-6=36
 - Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=28, 2-3=13, 4-5=-72, 2-6=-12
Horz: 1-2=40, 2-3=-25, 3-4=-11, 5-6=18
 - Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=3, 2-3=8, 4-5=-72, 2-6=-12
Horz: 1-2=15, 2-3=-20, 3-4=-26, 5-6=-15
 - Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-16, 2-3=-21, 4-5=-119, 2-6=-20
Horz: 1-2=4, 2-3=1, 3-4=31, 5-6=7
 - Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-5, 2-3=-10, 4-5=-119, 2-6=-20
Horz: 1-2=15, 2-3=-10, 3-4=-4, 5-6=-25
 - Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=32, 2-3=17, 4-5=-81, 2-6=-12
Horz: 1-2=44, 2-3=-29, 3-4=-34, 5-6=23
 - Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=21, 2-3=6, 4-5=-92, 2-6=-12
Horz: 1-2=33, 2-3=-18, 3-4=-24, 5-6=23
 - Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-16, 2-3=-21, 4-5=-119, 2-6=-20
Horz: 1-2=4, 2-3=1, 3-4=6, 5-6=12
 - Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-16, 2-3=-21, 4-5=-119, 2-6=-20
Horz: 1-2=4, 2-3=1, 3-4=6, 5-6=12
 - Dead + Snow on Overhangs: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-43, 2-3=-20, 4-5=-130, 2-6=-20
 - Dead + Snow (Unbal. Left): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-49, 4-5=-137, 2-6=-20

Continued on page 3

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

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 88 ROOF	i66910380
25-3704-A	M02GE	HALF HIP	1	1	Job Reference (optional)	

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

8.730 s Jun 13 2024 MiTek Industries, Inc. Tue Jul 16 16:42:45 2024 Page 3
ID:Bxl2MwYau_NHkbraGcmHloyOvst-5gER9I_5_o61FA50k4otjuLzqlpMj8xGeUa3UyxR2e

LOAD CASE(S) Standard

- 22) Dead + Snow (Unbal. Right): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-27, 4-5=-165, 2-6=-20
- 23) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
Uniform Loads (plf)
Vert: 1-3=-20, 4-5=-130, 2-6=-20
- 24) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-34, 2-3=-38, 4-5=-204, 2-6=-20
Horz: 1-2=3, 2-3=1, 3-4=23, 5-6=5
- 25) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-26, 2-3=-30, 4-5=-204, 2-6=-20
Horz: 1-2=11, 2-3=-7, 3-4=-3, 5-6=-19
- 26) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-34, 2-3=-38, 4-5=-204, 2-6=-20
Horz: 1-2=3, 2-3=1, 3-4=5, 5-6=9
- 27) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-34, 2-3=-38, 4-5=-204, 2-6=-20
Horz: 1-2=3, 2-3=1, 3-4=5, 5-6=9
- 28) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-47, 2-3=-51, 4-5=-209, 2-6=-20
Horz: 1-2=3, 2-3=1, 3-4=23, 5-6=5
- 29) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-39, 2-3=-43, 4-5=-209, 2-6=-20
Horz: 1-2=11, 2-3=-7, 3-4=-3, 5-6=-19
- 30) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-47, 2-3=-51, 4-5=-209, 2-6=-20
Horz: 1-2=3, 2-3=1, 3-4=5, 5-6=9
- 31) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-47, 2-3=-51, 4-5=-209, 2-6=-20
Horz: 1-2=3, 2-3=1, 3-4=5, 5-6=9
- 32) Dead + Minimum Snow: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-20, 4-5=-160, 2-6=-20
- 33) Dead + 0.6 C-C Wind Min. Down: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=4, 2-3=-28, 4-5=-126, 2-6=-12
Horz: 1-3=16, 3-4=-16, 5-6=-16
- 34) Dead + 0.6 C-C Wind Min. Upward: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=4, 4-5=-94, 2-6=-12
Horz: 1-2=16, 2-3=-16, 3-4=16, 5-6=16
- 35) 3rd Unbal.Dead + Snow (balanced) + Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-27, 4-5=-180, 2-6=-20
- 36) 4th Unbal.Dead + Snow (balanced) + Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 4-5=-137, 2-6=-20
- 37) 5th Unbal.Dead + 0.75 Snow (balanced) + 0.75 Attic Floor + Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-25, 4-5=-226, 2-6=-20
- 38) 6th Unbal.Dead + 0.75 Snow (balanced) + 0.75 Attic Floor + Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-57, 4-5=-194, 2-6=-20
- 39) 7th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left) + Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-22, 2-3=-26, 4-5=-217, 2-6=-20
Horz: 1-2=3, 2-3=1, 3-4=23, 5-6=5
- 40) 8th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left) + Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-54, 2-3=-58, 4-5=-185, 2-6=-20
Horz: 1-2=3, 2-3=1, 3-4=23, 5-6=5
- 41) 9th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right) + Parallel: Lumber Increase=1.60, Plate Increase=1.60

Continued on page 4

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

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 88 ROOF
25-3704-A	M02GE	HALF HIP	1	1	I66910380
					Job Reference (optional)

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

8.730 s Jun 13 2024 MiTek Industries, Inc. Tue Jul 16 16:42:45 2024 Page 4
ID:Bxl2MwYau_NHkbraGcmHloyOvst-5gER9I_5_o61FA50k4otjuLzqlpMj8xGeUa3UyxR2e

- LOAD CASE(S)** Standard
- Uniform Loads (plf)
Vert: 1-2=-14, 2-3=-18, 4-5=-217, 2-6=-20
Horz: 1-2=11, 2-3=-7, 3-4=-3, 5-6=-19
- 42) 10th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right) + Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-46, 2-3=-50, 4-5=-185, 2-6=-20
Horz: 1-2=11, 2-3=-7, 3-4=-3, 5-6=-19
- 43) 11th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-22, 2-3=-26, 4-5=-217, 2-6=-20
Horz: 1-2=3, 2-3=1, 3-4=5, 5-6=9
- 44) 12th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-54, 2-3=-58, 4-5=-185, 2-6=-20
Horz: 1-2=3, 2-3=1, 3-4=5, 5-6=9
- 45) 13th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-22, 2-3=-26, 4-5=-217, 2-6=-20
Horz: 1-2=3, 2-3=1, 3-4=5, 5-6=9
- 46) 14th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-54, 2-3=-58, 4-5=-185, 2-6=-20
Horz: 1-2=3, 2-3=1, 3-4=5, 5-6=9
- 47) 15th Unbal.Dead + Minimum Snow + Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-27, 4-5=-180, 2-6=-20
- 48) 16th Unbal.Dead + Minimum Snow + Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 4-5=-137, 2-6=-20
- 49) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 4-5=-130, 2-6=-20
- 50) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-20, 4-5=-170, 2-6=-20
- 51) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-50, 4-5=-189, 2-6=-20
- 52) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-20, 4-5=-219, 2-6=-20

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

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 88 ROOF	I66910381
25-3704-A	M03	MONOPITCH	2	1		

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

8.730 s Jun 13 2024 MiTek Industries, Inc. Tue Jul 16 16:42:45 2024 Page 1

ID:Bxi2MwYau_NHkbraGCmHloyOvst-5gER9I_5_o61FA50k4otljuLDqkcMjlxGeUa3UyxR2e



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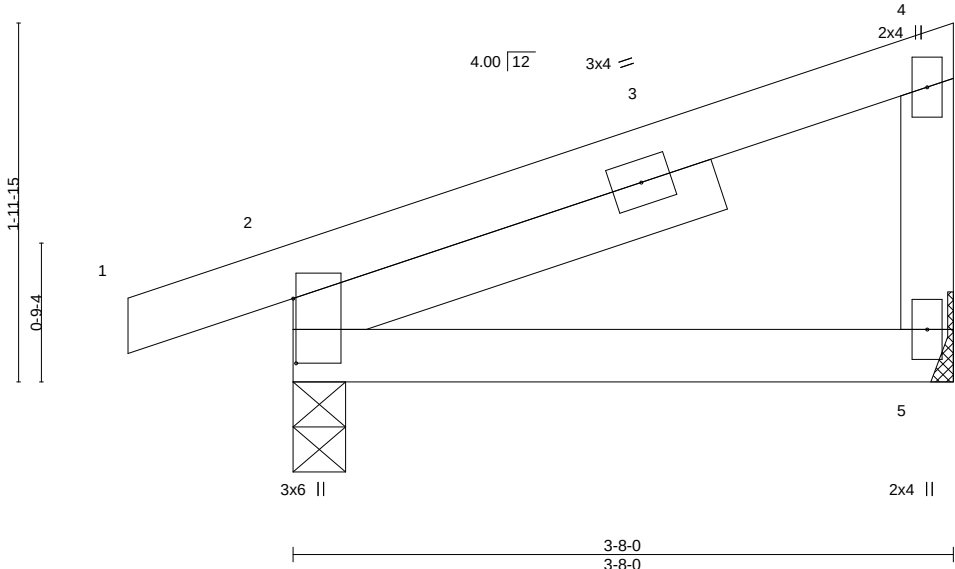


Plate Offsets (X,Y)-- [2:0-4-5,0-0-3]									
LOADING (psf)		SPACING-	2-0-0	CSI.				DEFL.	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.18	in	(loc)	I/defl	L/d
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.10	Vert(LL)	-0.01 5-8	>999	240
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Vert(CT)	-0.01 5-8	>999	180
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-MP		Horz(CT)	0.01 2	n/a	n/a
BCDL	10.0							PLATES	GRIP
								MT20	244/190
								Weight: 19 lb	FT = 20%

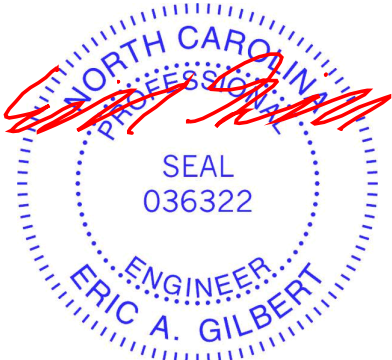
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x4 SP No.3 2-6-0

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

REACTIONS. (size) 5=Mechanical, 2=0-3-8
Max Horz 2=57(LC 15)
Max Uplift 5=-7(LC 16), 2=-39(LC 16)
Max Grav 5=137(LC 21), 2=208(LC 21)

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

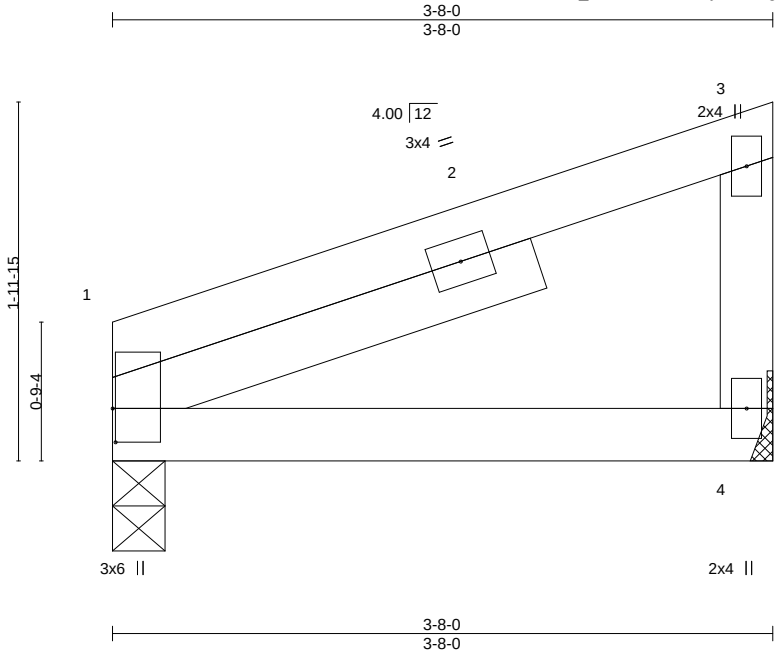
- NOTES-**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 3-6-4 zone; cantilever left and right exposed ; end vertical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



July 18,2024

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 88 ROOF	166910382
25-3704-A	M03A	MONOPITCH	1	1	Job Reference (optional)	

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Jun 13 2024 MiTek Industries, Inc. Tue Jul 16 16:42:45 2024 Page 1
ID:Bxl2MwYau_NHkbraGCmHloyOvst-5gER9l_5_o61FA50k4otjuK1qkUMjlxGeUa3UyxR2e



Scale = 1:12.8

Plate Offsets (X,Y)-- [1:0-2-4,0-0-3]														
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	0.19	Vert(LL)	-0.01	4-7	>999	240	MT20	244/190
Snow (Pf/Pg)	11.6/15.0		Lumber DOL	1.15		BC	0.11	Vert(CT)	-0.01	4-7	>999	180		
TCDL	10.0		Rep Stress Incr	YES		WB	0.00	Horz(CT)	0.01	1	n/a	n/a		
BCLL	0.0 *		Code IRC2018/TPI2014			Matrix-MP							Weight: 17 lb	FT = 20%
BCDL	10.0													

LUMBER-

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

BRACING-

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

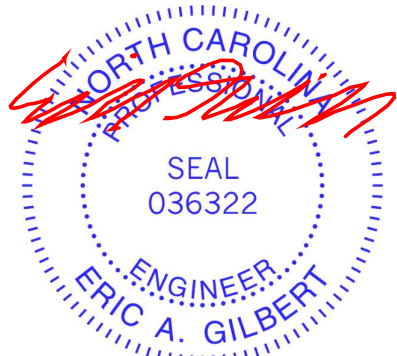
REACTIONS.

(size) 1=0-3-8, 4=Mechanical
Max Horz 1=53(LC 15)
Max Uplift 1=-7(LC 16), 4=-10(LC 16)
Max Grav 1=141(LC 2), 4=141(LC 2)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 3-6-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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 a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * 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.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



July 18,2024

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

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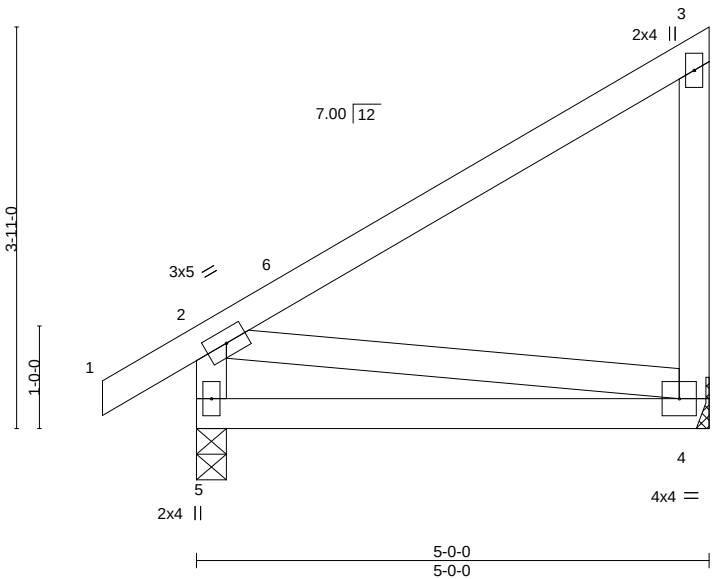
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 88 ROOF	166910383
25-3704-A	M04	MONOPITCH	4	1	Job Reference (optional)	

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

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ID:Bxl2MwYau_NHkbraGcmHloyOvst-ZsopMd?jl6EusJgCHnJ6HwRRUE1A59N5UID8bxyxR2d



LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.47	Vert(LL)	-0.03	4-5	>999	240	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.27	Vert(CT)	-0.06	4-5	>958	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.08	Horz(CT)	-0.00	4	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MP							
BCDL 10.0	Code IRC2018/TPI2014								
								Weight: 30 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	

REACTIONS.	(size)	4=Mechanical, 5=0-3-8
	Max Horz	5=130(LC 15)
	Max Uplift	4=-37(LC 13), 5=-38(LC 16)
	Max Grav	4=205(LC 21), 5=259(LC 2)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
BOT CHORD	4-5=-291/179
WEBS	2-4=-133/252

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



July 18,2024

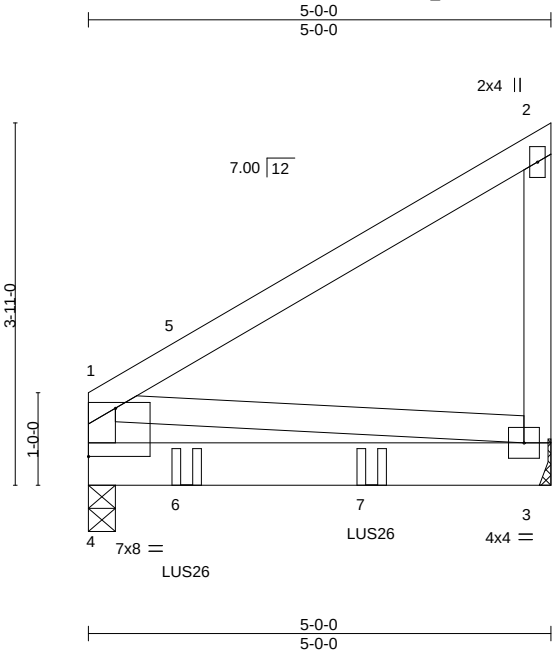
Job	Truss	Truss Type	Qty	Ply	SGR-LOT 88 ROOF
25-3704-A	M04G	Monopitch Girder	1	2	166910384

Riverside Roof Truss, LLC,

Danville, Va - 24541,

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ID:Bxl2MwYau_NHkbraGcmHloyOvst-ZsopMd?jl6EusJgCHnJ6HwRUSEsD5AL5UID8bxyxR2d



Scale = 1:24.9

Plate Offsets (X,Y)--		[4:Edge,0-6-4]									
LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	
TCLL (roof)	20.0	Plate Grip DOL	2-0-0	TC	0.28	in	(loc)	I/defl	L/d	MT20	GRIP
Snow (Pl/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.97	-0.06	3-4	>999	240		244/190
TCDL	10.0	Rep Stress Incr	NO	WB	0.01	-0.10	3-4	>539	180		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-MP		Horz(CT)	-0.00	3	n/a		
BCDL	10.0									Weight: 65 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 5-0-0 oc purlins, except end verticals.

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

REACTIONS.

(size) 3=Mechanical, 4=0-3-8

Max Horz 4=118(LC 9)

Max Uplift 3=-93(LC 9), 4=-88(LC 12)

Max Grav 3=1029(LC 3), 4=1423(LC 3)

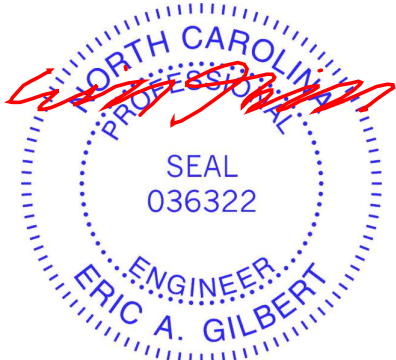
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- 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.
- 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.
- 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
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Use Simpson Strong-Tie LUS26 (4-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-0-12 from the left end to 3-0-12 to connect truss(es) to back face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

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



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Continued on page 2

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 88 ROOF
25-3704-A	M04G	Monopitch Girder	1	2	I66910384
					Job Reference (optional)

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 6=-770(B) 7=-769(B)

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

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 88 ROOF	I66910385
25-3704-A	PB01	Piggyback	11	1	Job Reference (optional)	

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

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ID:BxI2MwYau_NHkbraGcmHloyOvst-13MBaz0LWPMIUTFPrUqLq8_iCeRjqdoEjyzh8NyxR2c

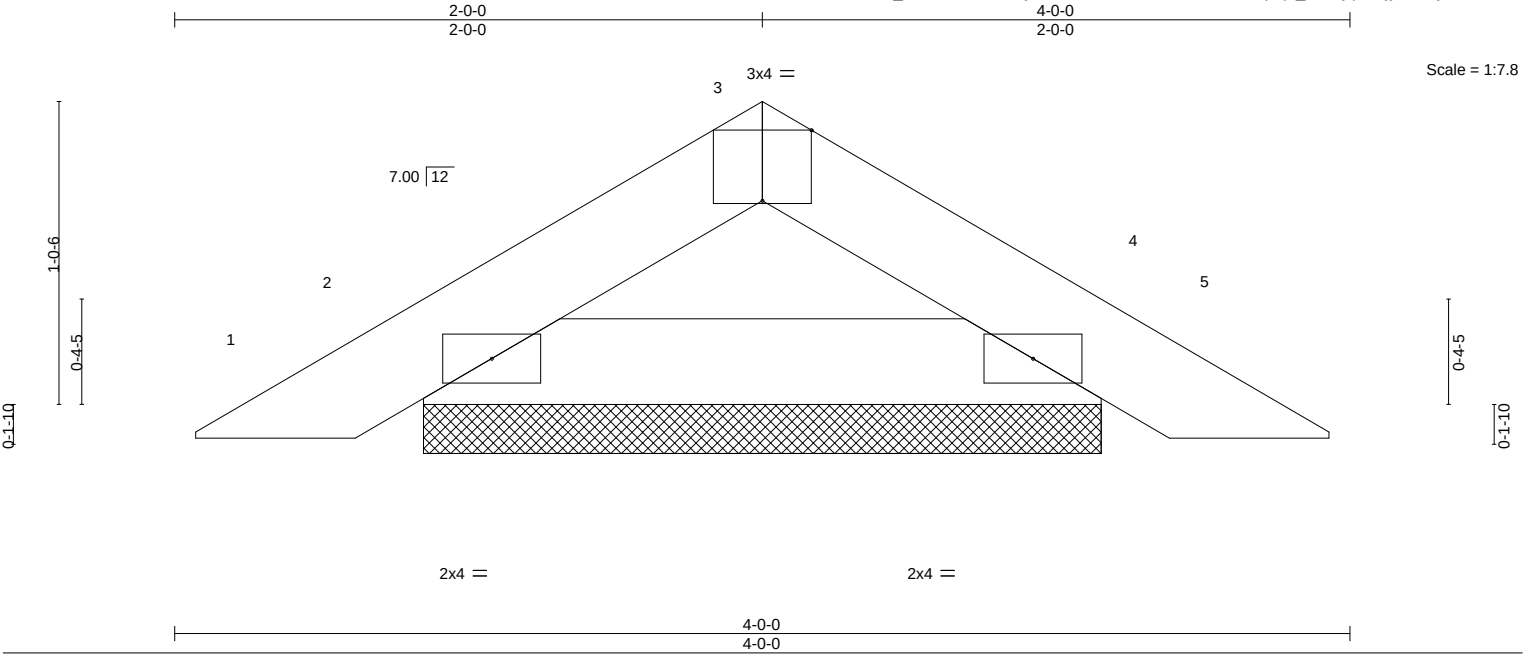


Plate Offsets (X,Y)--		[3:0-2-0,Edge]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.02	Vert(LL)	0.00 4 n/r 120	MT20		244/190	
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	0.00 4 n/r 120				
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00 4 n/a n/a				
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-P							
BCDL	10.0										
								Weight: 10 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 4-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 2=2-3-11, 4=2-3-11
Max Horz 2=19(LC 15)
Max Uplift 2=-21(LC 16), 4=-21(LC 16)
Max Grav 2=122(LC 2), 4=122(LC 2)

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

NOTES-

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



July 18,2024

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818 Soundside Road
Edenton, NC 27932

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ID: BxI2MwYau NHkhraGCmHloyOyst-VEwZnJ0zHilJc6dqhPCMaMI WqP2aCZvzOyciEnpvxB2h



TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-11-6 max.): 6-7.
BOT CHORD	Rigid ceiling directly applied or 9-7-6 oc bracing. Except: 6-0-0 oc bracing: 16-19
WEBS	1 Row at midpt 5-20, 7-19, 3-23, 10-13

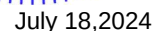
(size) 23=0-3-8, 13=0-3-8
 Max Horz 23=233(LC 15)
 Max Uplift 23=-73(LC 16), 13=-47(LC 16)
 Max Grav 23=1984(LC 28), 13=2067(LC 29)

TOP CHORD 2-3=-624/98, 3-5=-2823/122, 5-6=-2353/128, 6-7=-1953/138, 7-8=-3178/180,
8-10=-3035/36, 10-11=-429/75, 2-23=-511/20, 11-13=-394/101

BOT CHORD 22-23=0/2508, 20-22=0/2392, 18-20=0/1978, 14-18=0/1978, 13-14=0/2361

WEBS 5-22=-14/334, 5-20=-579/149, 6-20=0/951, 7-19=-84/353, 7-16=-54/1329,
14-16=-110/1154, 8-14=-557/196, 10-14=0/310, 3-23=2376/2, 10-13=-2623/0

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=38ft; eave=5ft; Cat II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-10-10, Interior(1) 2-10-10 to 17-0-0, Exterior(2E) 17-0-0 to 21-0-0, Exterior(2R) 21-0-0 to 26-4-8, Interior(1) 26-4-8 to 38-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 23, 13.
- 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.



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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 88 ROOF	166910387
25-3704-A	SD02	HIP	1	1	Job Reference (optional)	

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

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ID:Bxl2MwYau_NHkbraGcmHloyOvst-zRTx?f1b21cTjnOnyvtpvZ3q5RtlJbXBGSoCFyxR2a

-0-11-0 7-7-12 15-0-0 17-0-0 23-0-0 30-4-4 38-0-0 38-11-0
0-11-0 7-7-12 7-4-4 2-0-0 6-0-0 7-4-4 7-7-12 0-11-0

Scale = 1:70.8

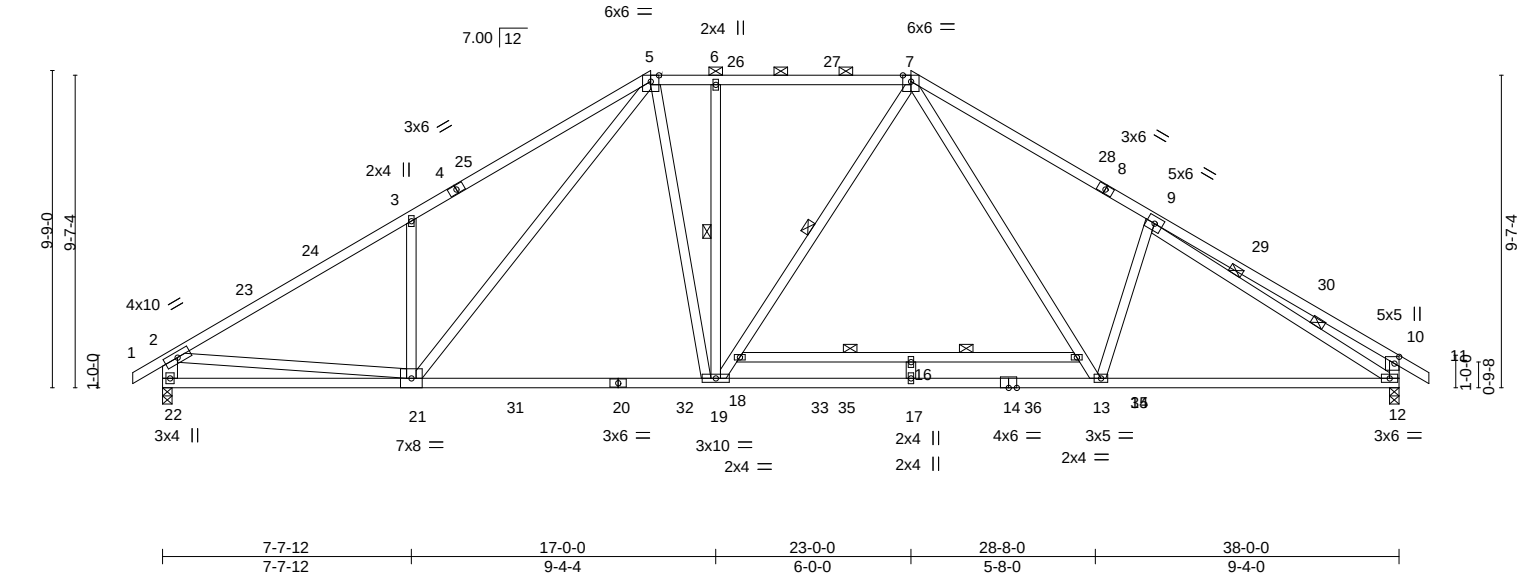


Plate Offsets (X,Y)-- [10:0-2-8,0-1-12]		7-7-12 17-0-0 23-0-0 28-8-0 38-0-0 7-7-12 9-4-4 6-0-0 5-8-0 9-4-0	
LOADING (psf)		SPACING-	CSL
TCLL (roof)	20.0	2-0-0	TC 0.96
Snow (Pf/Pg)	16.5/15.0	Plate Grip DOL	BC 0.99
TCDL	10.0	Lumber DOL	WB 0.88
BCLL	0.0 *	Rep Stress Incr	Matrix-MS
BCDL	10.0	Code IRC2018/TPI2014	
		DEFL.	PLATES
		in (loc) l/defl L/d	MT20
		Vert(LL) -0.81 16 >560 240	
		Vert(CT) -1.30 16 >346 180	
		Horz(CT) 0.09 12 n/a n/a	
			Weight: 257 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD	TOP CHORD
2x4 SP DSS *Except*	Structural wood sheathing directly applied, except end verticals, and
5-7: 2x4 SP No.2, 1-4,8-11: 2x4 SP No.1	2-0-0 oc purlins (3-1-11 max.): 5-7.
BOT CHORD	BOT CHORD
2x4 SP DSS *Except*	Rigid ceiling directly applied or 9-2-13 oc bracing. Except:
20-22: 2x4 SP No.2, 15-18: 2x4 SP No.1	5-3-0 oc bracing: 15-18
WEBS	WEBS
2x4 SP No.3 *Except*	1 Row at midpt 6-19, 7-19
2-22: 2x6 SP No.2	2 Rows at 1/3 pts 9-12

REACTIONS.	(size) 22=0-3-8, 12=0-3-8
	Max Horz 22=-211(LC 14)
	Max Uplift 22=-76(LC 16), 12=-47(LC 16)
	Max Grav 22=1985(LC 28), 12=2071(LC 29)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-2836/87, 3-5=-2906/232, 5-6=-2147/120, 6-7=-2146/121, 7-9=-3018/119, 9-10=-705/178, 2-22=-1861/117, 10-12=-584/168
BOT CHORD	21-22=-104/620, 19-21=0/2078, 17-19=0/2064, 13-17=0/2064, 12-13=0/2521
WEBS	3-21=-534/208, 5-21=-158/726, 5-19=0/903, 6-19=-455/87, 18-19=-50/273, 7-18=0/449, 7-15=0/1087, 13-15=-38/907, 9-13=-327/203, 2-21=0/1983, 9-12=-2557/0

- 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=38ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-10-10, Interior(1) 2-10-10 to 15-0-0, Exterior(2R) 15-0-0 to 20-4-8, Interior(1) 20-4-8 to 23-0-0, Exterior(2R) 23-0-0 to 28-4-8, Interior(1) 28-4-8 to 38-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - 4) Unbalanced snow loads have been considered for this design.
 - 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
 - 6) Provide adequate drainage to prevent water ponding.
 - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 22, 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.
 - 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 18,2024

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 88 ROOF	166910388
25-3704-A	SD03	HIP	1	1	Job Reference (optional)	

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

8.730 s Jun 13 2024 MiTek Industries, Inc. Tue Jul 16 16:42:50 2024 Page 1

ID:Bxl2MwYau_NHkbraGCMHloyOvst-Re1KC?2DpKkKLxzzWdO2Smc_LrGk1m6gPwBLiyxR2Z

-0-11-0 6-7-12 13-0-0 17-0-0 25-0-0 31-4-4 38-0-0 38-11-0
0-11-0 6-7-12 6-4-4 4-0-0 8-0-0 6-4-4 6-7-12 0-11-0

Scale = 1:70.5

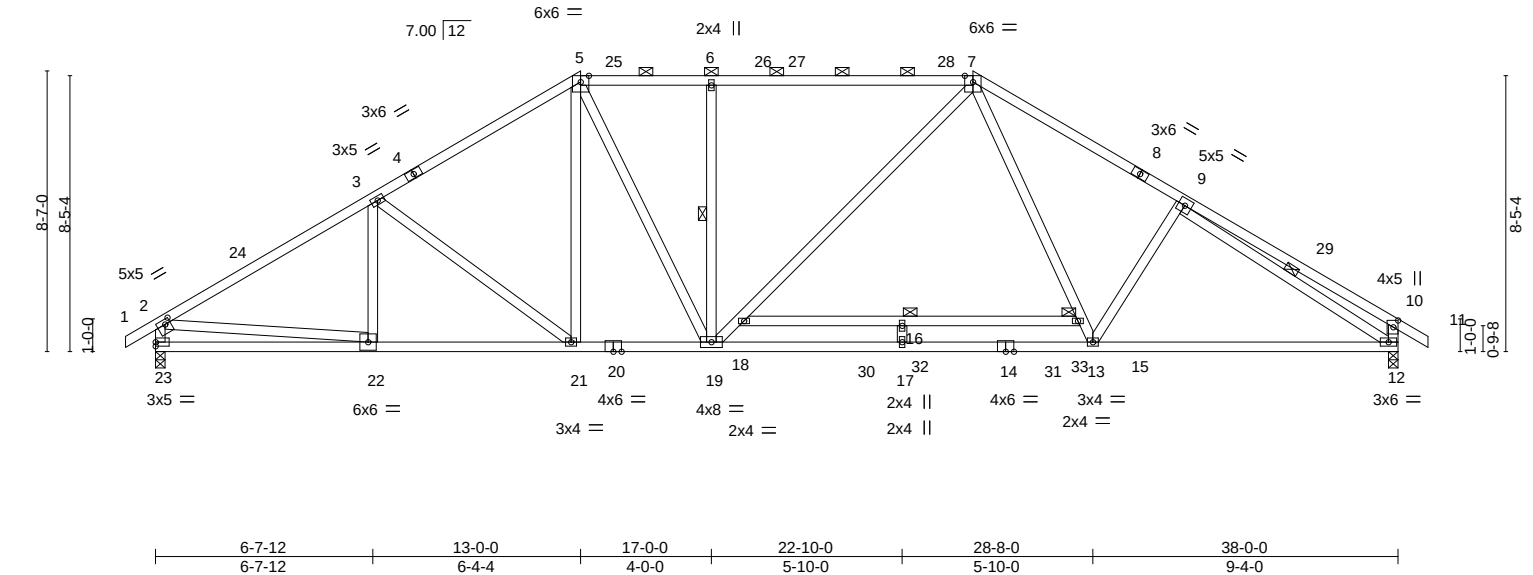


Plate Offsets (X,Y)-- [2:0-2-0,0-1-12], [10:0-2-8,0-1-12]		6-7-12 13-0-0 17-0-0 22-10-0 28-8-0 38-0-0 6-7-12 6-4-4 4-0-0 5-10-0 5-10-0 9-4-0	
LOADING (psf)		SPACING-	CSL
TCLL (roof)	20.0	2-0-0	TC 0.99
Snow (Pl/Pg)	16.5/15.0	Plate Grip DOL 1.15	BC 0.81
TCDL	10.0	Lumber DOL 1.15	WB 0.86
BCLL	0.0 *	Rep Stress Incr YES	Matrix-MS
BCDL	10.0	Code IRC2018/TPI2014	
		DEFL.	PLATES
		in (loc) l/defl L/d	MT20 244/190
		Vert(LL) -0.70 15-16 >642 240	
		Vert(CT) -1.18 15-16 >384 180	
		Horz(CT) 0.09 12 n/a n/a	
		Weight: 252 lb FT = 20%	

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 *Except* 5-7: 2x4 SP DSS	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-6-14 max.): 5-7.
BOT CHORD 2x4 SP DSS *Except* 20-23: 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
WEBS 2x4 SP No.3	WEBS 6-0-0 oc bracing: 15-18 1 Row at midpt 6-19, 9-12

REACTIONS.	(size) 23=0-3-8, 12=0-3-8 Max Horz 23=-186(LC 14) Max Uplift 23=-75(LC 16), 12=-48(LC 16) Max Grav 23=1915(LC 28), 12=2035(LC 29)
-------------------	--

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-2734/84, 3-5=-2405/123, 5-6=-2357/111, 6-7=-2356/111, 7-9=-2871/78, 9-10=-604/136, 2-23=-1808/108, 10-12=-515/141
BOT CHORD	22-23=-88/490, 21-22=0/2398, 19-21=0/2083, 17-19=0/2187, 13-17=0/2187, 12-13=0/2410
WEBS	3-21=-470/100, 5-21=-39/314, 5-19=0/969, 6-19=-629/118, 18-19=-65/383, 7-18=-4/543, 7-15=0/923, 13-15=0/708, 9-13=-256/168, 2-22=0/1927, 9-12=-2445/0

- 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=38ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-10-10, Interior(1) 2-10-10 to 13-0-0, Exterior(2R) 13-0-0 to 18-4-8, Interior(1) 18-4-8 to 25-0-0, Exterior(2R) 25-0-0 to 30-4-8, Interior(1) 30-4-8 to 38-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - 4) Unbalanced snow loads have been considered for this design.
 - 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
 - 6) Provide adequate drainage to prevent water ponding.
 - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 23, 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.
 - 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 18,2024

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 88 ROOF	166910389
25-3704-A	SD04	ROOF SPECIAL	1	1	Job Reference (optional)	

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Jun 13 2024 MiTek Industries, Inc. Tue Jul 16 16:42:51 2024 Page 1

ID:Bx12MwYau_NHkbraGcmHloyOvst-wqbiPL3sZesBz5YA4KvH_8C9FZOmEWqeaxuH8yxR2Y

-0-11-0 6-3-14 12-7-12 14-3-8 20-7-12 27-0-0 32-6-0 38-0-0 38-11-0
0-11-0 6-3-14 6-3-14 1-7-12 6-4-4 6-4-4 5-6-0 5-6-0 0-11-0

Scale = 1:67.9

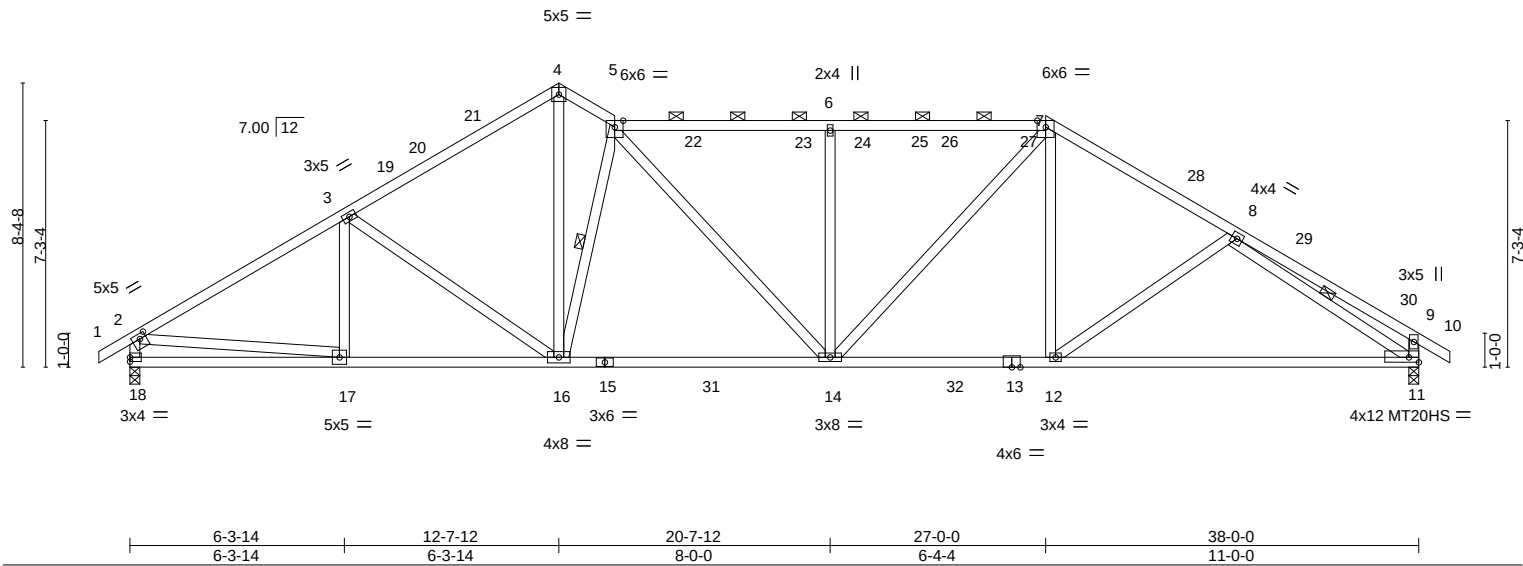


Plate Offsets (X,Y)-- [2:0-2-4,0-1-12], [11:Edge,0-1-12]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	20.0	Plate Grip DOL	2-0-0	TC	0.79	in (loc)	l/defl	MT20	GRIP
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.97	Vert(LL)	-0.32 11-12 >999	MT20HS	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.79	Vert(CT)	-0.65 11-12 >692		187/143
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-MS		Horz(CT)	0.09 11 n/a n/a		
BCDL	10.0							Weight: 238 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 3-1-15 oc purlins, except end verticals, and 2-0-0 oc purlins (3-1-2 max.): 5-7.
BOT CHORD	2x4 SP No.1 *Except* 15-18: 2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
WEBS	2x4 SP No.3	WEBS	2-2-0 oc bracing: 14-16. 1 Row at midpt 5-16, 8-11
REACTIONS. (size) 18=0-3-8, 11=0-3-8 Max Horz 18=-184(LC 14) Max Uplift 18=-125(LC 16), 11=-125(LC 16) Max Grav 18=1753(LC 28), 11=1761(LC 29)			

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-2453/203, 3-4=-2151/237, 4-5=-2117/267, 5-6=-2301/269, 6-7=-2301/269, 7-8=-2289/225, 8-9=-625/52, 2-18=-1644/168, 9-11=-487/90
BOT CHORD	17-18=-84/454, 16-17=-114/2159, 14-16=-70/2190, 12-14=-35/1915, 11-12=-132/1938
WEBS	3-16=-362/107, 4-16=-159/1915, 5-16=-1538/194, 5-14=-37/429, 6-14=-611/134, 7-14=-65/697, 7-12=0/479, 2-17=-43/1724, 8-11=-1858/211

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=38ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-10-10, Interior(1) 2-10-10 to 12-7-12, Exterior(2E) 12-7-12 to 14-3-8, Interior(1) 14-3-8 to 27-0-0, Exterior(2R) 27-0-0 to 30-9-10, Interior(1) 30-9-10 to 38-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 18=125, 11=125.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Job	Truss	Truss Type	Qty	Ply	SGR-LOT 88 ROOF	166910390
25-3704-A	SD05	ROOF SPECIAL	1	1	Job Reference (optional)	

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Jun 13 2024 MiTek Industries, Inc. Tue Jul 16 16:42:51 2024 Page 1

ID:Bxl2MwYau_NHkbraGcmHloyOvst-wqbiPL3sZesBz5YA4KvH_8BMFapmC4qeaxuH8yxR2Y

-0-11-0 6-5-10 12-7-12 16-3-8 22-7-12 29-0-0 33-4-4 38-0-0 38-11-0
0-11-0 6-5-10 6-2-2 3-7-12 6-4-4 6-4-4 4-4-4 4-7-12 0-11-0

Scale = 1:68.1

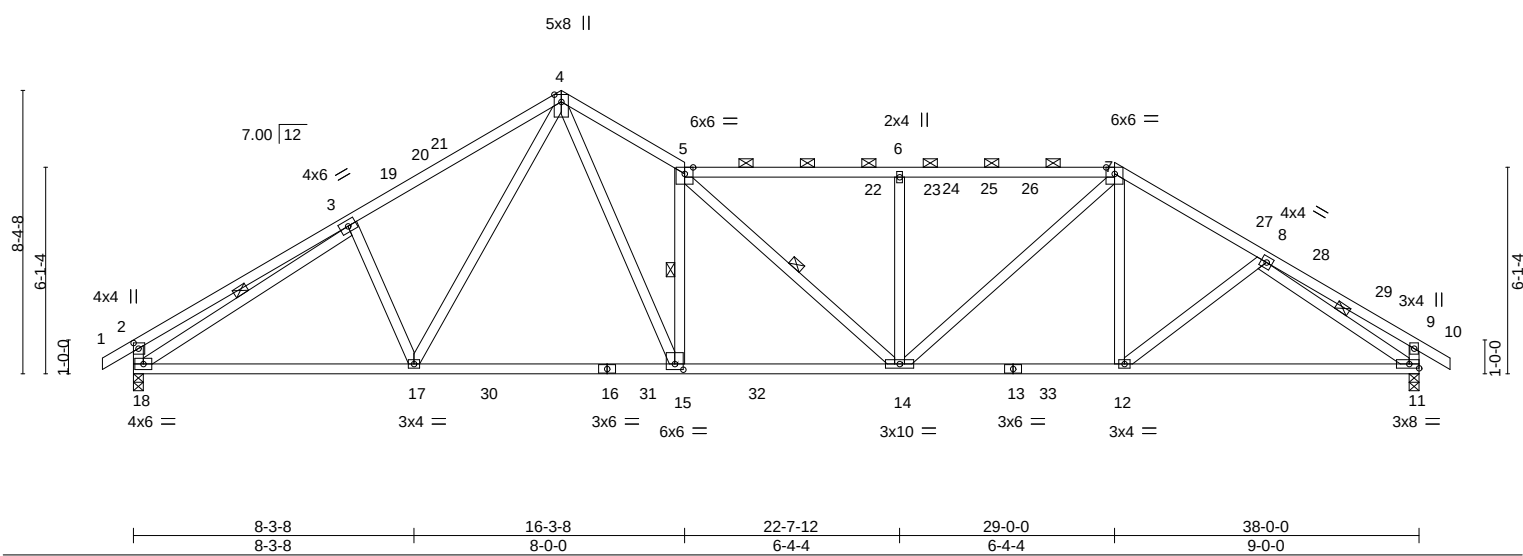
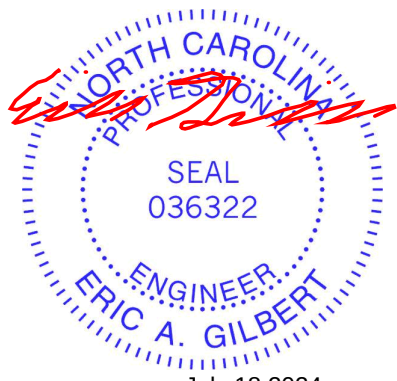


Plate Offsets (X,Y)-- [2:0-2-0,0-1-12], [15:0-3-0,0-2-0]																			
LOADING (psf)		SPACING-		2-0-0		CSI.		DEFL.		in (loc)		l/defl		L/d		PLATES		GRIP	
TCLL (roof) 20.0		Plate Grip DOL		1.15		TC 0.84		Vert(LL)		-0.27 15-17		>999		240		MT20		244/190	
Snow (Pf/Pg) 16.5/15.0		Lumber DOL		1.15		BC 0.95		Vert(CT)		-0.45 15-17		>999		180					
TCDL 10.0		Rep Stress Incr		YES		WB 0.94		Horz(CT)		0.12 11		n/a		n/a					
BCLL 0.0 *		Code IRC2018/TPI2014				Matrix-MS										Weight: 233 lb		FT = 20%	
BCDL 10.0																			

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (2-6-14 max.): 5-7.
BOT CHORD 2x4 SP No.1 *Except* 16-18: 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 17-18.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 5-15, 5-14, 3-18, 8-11
REACTIONS. (size) 18=0-3-8, 11=0-3-8 Max Horz 18=184(LC 15) Max Uplift 18=125(LC 16), 11=125(LC 16) Max Grav 18=1773(LC 28), 11=1766(LC 29)	

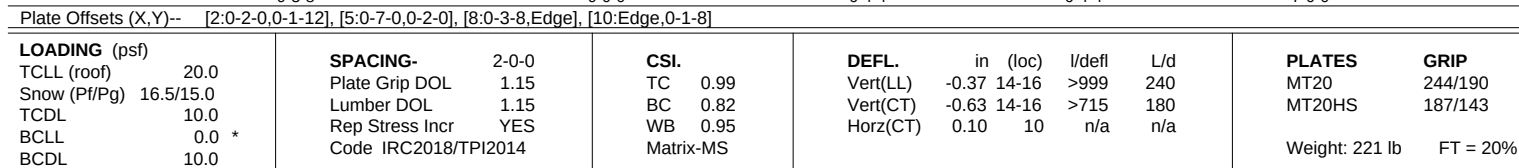
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-572/132, 3-4=-2427/274, 4-5=-3170/351, 5-6=-2690/278, 6-7=-2690/278, 7-8=-2378/220, 8-9=-479/61, 2-18=-488/136, 9-11=-443/91
BOT CHORD 17-18=-123/2165, 15-17=-34/1843, 14-15=-112/2781, 12-14=-59/2005, 11-12=-125/1925
WEBS 4-17=-49/538, 4-15=-179/2322, 5-15=-1809/251, 6-14=-617/134, 7-14=-84/997, 7-12=0/350, 3-18=-2019/87, 8-11=-2006/186

- NOTES-
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=38ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-10-10, Interior(1) 2-10-10 to 12-7-12, Exterior(2E) 12-7-12 to 16-3-8, Interior(1) 16-3-8 to 29-0-0, Exterior(2R) 29-0-0 to 32-9-10, Interior(1) 32-9-10 to 38-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 18=125, 11=125.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 18,2024

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Jun 13 2024 MiTek Industries, Inc. Tue Jul 16 16:42:52 2024 Page 1
 ID:Bxl2MwYau_NHkbraGcmHloyOvst-O094dh3UKy_2aE7Me2QWXBhKqfy4VfAzteGSpayxR2X
 0-11-0 6-5-10 12-7-12 18-3-8 31-0-0 38-0-0
 0-11-0 6-5-10 6-2-2 5-7-12 6-4-4 6-4-4 7-0-0 0-11-0
 Scale = 1:67.8



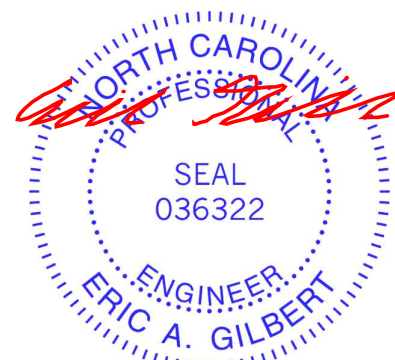
REACTIONS. (size) 17=0-3-8, 10=0-3-8
 Max Horz 17=-184(LC 14)
 Max Uplift 17=-125(LC 16), 10=-125(LC 16)
 Max Grav 17=1745(LC 28), 10=1726(LC 29)

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

TOP CHORD	2-3=-595/125, 3-4=-2334/251, 4-5=-3928/407, 5-6=-3106/290, 6-7=-3106/290, 7-8=-2424/198, 2-17=-500/133, 8-10=-1615/189
BOT CHORD	16-17=-126/2113, 14-16=-34/1801, 13-14=-174/3418, 11-13=-86/2007, 10-11=-110/514
WEBS	4-16=-13/567, 4-14=-242/2859, 5-14=-2060/292, 5-13=-409/15, 6-13=-621/127, 7-13=-100/1397, 3-17=-1944/117, 8-11=0/1689

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=38ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-10-10, Interior(1) 2-10-10 to 12-7-12, Exterior(2R) 12-7-12 to 16-5-6, Interior(1) 16-5-6 to 31-0-0, Exterior(2R) 31-0-0 to 34-9-10, Interior(1) 34-9-10 to 38-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TLL: 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) All plates are MT20 plates unless otherwise indicated.
- 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, with BCDL = 10.0psf.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=125, 10=125.
- 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.



July 18, 2024



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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 88 ROOF	166910392
25-3704-A	T01	COMMON	2	1	Job Reference (optional)	

Riverside Roof Truss, LLC,

Danville, Va - 24541,

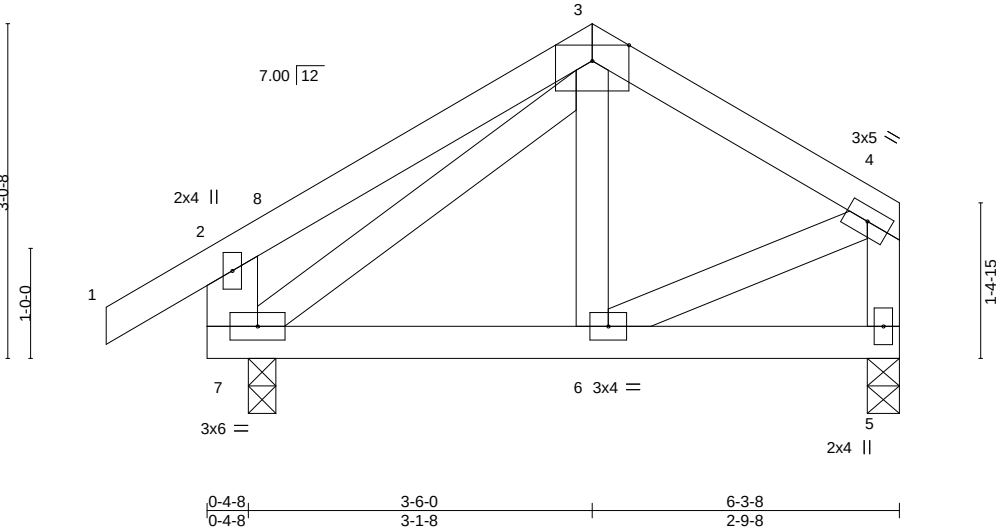
8.730 s Jun 13 2024 MiTek Industries, Inc. Tue Jul 16 16:42:53 2024 Page 1

ID:BxI2MwYau_NHkbraGcmHloyOvst-sDjSq1465F6vCOiYBlxI3PDiN3TREKO75uQ?L1yxR2W



5x8 =

Scale = 1:20.9



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	GRIP
TCLL (roof)	20.0		2-0-0	TC	0.17	in	(loc)	l/defl	L/d	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Plate Grip DOL	1.15	BC	0.11	Vert(LL)	-0.00	6-7	>999		
TCDL	10.0	Lumber DOL	1.15	WB	0.06	Vert(CT)	-0.01	6-7	>999		
BCLL	0.0 *	Rep Stress Incr	YES	Matrix-MP		Horz(CT)	0.00	5	n/a		
BCDL	10.0	Code IRC2018/TPI2014								Weight: 38 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2

BOT CHORD 2x4 SP No.2

WEBS 2x4 SP No.3 *Except*

2-7: 2x6 SP No.2

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) 5=0-3-8, 7=0-3-0

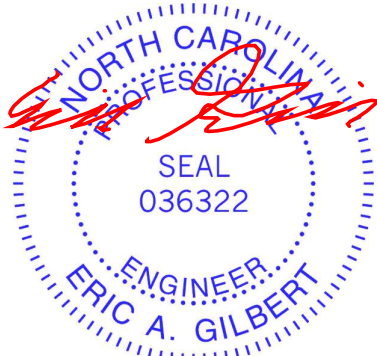
Max Horz 7=80(LC 15)

Max Uplift 5=-14(LC 16), 7=-51(LC 16)

Max Grav 5=230(LC 2), 7=312(LC 2)

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

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



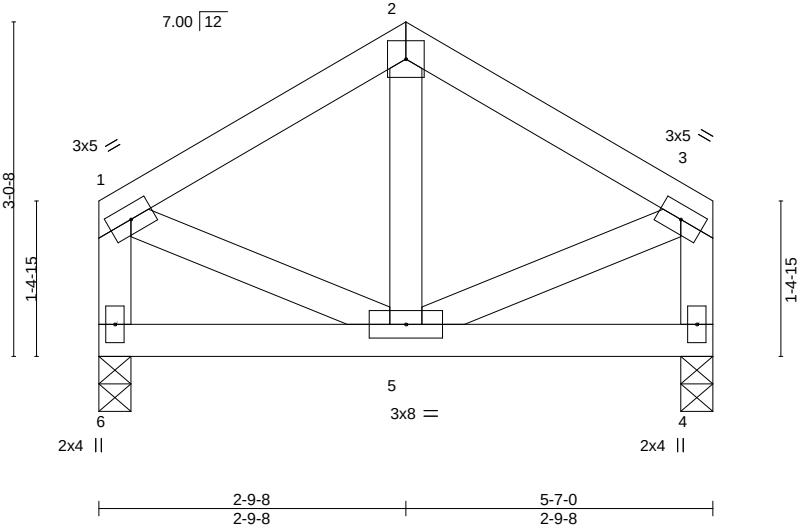
July 18,2024

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 88 ROOF
25-3704-A	T01A	Common	2	1	i66910393
Job Reference (optional)					

Riverside Roof Truss, LLC,
Danville, Va - 24541,
8.730 s Jun 13 2024 MiTek Industries, Inc. Tue Jul 16 16:42:53 2024 Page 1

ID:Bxl2MwYau_NHkbraGcmHloyOvst-sDjSq1465F6vCOiYBlxI3PDi_3T4EKX75uQ?L1yxR2W
5-7-0
2-9-8

4x4 =
Scale = 1:21.0



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	-0.00 5-6 >999 240	MT20		244/190	
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	-0.00 5-6 >999 180				
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	-0.00 4 n/a n/a				
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-MP							
BCDL	10.0										
Weight: 32 lb										FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 5-7-0 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3		

REACTIONS. (size) 6=0-3-8, 4=0-3-8
Max Horz 6=-69(LC 14)
Max Uplift 6=-13(LC 16), 4=-13(LC 16)
Max Grav 6=212(LC 2), 4=212(LC 2)

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

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



July 18,2024

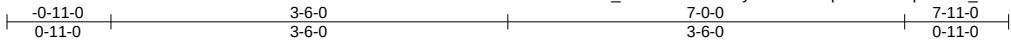
Job	Truss	Truss Type	Qty	Ply	SGR-LOT 88 ROOF	166910394
25-3704-A	T01GE	COMMON STRUCTURAL GA	1	1	Job Reference (optional)	

Riverside Roof Truss, LLC,

Danville, Va - 24541,

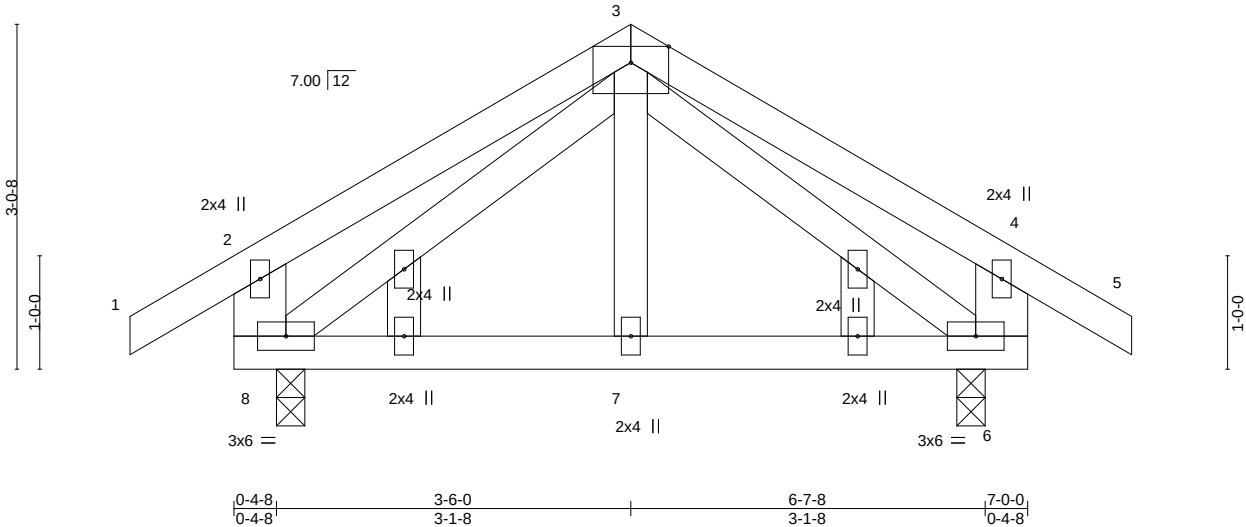
8.730 s Jun 13 2024 MiTek Industries, Inc. Tue Jul 16 16:42:54 2024 Page 1

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5x8 =

Scale = 1:20.3



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	2-0-0		TC	0.19	in (loc)	l/defl	L/d			
Snow (Pf/Pg)	11.6/15.0	Plate Grip DOL	1.15	BC	0.12	Vert(LL)	-0.00 7-8	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	WB	0.07	Vert(CT)	-0.01 7-8	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	Matrix-MP		Horz(CT)	0.00 6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014								Weight: 46 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
2-8,4-6: 2x6 SP No.2
OTHERS 2x4 SP No.3

BRACING-

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

REACTIONS.

(size) 8=0-3-0, 6=0-3-0
Max Horz 8=78(LC 15)
Max Uplift 8=52(LC 16), 6=52(LC 16)
Max Grav 8=330(LC 2), 6=330(LC 2)

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

NOTES-

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



July 18,2024

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

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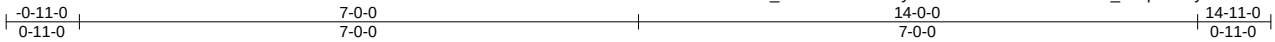
ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

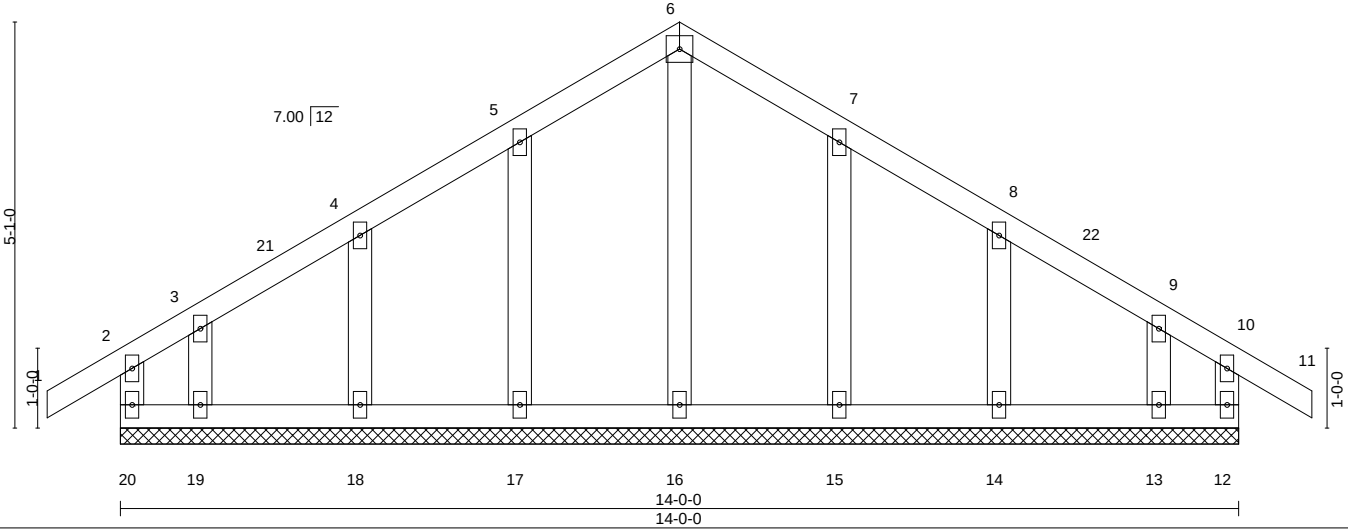
Job	Truss	Truss Type	Qty	Ply	SGR-LOT 88 ROOF	166910395
25-3704-A	T02GE	COMMON SUPPORTED GAB	1	1	Job Reference (optional)	

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

8.730 s Jun 13 2024 MiTek Industries, Inc. Tue Jul 16 16:42:55 2024 Page 1
ID:Bxl2MwYau_NHkbraGcmHloyOvst-obrDFi6MdtMcSisxJA_D9qJ3vs9yiExPZCv6QvyxR2U



4x4 = Scale = 1:28.8



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	GRIP
TCLL (roof)	20.0	2-0-0		TC	0.10	in	(loc)	l/defl	L/d	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Plate Grip DOL	1.15	BC	0.04	Vert(LL)	-0.00	11	n/r		
TCDL	10.0	Lumber DOL	1.15	WB	0.05	Vert(CT)	-0.00	11	n/r		
BCLL	0.0 *	Rep Stress Incr	YES	Matrix-R		Horz(CT)	-0.00	12	n/a		
BCDL	10.0	Code IRC2018/TPI2014									
										Weight: 76 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.

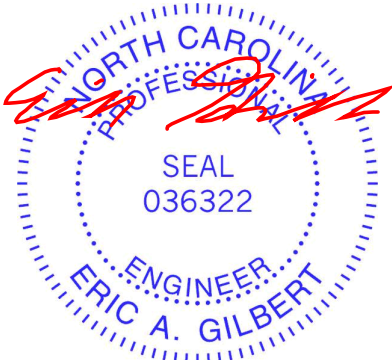
REACTIONS.

All bearings 14-0-0.
(lb) - Max Horz 20=-117(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 20, 12, 17, 18, 19, 15, 14, 13
Max Grav All reactions 250 lb or less at joint(s) 20, 12, 16, 17, 18, 19, 15, 14, 13

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-11-0 to 2-1-0, Exterior(2N) 2-1-0 to 7-0-0, Corner(3R) 7-0-0 to 10-0-0, Exterior(2N) 10-0-0 to 14-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 12, 17, 18, 19, 15, 14, 13.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



July 18,2024

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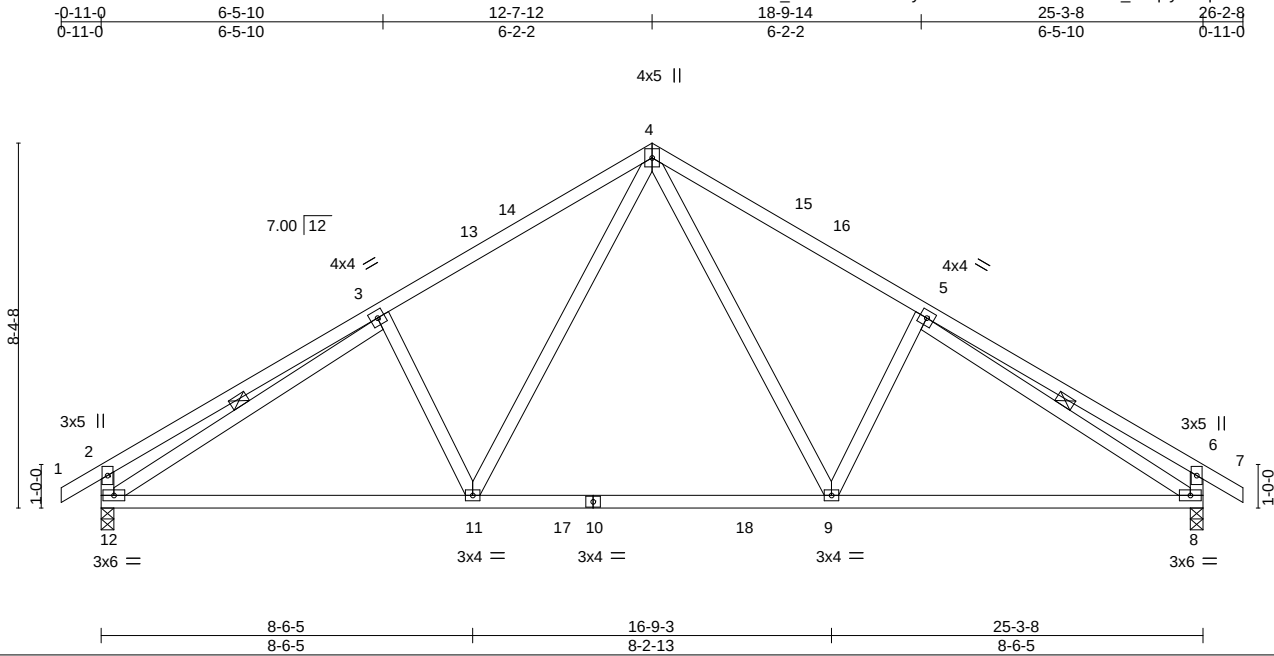
ENGINEERING BY
TRENCO
A MITEK Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 88 ROOF	166910396
25-3704-A	T03	COMMON	2	1	Job Reference (optional)	

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

8.730 s Jun 13 2024 MiTek Industries, Inc. Tue Jul 16 16:42:55 2024 Page 1
ID:BxI2MwYau_NHkbraGCMHloyOvst-obrDFi6MdtMcSisxJA_D9qJysszqi93PZCv6QvyxR2U



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.55	Vert(LL)	-0.16 9-11 >999 240	MT20		244/190	
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.24 11-12 >999 180				
TCDL	10.0	Rep Stress Incr	YES	WB	0.37	Horz(CT)	0.04 8 n/a n/a				
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-MS							
BCDL	10.0										
								Weight: 148 lb		FT = 20%	

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-6-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-12, 5-8

REACTIONS.

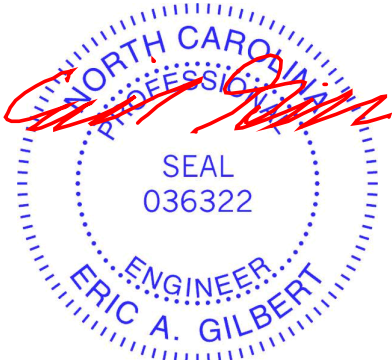
(size) 12=0-3-8, 8=0-3-8
Max Horz 12=-183(LC 14)
Max Uplift 12=-94(LC 16), 8=-94(LC 16)
Max Grav 12=1181(LC 28), 8=1181(LC 29)

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

TOP CHORD 2-3=-496/126, 3-4=-1405/196, 4-5=-1405/196, 5-6=-496/126, 2-12=-443/133, 6-8=-443/133
BOT CHORD 11-12=-60/1329, 9-11=0/926, 8-9=-50/1216
WEBS 4-9=-45/636, 5-9=-282/162, 4-11=-45/635, 3-11=-282/162, 3-12=-1108/45, 5-8=-1108/44

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=25ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 12-7-12, Exterior(2R) 12-7-12 to 15-7-12, Interior(1) 15-7-12 to 26-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 8.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



July 18,2024

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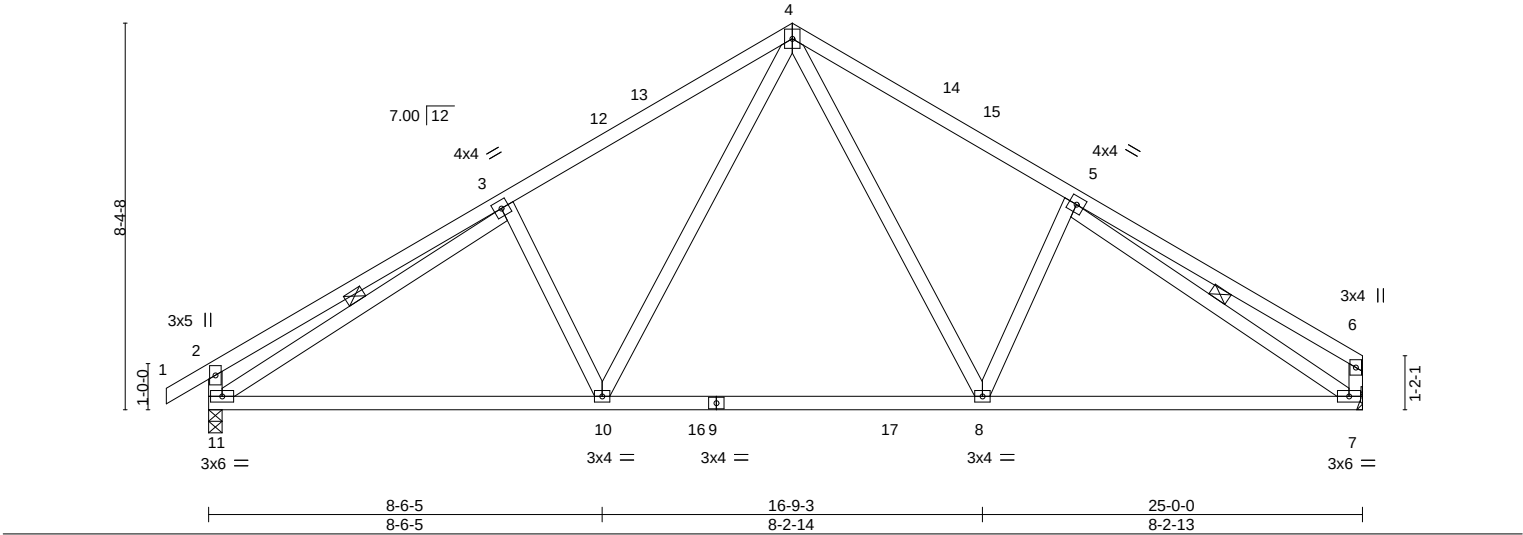
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 88 ROOF	166910397
25-3704-A	T03A	COMMON	2	1		

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Jun 13 2024 MiTek Industries, Inc. Tue Jul 16 16:42:56 2024 Page 1
ID:BxI2MwYau_NHkbraGCMhloyOvst-GoObT27_OAVT3sR7ttVSh1r7gGJ2RbsZosefyLyxR2T



Scale = 1:49.9



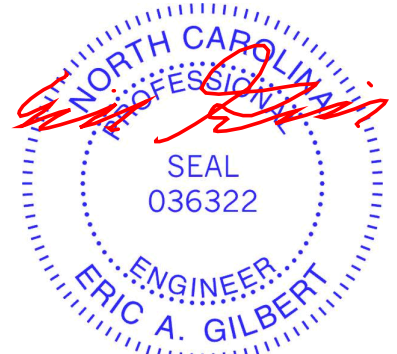
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.55	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.82	Vert(LL) -0.17 8-10 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.40	Vert(CT) -0.25 8-10 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.04 7 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 146 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-6-15 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 3-11, 5-7

REACTIONS. (size) 11=0-3-8, 7=Mechanical
Max Horz 11=182(LC 15)
Max Uplift 11=-93(LC 16), 7=-60(LC 16)
Max Grav 11=1170(LC 28), 7=1109(LC 29)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-493/126, 3-4=-1386/195, 4-5=-1368/197, 5-6=-339/92, 2-11=-441/132, 6-7=-292/78
BOT CHORD 10-11=-96/1306, 8-10=-3/900, 7-8=-82/1167
WEBS 3-10=-283/162, 4-10=-45/640, 4-8=-48/608, 5-8=-263/160, 3-11=-1092/43, 5-7=-1198/81

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=25ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 12-7-12, Exterior(2R) 12-7-12 to 15-7-12, Interior(1) 15-7-12 to 24-10-4 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, with BCDL = 10.0psf.
 - 8) Refer to girder(s) for truss to truss connections.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 7.
 - 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.



July 18,2024

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 88 ROOF	166910399
25-3704-A	T04	PIGGYBACK BASE	5	1		

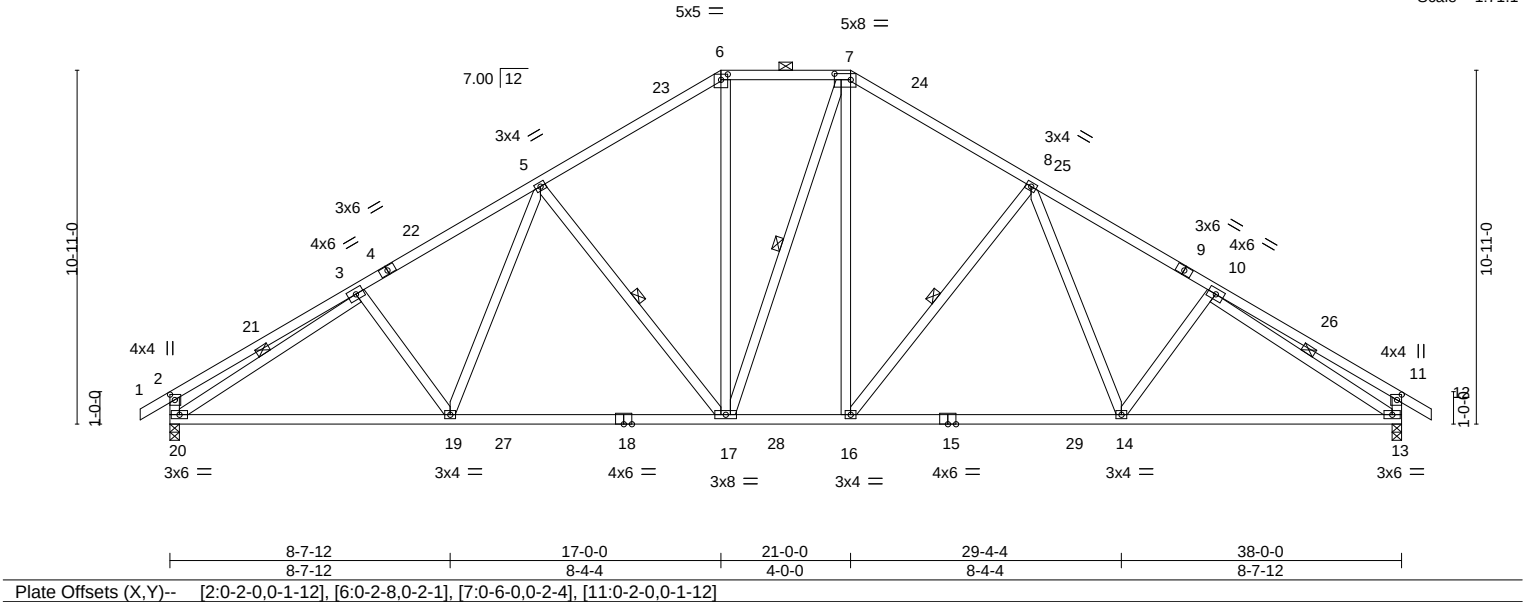
Riverside Roof Truss, LLC, Danville, Va - 24541,

8.730 s Jun 13 2024 MiTek Industries, Inc. Tue Jul 16 16:42:57 2024 Page 1

ID:Bx12MwYau_NHkbraGcmHloyOvst-k_yzgO7c9UdKh00KQb0hEFOHbgl4A_FiOWODUoyxR2S

0-11-0 5-10-5 11-5-3 17-0-0 21-0-0 26-6-13 32-1-11 38-0-0 38-11-0
0-11-0 5-10-5 5-6-13 5-6-13 4-0-0 5-6-13 5-6-13 5-10-5 0-11-0

Scale = 1:71.1



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 0.60	Vert(LL)	-0.25 14-16	>999	240	MT20	244/190
Snow (Pl/Pg) 16.5/15.0	Lumber DOL	1.15	BC 0.83	Vert(CT)	-0.43 14-16	>999	180		
TCDL 10.0	Rep Stress Incr	YES	WB 0.64	Horz(CT)	0.11 13	n/a	n/a		
BCLL 0.0 *	Code IRC2018/TPI2014		Matrix-MS						
BCDL 10.0								Weight: 256 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-4-14 oc purlins, except end verticals, and 2-0-0 oc purlins (4-7-5 max.): 6-7.
BOT CHORD 2x4 SP No.1 *Except* 15-18: 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 5-17, 7-17, 8-16, 3-20, 10-13

REACTIONS.	(size) 20=0-3-8, 13=0-3-8
	Max Horz 20=235(LC 15)
	Max Uplift 20=-125(LC 16), 13=-125(LC 16)
	Max Grav 20=1786(LC 28), 13=1788(LC 29)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-547/113, 3-5=-2511/206, 5-6=-1924/234, 6-7=-1590/231, 7-8=-1925/234, 8-10=-2514/206, 10-11=-547/113, 2-20=-470/127, 11-13=-469/127
BOT CHORD	19-20=-50/2256, 17-19=-6/2080, 16-17=0/1643, 14-16=0/1954, 13-14=-50/2082
WEBS	5-19=0/453, 5-17=-680/132, 6-17=-37/734, 7-16=-37/784, 8-16=-683/132, 8-14=0/455, 3-20=-2146/71, 10-13=-2149/71

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=38ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-10-10, Interior(1) 2-10-10 to 17-0-0, Exterior(2E) 17-0-0 to 21-0-0, Exterior(2R) 21-0-0 to 26-6-13, Interior(1) 26-6-13 to 38-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - 4) Unbalanced snow loads have been considered for this design.
 - 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
 - 6) Provide adequate drainage to prevent water ponding.
 - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 20=125, 13=125.
 - 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.



July 18,2024

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacompnents.com)

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 88 ROOF	166910400
25-3704-A	T04GE	PIGGYBACK BASE SUPPO	1	1	Job Reference (optional)	

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

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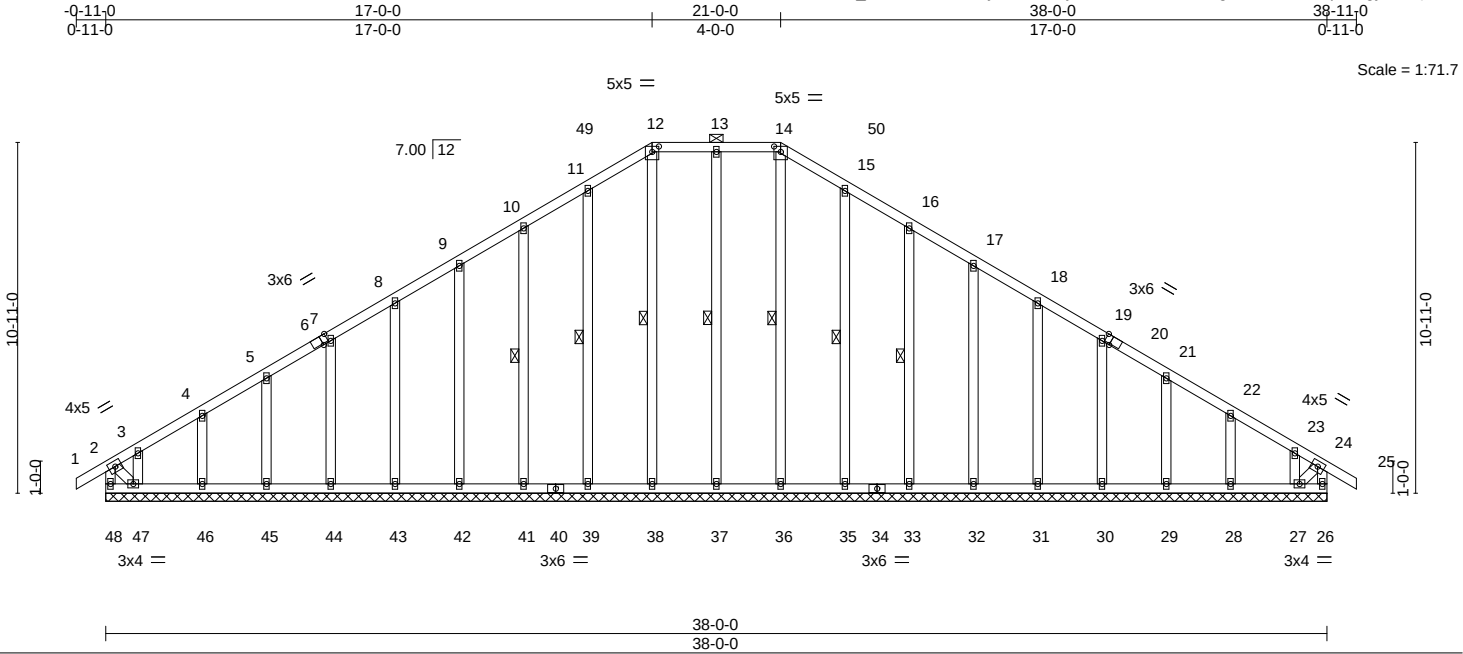


Plate Offsets (X,Y)--		[6:0-2-3,Edge], [12:0-2-8,0-2-1], [14:0-2-8,0-2-1], [20:0-2-3,Edge]	
LOADING (psf)		SPACING-	2-0-0
TCLL (roof)	20.0	Plate Grip DOL	1.15
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15
TCDL	10.0	Rep Stress Incr	YES
BCLL	0.0 *	Code	IRC2018/TPI2014
BCDL	10.0	CSI.	TC 0.08
		BC 0.04	WB 0.15
		Matrix-S	
		DEFL.	in (loc) l/defl L/d
		Vert(LL)	-0.00 25 n/r 120
		Vert(CT)	-0.00 25 n/r 120
		Horz(CT)	0.01 26 n/a n/a
		PLATES	MT20
		GRIP	244/190
		Weight:	297 lb
		FT =	20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 12-14.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 47-48,26-27.
WEBS	2x4 SP No.3	WEBS	1 Row at midpt 14-36, 13-37, 12-38, 11-39, 10-41, 15-35, 16-33
OTHERS	2x4 SP No.3		

REACTIONS. All bearings 38-0-0.
(lb) - Max Horz 48=-235(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 26, 37, 39, 41, 42, 43, 44, 45, 46, 35, 33, 32, 31, 30, 29, 28, 27 except 48=-159(LC 14), 47=-113(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 48, 26, 36, 37, 38, 39, 41, 42, 43, 44, 45, 46, 47, 35, 33, 32, 31, 30, 29, 28, 27

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 11-12=-163/268, 14-15=-163/268

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=38ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-11-0 to 3-0-0, Exterior(2N) 3-0-0 to 17-0-0, Corner(3E) 17-0-0 to 21-0-0, Corner(3R) 21-0-0 to 25-0-0, Exterior(2N) 25-0-0 to 38-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 26, 37, 39, 41, 42, 43, 44, 45, 46, 35, 33, 32, 31, 30, 29, 28, 27 except (jt=lb) 48=159, 47=113.

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 88 ROOF
25-3704-A	T04GE	PIGGYBACK BASE SUPPO	1	1	I66910400
Job Reference (optional)					

- NOTES-**
- 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.

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

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 88 ROOF	166910401
25-3704-A	T04S	PIGGYBACK BASE	5	1	Job Reference (optional)	

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

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ID:Bxl2MwYau_NHkbraGcmHloyOvst-9Ze6lQAVSP?vYTku6jZPrt0j1th0NKw9iTct57yxR2P

-0-11-0 5-10-5 11-5-3 17-0-0 21-0-0 28-8-0 33-2-4 38-0-0 38-11-0
0-11-0 5-10-5 5-6-13 5-6-13 4-0-0 7-8-0 4-6-4 4-9-12 0-11-0

5x5 =

5x5 =

Scale = 1:76.4

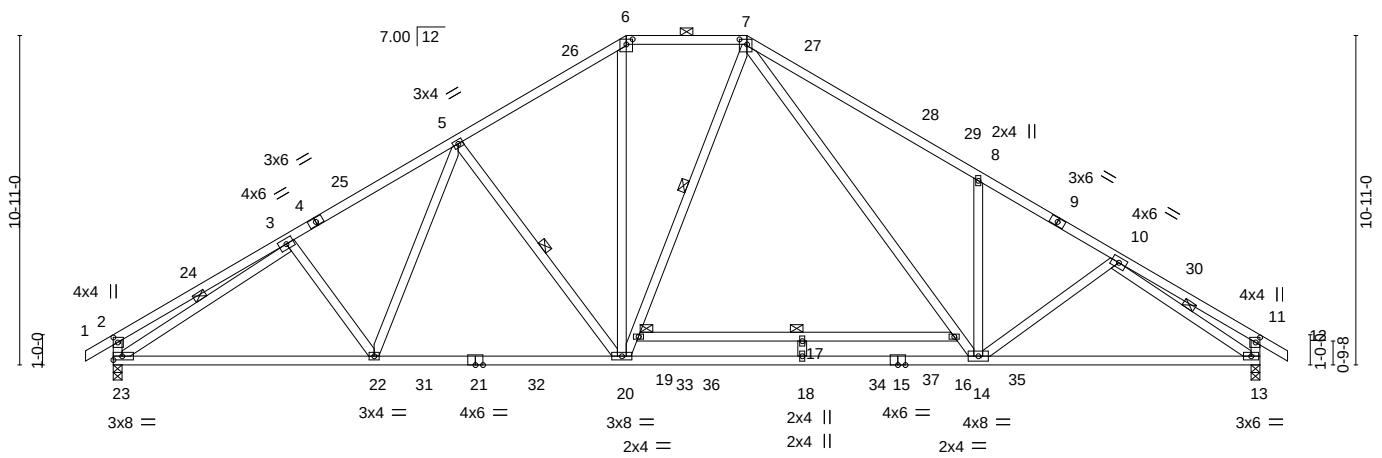


Plate Offsets (X, Y)--		[2:0-2-0,0-1-12], [6:0-2-8,0-2-1], [7:0-3-0,0-2-0], [11:0-2-0,0-1-12]									
LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	
TCLL (roof)	20.0	2-0-0		TC 0.91		in (loc)		l/defl		MT20	
Snow (Pf/Pg)	16.5/15.0	Plate Grip DOL 1.15		BC 0.81		Vert(LL) -0.82 17-19		>554		244/190	
TCDL	10.0	Lumber DOL 1.15		WB 0.71		Vert(CT) -1.31 17-19		>346			
BCLL	0.0 *	Rep Stress Incr YES		Matrix-MS		Horz(CT) 0.10 13		n/a			
BCDL	10.0	Code IRC2018/TPI2014								Weight: 260 lb	
										FT = 20%	

LUMBER-

TOP CHORD 2x4 SP No.2 *Except*
4-6,7-9: 2x4 SP DSS
BOT CHORD 2x4 SP DSS
WEBS 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-11-8 max.): 6-7.
BOT CHORD Rigid ceiling directly applied or 9-6-15 oc bracing. Except: 6-0-0 oc bracing: 16-19
WEBS 1 Row at midpt 5-20, 7-19, 3-23, 10-13

REACTIONS.

(size) 23=0-3-8, 13=0-3-8
Max Horz 23=235(LC 15)
Max Uplift 23=73(LC 16), 13=47(LC 16)
Max Grav 23=1984(LC 28), 13=2067(LC 29)

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

TOP CHORD 2-3=-624/99, 3-5=-2823/122, 5-6=-2353/129, 6-7=-1937/139, 7-8=-3196/182, 8-10=-3031/38, 10-11=-468/90, 2-23=-512/120, 11-13=-423/113
BOT CHORD 22-23=0/2510, 20-22=0/2393, 18-20=0/1959, 14-18=0/1959, 13-14=0/2392
WEBS 5-22=-13/334, 5-20=-608/151, 6-20=0/975, 7-19=-84/353, 7-16=-56/1364, 14-16=-113/1191, 8-14=-579/195, 10-14=0/280, 3-23=-2377/2, 10-13=-2614/0

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=38ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-10-10, Interior(1) 2-10-10 to 17-0-0, Exterior(2E) 17-0-0 to 21-0-0, Exterior(2R) 21-0-0 to 26-4-8, Interior(1) 26-4-8 to 38-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 23, 13.
- 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.



July 18,2024

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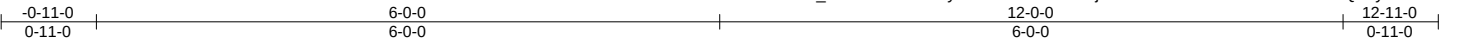
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 88 ROOF	166910402
25-3704-A	T05	Common	5	1	Job Reference (optional)	

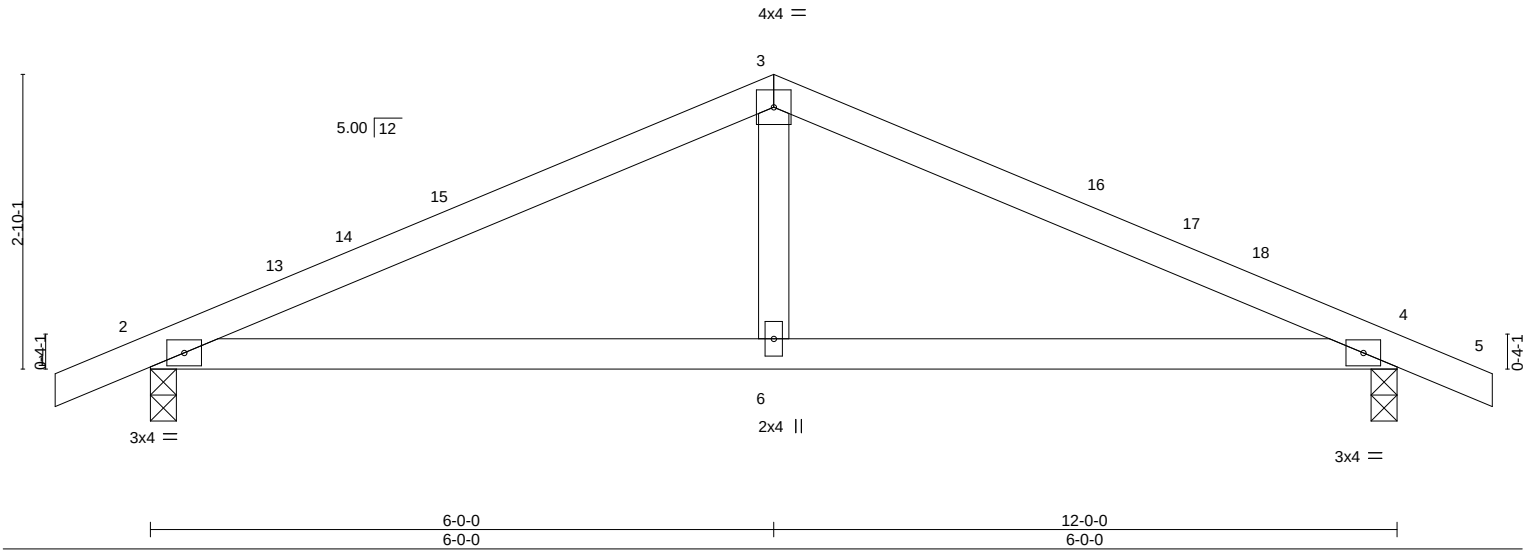
Riverside Roof Truss, LLC, Danville, Va - 24541,

8.730 s Jun 13 2024 MiTek Industries, Inc. Tue Jul 16 16:43:01 2024 Page 1

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Scale = 1:22.2



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

LUMBER-

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

BRACING-

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

REACTIONS.

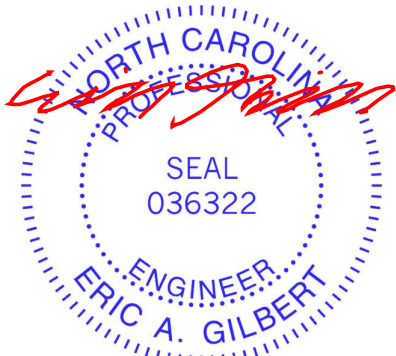
(size) 2=0-3-0, 4=0-3-0
Max Horz 2=37(LC 15)
Max Uplift 2=-58(LC 16), 4=-58(LC 16)
Max Grav 2=535(LC 2), 4=535(LC 2)

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

TOP CHORD 2-3=-765/237, 3-4=-765/237
BOT CHORD 2-6=-119/654, 4-6=-119/654
WEBS 3-6=0/280

NOTES-

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



July 18,2024

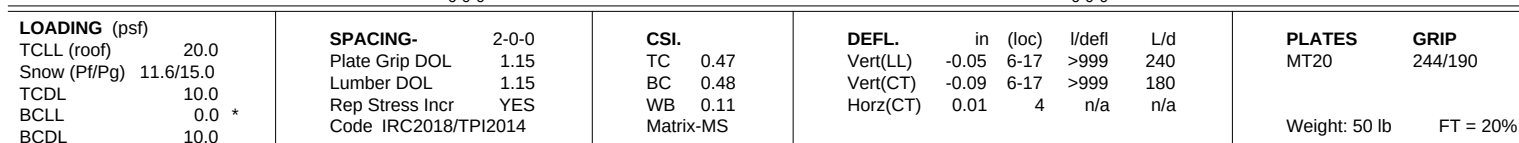
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Jun 13 2024 MiTek Industries, Inc. Tue Jul 16 16:43:01 2024 Page 1
ID:Bxl2MwYau_NHKbraGCMHloyOvst-dlCUWmAw7Dj7mAdJ5fR5eO5Z?eH5U6xcix7MqDZyXR2O
-0-11-0 6-0-0 12-0-0 12-11-0
0-11-0 6-0-0 6-0-0 0-11-0
Scale = 1:22.2



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

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

TOP CHORD	2-3=-765/237, 3-4=-765/237
BOT CHORD	2-6=-119/654, 4-6=-119/654
WEBS	3-6=0/280

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



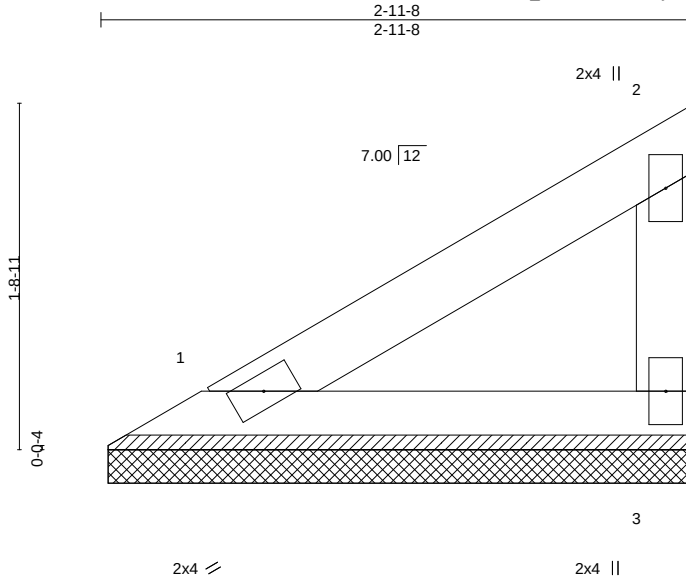
July 18, 2024

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 88 ROOF
25-3704-A	V01	Valley	1	1	I66910404
Riverside Roof Truss, LLC,					Job Reference (optional)

Danville, Va - 24541,

8.730 s Jun 13 2024 MiTek Industries, Inc. Tue Jul 16 16:43:02 2024 Page 1

ID:Bxl2MwYau_NHkbraGCmHloyOvst-5ymsj6BI_0FdnnuHD8ctxl5FJhYlrPWRAn5_A?yxR2N



Scale = 1:11.5

LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	MT20		244/190	
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a				
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00				
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-P							
BCDL	10.0										
								Weight: 10 lb		FT = 20%	

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-11-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

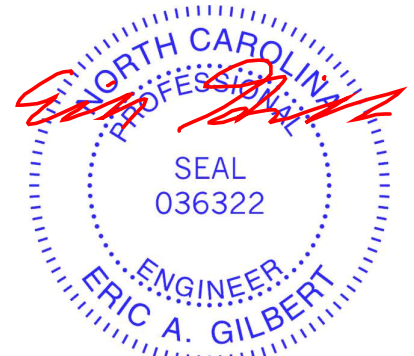
REACTIONS.

(size) 1=2-11-1, 3=2-11-1
Max Horz 1=46(LC 13)
Max Uplift 1=-3(LC 16), 3=-9(LC 13)
Max Grav 1=92(LC 20), 3=93(LC 27)

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

NOTES-

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



July 18,2024

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	SGR-LOT 88 ROOF
25-3704-A	V02	Valley	1	1	I66910405
Riverside Roof Truss, LLC,					Job Reference (optional)

Riverside Roof Truss, LLC,

Danville, Va - 24541,

8.730 s Jun 13 2024 MiTek Industries, Inc. Tue Jul 16 16:43:02 2024 Page 1

ID:Bxl2MwYau_NHkbraGCMhloyOvst-5ymsj6Bl_0FdnnuHD8ctxl5G9hYprPWRA5_A?yxR2N

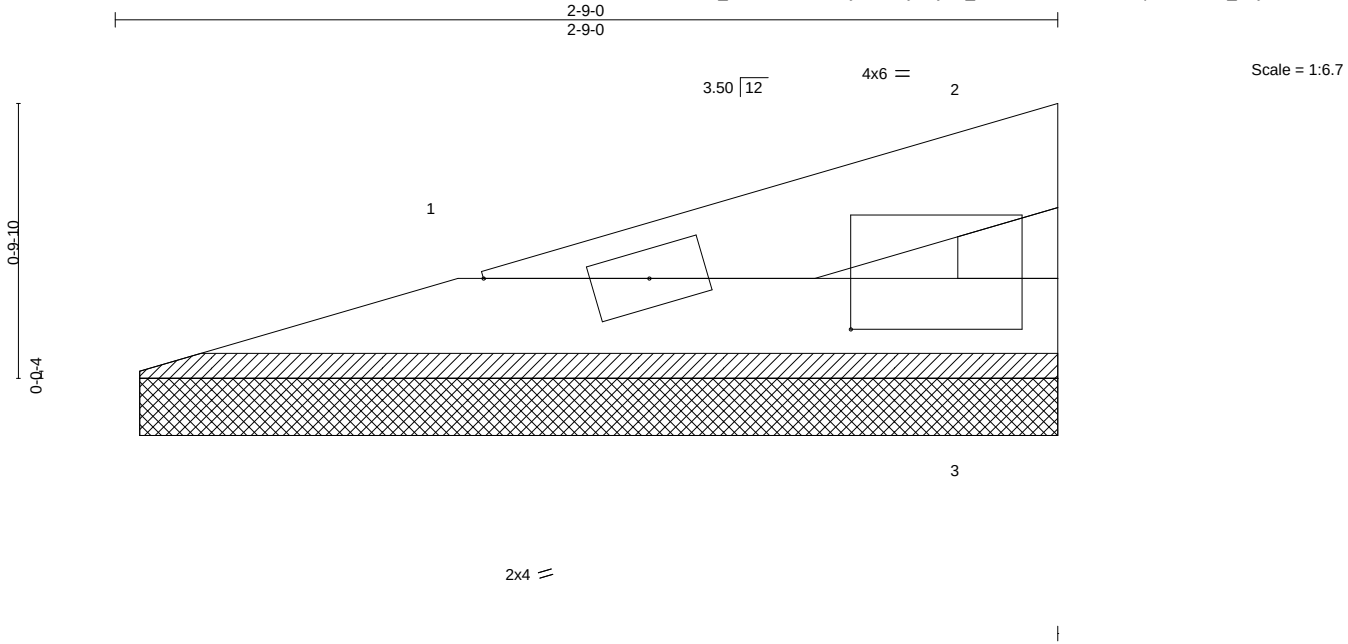


Plate Offsets (X,Y)-- [2:1-0-14,0-1-13]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.04	in (loc)	l/defl	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.02	n/a	n/a		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-P		0.00	3		
BCDL	10.0							Weight: 7 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 2-9-0 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3		

REACTIONS. (size) 1=2-8-2, 3=2-8-2
Max Horz 1=16(LC 13)
Max Uplift 1=-3(LC 16), 3=-4(LC 16)
Max Grav 1=61(LC 2), 3=61(LC 2)

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

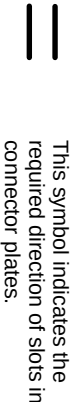
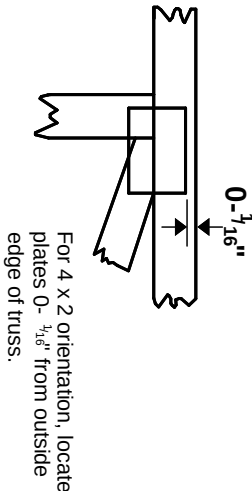
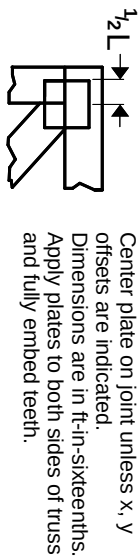
- NOTES-**
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces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



July 18,2024

Symbols

PLATE LOCATION AND ORIENTATION



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

PLATE SIZE

4 X 4

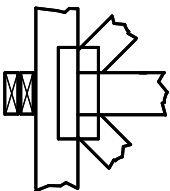
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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.

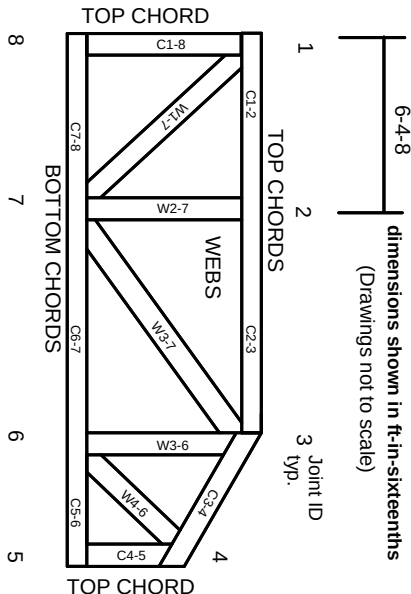
BEARING



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/TPI.1: 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.

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General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative 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.

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