

RE: 25-0518-A

FFF-LOT #54 Roof

Trenco 818 Soundside Rd Edenton, NC 27932

Site Information:

Customer: Project Name: 25-0518-A

Lot/Block: Model:
Address: Subdivision:
City: State:

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

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.7

Wind Code: ASCE 7-16 Wind Speed: 130 mph Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 54 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I71355550	CJ01	2/12/2025	21	I71355570	M08	2/12/2025
2	171355551	HG01	2/12/2025	22	I71355571	M09	2/12/2025
3	171355552	HG02	2/12/2025	23	171355572	M10	2/12/2025
4	171355553	HG03	2/12/2025	24	171355573	SD01	2/12/2025
5	I71355554	HG04	2/12/2025	25	171355574	SD02	2/12/2025
6	I71355555	J01	2/12/2025	26	I71355575	SD03	2/12/2025
7	I71355556	J02	2/12/2025	27	I71355576	SD04	2/12/2025
8	171355557	M01	2/12/2025	28	171355577	SM01G	2/12/2025
9	I71355558	M01A	2/12/2025	29	I71355578	SM02G	2/12/2025
10	I71355559	M01AS	2/12/2025	30	I71355579	SM03G	2/12/2025
11	I71355560	M01G	2/12/2025	31	I71355580	SM04	2/12/2025
12	I71355561	M01GE	2/12/2025	32	I71355581	SM05G	2/12/2025
13	171355562	M01S	2/12/2025	33	I71355582	SM06	2/12/2025
14	171355563	M02	2/12/2025	34	I71355583	SM07	2/12/2025
15	I71355564	M03	2/12/2025	35	I71355584	SM08	2/12/2025
16	I71355565	M04	2/12/2025	36	I71355585	SM09	2/12/2025
17	I71355566	M04G	2/12/2025	37	I71355586	SM09AG	2/12/2025
18	171355567	M05	2/12/2025	38	171355587	SM10G	2/12/2025
19	171355568	M06	2/12/2025	39	I71355588	T01	2/12/2025
20	171355569	M07	2/12/2025	40	I71355589	T01A	2/12/2025

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.





RE: 25-0518-A - FFF-LOT #54 Roof

Trenco 818 Soundside Rd Edenton, NC 27932

Site Information:

Project Name: 25-0518-A

Project Customer: Lot/Block: Address: Subdivision:

City, County: State:

No.	Seal#	Truss Name	Date
41	171355590	T02	2/12/2025
42	171355591	T02A	2/12/2025
43	171355592	T03	2/12/2025
44	171355593	T03G	2/12/2025
45	171355594	T03GE	2/12/2025
46	171355595	T04	2/12/2025
47	171355596	T04A	2/12/2025
48	171355597	T04GE	2/12/2025
49	I71355598	T05	2/12/2025
50	I71355599	V01	2/12/2025
51	I71355600	V02	2/12/2025
52	I71355601	V03	2/12/2025
53	171355602	V04	2/12/2025
54	171355603	V05	2/12/2025

Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355550 CJ01 DIAGONAL HIP GIRDER 2 25-0518-A Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:06:42 2025 Page 1 ID:kk2_eRZGXXvKblGikzSpyNzs9fO-_DmYa?dKFGqkEWpDTTd99RGei_685Uv3VkJrRMzmDDB Scale = 1:18.8 4.24 12 NAILED NAILED

NAILED

9 NAILED

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

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO	CSI. TC 0.68 BC 0.15 WB 0.02	DEFL. in (loc) l/defl Vert(LL) -0.01 6-7 >999 Vert(CT) -0.02 6-7 >999 Horz(CT) -0.00 6 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 244/190
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP			Weight: 35 lb	FT = 20%

LUMBER-

WFBS

TOP CHORD 2x4 SP No 2 2x6 SP No 2

BOT CHORD 2x4 SP No.3 BRACING-

BOT CHORD

TOP CHORD Structural wood sheathing directly applied or 5-7-2 oc purlins,

except end verticals.

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

4x5 =

REACTIONS. (size) 7=0-4-9, 6=Mechanical

Max Horz 7=95(LC 9)

1-0-0

Max Uplift 7=-83(LC 12), 6=-38(LC 12) Max Grav 7=329(LC 17), 6=262(LC 17)

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

TOP CHORD 2-7=-277/89

NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 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 15.4 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) 7, 6.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Vert: 1-2=-51, 2-3=-51, 3-4=-51, 5-7=-20



February 12,2025



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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall

building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TP11 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355551 HG01 25-0518-A Hip Girder Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:06:42 2025 Page 1 ID:kk2_eRZGXXvKblGikzSpyNzs9fO-_DmYa?dKFGqkEWpDTTd99RGan_0E5Ml3VkJrRMzmDDB 10-8-11 16-7-8 5-6-9 5-10-13 Scale = 1:29.4 5x5 = 5x5 = 2 11 3 6.00 12 4x6 / T I ПП ПП ПП 12 17 9 13 14 15 16 8 74x8 = 4x6 = NAILED NAILED NAILED LUS26 10 NAILED 6 NAII FD 3x6 =4x4 || NAILED 8x8 = NAILED 10-8-11 16-7-8 5-2-1 5-6-9 5-10-13 Plate Offsets (X,Y)--[2:0-2-8,0-2-4], [3:0-2-8,0-2-4], [6:Edge,0-6-8] LOADING (psf) SPACING-CSI. DEFL. in (loc) I/defl L/d **PLATES** GRIP TCLL (roof) 20.0

LUMBER-

Snow (Pf/Pg)

TCDL

BCLL

BCDL

WFBS

TOP CHORD 2x4 SP No.2

10.0

10.0

0.0

BOT CHORD 2x6 SP No 2 2x4 SP No.3

16.5/15.0

BRACING-TOP CHORD

BOT CHORD

Vert(LL)

Vert(CT)

Horz(CT)

-0.05

-0.09

0.01

7-8

7-8

6

>999

>999

n/a

Structural wood sheathing directly applied or 3-8-4 oc purlins, except end verticals, and 2-0-0 oc purlins (3-2-6 max.): 2-3. Rigid ceiling directly applied or 10-0-0 oc bracing.

240

180

n/a

MT20

Weight: 103 lb

244/190

FT = 20%

REACTIONS. (size) 10=0-3-8, 6=0-3-8

Max Horz 10=-85(LC 56)

Max Uplift 10=-262(LC 12), 6=-299(LC 12) Max Grav 10=1391(LC 35), 6=1430(LC 35)

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

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

Lumber DOL

TOP CHORD 1-2=-1653/342, 2-3=-1495/351, 3-4=-1777/366, 1-10=-1156/232, 4-6=-1188/259

BOT CHORD 7-8=-255/1399, 6-7=-118/571

WFBS 2-8=-82/399, 3-7=-98/529, 1-8=-247/1313, 4-7=-197/1134

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); cantilever left and right exposed; end vertical left and right exposed; 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 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.

1.15

1.15

NO

TC

BC

WB

Matrix-MS

0.93

0.53

0.54

- 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.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=262, 6=299. 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. 12) Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss, Single Ply Girder) or equivalent at 14-7-6 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.
- 13) Fill all nail holes where hanger is in contact with lumber.
- 14) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines
- 15) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).



February 12,2025

MARNING - 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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Job	Truss	Truss Type	Qty	Ply	FFF-LOT #54 Roof
					I71355551
25-0518-A	HG01	Hip Girder	1	1	
					Job Reference (optional)

Danville, Va - 24541,

8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:06:43 2025 Page 2 ID:kk2_eRZGXXvKblGikzSpyNzs9fO-TPKwnLdy0aybrgOP1B8OiepkXOLTqp?CkO2O_ozmDDA

LOAD CASE(S) Standard

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

Vert: 1-2=-43, 2-3=-53, 3-4=-43, 4-5=-43, 6-10=-20

Concentrated Loads (lb)

Vert: 8=-182(F) 7=-182(F) 12=-195(F) 13=-150(F) 14=-182(F) 15=-182(F) 16=-152(F) 17=-223(F)



818 Soundside Road Edenton, NC 27932

Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355552 HG02 25-0518-A Roof Special Girder 2 Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:06:43 2025 Page 1 ID:kk2_eRZGXXvKblGikzSpyNzs9fO-TPKwnLdy0aybrgOP1B8OiepsHOMxqrDCkO2O_ozmDDA

14-11-5

3-10-0

11-1-5

3-2-0

4x4 =

7-11-6 3-11-11

Scale = 1:43.0

5-6-3

24-3-8

3 6.00 12 2x4 || 5x5 = 4x12 = 3x4 / 17 \bowtie \boxtimes 18 19 20 5-4-1 3x4 / 3-9-1 1-4-6 ПП 22 13 23 24 15 14 12 11 10 LUS26-2 NAILED 3x5 = 3x8 = 4x4 = 3x8 =2x4 II 8x8 > NAILED

	3-11-11	7-11-0		11-1-0		14-11-0	10-9-3			24-3-0	
	3-11-11	3-11-11	· ·	3-2-0	ı	3-10-0	3-10-0		1	5-6-3	<u>'</u>
Plate Offsets	(X,Y) [6:0-2-8,0)-2-4], [9:0-2-12,0-2-4]									
LOADING (p TCLL (roof) Snow (Pf/Pg) TCDL BCLL	20.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.15 1.15 NO	CSI. TC BC WB	0.43 0.50 0.40	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) -0.06 10-11 -0.11 10-11 0.02 9	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 244/190
DCLL	10.0	Code IRC2018/TF	PI2014	Matri	x-MS					Weight: 327 lb	FT = 20%

2x4 ||

11_1_5

LUMBER-

REACTIONS.

BCDL

WFBS

TOP CHORD 2x4 SP No 2 2x6 SP No 2 **BOT CHORD**

10.0

2x4 SP No.3

3_11_11

BRACING-TOP CHORD

BOT CHORD

1/1-11-5

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

18-0-5

NAILED

3-10-0

(size) 16=0-3-8, 9=0-3-8

Max Horz 16=-107(LC 60)

Max Uplift 16=-120(LC 12), 9=-285(LC 12) Max Grav 16=1249(LC 2), 9=1817(LC 2)

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

TOP CHORD 1-2=-1643/187, 2-3=-1728/239, 3-4=-1707/240, 4-5=-2950/425, 5-6=-2950/425,

6-7=-2762/420, 1-16=-1184/136, 7-9=-1708/294

BOT CHORD 14-15=-84/1426, 12-14=-228/2602, 11-12=-231/2605, 10-11=-287/2371, 9-10=-81/499 **WEBS** 2-15=-333/87, 3-14=-148/1271, 4-14=-1621/232, 4-11=-175/579, 5-11=-331/109,

7-11-6

6-11=-47/773, 6-10=-131/522, 1-15=-110/1374, 7-10=-249/1938

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.

Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.

Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 6) Unbalanced snow loads have been considered for this design.
- 7) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads
- 8) Provide adequate drainage to prevent water ponding.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=120, 9=285.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and

February 12,2025

036322



Job	Truss	Truss Type	Qty	Ply	FFF-LOT #54 Roof
25-0518-A	HG02	Roof Special Girder	1		I71355552
25 05 10 1	11002	Troof opedial Girder	'	2	Job Reference (optional)

Danville, Va - 24541,

8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:06:44 2025 Page 2 ID:kk2_eRZGXXvKbIGikzSpyNzs9fO-xctl?hebnt4STpzbbufdFsL11ni9ZITMz2oyWFzmDD9

NOTES-

- 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, 3-10d Truss, Single Ply Girder) or equivalent at 16-6-0 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) Fill all nail holes where hanger is in contact with lumber.
- 16) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.

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

Vert: 1-3=-43, 3-4=-43, 4-6=-53, 6-7=-43, 7-8=-43, 9-16=-20

Concentrated Loads (lb)

Vert: 10=-168(F) 22=-535(F) 23=-168(F) 24=-209(F)

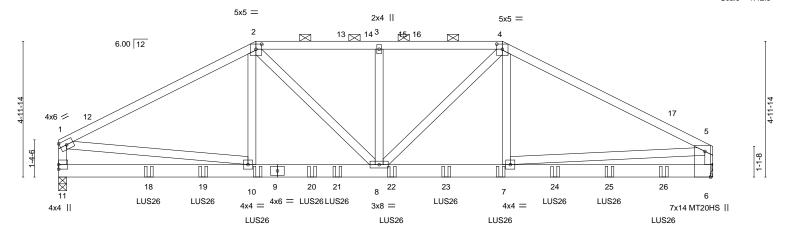


818 Soundside Road Edenton, NC 27932

Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355553 HG03 25-0518-A Hip Girder 2 Job Reference (optional) Riverside Roof Truss, LLC,

Danville, Va - 24541, 8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:06:45 2025 Page 1 ID:kk2_eRZGXXvKblGikzSpyNzs9fO-PoRgC1fDXBCJ5zYo8cAsn3u4kB1_lj_VCiXV2hzmDD8 11-9<u>-6</u> 16-3-11 24-0-8 4-6-5 7-8-13

Scale = 1:42.3



	7-3-0	4-6-5	4-6-5	'	7-8-13	<u>'</u>			
Plate Offsets (X,Y) [2:0-2-8,0-2-4], [4:0-2-8,0-2-4], [6:0-11-5,Edge]									
LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 16.5/15.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO Code IRC2018/TPI2014	CSI. TC 0.95 BC 0.53 WB 0.51 Matrix-MS	Vert(CT) -	in (loc) -0.07 6-7 -0.13 6-7 0.02 6	l/defl L/d >999 240 >999 180 n/a n/a	PLATES GRIP MT20 244/190 MT20HS 187/143 Weight: 309 lb FT = 2	3		

11-9-6

LUMBER-TOP CHORD

2x4 SP No 2 2x6 SP No 2

BOT CHORD WFBS 2x4 SP No.3 BRACING-TOP CHORD

BOT CHORD

16-3-11

Structural wood sheathing directly applied, except end verticals, and

24-0-8

2-0-0 oc purlins (6-0-0 max.): 2-4. Rigid ceiling directly applied or 10-0-0 oc bracing

REACTIONS. (size) 11=0-3-8, 6=Mechanical

Max Horz 11=-94(LC 10)

Max Uplift 11=-422(LC 12), 6=-462(LC 12) Max Grav 11=2309(LC 34), 6=2436(LC 34)

7-3-0

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

TOP CHORD 1-2=-3218/622, 2-3=-3272/645, 3-4=-3272/645, 4-5=-3300/628, 1-11=-2005/387,

5-6=-1937/370

BOT CHORD 10-11=-114/494, 8-10=-457/2785, 7-8=-466/2847, 6-7=-182/837

2-10=-144/712, 2-8=-108/695, 3-8=-375/97, 4-8=-106/607, 4-7=-127/791, **WEBS**

1-10=-403/2473, 5-7=-338/2236

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.

Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.

Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60
- 5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 6) Unbalanced snow loads have been considered for this design.
- 7) Provide adequate drainage to prevent water ponding.
- 8) All plates are MT20 plates unless otherwise indicated.
- 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) Refer to girder(s) for truss to truss connections.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=422, 6=462
- 13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and

February 12,2025



Job	Truss	Truss Type	Qty	Ply	FFF-LOT #54 Roof
					171355553
25-0518-A	HG03	Hip Girder	1	2	Inh Deference (antique)
				_	Job Reference (optional)

Danville, Va - 24541,

8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:06:45 2025 Page 2 ID:kk2_eRZGXXvKblGikzSpyNzs9fO-PoRgC1fDXBCJ5zYo8cAsn3u4kB1_lj_VCiXV2hzmDD8

NOTES-

- 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 15) Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss, Single Ply Girder) or equivalent at 3-3-13 from the left end to connect truss(es) to back face of bottom chord.
- 16) Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 5-3-12 from the left end to 22-2-15 to connect truss(es) to back face of bottom chord.
- 17) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-43, 2-4=-53, 4-5=-43, 6-11=-20

Concentrated Loads (lb)

Vert: 10=-252(B) 7=-252(B) 18=-383(B) 19=-218(B) 20=-252(B) 21=-252(B) 22=-252(B) 23=-252(B) 24=-218(B) 25=-254(B) 26=-332(B)



Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355554 HG04 HIP GIRDER 25-0518-A 2 Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:06:45 2025 Page 1 ID:kk2_eRZGXXvKblGikzSpyNzs9fO-PoRgC1fDXBCJ5zYo8cAsn3uFPB6zlofVCiXV2hzmDD8 -0-11-0 0-11-0 4-0-0 12-0-0 12-11-0 4-0-0 4-0-0 0-11-0 Scale = 1:22.5 5x5 = 5x5 = 3 6.00 12 12 3-0-0 5 ПП 13 9 8 4x8 = NAILED 4v4 = THJA26 7x8 = THJA26 7x8 8-0-0 12-0-0 4-0-0 4-0-0 4-0-0 4-0-0 Plate Offsets (X,Y)-- [3:0-2-8,0-2-4], [4:0-2-8,0-2-4], [7:Edge,0-6-8], [10:Edge,0-6-8]

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO	CSI. TC 0.20 BC 0.21 WB 0.21	Vert(CT) -0.	in (loc) 0.02 8-9 0.03 8-9 0.00 7	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 244/190
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MS					Weight: 151 lb	FT = 20%

LUMBER-

WFBS

TOP CHORD 2x4 SP No 2 BOT CHORD

2x6 SP No 2 2x4 SP No.3 **BRACING-**TOP CHORD

BOT CHORD

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

REACTIONS. (size) 10=0-3-8, 7=0-3-8

Max Horz 10=-63(LC 10)

Max Uplift 10=-175(LC 12), 7=-172(LC 12) Max Grav 10=1069(LC 35), 7=1060(LC 35)

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

TOP CHORD 2-3=-1367/234, 3-4=-1164/224, 4-5=-1361/232, 2-10=-1023/193, 5-7=-1012/191

BOT CHORD 8-9=-173/1151

WFBS 3-9=-59/371, 4-8=-68/405, 2-9=-162/1032, 5-8=-162/1021

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc. Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc. Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 6) Unbalanced snow loads have been considered for this design.
- 7) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 8) Provide adequate drainage to prevent water ponding.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=175, 7=172.
- 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.



February 12,2025

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TP11 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Job	Truss	Truss Type	Qty	Ply	FFF-LOT #54 Roof
25-0518-A	HG04	HIP GIRDER	,		I71355554
25-0516-A	11004	HIF GIRDER	'	2	Job Reference (optional)

Danville, Va - 24541,

8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:06:45 2025 Page 2 ID:kk2_eRZGXXvKblGikzSpyNzs9fO-PoRgC1fDXBCJ5zYo8cAsn3uFPB6zlofVCiXV2hzmDD8

NOTES-

- 14) Use Simpson Strong-Tie THJA26 (THJA26 on 2 ply, Left Hand Hip) or equivalent at 4-0-6 from the left end to connect truss(es) to front face of bottom chord, 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 7-11-10 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 guidlines.

LOAD CASE(S) Standard

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

Vert: 1-2=-51, 2-3=-51, 3-4=-61, 4-5=-51, 5-6=-51, 7-10=-20

Concentrated Loads (lb)

Vert: 9=-384(F) 8=-384(F) 13=-150(F)



818 Soundside Road Edenton, NC 27932

Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355555 J01 25-0518-A Jack-Open Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:06:46 2025 Page 1 ID:kk2_eRZGXXvKblGikzSpyNzs9fO-t_?2QNgrIVKAi77_iJi5KHQS9bUJ1IEeQMH2a7zmDD7 2-7-8 0-11-0 Scale = 1:8.8 8 4.00 12 -2-7 0-10-4 2 0-3-15 2x4 = 2-7-8 2-7-8 LOADING (psf) DEFL SPACING-2-0-0 CSI. in (loc) I/defl I/d **PLATES** GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.07 Vert(LL) -0.00 >999 240 MT20 244/190 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 вс 0.07 Vert(CT) -0.00 >999 180 TCDL 10.0 WB 0.00 Rep Stress Incr YES Horz(CT) -0.00 3 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-MP Weight: 10 lb FT = 20% BCDL 10.0

LUMBER-

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

TOP CHORD BOT CHORD Structural wood sheathing directly applied or 2-7-8 oc purlins.

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

REACTIONS.

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical Max Horz 2=38(LC 16)

Max Uplift 3=-13(LC 16), 2=-37(LC 16)

Max Grav 3=69(LC 21), 2=192(LC 21), 4=44(LC 7)

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

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; b=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 2-6-12 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
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 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 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
- 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.



February 12,2025

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall

building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355556 J02 JACK-OPEN 4 25-0518-A Job Reference (optional)

Riverside Roof Truss, LLC,

Danville, Va - 24541,

8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:06:46 2025 Page 1 ID:kk2_eRZGXXvKblGikzSpyNzs9fO-t_?2QNgrlVKAi77_iJi5KHQSsbVu1ljeQMH2a7zmDD7

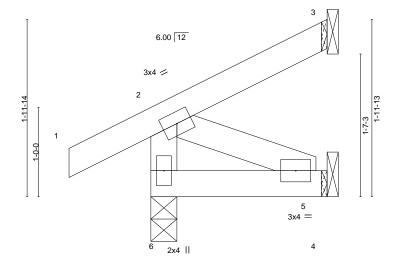
Structural wood sheathing directly applied or 1-11-11 oc purlins,

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

except end verticals.

-0-11-0 1-11-11 0-11-0 1-11-11

Scale = 1:12.9



1-11-11

BRACING-

TOP CHORD

BOT CHORD

TCLL (roof) Snow (Pf/Pg)	20.0	SPACING- Plate Grip DOL	2-0-0 1.15	CSI.	0.09	DEFL. Vert(LL)	in -0.00	(loc)	l/defl >999	L/d 240	PLATES MT20	GRIP 244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	5-6	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	-0.00	3	n/a	n/a		
		Code IRC2018/TF	212014	Matri	x-MP	1					Weight: 11 lb	FT = 20%
BCDL	10.0	0000 11(02010/11	12011	I VIGU	X 1VII						Wolgitt. 11 lb	1 1 - 2070

LUMBER-

WFBS REACTIONS.

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

2x4 SP No.3

(size) 6=0-3-8, 3=Mechanical, 4=Mechanical

Max Horz 6=67(LC 16)

Max Uplift 6=-20(LC 16), 3=-10(LC 13), 4=-14(LC 16) Max Grav 6=184(LC 21), 3=43(LC 21), 4=36(LC 7)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 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 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to 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) 6, 3, 4.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355557 M01 MONOPITCH 11 25-0518-A Job Reference (optional)

Riverside Roof Truss, LLC,

Danville, Va - 24541,

8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:06:47 2025 Page 1 ID:kk2_eRZGXXvKblGikzSpyNzs9fO-LBZRdjgT3oS1KHiAG0DKsUzU2?fylZcof00c7ZzmDD6

Structural wood sheathing directly applied or 5-9-8 oc purlins,

6-7, 5-7

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

except end verticals.

1 Row at midpt

19-4-8 6-6-11 6-6-11 6-6-11

Scale = 1:58.4

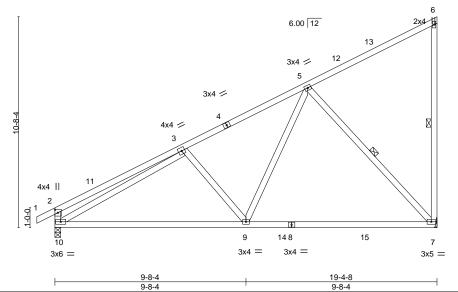


Plate Offsets (X,Y)	[2:0-2-0,0-1-12]
---------------------	------------------

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.64 BC 0.81 WB 0.76	DEFL. in (loc) l/defl L/d Vert(LL) -0.37 7-9 >618 240 Vert(CT) -0.57 7-9 >402 180 Horz(CT) 0.02 7 n/a n/a	PLATES GRIP MT20 244/190
BCLL 0.0 * BCDL 10.0	Code IRC2018/TPI2014	Matrix-MS	11012(01) 0.02 / 11/4 11/4	Weight: 121 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

TOP CHORD 2x4 SP No 2

2x4 SP No.2 *Except* **BOT CHORD**

8-10: 2x4 SP No.1

WFBS 2x4 SP No.3

REACTIONS. (size) 7=Mechanical, 10=0-3-8

Max Horz 10=316(LC 16) Max Uplift 7=-126(LC 16)

Max Grav 7=917(LC 28), 10=920(LC 28)

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

TOP CHORD 2-3=-473/149, 3-5=-982/3, 2-10=-409/180

BOT CHORD 9-10=-290/1003, 7-9=-154/566

WEBS 3-9=-278/200, 5-9=-21/688, 5-7=-824/229, 3-10=-712/0

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 19-2-12 zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 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 15.4 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, with BCDL = 10.0psf.
- 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) except (jt=lb) 7=126.
- 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.



February 12,2025



Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355558 M01A 4 25-0518-A Monopitch Job Reference (optional)

Riverside Roof Truss, LLC,

Danville, Va - 24541,

8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:06:47 2025 Page 1 ID:kk2_eRZGXXvKblGikzSpyNzs9fO-LBZRdjgT3oS1KHiAG0DKsUzVL?fxlYZof00c7ZzmDD6

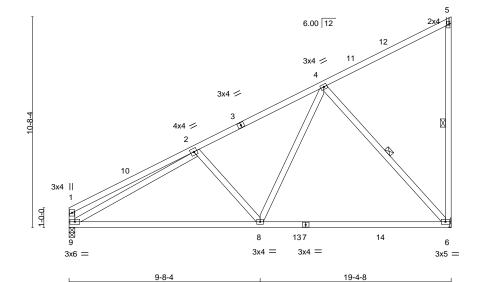
Structural wood sheathing directly applied or 5-8-11 oc purlins,

5-6. 4-6

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

6-5-8 6-5-8 12-11-0 19-4-8 6-5-8 6-5-8

Scale = 1:58.4



LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defl I/d PLATES GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.62 Vert(LL) -0.37 6-8 >613 240 MT20 244/190 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 вс 0.81 Vert(CT) -0.57 6-8 >399 180 TCDL 10.0 WB 0.83 Rep Stress Incr YES Horz(CT) 0.02 6 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-MS Weight: 120 lb FT = 20% BCDL 10.0

BRACING-

TOP CHORD

BOT CHORD

WFBS

9-8-4

except end verticals.

1 Row at midpt

9-8-4

LUMBER-

TOP CHORD 2x4 SP No.2 2x4 SP No.2 *Except* BOT CHORD

7-9: 2x4 SP No.1 WFBS 2x4 SP No.3

REACTIONS. (size) 6=Mechanical, 9=0-3-8

Max Horz 9=293(LC 16) Max Uplift 6=-126(LC 16)

Max Grav 6=919(LC 27), 9=864(LC 27)

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

TOP CHORD 1-2=-390/96, 2-4=-988/6, 1-9=-302/102

BOT CHORD 8-9=-296/1017 6-8=-153/557

WFBS 2-8=-293/209, 4-8=-25/697, 4-6=-822/230, 2-9=-805/0

NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; B=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 19-2-12 zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 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, with BCDL = 10.0psf.
- 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) except (jt=lb)
- 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.



February 12,2025

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Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355559 M01AS MONOPITCH 3 25-0518-A Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:06:48 2025 Page 1 ID:kk2_eRZGXXvKbIGikzSpyNzs9fO-pN7pr2h5q6auyRHMqkkZPiWdkPyVU2sxugm9f0zmDD5 9-0-0 14-0-8 19-4-8 5-0-8 Scale = 1:62.1 3x4 🖊 6 6.00 12 3x5 / 16 5 2x4 || 3x4 / 4x5 / 2x4 || 1-0-0 10 9-6-0 **∑** 14 20 12 2x4 11 18 19

9-0-0 14-0-8 9-0-0 5-0-8 Plate Offsets (X,Y)-- [6:0-0-13,0-1-8]

3x5 =

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.77 BC 0.99 WB 0.63	DEFL. in (loc) l/defl L/d Vert(LL) -0.52 7-8 >443 240 Vert(CT) -0.83 7-8 >276 180 Horz(CT) 0.02 7 n/a n/a	PLATES GRIP MT20 244/190
BCLL 0.0 * BCDL 10.0	Code IRC2018/TPI2014	Matrix-MS		Weight: 140 lb FT = 20%

BRACING-

 $^{13}_{2x4} =$

3x8 =

LUMBER-TOP CHORD 2x4 SP No 2

BOT CHORD 2x4 SP No.1

2x4 SP No.3 *Except* WFBS

6-7: 2x4 SP No.2

TOP CHORD

except end verticals. **BOT CHORD**

Rigid ceiling directly applied or 2-2-0 oc bracing. Except:

3x8 =

Structural wood sheathing directly applied or 5-1-8 oc purlins,

2x4 =

19-4-8 5-4-0

5-8-0 oc bracing: 9-12

8

2x4 ||

3x6 =

WEBS 1 Row at midpt 6-7, 5-7

REACTIONS. (size) 7=Mechanical, 14=0-3-8

Max Horz 14=358(LC 13)

Max Grav 7=1207(LC 27), 14=948(LC 27)

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

TOP CHORD 1-2=-266/55. 2-4=-1268/110. 4-5=-1254/207 **BOT CHORD** 13-14=-412/1214, 8-13=-193/628, 7-8=-193/628

 $4\text{-}13\text{=-}270/156,\ 12\text{-}13\text{=-}116/911,\ 5\text{-}12\text{=-}73/1106,\ 5\text{-}9\text{=-}861/222,\ 7\text{-}9\text{=-}1054/155,}$ WFBS

2-14=-1158/111

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) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 19-2-12 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
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 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, with BCDL = 10.0psf.
- 6) Refer to girder(s) for truss to truss connections.
- 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.



February 12,2025



Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355560 M01G MONOPITCH 2 25-0518-A Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:06:48 2025 Page 1 ID:kk2_eRZGXXvKbIGikzSpyNzs9fO-pN7pr2h5q6auyRHMqkkZPiWcNP0YU?Mxugm9f0zmDD5 4-7-12 9-0-0 14-0-8 19-4-8 4-7-12 5-0-8 5-4-0 Scale = 1:62.2 2x4 || 6.00 12 3x6 / 17 6 2x4 || 3x4 / 4x5 / 3 16 3x4 || \boxtimes 11 8-6-0 21 2x4 13 10 12 19 20 14 2x4 = 8 9 3x6 = 4x5 = 3x8 =4x8 = 2x4 || 2x4 = 9-0-0 14-0-8 5-4-0 5-0-8 LOADING (psf) SPACING-2-6-0 CSI. DEFL in (loc) I/defl I/d **PLATES** GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.86 Vert(LL) -0.55 8-9 >414 240 MT20 244/190 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 вс 0.73 Vert(CT) -0.89 8-9 >257 180 TCDL 10.0 WB 0.79 Rep Stress Incr NO Horz(CT) 0.02 8 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-MS Weight: 142 lb FT = 20% BCDL 10.0 LUMBER-**BRACING-**TOP CHORD 2x4 SP No.2 TOP CHORD Structural wood sheathing directly applied or 4-5-15 oc purlins, except end verticals

BOT CHORD

2x4 SP DSS 2x4 SP No.3

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

6-0-0 oc bracing: 10-13

WFBS 1 Row at midpt 7-8, 6-8

REACTIONS. 8=Mechanical, 15=0-3-8 (size)

Max Horz 15=395(LC 16) Max Uplift 8=-58(LC 16)

Max Grav 8=1488(LC 28), 15=1273(LC 28)

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

TOP CHORD 2-3=-375/98. 3-5=-1553/0. 5-6=-1572/13. 2-15=-368/160

BOT CHORD 14-15=-350/1462 9-14=-99/749 8-9=-99/749

WFBS 5-14=-342/182, 13-14=-140/1135, 6-13=-67/1385, 6-10=-1070/252, 8-10=-1318/179,

3-15=-1364/0

NOTES-

WFBS

- 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 19-2-12 zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 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 15.4 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, with BCDL = 10.0psf.
- 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) 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.



February 12,2025



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Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355561 M01GE 2 25-0518-A Half Hip Supported Job Reference (optional)

Riverside Roof Truss, LLC,

Danville, Va - 24541,

8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:06:49 2025 Page 1 ID:kk2_eRZGXXvKbIGikzSpyNzs9fO-HZhB2OijbQilabsZNRFoyv2oDoQ6Dc456KVjBSzmDD4

18-9-10 18-9-10

Scale: 3/16"=1"

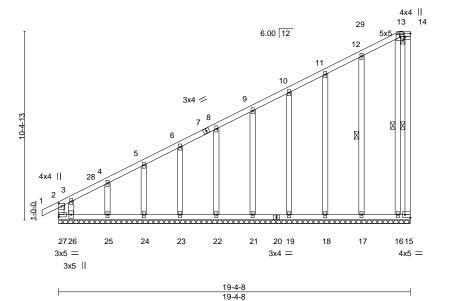


Plate Offsets (X,Y)-- [2:0-2-0,0-1-12], [13:0-2-8,0-2-4], [14:Edge,0-3-8], [15:Edge,0-2-0]

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 16.5/15.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.79 BC 0.39 WB 0.19	DEFL. in (loc) l/defl L Vert(LL) -0.00 1 n/r 12 Vert(CT) -0.00 1 n/r 12 Horz(CT) 0.00 15 n/a n	MT20 244/190
BCLL 0.0 * BCDI 10.0	Code IRC2018/TPI2014	Matrix-R		Weight: 157 lb FT = 20%

LUMBER-TOP CHORD 2x4 SP No 2

BOT CHORD 2x4 SP No.2

WFBS 2x4 SP No.3 *Except*

14-15: 2x4 SP No.2 **OTHERS** 2x4 SP No.3

BRACING-TOP CHORD **BOT 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.): 13-14. Rigid ceiling directly applied or 6-0-0 oc bracing, Except:

10-0-0 oc bracing: 15-16.

WEBS 14-15, 12-17, 13-16 1 Row at midpt

REACTIONS. All bearings 19-4-8.

Max Horz 27=359(LC 13) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 22, 23, 24, 25, 21, 19, 18, 17, 16 except 27=-181(LC 14),

15=-114(LC 15), 26=-426(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 15, 22, 23, 24, 25, 26, 21, 19, 18, 17, 16 except 27=543(LC

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-27=-607/345, 2-3=-740/420, 3-4=-539/317, 4-5=-491/300, 5-6=-443/285,

6-8=-395/269, 8-9=-347/253, 9-10=-299/238, 14-15=-236/309

WEBS 3-26=-272/444, 13-16=-309/232

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 18-9-10, Corner(3E) 18-9-10 to 19-2-12 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
- 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=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 2x4 MT20 unless otherwise indicated.
- 8) Gable requires continuous bottom chord bearing.
- 9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 10) Gable studs spaced at 2-0-0 oc.
- 11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 22, 23, 24, 25,



February 12,2025

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Job	Truss	Truss Type	Qty	Ply	FFF-LOT #54 Roof
					I71355561
25-0518-A	M01GE	Half Hip Supported	2	1	
					Job Reference (optional)

Danville, Va - 24541,

8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:06:49 2025 Page 2 ID:kk2_eRZGXXvKblGikzSpyNzs9fO-HZhB2OijbQilabsZNRFoyv2oDoQ6Dc456KVjBSzmDD4

NOTES-

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

Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355562 M01S MONOPITCH 4 25-0518-A Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:06:49 2025 Page 1 ID:kk2_eRZGXXvKblGikzSpyNzs9fO-HZhB2OijbQilabsZNRFoyv2oXoHfDVB56KVjBSzmDD4 9-0-0 14-0-8 19-4-8 4-7-12 5-0-8 Scale = 1:62.2 2x4 || 6.00 12 3x5 / 6 2x4 || 3x4 / 4x5 / 3 16 3x4 || 1-0-0 6-9-8 11 21 13 2x4 22 10 12 19 20 14 2x4 = 8 9 3x5 = 3x6 = 3x6 = 3x8 =2x4 || 2x4 = 9-0-0 14-0-8 5-4-0 5-0-8 LOADING (psf)

TCLL (roof) Snow (Pf/Pg) 15.4/20.0 TCDL 10.0 **BCLL** 0.0 BCDL 10.0

20.0

SPACING-2-0-0 CSI. Plate Grip DOL 1.15 TC 0.77 Lumber DOL 1.15 вс 0.99 WB 0.63 Rep Stress Incr YES Code IRC2018/TPI2014 Matrix-MS

DEFL. in (loc) I/defl I/d Vert(LL) -0.52 8-9 >442 240 Vert(CT) -0.83 8-9 >275 180 Horz(CT) 0.02 8 n/a n/a

PLATES MT20

GRIP 244/190

Weight: 142 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.1 2x4 SP No.3 WFBS

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-1-6 oc purlins,

except end verticals

BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing. Except:

5-5-0 oc bracing: 10-13

WFBS

1 Row at midpt 7-8, 6-8

REACTIONS. (size) 8=Mechanical, 15=0-3-8

Max Horz 15=316(LC 16) Max Uplift 8=-46(LC 16)

Max Grav 8=1190(LC 28), 15=1018(LC 28)

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

2-3=-299/78, 3-5=-1243/0, 5-6=-1258/11, 2-15=-295/128 TOP CHORD

BOT CHORD 14-15=-280/1169 9-14=-79/597 8-9=-79/597

WFBS 5-14=-274/146. 13-14=-112/910. 6-13=-54/1107. 6-10=-855/202. 8-10=-1050/144.

3-15=-1092/0

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 19-2-12 zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 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 15.4 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, with BCDL = 10.0psf.
- 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) 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.



February 12,2025



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Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355563 M02 MONOPITCH 9 25-0518-A Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:06:50 2025 Page 1 ID:kk2_eRZGXXvKblGikzSpyNzs9fO-lmFZFkjLMjrcBkRlx9m1U7bz1Cjny5DEL_FGjuzmDD3 0-11-0 Scale = 1:15.8 2x4 || 3 4.00 12 0-3-15, 2x4 II 6-8-0 6-8-0 LOADING (psf) SPACING-2-0-0 CSI. **DEFL** in (loc) I/defl I/d **PLATES** GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.79 Vert(LL) -0.11 4-7 >696 240 MT20 244/190 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 вс 0.61 Vert(CT) -0.22 >358 180 TCDL 10.0 WB 0.00 Rep Stress Incr YES Horz(CT) 0.00 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-MP Weight: 25 lb FT = 20% BCDL 10.0 **BRACING-**

LUMBER-

WFBS

2x4 SP No.2

TOP CHORD BOT CHORD 2x4 SP No.2

2x4 SP No.3

TOP CHORD

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

except end verticals

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

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

Max Horz 2=81(LC 15)

Max Uplift 4=-16(LC 16), 2=-45(LC 16) Max Grav 4=303(LC 21), 2=340(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; B=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 6-6-4 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=20.0 psf; Pf=15.4 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 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



February 12,2025



Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355564 M03 25-0518-A Monopitch Job Reference (optional)

Riverside Roof Truss, LLC,

Danville, Va - 24541,

8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:06:50 2025 Page 1 ID:kk2_eRZGXXvKblGikzSpyNzs9fO-lmFZFkjLMjrcBkRlx9m1U7b89CsVy5DEL_FGjuzmDD3

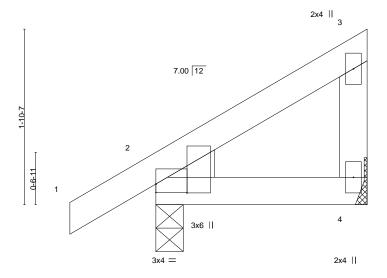
Structural wood sheathing directly applied or 2-3-0 oc purlins,

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

except end verticals.

-0-11-0 0-11-0

Scale = 1:12.3



2-3-0 2-3-0

BRACING-

TOP CHORD

BOT CHORD

Flate Offsets (X, 1) [2.0-0-0,0-1-1], [2.0-1-2,0-4-0]	Plate Offsets ((X,Y)	[2:0-0-0,0-1-1],	[2:0-1-2,0-4-0]
---	-----------------	-------	------------------	-----------------

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15	CSI. TC 0.07 BC 0.06	DEFL. in (loc) l/defl L/d Vert(LL) -0.00 7 >999 240 Vert(CT) -0.00 7 >999 180	PLATES GRIP MT20 244/190
BCLL 0.0 * BCDL 10.0	Rep Stress Incr YES Code IRC2018/TPI2014	WB 0.00 Matrix-MP	Horz(CT) 0.00 2 n/a n/a	Weight: 12 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SP No 2 BOT CHORD 2x4 SP No 2

WFBS 2x4 SP No.3 WEDGE

Left: 2x4 SP No.3

REACTIONS.

(size) 4=Mechanical, 2=0-3-8

Max Horz 2=57(LC 15)

Max Uplift 4=-13(LC 13), 2=-38(LC 16) Max Grav 4=85(LC 21), 2=184(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) 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=20.0 psf; Pf=15.4 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 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



February 12,2025



Job	Truss	Truss Type	Qty	Ply	FFF-LOT #54 Roof
			_		I71355565
25-0518-A	M04	Monopitch	2	1	
					Job Reference (optional)

Danville, Va - 24541,

8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:06:51 2025 Page 1 ID:kk2_eRZGXXvKblGikzSpyNzs9fO-EyoxT4j_71zTpu?xVsHG1K8E1c95hXMNad_pGLzmDD2

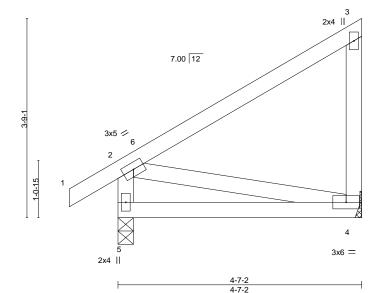
Structural wood sheathing directly applied or 4-7-2 oc purlins,

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

except end verticals

-0-11-0 0-11-0 4-7-2

Scale = 1:21.7



LOADING (ps	sf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0				0.00			(/			_	
Snow (Pf/Pg)	11.6/15.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	-0.02	4-5	>999	240	MT20	244/190
		Lumber DOL	1.15	BC	0.22	Vert(CT)	-0.04	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	-0.00	1	n/a	n/a		
BCLL	0.0 *					11012(01)	-0.00	4	II/a	II/a		
BCDL	10.0	Code IRC2018/TF	212014	Matri	x-MP						Weight: 28 lb	FT = 20%
DODL	10.0											

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

WFBS

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

2x4 SP No.3

(size) 5=0-3-8, 4=Mechanical Max Horz 5=124(LC 13)

Max Uplift 5=-37(LC 16), 4=-38(LC 13) Max Grav 5=244(LC 2), 4=188(LC 21)

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

BOT CHORD 4-5=-275/168

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 4-5-6 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, 4.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



February 12,2025



Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355566 M04G 25-0518-A Monopitch Girder 2 Job Reference (optional)

Riverside Roof Truss, LLC,

Danville, Va - 24541,

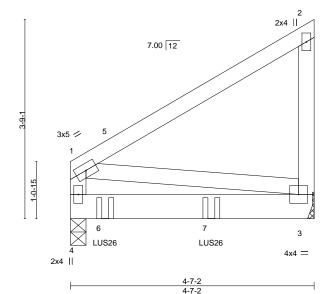
8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:06:51 2025 Page 1 ID:kk2_eRZGXXvKblGikzSpyNzs9fO-EyoxT4j_71zTpu?xVsHG1K8HWc5qhYHNad_pGLzmDD2

Structural wood sheathing directly applied or 4-7-2 oc purlins,

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

except end verticals

Scale = 1:21.7



LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL (roof) 20.0			(/	
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	TC 0.23	Vert(LL) -0.02 3-4 >999 240	MT20 244/190
	Lumber DOL 1.15	BC 0.50	Vert(CT) -0.04 3-4 >999 180	
TCDL 10.0	Rep Stress Incr NO	WB 0.01	Horz(CT) -0.00 3 n/a n/a	
BCLL 0.0 *	Code IRC2018/TPI2014	Matrix-MP	11012(01) 0.00 0 11/4	Weight: 60 lb FT = 20%
BCDL 10.0	Code IRC2016/1712014	IVIALITX-IVIE		Weight. 60 ib F1 = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

WFBS

TOP CHORD 2x4 SP No.2 BOT CHORD 2x6 SP No.2

2x4 SP No.3

(size) 3=Mechanical, 4=0-3-8 Max Horz 4=112(LC 9) Max Uplift 3=-71(LC 9), 4=-67(LC 12) Max Grav 3=610(LC 2), 4=985(LC 2)

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

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.

Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.

Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; B=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
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss, Single Ply Girder) or equivalent at 0-7-14 from the left end to connect truss(es) to back face of bottom chord, skewed 0.0 deg.to the left, sloping 0.0 deg. down.
- 12) Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss, Single Ply Girder) or equivalent at 2-7-14 from the left end to connect truss(es) to back face of bottom chord, skewed 0.0 deg.to the left, sloping 0.0 deg. down.
- 13) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

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



February 12,2025

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TP11 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Job	Truss	Truss Type	Qty	Ply	FFF-LOT #54 Roof
25-0518-A	M04G	Monopitch Girder	4	_	171355566
25-0516-A	MU4G	Michiopheri Girder		2	Job Reference (optional)

Danville, Va - 24541,

8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:06:51 2025 Page 2 ID:kk2_eRZGXXvKblGikzSpyNzs9fO-EyoxT4j_71zTpu?xVsHG1K8HWc5qhYHNad_pGLzmDD2

LOAD CASE(S) Standard Uniform Loads (plf) Vert: 1-2=-43, 3-4=-20 Concentrated Loads (lb) Vert: 6=-529(B) 7=-524(B)



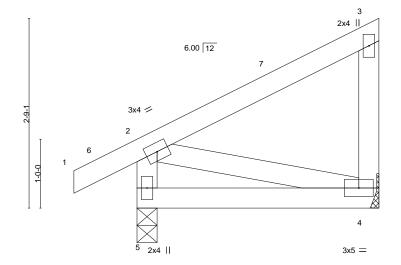
Job	Truss	Truss Type	Qty	Ply	FFF-LOT #54 Roof
					171355567
25-0518-A	M05	Monopitch	1	1	
					Job Reference (optional)

Danville, Va - 24541,

8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:06:51 2025 Page 1 ID:kk2_eRZGXXvKblGikzSpyNzs9fO-EyoxT4j_71zTpu?xVsHG1K8llcBjhYgNad_pGLzmDD2

-0-11-0 0-11-0

Scale = 1:16.7



3-6-3

LOADING (psf) TCLL (roof) 20 Snow (Pf/Pg) 11.6/15. TCDL 10	SPACING- Plate Grip D Lumber DO Rep Stress	OOL 1.15 L 1.15	CSI. TC BC WB	0.18 0.12 0.05	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.01 -0.01 -0.00	(loc) 4-5 4-5 4	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 244/190
BCLL 0 BCDL 10	* Code IRC2	018/TPI2014	Matr	ix-MP	, ,					Weight: 21 lb	FT = 20%

LUMBER-

WFBS

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

2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-6-3 oc purlins,

except end verticals

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

REACTIONS. (size) 5=0-3-8, 4=Mechanical

Max Horz 5=89(LC 13)

Max Uplift 5=-38(LC 16), 4=-25(LC 13) Max Grav 5=205(LC 21), 4=129(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; B=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 3-4-7 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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, 4.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



February 12,2025



Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355568 M06 Monopitch 4 25-0518-A Job Reference (optional)

Riverside Roof Truss, LLC,

Danville, Va - 24541,

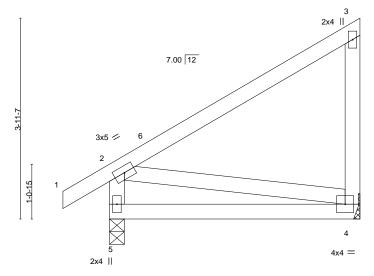
8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:06:52 2025 Page 1 ID:kk2_eRZGXXvKblGikzSpyNzs9fO-i8MJgQkcuL5KR2a83aoVZYgOj0UiQ_YXpHkNonzmDD1

4-11-2

Scale = 1:22.7

GRIP 244/190

FT = 20%



4-11-2

LOADING (psf) TCLL (roof) 20	SPACING		CSI.		DEFL.	in	(loc)	I/defI	L/d	PLATES
Snow (Pf/Pg) 11.6/15	Plate Grin	DOL 1.15	TC	0.45	Vert(LL)	-0.03	4-5	>999	240	MT20
, 0,	l lumber l	OL 1.15	BC	0.26	Vert(CT)	-0.06	4-5	>999	180	
	Ren Stres	s Incr YES	WB	0.08	Horz(CT)	-0.00	4	n/a	n/a	
	.0 * Code IRC	2018/TPI2014	Matr	ix-MP	` ′					Weight: 30 lb
BCDL 10	0 5505									110.g.m. 00 .2

LUMBER-

WFBS

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

2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-11-2 oc purlins,

except end verticals

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

REACTIONS. (size) 4=Mechanical, 5=0-3-8

Max Horz 5=131(LC 13)

Max Uplift 4=-39(LC 13), 5=-38(LC 16) Max Grav 4=202(LC 21), 5=256(LC 2)

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

BOT CHORD 4-5=-291/180 **WEBS** 2-4=-134/253

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 4-9-6 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.



February 12,2025



Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355569 M07 Monopitch 6 25-0518-A Job Reference (optional)

Riverside Roof Truss, LLC,

Danville, Va - 24541,

8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:06:52 2025 Page 1 ID:kk2_eRZGXXvKblGikzSpyNzs9fO-i8MJgQkcuL5KR2a83aoVZYgIV0QUQzZXpHkNonzmDD1

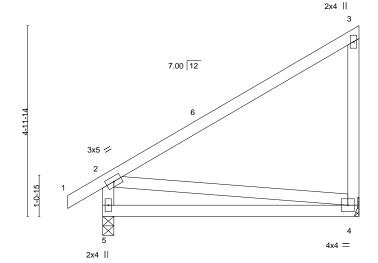
Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 9-6-6 oc bracing.

except end verticals

-0-11-0 0-11-0 6-8-8

Scale = 1:30.2



6-8-8 6-8-8

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 11.6/15.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.85 BC 0.53 WB 0.14	DEFL. in Vert(LL) -0.10 Vert(CT) -0.20 Horz(CT) -0.00	(loc) 4-5 4-5	l/defl >757 >379 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 244/190
BCLL 0.0 * BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP	(5.)				Weight: 40 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

WFBS

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

2x4 SP No.3

(size) 4=Mechanical, 5=0-3-8 Max Horz 5=168(LC 13)

Max Uplift 4=-46(LC 13), 5=-40(LC 16) Max Grav 4=272(LC 21), 5=326(LC 2)

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

TOP CHORD 2-5=-262/175 **BOT CHORD** 4-5=-354/234 **WEBS** 2-4=-174/301

NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; b=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 6-6-12 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
- 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.



February 12,2025

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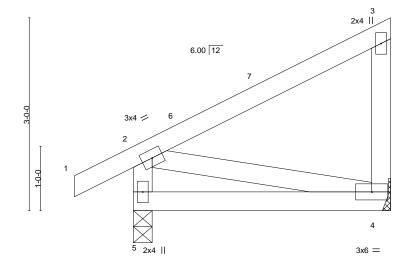
Job		Truss	Truss Type	Qty	Ply	FFF-LOT #54 Roof
						I71355570
25-0518-	A	M08	MONOPITCH	3	1	
						Job Reference (optional)

Danville, Va - 24541,

8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:06:53 2025 Page 1 ID:kk2_eRZGXXvKblGikzSpyNzs9fO-AKwiumlEfeDB2C9KcHKk6lDc2QsX9S6g1xTwKDzmDD0

4-0-0 0-11-0

Scale = 1:17.9



4-0-0

LOADING (psf) TCLL (roof) Snow (Pf/Pg) 1	20.0 5.4/20.0	SPACING- Plate Grip DOL	2-0-0 1.15	CSI.	0.29	DEFL. Vert(LL)	in -0.01	(loc) 4-5	l/defl >999	L/d 240	PLATES MT20	GRIP 244/190
TCDL	10.0	Lumber DOL Rep Stress Incr	1.15 YES	BC WB	0.16 0.06	Vert(CT) Horz(CT)	-0.02 -0.00	4-5	>999 n/a	180 n/a		
BCLL BCDL	0.0 * 10.0	Code IRC2018/TF			x-MP	HOIZ(C1)	-0.00	4	II/a	II/a	Weight: 24 lb	FT = 20%

LUMBER-

WFBS

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

2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-0-0 oc purlins,

except end verticals

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

REACTIONS. (size) 5=0-3-8, 4=Mechanical

Max Horz 5=97(LC 13)

Max Uplift 5=-39(LC 16), 4=-26(LC 13) Max Grav 5=279(LC 21), 4=171(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 3-10-4 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=20.0 psf; Pf=15.4 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 15.4 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, 4.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



February 12,2025



Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355571 M09 Monopitch 5 25-0518-A Job Reference (optional)

Riverside Roof Truss, LLC,

Danville, Va - 24541,

8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:06:53 2025 Page 1

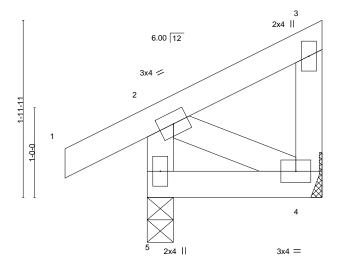
Structural wood sheathing directly applied or 1-11-6 oc purlins,

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

except end verticals.

ID:kk2_eRZGXXvKblGikzSpyNzs9fO-AKwiumlEfeDB2C9KcHKk6lDfKQud9SNg1xTwKDzmDD0 <u>-0-11-</u>0 1-11-6 0-11-0

Scale = 1:12.8



1-11-6

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 11.6/15.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.08 BC 0.03 WB 0.04	DEFL. in (loc) I/defl Vert(LL) -0.00 5 >999 Vert(CT) -0.00 5 >999 Horz(CT) -0.00 4 n/a	L/d PLATES GRIP 240 MT20 244/190 180 n/a
BCLL 0.0 *	Code IRC2018/TPI2014	Matrix-MP	, ,	Weight: 13 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

WFBS

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

2x4 SP No.3

(size) 5=0-3-8, 4=Mechanical Max Horz 5=62(LC 13)

Max Uplift 5=-38(LC 16), 4=-25(LC 13) Max Grav 5=153(LC 21), 4=55(LC 28)

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

NOTES-

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



February 12,2025



Job	Truss	Truss Type	Qty	Ply	FFF-LOT #54 Roof
					171355572
25-0518-A	M10	Monopitch	2	1	
					Job Reference (optional)

Danville, Va - 24541,

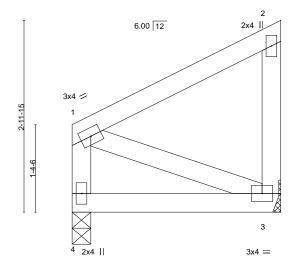
8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:06:53 2025 Page 1 ID:kk2_eRZGXXvKblGikzSpyNzs9fO-AKwiumlEfeDB2C9KcHKk6lDezQtV9SFg1xTwKDzmDD0

Structural wood sheathing directly applied or 3-3-1 oc purlins,

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

except end verticals

Scale = 1:18.0



- 1	3-3-1
ſ	3-3-1

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL (roof) 20.0			()	
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	TC 0.16	Vert(LL) -0.00 3-4 >999 240	MT20 244/190
	Lumber DOL 1.15	BC 0.10	Vert(CT) -0.01 3-4 >999 180	
TCDL 10.0	Rep Stress Incr YES	WB 0.05	Horz(CT) -0.00 3 n/a n/a	
BCLL 0.0 *	Code IRC2018/TPI2014	Matrix-MP	110.2(01) 0.00 0 1.74 1.74	Weight: 20 lb FT = 20%
BCDL 10.0	0006 INO2010/1F12014	IVIALITY=IVIE		Weight. 2010 FT = 2076

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

WFBS

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

2x4 SP No.3

(size) 4=0-3-8, 3=Mechanical Max Horz 4=88(LC 15)

Max Uplift 4=-1(LC 16), 3=-34(LC 13) Max Grav 4=123(LC 28), 3=126(LC 27)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for 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) 4, 3.
- 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.



February 12,2025

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Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355573 SD01 25-0518-A Hip Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:06:54 2025 Page 1 ID:kk2_eRZGXXvKbIGikzSpyNzs9fO-eXU456msQyL1gMkWA?rzfzminp1wujAqGbDUtfzmDD? 4-8-11 9-5-6 4-8-11 14-1<u>-6</u> , 19-0-15 24-0-8 4-8-11 4-8-0 4-11-9 Scale = 1:42.6 4x4 = 6x6 = ⊠¹⁷ 16 _\$ 19 20 15 6.00 12 3x6 / 21 4x5 < 12 13 22 5-11-5 6-1-1 2x4 || 2x4 || 6 1-4-6 9 10 8 11 3x4 = 3x8 = 3x4 =3x8 =3x8 =9-5-6 14-1-6 24-0-8 9-5-6 4-8-0 9-11-2 LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defl I/d PLATES GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.61 Vert(LL) -0.24 7-8 >999 240 MT20 244/190 Snow (Pf/Pg) 16.5/15.0

LUMBER-TOP CHORD

TCDL

BCLL

BCDL

2x4 SP No.2 2x4 SP No.2

10.0

10.0

0.0

BOT CHORD 2x4 SP No.3 WFBS

BRACING-

TOP CHORD

Vert(CT)

Horz(CT)

-0.49

0.04

Structural wood sheathing directly applied or 5-0-13 oc purlins, except end verticals, and 2-0-0 oc purlins (5-6-3 max.): 3-4.

180

n/a

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

7-8

>579

n/a

REACTIONS. (size) 11=0-3-8, 7=Mechanical

Max Horz 11=-113(LC 14)

Max Uplift 11=-58(LC 16), 7=-57(LC 16) Max Grav 11=1020(LC 38), 7=1025(LC 38)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1167/172, 3-4=-970/183, 4-5=-1195/171, 5-6=-294/21, 6-7=-257/45

Lumber DOL

Rep Stress Incr

Code IRC2018/TPI2014

BOT CHORD 10-11=-144/1084 8-10=-48/989 7-8=-140/1177 WFBS 3-10=0/272, 4-8=0/301, 2-11=-1188/182, 5-7=-1187/190

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 9-5-6, Exterior(2R) 9-5-6 to 13-8-4, Interior(1) 13-8-4 to 14-1-6, Exterior(2R) 14-1-6 to 18-4-4, Interior(1) 18-4-4 to 23-10-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

1.15

YES

вс

WB

Matrix-MS

0.86

0.77

- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) Provide adequate drainage to prevent water ponding.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 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.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Weight: 137 lb

FT = 20%

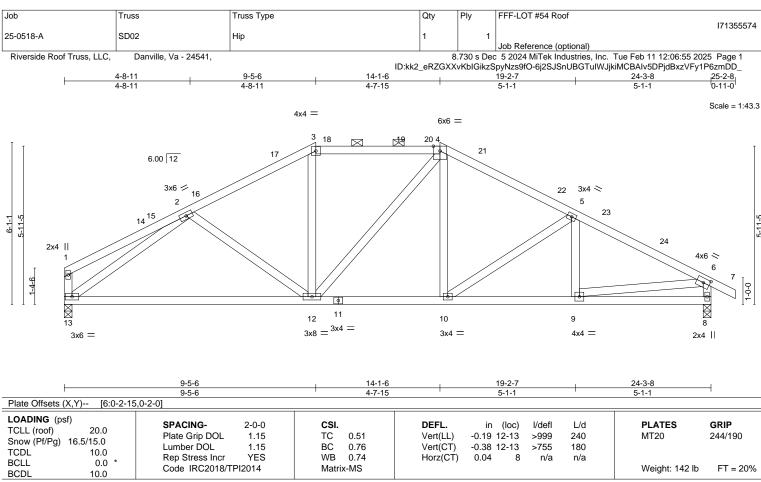


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LUMBER-TOP CHORD

REACTIONS.

2x4 SP No.2 2x4 SP No 2

BOT CHORD WFBS 2x4 SP No.3 BRACING-TOP CHORD

Structural wood sheathing directly applied or 4-7-6 oc purlins, except end verticals, and 2-0-0 oc purlins (5-5-10 max.): 3-4. Rigid ceiling directly applied or 10-0-0 oc bracing.

BOT CHORD

(size) 13=0-3-8, 8=0-3-8

Max Horz 13=-121(LC 14)

Max Uplift 13=-58(LC 16), 8=-92(LC 16) Max Grav 13=1029(LC 39), 8=1120(LC 39)

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

2-3=-1187/168, 3-4=-987/179, 4-5=-1201/184, 5-6=-1509/159, 6-8=-1068/166 TOP CHORD

BOT CHORD 12-13=-106/1099. 10-12=-23/994. 9-10=-67/1277

WFBS 3-12=0/281, 4-10=0/260, 5-10=-336/70, 2-13=-1210/177, 6-9=-51/1103

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 9-5-6, Exterior(2R) 9-5-6 to 13-8-5, Interior(1) 13-8-5 to 14-1-6, Exterior(2R) 14-1-6 to 18-4-4, Interior(1) 18-4-4 to 25-2-8 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=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.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13, 8.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 12,2025

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Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355575 SD03 25-0518-A Hip Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:06:55 2025 Page 1

11-9-6

4-8-0

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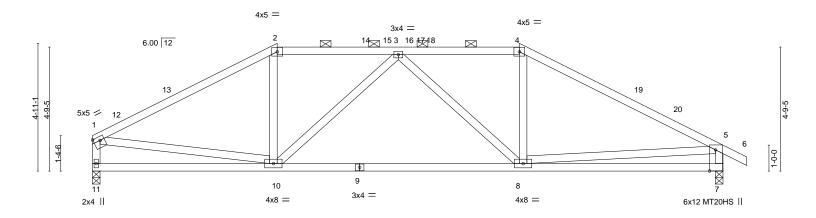
24-3-8

Structural wood sheathing directly applied, except end verticals, and

2-0-0 oc purlins (5-3-12 max.): 2-4.

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

Scale = 1:44.4



	7-1-6	9-3-15	7-10-3	
Plate Offsets (X,Y) [1:Edge,	0-1-12], [7:0-9-12,0-2-12]			
LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 16.5/15.0 TCDL 10.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	TC 0.96 V BC 0.78 V	EFL. in (loc) I/defl L/d ert(LL) -0.15 8-10 >999 240 ert(CT) -0.32 8-10 >901 180 orz(CT) 0.03 7 n/a n/a	PLATES GRIP MT20 244/190 MT20HS 187/143
BCDI 10.0	Code IRC2018/TPI2014	Matrix-MS		Weight: 131 lb $FT = 20\%$

BRACING-

TOP CHORD

BOT CHORD

16-5-6

LUMBER-TOP CHORD

2x4 SP No.2 *Except* 1-2: 2x4 SP No.1

BOT CHORD 2x4 SP No.2

WEBS 2x4 SP No.3 *Except*

5-7: 2x4 SP No.2

REACTIONS. (size) 11=0-3-8, 7=0-3-8

Max Horz 11=-102(LC 14)

Max Uplift 11=-58(LC 16), 7=-92(LC 16)

7-1-6

Max Grav 11=959(LC 2), 7=1025(LC 2)

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

TOP CHORD 1-2=-1315/140, 2-3=-1096/163, 3-4=-1156/170, 4-5=-1403/144, 1-11=-901/130,

5-7=-959/179

BOT CHORD 10-11=-52/257, 8-10=-78/1279, 7-8=-133/571

WEBS 2-10=0/310, 3-10=-337/70, 3-8=-268/80, 4-8=0/337, 1-10=-18/932, 5-8=0/807

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 7-1-6, Exterior(2R) 7-1-6 to 11-4-5, Interior(1) 11-4-5 to 16-5-6, Exterior(2R) 16-5-6 to 20-8-4, Interior(1) 20-8-4 to 25-2-8 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=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.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 7.
- 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.



February 12,2025

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Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355576 SD04 25-0518-A diH Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:06:56 2025 Page 1 ID:kk2_eRZGXXvKblGikzSpyNzs9fO-avcqWon6yZblvfuvIPtRkOr?ldnwMku7jviawYzmDCz 8-4-11 16-7-8 17-6-8 0-10-9 Scale = 1:33.8 4x6 = 6x6 =6.00 12 4x5 < 4 15 5-1-7 16 2x4 || 1-4-6 φ. 10 9 $_{3x4} = _{4x8}$ 3x4 = 3x4 | 3x5 =16-7-8 0-10-9 8-2-14 Plate Offsets (X,Y)--[1:Edge,0-1-12] LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defl L/d **PLATES** GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.77 Vert(LL) -0.10 7-8 >999 240 MT20 244/190 Snow (Pf/Pg) 16.5/15.0 Lumber DOL 1.15 BC 0.57 Vert(CT) -0.20 7-8 >992 180 TCDL 10.0 WB Rep Stress Incr YES 0.37 Horz(CT) 0.01 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-MS FT = 20% Weight: 100 lb BCDL 10.0 LUMBER-BRACING-2x4 SP No.2 *Except* TOP CHORD TOP CHORD Structural wood sheathing directly applied or 4-2-15 oc purlins, 1-2: 2x4 SP No.1 except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 2-3. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

2x4 SP No.2

BOT CHORD WEBS 2x4 SP No.3

REACTIONS. (size) 11=0-3-8, 7=0-3-8 Max Horz 11=-105(LC 14)

Max Uplift 11=-39(LC 16), 7=-73(LC 16)

Max Grav 11=756(LC 39), 7=844(LC 39)

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

TOP CHORD 1-2=-889/142, 2-3=-690/174, 3-4=-820/146, 1-11=-687/150, 5-7=-304/120

BOT CHORD 9-11=-67/279, 8-9=-5/664, 7-8=-82/824

WEBS 1-9=-1/461, 4-7=-813/152

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 7-6-1, Exterior(2E) 7-6-1 to 8-4-11, Exterior(2R) 8-4-11 to 12-7-5, Interior(1) 12-7-5 to 17-6-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=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.
- 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.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 12,2025

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building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TP11 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355577 SM01G 25-0518-A Half Hip Girder Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:06:56 2025 Page 1 ID:kk2_eRZGXXvKblGikzSpyNzs9fO-avcqWon6yZblvfuvIPtRkOr7fdroMok7jviawYzmDCz 6-8-0 4-7-8 2-0-8 Scale = 1:14.4 4x4 = 3 4.00 12 9 0-3-15 10 3x4 = 6_{2x4} || 5 NAILED NAII FD 4x4 = 4-7-8 4-7-8 Plate Offsets (X,Y)--[2:0-3-6,Edge] LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defl L/d **PLATES** GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.26 Vert(LL) -0.02 6-8 >999 240 MT20 244/190 Snow (Pf/Pg) 20.4/20.0 Lumber DOL 1.15 BC 0.32 Vert(CT) -0.02 6-8 >999 180 TCDL 10.0 Rep Stress Incr NO WB 0.13 Horz(CT) 0.00 n/a

Matrix-MP

BRACING-

TOP CHORD

BOT CHORD

BCLL BCDL

REACTIONS.

LUMBER-TOP CHORD 2x4 SP No.2 BOT CHORD 2x6 SP No 2

0.0

10.0

WFBS 2x4 SP No.3

(size) 2=0-3-8, 5=Mechanical

Max Horz 2=58(LC 9) Max Uplift 2=-73(LC 12), 5=-49(LC 8) Max Grav 2=472(LC 32), 5=316(LC 31)

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

Code IRC2018/TPI2014

TOP CHORD 2-3=-493/61

BOT CHORD 2-6=-57/423, 5-6=-57/393 WFBS 3-6=-17/305, 3-5=-501/62

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); cantilever left and right exposed; end vertical left and right exposed; 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=20.0 psf; Pf=20.4 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 15.4 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.
- 9) Refer to girder(s) for truss to truss connections.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 5.
- 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.
- 13) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 14) 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



FT = 20%

Weight: 34 lb

n/a

except end verticals, and 2-0-0 oc purlins: 3-4.

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

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

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	Job	Truss	Truss Type	Qty	Ply	FFF-LOT #54 Roof
						I71355577
	25-0518-A	SM01G	Half Hip Girder	1	1	
Į						Job Reference (optional)

Danville, Va - 24541,

8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:06:57 2025 Page 2 ID:kk2_eRZGXXvKblGikzSpyNzs9fO-26ACk7okjtjcXpT5r7OgGbOIP1B15F_GyZR8S_zmDCy

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)
Vert: 1-3=-51, 3-4=-61, 2-5=-20 Concentrated Loads (lb) Vert: 6=-65(B) 10=-85(B)



Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355578 SM02G 25-0518-A Half Hip Girder Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:06:57 2025 Page 1 ID:kk2_eRZGXXvKbIGikzSpyNzs9fO-26ACk7okjtjcXpT5r7OgGbOLz1Fh5GmGyZR8S_zmDCy -0-11-0 0-11-0 1-1-5 NAILED Scale = 1:8.8 ≨x4 || 7.00 12 2 0-6-11 NAILED 5 2x4 || 4x4 = 3x4 = 2-3-0 1-1-5 1-1-11 Plate Offsets (X,Y)-- [3:0-2-8,0-2-1] LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defl L/d **PLATES** GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.10 Vert(LL) -0.00 >999 240 MT20 244/190 Snow (Pf/Pg) 20.4/20.0 Lumber DOL 1.15 BC 0.02 Vert(CT) -0.00 6 >999 180 TCDL 10.0 WB

0.01

Matrix-MP

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

0.00

5

n/a

except end verticals, and 2-0-0 oc purlins: 3-4.

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

n/a

Structural wood sheathing directly applied or 2-3-0 oc purlins,

LUMBER-

REACTIONS.

BCLL

BCDL

WFBS

TOP CHORD 2x4 SP No.2 2x6 SP No 2 **BOT CHORD**

0.0

10.0

2x4 SP No 3 (size) 2=0-3-8, 5=Mechanical

Max Horz 2=35(LC 11) Max Uplift 2=-38(LC 12), 5=-11(LC 9)

Max Grav 2=217(LC 32), 5=105(LC 31)

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

Rep Stress Incr

Code IRC2018/TPI2014

- 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); cantilever left and right exposed; end vertical left and right exposed; 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=20.0 psf; Pf=20.4 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.

NO

- 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 15.4 psf on overhangs non-concurrent with other live loads.
- 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.
- 9) Refer to girder(s) for truss to truss connections.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 5.
- 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.
- 13) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 14) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Vert: 1-3=-51, 3-4=-61, 5-7=-20



Weight: 13 lb

FT = 20%

February 12,2025

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	Job	Truss	Truss Type	Qty	Ply	FFF-LOT #54 Roof
						I71355578
	25-0518-A	SM02G	Half Hip Girder	1	1	
Į						Job Reference (optional)

Danville, Va - 24541,

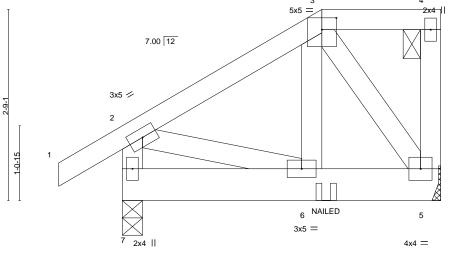
8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:06:57 2025 Page 2 ID:kk2_eRZGXXvKblGikzSpyNzs9fO-26ACk7okjtjcXpT5r7OgGbOLz1Fh5GmGyZR8S_zmDCy

LOAD CASE(S) Standard Concentrated Loads (lb) Vert: 6=-16(F) 3=-15(F)



818 Soundside Road Edenton, NC 27932

Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355579 SM03G 25-0518-A Half Hip Girder Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:06:58 2025 Page 1 ID:kk2_eRZGXXvKblGikzSpyNzs9fO-WlkbxTpNUBrT9z2HPqvvppwV?RblqjRPBDBh?RzmDCx 2-10-8 2-10-8 -0-11-0 4-7-2 Scale = 1:16.6 5x5



2-10-8

Plate Offsets (X,Y)--[3:0-2-8,0-2-1] LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defl L/d **PLATES** GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.15 Vert(LL) -0.00 >999 240 MT20 244/190 16.5/15.0 Snow (Pf/Pg) Lumber DOL 1.15 BC 0.03 Vert(CT) -0.00 6 >999 180 TCDL 10.0 Rep Stress Incr NO WB 0.05 Horz(CT) -0.00 5 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-MP FT = 20% Weight: 34 lb BCDL 10.0

LUMBER-

TOP CHORD 2x4 SP No.2 2x6 SP No 2

BOT CHORD WFBS 2x4 SP No.3 BRACING-

BOT CHORD

TOP CHORD Structural wood sheathing directly applied or 4-7-2 oc purlins,

except end verticals, and 2-0-0 oc purlins: 3-4. Rigid ceiling directly applied or 10-0-0 oc bracing.

1-8-9

REACTIONS.

(size) 7=0-3-8, 5=Mechanical Max Horz 7=91(LC 9)

Max Uplift 7=-56(LC 12), 5=-60(LC 9) Max Grav 7=334(LC 32), 5=229(LC 31)

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

TOP CHORD 2-7=-304/68

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; B=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
- 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.
- 9) Refer to girder(s) for truss to truss connections.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 5.
- 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.
- 13) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 14) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Vert: 1-2=-43, 2-3=-43, 3-4=-53, 5-7=-20

February 12,2025

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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	Job	Truss	Truss Type	Qty	Ply	FFF-LOT #54 Roof
						I71355579
	25-0518-A	SM03G	Half Hip Girder	1	1	
Į						Job Reference (optional)

Danville, Va - 24541,

8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:06:58 2025 Page 2 ID:kk2_eRZGXXvKblGikzSpyNzs9fO-WlkbxTpNUBrT9z2HPqvvppwV?RblqjRPBDBh?RzmDCx

LOAD CASE(S) Standard Concentrated Loads (lb) Vert: 6=-109(F)

Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355580 SM04 25-0518-A Half Hip Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:06:58 2025 Page 1 ID:kk2_eRZGXXvKblGikzSpyNzs9fO-WlkbxTpNUBrT9z2HPqvvppwVYRa9qjcPBDBh?RzmDCx 4-11-2 1-8-9 Scale = 1:17.6 5x5 7.00 12 3x5 / 1-0-15 6 5 3x4 2x4 || 3x4 = 3-2-9 1-8-9 Plate Offsets (X,Y)-- [3:0-2-8,0-2-1]

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 16.5/15.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.18 BC 0.07 WB 0.04	DEFL. in (loc) l/defl L/d Vert(LL) -0.00 6-7 >999 240 Vert(CT) -0.01 6-7 >999 180 Horz(CT) -0.00 5 n/a n/a	PLATES GRIP MT20 244/190
BCLL 0.0 * BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP	1.0.2(0.1) 0.000 0 1.00	Weight: 33 lb FT = 20%

LUMBER-TOP CHORD BOT CHORD

WFBS

2x4 SP No 2

2x4 SP No 2 2x4 SP No.3

BRACING-TOP CHORD

BOT CHORD

Structural wood sheathing directly applied or 4-11-2 oc purlins,

except end verticals, and 2-0-0 oc purlins: 3-4. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=0-3-8, 5=Mechanical

Max Horz 7=100(LC 13)

Max Uplift 7=-41(LC 16), 5=-41(LC 13) Max Grav 7=307(LC 36), 5=178(LC 2)

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

TOP CHORD 2-7=-282/124

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 3-2-9, Exterior(2E) 3-2-9 to 4-9-6 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.
- 9) Refer to girder(s) for truss to truss connections.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 5.
- 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.



February 12,2025

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Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355581 SM05G 25-0518-A Half Hip Girder Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:06:59 2025 Page 1 ID:kk2_eRZGXXvKbIGikzSpyNzs9fO-?UHz8pq?EUzKm7dUzYQ8L0TdWqwJZ9QZQtwEXtzmDCw -0-11-0 1-6-7 0-11-0 1-6-7 3-4-11 Scale = 1:12.6 ₄ 2x4 | 5x5 = 7.00 12 3x5 / 2 1-11-11 1-0-15 NAILED 5 6 NAILED 3x4 =2x4 || 4x4 = 1-6-7 3-4-11 1-6-7 Plate Offsets (X,Y)--[3:0-2-8,0-2-1] LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defl L/d **PLATES** GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.29 Vert(LL) -0.00 5-6 >999 240 MT20 244/190 16.5/15.0 Snow (Pf/Pg) Lumber DOL 1.15 BC 0.07 Vert(CT) -0.00 5-6 >999 180 TCDL 10.0 Rep Stress Incr NO WB 0.07 Horz(CT) 0.00 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-MP Weight: 32 lb FT = 20% BCDL 10.0

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

WFBS

TOP CHORD 2x4 SP No.2 BOT CHORD 2x6 SP No 2

2x4 SP No.3

REACTIONS. (size) 7=0-3-8, 5=Mechanical Max Horz 7=63(LC 9)

Max Uplift 7=-79(LC 12), 5=-74(LC 9) Max Grav 7=291(LC 32), 5=243(LC 31)

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

TOP CHORD 2-7=-291/83

NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=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.
- 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.
- Provide adequate drainage to prevent water ponding.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 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) 7, 5.
- 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.
- 12) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 13) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Vert: 1-2=-43, 2-3=-43, 3-4=-53, 5-7=-20

Structural wood sheathing directly applied or 4-11-2 oc purlins,

except end verticals, and 2-0-0 oc purlins: 3-4.

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

February 12,2025

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Job	Truss	Truss Type	Qty	Ply	FFF-LOT #54 Roof
					171355581
25-0518-A	SM05G	Half Hip Girder	1	1	
					Job Reference (optional)

Danville, Va - 24541,

8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:06:59 2025 Page 2 ID:kk2_eRZGXXvKbIGikzSpyNzs9fO-?UHz8pq?EUzKm7dUzYQ8L0TdWqwJZ9QZQtwEXtzmDCw

LOAD CASE(S) Standard Concentrated Loads (lb) Vert: 6=-29(F) 8=-29(F)



Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355582 SM06 25-0518-A Half Hip Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:06:59 2025 Page 1 ID:kk2_eRZGXXvKbIGikzSpyNzs9fO-?UHz8pq?EUzKm7dUzYQ8L0Tf6qwMZArZQtwEXtzmDCw 4-11-2 Scale = 1:17.8 5x5 7.00 12 3x5 / 2 1-0-15 6 5 3x4 =2x4 3x4 = 3-3-6 1-7-12 Plate Offsets (X,Y)-- [3:0-2-8,0-2-1]

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 16.5/15.0 TCDL 10.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.19 BC 0.07 WB 0.04	DEFL. in (loc) l/defl L/d Vert(LL) -0.00 6-7 >999 240 Vert(CT) -0.01 6-7 >999 180 Horz(CT) -0.00 5 n/a n/a		GRIP 244/190
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP		Weight: 33 lb	FT = 20%

LUMBER-

WFBS

TOP CHORD 2x4 SP No 2 BOT CHORD

2x4 SP No 2 2x4 SP No.3 **BRACING-**

BOT CHORD

TOP CHORD Structural wood sheathing directly applied or 4-11-2 oc purlins,

except end verticals, and 2-0-0 oc purlins: 3-4. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=0-3-8, 5=Mechanical

Max Horz 7=101(LC 13)

Max Uplift 7=-41(LC 16), 5=-41(LC 13) Max Grav 7=308(LC 36), 5=178(LC 2)

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

TOP CHORD 2-7=-283/124

NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; B=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 3-3-6, Exterior(2E) 3-3-6 to 4-9-6 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=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.
- 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) Provide adequate drainage to prevent water ponding.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 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) 7, 5.
- 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.

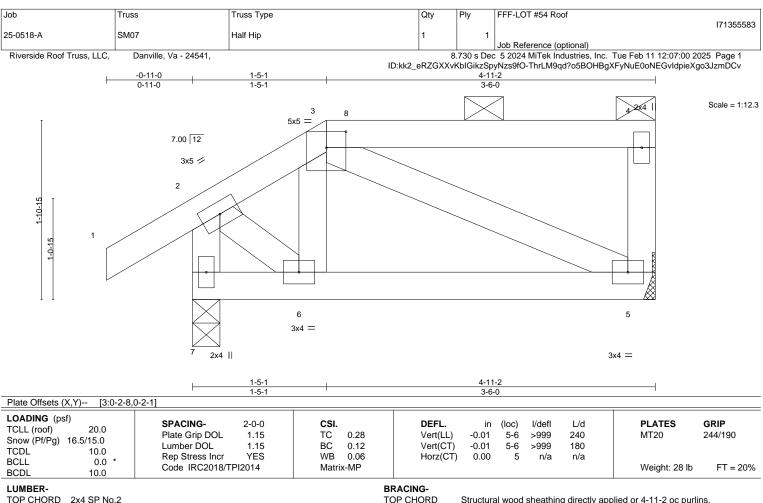


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2x4 SP No.2

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

BOT CHORD

Structural wood sheathing directly applied or 4-11-2 oc purlins,

except end verticals, and 2-0-0 oc purlins: 3-4. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=0-3-8, 5=Mechanical

Max Horz 7=64(LC 13)

Max Uplift 7=-44(LC 16), 5=-39(LC 13) Max Grav 7=258(LC 36), 5=215(LC 35)

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

TOP CHORD 2-7=-265/109

NOTES-

BOT CHORD

WFBS

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; B=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=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.
- 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) Provide adequate drainage to prevent water ponding.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 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) 7, 5.
- 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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Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355584 SM08 2 25-0518-A Half Hip Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:07:00 2025 Page 1

ID:kk2_eRZGXXvKblGikzSpyNzs9fO-ThrLM9qd?o5BOHBgXFyNuE0k2EFrlcPieXgo3JzmDCv 4-11-15 6-8-8 4-11-15

Scale = 1:25.6

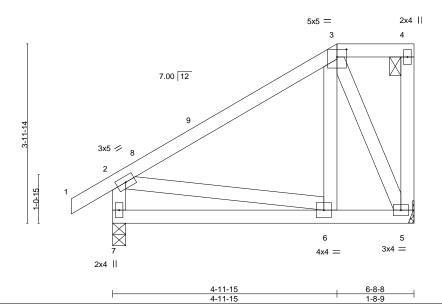


Plate Offsets (X,Y)-- [3:0-2-8,0-2-1] LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defl L/d **PLATES** GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.56 Vert(LL) -0.02 6-7 >999 240 MT20 244/190 Snow (Pf/Pg) 16.5/15.0 Lumber DOL 1.15 BC 0.18 Vert(CT) -0.03 6-7 >999 180 TCDL 10.0 WB Rep Stress Incr YES 0.08 Horz(CT) -0.00 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-MP Weight: 46 lb FT = 20% BCDL 10.0

LUMBER-

WFBS

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

2x4 SP No.3

BRACING-

BOT CHORD

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

except end verticals, and 2-0-0 oc purlins: 3-4. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=0-3-8, 5=Mechanical

Max Horz 7=136(LC 13)

Max Uplift 7=-43(LC 16), 5=-50(LC 13) Max Grav 7=396(LC 36), 5=251(LC 2)

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

TOP CHORD 2-7=-357/136

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 4-11-15, Exterior(2E) 4-11-15 to 6-6-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Refer to girder(s) for truss to truss connections.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 5.
- 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.



February 12,2025

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Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355585 SM09 25-0518-A Half Hip Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:07:01 2025 Page 1 ID:kk2_eRZGXXvKblGikzSpyNzs9fO-xtPjZVrFm6D20Rms4zTcRRYzKec113nstBPLblzmDCu 3-3-6 3-3-6 Scale = 1:19.8 5x5 = 2x4 3 7.00 12 3x5 / 1-0-15 5 3x4 = 3x4 =2x4 3-3-6 6-8-8 Plate Offsets (X,Y)-- [3:0-2-8,0-2-1]

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 16.5/15.0 TCDL 10.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.27 BC 0.12 WB 0.08	DEFL. in (loc) l/defl L/d Vert(LL) -0.00 5-6 >999 240 Vert(CT) -0.01 5-6 >999 180 Horz(CT) 0.00 5 n/a n/a	PLATES MT20	GRIP 244/190
BCDL 0.0	Code IRC2018/TPI2014	Matrix-MP		Weight: 41 lb	FT = 20%

LUMBER-TOP CHORD BOT CHORD

WFBS

2x4 SP No 2 2x4 SP No 2

2x4 SP No.3

BRACING-

BOT CHORD

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

except end verticals, and 2-0-0 oc purlins: 3-4. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 7=0-3-8, 5=Mechanical Max Horz 7=101(LC 13) Max Uplift 7=-46(LC 16), 5=-51(LC 13)

Max Grav 7=362(LC 36), 5=274(LC 35)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-7=-340/130

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- $2) \ Wind: ASCE \ 7-16; \ Vult=130mph \ (3-second \ gust) \ Vasd=103mph; \ TCDL=6.0psf; \ BCDL=6.0psf; \ h=25ft; \ B=45ft; \ L=24ft; \ eave=4ft; \ Cat.$ II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 3-3-6, Exterior(2E) 3-3-6 to 6-6-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Refer to girder(s) for truss to truss connections.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 5.
- 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.



February 12,2025



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Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355586 SM09AG 25-0518-A Half Hip Girder Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:07:01 2025 Page 1 ID:kk2_eRZGXXvKbIGikzSpyNzs9fO-xtPjZVrFm6D20Rms4zTcRRYzweba13DstBPLblzmDCu 3-3-6 3-3-6 Scale = 1:19.8 5x5 = 2x4 3 7.00 12 3x5 / 1-0-15 6 NAILED 5 NAILED 3x6 = 4x4 = 2x4 3-3-6 6-8-8 Plate Offsets (X,Y)-- [3:0-2-8,0-2-1]

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 16.5/15.0 TCDL 10.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO	CSI. TC 0.29 BC 0.15 WB 0.11	DEFL. in (loc) Vert(LL) -0.00 5-6 Vert(CT) -0.01 5-6 Horz(CT) 0.00 5	PLATES MT20	GRIP 244/190
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP		Weight: 45 lb	FT = 20%

LUMBER-

WFBS

TOP CHORD 2x4 SP No.2 BOT CHORD 2x6 SP No.2

2x6 SP No.2 2x4 SP No.3 BRACING-TOP CHORD

BOT CHORD

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

except end verticals, and 2-0-0 oc purlins: 3-4. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 7=0-3-8, 5=Mechanical Max Horz 7=99(LC 9)

Max Uplift 7=-80(LC 12), 5=-108(LC 9)

Max Grav 7=436(LC 32), 5=403(LC 31)

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

TOP CHORD 2-3=-339/72, 2-7=-416/96 WEBS 3-5=-303/88, 2-6=-23/257

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- 9) Refer to girder(s) for truss to truss connections.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 5=108.
- 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.
- 13) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 14) 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



February 12,2025

Continued on page 2

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Job	Truss	Truss Type	Qty	Ply	FFF-LOT #54 Roof
					171355586
25-0518-A	SM09AG	Half Hip Girder	1	1	
					Job Reference (optional)

Danville, Va - 24541,

8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:07:01 2025 Page 2 ID:kk2_eRZGXXvKbIGikzSpyNzs9fO-xtPjZVrFm6D20Rms4zTcRRYzweba13DstBPLblzmDCu

LOAD CASE(S) Standard

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

Vert: 1-2=-43, 2-3=-43, 3-4=-53, 5-7=-20 Concentrated Loads (lb) Vert: 6=-101(F) 8=-101(F)



Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355587 SM10G 25-0518-A Half Hip Girder Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:07:02 2025 Page 1 ID:kk2_eRZGXXvKbIGikzSpyNzs9fO-P3z5nrstXPLvdaL3eg_rzf51p2wumVy?6r9v8CzmDCt 6-8-8 Scale = 1:14.5 5x5 = 3 7.00 12 3x5 / 10 NAILED 6 5 3x4 = NAILED NAILED 2x4 || 4x4 = 1-6-13 6-8-8 1-6-13 5-1-11 Plate Offsets (X,Y)--[3:0-2-8,0-2-1] LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defl L/d **PLATES** GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.73 Vert(LL) -0.01 5-6 >999 240 MT20 244/190 16.5/15.0 Snow (Pf/Pg) Lumber DOL 1.15 BC 0.15 Vert(CT) -0.02 5-6 >999 180 TCDL 10.0 Rep Stress Incr NO WB 0.14 Horz(CT) 0.00 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-MP Weight: 41 lb FT = 20% BCDL 10.0

LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x6 SP No.2

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

BOT CHORD

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

except end verticals, and 2-0-0 oc purlins: 3-4. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=0-3-8, 5=Mechanical

Max Horz 7=64(LC 9)

Max Uplift 7=-98(LC 12), 5=-104(LC 9) Max Grav 7=366(LC 2), 5=352(LC 31)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-303/83, 2-7=-399/107

WEBS 3-5=-257/88. 2-6=-51/287

NOTES-

- 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); cantilever left and right exposed; end vertical left and right exposed; 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.
- 9) Refer to girder(s) for truss to truss connections.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 5=104.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 14) 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



February 12,2025

Continued on page 2

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Job	Truss	Truss Type	Qty	Ply	FFF-LOT #54 Roof
					171355587
25-0518-A	SM10G	Half Hip Girder	1	1	
					Job Reference (optional)

Danville, Va - 24541,

8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:07:02 2025 Page 2 ID:kk2_eRZGXXvKbIGikzSpyNzs9fO-P3z5nrstXPLvdaL3eg_rzf51p2wumVy?6r9v8CzmDCt

LOAD CASE(S) Standard

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

Vert: 1-2=-43, 2-3=-43, 3-4=-53, 5-7=-20 Concentrated Loads (lb) Vert: 6=-29(B) 9=-29(B) 10=-30(B)



Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355588 T01 6 25-0518-A Common Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:07:02 2025 Page 1 ID:kk2_eRZGXXvKbIGikzSpyNzs9fO-P3z5nrstXPLvdaL3eg_rzf5_S2ojmS7?6r9v8CzmDCt 7-11-6 7-11-6 12-3-7 16-7-8 17-6-8 Scale = 1:33.0 4x5 = 2 6.00 12 13 4x5 > 14 5x5 / 3x4 || 1-4-6 T a 8 3x4 = 4x8 = 3x4 II 3x5 = 16-7-8 7-11-6 8-8-2 Plate Offsets (X,Y)--[1:Edge,0-1-12] LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) I/defl L/d **PLATES** GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.95 Vert(LL) -0.10 6-7 >999 240 MT20 244/190 Snow (Pf/Pg) 11.6/15.0 Lumber DOL 1.15 BC 0.67 Vert(CT) -0.21 6-7 >921 180 TCDL 10.0 WB Rep Stress Incr YES 0.32 Horz(CT) 0.01 6 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-MS Weight: 89 lb FT = 20% BCDL 10.0 LUMBER-BRACING-

TOP CHORD

BOT CHORD

TOP CHORD 2x4 SP No.2 2x4 SP No 2

BOT CHORD 2x4 SP No 3 WFBS

REACTIONS. (size) 9=0-3-8, 6=0-3-8 Max Horz 9=-110(LC 14)

Max Uplift 9=-39(LC 16), 6=-73(LC 16) Max Grav 9=651(LC 2), 6=719(LC 2)

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

TOP CHORD 1-2=-758/177, 2-3=-708/196, 1-9=-582/181, 4-6=-277/141

BOT CHORD 7-9=-89/279 6-7=-128/699

WFBS 2-7=0/335, 1-7=0/370, 3-6=-648/165

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 7-11-6, Exterior(2R) 7-11-6 to 10-11-6, Interior(1) 10-11-6 to 17-6-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 6.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied, except end verticals.

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

February 12,2025

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Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355589 T01A 2 25-0518-A Common Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:07:03 2025 Page 1 ID:kk2_eRZGXXvKblGikzSpyNzs9fO-tGXU_BtVljTmFkwFCOV4Wse9FS8OVvK9KVuSgezmDCs 7-11-6 16-4-8 12-1-15 7-11-6 4-2-9 Scale = 1:32.5 4x5 = 2 6.00 12 12 4x5 < 3 13 5x5 / 2x4 || 4 1-4-6 T AT 7 6 5 3x4 =3x5 =4x8 = 3x4 || 16-4-8 7-11-6 8-5-2 Plate Offsets (X,Y)--[1:Edge,0-1-12] LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defl L/d **PLATES** GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.95 Vert(LL) -0.09 5-6 >999 240 MT20 244/190 Snow (Pf/Pg) 11.6/15.0 Lumber DOL 1.15 BC 0.64 Vert(CT) -0.19 5-6 >999 180 TCDL 10.0 WB Rep Stress Incr YES 0.33 Horz(CT) 0.01 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-MS Weight: 87 lb FT = 20% BCDL 10.0 LUMBER-

TOP CHORD 2x4 SP No.2 2x4 SP No 2

BOT CHORD 2x4 SP No 3 WFBS

BRACING-

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

REACTIONS. (size) 8=0-3-8, 5=Mechanical

Max Horz 8=-102(LC 14)

Max Uplift 8=-39(LC 16), 5=-39(LC 16) Max Grav 8=643(LC 2), 5=643(LC 2)

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

TOP CHORD 1-2=-743/177, 2-3=-691/200, 1-8=-573/182

BOT CHORD 6-8=-127/274, 5-6=-165/667

WFBS 2-6=0/324, 1-6=0/357, 3-5=-673/189

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 7-11-6, Exterior(2R) 7-11-6 to 10-11-6, Interior(1) 10-11-6 to 16-2-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 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) 8, 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.



February 12,2025



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											171355590
25-0518-A		Т02	Common		1	1	Joh Refe	erence (op	ntional)		
Riverside Roof Tru	uss. LLC.	Danville, Va - 24541,				8.730 s De				ue Feb 11 12:07:03 20	25 Page 1
	,,				ID:kk2_eRZGXX	KblGikzSpy			TmFkwFCOV4\	WseEwS6GVva9KVuS	gezmDCs
—		5-10-11		9-6		18-0-7			24-	3-8	25-2-8 0-11-0
1		5-10-11	5-10	0-11	1	6-3-1		,	6-3	3-1	0-11-0'
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7.3.1 2x4 1		6.00 \[\frac{12}{2} \]	13		3	15	16	4x4 4		17 3x5	= 6 / - 0-0-1
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11			3x4 =	3x4 =		3:	<4 =				
3x5	=									3x6 =	:
F		8-1-3 8-1-3	+		16-2-5 8-1-3		 		24-3-8 8-1-3		
LOADING (psf) TCLL (roof) Snow (Pf/Pg) 11 TCDL BCLL BCDL	20.0 .6/15.0 10.0 0.0 *	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/	2-0-0 1.15 1.15 YES TPI2014	CSI. TC 0.58 BC 0.78 WB 0.38 Matrix-MS	DEFI Vert(Vert(Horz	.L) -0.15 CT) -0.23	8-10 8-10	I/defI >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 136 lb	GRIP 244/190 FT = 20%
LUMBER- TOP CHORD 22	x4 SP No.2	2			BRACING- TOP CHORD	Structu	ral wood s	sheathing	directly applie	ed or 4-3-8 oc purlins	,

BOT CHORD

WEBS

Qty

Plv

FFF-LOT #54 Roof

except end verticals.

1 Row at midpt

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

2-11. 4-7

BOT CHORD 2x4 SP No.2

2x4 SP No.3

(size) 11=0-3-8, 7=0-3-8 Max Horz 11=-142(LC 14)

Max Uplift 11=-58(LC 16), 7=-92(LC 16) Max Grav 11=1054(LC 28), 7=1115(LC 29)

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

TOP CHORD 2-3=-1344/233, 3-4=-1444/246, 4-5=-428/119, 5-7=-377/149

BOT CHORD 10-11=-111/1262 8-10=-16/952 7-8=-112/1312

WEBS 3-10=-36/507, 3-8=-58/609, 4-8=-274/170, 2-11=-1271/157, 4-7=-1188/111

NOTES-

WEBS

REACTIONS.

Job

Truss

Truss Type

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 11-9-6, Exterior(2R) 11-9-6 to 14-9-6, Interior(1) 14-9-6 to 25-2-8 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) 11, 7.
- 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.



February 12,2025

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Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355591 T02A 5 25-0518-A Common Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:07:04 2025 Page 1 ID:kk2_eRZGXXvKbIGikzSpyNzs9fO-LS5sCXu731bdtuVRm50J24APnrPTEKPIZ9e?C4zmDCr 6-9-6 6-9-6 11-9-6 16-9-6 24-0-8 5-0-0 Scale = 1:43.8 4x4 = 6.00 12 15 2x4 || 16 4x6 🖊 4x4 > 5 1-1-8 178 18 9 7 10 4x5 = 4x8 = 4x8 = 2x4 || 2x4 | 6-9-6 16-9-6 24-0-8 6-9-6 10-0-0 7-3-2 Plate Offsets (X,Y)--[5:Edge,0-1-12] LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defl L/d **PLATES** GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.64 Vert(LL) -0.36 >802 240 MT20 244/190 Snow (Pf/Pg) 11.6/15.0 вс Lumber DOL 1.15 0.97 Vert(CT) -0.57 7-9 >502 180 TCDL 10.0 WB 0.47 Rep Stress Incr YES Horz(CT) 0.02 6 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-MS Weight: 135 lb FT = 20% BCDL 10.0 LUMBER-BRACING-TOP CHORD 2x4 SP No.2 TOP CHORD Structural wood sheathing directly applied or 3-7-0 oc purlins, BOT CHORD

2x4 SP No 2

2x4 SP No.3 WFBS

except end verticals.

BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS. 10=0-3-8, 6=Mechanical (size)

Max Horz 10=-133(LC 14)

Max Uplift 10=-58(LC 16), 6=-57(LC 16) Max Grav 10=1051(LC 27), 6=1053(LC 28)

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

TOP CHORD 1-2=-1462/178, 2-3=-1462/289, 3-4=-1524/296, 4-5=-1526/185, 1-10=-971/149,

5-6=-961/152 BOT CHORD 7-9=-53/916

WEBS $2-9=-397/199,\ 3-9=-100/666,\ 3-7=-111/757,\ 4-7=-415/207,\ 1-9=-63/1136,\ 5-7=-45/1103$

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 11-9-6, Exterior(2R) 11-9-6 to 14-9-6, Interior(1) 14-9-6 to 23-10-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 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.



February 12,2025

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Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355592 T03 COMMON 25-0518-A Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:07:04 2025 Page 1 ID:kk2_eRZGXXvKbIGikzSpyNzs9fO-LS5sCXu731bdtuVRm50J24AOnra7EQEIZ9e?C4zmDCr 12-7-0 -0-11-0 0-11-0 5-10-0 11-8-0 0-11-0 5-10-0 5-10-0 Scale = 1:28.2 4x4 = 3 7.00 12 10 5x5 // 5x5 <> 2 ° \bigotimes 7 4x8 = 2x4 || 11 2x4 5-10-0 11-8-0 5-10-0 5-10-0 Plate Offsets (X,Y)--[2:0-2-0,0-1-12], [4:0-2-0,0-1-12] LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defl L/d **PLATES** GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.70 Vert(LL) -0.02 7-8 >999 240 MT20 244/190 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 BC 0.29 Vert(CT) -0.05 7-8 >999 180 TCDL 10.0 WB Rep Stress Incr YES 0.09 Horz(CT) 0.00 6 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-MS Weight: 65 lb FT = 20% BCDL 10.0 BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

2x4 SP No.3 WFBS

REACTIONS. (size) 8=0-3-8, 6=0-3-8 Max Horz 8=-106(LC 14)

Max Uplift 8=-61(LC 16), 6=-61(LC 16) Max Grav 8=520(LC 21), 6=520(LC 22)

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

TOP CHORD 2-3=-485/108, 3-4=-485/108, 2-8=-468/163, 4-6=-469/164

BOT CHORD 7-8=-107/267. 6-7=-80/259

NOTES-

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 5-10-0, Exterior(2R) 5-10-0 to 8-10-0, Interior(1) 8-10-0 to 12-7-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 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 15.4 psf on overhangs non-concurrent with other live loads.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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

except end verticals.

February 12,2025



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Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355593 T03G 25-0518-A Common Girder 2 Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:07:05 2025 Page 1 ID:kk2_eRZGXXvKbIGikzSpyNzs9fO-pefEPtumqKjUU24eJoXYbHjauFsJzkWRopNZkXzmDCq 2-11-0 2-11-0 5-10-0 8-10-0 11-10-Ó 2-11-0 3-0-0 3-0-0 Scale = 1:28.3 4x4 = 3 7.00 12 3x5 🗸 3x5 <> 7x8 = 3x5 / 5 1-0-15 13 14 15 16 9 8 74x4 =LUS26 LUS26 HUS26 10 4x5 = 8x8 = LUS26 HHUS26-2 4x4 || LUS26 LUS26 2-11-0 5-10-0 8-10-0 11-10-0 2-11-0 2-11-0 3-0-0 3-0-0

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

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO	CSI. TC 0.62 BC 0.55 WB 0.60	DEFL. in (loc) l/defl L/d Vert(LL) -0.03 8-9 >999 240 Vert(CT) -0.05 8-9 >999 180 Horz(CT) 0.01 6 n/a n/a	PLATES GRIP MT20 244/190
	Code IRC2018/TPI2014	Matrix-MS		Weight: 158 lb FT = 20%
BCDL 10.0				

LUMBER-TOP CHORD 2x4 SP No 2

2x6 SP No 2

BOT CHORD 2x4 SP No.3 BRACING-TOP CHORD

except end verticals.

BOT CHORD

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

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

REACTIONS. (size) 10=0-3-8, 6=0-5-8

Max Horz 10=-91(LC 35)

Max Uplift 10=-244(LC 12), 6=-695(LC 12) Max Grav 10=3570(LC 3), 6=5931(LC 17)

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

TOP CHORD 1-2=-3774/279, 2-3=-2950/251, 3-4=-2952/251, 4-5=-3718/280, 1-10=-2756/205,

5-6=-2580/197

BOT CHORD 9-10=-86/421, 8-9=-193/3213, 7-8=-196/3164, 6-7=-34/518

WEBS 2-9=-76/906, 2-8=-893/96, 3-8=-197/2754, 4-8=-915/97, 4-7=-66/826, 1-9=-178/2917,

5-7=-167/2749

NOTES-

WFBS

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.

Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.

Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 6) Unbalanced snow loads have been considered for this design.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=244, 6=695.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Use Simpson Strong-Tie LUS26 (4-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 0-11-9 from the left end to 8-6-7 to connect truss(es) to back face of bottom chord.
- 12) Use Simpson Strong-Tie HUS26 (14-16d Girder, 4-16d Truss) or equivalent at 10-6-7 from the left end to connect truss(es) to back

February 12,2025



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Job	Truss	Truss Type	Qty	Ply	FFF-LOT #54 Roof
					171355593
25-0518-A	T03G	Common Girder	1	2	Inh Deference (antique)
				_	Job Reference (optional)

Danville, Va - 24541,

8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:07:05 2025 Page 2 ID:kk2_eRZGXXvKblGikzSpyNzs9fO-pefEPtumqKjUU24eJoXYbHjauFsJzkWRopNZkXzmDCq

NOTES-

13) Use Simpson Strong-Tie HHUS26-2 (14-10d Girder, 6-10d Truss) or equivalent at 11-8-4 from the left end to connect truss(es) to back face of bottom chord.

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

LOAD CASE(S) Standard

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

Vert: 1-3=-51, 3-5=-51, 6-10=-20

Concentrated Loads (lb)

Vert: 6=-2782(B) 9=-837(B) 7=-837(B) 13=-839(B) 14=-837(B) 15=-837(B) 16=-1118(B)



818 Soundside Road Edenton, NC 27932

Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355594 T03GE COMMON SUPPORTED GAB 25-0518-A Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:07:06 2025 Page 1 ID:kk2_eRZGXXvKblGikzSpyNzs9fO-HrCccCvObesK6CfqtW3n8VFt2fKhiKUb1T76HzzmDCp 5-10-0 11-8-0 5-10-0 5-10-0 Scale = 1:27.8 4x4 = 5 7.00 12 3 18 17 3x5 / 3x5 < 1-0-15 1-0-15 16 13 12 11 10 15 3x4 =3x4 =11-8-0 11-8-0 LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defl I/d **PLATES** GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.08 Vert(LL) -0.00 n/r 120 MT20 244/190 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 вс 0.03 Vert(CT) -0.00 n/r 120 TCDL 10.0 WB Rep Stress Incr YES 0.05 Horz(CT) 0.00 10 n/a n/a **BCLL** 0.0

LUMBER-

OTHERS

BCDL

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

BRACING-

Matrix-S

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 11-8-0.

10.0

2x4 SP No 3

(lb) -Max Horz 16=-106(LC 14)

Max Uplift All uplift 100 lb or less at joint(s) 16, 10, 14, 15, 12, 11 Max Grav All reactions 250 lb or less at joint(s) 16, 10, 13, 14, 15, 12, 11

Code IRC2018/TPI2014

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-11-0 to 1-10-0, Exterior(2N) 1-10-0 to 5-10-0, Corner(3R) 5-10-0 to 8-10-0, Exterior(2N) 8-10-0 to 12-7-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 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 15.4 psf on overhangs non-concurrent with other live loads.
- 7) All plates are 2x4 MT20 unless otherwise indicated.
- 8) Gable requires continuous bottom chord bearing.
- 9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 10) Gable studs spaced at 2-0-0 oc.
- 11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 10, 14, 15, 12. 11.
- 14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Weight: 66 lb

FT = 20%

February 12,2025

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Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355595 T04 COMMON 2 25-0518-A Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:07:06 2025 Page 1 ID:kk2_eRZGXXvKblGikzSpyNzs9fO-HrCccCvObesK6CfqtW3n8VFn9fE5iJkb1T76HzzmDCp 12-1-0 0-11-0 Scale = 1:25.4 4x4 = 3 7.00 12 14 0-6-11 6 2x4 || 3x4 =3x4 =3x8 II 3x8 II 0_2-8 5-7-0 10-11-8 5-4-8 5-4-8 Plate Offsets (X,Y)--[2:0-0-0,0-0-13], [2:0-2-10,Edge], [4:0-0-0,0-0-13], [4:0-2-10,Edge] LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defl L/d **PLATES** GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.45 Vert(LL) -0.04 6-12 >999 240 MT20 244/190 Snow (Pf/Pg) 15.4/20.0 вс Lumber DOL 1.15 0.39 Vert(CT) -0.06 6-12 >999 180 TCDL 10.0 WB Rep Stress Incr YES 0.09 Horz(CT) 0.01 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-MS Weight: 46 lb FT = 20% BCDL 10.0

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEDGE

Left: 2x4 SP No.3, Right: 2x4 SP No.3

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

Max Horz 2=76(LC 15) Max Uplift 2=-56(LC 16), 4=-56(LC 16)

Max Grav 2=506(LC 21), 4=506(LC 22)

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

TOP CHORD 2-3=-539/129. 3-4=-539/129 **BOT CHORD** 2-6=-7/403, 4-6=-7/403

NOTES-

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 5-7-0, Exterior(2R) 5-7-0 to 8-7-0 Interior(1) 8-7-0 to 12-1-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 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 15.4 psf on overhangs non-concurrent with other live loads.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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

February 12,2025

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building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TP11 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355596 COMMON 2 25-0518-A T04A Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:07:07 2025 Page 1 ID:kk2_eRZGXXvKblGikzSpyNzs9fO-m1m_qYw0My_BkME0RDa0gioyz3bRRmZkF7sgpPzmDCo -0-11-0 0-11-0 4-11-0 Scale = 1:24.4 4x4 = 3 7.00 12 3x8 > 11₄ 6 4x4 = 5 2x4 || 3x4 =3x8 || 5-7-0 10-6-0 5-4-8 4-11-0 Plate Offsets (X,Y)--[2:0-0-0,0-0-13], [2:0-2-10,Edge] LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defl L/d **PLATES** GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.45 Vert(LL) -0.04 6-9 >999 240 MT20 244/190 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 BC 0.38 Vert(CT) -0.06 6-9 >999 180 TCDL 10.0 WB Rep Stress Incr YES 0.12 Horz(CT) 0.01 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-MS Weight: 49 lb FT = 20% BCDL 10.0

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WFBS 2x4 SP No.3 WEDGE

Left: 2x4 SP No.3

REACTIONS. (size) 5=Mechanical, 2=0-3-0

Max Horz 2=86(LC 15)

Max Uplift 5=-24(LC 16), 2=-55(LC 16) Max Grav 5=433(LC 22), 2=476(LC 21)

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

TOP CHORD 2-3=-480/120, 3-4=-472/121, 4-5=-393/121

BOT CHORD 2-6=-52/347 **WEBS** 4-6=0/291

NOTES-

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 5-7-0, Exterior(2R) 5-7-0 to 8-7-0 , Interior(1) 8-7-0 to 10-4-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 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 15.4 psf on overhangs non-concurrent with other live loads.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2.
- 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.



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

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

except end verticals.

February 12,2025

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Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355597 T04GE COMMON STRUCTURAL GA 25-0518-A Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:07:07 2025 Page 1 ID:kk2_eRZGXXvKblGikzSpyNzs9fO-m1m_qYw0My_BkME0RDa0gioyv3aKRm_kF7sgpPzmDCo Scale = 1:25.4 4x4 = 3 7.00 12 22 0-6-11 6 3x4 = 3x4 =3x8 II 3x8 II 0_2-8 5-7-0 10-11-8 5-4-8 5-4-8 Plate Offsets (X,Y)--[2:0-0-0,0-0-13], [2:0-2-10,Edge], [4:0-0-0,0-0-13], [4:0-2-10,Edge] LOADING (psf) SPACING-CSI. DEFL. in (loc) I/defl L/d **PLATES** GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.45 Vert(LL) -0.04 6-20 >999 240 MT20 244/190 Snow (Pf/Pg) 15.4/20.0 вс Lumber DOL 1.15 0.39 Vert(CT) -0.06 6-20 >999 180 TCDL 10.0 WB Rep Stress Incr YES 0.09 Horz(CT) 0.01 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-MS Weight: 55 lb FT = 20% BCDL 10.0

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

OTHERS 2x4 SP No.3

WEDGE

Left: 2x4 SP No.3, Right: 2x4 SP No.3

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

Max Horz 2=76(LC 15)

Max Uplift 2=-56(LC 16), 4=-56(LC 16) Max Grav 2=506(LC 21), 4=506(LC 22)

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

TOP CHORD 2-3=-539/129, 3-4=-539/129 BOT CHORD 2-6=-7/403, 4-6=-7/403

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 5-7-0, Exterior(2R) 5-7-0 to 8-7-0 , Interior(1) 8-7-0 to 12-1-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 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 15.4 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.



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

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

February 12,2025



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Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355598 T05 COMMON 3 25-0518-A Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:07:08 2025 Page 1 ID:kk2_eRZGXXvKblGikzSpyNzs9fO-EDKN1uxe7F62LVpC?x5FDwL3yTxnAD_uUncDLrzmDCn -0-11-0 0-11-0 12-0-0 0-11-0 Scale = 1:25.5 4x4 = 3 6.00 12 12 13 10 5x5 / 5x5 < 7 4x8 = 2x4 || 2x4 || 6-0-0 12-0-0 6-0-0 Plate Offsets (X,Y)--[2:0-2-0,0-1-12], [4:0-2-0,0-1-12] LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defl L/d **PLATES** GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.76 Vert(LL) -0.02 6-7 >999 240 MT20 244/190 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 BC 0.31 Vert(CT) -0.05 6-7 >999 180 TCDL 10.0 WB Rep Stress Incr YES 0.11 Horz(CT) 0.00 6 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-MS Weight: 64 lb FT = 20% BCDL 10.0

LUMBER-

TOP CHORD 2x4 SP No.2 2x4 SP No 2

BOT CHORD 2x4 SP No 3 WFBS

BRACING-

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

except end verticals.

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

REACTIONS. (size) 8=0-3-8, 6=0-3-8

Max Horz 8=-82(LC 14)

Max Uplift 8=-62(LC 16), 6=-62(LC 16) Max Grav 8=532(LC 2), 6=532(LC 2)

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

TOP CHORD 2-3=-538/177, 3-4=-538/177, 2-8=-479/229, 4-6=-479/229

BOT CHORD 7-8=-169/307, 6-7=-124/307 WFBS 2-7=0/262, 4-7=0/262

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 6-0-0, Exterior(2R) 6-0-0 to 9-0-0 , Interior(1) 9-0-0 to 12-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 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 15.4 psf on overhangs non-concurrent with other live loads. 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

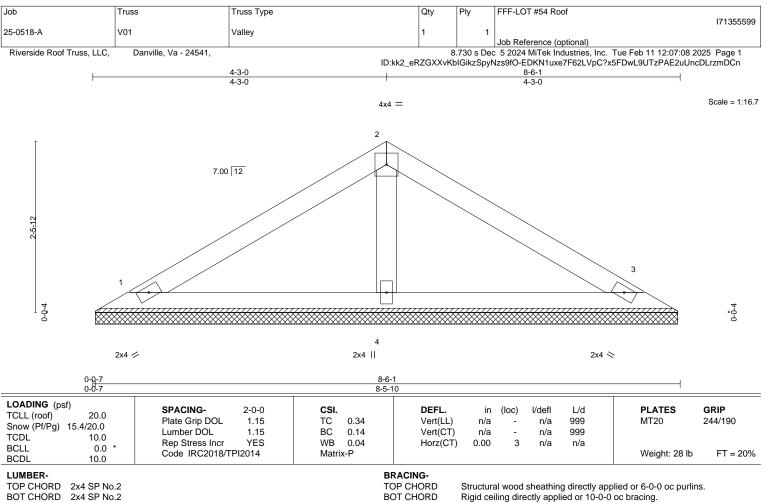


February 12,2025

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REACTIONS.

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

> (size) 1=8-5-3, 3=8-5-3, 4=8-5-3 Max Horz 1=-43(LC 14)

Max Uplift 1=-25(LC 16), 3=-25(LC 16)

Max Grav 1=186(LC 20), 3=186(LC 21), 4=283(LC 2)

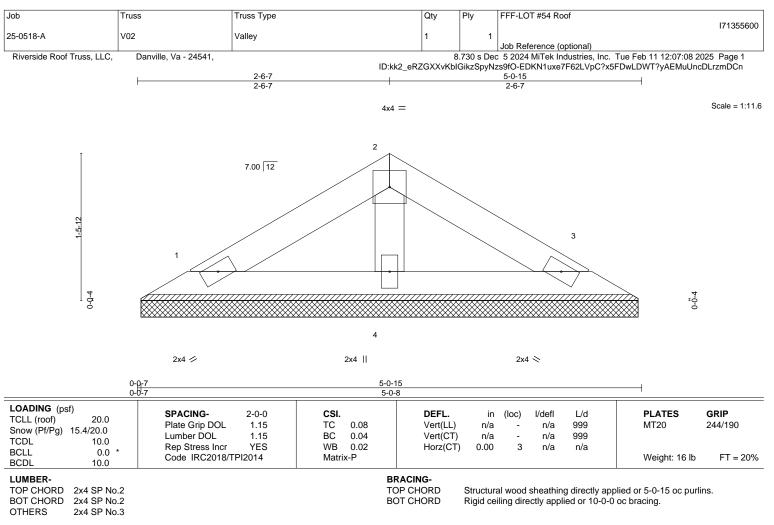
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- $2) \ \ Wind: ASCE \ 7-16; \ Vult=130mph \ (3-second \ gust) \ \ Vasd=103mph; \ TCDL=6.0psf; \ BCDL=6.0psf; \ h=25ft; \ B=45ft; \ L=24ft; \ eave=4ft; \ Cat.$ II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 4-3-0, Exterior(2R) 4-3-0 to 7-3-0, Interior(1) 7-3-0 to 7-11-9 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.







REACTIONS. (size) 1=5-0-1, 3=5-0-1, 4=5-0-1

Max Horz 1=-23(LC 14)

Max Uplift 1=-14(LC 16), 3=-14(LC 16)

Max Grav 1=92(LC 20), 3=92(LC 21), 4=152(LC 2)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- $2) \ \ Wind: ASCE \ 7-16; \ Vult=130mph \ (3-second \ gust) \ \ Vasd=103mph; \ TCDL=6.0psf; \ BCDL=6.0psf; \ h=25ft; \ B=45ft; \ L=24ft; \ eave=4ft; \ Cat.$ II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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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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)



Job Truss Truss Type Qty Ply FFF-LOT #54 Roof 171355601 V03 Valley 25-0518-A Job Reference (optional)

Riverside Roof Truss, LLC,

Danville, Va - 24541,

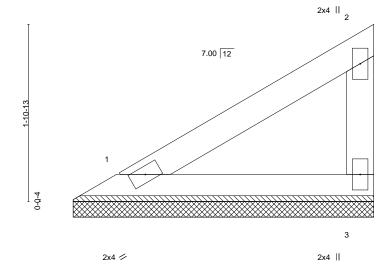
8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:07:09 2025 Page 1 ID:kk2_eRZGXXvKblGikzSpyNzs9fO-iPulFExGuZEvzfNPYecUl7tObsKgvhw1jRLmtlzmDCm

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

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

except end verticals

Scale = 1:12.4



LOADING (psf) **PLATES** SPACING-2-0-0 CSI. DEFL. in (loc) I/defl I/d GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.12 Vert(LL) n/a n/a 999 MT20 244/190 Snow (Pf/Pg) 11.6/15.0 Lumber DOL 1.15 вс 0.07 Vert(CT) n/a n/a 999 TCDL 10.0 WB 0.00 Rep Stress Incr YES Horz(CT) 0.00 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-P Weight: 11 lb FT = 20% BCDL 10.0

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

WFBS REACTIONS.

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

2x4 SP No.3

(size) 1=3-2-11, 3=3-2-11 Max Horz 1=52(LC 13)

Max Uplift 1=-4(LC 16), 3=-10(LC 13) Max Grav 1=106(LC 20), 3=106(LC 27)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) Gable requires continuous bottom chord bearing.
- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 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.



February 12,2025

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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Truss Type Qty Ply 171355602 25-0518-A V04 Valley Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Dec 5 2024 MiTek Industries, Inc. Tue Feb 11 12:07:09 2025 Page 1 ID:kk2_eRZGXXvKblGikzSpyNzs9fO-iPulFExGuZEvzfNPYecUl7tL3sKuvhl1jRLmtlzmDCm Scale = 1:15.1 4x4 = 6.00 12 8 0-0-4 2x4 / 2x4 || 2x4 > 8-3-0 LOADING (psf) GRIP SPACING-2-0-0 CSI. DEFL. in (loc) I/defl I/d **PLATES** TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.28 Vert(LL) n/a n/a 999 MT20 244/190 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 вс 0.12 Vert(CT) n/a n/a 999 TCDL 10.0 WB 0.04 Rep Stress Incr YES Horz(CT) 0.00 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-P Weight: 26 lb FT = 20% BCDL 10.0 LUMBER-BRACING-TOP CHORD TOP CHORD 2x4 SP No.2 Structural wood sheathing directly applied or 6-0-0 oc purlins. BOT CHORD 2x4 SP No.2 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. 2x4 SP No.3 **OTHERS**

FFF-LOT #54 Roof

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

Max Horz 1=29(LC 15)

Truss

Max Uplift 1=-21(LC 16), 3=-21(LC 16)

Max Grav 1=166(LC 20), 3=166(LC 21), 4=276(LC 2)

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

NOTES-

Job

- 1) Unbalanced roof live loads have been considered for this design.
- $2) \ \ Wind: ASCE \ 7-16; \ Vult=130mph \ (3-second \ gust) \ \ Vasd=103mph; \ TCDL=6.0psf; \ BCDL=6.0psf; \ h=25ft; \ B=45ft; \ L=24ft; \ eave=4ft; \ Cat.$ II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 4-1-8, Exterior(2R) 4-1-8 to 7-1-8, Interior(1) 7-1-8 to 7-7-7 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



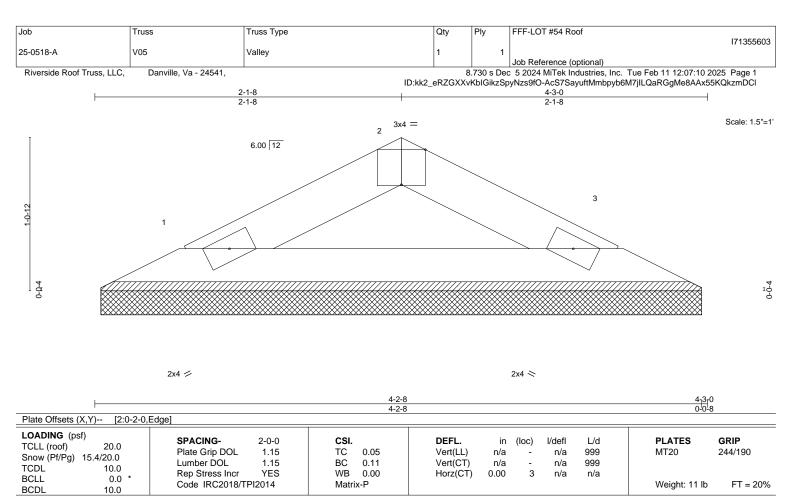
February 12,2025

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LUMBER-TOP CHORD

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

BRACING-

TOP CHORD **BOT CHORD** Structural wood sheathing directly applied or 4-3-0 oc purlins.

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

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

Max Horz 1=-12(LC 14)

Max Uplift 1=-7(LC 16), 3=-7(LC 16) Max Grav 1=120(LC 2), 3=120(LC 2)

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

NOTES-

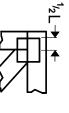
- 1) Unbalanced roof live loads have been considered for this design.
- $2) \ \ Wind: ASCE \ 7-16; \ Vult=130mph \ (3-second \ gust) \ \ Vasd=103mph; \ TCDL=6.0psf; \ BCDL=6.0psf; \ h=25ft; \ B=45ft; \ L=24ft; \ eave=4ft; \ Cat.$ II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



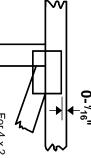


Symbols

PLATE LOCATION AND ORIENTATION



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



For 4 x 2 orientation, locate plates 0- $\frac{1}{16}$ from outside edge of truss.

₹

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

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

PLATE SIZE

4 × 4

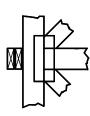
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



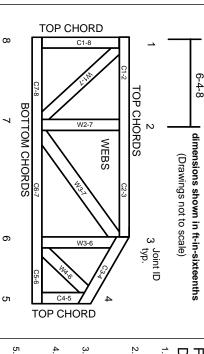
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur Min size shown is for crushing only.

Industry Standards: ANSI/TPI1: National Design Specification for Metal

DSB-22:

Plate Connected Wood Truss Construction.
Design Standard for Bracing.
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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MITOK



MiTek Engineering Reference Sheet: MII-7473 rev. 1/2/2023

▲ General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- 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.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- Cut members to bear tightly against each other.
- 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.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.

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- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- 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.
- Do not cut or alter truss member or plate without prior approval of an engineer.
- Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- The design does not take into account any dynamic or other loads other than those expressly stated.