

Trenco 818 Soundside Rd Edenton, NC 27932

Re: 25-0577-A

FFF-LOT #55 Roof

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

Pages or sheets covered by this seal: I72260434 thru I72260456

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

North Carolina COA: C-0844



March 26,2025

Gilbert, Eric

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

Job Truss Truss Type Qty Ply FFF-LOT #55 Roof 172260434 CJ01 DIAGONAL HIP GIRDER 25-0577-A Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Feb 19 2025 MiTek Industries, Inc. Tue Mar 25 08:02:40 2025 Page 1 ID:InVYNKydfynyZ5DaPQ61KbyAhdz-p6djyXTgoYZAzNJlboekuAwrSxz_vu3a_jdQXJzXSSD <u>5-10-1</u>1 5-10-11 Scale = 1:13.8 2x4 | NAILED 3.54 12 NAILED 12 11 0-4-1 13 6 NAILED NAILED 2x4 || ⁵ 0-9-15 5-10-11 0-9-15 5-0-12 LOADING (psf) SPACING-2-0-0 CSI. DEFL. in I/defl I/d **PLATES** GRIP (loc) TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.26 Vert(LL) -0.01 6-10 >999 240 MT20 244/190 Snow (Pf/Pg) 11.6/15.0 Lumber DOL 1.15 вс 0.10 Vert(CT) -0.01 6-10 >999 180 TCDL 10.0 WB 0.00 Rep Stress Incr NO Horz(CT) 0.00 6 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-MP Weight: 27 lb FT = 20% BCDL 10.0 **BRACING-**

LUMBER-TOP CHORD BOT CHORD

WFBS

2x4 SP No.2 2x6 SP No.2

2x4 SP No.3

TOP CHORD Structural wood sheathing directly applied or 5-10-11 oc purlins, except end verticals

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

REACTIONS. (size) 6=Mechanical, 2=0-4-4

Max Horz 2=64(LC 9) Max Uplift 2=-70(LC 12)

Max Grav 6=185(LC 17), 2=379(LC 2)

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); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2.
- 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: 1-3=-43, 3-4=-43, 2-5=-20 Concentrated Loads (lb)

Vert: 13=2(F=1, B=1)



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

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

building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/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 #55 Roof 172260435 25-0577-A J01 2 Jack-Open Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Feb 19 2025 MiTek Industries, Inc. Tue Mar 25 08:02:40 2025 Page 1 ID:InVYNKydfynyZ5DaPQ61KbyAhdz-p6djyXTgoYZAzNJlboekuAwuPx_evu3a_jdQXJzXŠSD -0-11-0 0-11-0 Scale = 1:9.0 5.00 12 1-2-15 0-10-9 2 0-4-1 2x4 = 3x6 II 2-2-3 0-7-8 1-6-11 Plate Offsets (X,Y)-- [2:0-1-14,0-0-10], [2:0-1-4,0-11-14] LOADING (psf) SPACING-CSI. DEFL. in (loc) I/defl L/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) 11.6/15.0

LUMBER-

TCDL

BCLL

BCDL

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

WEDGE

Left: 2x4 SP No.3

REACTIONS. (size) 3=Mechanical, 2=0-3-0, 4=Mechanical Max Horz 2=42(LC 16)

10.0

10.0

0.0

Max Uplift 3=-4(LC 13), 2=-51(LC 16), 4=-2(LC 20) Max Grav 3=12(LC 28), 2=217(LC 21), 4=15(LC 7)

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

Lumber DOL

Rep Stress Incr

Code IRC2018/TPI2014

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 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.

1.15

YES

вс

WB

Matrix-MP

0.06

0.00

Vert(CT)

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

-0.00

-0.00

5 >999

3

n/a

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

180

n/a

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

- 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) 3, 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.



Weight: 9 lb

FT = 20%



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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 #55 Roof 172260436 M01 MONOPITCH 5 25-0577-A Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Feb 19 2025 MiTek Industries, Inc. Tue Mar 25 08:02:40 2025 Page 1 ID:InVYNKydfynyZ5DaPQ61KbyAhdz-p6djyXTgoYZAzNJlboekuAwsoxygvu3a_jdQXJzXSSD -0-11-0 0-11-0 Scale = 1:14.9 2x4 || 5.00 12 2-1-9 10 2-5-1 0-4-1 0-3-8 3x6 || 2x4 ||

Plate Offsets (X,Y)-- [2:0-1-14,0-0-10], [2:0-1-4,0-11-14]

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 0.24 BC 0.19 WB 0.00	DEFL. i Vert(LL) 0.00 Vert(CT) -0.00 Horz(CT) 0.00	3 4-9	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 244/190
BCLL 0.0 * BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP					Weight: 21 lb	FT = 20%

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) 2=0-3-0, 4=0-1-8

Max Horz 2=77(LC 15)

Max Uplift 2=-47(LC 16), 4=-9(LC 13) Max Grav 2=292(LC 2), 4=168(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 4-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10

0-7-8

- 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) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 5-0-0 oc purlins,

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

except end verticals.

March 26,2025

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Job Truss Truss Type Qty Ply FFF-LOT #55 Roof 172260437 M01G MONOPITCH GIRDER 25-0577-A Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Feb 19 2025 MiTek Industries, Inc. Tue Mar 25 08:02:41 2025 Page 1 ID:InVYNKydfynyZ5DaPQ61KbyAhdz-IIB59tUJZsh0aWux9VAzRNT1OLHReLJjDNN_3IzXŠSC -0-11-0 0-11-0 5-0-0 5-0-0 Scale = 1:14.9 2x4 || 5.00 12 2-1-9 0-4-1 0-3-8 LUS26 2x4 ||

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 NO	CSI. TC 0.25 BC 0.22 WB 0.00	DEFL. in Vert(LL) -0.01 Vert(CT) -0.02 Horz(CT) 0.00	4-8 >	defl L/d 999 240 999 180 n/a n/a	PLATES MT20	GRIP 244/190
BCLL 0.0 * BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP	1.0.2(0.1)	·	1,74	Weight: 24 lb	FT = 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) 2=0-3-0, 4=0-1-8 Max Horz 2=73(LC 9)

Max Uplift 2=-52(LC 12), 4=-31(LC 9) Max Grav 2=342(LC 2), 4=465(LC 17)

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; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss, Single Ply Girder) or equivalent at 4-3-4 from the left end to connect truss(es) to back face of bottom chord.
- 12) Fill all nail holes where hanger is in contact with lumber.
- 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: 1-3=-43, 2-4=-20

Concentrated Loads (lb) Vert: 9=-350(B)



Structural wood sheathing directly applied or 5-0-0 oc purlins,

Rigid ceiling directly applied or 6-0-0 oc bracing.

except end verticals

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Job Truss Truss Type Qty Ply FFF-LOT #55 Roof 172260438 M01GE MONOPITCH STRUCTURAL 25-0577-A Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Feb 19 2025 MiTek Industries, Inc. Tue Mar 25 08:02:41 2025 Page 1 ID:InVYNKydfynyZ5DaPQ61KbyAhdz-IIB59tUJZsh0aWux9VAzRNT1XLIveLJjDNN_3IzXŠSC -0-11-0 0-11-0 Scale = 1:14.9 2x4 || 2x4 || 5.00 12 2-1-9 12 2-5-1 0-4-1 0-3-8 2x4 || 3x6 || 2x4 ||

0-7-8 Plate Offsets (X,Y)-- [2:0-1-14,0-0-10], [2:0-1-4,0-11-14]

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 11.6/15.0 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 0.24 BC 0.19 WB 0.00	DEFL. Vert(LL) Vert(CT) Horz(CT)	in 0.02 -0.03 0.00	(loc) 4-11 4-11 2	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 244/190
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP						Weight: 22 lb	FT = 20%

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

REACTIONS.

(size) 2=0-3-0, 4=0-1-8 Max Horz 2=77(LC 15)

Max Uplift 2=-47(LC 16), 4=-9(LC 13) Max Grav 2=292(LC 2), 4=168(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 4-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1. 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate
- DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 10) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 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 5-0-0 oc purlins,

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

except end verticals.

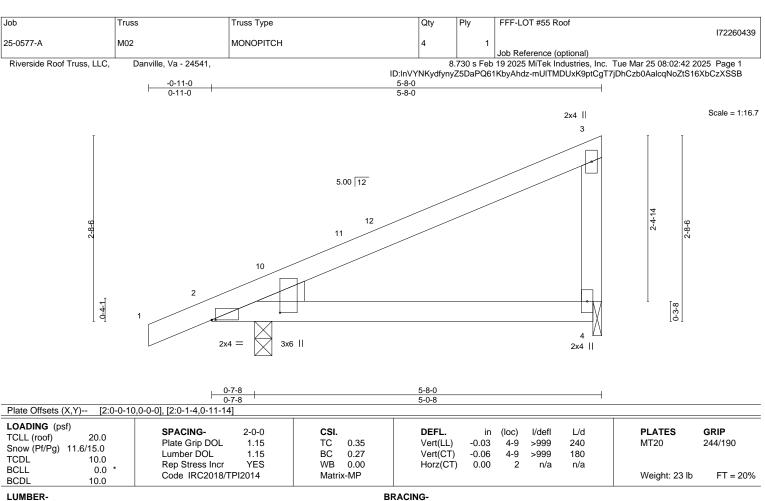
March 26,2025

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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) 2=0-3-0, 4=0-1-8 Max Horz 2=87(LC 15)

Max Uplift 2=-48(LC 16), 4=-10(LC 13)

Max Grav 2=316(LC 2), 4=199(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 5-6-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 5-8-0 oc purlins,

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

except end verticals.



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 #55 Roof 172260440 M03 MONOPITCH 25-0577-A Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Feb 19 2025 MiTek Industries, Inc. Tue Mar 25 08:02:42 2025 Page 1 ID:InVYNKydfynyZ5DaPQ61KbyAhdz-mUITMDUxK9ptCgT7jDhCzb0DxlfTNoZtS16XbCzXSSB 4-2-8 0-11-0 Scale = 1:13.2 2x4 || 5.00 12 11 10 0-4-1 4 3x6 || 2x4 || 0-7-8 4-2-8 3-7-0 0-7-8 Plate Offsets (X,Y)--[2:0-1-14,0-0-10], [2:0-1-4,0-11-14] 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 0.14 Vert(LL) -0.01 4-9 >999 240 MT20 244/190 11.6/15.0 Snow (Pf/Pg) Lumber DOL 1.15 BC 0.10 Vert(CT) -0.01 4-9 >999 180 TCDL 10.0 WB

0.00

Matrix-MP

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

0.00

except end verticals.

n/a

Structural wood sheathing directly applied or 4-2-8 oc purlins,

n/a

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

BCDL LUMBER-

BCLL

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=0-3-0

0.0

10.0

Max Horz 2=66(LC 15)

Max Uplift 4=-8(LC 13), 2=-48(LC 16)

Max Grav 4=127(LC 21), 2=268(LC 21)

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

Rep Stress Incr

Code IRC2018/TPI2014

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 4-0-12 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

YES

- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Weight: 18 lb

FT = 20%

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

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Job Truss Truss Type Qty Ply FFF-LOT #55 Roof 172260441 SM01G HALF HIP GIRDER 25-0577-A Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Feb 19 2025 MiTek Industries, Inc. Tue Mar 25 08:02:43 2025 Page 1 ID:InVYNKydfynyZ5DaPQ61KbyAhdz-EhlraZVZ5Txkqq2KGwCRWoYNg9?s6E?0hhs58ezXSSA -0-11-0 6-2-8 4-2-8 0-11-0 4-2-8 2-0-0 Scale = 1:15.1 4x8 = 3 5.00 12 0-4-1 5 62x4 II THJA26 4x4 = 3x4 =0-7-8 4-2-8 6-2-8 3-7-0 2-0-0 Plate Offsets (X,Y)--[3:0-5-0,0-2-0] 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 0.20 Vert(LL) -0.00 >999 240 MT20 244/190 16.5/15.0 Snow (Pf/Pg) Lumber DOL 1.15 BC 0.09 Vert(CT) -0.01 6 >999 180 TCDL 10.0 WB Rep Stress Incr NO 0.12 Horz(CT) 0.00 5 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-MP Weight: 33 lb FT = 20% BCDL 10.0 BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

WFBS 2x4 SP No 3

(size) 5=Mechanical, 2=0-3-0 Max Horz 2=67(LC 9)

Max Uplift 5=-15(LC 9), 2=-45(LC 12) Max Grav 5=366(LC 31), 2=473(LC 32)

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

TOP CHORD 2-3=-351/0

BOT CHORD 2-6=-16/273, 5-6=-12/297 WFBS 3-6=0/283, 3-5=-404/0

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=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) 5, 2.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) Use Simpson Strong-Tie THJA26 (THJA26 on 1 ply, Left Hand Hip) or equivalent at 4-2-14 from the left end to connect truss(es) to front face of bottom chord.
- 14) Fill all nail holes where hanger is in contact with lumber.
- 15) 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

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REPERENCE PAGE MILITATORY. INCLUDED MITEKER PAGE M

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)



 $m_{111111111}$ March 26,2025

Edenton, NC 27932

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.

Job	Truss	Truss Type	Qty	Ply	FFF-LOT #55 Roof
					172260441
25-0577-A	SM01G	HALF HIP GIRDER	1	1	
					Job Reference (optional)

Riverside Roof Truss, LLC,

Danville, Va - 24541,

8.730 s Feb 19 2025 MiTek Industries, Inc. Tue Mar 25 08:02:43 2025 Page 2 ID:InVYNKydfynyZ5DaPQ61KbyAhdz-EhlraZVZ5Txkqq2KGwCRWoYNg9?s6E?0hhs58ezXSSA

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=-53, 2-5=-20 Concentrated Loads (lb) Vert: 6=-263(F)



818 Soundside Road Edenton, NC 27932

Job Truss Truss Type Qty Ply FFF-LOT #55 Roof 172260442 T02G 25-0577-A Common Girder 2 Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Feb 19 2025 MiTek Industries, Inc. Tue Mar 25 08:02:43 2025 Page 1 ID:InVYNKydfynyZ5DaPQ61KbyAhdz-EhlraZVZ5Txkqq2KGwCRWoYHB9wq66Y0hhs58ezXSSA 3-0-0 3-0-0 6-0-0 3-0-0 3-0-0 Scale = 1:22.0 4x5 || 3 5.00 12 5x5 = 4 5x5 ≥ 11 7x14 MT20HS = 7x14 MT20HS = 9-0-1 12 8 13 HUS26 HUS26 HUS26 6x6 = 6x6 = HUS26 HUS26 4-0-0 8-0-0 12-0-0 4-0-0 4-0-0 4-0-0 Plate Offsets (X,Y)--[1:Edge,0-2-8], [5:Edge,0-2-8], [7:0-2-4,0-4-8], [8:0-2-4,0-4-8] LOADING (psf) SPACING-DEFL. in (loc) I/defl L/d **PLATES GRIP** TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.62 Vert(LL) -0.06 7-8 >999 240 MT20 244/190 Snow (Pf/Pg) 11.6/15.0 Lumber DOL 1.15 BC 0.41 Vert(CT) -0.11 7-8 >999 180 MT20HS 187/143 TCDL 10.0 Rep Stress Incr NO 0.02 6 n/a n/a **BCLL** 0.0

LUMBER-

BCDL

TOP CHORD 2x4 SP No.2 **BOT CHORD** 2x6 SP 2400F 2 0F

2x4 SP No.3 *Except* WFBS 1-9,5-6: 2x4 SP No.2

REACTIONS.

10.0

(size) 9=0-3-8, 6=0-3-8 Max Horz 9=53(LC 11)

Max Uplift 9=-283(LC 12), 6=-286(LC 12) Max Grav 9=4424(LC 3), 6=4477(LC 3)

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

TOP CHORD 1-2=-1155/100, 2-3=-6583/455, 3-4=-6580/455, 4-5=-1164/100, 1-9=-589/60,

5-6=-592/61

BOT CHORD 8-9=-342/5536, 7-8=-253/4534, 6-7=-342/5534

WEBS 3-7=-173/2862, 4-7=-97/1107, 3-8=-173/2867, 2-8=-97/1109, 2-9=-5430/346,

4-6=-5419/345

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 0-6-0 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; 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
- 5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 6) Unbalanced snow loads have been considered for this design.
- 7) 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) except (jt=lb) 9=283, 6=286.
- 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) Use Simpson Strong-Tie HUS26 (14-16d Girder, 4-16d Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left

March 26,2025

Weight: 146 lb

CAROL

FT = 20%

Edenton, NC 27932

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WB 0.59 Code IRC2018/TPI2014 Matrix-MS

Horz(CT)

BRACING-TOP CHORD

Structural wood sheathing directly applied or 4-7-7 oc purlins, except end verticals.

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

BOT CHORD

FFF-LOT #55 Roof Job Truss Truss Type Qty Ply 172260442 25-0577-A T02G Common Girder 2 Job Reference (optional)

Riverside Roof Truss, LLC,

Danville, Va - 24541,

8.730 s Feb 19 2025 MiTek Industries, Inc. Tue Mar 25 08:02:43 2025 Page 2 ID:InVYNKydfynyZ5DaPQ61KbyAhdz-EhlraZVZ5Txkqq2KGwCRWoYHB9wq66Y0hhs58ezXSSA

NOTES-

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 Uniform Loads (plf)

Vert: 1-3=-43, 3-5=-43, 6-9=-20

Concentrated Loads (lb)

Vert: 7=-1160(B) 8=-1160(B) 12=-1160(B) 13=-1160(B) 14=-1160(B)



818 Soundside Road Edenton, NC 27932

Job Truss Truss Type Qty Ply FFF-LOT #55 Roof 172260443 T02GE COMMON SUPPORTED GAB 25-0577-A Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Feb 19 2025 MiTek Industries, Inc. Tue Mar 25 08:02:44 2025 Page 1 ID:InVYNKydfynyZ5DaPQ61KbyAhdz-itsEnvWBsn3bS_dWqejg305aNYL4riXAvLbeg4zXSS9 12-11-0 6-0-0 12-0-0 6-0-0 6-0-0 0-11-0 Scale = 1:22.7 4x4 = 5 5.00 12 6 3x4 = 3x4 > 3x4 = 1516 14 13 12 11 10 3x4 = 12-0-0 12-0-0 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) 11.6/15.0 Lumber DOL 1.15 вс 0.03 Vert(CT) -0.00 n/r 120 TCDL 10.0 WB Rep Stress Incr YES 0.03 Horz(CT) 0.00 10 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-S Weight: 61 lb FT = 20% BCDL 10.0 LUMBER-**BRACING-**TOP CHORD 2x4 SP No.2 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, **BOT CHORD** 2x4 SP No.2 except end verticals

BOT CHORD

Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. All bearings 12-0-0.

2x4 SP No.3

2x4 SP No.3

(lb) -Max Horz 16=-61(LC 14)

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

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

NOTES-

WFBS

OTHERS

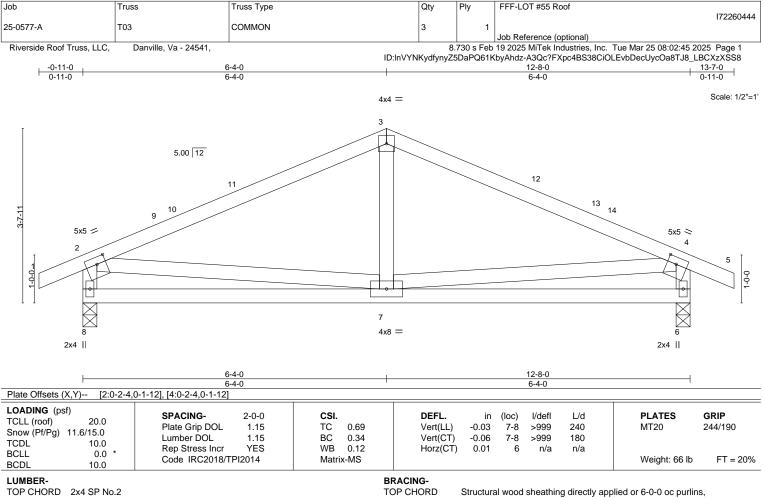
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-11-0 to 2-0-0, Exterior(2N) 2-0-0 to 6-0-0,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



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BOT CHORD

except end verticals.

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

TOP CHORD

2x4 SP No.2 2x4 SP No 2

BOT CHORD 2x4 SP No.3 WFBS

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

Max Horz 8=63(LC 15)

Max Uplift 8=-63(LC 16), 6=-63(LC 16) Max Grav 8=559(LC 2), 6=559(LC 2)

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

TOP CHORD 2-3=-621/186, 3-4=-621/187, 2-8=-503/229, 4-6=-503/229

BOT CHORD 7-8=-168/292, 6-7=-125/292 WFBS 2-7=0/286, 4-7=0/286

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 6-4-0, Exterior(2R) 6-4-0 to 9-4-0 , Interior(1) 9-4-0 to 13-7-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 26,2025

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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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 #55 Roof 172260445 T03G 25-0577-A Common Girder 2 Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Feb 19 2025 MiTek Industries, Inc. Tue Mar 25 08:02:45 2025 Page 1 ID:InVYNKydfynyZ5DaPQ61KbyAhdz-A3Qc?FXpc4BS38CiOLEvbDeaXyaPa?FJ8_LBCXzXSS8 6-4-0 12-8-0 3-0-4 Scale = 1:23.6 4x5 || 3 5.00 12 5x5 = 45x5 ≥ 2 11 6x12 MT20HS || 6x12 MT20HS || 1-0-0 12 13 8 14 15 16 17 HUS26 HUS26 7x8 HUS26 7x8 HUS26 HUS26 HUS26 4-3-13 8-4-3 12-8-0 4-3-13 4-0-5 4-3-13 Plate Offsets (X,Y)--[1:0-5-8,Edge], [5:0-5-8,Edge], [7:0-4-0,0-4-12], [8:0-4-0,0-4-12] LOADING (psf) SPACING-CSI. DEFL. in (loc) I/defl L/d **PLATES GRIP** TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.82 Vert(LL) -0.06 7-8 >999 240 MT20 244/190 Snow (Pf/Pg) 11.6/15.0 Lumber DOL 1.15 BC 0.47 Vert(CT) -0.12 7-8 >999 180 MT20HS 187/143 TCDL 10.0 WB Rep Stress Incr NO 0.64 Horz(CT) 0.03 6 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-MS Weight: 155 lb FT = 20% BCDL 10.0 BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP No.2 2x6 SP 2400F 2 0F

BOT CHORD 2x4 SP No.3 *Except* WFBS

1-9,5-6: 2x4 SP No.2 REACTIONS.

(size) 9=0-3-8, 6=0-3-8 Max Horz 9=55(LC 36)

Max Uplift 9=-365(LC 12), 6=-307(LC 12) Max Grav 9=5760(LC 3), 6=4809(LC 3)

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

TOP CHORD 1-2=-1456/121, 2-3=-7130/492, 3-4=-7086/490, 4-5=-1359/116, 1-9=-706/71,

5-6=-668/69

BOT CHORD 8-9=-376/6096, 7-8=-277/4951, 6-7=-374/6051

WEBS 3-7=-186/3033, 4-7=-100/1061, 3-8=-190/3111, 2-8=-100/1052, 2-9=-5704/362,

4-6=-5757/365

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 0-5-0 oc.

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

2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.

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

- 4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; 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
- 5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 6) Unbalanced snow loads have been considered for this design.
- 7) 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) except (jt=lb) 9=365, 6=307.
- 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) Use Simpson Strong-Tie HUS26 (14-16d Girder, 4-16d Truss) or equivalent spaced at 2-0-0 oc max. starting at 0-8-12 from the left

March 26.2025



Edenton, NC 27932

Structural wood sheathing directly applied or 4-4-13 oc purlins,

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

except end verticals.

FFF-LOT #55 Roof Job Truss Truss Type Qty Ply 172260445 25-0577-A T03G Common Girder 2 Job Reference (optional)

Riverside Roof Truss, LLC,

Danville, Va - 24541,

8.730 s Feb 19 2025 MiTek Industries, Inc. Tue Mar 25 08:02:45 2025 Page 2 ID:InVYNKydfynyZ5DaPQ61KbyAhdz-A3Qc?FXpc4BS38CiOLEvbDeaXyaPa?FJ8_LBCXzXSS8

NOTES-

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

Uniform Loads (plf)

Vert: 1-3=-43, 3-5=-43, 6-9=-20

Concentrated Loads (lb)

Vert: 12=-1164(B) 13=-1160(B) 14=-1160(B) 15=-1160(B) 16=-1160(B) 17=-1160(B)



Job Truss Truss Type Qty Ply FFF-LOT #55 Roof 172260446 T03GE COMMON SUPPORTED GAB 25-0577-A Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Feb 19 2025 MiTek Industries, Inc. Tue Mar 25 08:02:46 2025 Page 1 ID:InVYNKydfynyZ5DaPQ61KbyAhdz-eG__CaXRNOJJhlmuy2l88RAwtM1QJc3SNe4lkzzXSS7 12-8-0 6-4-0 6-4-0 Scale = 1:23.6 4x4 = 5 5.00 12 6 3 18 17 3x4 = 3x4 > 1-0-0-3x4 = 1516 14 13 12 11 10 3x4 = 12-8-0 12-8-0 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) 11.6/15.0 Lumber DOL 1.15 вс 0.04 Vert(CT) -0.00 n/r 120 TCDL 10.0 WB Rep Stress Incr YES 0.03 Horz(CT) 0.00 10 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-S Weight: 65 lb FT = 20% BCDL 10.0 LUMBER-**BRACING-**

TOP CHORD

OTHERS

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

TOP CHORD

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

except end verticals

BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. All bearings 12-8-0.

2x4 SP No.3

(lb) -Max Horz 16=63(LC 15)

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

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

NOTES-

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



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 #55 Roof 172260447 T04 COMMON 11 25-0577-A Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Feb 19 2025 MiTek Industries, Inc. Tue Mar 25 08:02:47 2025 Page 1

ID:InVYNKydfynyZ5DaPQ61KbyAhdz-6SYMQwY38iRAJRL5VmGNgejwmmAd2u6cblqIHPzXSS6 19-0-0 31-5-11 37-8-8 6-6-5 6-2-13 6-2-13 6-2-13 6-2-13 6-2-13

Scale = 1:64.9

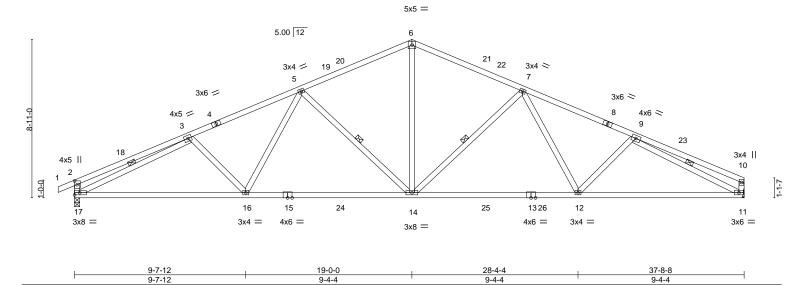


Plate Offsets (X,Y) [2:0-2-8,	0-1-12]			
LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 11.6/15.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.77 BC 0.87 WB 0.75 Matrix-MS	DEFL. in (loc) l/defl L/d Vert(LL) -0.28 12-14 >999 240 Vert(CT) -0.50 12-14 >900 180 Horz(CT) 0.13 11 n/a n/a	PLATES GRIP MT20 244/190 Weight: 210 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

TOP CHORD 2x4 SP No 2 2x4 SP No.1

BOT CHORD WFBS 2x4 SP No.3

REACTIONS. (size) 17=0-3-8, 11=Mechanical

Max Horz 17=159(LC 15)

Max Uplift 17=-124(LC 16), 11=-90(LC 16) Max Grav 17=1711(LC 28), 11=1656(LC 29)

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

TOP CHORD 2-3=-605/101, 3-5=-2802/253, 5-6=-2074/267, 6-7=-2074/269, 7-9=-2755/257,

9-10=-402/63, 2-17=-449/143, 10-11=-292/74

BOT CHORD 16-17=-216/2656, 14-16=-157/2385, 12-14=-142/2308, 11-12=-208/2488 **WEBS** 5-16=0/477, 5-14=-714/135, 6-14=-65/1258, 7-14=-680/133, 7-12=0/435,

3-17=-2376/180, 9-11=-2508/220

NOTES-

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=38ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-10-4, Interior(1) 2-10-4 to 19-0-0, Exterior(2R) 19-0-0 to 22-9-4, Interior(1) 22-9-4 to 37-6-12 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=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11 except (jt=lb) 17=124
- 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 3-1-15 oc purlins,

5-14, 7-14, 3-17, 9-11

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

except end verticals.

1 Row at midpt

March 26,2025

Edenton, NC 27932

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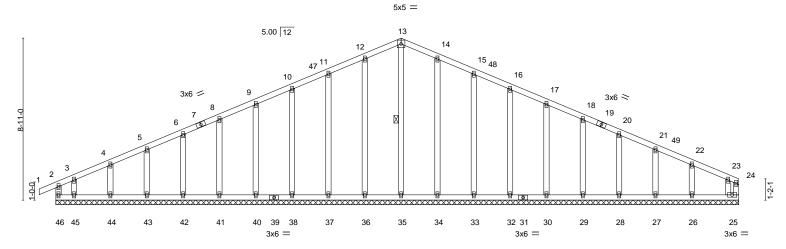
building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, 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 #55 Roof 172260448 T04GE COMMON SUPPORTED GAB 2 25-0577-A Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Feb 19 2025 MiTek Industries, Inc. Tue Mar 25 08:02:48 2025 Page 1

ID:InVYNKydfynyZ5DaPQ61KbyAhdz-ae6kdGZiv?Z1wbwH3TocDsGGeAjUnURlqyZrprzXSS5 19-0-0 37-7-0 19-0-0 18-7-0

Scale: 3/16"=1



37-7-0

LUMBER-BRACING-

TOP CHORD 2x4 SP No.2 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, BOT CHORD 2x4 SP No.2 except end verticals.

2x4 SP No.3 BOT CHORD WFBS Rigid ceiling directly applied or 10-0-0 oc bracing.

OTHERS 2x4 SP No.3 WFBS 1 Row at midpt 13-35

REACTIONS. All bearings 37-7-0.

Max Horz 46=160(LC 15)

Max Uplift All uplift 100 lb or less at joint(s) 46, 36, 37, 38, 40, 41, 42, 43, 44, 45, 34, 33, 32, 30, 29, 28, 27, 26

All reactions 250 lb or less at joint(s) 46, 25, 35, 36, 37, 38, 40, 41, 42, 43, 44, 45, 34, 33, 32, Max Grav 30, 29, 28, 27, 26

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 11-12=-109/267, 12-13=-121/300, 13-14=-121/300, 14-15=-109/267

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=38ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-11-0 to 3-0-0, Exterior(2N) 3-0-0 to 19-0-0, Corner(3R) 19-0-0 to 23-0-0, Exterior(2N) 23-0-0 to 37-5-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 7) All plates are 2x4 MT20 unless otherwise indicated.
- 8) Gable requires continuous bottom chord bearing.
- 9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 10) Gable studs spaced at 2-0-0 oc.
- 11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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) 46, 36, 37, 38, 40, 41, 42, 43, 44, 45, 34, 33, 32, 30, 29, 28, 27, 26.
- 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.



March 26,2025

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24-0-0

5-0-0

19-0-0

5-0-0

Scale = 1:65.5 5x5 =

7-0-0

38-0-0

7-0-0

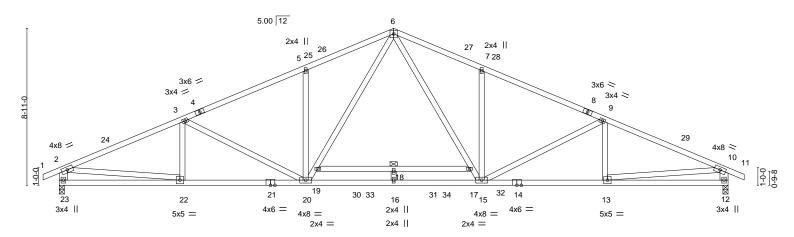
31-0-0

except end verticals

6-0-0 oc bracing: 17-19

Structural wood sheathing directly applied or 2-7-0 oc purlins,

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



	7-0-0	7-0-0	-	5-0-0	_	5-0-0			0-0		7-0-0	⊣
LOADIN TCLL (ro Snow (P TCDL BCLL BCDL		SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TF	2-0-0 1.15 1.15 YES PI2014	CSI. TC BC WB Matri	0.67 0.90 0.62 x-MS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.52 -0.92 0.10	(loc) 18 18 12	I/defI >858 >490 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 236 lb	GRIP 244/190 FT = 20%

24-0-0

BRACING-

TOP CHORD

BOT CHORD

10-0-0

LUMBER-

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

14-21: 2x4 SP DSS WFBS 2x4 SP No.3 *Except*

2-23,10-12: 2x6 SP No.2, 2-22,10-13: 2x4 SP No.2

REACTIONS. (size) 23=0-3-8, 12=0-3-8

7-0-0

Max Horz 23=159(LC 15)

Max Uplift 23=-73(LC 16), 12=-73(LC 16) Max Grav 23=1897(LC 28), 12=1897(LC 29)

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

TOP CHORD 2-3=-3253/131, 3-5=-2987/128, 5-6=-2978/208, 6-7=-2978/208, 7-9=-2987/128,

14-0-0

7-0-0

1/1-0-0

9-10=-3253/131, 2-23=-1768/168, 10-12=-1767/168 **BOT CHORD** 22-23=-75/557, 20-22=-63/3036, 16-20=0/2112, 15-16=0/2112, 13-15=-52/2945,

12-13=-41/443

WEBS $6\text{-}17\text{=-}47/1238,\ 15\text{-}17\text{=-}94/1133,\ 7\text{-}15\text{=-}392/163,\ 9\text{-}15\text{=-}372/103,\ 19\text{-}20\text{=-}94/1133,}$ 6-19=-47/1238, 5-20=-392/163, 3-20=-372/103, 2-22=-8/2524, 10-13=-10/2524

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=38ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-10-10, Interior(1) 2-10-10 to 19-0-0, Exterior(2R) 19-0-0 to 22-9-10, Interior(1) 22-9-10 to 38-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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) 23, 12.
- 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.



March 26,2025

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

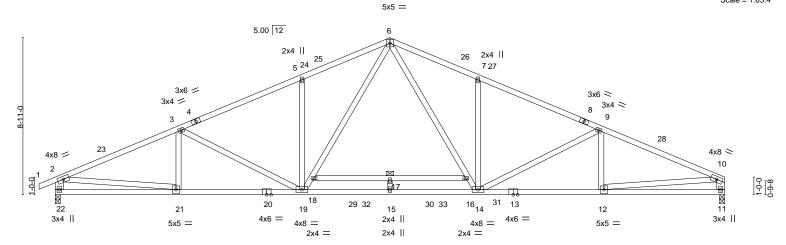
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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





ID:InVYNKydfynyZ5DaPQ61KbyAhdz-3rg7qcaKgJhuYIVTdBJrm3oG6ZrYWpHv3cJPLlzXSS4 14-0-0 19-0-0 24-0-0 31-0-0 38-0-0 7-0-0 5-0-0 5-0-0 7-0-0

Scale = 1:65.4



7-0-0	14-0-0	19-0-0	24-0-0	+ 31-0-0	38-0-0
7-0-0	7-0-0	5-0-0	5-0-0	7-0-0	7-0-0
LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 11.6/15.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	Lumber DOL 1	15 TC 0.78 15 BC 0.91 15 WB 0.64	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) I/defl L/d -0.53 17 >858 240 -0.92 17 >489 180 0.10 11 n/a n/a	PLATES GRIP MT20 244/190 Weight: 235 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 *Except* 13-20: 2x4 SP DSS

WFBS 2x4 SP No.3 *Except*

2-22,10-11: 2x6 SP No.2, 2-21,10-12: 2x4 SP No.2

REACTIONS. (size) 22=0-3-8, 11=0-3-8

Max Horz 22=159(LC 15)

Max Uplift 22=-74(LC 16), 11=-37(LC 16) Max Grav 22=1898(LC 28), 11=1838(LC 29)

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

TOP CHORD 2-3=-3254/131, 3-5=-2989/129, 5-6=-2980/211, 6-7=-2979/208, 7-9=-2991/133,

9-10=-3261/141, 2-22=-1768/168, 10-11=-1708/120

BOT CHORD 21-22=-100/552, 19-21=-91/3032, 15-19=0/2109, 14-15=0/2109, 12-14=-90/2958, 11-12=-43/344

WEBS $6-16=-46/1238,\ 14-16=-93/1132,\ 7-14=-384/160,\ 9-14=-388/110,\ 18-19=-94/1133,$ 6-18=-46/1238, 5-19=-392/162, 3-19=-372/103, 2-21=-9/2525, 10-12=-48/2632

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=38ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-10-10, Interior(1) 2-10-10 to 19-0-0, Exterior(2R) 19-0-0 to 22-9-10, Interior(1) 22-9-10 to 37-9-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 22, 11.
- 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. Except:

March 26.2025



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Job Truss Truss Type Qty Ply FFF-LOT #55 Roof 172260451 T06 5 25-0577-A Common Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Feb 19 2025 MiTek Industries, Inc. Tue Mar 25 08:02:50 2025 Page 1 ID:InVYNKydfynyZ5DaPQ61KbyAhdz-X1EV2yayRdpIAv4gBuq4IHLYVzIVFNa2IG2yukzXSS3 10-0-8 15-0-12 20-1-0 21-0-0 5-0-4 5-0-4 Scale = 1:35.1 4x4 = 6.00 12 19 21 2x4 \\ 2x4 // 18 22 • 10 9 8 3x4 = 3x4 =3x4 =3x4 = 3x4 =

	6-8-5	6-8-5			6-8-5
CADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 11.6/15.0 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 YES Code IRC2018/TPI2014	CSI. TC 0.35 BC 0.48 WB 0.19 Matrix-MS	DEFL. in Vert(LL) -0.04 Vert(CT) -0.11 Horz(CT) 0.03	(loc) I/defl L/d 8-10 >999 240 8-10 >999 180 6 n/a n/a	PLATES GRIP MT20 244/190 Weight: 93 lb FT = 209

13_/_11

LUMBER-

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

BRACING-

TOP CHORD BOT CHORD Structural wood sheathing directly applied or 4-9-13 oc purlins.

20-1-0

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

REACTIONS. (size) 2=0-3-8, 6=0-3-8

Max Horz 2=-91(LC 14)

Max Uplift 2=-78(LC 16), 6=-78(LC 16) Max Grav 2=858(LC 2), 6=858(LC 2)

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

TOP CHORD 2-3=-1389/244, 3-4=-1228/251, 4-5=-1228/251, 5-6=-1389/244 **BOT CHORD** 2-10=-143/1195 8-10=-30/788 6-8=-150/1195

6-8-5

WEBS 4-8=-58/460, 5-8=-299/156, 4-10=-58/460, 3-10=-299/156

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 10-0-8, Exterior(2R) 10-0-8 to 13-0-8, Interior(1) 13-0-8 to 21-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 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.



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-LC	OT #55 R	oof		172260452
25-0577-A	T06GE	Common Suppo	orted Gable	1	1					172200452
							erence (c			
Riverside Roof Truss, LLC,	Danville, Va -	24541,			8.730 s Feb	19 2025	MiTek In	dustries, Inc.	Tue Mar 25 08:02:51 202	25 Page 1
0-11-0.		10-0-8		ID:INVYNKyaty	nyZ5DaPQ6	1KbyAn	20-1-0	baCwxcn3fsk	ccLJrUuovNkf_syBWwoW	
-0-11-0 		10-0-8					10-0-8			21-0-0 0-11-0
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			5x5 =							
			20-1-	0						
			20-1-							
Plate Offsets (X,Y) [19	:0-2-8,0-3-0]								1	
LOADING (psf)	SPAC	ING- 2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0		Grip DOL 1.15	TC 0.06	Vert(LL		12	n/r	120	MT20	244/190
Snow (Pf/Pg) 11.6/15.0		er DOL 1.15	BC 0.03	Vert(C		13	n/r	120	20	,
TCDL 10.0	Pen S	tress Incr YES	WB 0.05	Horz(C		12	n/a	n/a		
BCLL 0.0 BCDL 10.0	Code	IRC2018/TPI2014	Matrix-S	,					Weight: 102 lb	FT = 20%
LUMBER-	I		DI	LACING-					1	
LUMBER-			DI DI	ACING-						

TOP CHORD 2x4 SP No 2

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

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

REACTIONS. All bearings 20-1-0.

(lb) - Max Horz 2=91(LC 15)

Max Uplift All uplift 100 lb or less at joint(s) 2, 19, 20, 21, 22, 17, 16, 15, 14, 12 Max Grav All reactions 250 lb or less at joint(s) 2, 18, 19, 20, 21, 22, 17, 16, 15, 14, 12

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

OTHERS

- 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=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-11-0 to 2-0-8, Exterior(2N) 2-0-8 to 10-0-8, Corner(3R) 10-0-8 to 13-0-8, Exterior(2N) 13-0-8 to 21-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 7) All plates are 2x4 MT20 unless otherwise indicated.
- 8) Gable requires continuous bottom chord bearing.
- 9) Gable studs spaced at 2-0-0 oc.
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 19, 20, 21, 22, 17, 16, 15, 14, 12.
- 13) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
- 14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 26,2025

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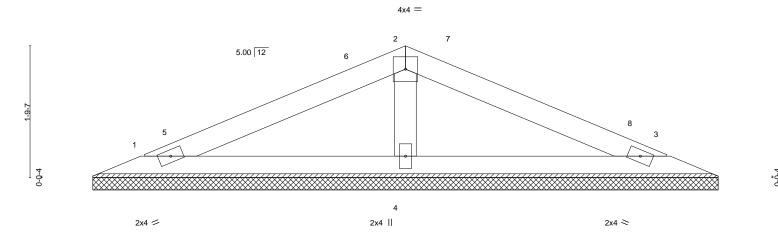
Job Truss Truss Type Qty Ply FFF-LOT #55 Roof 172260453 V01 Valley 25-0577-A Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Feb 19 2025 MiTek Industries, Inc. Tue Mar 25 08:02:51 2025 Page 1 ID:InVYNKydfynyZ5DaPQ61KbyAhdz-?DntFlbaCwxcn3fskcLJrUul2NjC_s7BWwoWQAzXSS2

8-7-0 4-3-8

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

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

Scale = 1:15.6



0-0-10		8-6-6							
CADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 11.6/15.0 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 0.24 BC 0.13 WB 0.04	DEFL. Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 3	I/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	GRIP 244/190
BCLL 0.0 * BCDL 10.0	Code IRC2018/TPI2014	Matrix-P						Weight: 26 lb	FT = 20%

BRACING-TOP CHORD

BOT CHORD

8-7-0

LUMBER-

REACTIONS.

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

0-Q₁10

(size) 1=8-5-13, 3=8-5-13, 4=8-5-13

Max Horz 1=-19(LC 14)

Max Uplift 1=-20(LC 16), 3=-20(LC 16)

Max Grav 1=141(LC 20), 3=141(LC 21), 4=287(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) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 4-3-8, Exterior(2R) 4-3-8 to 7-3-8, Interior(1) 7-3-8 to 7-9-15 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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Job Truss Truss Type Qty Ply FFF-LOT #55 Roof 172260454 V02 Valley 25-0577-A Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Feb 19 2025 MiTek Industries, Inc. Tue Mar 25 08:02:52 2025 Page 1 ID:InVYNKydfynyZ5DaPQ61KbyAhdz-TQLFTecCzE3TPDE2IJsYNiQzgn3ajJ2LlaX3ydzXSS1 4-7-0 Scale = 1:8.5 3x4 = 2 5.00 12 3 0-0-4 2x4 = 2x4 < 4-7-0 4-6-6 Plate Offsets (X,Y)--[2:0-2-0,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 0.06 Vert(LL) n/a n/a 999 MT20 244/190 Snow (Pf/Pg) 11.6/15.0 Lumber DOL 1.15 вс 0.12 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: 12 lb FT = 20%

LUMBER-

BCDL

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

BRACING-

TOP CHORD **BOT CHORD** Structural wood sheathing directly applied or 4-7-0 oc purlins.

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

REACTIONS. (size) 1=4-5-13, 3=4-5-13

10.0

Max Horz 1=-8(LC 14)

Max Uplift 1=-7(LC 16), 3=-7(LC 16) Max Grav 1=123(LC 2), 3=123(LC 2)

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

NOTES-

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



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 #55 Roof 172260455 25-0577-A V03 Valley Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Feb 19 2025 MiTek Industries, Inc. Tue Mar 25 08:02:52 2025 Page 1

4x4 =

ID:InVYNKydfynyZ5DaPQ61KbyAhdz-TQLFTecCzE3TPDE2IJsYNiQxZn3njJPLlaX3ydzXSS1

3-11-8

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

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

Scale = 1:14.5

5.00 12 0-0-4 2x4 = 2x4 || 2x4 >

7-10-6 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 0.19 Vert(LL) n/a n/a 999 MT20 244/190 Snow (Pf/Pg) 11.6/15.0 Lumber DOL 1.15 вс 0.10 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: 24 lb FT = 20% BCDL 10.0

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

(size) 1=7-9-13, 3=7-9-13, 4=7-9-13

Max Horz 1=17(LC 15) Max Uplift 1=-18(LC 16), 3=-18(LC 16)

Max Grav 1=126(LC 2), 3=126(LC 2), 4=260(LC 2)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- $2) \ \ Wind: ASCE \ 7-16; \ Vult=130mph \ (3-second \ gust) \ \ Vasd=103mph; \ TCDL=6.0psf; \ BCDL=6.0psf; \ h=25ft; \ B=45ft; \ L=24ft; \ eave=4ft; \ Cat.$ II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

3-11-8 3-11-8

- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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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 #55 Roof 172260456 V04 Valley 25-0577-A Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.730 s Feb 19 2025 MiTek Industries, Inc. Tue Mar 25 08:02:52 2025 Page 1 ID:InVYNKydfynyZ5DaPQ61KbyAhdz-TQLFTecCzE3TPDE2IJsYNiQzzn3JjJ2LlaX3ydzXSS1 1-11-8 1-11-8 Scale = 1:7.3 3x4 = 5.00 12 2 3 0 - 9 - 130-0-4 2x4 = 2x4 > 3-10-6 3-10-6 Plate Offsets (X,Y)--[2:0-2-0,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 0.04 Vert(LL) n/a n/a 999 MT20 244/190 Snow (Pf/Pg) 11.6/15.0 Lumber DOL вс 1.15 0.07 Vert(CT) n/a n/a 999 TCDL 10.0

LUMBER-TOP CHORD BOT CHORD

REACTIONS.

BCLL

BCDL

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

0.0

10.0

(size) 1=3-9-13, 3=3-9-13

Max Horz 1=7(LC 15) Max Uplift 1=-6(LC 16), 3=-6(LC 16) Max Grav 1=96(LC 2), 3=96(LC 2)

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

Rep Stress Incr

Code IRC2018/TPI2014

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

WB

Matrix-P

0.00

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

0.00

n/a

Structural wood sheathing directly applied or 3-11-0 oc purlins.

n/a

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

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

YES

- 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.



Weight: 10 lb

FT = 20%

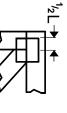
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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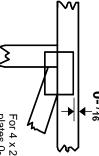


Symbols

PLATE LOCATION AND ORIENTATION



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



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

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'n

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

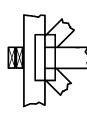
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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.

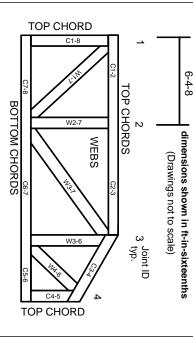
Industry Standards:

National Design Specification for Metal 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.

ANSI/TPI1: DSB-22:

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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MiTek



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.

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- 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.

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- 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.