

Trenco 818 Soundside Rd Edenton, NC 27932

Re: 25-3407-B

CLB-LOT #5 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: I74047357 thru I74047382

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

North Carolina COA: C-0844



June 10,2025

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.

174047357 25-3407-B GE01 Common Supported Gable Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:15:00 2025 Page 1 ID:Bxl2MwYau_NHkbraGCmHloyOvst-iBsURqzHBeol77BENtotll6wAocr5GpniySMI1z86hP 12-7-0 11-7-0 5-9-8 1-0-0 5-9-8 Scale = 1:28.7 4x4 = 7.00 12 3x5 / 3x5 <> -5-0 14 13 11 10 16 15 3x4 =3x4 = 11-7-0 11-7-0 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 0.09 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 0.04 Horz(CT) 0.00 10 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-S Weight: 67 lb FT = 20% BCDL 10.0 LUMBER-BRACING-

Qty

Ply

CLB-LOT #5 Roof

OTHERS

Job

Truss

Truss Type

TOP CHORD 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 11-7-0.

2x4 SP No.3

(lb) -Max Horz 16=109(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) -1-0-0 to 1-9-8, Exterior(2N) 1-9-8 to 5-9-8, Corner(3R) 5-9-8 to 8-9-8, Exterior(2N) 8-9-8 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=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.

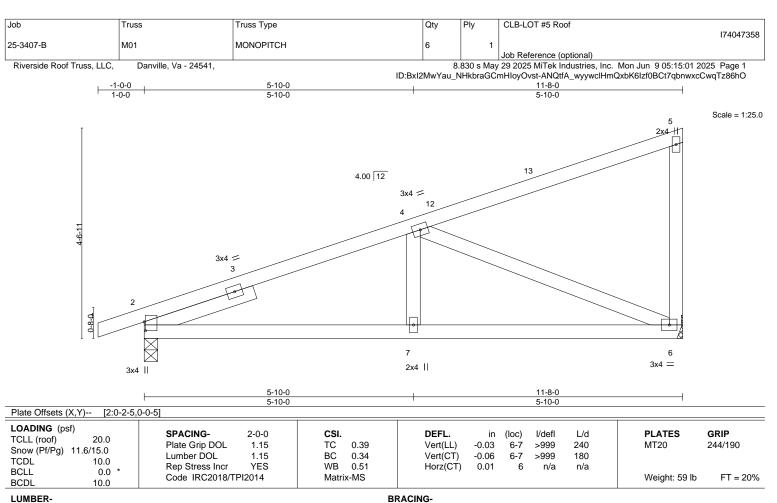


WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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)





TOP CHORD

BOT CHORD

LUMBER-

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

2x4 SP No 3 WFBS

SLIDER Left 2x4 SP No.3 2-6-0

REACTIONS.

(size) 2=0-3-8, 6=Mechanical

Max Horz 2=148(LC 15)

Max Uplift 2=-56(LC 16), 6=-31(LC 16) Max Grav 2=523(LC 2), 6=458(LC 2)

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

TOP CHORD 2-4=-660/179

BOT CHORD 2-7=-273/666, 6-7=-273/666

WEBS 4-6=-698/233

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



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

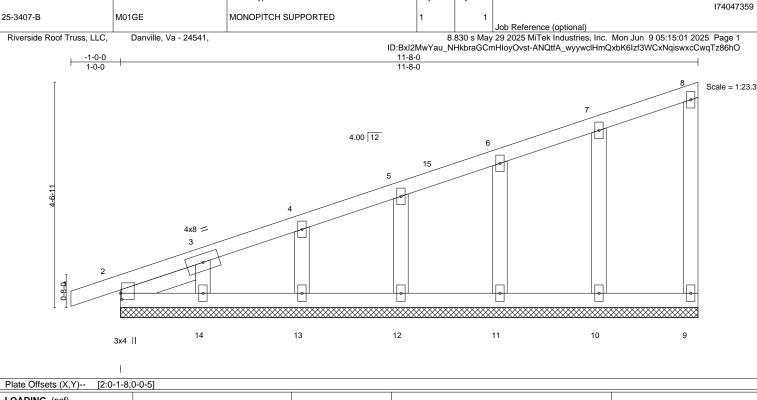
Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

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Qty

Ply

CLB-LOT #5 Roof

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 0.24 Vert(LL) -0.00 n/r 120 MT20 244/190 Snow (Pf/Pg) 11.6/15.0 Lumber DOL 1.15 BC 0.07 Vert(CT) -0.00 n/r 120 TCDL 10.0 WB Rep Stress Incr YES 0.05 Horz(CT) 0.00 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-S Weight: 61 lb FT = 20% BCDL 10.0

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

Job

Truss

Truss Type

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

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

SLIDER Left 2x4 SP No.3 1-7-8

REACTIONS. All bearings 11-8-0.

(lb) - Max Horz 2=146(LC 13)

Max Uplift All uplift 100 lb or less at joint(s) 9, 2, 10, 11, 12, 13, 14 Max Grav All reactions 250 lb or less at joint(s) 9, 2, 10, 11, 12, 13, 14

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

TOP CHORD 2-3=-340/173, 3-4=-261/141

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) -1-0-0 to 2-0-0, Exterior(2N) 2-0-0 to 11-6-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) 9, 2, 10, 11, 12, 13. 14.
- 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.



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

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

except end verticals.

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Job Truss Truss Type Qty Ply CLB-LOT #5 Roof 174047360 25-3407-B M02 HALF HIP 3 Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:15:02 2025 Page 1 ID:Bxl2MwYau_NHkbraGCmHloyOvst-ea_FsW_YiF2TMQLcUIrLqACFLbHfZ9C4AGxTMvz86hN -1-0-0 3-8-0 1-0-0 Scale = 1:10.5 2x4 12 4.00 12 2x4 13 2 11 0-8-0 2x4 || 4x4 = 3x4 = 2-8-0 3-8-0 2-8-0 1-0-0 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 0.18 Vert(LL) -0.00 10 >999 240 MT20 244/190 Snow (Pf/Pg) 16.5/15.0 Lumber DOL 1.15 вс 0.07 Vert(CT) -0.00 >999 180 TCDL 10.0 WB Rep Stress Incr NO 0.05 Horz(CT) 0.00 2 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-MP Weight: 19 lb FT = 20% BCDL 10.0 LUMBER-**BRACING-**TOP CHORD 2x4 SP No.2 TOP CHORD Structural wood sheathing directly applied or 3-8-0 oc purlins,

WFBS

BOT CHORD 2x6 SP No.2

BOT CHORD

except end verticals, and 2-0-0 oc purlins; 4-7, 4-5, Rigid ceiling directly applied or 10-0-0 oc bracing.

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

2x4 SP No.3

Max Horz 2=42(LC 13) Max Uplift 2=-8(LC 16)

Max Grav 2=263(LC 36), 6=325(LC 3)

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) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 3-6-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) 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) Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

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

Vert: 1-3=-43, 6-8=-20, 4-5=-83



June 10,2025

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8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:15:02 2025 Page 2 ID:Bxl2MwYau_NHkbraGCmHloyOvst-ea_FsW_YiF2TMQLcUIrLqACFLbHfZ9C4AGxTMvz86hN

Riverside Roof Truss, LLC, Danville, Va - 24541, LOAD CASE(S) Standard Concentrated Loads (lb) Vert: 13=-160 2) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-3=-60, 6-8=-20, 4-5=-90 Concentrated Loads (lb) Vert: 13=-160 3) Dead + 0.75 Roof Live (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-3=-50, 6-8=-20, 4-5=-139 Concentrated Loads (lb) Vert: 13=-160 4) Dead + 0.75 Snow (balanced) + 0.75 Attic Floor: Lumber Increase=1.15. Plate Increase=1.15 Uniform Loads (plf) Vert: 1-3=-37, 6-8=-20, 4-5=-133 Concentrated Loads (lb) Vert: 13=-160 5) Dead + 0.75 Snow (Unbal. Left) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-11=-37, 3-11=-42, 6-8=-20, 4-5=-114 Concentrated Loads (lb) Vert: 13=-160 6) Dead + 0.75 Snow (Unbal. Right) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-3=-25, 6-8=-20, 4-5=-135 Concentrated Loads (lb) Vert: 13=-160 7) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25 Uniform Loads (plf) Vert: 1-3=-20, 6-8=-40, 4-5=-50 Concentrated Loads (lb) Vert: 13=-160 8) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=60, 2-12=50, 3-12=34, 6-8=-12, 4-5=16 Horz: 1-2=-72, 2-12=-62, 3-12=-46, 3-4=10, 5-6=38 Concentrated Loads (lb) Vert: 13=-160 9) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=45, 2-3=50, 6-8=-12, 4-5=32 Horz: 1-2=-57, 2-3=-62, 3-4=-51, 5-6=-24 Concentrated Loads (lb) Vert: 13=-160 10) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=1, 2-3=-46, 6-8=-20, 4-5=-64 Horz: 1-2=-21, 2-3=26, 3-4=-30, 5-6=-35 Concentrated Loads (lb) Vert: 13=-160 11) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=-41, 2-3=-46, 6-8=-20, 4-5=-64 Horz: 1-2=21, 2-3=26, 3-4=31, 5-6=27

Concentrated Loads (lb)

Vert: 13=-160

12) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=28, 2-3=13, 6-8=-12, 4-5=8 Horz: 1-2=-40, 2-3=-25, 3-4=-11, 5-6=18

Concentrated Loads (lb)

Vert: 13=-160

13) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=3, 2-3=8, 6-8=-12, 4-5=8

Horz: 1-2=-15, 2-3=-20, 3-4=-26, 5-6=-15

Concentrated Loads (lb) Vert: 13=-160

14) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-16, 2-3=-21, 6-8=-20, 4-5=-39 Horz: 1-2=-4, 2-3=1, 3-4=31, 5-6=7

Concentrated Loads (lb)

Vert: 13=-160

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



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Danville, Va - 24541,

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:15:02 2025 Page 3 ID:Bxl2MwYau_NHkbraGCmHloyOvst-ea_FsW_YiF2TMQLcUlrLqACFLbHfZ9C4AGxTMvz86hN

LOAD CASE(S) Standard Uniform Loads (plf) Vert: 1-2=-5, 2-3=-10, 6-8=-20, 4-5=-39 Horz: 1-2=-15, 2-3=-10, 3-4=-4, 5-6=-25 Concentrated Loads (lb) Vert: 13=-160 16) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=32, 2-3=17, 6-8=-12, 4-5=-1 Horz: 1-2=-44, 2-3=-29, 3-4=-34, 5-6=23 Concentrated Loads (lb) Vert: 13=-160 17) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=21, 2-3=6, 6-8=-12, 4-5=-12 Horz: 1-2=-33, 2-3=-18, 3-4=-24, 5-6=23 Concentrated Loads (lb) Vert: 13=-160 18) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=-16, 2-3=-21, 6-8=-20, 4-5=-39 Horz: 1-2=-4, 2-3=1, 3-4=6, 5-6=12 Concentrated Loads (lb) Vert: 13=-160 19) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=-16, 2-3=-21, 6-8=-20, 4-5=-39 Horz: 1-2=-4, 2-3=1, 3-4=6, 5-6=12 Concentrated Loads (lb) Vert: 13=-160 20) Dead + Snow on Overhangs: Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-2=-43, 2-3=-20, 6-8=-20, 4-5=-50 Concentrated Loads (lb) Vert: 13=-160 21) Dead + Snow (Unbal. Left): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-11=-43, 3-11=-49, 6-8=-20, 4-5=-57 Concentrated Loads (lb) Vert: 13=-160 22) Dead + Snow (Unbal. Right): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-3=-27, 6-8=-20, 4-5=-85 Concentrated Loads (lb) Vert: 13=-160 23) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90 Uniform Loads (plf) Vert: 1-3=-20, 6-8=-20, 4-5=-50 Concentrated Loads (lb) Vert: 13=-160 24) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=-34, 2-3=-38, 6-8=-20, 4-5=-124 Horz: 1-2=-3, 2-3=1, 3-4=23, 5-6=5 Concentrated Loads (lb) Vert: 13=-160 25) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=-26, 2-3=-30, 6-8=-20, 4-5=-124 Horz: 1-2=-11, 2-3=-7, 3-4=-3, 5-6=-19 Concentrated Loads (lb) Vert: 13=-160 26) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate

Increase=1.60 Uniform Loads (plf) Vert: 1-2=-34, 2-3=-38, 6-8=-20, 4-5=-124

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

Concentrated Loads (lb)

Vert: 13=-160

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

Uniform Loads (plf)

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

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

Concentrated Loads (lb) Vert: 13=-160



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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8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:15:02 2025 Page 4 ID:Bxl2MwYau_NHkbraGCmHloyOvst-ea_FsW_YiF2TMQLcUIrLqACFLbHfZ9C4AGxTMvz86hN

Riverside Roof Truss, LLC, Danville, Va - 24541, LOAD CASE(S) Standard 28) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=-47, 2-3=-51, 6-8=-20, 4-5=-129 Horz: 1-2=-3, 2-3=1, 3-4=23, 5-6=5 Concentrated Loads (lb) Vert: 13=-160 29) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=-39, 2-3=-43, 6-8=-20, 4-5=-129 Horz: 1-2=-11, 2-3=-7, 3-4=-3, 5-6=-19 Concentrated Loads (lb) Vert: 13=-160 30) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=-47, 2-3=-51, 6-8=-20, 4-5=-129 Horz: 1-2=-3, 2-3=1, 3-4=5, 5-6=9 Concentrated Loads (lb) Vert: 13=-160 31) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=-47, 2-3=-51, 6-8=-20, 4-5=-129 Horz: 1-2=-3, 2-3=1, 3-4=5, 5-6=9 Concentrated Loads (lb) Vert: 13=-160 32) Dead + Minimum Snow: Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-3=-20, 6-8=-20, 4-5=-80 Concentrated Loads (lb) Vert: 13=-160 33) Dead + 0.6 C-C Wind Min. Down: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=4, 2-3=-28, 6-8=-12, 4-5=-46 Horz: 1-2=-16, 2-3=16, 3-4=-16, 5-6=-16 Concentrated Loads (lb) Vert: 13=-160 34) Dead + 0.6 C-C Wind Min. Upward: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-3=4, 6-8=-12, 4-5=-14 Horz: 1-3=-16, 3-4=16, 5-6=16 Concentrated Loads (lb) Vert: 13=-160 35) 3rd Unbal.Dead + Snow (balanced) + Parallel: Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-3=-27, 6-8=-20, 4-5=-100 Concentrated Loads (lb) Vert: 13=-160 36) 4th Unbal.Dead + Snow (balanced) + Parallel: Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-3=-70, 6-8=-20, 4-5=-57 Concentrated Loads (lb) Vert: 13=-160 37) 5th Unbal.Dead + 0.75 Snow (balanced) + 0.75 Attic Floor + Parallel: Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-3=-25, 6-8=-20, 4-5=-146 Concentrated Loads (lb) Vert: 13=-160 38) 6th Unbal.Dead + 0.75 Snow (balanced) + 0.75 Attic Floor + Parallel: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-57, 6-8=-20, 4-5=-114

Concentrated Loads (lb)

Vert: 13=-160

39) 7th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left) + Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-22, 2-3=-26, 6-8=-20, 4-5=-137 Horz: 1-2=-3, 2-3=1, 3-4=23, 5-6=5

Concentrated Loads (lb)

Vert: 13=-160

40) 8th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left) + Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-54, 2-3=-58, 6-8=-20, 4-5=-105

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

Concentrated Loads (lb)

Vert: 13=-160



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Job	Truss	Truss Type	Qty	Ply	CLB-LOT #5 Roof	
25-3407-B	M02	 HALF HIP	3	1		17404736
20 0 10.7 2					Job Reference (optional)	

Danville, Va - 24541,

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:15:02 2025 Page 5 ID:Bxl2MwYau_NHkbraGCmHloyOvst-ea_FsW_YiF2TMQLcUIrLqACFLbHfZ9C4AGxTMvz86hN

LOAD CASE(S) Standard

41) 9th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right) + Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-14, 2-3=-18, 6-8=-20, 4-5=-137 Horz: 1-2=-11, 2-3=-7, 3-4=-3, 5-6=-19

Concentrated Loads (lb)

Vert: 13=-160

42) 10th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right) + Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-46, 2-3=-50, 6-8=-20, 4-5=-105 Horz: 1-2=-11, 2-3=-7, 3-4=-3, 5-6=-19

Concentrated Loads (lb)

Vert: 13=-160

43) 11th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf)

Vert: 1-2=-22, 2-3=-26, 6-8=-20, 4-5=-137

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

Concentrated Loads (lb) Vert: 13=-160

44) 12th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-54, 2-3=-58, 6-8=-20, 4-5=-105

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

Concentrated Loads (lb)

Vert: 13=-160

45) 13th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-22, 2-3=-26, 6-8=-20, 4-5=-137

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

Concentrated Loads (lb)

Vert: 13=-160

46) 14th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf)

Vert: 1-2=-54, 2-3=-58, 6-8=-20, 4-5=-105

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

Concentrated Loads (lb)

Vert: 13=-160

47) 15th Unbal.Dead + Minimum Snow + Parallel: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-27, 6-8=-20, 4-5=-100

Concentrated Loads (lb)

Vert: 13=-160

48) 16th Unbal.Dead + Minimum Snow + Parallel: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-70, 6-8=-20, 4-5=-57

Concentrated Loads (lb)

Vert: 13=-160

49) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-60, 6-8=-20, 4-5=-50

Concentrated Loads (lb) Vert: 13=-160

50) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf) Vert: 1-3=-20, 6-8=-20, 4-5=-90

Concentrated Loads (lb)

Vert: 13=-160

51) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-50, 6-8=-20, 4-5=-109 Concentrated Loads (lb)

Vert: 13=-160

52) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-20, 6-8=-20, 4-5=-139

Concentrated Loads (lb)

Vert: 13=-160



June 10,2025



Job Truss Truss Type Qty Ply CLB-LOT #5 Roof 174047361 25-3407-B M03 6 Monopitch Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:15:02 2025 Page 1 ID:Bxl2MwYau_NHkbraGCmHloyOvst-ea_FsW_YiF2TMQLcUlrLqACFzbHdZ9w4AGxTMvz86hN -1-0-0 3-8-0 1-0-0 Scale = 1:12.3 2x4 4 4.00 12 1-10-11 4 2x4 || 3-8-0 3-8-0 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 0.14 Vert(LL) -0.00 4-7 >999 240 MT20 244/190 Snow (Pf/Pg) 11.6/15.0 Lumber DOL 1.15 вс 0.07 Vert(CT) -0.01 >999 180 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: 18 lb FT = 20% BCDL 10.0 **BRACING-**

TOP CHORD

BOT CHORD

LUMBER-TOP CHORD BOT CHORD

WFBS REACTIONS. 2x6 SP No.2

2x4 SP No.2 2x4 SP No.3

(size) 4=Mechanical, 2=0-3-8 Max Horz 2=53(LC 15)

Max Uplift 4=-6(LC 16), 2=-43(LC 16) Max Grav 4=136(LC 21), 2=215(LC 21)

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

NOTES-

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

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

except end verticals



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Job Truss Truss Type Qty Ply CLB-LOT #5 Roof 174047362 25-3407-B M03GE Monopitch Supported Gable Job Reference (optional)

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

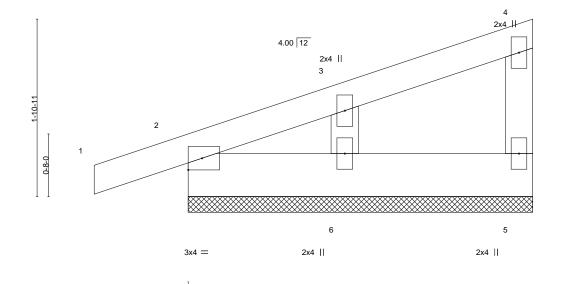
-1-0-0

1-0-0

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:15:03 2025 Page 1 ID:Bxl2MwYau_NHkbraGCmHloyOvst-6mYd4r?ATZAK_awp20MaNNkRa?emlcHDOwh1uLz86hM

3-8-0

Scale = 1:12.3



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 0.08 Vert(LL) -0.00 n/r 120 MT20 244/190 Snow (Pf/Pg) 11.6/15.0 Lumber DOL 1.15 вс 0.01 Vert(CT) -0.00 n/r 120 TCDL 10.0 WB Rep Stress Incr YES 0.06 Horz(CT) 0.00 5 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-P Weight: 18 lb FT = 20% BCDL 10.0

LUMBER-

OTHERS

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

2x4 SP No.3 2x4 SP No 3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-8-0 oc purlins

except end verticals

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

REACTIONS. (size) 5=3-8-0, 2=3-8-0, 6=3-8-0

Max Horz 2=52(LC 15)

Max Uplift 5=-3(LC 13), 2=-38(LC 16), 6=-8(LC 16) Max Grav 5=63(LC 21), 2=135(LC 21), 6=153(LC 21)

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

NOTES-

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



June 10,2025

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Job Truss Truss Type Qty Ply CLB-LOT #5 Roof 174047363 25-3407-B M04 HALF HIP 3 Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:15:03 2025 Page 1 ID:Bxl2MwYau_NHkbraGCmHloyOvst-6mYd4r?ATZAK_awp20MaNNkFY?aalbhDOwh1uLz86hM 7-8-0 1-0-0 Scale = 1:18.2 2x4_H 4.00 12 14 2-10-11 3x6 = 3x5 =7 6 2x4 || 4x4 =3x8 II 0-6-8 6-8-0 7-8-0 6-1-8 1-0-0 Plate Offsets (X,Y)--[2:0-0-0,0-0-14] 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 0.85 Vert(LL) -0.03 7-12 >999 240 MT20 244/190 Snow (Pf/Pg) 16.5/15.0 Lumber DOL 1.15 BC 0.28 Vert(CT) -0.06 7-12 >999 180 TCDL 10.0 WB Rep Stress Incr NO 0.10 Horz(CT) 0.01 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-MP Weight: 38 lb FT = 20% BCDL 10.0 BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WFBS 2x4 SP No.3 WEDGE

Left: 2x4 SP No.3

REACTIONS.

(size) 6=Mechanical, 2=0-3-0

Max Horz 2=116(LC 16) Max Uplift 2=-16(LC 16)

Max Grav 6=467(LC 28), 2=456(LC 36)

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

BOT CHORD 6-7=-137/382 **WEBS** 4-6=-484/164

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) C-C wind load user defined.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL= 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 7) Provide adequate drainage to prevent water ponding.
- 8) 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) Refer to girder(s) for truss to truss connections.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss
- 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 15) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

CASE(S) 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)



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

except end verticals, and 2-0-0 oc purlins: 4-7, 4-5.

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

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LOAD CASE(S)

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

Uniform Loads (plf)

Vert: 1-3=-43, 4-5=-83(F=-30), 6-8=-20

Concentrated Loads (lb)

Vert: 15=-160

2) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-60, 4-5=-90(F=-30), 6-8=-20

Concentrated Loads (lb)

Vert: 15=-160

3) Dead + 0.75 Roof Live (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-50, 4-5=-139(F=-89), 6-8=-20

Concentrated Loads (lb)

Vert: 15=-160

4) Dead + 0.75 Snow (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-37, 4-5=-133(F=-89), 6-8=-20

Concentrated Loads (lb)

Vert: 15=-160

5) Dead + 0.75 Snow (Unbal. Left) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-14=-37, 3-14=-42, 4-5=-114(F=-89), 6-8=-20

Concentrated Loads (lb)

Vert: 15=-160

6) Dead + 0.75 Snow (Unbal. Right) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-25, 4-5=-137(F=-89), 6-8=-20

Concentrated Loads (lb)

Vert: 15=-160

7) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-3=-20, 4-5=-50(F=-30), 6-8=-40

Concentrated Loads (lb)

Vert: 15=-160

8) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=58, 2-13=45, 3-13=34, 4-5=16(F=-18), 6-8=-12

Horz: 1-2=-70, 2-13=-57, 3-13=-46, 3-4=7, 5-6=36

Concentrated Loads (lb)

Vert: 15=-160

9) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=29, 2-13=34, 3-13=45, 4-5=27(F=-18), 6-8=-12

Horz: 1-2=-41, 2-13=-46, 3-13=-57, 3-4=-51, 5-6=-23

Concentrated Loads (lb)

Vert: 15=-160

10) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-3, 2-3=-42, 4-5=-60(F=-18), 6-8=-20

Horz: 1-2=-17, 2-3=22, 3-4=-30, 5-6=-33

Concentrated Loads (lb)

Vert: 15=-160

11) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-37, 2-3=-42, 4-5=-60(F=-18), 6-8=-20 Horz: 1-2=17, 2-3=22, 3-4=28, 5-6=25

Concentrated Loads (lb)

Vert: 15=-160

12) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=28, 2-3=13, 4-5=8(F=-18), 6-8=-12 Horz: 1-2=-40, 2-3=-25, 3-4=-11, 5-6=18

Concentrated Loads (lb)

Vert: 15=-160

13) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

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

Horz: 1-2=-15, 2-3=-20, 3-4=-26, 5-6=-15

Concentrated Loads (lb)

Vert: 15=-160

14) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

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

Horz: 1-2=-4, 2-3=1, 3-4=31, 5-6=7



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LOAD CASE(S)

Concentrated Loads (lb)

Vert: 15=-160

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

Uniform Loads (plf)

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

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

Concentrated Loads (lb)

Vert: 15=-160

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

Uniform Loads (plf)

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

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

Concentrated Loads (lb)

Vert: 15=-160

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

Uniform Loads (plf)

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

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

Concentrated Loads (lb)

Vert: 15=-160

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

Uniform Loads (plf)

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

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

Concentrated Loads (lb)

Vert: 15=-160

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

Uniform Loads (plf)

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

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

Concentrated Loads (lb)

Vert: 15=-160

20) Dead + Snow on Overhangs: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

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

Concentrated Loads (lb)

Vert: 15=-160

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

Uniform Loads (plf)

Vert: 1-14=-43, 3-14=-49, 4-5=-57(F=-30), 6-8=-20

Concentrated Loads (lb)

Vert: 15=-160

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

Uniform Loads (plf)

Vert: 1-3=-27, 4-5=-88(F=-30), 6-8=-20

Concentrated Loads (lb)

Vert: 15=-160

23) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90

Uniform Loads (plf)

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

Concentrated Loads (lb)

Vert: 15=-160

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

Uniform Loads (plf)

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

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

Concentrated Loads (lb)

Vert: 15=-160

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

Uniform Loads (plf)

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

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

Concentrated Loads (lb)

Vert: 15=-160

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

Increase=1.60

Uniform Loads (plf)

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

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

Concentrated Loads (lb)

Vert: 15=-160

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



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LOAD CASE(S)

Uniform Loads (plf)

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

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

Concentrated Loads (lb)

Vert: 15=-160

28) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-47, 2-3=-51, 4-5=-129(F=-79), 6-8=-20

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

Concentrated Loads (lb)

Vert: 15=-160

29) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-39, 2-3=-43, 4-5=-129(F=-79), 6-8=-20

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

Concentrated Loads (lb)

Vert: 15=-160

30) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60

Vert: 1-2=-47, 2-3=-51, 4-5=-129(F=-79), 6-8=-20 Horz: 1-2=-3, 2-3=1, 3-4=5, 5-6=9

Concentrated Loads (lb)

Vert: 15=-160

31) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert; 1-2=-47, 2-3=-51, 4-5=-129(F=-79), 6-8=-20

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

Concentrated Loads (lb)

Vert: 15=-160

32) Dead + Minimum Snow: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-20, 4-5=-80(F=-30), 6-8=-20

Concentrated Loads (lb)

Vert: 15=-160

33) Dead + 0.6 C-C Wind Min. Down: Lumber Increase=1.60. Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=4, 2-3=-28, 4-5=-46(F=-18), 6-8=-12

Horz: 1-2=-16, 2-3=16, 3-4=-16, 5-6=-16

Concentrated Loads (lb)

Vert: 15=-160

34) Dead + 0.6 C-C Wind Min. Upward: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-3=4, 4-5=-14(F=-18), 6-8=-12

Horz: 1-3=-16, 3-4=16, 5-6=16

Concentrated Loads (lb)

Vert: 15=-160

35) 3rd Unbal.Dead + Snow (balanced) + Parallel: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-27, 4-5=-100(F=-30), 6-8=-20

Concentrated Loads (lb)

Vert: 15=-160

36) 4th Unbal.Dead + Snow (balanced) + Parallel: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-70, 4-5=-57(F=-30), 6-8=-20 Concentrated Loads (lb)

Vert: 15=-160

37) 5th Unbal.Dead + 0.75 Snow (balanced) + 0.75 Attic Floor + Parallel: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-25, 4-5=-146(F=-89), 6-8=-20 Concentrated Loads (lb)

Vert: 15=-160

38) 6th Unbal.Dead + 0.75 Snow (balanced) + 0.75 Attic Floor + Parallel: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-57, 4-5=-114(F=-89), 6-8=-20

Concentrated Loads (lb)

Vert: 15=-160

39) 7th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left) + Parallel: Lumber Increase=1.60,

Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-22, 2-3=-26, 4-5=-137(F=-79), 6-8=-20

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

Concentrated Loads (lb)

Vert: 15=-160



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LOAD CASE(S)

40) 8th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left) + Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-54, 2-3=-58, 4-5=-105(F=-79), 6-8=-20

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

Concentrated Loads (lb)

Vert: 15=-160

41) 9th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right) + Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-14, 2-3=-18, 4-5=-137(F=-79), 6-8=-20

Horz: 1-2=-11, 2-3=-7, 3-4=-3, 5-6=-19 Concentrated Loads (lb)

Vert: 15=-160

42) 10th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right) + Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-46, 2-3=-50, 4-5=-105(F=-79), 6-8=-20

Horz: 1-2=-11, 2-3=-7, 3-4=-3, 5-6=-19 Concentrated Loads (lb)

Vert: 15=-160

43) 11th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-22, 2-3=-26, 4-5=-137(F=-79), 6-8=-20

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

Concentrated Loads (lb)

Vert: 15=-160

44) 12th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-54, 2-3=-58, 4-5=-105(F=-79), 6-8=-20

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

Concentrated Loads (lb)

Vert: 15=-160

45) 13th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60

Vert: 1-2=-22, 2-3=-26, 4-5=-137(F=-79), 6-8=-20

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

Concentrated Loads (lb)

Vert: 15=-160

46) 14th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-54, 2-3=-58, 4-5=-105(F=-79), 6-8=-20 Horz: 1-2=-3, 2-3=1, 3-4=5, 5-6=9

Concentrated Loads (lb)

Vert: 15=-160

47) 15th Unbal.Dead + Minimum Snow + Parallel: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-27, 4-5=-100(F=-30), 6-8=-20

Concentrated Loads (lb)

Vert: 15=-160

48) 16th Unbal.Dead + Minimum Snow + Parallel: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-70, 4-5=-57(F=-30), 6-8=-20

Concentrated Loads (lb)

Vert: 15=-160

49) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-60, 4-5=-50(F=-30), 6-8=-20

Concentrated Loads (lb)

Vert: 15=-160

50) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-20, 4-5=-90(F=-30), 6-8=-20

Concentrated Loads (lb) Vert: 15=-160

51) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-50, 4-5=-109(F=-89), 6-8=-20

Concentrated Loads (lb) Vert: 15=-160

52) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15. Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-20, 4-5=-139(F=-89), 6-8=-20

Concentrated Loads (lb)

Vert: 15=-160



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Job Truss Truss Type Qty Ply CLB-LOT #5 Roof 174047364 25-3407-B M04SGE **GABLE** Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:15:04 2025 Page 1 ID:Bxl2MwYau_NHkbraGCmHloyOvst-ay6?HB0oEtlAckV?cjtpvbHVUPxG13xNdaQaRoz86hL -1-0-0 7-8-0 1-0-0 1-0-0 Scale = 1:18.2 2x4_H 2x4 || 4.00 12 2x4 || 2-10-11 3x4 =4x4 = 7 2x4 || 2x4 || 6 2x4 || 4x4 =3x8 II 0-6-8 0-6-8 6-8-0 7-8-0 3-7-4 2-6-4 1-0-0 Plate Offsets (X,Y)--[2:0-1-0,0-1-2], [2:0-2-9,0-9-1] 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 0.52 Vert(LL) -0.01 8-17 >999 240 MT20 244/190 16.5/15.0 Snow (Pf/Pg) Lumber DOL 1.15 BC 0.25 Vert(CT) -0.01 8-17 >999 180 TCDL 10.0 Rep Stress Incr NO WB 0.03 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-BRACING-TOP CHORD 2x4 SP No 2 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins,

BOT CHORD

2x6 SP No.2 BOT CHORD

WFBS 2x4 SP No.3 **OTHERS** 2x4 SP No.3

WEDGE

Left: 2x4 SP No.3

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

> Max Horz 2=116(LC 16) Max Uplift 2=-28(LC 16)

Max Grav 6=337(LC 28), 2=318(LC 36), 8=286(LC 36)

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); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) C-C wind load user defined.
- 4) 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.
- 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; 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.
- 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) 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) Refer to girder(s) for truss to truss connections.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift 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.
- 15) Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.







minim

June 10,2025

Edenton, NC 27932

NORTH

except end verticals, and 2-0-0 oc purlins: 4-7, 4-5.

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

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LOAD CASE(S)

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

Uniform Loads (plf)

Vert: 1-3=-43, 4-5=-83, 6-13=-20

Concentrated Loads (lb)

Vert: 19=-160

2) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-60, 4-5=-90, 6-13=-20

Concentrated Loads (lb)

Vert: 19=-160

3) Dead + 0.75 Roof Live (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-50, 4-5=-139, 6-13=-20

Concentrated Loads (lb)

Vert: 19=-160

4) Dead + 0.75 Snow (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-37, 4-5=-133, 6-13=-20

Concentrated Loads (lb)

Vert: 19=-160

5) Dead + 0.75 Snow (Unbal. Left) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-18=-37, 3-18=-42, 4-5=-114, 6-13=-20

Concentrated Loads (lb)

Vert: 19=-160

6) Dead + 0.75 Snow (Unbal. Right) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-25, 4-5=-137, 6-13=-20

Concentrated Loads (lb)

Vert: 19=-160

7) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-3=-20, 4-5=-50, 6-13=-40

Concentrated Loads (lb)

Vert: 19=-160

8) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=61, 2-3=52, 4-5=34, 6-13=-12

Horz: 1-2=-73, 2-3=-64, 3-4=7, 5-6=36

Concentrated Loads (lb)

Vert: 19=-160

9) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=47, 2-3=52, 4-5=34, 6-13=-12

Horz: 1-2=-59, 2-3=-64, 3-4=-69, 5-6=-23

Concentrated Loads (lb)

Vert: 19=-160

10) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-3, 2-3=-42, 4-5=-60, 6-13=-20

Horz: 1-2=-17, 2-3=22, 3-4=-48, 5-6=-33

Concentrated Loads (lb)

Vert: 19=-160

11) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-37, 2-3=-42, 4-5=-60, 6-13=-20

Horz: 1-2=17, 2-3=22, 3-4=28, 5-6=25

Concentrated Loads (lb)

Vert: 19=-160

12) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=28, 2-3=13, 4-5=8, 6-13=-12 Horz: 1-2=-40, 2-3=-25, 3-4=-11, 5-6=18

Concentrated Loads (lb)

Vert: 19=-160

13) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=3, 2-3=8, 4-5=8, 6-13=-12

Horz: 1-2=-15, 2-3=-20, 3-4=-26, 5-6=-15

Concentrated Loads (lb)

Vert: 19=-160

14) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-16, 2-3=-21, 4-5=-39, 6-13=-20

Horz: 1-2=-4, 2-3=1, 3-4=31, 5-6=7



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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)



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LOAD CASE(S)

Concentrated Loads (lb)

Vert: 19=-160

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

Uniform Loads (plf)

Vert: 1-2=-5, 2-3=-10, 4-5=-39, 6-13=-20

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

Concentrated Loads (lb)

Vert: 19=-160

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

Uniform Loads (plf)

Vert: 1-2=32, 2-3=17, 4-5=-1, 6-13=-12

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

Concentrated Loads (lb)

Vert: 19=-160

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

Uniform Loads (plf)

Vert: 1-2=21, 2-3=6, 4-5=-12, 6-13=-12

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

Concentrated Loads (lb)

Vert: 19=-160

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

Uniform Loads (plf)

Vert: 1-2=-16, 2-3=-21, 4-5=-39, 6-13=-20

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

Concentrated Loads (lb)

Vert: 19=-160

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

Uniform Loads (plf)

Vert: 1-2=-16, 2-3=-21, 4-5=-39, 6-13=-20

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

Concentrated Loads (lb)

Vert: 19=-160

20) Dead + Snow on Overhangs: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-43, 2-3=-20, 4-5=-50, 6-13=-20

Concentrated Loads (lb)

Vert: 19=-160

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

Uniform Loads (plf)

Vert: 1-18=-43, 3-18=-49, 4-5=-57, 6-13=-20

Concentrated Loads (lb)

Vert: 19=-160

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

Uniform Loads (plf)

Vert: 1-3=-27, 4-5=-88, 6-13=-20

Concentrated Loads (lb)

Vert: 19=-160

23) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90

Uniform Loads (plf)

Vert: 1-3=-20, 4-5=-50, 6-13=-20

Concentrated Loads (lb)

Vert: 19=-160

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

Uniform Loads (plf)

Vert: 1-2=-34, 2-3=-38, 4-5=-124, 6-13=-20

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

Concentrated Loads (lb)

Vert: 19=-160

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

Uniform Loads (plf)

Vert: 1-2=-26, 2-3=-30, 4-5=-124, 6-13=-20

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

Concentrated Loads (lb)

Vert: 19=-160

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

Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-34, 2-3=-38, 4-5=-124, 6-13=-20

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

Concentrated Loads (lb)

Vert: 19=-160

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



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LOAD CASE(S)

Uniform Loads (plf)

Vert: 1-2=-34, 2-3=-38, 4-5=-124, 6-13=-20

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

Concentrated Loads (lb)

Vert: 19=-160

28) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-47, 2-3=-51, 4-5=-129, 6-13=-20

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

Concentrated Loads (lb)

Vert: 19=-160

29) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-39, 2-3=-43, 4-5=-129, 6-13=-20

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

Concentrated Loads (lb)

Vert: 19=-160

30) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-47, 2-3=-51, 4-5=-129, 6-13=-20

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

Concentrated Loads (lb) Vert: 19=-160

31) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-47, 2-3=-51, 4-5=-129, 6-13=-20

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

Concentrated Loads (lb)

Vert: 19=-160

32) Dead + Minimum Snow: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-20, 4-5=-80, 6-13=-20

Concentrated Loads (lb)

Vert: 19=-160

33) Dead + 0.6 C-C Wind Min. Down: Lumber Increase=1.60. Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=4, 2-3=-28, 4-5=-46, 6-13=-12 Horz: 1-2=-16, 2-3=16, 3-4=-16, 5-6=-16

Concentrated Loads (lb)

Vert: 19=-160

34) Dead + 0.6 C-C Wind Min. Upward: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-3=4, 4-5=-14, 6-13=-12

Horz: 1-3=-16, 3-4=16, 5-6=16

Concentrated Loads (lb)

Vert: 19=-160

35) 3rd Unbal.Dead + Snow (balanced) + Parallel: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-27, 4-5=-100, 6-13=-20

Concentrated Loads (lb)

Vert: 19=-160

36) 4th Unbal.Dead + Snow (balanced) + Parallel: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-70, 4-5=-57, 6-13=-20

Concentrated Loads (lb)

Vert: 19=-160

37) 5th Unbal.Dead + 0.75 Snow (balanced) + 0.75 Attic Floor + Parallel: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-25, 4-5=-146, 6-13=-20 Concentrated Loads (lb)

Vert: 19=-160

38) 6th Unbal.Dead + 0.75 Snow (balanced) + 0.75 Attic Floor + Parallel: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-57, 4-5=-114, 6-13=-20

Concentrated Loads (lb)

Vert: 19=-160

39) 7th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left) + Parallel: Lumber Increase=1.60,

Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-22, 2-3=-26, 4-5=-137, 6-13=-20

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

Concentrated Loads (lb)

Vert: 19=-160



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Job	Truss	Truss Type	Qty	Ply	CLB-LOT #5 Roof	
25-3407-B	M04SGE	GABLE	1	1		17404736
25-5407-5	IVIO43GL	GABLE	'	'	Job Reference (optional)	

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LOAD CASE(S)

40) 8th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left) + Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-54, 2-3=-58, 4-5=-105, 6-13=-20

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

Concentrated Loads (lb)

Vert: 19=-160

41) 9th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right) + Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-14, 2-3=-18, 4-5=-137, 6-13=-20 Horz: 1-2=-11, 2-3=-7, 3-4=-3, 5-6=-19

Concentrated Loads (lb)

Vert: 19=-160

42) 10th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right) + Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-46, 2-3=-50, 4-5=-105, 6-13=-20

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

Concentrated Loads (lb) Vert: 19=-160

43) 11th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-22, 2-3=-26, 4-5=-137, 6-13=-20

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

Concentrated Loads (lb)

Vert: 19=-160

44) 12th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-54, 2-3=-58, 4-5=-105, 6-13=-20

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

Concentrated Loads (lb)

Vert: 19=-160

45) 13th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60

Vert: 1-2=-22, 2-3=-26, 4-5=-137, 6-13=-20

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

Concentrated Loads (lb)

Vert: 19=-160

46) 14th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-54, 2-3=-58, 4-5=-105, 6-13=-20

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

Concentrated Loads (lb)

Vert: 19=-160

47) 15th Unbal.Dead + Minimum Snow + Parallel: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-27, 4-5=-100, 6-13=-20

Concentrated Loads (lb) Vert: 19=-160

48) 16th Unbal.Dead + Minimum Snow + Parallel: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-70, 4-5=-57, 6-13=-20

Concentrated Loads (lb)

Vert: 19=-160

49) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-60, 4-5=-50, 6-13=-20

Concentrated Loads (lb)

Vert: 19=-160

50) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-20, 4-5=-90, 6-13=-20

Concentrated Loads (lb) Vert: 19=-160

51) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-50, 4-5=-109, 6-13=-20

Concentrated Loads (lb)

Vert: 19=-160

52) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15. Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-20, 4-5=-139, 6-13=-20

Concentrated Loads (lb)

Vert: 19=-160



June 10,2025



Qty 174047365 25-3407-B T01 5 Common Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:15:05 2025 Page 1 ID:Bxl2MwYau_NHkbraGCmHloyOvst-29gNUX1Q?AQ1Du4BARO2Soqh?pD1mV?WsEA7zEz86hK -1-0-0 6-0-0 12-0-0

Ply

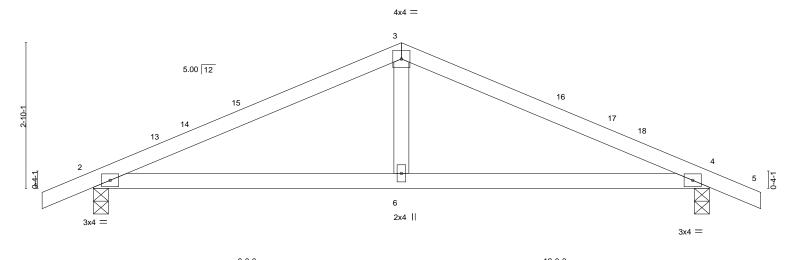
CLB-LOT #5 Roof

6-0-0

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

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

Scale = 1:22.4



-	6-0-0	6-0-0						
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 0.47 BC 0.47 WB 0.11 Matrix-MS	Vert(CT) -	in (loc) -0.05 6-12 -0.09 6-12 0.01 4	l/defl >999 >999	L/d 240 180 n/a	PLATES MT20 Weight: 44 lb	GRIP 244/190 FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

Job

Truss

Truss Type

6-0-0

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

2x4 SP No.3 REACTIONS. (size) 2=0-3-8, 4=0-3-8

Max Horz 2=-37(LC 14) Max Uplift 2=-61(LC 16), 4=-61(LC 16) Max Grav 2=540(LC 2), 4=540(LC 2)

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

TOP CHORD 2-3=-763/235, 3-4=-763/235 **BOT CHORD** 2-6=-115/652, 4-6=-115/652

WEBS 3-6=0/280

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) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 6-0-0, Exterior(2R) 6-0-0 to 9-0-0, Interior(1) 9-0-0 to 13-0-0 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, 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.



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)

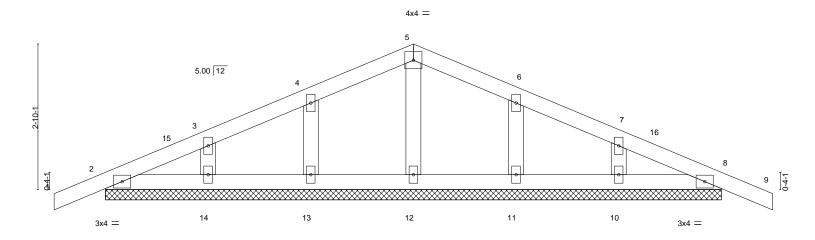


Truss Type Qty 174047366 25-3407-B T01GE **GABLE** Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:15:05 2025 Page 1 ID:Bxl2MwYau_NHkbraGCmHloyOvst-29gNUX1Q?AQ1Du4BARO2SoqnlpKymW7WsEA7zEz86hK -1-0-0 12-0-0 6-0-0 6-0-0 6-0-0

Ply

CLB-LOT #5 Roof

Scale = 1:22.4



·		12-0-	0					<u> </u>	
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 0.07 BC 0.03 WB 0.03	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.00 -0.00 0.00	(loc) 9 9	l/defl n/r n/r n/a	L/d 120 120 n/a	PLATES MT20	GRIP 244/190
BCLL 0.0 * BCDL 10.0	Code IRC2018/TPI2014	Matrix-S						Weight: 50 lb	FT = 20%

12-0-0

LUMBER-

Job

Truss

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

BRACING-

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 12-0-0.

Max Horz 2=-37(LC 14) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 13, 14, 11, 10 Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -1-0-0 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 13-0-0 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, 8, 13, 14, 11, 10.
- 13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



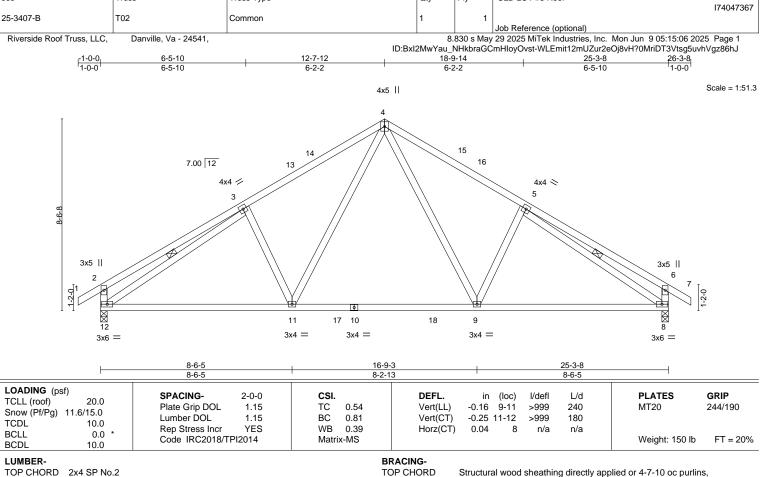
June 10,2025

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)





BOT CHORD

WFBS

Qty

Ply

CLB-LOT #5 Roof

except end verticals.

1 Row at midpt

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

3-12. 5-8

TOP CHORD 2x4 SP No.2 BOT CHORD

2x4 SP No.2 2x4 SP No.3

(size) 12=0-3-8, 8=0-3-8 Max Horz 12=189(LC 15)

Truss

Truss Type

Max Uplift 12=-97(LC 16), 8=-97(LC 16) Max Grav 12=1185(LC 28), 8=1185(LC 29)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-414/125, 3-4=-1368/197, 4-5=-1369/197, 5-6=-414/125, 2-12=-406/135,

6-8=-405/135

BOT CHORD 11-12=-60/1285. 9-11=0/910. 8-9=-49/1174

WFBS 4-9=-46/613, 5-9=-264/162, 4-11=-46/613, 3-11=-264/162, 3-12=-1151/49,

5-8=-1151/49

NOTES-

WFBS

REACTIONS.

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



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JobTrussTruss TypeQtyPlyCLB-LOT #5 Roof25-3407-BT02GCommon Girder13

4x6 ||

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

4-4-15

4-4-15

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:15:07 2025 Page 1 ID:Bxl2MwYau_NHkbraGCmHloyOvst-_Xn8vD2gXohITCDaHsQWXDvvbcupECcpJYfE27z86hl 16-9-3 20-10-9 25-3-8

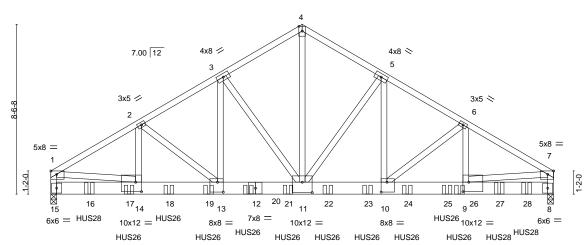
8-6-5 12-7-12 16-9-3 20-10-9 25-3-8 4-1-7 4-1-7 4-1-7 4-1-7 4-1-5

Scale = 1:58.0

Structural wood sheathing directly applied or 4-3-6 oc purlins,

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

except end verticals.



4-4-15	8-6-5	12-7-12	16-9-3	20-10-9	25-3-8	ī
4-4-15	4-1-7	4-1-7	4-1-7	4-1-7	4-4-15	7

Plate Offsets (X,Y)-- [1:Edge,0-2-0], [7:0-3-8,Edge], [9:0-3-8,0-5-12], [10:0-3-8,0-6-0], [11:0-6-0,0-6-4], [13:0-3-8,0-6-0], [14:0-3-8,0-5-12] LOADING (psf) SPACING-CSI. DEFL. (loc) I/defl L/d **PLATES** GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.97 Vert(LL) -0.16 10-11 >999 240 MT20 244/190 11.6/15.0 Snow (Pf/Pg) Lumber DOL 1.15 BC 0.45 Vert(CT) -0.30 10-11 >999 180 TCDL 10.0 Rep Stress Incr NO WB 0.93 Horz(CT) 0.04 8 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-MS Weight: 613 lb FT = 20% BCDL 10.0

BRACING-

TOP CHORD

BOT CHORD

LUMBER-TOP CHORD 2x4 SP No.2

WEBS 2x4 SP No.3 *Except*

2x8 SP DSS

4-11: 2x4 SP No.2, 1-15,1-14,7-8,7-9: 2x4 SP No.1

(size) 15=0-3-8, 8=0-3-8

Max Horz 15=-171(LC 10)

Max Uplift 15=-513(LC 12), 8=-456(LC 12) Max Grav 15=11264(LC 3), 8=13361(LC 3)

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

TOP CHORD 1-2=-15107/688, 2-3=-14142/615, 3-4=-11591/504, 4-5=-11592/504, 5-6=-14922/549,

6-7=-17208/569, 1-15=-9820/456, 7-8=-11164/378

BOT CHORD 14-15=-169/1601, 13-14=-530/12976, 11-13=-396/12186, 10-11=-339/12864, 9-10=-428/14785, 8-9=-75/1910

4-11=-431/11394, 5-11=-4909/187, 5-10=-102/5446, 6-10=-2477/113, 6-9=-106/2594,

3-11=-3755/284, 3-13=-214/4128, 2-13=-1043/171, 2-14=-164/1014, 1-14=-454/11564,

7-9=-359/13089

NOTES-

WEBS

BOT CHORD

REACTIONS.

1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.

Bottom chords connected as follows: 2x8 - 3 rows staggered at 0-4-0 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=25ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 6) Unbalanced snow loads have been considered for this design.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Bearing at joint(s) 15, 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=513, 8=456.

June 10.2025

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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818 Soundside Road Edenton, NC 27932

Continued on page 2

Job	ob	Truss	Truss Type	Qty	Ply	CLB-LOT #5 Roof	
						17404736	8
25-3	5-3407-B	T02G	Common Girder	1	3		
25-3	5-3407-B	102G	Common Girder	1	3	Ich Reference (entional)	

Danville, Va - 24541,

Job Reference (optional)

8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:15:07 2025 Page 2 ID:Bxl2MwYau_NHkbraGCmHloyOvst-_Xn8vD2gXohlTCDaHsQWXDvvbcupECcpJYfE27z86hl

NOTES-

- 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 HUS28 (22-10d Girder, 4-10d Truss) or equivalent spaced at 20-7-8 oc max. starting at 1-11-4 from the left end to 23-11-4 to connect truss(es) to back face of bottom chord.
- 13) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 3-11-4 from the left end to 20-6-12 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: 1-4=-43, 4-7=-43, 8-15=-20

Concentrated Loads (lb)

Vert: 16=-1170(B) 17=-1170(B) 18=-1170(B) 19=-1170(B) 20=-1273(B) 21=-1273(B) 22=-1273(B) 23=-1273(B) 24=-1273(B) 25=-1273(B) 25=-1273(B) 25=-1273(B) 27=-1273(B) 27=-1273(B)

28=-1170(B)

will Fin





818 Soundside Road Edenton, NC 27932

Job Truss Truss Type Qty Ply CLB-LOT #5 Roof 174047369 25-3407-B T02SGE Common Structural Gable Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:15:08 2025 Page 1 ID:Bxl2MwYau_NHkbraGCmHloyOvst-TkLW7Z3JI5pc4LomrZyl4RSCd0CozmpyYCOnaZz86hH 18-9-14 26-3-8 1-0-0 12-7-12 6-5-10 6-5-10 6-2-2 6-2-2 Scale = 1:56.9 4x5 || 31 30 7.00 12 32 29 4x4 / 4x4 < 3x4 II 3x4 || 6 33 9 3x4 3x4 =3x6 = 18 16 15 14 13 12 11 3x4 =3x4 = 3x5 II 3x4 II 8-6-5 14-0-0 16-9-3 25-3-8 8-6-5 8-6-5 Plate Offsets (X,Y)--[4:0-2-0,0-0-4], [9:0-1-6,0-1-8], [14:0-1-10,0-1-8] LOADING (psf) SPACING-CSI. DEFL. in (loc) I/defl L/d **PLATES** GRIP

LUMBER-

TCLL (roof)

TCDL

BCLL

BCDL

Snow (Pf/Pg)

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

20.0

10.0

10.0

0.0

11.6/15.0

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

Vert(LL)

Vert(CT)

Horz(CT)

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

>999

>528

n/a

240

180

n/a

MT20

Weight: 209 lb

244/190

FT = 20%

except end verticals.

8-9

8-9

8

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

WEBS 1 Row at midpt

-0.13

-0.26

0.01

REACTIONS. All bearings 14-0-0 except (jt=length) 8=0-3-8, 10=0-3-8.

(lb) -Max Horz 18=189(LC 15)

Max Uplift All uplift 100 lb or less at joint(s) 18, 8, 10 except 14=-123(LC 16)

1.15

1.15

YES

All reactions 250 lb or less at joint(s) 11, 13, 15, 16, 17, 10 except 18=327(LC 34), 8=769(LC 29), Max Grav 14=933(LC 28)

TC

BC

WB

Matrix-MS

0.51

0.60

0.49

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 4-5=-664/168, 5-6=-395/122, 2-18=-306/150, 6-8=-392/133 BOT CHORD 13-14=0/254, 11-13=0/254, 10-11=0/254, 9-10=0/254, 8-9=-19/574 WEBS 4-9=-51/615, 5-9=-315/165, 4-14=-633/23, 3-14=-374/174, 5-8=-427/14

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=25ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 12-7-12, Exterior(2R) 12-7-12 to 15-7-12, Interior(1) 15-7-12 to 26-3-8 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 7) All plates are 2x4 MT20 unless otherwise indicated.
- 8) Gable studs spaced at 2-0-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18, 8, 10 except (it=lb) 14=123.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 10,2025

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

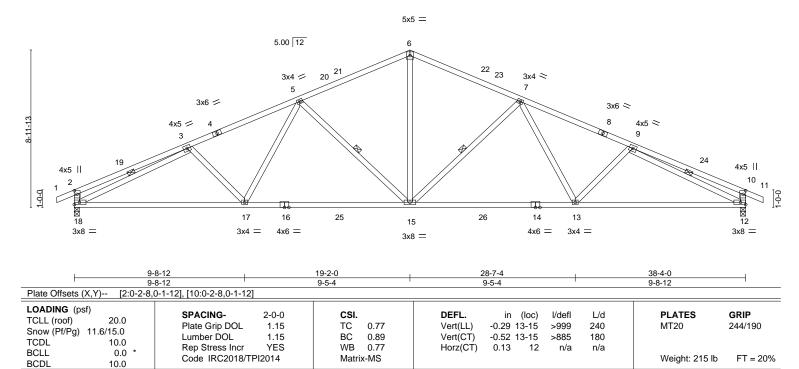
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall

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 CLB-LOT #5 Roof 174047370 25-3407-B T03 6 Common Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:15:09 2025 Page 1 ID:Bxl2MwYau_NHkbraGCmHloyOvst-xwvuKv4x3PxTiVNzPGT_ce_IGQUUi9g6ns8L6?z86hG 12-10-8 19-2-0 31-9-0 38-4-0 6-3-8 6-3-8 6-3-8 6-3-8 6-7-0

Scale = 1:65.8



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) 18=0-3-8, 12=0-3-8 Max Horz 18=160(LC 15)

Max Uplift 18=-128(LC 16), 12=-128(LC 16) Max Grav 18=1744(LC 28), 12=1744(LC 29)

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

TOP CHORD 2-3=-611/102, 3-5=-2859/256, 5-6=-2123/271, 6-7=-2123/271, 7-9=-2859/256,

9-10=-611/102, 2-18=-457/147, 10-12=-457/147

BOT CHORD 17-18=-186/2715, 15-17=-127/2441, 13-15=-111/2383, 12-13=-175/2620 6-15=-66/1294, 7-15=-723/136, 7-13=0/483, 5-15=-722/136, 5-17=0/483, 5-17=0/483**WEBS**

3-18=-2428/187, 9-12=-2428/186

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) -1-0-0 to 2-10-0, Interior(1) 2-10-0 to 19-2-0, Exterior(2R) 19-2-0 to 23-0-0, Interior(1) 23-0-0 to 39-4-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=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) except (jt=lb) 18=128, 12=128,
- 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 3-1-4 oc purlins,

7-15, 5-15, 3-18, 9-12

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

except end verticals.

1 Row at midpt

June 10,2025

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Job Truss Truss Type Qty Ply CLB-LOT #5 Roof 174047371 25-3407-B T03A 5 Common Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:15:09 2025 Page 1 ID:Bxl2MwYau_NHkbraGCmHloyOvst-xwvuKv4x3PxTiVNzPGT_ce_IIQUYi9j6ns8L6?z86hG

25-5-8

31-9-0

6-3-8

Structural wood sheathing directly applied or 3-1-9 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

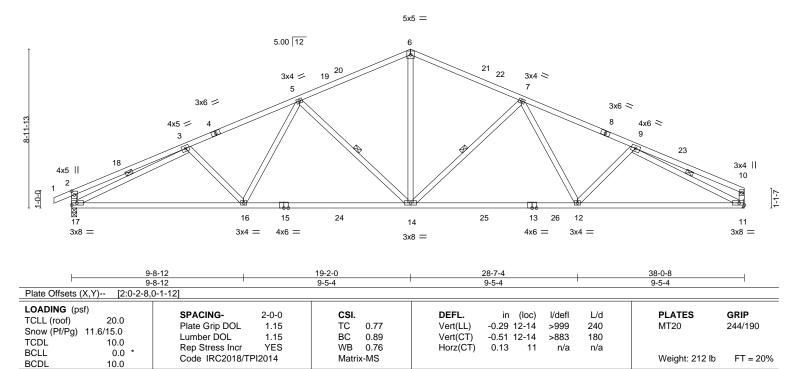
19-2-0

6-3-8

Scale = 1:65.2

38-0-8

6-3-8



BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

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

WFBS 2x4 SP No 3

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

Max Horz 17=161(LC 15)

Max Uplift 17=-128(LC 16), 11=-91(LC 16) Max Grav 17=1732(LC 28), 11=1673(LC 29)

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

2-3=-610/102, 3-5=-2835/254, 5-6=-2097/269, 6-7=-2096/271, 7-9=-2786/259, TOP CHORD

12-10-8

6-3-8

9-10=-408/63, 2-17=-456/146, 10-11=-295/75

BOT CHORD 16-17=-218/2689. 14-16=-159/2412. 12-14=-143/2334. 11-12=-210/2518 **WEBS** 5-16=0/484, 5-14=-723/136, 6-14=-66/1273, 7-14=-688/134, 7-12=0/441,

3-17=-2406/185, 9-11=-2535/222

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) -1-0-0 to 2-9-10, Interior(1) 2-9-10 to 19-2-0, Exterior(2R) 19-2-0 to 22-11-10. Interior(1) 22-11-10 to 37-10-12 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 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=128
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 10,2025

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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174047372 T03AGE 25-3407-B Common Supported Gable Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:15:10 2025 Page 1 ID:Bxl2MwYau_NHkbraGCmHloyOvst-P6TGYF5Zqj3KKfy9y__D9sXeiq1dRIFF?WtueRz86hF 19-2-0 19-2-0 38-0-8

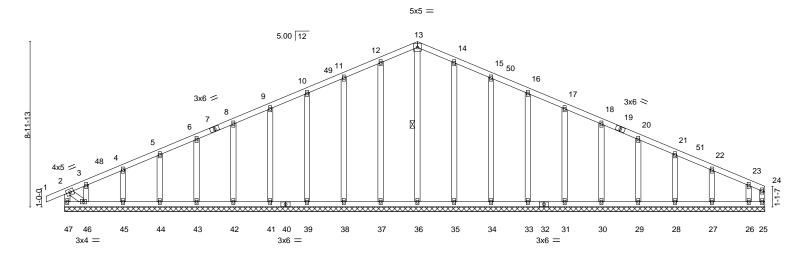
Qty

Ply

CLB-LOT #5 Roof

18-10-8

Scale = 1:62.6



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 0.09 BC 0.06 WB 0.17	DEFL. ir Vert(LL) -0.00 Vert(CT) -0.00 Horz(CT) 0.00	1	l/defl n/r n/r n/a	L/d 120 120 n/a	PLATES MT20	GRIP 244/190
BCLL 0.0 * BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	,				Weight: 250 lb	FT = 20%

38-0-8 38-0-8

WFBS

1 Row at midpt

13-36

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 Rigid ceiling directly applied or 10-0-0 oc bracing, Except: WFBS OTHERS 2x4 SP No.3 6-0-0 oc bracing: 46-47.

REACTIONS. All bearings 38-0-8.

(lb) -Max Horz 47=161(LC 15)

Max Uplift All uplift 100 lb or less at joint(s) 47, 25, 37, 38, 39, 41, 42, 43, 44, 45, 46, 35, 34, 33, 31, 30, 29, 28, 27, 26

Max Grav All reactions 250 lb or less at joint(s) 47, 25, 36, 37, 38, 39, 41, 42, 43, 44, 45, 46, 35, 34, 33, 31, 30, 29, 28, 27, 26

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

TOP CHORD 12-13=-112/277. 13-14=-112/277

NOTES-

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=38ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -1-0-0 to 2-9-10, Exterior(2N) 2-9-10 to 19-2-0, Corner(3R) 19-2-0 to 23-2-0, Exterior(2N) 23-2-0 to 37-10-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=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) 47, 25, 37, 38, 39, 41, 42, 43, 44, 45, 46, 35, 34, 33, 31, 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.



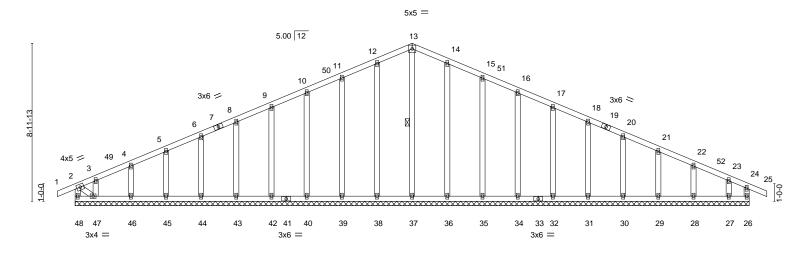
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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Job Truss Truss Type Qty Ply CLB-LOT #5 Roof 174047373 T03GE 25-3407-B Common Supported Gable Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:15:11 2025 Page 1 ID:Bxl2MwYau_NHkbraGCmHloyOvst-tJ1flb5Bb0BBxpXLWhVSi34ocDNwACUPEAdSBuz86hE 39-4-0 1-0-0 19-2-0 19-2-0

Scale = 1:65.5



·		38-4	1-0					
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 0.14 BC 0.06 WB 0.17	- ()	in (loc -0.00 2 -0.01 2 0.00 2	5 n/r 5 n/r	L/d 120 120 n/a	PLATES MT20	GRIP 244/190
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S					Weight: 252 lb	FT = 20%

38-4-0

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 6-0-0 oc bracing. OTHERS 2x4 SP No.3 WFBS 1 Row at midpt 13-37

REACTIONS. All bearings 38-4-0.

(lb) -Max Horz 48=-160(LC 14)

Max Uplift All uplift 100 lb or less at joint(s) 48, 38, 39, 40, 42, 43, 44, 45, 46, 47, 36, 35, 34, 32, 31, 30, 29, 28, 27

All reactions 250 lb or less at joint(s) 48, 26, 37, 38, 39, 40, 42, 43, 44, 45, 46, 47, 36, 35, 34, Max Grav 32, 31, 30, 29, 28, 27

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

TOP CHORD 12-13=-106/276, 13-14=-106/276

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) -1-0-0 to 2-10-0, Exterior(2N) 2-10-0 to 19-2-0, Corner(3R) 19-2-0 to 23-2-0, Exterior(2N) 23-2-0 to 39-4-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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) 48, 38, 39, 40, 42, 43, 44, 45, 46, 47, 36, 35, 34, 32, 31, 30, 29, 28, 27.
- 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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Job Truss Truss Type Qty Ply CLB-LOT #5 Roof 174047374 25-3407-B T04 8 Common Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:15:12 2025 Page 1 ID:Bxl2MwYau_NHkbraGCmHloyOvst-LVb1yw6pMKJ2Zz6X4P0hEHcpLdUivXFYTqM?jKz86hD

24-10-0

5-8-0

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

0.08

11

except end verticals.

6-0-0 oc bracing: 15-17

n/a

n/a

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

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

Weight: 235 lb

ORTH CAROL

036322

FT = 20%

31-5-4

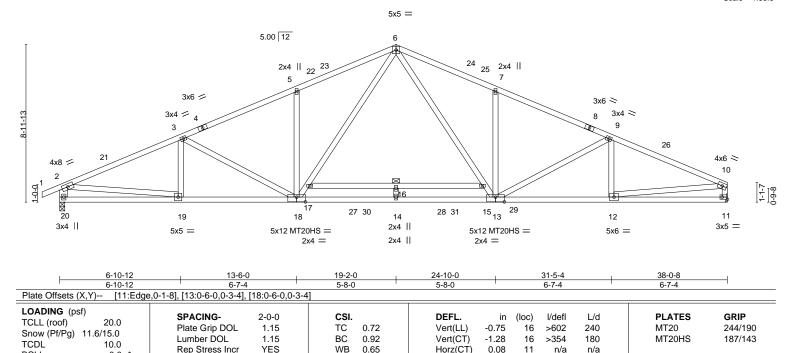
6-7-4

19-2-0

5-8-0

Scale = 1:65.6

38-0-8



0.65

Matrix-MS

LUMBER-

BCLL

BCDL

TOP CHORD 2x4 SP No.2

2x4 SP DSS *Except* **BOT CHORD**

0.0

10.0

15-17: 2x4 SP No.1 **WEBS** 2x4 SP No.3 *Except*

2-20: 2x6 SP No.2, 2-19,10-12: 2x4 SP No.2

REACTIONS. (size) 20=0-3-8, 11=Mechanical

6-10-12

6-10-12

Max Horz 20=162(LC 15)

Max Uplift 20=-69(LC 16), 11=-29(LC 16) Max Grav 20=1939(LC 28), 11=1876(LC 29)

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

Rep Stress Incr

Code IRC2018/TPI2014

YES

TOP CHORD $2\text{-}3\text{-}3302/117, \, 3\text{-}5\text{-}-3121/108, \, 5\text{-}6\text{-}-3120/193, \, 6\text{-}7\text{-}-3101/190, \, 7\text{-}9\text{-}-3104/112, \, 3\text{-}6\text{-}-3120/193, \, 6\text{-}7\text{-}-3101/190, \, 7\text{-}-9\text{-}-3104/112, \, 3\text{-}6\text{-}-3120/193, \, 6\text{-}7\text{-}-3101/190, \, 7\text{-}-9\text{-}-3104/112, \, 3\text{-}6\text{-}-3120/193, \, 6\text{-}-3120/193, \, 6\text{-}-3120/193,$

9-10=-3228/126, 2-20=-1799/166, 10-11=-1741/112

BOT CHORD 19-20=-102/585, 18-19=-84/3077, 14-18=0/2170, 13-14=0/2170, 12-13=-81/2931,

11-12=-37/292

WEBS 3-18=-305/107, 5-18=-396/162, 17-18=-85/1184, 6-17=-28/1324, 6-15=-27/1292,

13-15=-83/1151, 7-13=-390/160, 9-13=-276/112, 2-19=-4/2537, 10-12=-45/2663

- 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) -1-0-0 to 2-9-10, Interior(1) 2-9-10 to 19-2-0, Exterior(2R) 19-2-0 to 22-11-10, Interior(1) 22-11-10 to 37-10-12 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 greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 6) All plates are MT20 plates unless otherwise indicated.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) Refer to girder(s) for truss to truss connections.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 11.
- 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.

June 10.2025



Job Truss Truss Type Qty Ply CLB-LOT #5 Roof 174047375 25-3407-B V01 Valley Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:15:13 2025 Page 1 ID:Bxl2MwYau_NHkbraGCmHloyOvst-ph9PAG7R7eRvB7hke6XwnU96910be6LiiU6YFmz86hC 23-1-8 11-6-12 11-6-12 11-6-12 Scale = 1:44.4 4x4 = 7.00 12 15 14 0-0-4 3x4 > 3x4 / 13 12 11 10 9 8 3x4 =23-1-1 23-1-1 LOADING (psf) TCLL (roof) 20.0

TCDL 10.0 **BCLL** 0.0 BCDL 10.0

SPACING-2-0-0 CSI. Plate Grip DOL 1.15 TC 0.20 Lumber DOL 1.15 вс 0.17 WB Rep Stress Incr YES 0.15 Code IRC2018/TPI2014 Matrix-S

DEFL in I/defl I/d (loc) Vert(LL) n/a n/a 999 Vert(CT) n/a n/a 999 Horz(CT) 0.00 n/a n/a

PLATES GRIP MT20 244/190

> Weight: 97 lb FT = 20%

LUMBER-

Snow (Pf/Pg)

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

BRACING-

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 23-0-10.

11.6/15.0

Max Horz 1=-128(LC 14) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 11, 13, 9, 8

Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=379(LC 27), 11=431(LC 27), 13=363(LC 27), 9=431(LC 28), 8=363(LC 28)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. **WEBS** 3-11=-263/125, 5-9=-263/125

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- $2) \ \ Wind: ASCE \ 7-16; \ Vult=130mph \ (3-second \ gust) \ \ Vasd=103mph; \ TCDL=6.0psf; \ BCDL=6.0psf; \ h=25ft; \ B=45ft; \ L=24ft; \ eave=4ft; \ Cat.$ II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-6-8 to 3-6-12, Interior(1) 3-6-12 to 11-6-12, Exterior(2R) 11-6-12 to 14-6-12, Interior(1) 14-6-12 to 22-7-0 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) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 13, 9, 8.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 10,2025

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 CLB-LOT #5 Roof 174047376 25-3407-B V02 Valley Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:15:13 2025 Page 1 ID:Bxl2MwYau_NHkbraGCmHloyOvst-ph9PAG7R7eRvB7hke6XwnU96610ke7viiU6YFmz86hC 20-3-3 10-1-10 10-1-10 10-1-10 Scale = 1:38.9 4x4 = 7.00 12 15 3 5-10-15 3x4 <> 3x4 // 12 16 11 10 17 9 3x4 =20-3-3 20-2-13 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 0.20 Vert(LL) n/a n/a 999 MT20 244/190 Snow (Pf/Pg) 11.6/15.0 Lumber DOL 1.15 вс 0.17 Vert(CT) n/a n/a 999

LUMBER-

TCDL

BCLL

BCDL

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

BRACING-

Horz(CT)

0.00

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

n/a

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

n/a

REACTIONS. All bearings 20-2-6.

Max Horz 1=112(LC 15) (lb) -

10.0

10.0

0.0

Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 12, 13, 9, 8

Rep Stress Incr

Code IRC2018/TPI2014

All reactions 250 lb or less at joint(s) 1, 7 except 10=370(LC 27), 12=428(LC 27), 13=307(LC 27), 9=428(LC 28), 8=307(LC 28)

YES

WB

Matrix-S

0.11

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

3-12=-268/127, 5-9=-268/127 **WEBS**

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- $2) \ \ Wind: ASCE \ 7-16; \ Vult=130mph \ (3-second \ gust) \ \ Vasd=103mph; \ TCDL=6.0psf; \ BCDL=6.0psf; \ h=25ft; \ B=45ft; \ L=24ft; \ eave=4ft; \ Cat.$ II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 10-1-10, Exterior(2R) 10-1-10 to 13-1-10, Interior(1) 13-1-10 to 19-8-11 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 12, 13, 9, 8.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Weight: 82 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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25-3407-B	V03	Valley	1	1 1 Job	Reference (optional)						
Riverside Roof Truss, LLC,	Danville, Va - 24541,		l .	8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:15:14 2025 Page 1							
		3-8-7	ID:BxI2MwYau	_NHkbraGCmHloy	yOvst-HujnNc84uxZmoGGwBq3	9JiiH9RMKNafrw8	r6nDz86hB				
		3-8- <i>7</i> 3-8-7	+		17-4-15 8-8-7						
			4x4 =				Scale = 1:33.5				
			7A7 —								
5-0-15	7.00 12 2:	2 2	3	12	2x4 4	5					
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3x4 <		9 8	7		6	3x4 ≫					
		2x4    3x4 =	2x4	2)	x4						
0-0-7			17-4-15								
0- <b>0-7</b> 0- <b>0-7</b>			17-4-8								
LOADING (psf)         20.0           TCLL (roof)         20.0           Snow (Pf/Pg)         11.6/15.0           TCDL         10.0           BCLL         0.0           BCDL         10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/1	2-0-0 CSI. 1.15 TC 1.15 BC YES WB PI2014 Matri	0.25 Vert(L 0.14 Vert(C 0.08 Horz(C	L) n/a ` T) n/a	c) I/defl L/d - n/a 999 - n/a 999 5 n/a n/a	PLATES MT20 Weight: 67 lb	<b>GRIP</b> 244/190 FT = 20%				
LUMBER- TOP CHORD 2x4 SP No.	2		BRACING- TOP CHORD	Structural wo	ood sheathing directly applied	or 6-0-0 oc purlin	s.				

**BOT CHORD** 

Qty

Ply

CLB-LOT #5 Roof

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

174047377

REACTIONS. All bearings 17-4-1.

2x4 SP No.2

2x4 SP No.3

Max Horz 1=-95(LC 14) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 9, 6

Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 9=391(LC 33), 6=391(LC 34)

Truss Type

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

**WEBS** 2-9=-291/134, 4-6=-291/134

### NOTES-

**BOT CHORD** 

**OTHERS** 

Job

Truss

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



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/TPII 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 Safety Information available from the Structural Building Component Safety Inf and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



25-3407-B V04 Valley Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:15:15 2025 Page 1 ID:Bxl2MwYau_NHkbraGCmHloyOvst-l4G9by8ifFhdQQq6lXaOsvESgrjz629_9obfKfz86hA 14-6-10 Scale = 1:27.9 4x4 = 3 7.00 12 10 2x4 || 2x4 2 8 6 3x4 / 3x4 > 2x4 || 2x4 || 2x4 || 14-6-10 LOADING (psf) CSI. **PLATES** GRIP SPACING-2-0-0 DEFL. in (loc) I/defl I/d TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.20 Vert(LL) n/a n/a 999 MT20 244/190 Snow (Pf/Pg) 11.6/15.0 Lumber DOL 1.15 вс 0.12 Vert(CT) n/a n/a 999 TCDL 10.0 WB 0.06 Rep Stress Incr YES Horz(CT) 0.00 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-S Weight: 54 lb FT = 20% BCDL 10.0 LUMBER-BRACING-TOP CHORD

BOT CHORD

Qty

Ply

CLB-LOT #5 Roof

174047378

REACTIONS. All bearings 14-5-13.

2x4 SP No.2

2x4 SP No.2

2x4 SP No.3

Max Horz 1=-78(LC 14) (lb) -

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

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=272(LC 2), 8=321(LC 33), 6=321(LC 34)

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

### NOTES-

TOP CHORD

**BOT CHORD** 

**OTHERS** 

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) 0-6-8 to 3-3-5, Interior(1) 3-3-5 to 7-3-5, Exterior(2R) 7-3-5 to 10-3-5, Interior(1) 10-3-5 to 14-0-2 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL= 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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



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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174047379 25-3407-B V05 Valley Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:15:15 2025 Page 1 ID:Bxl2MwYau_NHkbraGCmHloyOvst-l4G9by8ifFhdQQq6lXaOsvEPrrgP61_ 5-10-3 5-10-3 11-8-6 5-10-3 Scale = 1:22.9 4x5 = 2 7.00 12 3x4 // 3x4 ≥ 2x4 || 11-8-6 11-7-15 LOADING (psf) **PLATES** GRIP SPACING-2-0-0 CSI. DEFL. in (loc) I/defl I/d TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.45 Vert(LL) n/a n/a 999 MT20 244/190 Snow (Pf/Pg) 11.6/15.0 Lumber DOL 1.15 вс 0.28 Vert(CT) n/a n/a 999 TCDL 10.0 WB 0.07 Rep Stress Incr YES Horz(CT) 0.00 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-S Weight: 40 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. **OTHERS** 

Qty

Ply

CLB-LOT #5 Roof

REACTIONS.

Job

2x4 SP No.3

(size) 1=11-7-8, 3=11-7-8, 4=11-7-8

Max Horz 1=-62(LC 14)

Truss

Truss Type

Max Uplift 1=-26(LC 16), 3=-26(LC 16)

Max Grav 1=201(LC 2), 3=201(LC 2), 4=447(LC 2)

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

**WEBS** 2-4=-291/106

### 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 5-10-3, Exterior(2R) 5-10-3 to 8-10-3, Interior(1) 8-10-3 to 11-1-14 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL= 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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 CLB-LOT #5 Roof 174047380 25-3407-B V06 Valley Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:15:15 2025 Page 1 ID:Bxl2MwYau_NHkbraGCmHloyOvst-l4G9by8ifFhdQQq6lXaOsvERvriQ62T_9obfKfz86hA 8-10-1 4-5-1 Scale = 1:17.5 4x4 = 2 7.00 12 0-0-4 0-0-4 2x4 | 2x4 < 2x4 / 8-9-10 8-10-1 0-0-7 8-9-10 LOADING (psf) **PLATES** GRIP SPACING-2-0-0 CSI. DEFL. in (loc) I/defl I/d TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.31 Vert(LL) n/a n/a 999 MT20 244/190 Snow (Pf/Pg) 11.6/15.0 Lumber DOL 1.15 вс 0.15 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: 29 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. 2x4 SP No.2 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. 2x4 SP No.3 **OTHERS** 

**BOT CHORD** 

REACTIONS. (size) 1=8-9-3, 3=8-9-3, 4=8-9-3

Max Horz 1=45(LC 15)

Max Uplift 1=-26(LC 16), 3=-26(LC 16)

Max Grav 1=162(LC 2), 3=162(LC 2), 4=296(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 4-5-1, Exterior(2R) 4-5-1 to 7-5-1, Interior(1) 7-5-1 to 8-3-9 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL= 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 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.

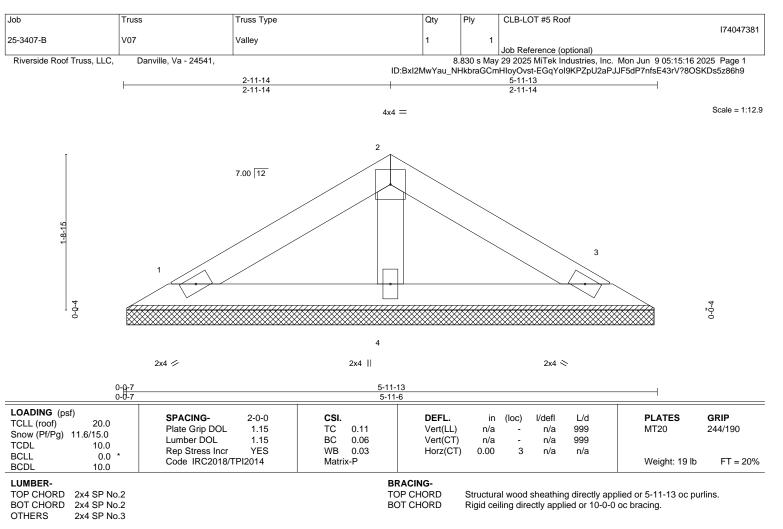


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REACTIONS. (size) 1=5-10-15, 3=5-10-15, 4=5-10-15

Max Horz 1=-29(LC 14)

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

Max Grav 1=102(LC 2), 3=102(LC 2), 4=187(LC 2)

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

### NOTES-

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



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Job Truss Truss Type Qty Ply CLB-LOT #5 Roof 174047382 25-3407-B V08 Valley Job Reference (optional) Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s May 29 2025 MiTek Industries, Inc. Mon Jun 9 05:15:16 2025 Page 1 ID:Bxl2MwYau_NHkbraGCmHloyOvst-EGqYol9KPZpU2aPJJF5dP7ngEE4GrVO8OSKDs5z86h9 1-6-12 1-6-12 1-6-12 Scale = 1:7.3 3x4 =2 7.00 12 3 0-0-4 0-0-4 2x4 / 2x4 < 3-1-1 Plate Offsets (X,Y)-- [2:0-2-0,Edge] LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) I/defI L/d **PLATES GRIP** TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.02 Vert(LL) n/a n/a 999 MT20 244/190 Snow (Pf/Pg) 11.6/15.0 вс Lumber DOL 1.15 0.05 Vert(CT) n/a n/a 999 TCDL 10.0 WB 0.00 Rep Stress Incr YES Horz(CT) 0.00

LUMBER-

**BCLL** 

BCDL

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

BRACING-

Matrix-P

TOP CHORD **BOT CHORD**  Structural wood sheathing directly applied or 3-1-8 oc purlins.

n/a

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

n/a

REACTIONS. (size) 1=3-0-10, 3=3-0-10

0.0

10.0

Max Horz 1=-12(LC 14)

Max Uplift 1=-5(LC 16), 3=-5(LC 16) Max Grav 1=82(LC 2), 3=82(LC 2)

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

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
- 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.



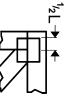
Weight: 8 lb

FT = 20%

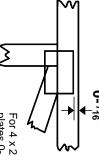


## Symbols

## PLATE LOCATION AND ORIENTATION



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



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

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

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

### PLATE SIZE

4 × 4

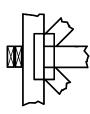
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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.

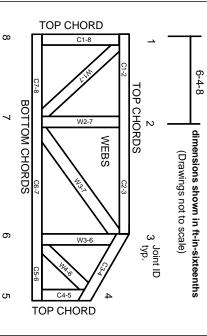
### Industry Standards:

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.

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- 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.