

Trenco 818 Soundside Rd Edenton, NC 27932

Re: 21-6297-A

POSTON PLAN 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: I54035444 thru I54035444

My license renewal date for the state of North Carolina is December 31, 2022.

North Carolina COA: C-0844



September 6,2022

Gilbert, Eric

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

Job Truss Truss Type Qty POSTON PLAN ROOF 154035444 21-6297-A H2D PIGGYBACK BASE Job Reference (optional) 8.530 e Jun 10 2022 MiTek Industries, Inc. Tue Sep 6 15:08:20 2022 Page 1 ID:4mqzx5JtNAwoTDf?zpILBsylfeY-6heoEoiYMoKH4EqVgDyPznyeiDJJ9D7yNrCUmqygJZ9 Riverside Roof Truss, LLC, Danville, VA, 24541 34-7-8 40-10-0 Scale = 1:82.0 16-0-0 REPAIR: MODIFY BOTTOM CHORD PROFILE AS SHOWN. 6x6 =6x6 = 5 42 45 46 43 10.00 12 3x5 // 3x5 💉 40 4x4 \\ 4x4 | 8 5x8 = 4x4 37 47 35 3x6 📏 4x5 📏 3x6 =9 31 48 5x5 ◇ 33 38 4-6-0 10 2 18 1-2-14 24 25 23 22 5x8 3x6 3x6 49 15 14 3x5 = 2017 13 30 29 28 16 12 3x8 =3x4 || 4x5 = 4x10 = 5x5 = 3x5 = 5x8 = 3x4 =SHOP FABRICATE SCAB TRUSS (SHOWN AS SHADED AREA ON TRUSS DESIGN DRAWING) USING THE LUMBER AND PLATES INDICATED.
ATTACH SCAB TRUSS TO ONE FACE OF EXISTING TRUSS WITH (0.131" X 3") NAILS 10-0-0 (INTO ALL ALIGNING MEMBERS) PER THE FOLLOWING NAIL SCHEDULE:

2 x 3's - 1 ROW, 2 x 4's - 2 ROWS, 2 x 6'S AND LARGER - 3 ROWS: SPACED @ 2" O.C. USE 2" MEMBER END DISTANCE.

28-5-0 1-0-0

Plate Offsets (X,Y) [1:Edge,0-2-4], [2:0-2-8,Edge], [5:0-4-4,0-2-0], [7:0-4-4,0-2-0], [10:0-1-8,0-1-12], [12:Edge,0-1-8], [15:0-1-12,0-1-8], [18:0-5-8,0-2-8], [27:0-3-8,0-1-4]									
LOADING (psf) TCLL (roof) 30.0 Snow (Pf/Pg) 23.1/30.0 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 0.83 BC 0.73 WB 0.84	DEFL. in (loc) l/defl L/d Vert(LL) -0.19 28 >999 360 Vert(CT) -0.39 20 >999 240 Horz(CT) 0.24 12 n/a n/a	PLATES GRIP MT20 244/190					
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS		Weight: 411 lb FT = 20%					

BRACING-

TOP CHORD

BOT CHORD

WEBS

JOINTS

LUMBER-

TOP CHORD 2x4 SP No.1 *Except*

5-7: 2x4 SP DSS

BOT CHORD 2x4 SP No.2 *Except*

2x6 SP No.2, 23-27,18-23: 2x4 SP No.1, 2-29: 2x4 SP No.3 2x4 SP No.3 *Except* **WEBS**

1-27: 2x4 SP No.2

OTHERS 2x4 SP No.1

LBR SCAB 4-5 2x4 SP No 1 one side

5-7 2x4 SP DSS one side

REACTIONS. (size)

30=0-5-8, 12=0-5-8

Max Horz 30=-313(LC 12)

Max Uplift 30=-149(LC 16), 12=-198(LC 17) Max Grav 30=2138(LC 39), 12=2220(LC 39)

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

TOP CHORD 1-2=-4406/415, 2-4=-2796/331, 4-5=-2748/406, 5-6=-2560/413, 6-7=-2560/413,

7-8=-2262/435. 8-10=-2547/352. 1-30=-2118/259. 10-12=-2153/358 BOT CHORD 29-30=-274/321, 15-16=-111/1794, 13-15=-103/1834, 26-27=-389/3371, 25-26=-335/2954,

24-25=-197/1943, 22-24=-248/1882, 21-22=-259/2732, 19-21=-259/2732, 18-19=0/1930,

2-27=-100/863

WEBS 4-35=-476/196, 5-36=-67/697, 5-39=-155/882, 6-38=-1163/254, 7-37=-208/1556,

7-31=-392/241, 8-32=-547/226, 10-13=-83/1631, 2-34=-1096/169, 34-35=-1095/169, 35-36=-504/167, 38-39=0/325, 37-38=-40/348, 1-29=-292/294, 1-27=-384/3306, 25-35=-892/196, 19-37=-243/759, 22-39=-176/840, 22-38=-626/268, 25-36=-156/877,

26-35=-24/462, 19-38=-612/266, 17-18=0/259, 18-37=0/658, 16-18=-53/1737,

18-31=-62/264, 16-31=-556/159, 16-32=-552/217

NOTES-

- 1) Attached 7-10-1 scab 4 to 5, front face(s) 2x4 SP No.1 with 1 row(s) of 12d (0.131"x3.25") nails spaced 9" o.c clinched.
- 2) Attached 16-0-0 scab 5 to 7, front face(s) 2x4 SP DSS with 1 row(s) of 12d (0.131"x3.25") nails spaced 9" o.c clinched except : starting at 0-0-0 from end at joint 5, nail 1 row(s) at 7" o.c. for 2-0-0; starting at 7-0-0 from end at joint 5, nail 1 row(s) at 4" o.c. for 2-0-0; starting at 14-0-0 from end at joint 5, nail 1 row(s) at 7" o.c. for 2-0-0.
- 3) Unbalanced roof live loads have been considered for this design
- 4) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(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

Timmin's

Structural wood sheathing directly applied, except end verticals, and [PSA]

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

6-38

2-0-0 oc purlins (5-4-12 max.): 5-7.

1 Brace at Jt(s): 31, 34, 27, 36, 37, 38, 39, 18

10-0-0 oc bracing: 27-29

1 Row at midpt

September 6,2022

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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

Design Valid to its 80 mly with win New Commercials. This design is based only upon parameters shown, and is for an individual orusining 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, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	POSTON PLAN ROOF	
21-6297-A	H2D	PIGGYBACK BASE	2	1		154035444
21-0297-A	l lab	FIGGT BACK BAGE	2	· '	Job Reference (optional)	

Riverside Roof Truss LLC Danville VA 24541

8.530 e Jun 10 2022 MTek Industries, Inc. Tue Sep 6 15:08:20 2022 Page 2 ID:4mqzx5JtNAwoTDf?zpILBsylfeY-6heoEoiYMoKH4EqVgDyPznyeiDJJ9D7yNrCUmqygJZ9

NOTES-

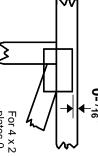
- 5) TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
- 6) Unbalanced snow loads have been considered for this design.
- 7) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 23.1 psf on overhangs non-concurrent with other live loads.
- 8) Provide adequate drainage to prevent water ponding.
- 9) All plates are 1.5x4 MT20 unless otherwise indicated.
- 10) All additional member connections shall be provided by others for forces as indicated.
- 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, with BCDL = 10.0psf.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 149 lb uplift at joint 30 and 198 lb uplift at joint 12.
- 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

* Plate location details available in MiTek 20/20 software or upon request.

PLATE SIZE

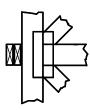
to slots. Second dimension is the length parallel to slots. width measured perpendicular The first dimension is the plate

LATERAL BRACING LOCATION



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

BEARING



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

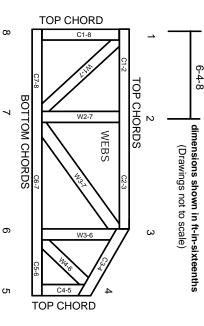
Industry Standards:

National Design Specification for Metal

Building Component Safety Information Installing & Bracing of Metal Plate Connected Wood Trusses. Guide to Good Practice for Handling Design Standard for Bracing. Plate Connected Wood Truss Construction.

DSB-89: ANSI/TPI1:

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-1311, ESR-1352, ESR1988 ER-3907, ESR-2362, ESR-1397, ESR-3282

truss unless otherwise shown. Trusses are designed for wind loads in the plane of the

established by others. section 6.3 These truss designs rely on lumber values Lumber design values are in accordance with ANSI/TPI 1

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MiTek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

General Safety Notes

Damage or Personal Injury Failure to Follow Could Cause Property

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- Ņ Truss bracing must be designed by an engineer. For bracing should be considered. may require bracing, or alternative Tor I wide truss spacing, individual lateral braces themselves
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.

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designer, erection supervisor, property owner and all other interested parties. Provide copies of this truss design to the building

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- Cut members to bear tightly against each other
- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.

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- 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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- 9 Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the camber for dead load deflection. responsibility of truss fabricator. General practice is to
- 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
- 13. 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
- Connections not shown are the responsibility of others
- Do not cut or alter truss member or plate without prior approval of an engineer
- 17. Install and load vertically unless indicated otherwise.
- 18. Use of green or treated lumber may pose unacceptable project engineer before use. environmental, health or performance risks. Consult with
- Review all portions of this design (front, back, words is not sufficient. and pictures) before use. Reviewing pictures alone
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- 21. The design does not take into account any dynamic or other loads other than those expressly stated.