

Trenco 818 Soundside Rd Edenton, NC 27932

Re: 28200-28200A

7 PRINCE PLACE - ROOF

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by 84 Components - #2383.

Pages or sheets covered by this seal: I50950038 thru I50950038

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

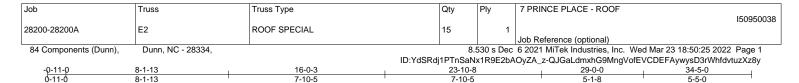
North Carolina COA: C-0844



March 24,2022

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.



7-10-5

16-0-3



5-5-0

5-1-8

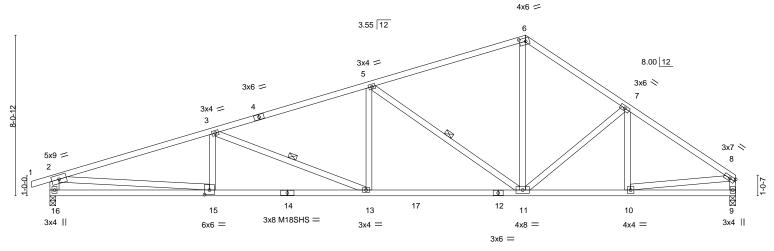
29-0-0

Structural wood sheathing directly applied, except end verticals.

3-13, 5-11

Rigid ceiling directly applied or 9-5-7 oc bracing.

1 Row at midpt



	8-1-13	7-10-5	7-10-5	5-1-8	5-5-0
Plate Offsets (X,Y) [6:0-3-11,0-2-0], [15:0-3-0,0-2-12]					
LOADING (psf)	SPACING- 2-0-0	CSI.	(/	defl L/d	PLATES GRIP
TCLL 20.0 TCDL 10.0	Plate Grip DOL 1.15 Lumber DOL 1.15	TC 0.89 BC 0.84	. ()	999 240 999 180	MT20 197/144 M18SHS 197/144
BCLL 0.0 * BCDL 10.0	Rep Stress Incr YES Code IRC2015/TPI2014	WB 0.91 Matrix-MS	Horz(CT) 0.08 9	n/a n/a	Weight: 194 lb FT = 20%

BRACING-

WEBS

TOP CHORD

BOT CHORD

23-10-8

LUMBER-

REACTIONS.

2x4 SP No.2 or 2x4 SPF No.2 TOP CHORD **BOT CHORD** 2x4 SP No.2 or 2x4 SPF No.2 WEBS 2x4 SP No.3 *Except*

2-16: 2x6 SP No.2 (size) 16=0-3-8, 9=0-3-8

8-1-13

8-1-13

Max Horz 16=200(LC 7) Max Uplift 16=-154(LC 6), 9=-39(LC 10) Max Grav 16=1432(LC 1), 9=1361(LC 1)

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

TOP CHORD $2\text{-}3\text{--}2944/436, 3\text{-}5\text{--}2357/390, 5\text{-}6\text{--}1436/285, 6\text{-}7\text{--}1638/314, 7\text{-}8\text{--}1811/261,}$

2-16=-1350/292, 8-9=-1303/196

BOT CHORD 15-16=-194/565, 13-15=-379/2754, 11-13=-252/2200, 10-11=-131/1438 3-13=-621/137, 5-13=0/488, 5-11=-1111/232, 6-11=-113/892, 7-11=-265/138, **WEBS**

2-15=-225/2200, 8-10=-111/1290

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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
- 3) All plates are MT20 plates unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9 except (jt=lb) 16=154



March 24,2022



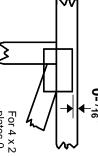
Edenton, NC 27932

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

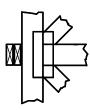
to slots. Second dimension is the length parallel to slots. width measured perpendicular The first dimension is the plate

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

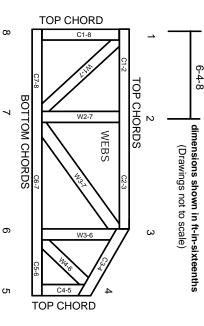
Industry Standards:

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.