



MiTek USA, Inc.
16023 Swingley Ridge Rd
Chesterfield, MO 63017
314-434-1200

Re: 21-6297-A
POSTON PLAN ROOF

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

Pages or sheets covered by this seal: I55021248 thru I55021248

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



November 1, 2022

Lassiter, Frank

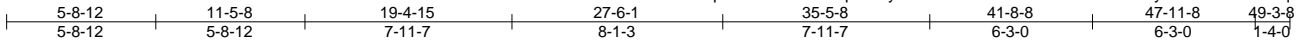
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which 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 21-6297-A	Truss T1	Truss Type Piggyback Base	Qty 3	Ply 1	POSTON PLAN ROOF	155021248
------------------	-------------	------------------------------	----------	----------	------------------	-----------

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

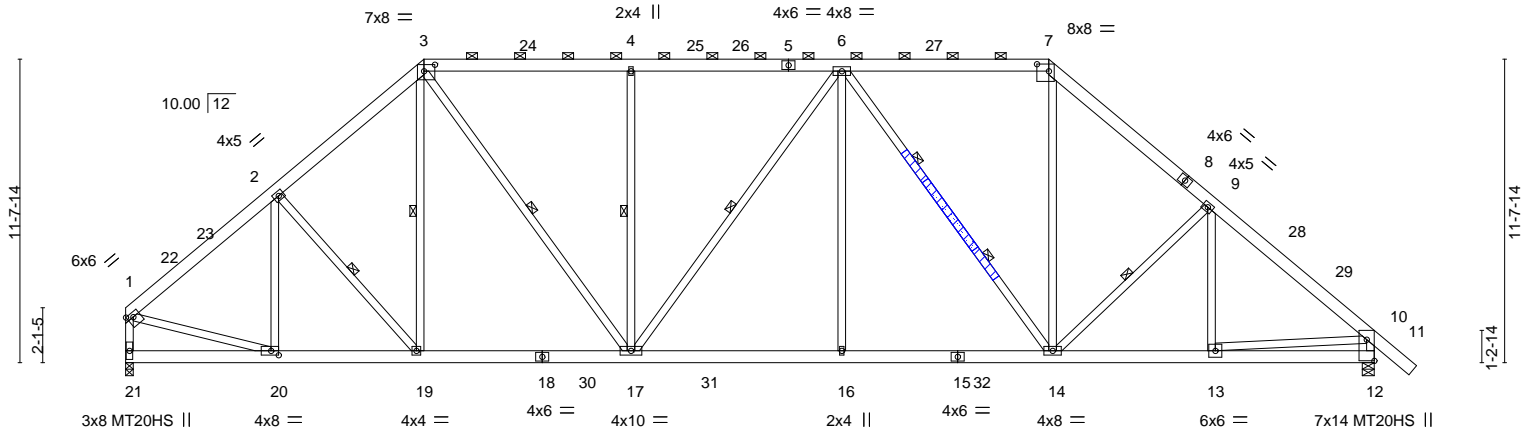
8.530 s Aug 11 2022 MiTek Industries, Inc. Tue Nov 1 07:11:59 2022 Page 1

ID:4mqz5JtNAwoTDF?zplLBSylfeY-MJ5UY4F9woWMWY26BN05yu0errrY0n2YCPqiaZyNeBk



REPAIR: REPLACE 3-3-0 SECTION OF WEB 6-14 STARTING 5-0-0 FROM JOINT 6.

Scale = 1:88.5



APPLY 2 X 4 X 7' SP NO.2 SCAB(S) TO EACH FACE OF TRUSS CENTERED ON REPLACED SECTION. ATTACH WITH (0.131" X 3") NAILS PER THE FOLLOWING NAIL SCHEDULE: 2 X 4'S - 2 ROWS, 2 X 6'S AND LARGER - 3 ROWS: SPACED @ 4" O.C. STAGGER NAIL SPACING FROM FRONT FACE AND BACK FACE FOR A NET 2" O.C SPACING IN THE TRUSS. USE 2" MEMBER END DISTANCE.

INSTALL 2 X 4 SP NO.2 CUT TO FIT TIGHT.



Plate Offsets (X, Y)-- [1:0-2-12,0-2-0], [3:0-5-0,0-3-0], [7:0-5-8,0-3-4], [12:Edge,0-3-8], [20:0-3-8,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc) l/defl L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.17 16-17 >999 360	MT20	244/190
Snow (Pf/Pg)	23.1/30.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.28 16-17 >999 240	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.09 12 n/a n/a		
BCLL	0.0 *	Code IRC2015/TPI2014		Matrix-MS					
BCDL	10.0							Weight: 430 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-1-5 oc purlins, except end verticals, and 2-0-0 oc purlins (2-3-11 max.): 3-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 2-19, 3-19, 3-17, 4-17, 6-17, 9-14
2 Rows at 1/3 pts 6-14

REACTIONS. (size) 21=0-3-8, 12=0-5-8
Max Horz 21=-320(LC 12)
Max Uplift 21=-225(LC 16), 12=-267(LC 17)
Max Grav 21=2381(LC 2), 12=2516(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2576/413, 2-3=-2682/536, 3-4=-2827/570, 4-6=-2827/570, 6-7=-2109/486, 7-9=-2811/548, 9-10=-2976/456, 1-21=-2314/362, 10-12=-2433/435
BOT CHORD 20-21=-266/332, 19-20=-290/1881, 17-19=-249/2019, 16-17=-241/2860, 14-16=-241/2860, 13-14=-178/2162, 12-13=-57/362
WEBS 2-20=-465/139, 2-19=-308/341, 3-19=-61/500, 3-17=-243/1395, 4-17=-930/230, 6-16=0/463, 6-14=-1281/249, 7-14=-170/1245, 9-14=-522/220, 1-20=-219/1882, 10-13=-148/1830

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=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
 - 3) 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
 - 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 23.1 psf on overhangs non-concurrent with other live loads.
 - 6) Provide adequate drainage to prevent water ponding.
 - 7) All plates are MT20 plates unless otherwise indicated.
 - 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 225 lb uplift at joint 21 and 267 lb uplift at joint 12.
 - 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 1, 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 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 ANSITPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

