

Trenco 818 Soundside Rd Edenton, NC 27932

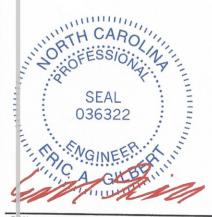
Re: 21-6297-A POSTON PLAN ROOF

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

Pages or sheets covered by this seal: I53767828 thru I53767832

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

North Carolina COA: C-0844



August 23,2022

Gilbert, Eric

IM PORTANT 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 shawn (e.g., loads, supports, dimensions, shapes and design codes), which were git an to MiTek or TRENCO. Any project specific information included is for MiTek's or TF ENCO's customers file reference purpose only, and was not taken into account in the proparation 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 POSTON PLAN ROOF 21-6297-A H2F 5 UNITS 153767828 Piggyback Base JTF. Riverside Roof Truss, LLC Danville, VA. 24541 Job Reference (optional) 8.530 s Jun 10 2022 MiTek Industries, Inc. Mon Aug 22 16:32:35 2022 Page 1 ID:4mqzx5JtNAwoTDf?zpiLBsylfeY-14CKAvh3kusKdfQC2C21JaPJ5RdE3BH80nprl.TyjEkA 6-11-0 23-0-8 26-2-0 3-1-8 5-6-0 5-3-12 5-3-12 13-9-0 REPAIR: MODIFY BOTTOM CHORD PROFILE AS SHOWN 6x6 = 1.5x4 || 3x4 = 5x5 = Scale = 1:68.7 5 10.00 12 4x10 / 3x8 = 24"y60" 6-10-5 11 8 10 5x5 = 18 3x4 = 4x8 = 3x4 == INSTALL 2 X 4 SPF/DF/SP NO.2 9.00 12 CUT TO FIT TIGHT. CUT BOTTOM CHORD JUST BEYOND CONNECTOR PLATES AT ATTACH 7/1( " OSB GUSSET (7/16" RATED SHEATHING 24/16 EXP 1) JOINT 8. THE JOINT MUST REMAIN UNDISTURBED. ATTACH //TU USB GUSSET (//TO RATED SHEATHING 24/TO EXP T)
TO EACH FA XE OF TRUSS WITH (0.131" X 2.5" MIN.) NAILS PER THE FOLLOWING NAIL SCHEDULE:
2 X 3"S - 2 R( WS, 2 X 4"S - 3 ROWS, 2 X 6"S AND LARGER - 4 ROWS: SPACED @ 4" O.C.
NAILS TO BE DRIVEN FROM BOTH FACES. STAGGER SPACING FROM FRONT TO BACK FACE FOR A NET 2 O.C. SPACING IN EACH COVERED TRUSS MEMBER. USE 2" MEMBER END DISTANCE 9-3-8 5-3-12 Plate Offsets (X,Y)-3:0-4-4,0-2-0], [13:0-2-4,0-1-0] LOADING (psf) SPACING-2-0-0 TCLL (roof) CSI. 30 0 DEFL in (loc) I/defl L/d **PLATES** GRIP Plate Grip DOL 1.15 Snow (Pf/Pg) 23.1/30.) TC 0.85 Vert(LL) -0.21 11-12 >999 360 MT20 Lumber DOI 244/190 TCDI 1.15 10.0 BC 0.80 Vert(CT) -0.43 11-12 >718 240 Rep Stress Incr YES BCLL 0 ) WB 0.90 Horz(CT) 0.09 n/a n/a Code IRC2015/TPI2014 BCDL Matrix-MS 10.0 Weight: 216 lb FT = 20%LUMBER. BRACING-2x4 SP Vo.2 \*Except\* TOP CHORD TOP CHORD Structural wood sheathing directly applied or 3-2-10 oc purlins, 1-2: 2x4 SP DSS, 2-3: 2x4 SP No.1 except end verticals, and 2-0-0 oc purlins (4-7-5 max.): 1-2, 3-6. 2x4 SP Vo.2 **BOT CHORD BOT CHORD** Rigid ceiling directly applied or 6-9-8 oc bracing. **WEBS** 2x4 SP Vo.3 \*Except\* WFRS 1 Row at midpt 1-13,6-1,4-9,5-8: 2x4 SP No.2 1-13, 6-7, 3-9, 4-9, 5-8 REACTIONS. (size 13=0-5-8, 7=0-5-8 Max Hc z 13=388(LC 13) Max Ur ift 13=-123(LC 16), 7=-234(LC 13) Max Gr ıv 13=1546(LC 38), 7=1676(LC 38) FORCES. (lb) - Max. ( omp./Max. Ten. - All forces 250 (lb) or less except when shown TOP CHORD 1-13= 1543/414, 1-2=-766/323, 2-3=-1460/230, 3-4=-1004/241, 4-5=-1004/241, 5-6=-4 38/196, 6-7=-1649/308 **BOT CHORD** 12-13: -576/587, 11-12=-700/1576, 9-11=-408/1045, 8-9=-188/510 **WEBS** 1-12= 381/1342, 2-12=-1276/300, 2-11=-686/382, 3-11=-143/645, 3-9=-406/169, 4-9=-7 28/169, 5-9=-280/1016, 5-8=-1423/398, 6-8=-319/1584 NOTES-1) Wind: ASCE 7-10; Vu =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 eactions shown; Lumber DOL=1.60 plate grip DOL=1.60 2) 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 Unbalanced snow loa s have been considered for this design. Provide adequate dra page to prevent water ponding. 5) This truss has been do signed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. 6) \* This truss has been esigned 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 bot om chord and any other members, with BCDL = 10.0psf. 7) Bearing at joint(s) 13, Considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface. 8) Provide mechanical  $\alpha$  nection (by others) of truss to bearing plate capable of withstanding 123 lb uplift at joint 13 and 234 lb uplift at

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9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

POSTON PLAN ROOF Qty Ply Job Truss Truss Type 153767829 21-6297-A Н2Н Piggyback Base Job Reference (optional) 8.530 s Dec 6 2021 MiTek Industries, Inc. Fri Aug 19 14:22:45 2022 Page 1 Riverside Roof Truss, LI C, Danville, Va - 24541, ID:4mqzx5JtNAwoTDf?zpILBsylfeY-akCg2\_3olghwheMvpSRBHXVcy8Hcs0aYmQiuRcymFvu 17-8-12 23-0-8 2-4-8 5.9.8 3-6-0 5-3-12 5-3-12 3-1-8 REPAIR: MODIFY BOTT( M CHORD PROFILE Scale = 1:69.3 6x6 = 3x8 =1.5x4 || 5x5 = SEE MITEK REFERENCE NUMBER 153767828 FOR REPAIR DETAILS 5 6 18 19 10.00 12 6x6 = 6x6 = 1.5×4 || 3x4 || 2 3 DX1 16 14 13 23 11 10 12 21 22 24 6x8 = 6x8 =3x8 = 1.5x4 || 3x4 = 9.00 12 15 4x4 5x5 / 3-1-8 17-8-12 26-2-0 5-3-12 9-3-8 [2:0-3-11,Edge], [4:0-2-5,Edge], [5:0-4-4,0-2-0], [10:0-5-4,0-2-12], [14:0-5-4,0-2-8], [15:0-1-4,0-2-8] Plate Offsets (X,Y)--LOADING (psf) PLATES GRIP SPACING-2-0-0 CSI. DEFI in (loc) I/defl L/d TCLL (roof) 30 0 Plate Grip DOL 1.15 TC 0.84 Vert(LL) -0.22 13-14 >999 360 MT20 244/190 Snow (Pf/Pg) 23.1/30 0 Lumber DOL 1.15 BC 0.96 Vert(CT) -0.44 13-14 >702 240 TCDL 10 0 YES WB 0.75 Horz(CT) 0.14 n/a n/a Rep Stress Incr BCLL 0.0 Weight: 248 lb FT = 20%Code IRC2015/TPI2014 Matrix-MS BCDL **BRACING-**LUMBER-Structural wood sheathing directly applied or 4-5-13 oc purlins, TOP CHORD 2x4 SF No.2 TOP CHORD except end verticals, and 2-0-0 oc purlins (4-2-15 max.): 2-4, 5-8. **BOT CHORD** 2x4 SF No.2 Rigid ceiling directly applied or 2-2-0 oc bracing BOT CHORD **WEBS** 2x4 SF No.3 \*Except\* 8-9, 4-14, 6-10, 7-10, 1-15, 2-15 8-9: 2) 4 SP DSS WEBS 1 Row at midpt REACTIONS. (siz :) 9=0-5-8, 15=0-5-8 Max F orz 15=421(LC 13) Max L plift 9=-235(LC 13), 15=-154(LC 12) Max ( rav 9=1729(LC 40), 15=1618(LC 40) FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown TOP CHORD 1-2= 289/281, 2-3=-755/321, 3-4=-770/324, 4-5=-1545/270, 5-6=-1125/248, 6-7= 511/181, 7-8=-503/181, 8-9=-1700/381, 1-15=-330/293 14-1 = 612/684, 13-14 = 619/1459, 11-13 = 370/1052, 10-11 = 370/1052 **BOT CHORD** 2-14 - 455/1801, 3-14 - 729/153, 4-14 - 1018/230, 4-13 - 685/348, 5-13 - 59/669, **WEBS** 6-13 -165/337, 6-11=0/258, 6-10=-1090/281, 7-10=-535/166, 8-10=-410/1639, 2-15 -1477/153 NOTES-1) Unbalanced roof liv : loads have been considered for this design. 2) 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 3) TCLL: ASCE 7-10; ?r=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 OOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0 4) Unbalanced snow I ads have been considered for this design. 5) Provide adequate c ainage to prevent water ponding. 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 ottom chord and any other members, with BCDL = 10.0psf.
- 8) Bearing at joint(s) 🗓 15 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) Provide mechanica connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=235, 15=154,
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



🛕 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 no valid to ruse not with MiTe-k® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Befo a use, the building designer must verify the applicability of design parameters and property incorporate this design into the overall building design. Bra ing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required fo prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, elivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



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POSTON PLAN ROOF Qty Plv Job Truss Truss Type 153767830 H2.1 Piggyback Base 21-6297-A Job Reference (optional) 8.530 s Dec 6 2021 MiTek Industries, Inc. Fri Aug 19 14:22:46 2022 Page 1 Riverside Roof Truss 11 C Danville, Va - 24541, ID:4mqzx5JtNAwoTDf?zpILBsylfeY-3wl3FK4Q3\_pmJox5MAyQqk1mBYfcbTri?4RSz2ymFvt 6-10-0 10-11-0 12-5-0 17-8-12 23-0-8 26-2-0 3-1-8 4-1-0 1-6-0 5-3-12 5-3-12 REPAIR: MODIFY BOTT OM CHORD PROFILE. Scale = 1:69.1 1.5x4 || 5x5 = 6x6 = 4x4 = SEE MITEK REFERENC: NUMBER 153767828 FOR REPAIR DETAILS. 5x5 = 10.00 12 3x4 = 3v8 / 16 17 11-7-1 3-0-9 2-0-0 14 12 21 11 10 22 23 19 13 20 4x8 = 7x8 = 5x12 = 4x5 = 3x10 = 9.00 12 15 4x4 || 3x4 3-1-8 10-11-0 17-8-12 23-0-8 5-3-12 7-9-8 6-9-12 Plate Offsets (X,Y)-[2:0-3-11,Edge], [5:0-4-0,0-1-12] LOADING (psf) PLATES GRIP DEFI I/d SPACING-2-0-0 CSI. in (loc) I/def TCLL (roof) 3( 0 244/190 MT20 Plate Grip DOL 1.15 TC 0.94 Vert(LL) -0.18 12-14 >999 360 Snow (Pf/Pg) 23.1/30 0 Lumber DOL 1.15 BC 0.78 Vert(CT) -0.32 12-14 >972 240 TCDL 1(.0 YES WB 0.74 Horz(CT) 0.13 n/a n/a Rep Stress Incr (.0 \* BCLL Weight: 254 lb FT = 20%Code IRC2015/TPI2014 Matrix-MS 1(.0 BCDL **BRACING-**LUMBER-TOP CHORD Structural wood sheathing directly applied or 4-0-6 oc purlins, TOP CHORD 2x4 SI No.2 except end verticals, and 2-0-0 oc purlins (4-5-7 max.): 2-4, 5-8. BOT CHORD 2x4 SP No.2 Rigid ceiling directly applied or 7-4-7 oc bracing BOT CHORD 2x4 SI No.3 \*Except\* WEBS 1 Row at midpt 8-9, 3-14, 4-12, 5-11, 6-11, 7-10, 1-15 8-9: 2: 4 SP DSS WEBS (siz e) 9=0-5-8, 15=0-5-8 REACTIONS. Max F orz 15=421(LC 13) Max ( plift 9=-235(LC 13), 15=-144(LC 16) Max ( rav 9=1786(LC 40), 15=1561(LC 40) FORCES. (lb) - Max Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-2= 734/357, 2-3=-574/300, 3-4=-1373/253, 4-5=-1776/362, 5-6=-1103/215, 6-7= 1103/215, 7-8=-521/182, 8-9=-1757/384, 1-15=-1543/438 BOT CHORD 14-1 5=-599/620, 12-14=-570/1096, 11-12=-461/1201, 10-11=-236/546 2-14 = 163/277, 3-14=-1262/235, 3-12=-93/642, 4-12=-1339/288, 5-11=-270/182, WFRS 6-11 =-710/169, 7-11=-278/1148, 7-10=-1542/408, 8-10=-413/1698, 1-14=-190/1209, 5-12 =-304/1022 NOTES-1) Unbalanced roof liv : loads have been considered for this design. 2) Wind: ASCE 7-10; /ult=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 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 bads have been considered for this design. 5) Provide adequate ( rainage to prevent water ponding.

- 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 be n 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 pottom chord and any other members, with BCDL = 10.0psf.
- 8) Bearing at joint(s) 1, 15 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) Provide mechanica connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=235, 15=144,
- 10) Graphical purlin r presentation does not depict the size or the orientation of the purlin along the top and/or bottom chord.





ameters 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 and properly incorporate this design into the overall building design. Br ing 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 available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road Edenton, NC 27932

Qty Ply POSTON PLAN ROOF Job Truss Type 153767831 Piggyback Base 21-6297-A T1A Job Reference (optional) 8.530 s Dec 6 2021 MiTek Industries, Inc. Fri Aug 19 14:22:48 2022 Page 1 Riverside Roof Truss, LI C Danville Va - 24541 ID:4mqzx5JtNAwoTDf?zpILBsylfeY-?ltpg05gbb3UY54UUa\_uv976YMKk3Kt?SOwZ2xymFvr 24-11-11 31-2-8 34-4-0 18-8-13 7-9-12 3-1-8 6-2-13 6-2-13 6-2-13 4-8-4 Scale = 1:71.1 REPAIR: MODIFY BOTT( M CHORD PROFILE 3x6 =1.5x4 || 7x8 =6x6 = 3x4 = 3x4 = SEE MITEK REFERENCE NUMBER 153767828 FOR REPAIR DETAILS. 212223 ≥20 10.00 12 3x4 / 4x8 3 9-7-14 1.5x4 || 3x10 // 2-0-0 12 15 1-2-14 16 14 26 13 27 28 25 24 6x12 = 3x8 = 8x12 = 3x5 == 3x4 = 11 9.00 12 4x4 17 31-2-8 21-10-4 12-6-0 9-4-4 9-4-8 3-1-8 [3:0-1-0,0-1-12], [5:0-4-4,0-2-0], [10:Edge,0-2-4], [12:0-5-12,0-2-4] Plate Offsets (X,Y)-LOADING (psf) GRIP L/d PLATES 2-0-0 CSI. DEFL. in (loc) I/defl SPACING-TCLL (roof) 3(.0 Vert(LL) -0.28 12-13 >999 360 MT20 244/190 TC 0.94 Plate Grip DOL 1.15 23.1/3( 0 Snow (Pf/Pg) Vert(CT) -0.53 15-16 >764 240 0.86 BC Lumber DOL 1.15 TCDL 10.0 Horz(CT) 0.33 n/a n/a Rep Stress Incr YES WB 0.90 11 **BCLL** 0.0 Weight: 258 lb FT = 20% Code IRC2015/TPI2014 Matrix-MS BCDI LUMBER-**BRACING-**TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, TOP CHORD 2x4 S No.2 \*Except except end verticals, and 2-0-0 oc purlins (3-4-13 max.): 5-10. 5-8,8- 0: 2x4 SP No.1 Rigid ceiling directly applied or 6-10-9 oc bracing. **BOT CHORD** 2x4 S No.1 BOT CHORD 3-16, 6-15, 6-13, 9-12 1 Row at midpt **WEBS** WEBS 2x4 S No.3 \*Except\* 10-11, 7-12 2 Rows at 1/3 pts 10-11 2x4 SP DSS, 1-16: 2x4 SP No.2 REACTIONS. (size) 11=0-5-8, 17=0-5-8 Max Florz 17=434(LC 13) Max Uplift 11=-286(LC 13), 17=-183(LC 16) Max Grav 11=2197(LC 34), 17=1708(LC 35) FORCES. (lb) - Max Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 1-2- 4097/1311, 2-3-4160/1471, 3-5-2135/422, 5-6-1584/371, 6-7-1740/348, TOP CHORD 7-9: -672/217, 9-10=-662/216, 10-11=-2180/403, 1-17=-1713/577 16-17=-759/773, 15-16=-816/1897, 13-15=-531/1871, 12-13=-418/1542 **BOT CHORD** 2-1( =-381/210, 3-16=-1099/2167, 3-15=-860/389, 5-15=-135/965, 6-15=-510/247, **WEBS** 6-1; =-416/243, 7-13=-116/728, 7-12=-1570/336, 9-12=-645/183, 10-12=-437/2178, 1-1( =-952/3172 NOTES-1) Wind: ASCE 7-10; /ult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone an I 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 JORT 2) 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 3) Unbalanced snow pads have been considered for this design. 4) Provide adequate rainage to prevent water ponding. 5) This truss has bee designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. 6) \* This truss has be an 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 pottom chord and any other members, with BCDL = 10.0psf. SEAL 7) Bearing at joint(s) 1, 17 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify 036322 capacity of bearing surface. 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=286, 17=183.

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

9) Graphical purlin re resentation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component
available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



August 23,2022

A. GIL Minner Comment

Edenton, NC 27932

POSTON PLAN ROOF Qty Ply Truss Type Joh Truss 153767832 5 21-6297-A T1R Piggyback Base Job Reference (optional) 8.530 s Dec 6 2021 MiTek Industries, Inc. Fri Aug 19 14:22:51 2022 Page 1 Danville, Va - 24541, Riverside Roof Truss, L. C. ID:4mqzx5JtNAwoTDf?zpILBsylfeY-PtZyJ18ZtWS3PZp29jYbXoleQZM\_GjXR8M9DfGymFvo 34-4-0 24-11-5 31-2-8 18-8-3 4-3-12 6-3-3 3-1-8 6-3-3 REPAIR: MODIFY BOTTOM CHORD PROFILE. Scale = 1:69.5 5x5 = 3x6 = 1.5x4 || 3x4 =SEE MITEK REFERENCI NUMBER 153767828 FOR REPAIR DETAILS. 22 23 24 3x4 / 3x5 // 10.00 12 4 3 4x8 16 15 1-2-14 27 14 25 13 26 4x12 = 7x8 = 4x8 = 3x5 =3x4 = 18 11 9.00 12 6x6 3 (4 = 4x4 || 31-2-8 34-4-0 12-5-0 21-9-12 9-4-12 [5:0-4-4,0-2-0], [12:0-5-4,Edge] Plate Offsets (X,Y)--LOADING (psf) **PLATES** GRIP I/d CSI. DEFL. in (loc) I/defl SPACING-2-0-0 TCLL (roof) 244/190 MT20 Vert(LL) -0.23 12-13 >000 360 Plate Grip DOL 1.15 TC 0.84 Snow (Pf/Pg) 23.1/3(.0 BC 0.83 Vert(CT) -0.41 12-13 >755 240 1 15 Lumber DOL 10.0 TCDI 0.72 Horz(CT) 0.08 11 WB Rep Stress Incr YES BCLL 0.0 Weight: 281 lb FT = 20%Code IRC2015/TPI2014 Matrix-MS BCDI 10.0 BRACING-LUMBER-Structural wood sheathing directly applied or 6-0-0 oc purlins, 2x4 S 3 No.2 \*Except\* TOP CHORD TOP CHORD except end verticals, and 2-0-0 oc purlins (4-11-12 max.): 5-10. 5-8: 2 (4 SP No.1 Rigid ceiling directly applied or 3-11-15 oc bracing. Except: BOT CHORD 2x4 S 2 No.2 \*Except\* **BOT CHORD** 3-17: 2x4 SP No.3, 12-14: 2x4 SP No.1 1 Row at midpt 3-16 10-11, 5-15, 6-15, 7-12, 9-12, 1-17, 1-16 WEBS 1 Row at midpt 2x4 S P No.3 \*Except\* WEBS 10-11 2x4 SP DSS (si e) 11=0-5-8, 18=0-5-8, 17=0-5-8 REACTIONS. Max lorz 18=430(LC 15) Max Jplift 11=-205(LC 13), 18=-17(LC 12), 17=-317(LC 13) Max Grav 11=1767(LC 34), 18=522(LC 41), 17=1756(LC 34) FORCES. (Ib) - Max: Comp./Max. Ten. - All forces 250 (Ib) or less except when shown.

TOP CHORD 1-2: -564/103, 2-3=-262/259, 3-5=-775/213, 5-6=-571/208, 6-7=-1186/260, 7-9: -539/195, 9-10=-529/194, 10-11=-1750/274, 1-18=-437/83 17- 8=-535/632, 16-17=-1666/496, 3-16=-1585/361, 13-15=-316/1169, 12-13=-289/1130 BOT CHORD 2-1( =-426/199, 3-15=-113/1141, 6-15=-1054/169, 7-13=0/294, 7-12=-1058/177, WEBS 9-1; =-647/182, 10-12=-301/1728, 1-17=-587/551, 1-16=-378/393 NOTES-1) 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 an I C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS 1 or reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 2) 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 Unbalanced snow pads have been considered for this design. 4) Provide adequate rainage to prevent water ponding. 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf. SEAL 7) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify 036322 capacity of bearing surface. Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18 except (jt=lb) 11=205, 17=317.



MARNING - Vertil design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE

Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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 for use 3-rily with mixture connectors. This design is based only upon parameters shown, and its for an individual building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bit in ing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required first stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, Jelivery, erection and bracing of trusses and truss systems, see

ANSI/TPH Quality Criteria, DSB-89 and BCSI Building Component available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



August 23,2022

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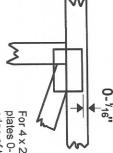
Edenton, NC 27932

#### Symbols

## PLATE LOCATION AND ORIENTATION



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



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

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On

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

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

#### PLATE SIZE

4 × 4

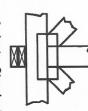
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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 where bearings occur. Min size shown is for crushing only

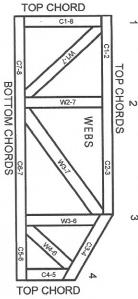
ANSI/TPI1: National Design Specification for Metal

DSB-89: BCSI:

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

## **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

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

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

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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.
- 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 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.
- Connections not shown are the responsibility of others.
- Do not cut or after 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.
- 19. Review all portions of this design (front, back, words and nictures) 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.