

Job	Truss	Truss Type	Qty	Ply	GMC/Lot 3 River Rd./Wake	171429234
J0824-4560	A5X	PIGGYBACK BASE	0	1		

Comtech, Inc., Fayetteville, NC 28309  
 ID:2kdYnTEIU94BYTjz8Ph1erzfJQd-9iCVUAhDb4zpYu0hAzLzqwuyArjrCJXqjyWzIDD1  
 8.630 s Jul 12 2024 Mitek Industries, Inc. Fri Feb 14 12:55:56 2025 Page 1

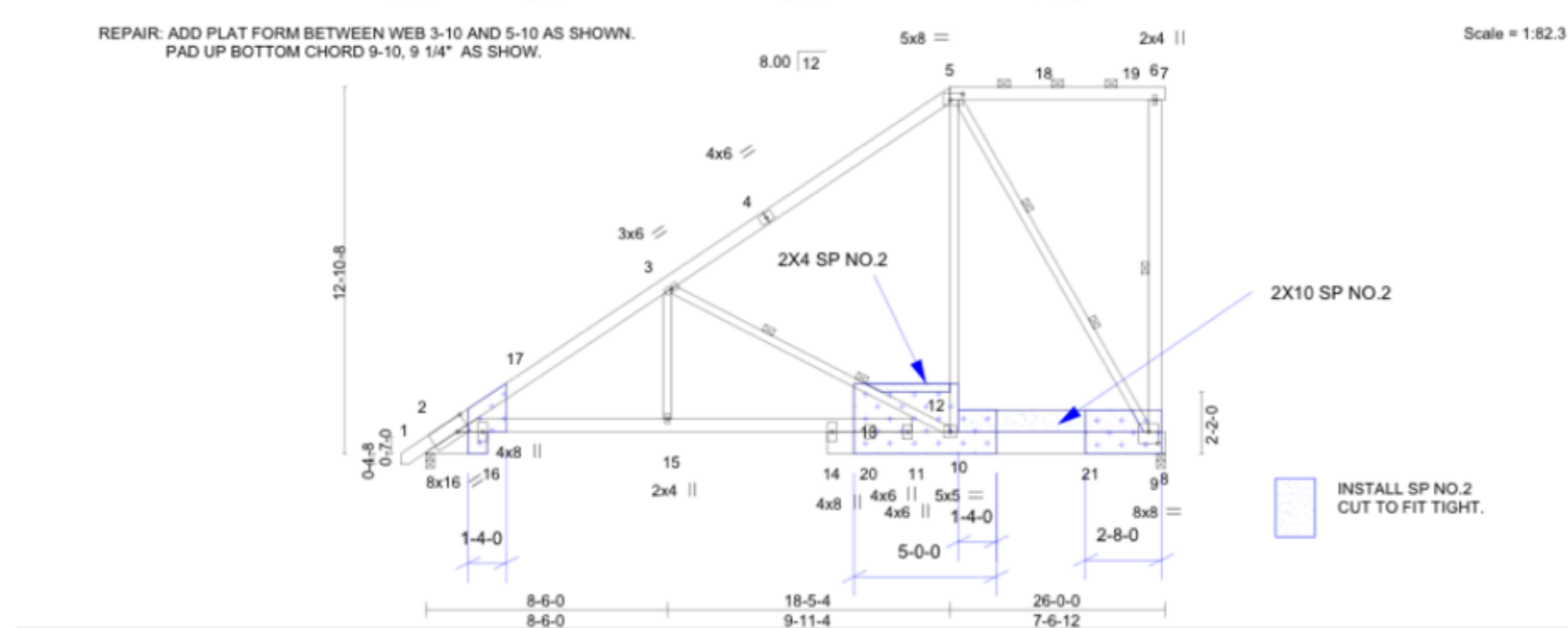


Plate Offsets (X,Y)-- [2-0-5-0,Edge], [5-0-5-4,0-2-12], [9-0-4-0,0-4-12]

LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.45	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.86	Vert(LL) -0.28 13 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.94	Vert(CT) -0.48 13 >640 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.07 9 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.13 13 >999 240	Weight: 257 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-1-14 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-7.
BOT CHORD 2x10 SP No.1 *Except*	BOT CHORD Rigid ceiling directly applied or 9-10-4 oc bracing.
WEBS 2-11: 2x6 SP No.1, 12-13: 2x4 SP No.2	WEBS 1 Row at midpt 6-9, 3-13
2x4 SP No.2 *Except*	2 Rows at 1/3 pts 5-9
6-9: 2x6 SP No.1	JOINTS 1 Brace at Jt(s): 13

**REACTIONS.** (lb/size) 9=1246/0-3-8, 2=1175/0-3-8  
 Max Horz 2=414(LC 12)  
 Max Uplift 9=-119(LC 12), 2=-10(LC 12)  
 Max Grav 9=1486(LC 19), 2=1262(LC 19)

ATTACH 1/2" PLYWOOD OR OSB GUSSET (15/32" RATED SHEATHING 32/16 EXP 1) TO EACH FACE OF TRUSS WITH (0.131" X 2.5" MIN.) NAILS PER THE FOLLOWING NAIL SCHEDULE:  
 2 X 3'S - 2 ROWS, 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.

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-17=-2093/179, 3-17=-2018/213, 3-4=-1022/53, 4-5=-868/96  
 BOT CHORD 2-16=-555/1765, 15-16=-552/1802, 14-15=-552/1802, 14-20=-551/1791, 11-20=-558/1764, 10-11=-552/1802, 10-21=-187/758, 9-21=-187/758  
 WEBS 3-15=0/571, 3-13=-1208/417, 10-13=-1344/417, 10-12=-56/1116, 5-12=-72/1338, 5-9=-1478/361

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-15 to 3-7-14, Interior(1) 3-7-14 to 18-5-4, Exterior(2) 18-5-4 to 24-7-15, Interior(1) 24-7-15 to 26-0-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Provide adequate drainage to prevent water ponding.
  - 3) N/A
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf 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 119 lb uplift at joint 9 and 10 lb uplift at joint 2.
  - 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 8) 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 + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-5=-60, 5-6=-60, 6-7=-60, 2-8=-20, 12-13=-95



**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)

**TRENCO**  
 ENGINEERING BY  
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