ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J0424-2142
Red Door\109-23-150 Strickland

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville.

Pages or sheets covered by this seal: I67868859 thru I67868859

My license renewal date for the state of North Carolina is December 31, 2024.

North Carolina COA: C-0844

August 29,2024

Gilbert, Eric

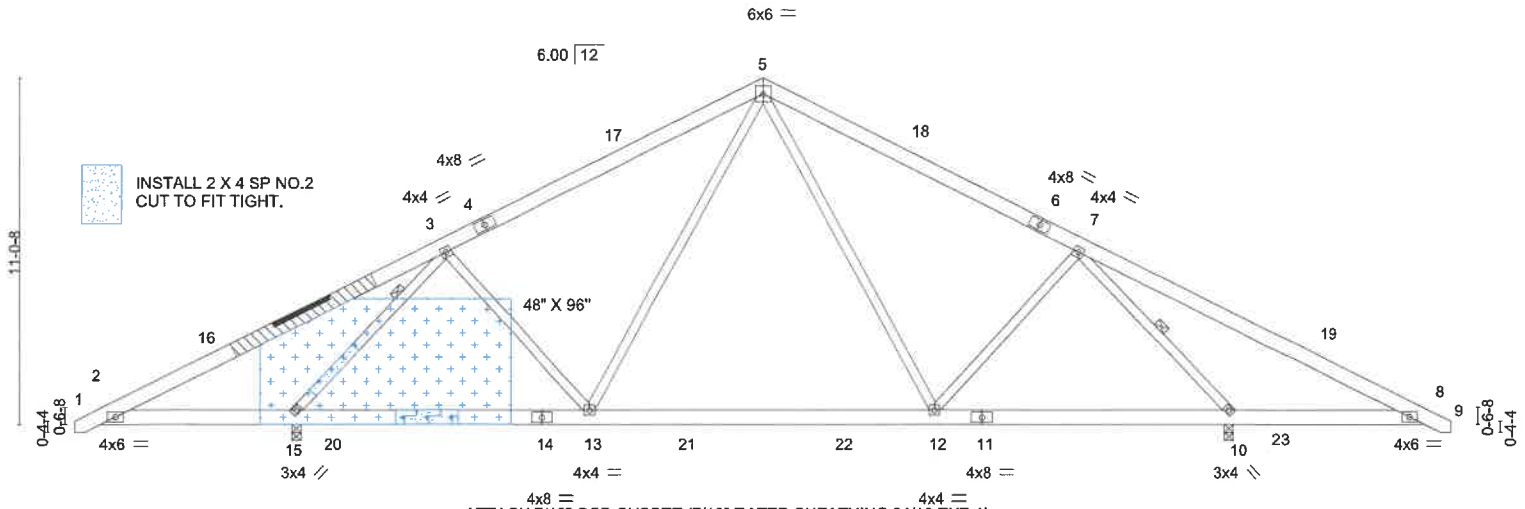
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which 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	Ply	Red Door\109-23-150 Strickland	I67868859
J0424-2142	A4X	COMMON	0	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Aug 28 12:44:04 2024 Page 1
ID:NpSit5YZ_4qsCWpC5omWUAyBIV_-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

-0-10-8 10-11-2 21-0-0 31-0-14 42-0-0 42-10-8
0-10-8 10-11-2 10-0-14 10-0-14 10-11-2 0-10-8

Scale = 1:73.5



INSTALL 2 X 6 SP NO.1
CUT TO FIT TIGHT.

ATTACH 7/16" OSB GUSSET (7/16" RATED SHEATHING 24/16 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.

6-0-0 6-1-12 8-10-15 15-0-0 15-6-0 26-6-0 27-0-0 33-1-1 35-10-4 36-0-0 42-0-0
6-0-0 0-1-12 2-9-3 6-1-1 0-6-0 11-0-0 0-6-0 6-1-1 2-9-3 0-1-12 6-0-0

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	-0.12	12-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.32	12-13	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.59	Horz(CT)	0.03	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.04	12-13	>999	240	Weight: 324 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-10-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 7-10, 3-15

REACTIONS. (size) 15=0-3-8, 10=0-3-8
Max Horz 15=141(LC 11)
Max Uplift 15=-32(LC 12), 10=-32(LC 13)
Max Grav 15=2045(LC 2), 10=2045(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-590/856, 3-5=-1515/60, 5-7=-1515/60, 7-8=-590/856
BOT CHORD 2-15=-619/642, 13-15=-9/1167, 12-13=0/1091, 10-12=0/1061, 8-10=-619/642
WEBS 5-12=0/523, 7-12=0/386, 5-13=0/523, 3-13=0/386, 7-10=-2277/604, 3-15=-2277/604

NOTES-
1) Repair Condition: 2-0-0 wide x 0-1-8 deep notch with a thickness of 0-0-12. Notch is 0-2-12 from the bottom edge to the center of the notch and is centered at 6-5-7 below joint 4 on the top face.
2) Repair Condition: bottom chord has damaged section 2-0-0 long starting 2-8-0 to the left of joint 14.
3) Repair Condition: web has damaged section 2-0-0 long starting 0-10-12 above joint 15.
4) Apply 60" long 2x6 SP No.1 scab to front side(s) of truss centered on damage located 6-5-7 below joint 4 with 3 row(s) of 10d (0.131"x3") nails spaced 2" o.c. from front face. Minimum 0-3-0 end distance.
5) N/A
6) N/A
7) N/A
8) Unbalanced roof live loads have been considered for this design.
9) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 21-0-0, Exterior(2) 21-0-0 to 25-4-13, Interior(1) 25-4-13 to 42-8-10 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
10) 200.0lb AC unit load placed on the bottom chord, 21-0-0 from left end, supported at two points, 5-0-0 apart.
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 with a clearance greater than 3-6-0 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 100 lb uplift at joint(s) 15, 10.

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