

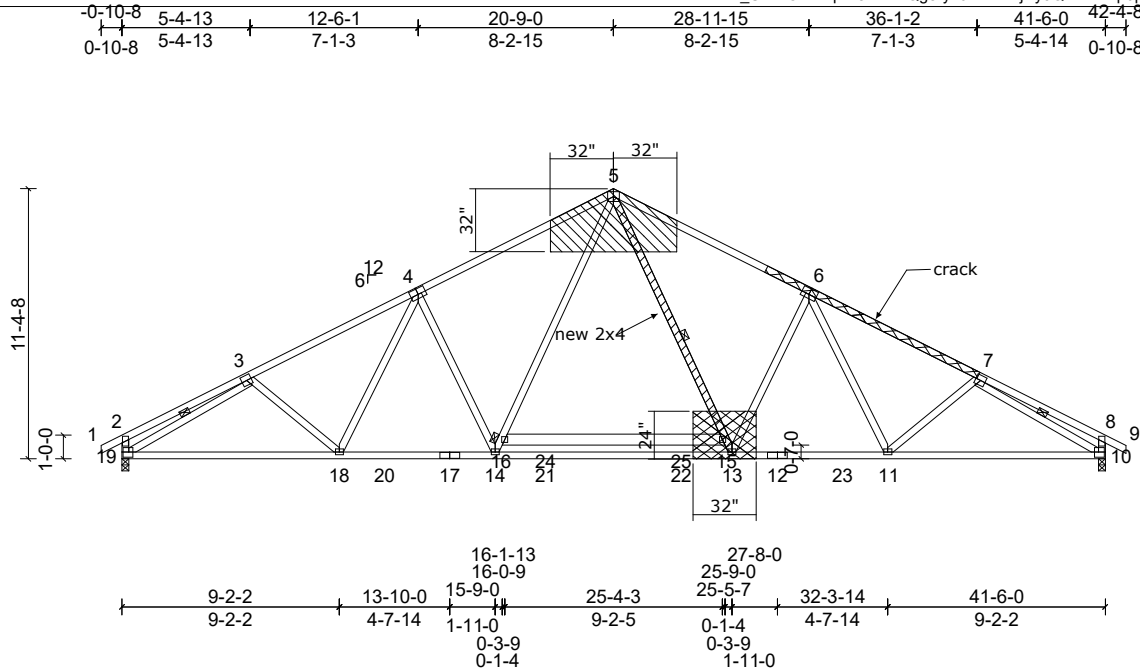
Job 72430118REP1	Truss A1	Truss Type Truss	Qty 4	Ply 1	PBS\SMITHFIELD FC RH ROOF Job Reference (optional)
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, clm

Run: 8.73 S Jul 24 2024 Print: 8.810 S Sep 13 2024 MiTek Industries, Inc. Wed Jan 15 16:43:10

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Repair to replace web 5-13 as shown.

Repair for a crack in the top chord where indicated.

Cut and fit tight a new 2x4 SP or SPF No.2 as shown. attach 1/2" Plywood or 7/16" OSB (APA Rated Sheathing Exposure 1) gusset to both sides of truss as shown with two rows of 10d (.131" x 3") nails

Attach 2x4 x 10' SP or SPF No.2 scab to each face of truss centered on crack with 2 rows of 10d (.131" x 3") nails spaced 4" oc

Plate Offsets (X, Y): [3:0-0,0-0-0], [4:0-4-0,0-3-0], [6:0-4-0,0-3-0], [10:0-2-0,0-2-12], [19:0-2-0,0-2-12]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	-0.37	13-14	>999	240	MT18HS	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(CT)	-0.72	13-14	>686	180	MT20	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	Horz(CT)	0.14	10	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH						Weight: 269 lb	FT = 20%

LUMBER	BRACING
TOP CHORD 2x4 SP SS "Except" T1:2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 2x4 SP No.1 "Except" B2:2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 3-19, 7-10
REACTIONS	
(lb/size)	10=1805/0-3-8, (min. 0-2-3), 19=1805/0-3-8, (min. 0-2-3)
Max Horiz	19=-167 (LC 8)
Max Uplift	10=-188 (LC 11), 19=-188 (LC 10)
Max Grav	10=1842 (LC 2), 19=1842 (LC 2)
FORCES	
(lb) - Max Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-19=-391/193, 8-10=-391/193, 2-3=-449/137, 3-4=-288/1623, 4-5=-2613/651, 5-6=-2613/651, 6-7=-288/1623, 7-8=-449/137
BOT CHORD	18-19=-434/2488, 18-20=-280/2452, 17-20=-280/2452, 14-17=-280/2452, 14-21=-52/1942, 21-22=-52/1942, 13-22=-280/2452, 11-23=-280/2452, 10-11=-434/2480
WEBS	5-15=-172/1046, 13-15=-228/834, 14-16=-228/834, 5-16=-172/1046, 4-14=-601/348, 3-19=-2562/523, 7-10=-2561/523, 6-11=-36/254, 6-13=-601/348

- NOTES (8)**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior 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
 - All plates are MT20 plates unless otherwise indicated.
 - 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 188 lb uplift at joint 19 and 188 lb uplift at joint 10.
 - 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.
 - This repair has been prepared based on information and use conditions supplied by client. Designer has made a good faith effort to outline damage and repair conditions as reported by client. When actual field conditions do not approximate those indicated on this drawing, client shall immediately inform the engineer and refrain from applying the repair.



This design is based upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of the Building Designer. Building Designer shall verify all design information on this sheet for conformance with conditions and requirements of the specific building and governing codes and ordinances. Building Designer accepts responsibility for the correctness or accuracy of the design information as it may relate to a specific building. Certification is valid only when truss is fabricated by a UFP plant. Bracing shown is for lateral support of truss members only and does not replace erection and permanent bracing. Refer to Building Component Safety Information (BCSI) for general guidance regarding storage, erection and bracing available from SBCA and Truss Plate Institute.

