

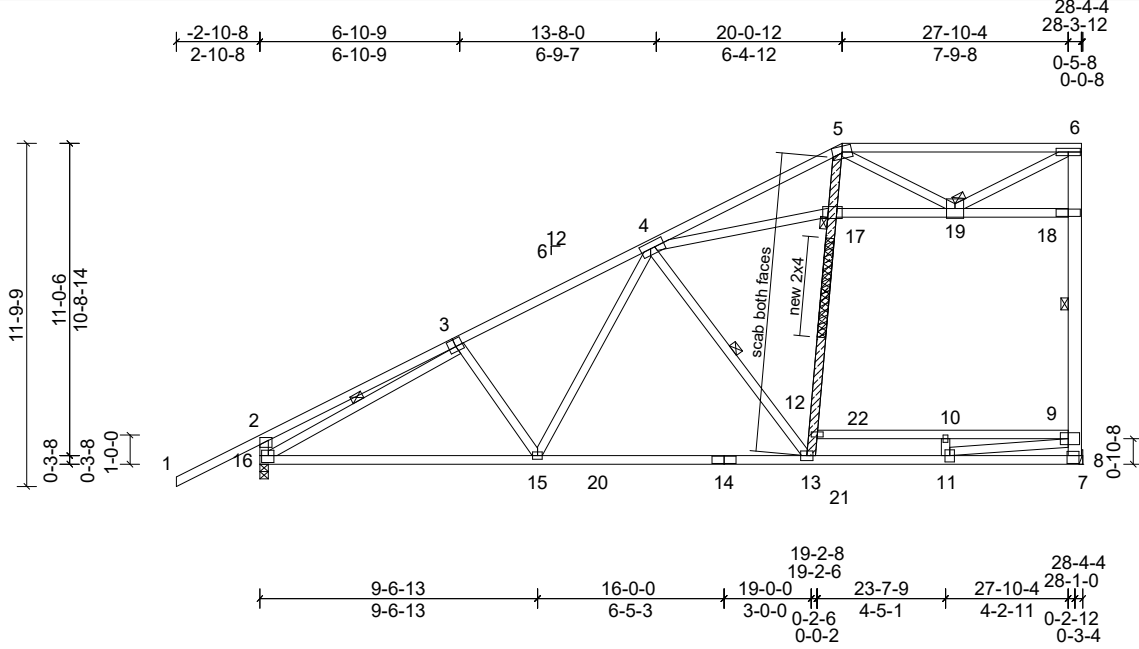
| | | | | | |
|---------------------|--------------|---------------------|----------|----------|--|
| Job 72341284REP2 | Truss A1F | Truss Type Truss | Qty 3 | Ply 1 | PROFESSIONALRALEIGH FARMHOUSE ROOF Job Reference (optional) |
|---------------------|--------------|---------------------|----------|----------|--|

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, clm

Run: 8.62 S Sep 22 2022 Print: 8.620 S Sep 22 2022 MiTek Industries, Inc. Fri Feb 09 12:42:58

Page: 1

ID:ObpBf0lcd4hHCFtn?0U8mkYg1hT-tgxLFRjDkDR6ITcR2Wl9MxLb6Qr_eJ2Wle1CjzmzmtIT



Repair for a section of web missing starting +/- 6" below joint 17.

Cut and fit tight a new 2x4 x 41" SP or SPF No.2, and attach 2x4 SP or SPF No.2 scabs to each face of truss as shown with 2 rows of 10d (.131" x 3") nails spaced 4" oc

Plate Offsets (X, Y): [3:0-3:0,0-3:0], [8:0-3:4,0-0-8], [9:0-4-12,0-2-8], [16:0-2-12,0-2-4]

| Loading | (psf) | Spacing | 2-4-0 | CSI | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|-------------|-------|-----------------|-----------------|------------|----------|-------|-------|--------|-----|----------------|----------|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | Vert(LL) | -0.38 | 13-15 | >873 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | Vert(CT) | -0.68 | 13-15 | >492 | 180 | MT18HS | 244/190 |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | Horz(CT) | 0.04 | 8 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TP12014 | Matrix-MSH | | | | | | Weight: 231 lb | FT = 20% |

| LUMBER | BRACING |
|---|--|
| TOP CHORD 2x4 SP SS "Except" T1:2x4 SP No.2 | TOP CHORD 2-0-0 oc purlins (2-11-2 max.), except end verticals (Switched from sheathed: Spacing > 2-0-0). Rigid ceiling directly applied or 6-0-0 oc bracing. Except: |
| BOT CHORD 2x4 SP No.1 "Except" B3:2x4 SP No.2 | BOT CHORD 6-0-0 oc bracing: 9-12 |
| WEBS 2x4 SP No.3 "Except" W12:2x6 SP SS, W7:2x4 SP No.1, W8,W6:2x4 SP No.2 | WEBS 1 Row at midpt 6-8, 4-13, 3-16 |
| REACTIONS (lb/size) 8=1469/ Mechanical, (min. 0-1-8), 16=1561/0-3-8, (min. 0-1-13) Max Horiz 16=519 (LC 10) Max Uplift 8=114 (LC 10), 16=210 (LC 10) Max Grav 8=1889 (LC 2), 16=1561 (LC 1) | JOINTS 1 Brace at Jt(s): 5, 2, 17, 19, 6 |

| FORCES | (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. |
|-----------|--|
| TOP CHORD | 2-3=-390/81, 3-4=-1924/281, 4-5=-387/11133, 5-6=-1445/516, 8-9=-1675/377, 9-18=-1202/416, 6-18=-1199/415, 2-16=-530/307 |
| BOT CHORD | 15-16=-648/1739, 15-20=-450/1402, 14-20=-450/1402, 13-14=-450/1402, 13-21=0/633, 11-21=0/633, 8-11=-918/86, 12-22=-364/0, 10-22=-364/0, 9-10=-364/0 |
| WEBS | 4-13=-1589/700, 12-13=-408/1634, 12-17=-360/1786, 5-17=-539/2277, 3-16=-1873/335, 4-15=-93/557, 3-15=-244/265, 9-11=-76/1573, 17-19=-992/2846, 18-19=-613/0, 5-19=-1936/559, 6-19=-577/2005, 4-17=-1047/2928 |

- NOTES (11)**
- 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 exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - 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 114 lb uplift at joint 8 and 210 lb uplift at joint 16.
 - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TP1 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Attic room checked for L/360 deflection.
 - 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 UFPI 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.

