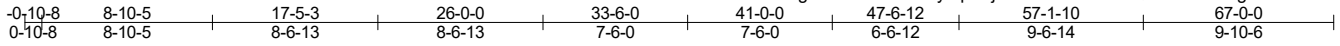


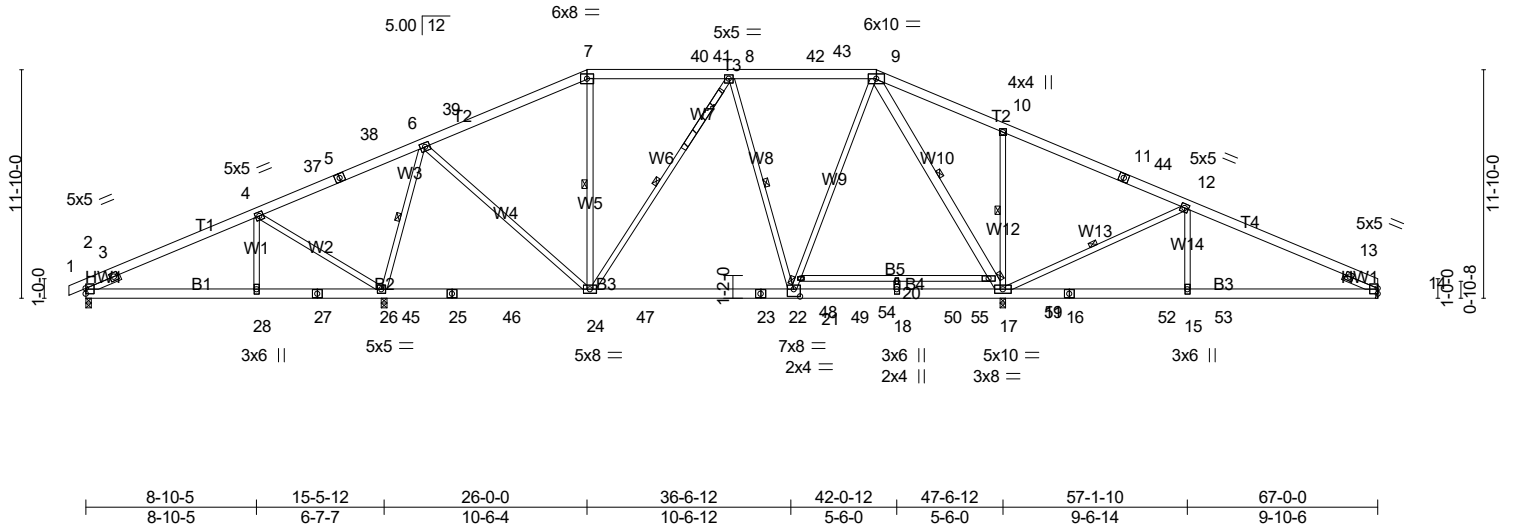
Job 23-7720-R01	Truss R02RP1	Truss Type Piggyback Base	Qty 8	Ply 1	LOT 29 PROVIDENCE CREEK 45 COTTONSEED LANE FUQUAY-VARINA, Job Reference (optional)
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Atlantic Building Components, Moncks Corner, South Carolina

8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Jan 5 14:38:25 2024 Page 1
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Scale = 1:119.5



REPAIR(S) REQUIRED

Plate Offsets (X,Y)-- [22:0-4-0,0-4-8]

LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.69	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.67	Vert(LL) -0.31 20-21 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.93	Vert(CT) -0.43 20-21 >893 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MSH	Horz(CT) 0.03 17 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 531 lb	FT = 20%

LUMBER-
 TOP CHORD 2x6 SP No.2
 BOT CHORD 2x6 SP No.2 *Except*
 B4: 2x6 SP DSS, B5: 2x4 SP No.2
 WEBS 2x4 SP No.3 *Except*
 W10: 2x6 SP No.2
 SLIDER Left 2x4 SP No.3 -i 1-11-0, Right 2x4 SP No.3 -i 1-11-0

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 9-8-5 oc bracing. Except:
 6-0-0 oc bracing: 19-21
 WEBS 1 Row at midpt 6-26, 7-24, 8-24, 8-22, 9-19, 10-17, 12-17

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. All bearings 0-3-8 except (jt=length) 14=Mechanical.
 (lb) - Max Horz 2=172(LC 14)
 Max Uplift All uplift 100 lb or less at joint(s) except 2=-102(LC 14), 26=-229(LC 14), 17=-146(LC 15), 14=-126(LC 15)
 Max Grav All reactions 250 lb or less at joint(s) except 2=628(LC 41), 26=2357(LC 45), 17=3149(LC 45), 14=664(LC 43)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-394/0, 3-4=-694/117, 6-38=0/293, 6-39=-1177/275, 7-39=-1127/305,
 7-40=-1040/327, 40-41=-1040/327, 8-41=-1040/327, 8-42=-1182/289, 42-43=-1182/289,
 9-43=-1182/289, 9-10=-29/454, 10-11=0/479, 11-44=0/261, 12-13=-863/204,
 13-14=-401/0
 BOT CHORD 2-28=-191/580, 27-28=-191/580, 26-27=-191/580, 26-45=-42/415, 25-45=-42/415,
 25-46=-42/415, 24-46=-42/415, 24-47=-19/1310, 23-47=-19/1310, 23-48=-19/1310,
 22-48=-19/1310, 22-49=0/839, 18-49=0/839, 18-50=0/839, 50-51=0/839, 17-51=0/839,
 16-17=-101/731, 16-52=-101/731, 15-52=-101/731, 15-53=-101/731, 14-53=-101/731
 WEBS 4-28=0/286, 4-26=-816/239, 6-26=-1684/299, 6-24=-17/1003, 8-24=-455/59,
 8-22=-553/197, 21-22=-54/1139, 9-21=-28/1256, 9-19=-1829/158, 17-19=-1920/133,
 10-17=-865/263, 12-17=-1114/287, 12-15=0/280, 18-20=-360/0

NOTES- (16-19)
 1) Repair Condition: web has 0-8-0 long break centered at 2-6-0 below joint 8.
 2) Apply 49" long 2x4 SP No.2 scab to front side(s) of truss centered on damage located 2-6-0 below joint 8 with 2 row(s) of 10d (0.131"x3") nails spaced 2" o.c. from front face. Minimum 0-3-0 end distance.
 3) Repairs specified by this program will be subject to review and change.
 4) Unbalanced roof live loads have been considered for this design.
 5) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 5-9-14, Interior(1) 5-9-14 to 19-3-10, Exterior(2R) 19-3-10 to 32-8-6, Interior(1) 32-8-6 to 34-3-10, Exterior(2R) 34-3-10 to 47-6-12, Interior(1) 47-6-12 to 60-3-10, Exterior(2E) 60-3-10 to 67-0-0 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

Continued on page 2



Job	Truss	Truss Type	Qty	Ply	LOT 29 PROVIDENCE CREEK 45 COTTONSEED LANE FUQUAY-VARINA,
23-7720-R01	R02RP1	Piggyback Base	8	1	Job Reference (optional)

Atlantic Building Components, Moncks Corner, South Carolina

8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Jan 5 14:38:25 2024 Page 2
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NOTES- (16-19)

- 6) TCELL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 7) Unbalanced snow loads have been considered for this design.
- 8) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 9) **WARNING:** This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
- 10) Provide adequate drainage to prevent water ponding.
- 11) All plates are 5x6 MT20 unless otherwise indicated.
- 12) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 13) * 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 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 14) Refer to girder(s) for truss to truss connections.
- 15) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 102 lb uplift at joint 2, 229 lb uplift at joint 26, 146 lb uplift at joint 17 and 126 lb uplift at joint 14.
- 16) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 17) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 18) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 19) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard