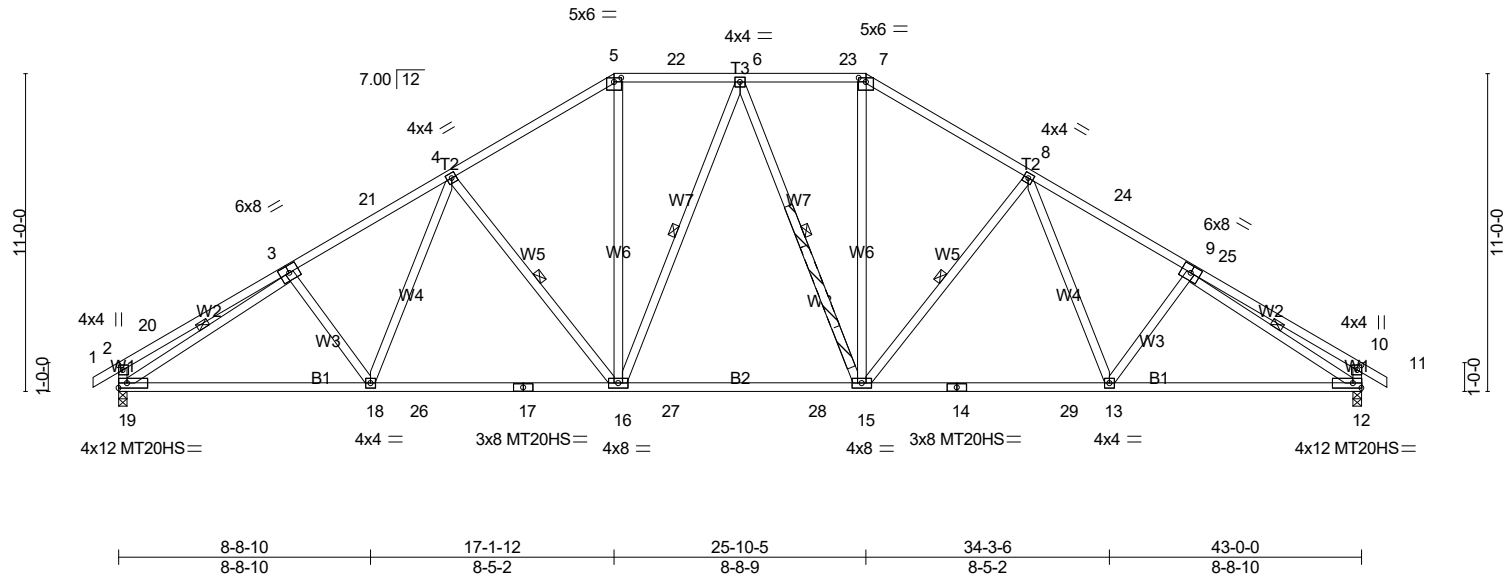
Job	Truss	Truss Type	Qty	Ply	LOT 0.0101 BLAKE POND | 56 GREAT SMOKEY WAY LILLINGTON, NC
23-5989-R01	R08RP1	Piggyback Base	5	1	Job Reference (optional)

Atlantic Building Components, Moncks Corner, South Carolina — 8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Dec 12 13:29:13 2023 Page 1
ID:6FBInSn_A4O3imHt7ACnTtz_Vpo-51JXnotk5DDThBNs3OBd??MlP3z4A6Ch9Sva3Py9ik4

-0-10-8 | 5-10-15 | 11-6-5 | 17-1-12 | 21-6-0 | 25-10-5 | 31-5-11 | 37-1-2 | 43-0-0 | 43-10-8
0-10-8 | 5-10-15 | 5-7-7 | 5-7-7 | 4-4-5 | 4-4-5 | 5-7-6 | 5-7-6 | 5-10-14 | 0-10-8

Scale = 1:79.7



8-8-10 | 17-1-12 | 25-10-5 | 34-3-6 | 43-0-0
8-8-10 | 8-5-2 | 8-8-9 | 8-5-2 | 8-8-10

REPAIR(S) REQUIRED

Plate Offsets (X,Y)-- [2:0-2-0,0-1-12], [5:0-3-0,0-1-12], [7:0-3-0,0-1-12], [10:0-2-0,0-1-12]

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	0.78	Vert(LL)	-0.32	16-18	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.49	15-16	>999	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.86	Horz(CT)	0.15	12	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 298 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-16, 6-16, 6-15, 8-15, 3-19, 9-12

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

REACTIONS. (lb/size) 19=1770/0-3-8 (min. 0-2-9), 12=1770/0-3-8 (min. 0-2-9)
Max Horz 19=-189(LC 12)
Max Uplift19=-76(LC 14), 12=-76(LC 15)
Max Grav 19=2172(LC 39), 12=2172(LC 39)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-20=-533/108, 3-20=-364/110, 3-21=-3135/105, 4-21=-2920/131, 4-5=-2557/153, 5-22=-2103/153, 6-22=-2103/153, 6-23=-2103/153, 7-23=-2103/153, 7-8=-2557/153, 8-24=-2920/131, 9-24=-3135/105, 9-25=-364/110, 10-25=-533/107, 2-19=-464/112, 10-12=-464/111
BOT CHORD 18-19=-154/2744, 18-26=-68/2556, 17-26=-68/2556, 16-17=-68/2556, 16-27=0/2119, 27-28=0/2119, 15-28=0/2119, 14-15=0/2501, 14-29=0/2501, 13-29=0/2501, 12-13=-26/2640
WEBS 4-18=-21/373, 4-16=-766/160, 5-16=-14/935, 6-16=-296/145, 6-15=-296/145, 7-15=-14/935, 8-15=-766/160, 8-13=-21/373, 3-19=-2827/30, 9-12=-2827/30

NORTH CAROLINA PROFESSIONAL SEAL 029729 12-12-2023 ENGINEER JAMES H. BROACH, JR.

NOTES- (14-17)
1) Repair Condition: web has damaged section 3-0-0 long starting 2-1-0 above joint 15.
2) Apply 72" long 2x4 SP No.2 scab to front side(s) of truss centered on damage located 3-7-0 above joint 15 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=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 12-4-2, Exterior(2R) 12-4-2 to 30-7-14, Interior(1) 30-7-14 to 39-0-14, Exterior(2E) 39-0-14 to 43-10-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
6) TCLL: 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.

Continued on page 2

NOTES- (14-17)

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) Provide adequate drainage to prevent water ponding.
10) All plates are MT20 plates unless otherwise indicated.
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 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.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 76 lb uplift at joint 19 and 76 lb uplift at joint 12.
14) 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.
15) 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.
16) 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.
17) 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