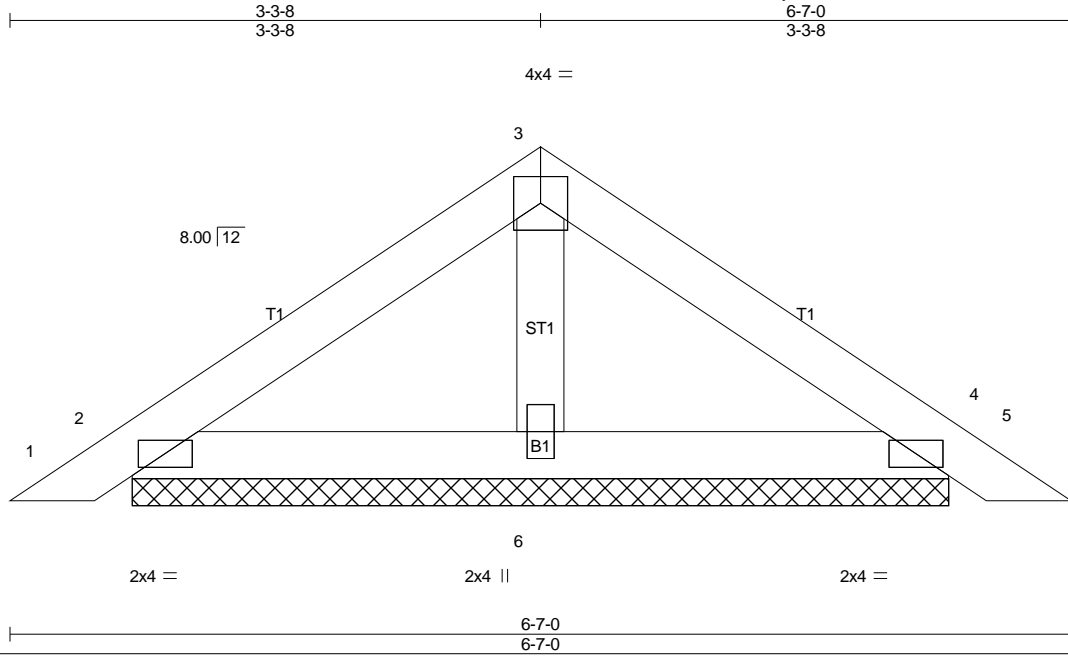


Job 22-2667-R01	Truss PB01	Truss Type Piggyback	Qty 2	Ply 1	LOT 64 CROSSING @ ANDERSON CREEK   233 TIMBER SKIP DRIVE SPR
Atlantic Building Components, Moncks Corner, South Carolina					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Apr 14 12:55:12 2022 Page 1  
 ID:NQLLeVDd4PWwD4SswrTSDr\_y95ve-hRw5bORhcl1rQkKmkCLGJtJ6JNhUCF1gE9A5n7zQpAD



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.11	Vert(LL)	0.00	5	n/r	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.11	Vert(CT)	0.00	5	n/r		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.02	Horz(CT)	0.00	4	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P						
	Code IRC2018/TPI2014						Weight: 21 lb	FT = 0%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.3  
 OTHERS 2x4 SP No.3

**BRACING-**

TOP CHORD  
 Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD  
 Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** (lb/size)

2 = 142/5-0-12 (min. 0-1-8)  
 4 = 142/5-0-12 (min. 0-1-8)  
 6 = 182/5-0-12 (min. 0-1-8)

Max Horz  
 2 = 46(LC 11)  
 Max Uplift  
 2 = -38(LC 12)  
 4 = -44(LC 13)

**FORCES.** (lb)

Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**NOTES-** (11-12)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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
- 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

4) 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.

5) Gable requires continuous bottom chord bearing.  
 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

7) \* 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.

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.

9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

11) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.

12) 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.

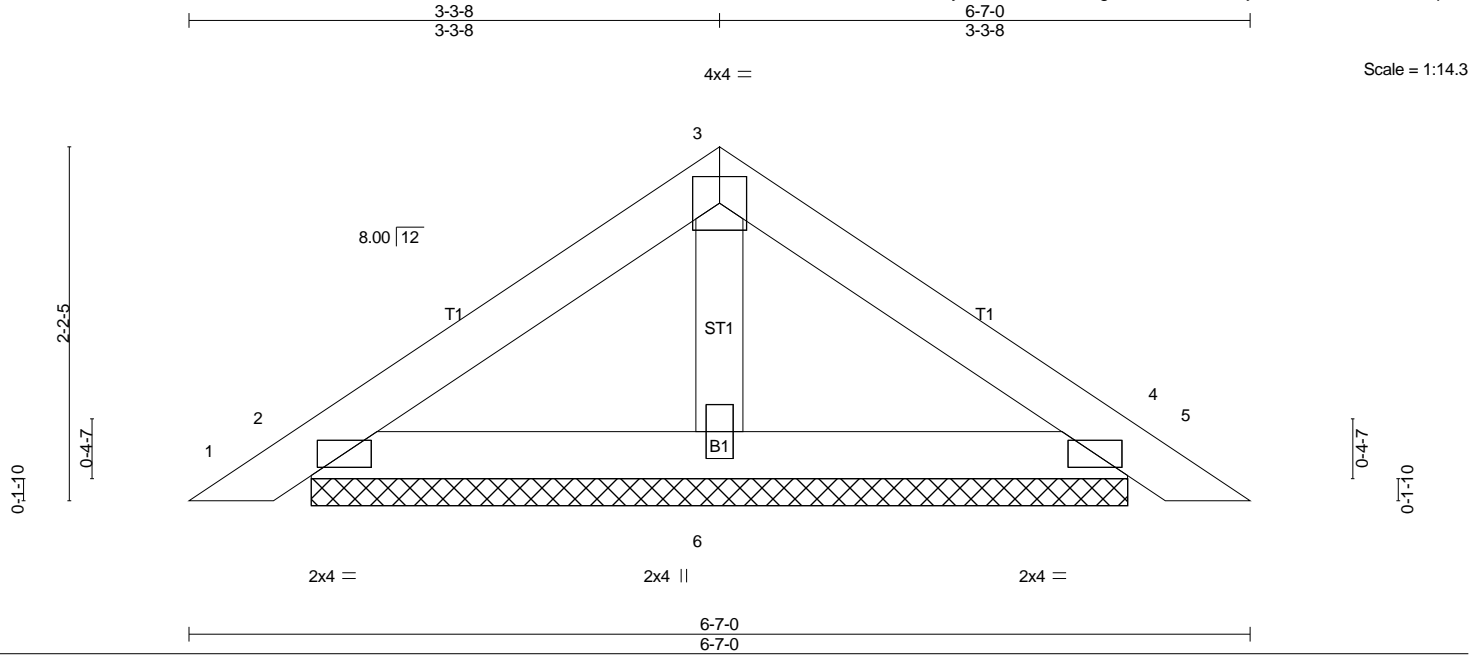
**LOAD CASE(S)**

Standard

Job	Truss	Truss Type	Qty	Ply	LOT 64 CROSSING @ ANDERSON CREEK   233 TIMBER SKIP DRIVE SPR
22-2667-R01	PB02	Piggyback	18	1	Job Reference (optional)

Atlantic Building Components, Moncks Corner, South Carolina

ID:NQLeVDd4PWwD4SswrTSDr\_y95ve-aC9cRmUCg\_XHvMdXZRPCTJToI\_2P830F9m8JwvzQpA9  
8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Apr 14 12:55:16 2022 Page 1



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.11	Vert(LL) 0.00	5	n/r	180	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.11	Vert(CT) 0.00	5	n/r	80		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.02	Horz(CT) 0.00	4	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P						
	Code IRC2018/TPI2014						Weight: 21 lb	FT = 0%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.3  
OTHERS 2x4 SP No.3

**BRACING-**

TOP CHORD  
Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD  
Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** (lb/size)

2 = 142/5-0-12 (min. 0-1-8)  
4 = 142/5-0-12 (min. 0-1-8)  
6 = 182/5-0-12 (min. 0-1-8)

Max Horz  
2 = -46(LC 10)  
Max Uplift  
2 = -38(LC 12)  
4 = -44(LC 13)

**FORCES.** (lb)

Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**NOTES-** (11-12)

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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
- 3) 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

4) 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.

5) Gable requires continuous bottom chord bearing.  
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

7) \* 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.

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.

9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

11) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.

12) 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.

**LOAD CASE(S)**

Standard

Job 22-2667-R01	Truss R01	Truss Type GABLE	Qty 2	Ply 1	LOT 64 CROSSING @ ANDERSON CREEK   233 TIMBER SKIP DRIVE SPR
Atlantic Building Components, Moncks Corner, South Carolina					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Apr 14 12:55:21 2022 Page 1  
 ID:NQLeVDd4PWwD4SswrTSDr\_y95ve-xAzVUTYKVVW9Z?7WVL??NAnBdl?lopl9?J2r4b6zQpA4

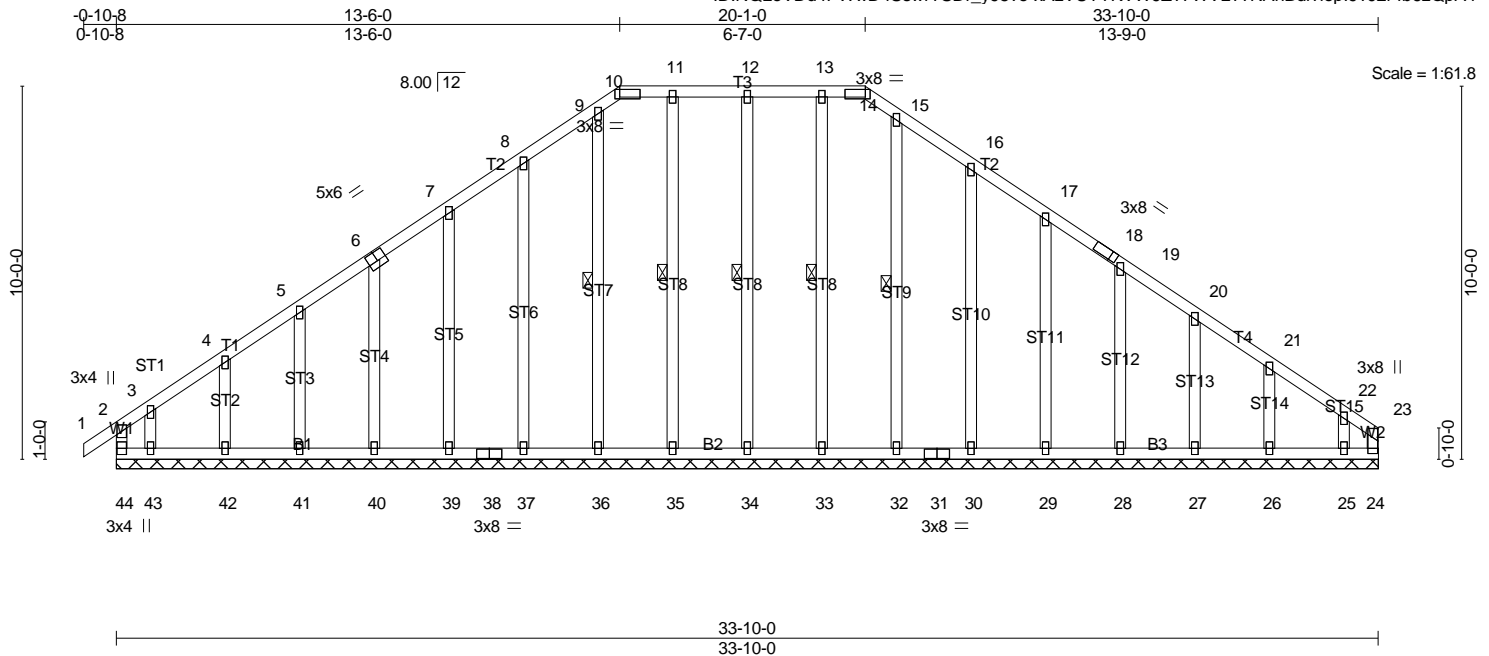


Plate Offsets (X,Y)-- [6:0-3-0,0-3-0], [10:0-6-8,0-2-8], [14:0-6-8,0-2-8], [18:0-2-1,Edge]					
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.19	Vert(LL) 0.00 1 n/r 180	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.16	Vert(CT) 0.00 1 n/r 80		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.16	Horz(CT) 0.01 24 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R			
				Weight: 258 lb	FT = 0%

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

**BRACING-**  
 TOP CHORD  
 Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD  
 Rigid ceiling directly applied or 6-0-0 oc bracing.  
 WEBS  
 1 Row at midpt  
 12-34, 11-35, 9-36, 13-33, 15-32

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

**NOTES-** (15-16)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 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
- 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.
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- 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 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.

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 34, 35, 37, 39, 40, 41, 42, 33, 30, 29, 28, 27, 26 except (jt=lb) 44=182, 24=143, 43=224, 25=179.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
- 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.

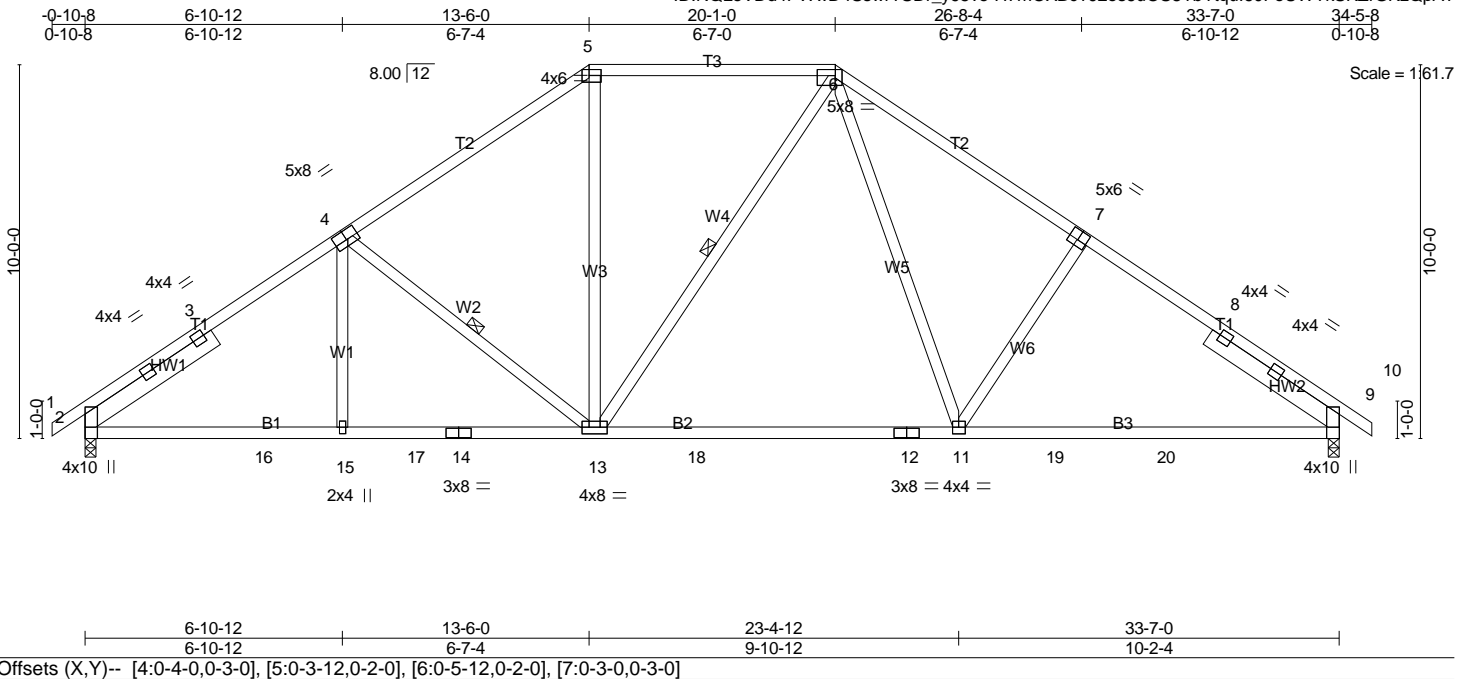
**REACTIONS.** All bearings 33-10-0.  
 (lb) - Max Horz  
 44= 239(LC 9)  
 Max Uplift  
 All uplift 100 lb or less at joint(s)  
 34, 35, 37, 39, 40, 41, 42, 33, 30, 29,  
 28, 27, 26 except 44=-182(LC 10),  
 24=-143(LC 11), 43=-224(LC 12),  
 25=-179(LC 13)  
 Max Grav  
 All reactions 250 lb or less at joint(s)  
 24, 34, 35, 41, 42, 43, 33, 32, 27, 26,  
 25 except 44=255(LC 9), 36=255(LC 23),  
 37=262(LC 20), 39=256(LC 20),  
 40=264(LC 20), 30=263(LC 21),  
 29=256(LC 21), 28=264(LC 21)

**FORCES.** (lb)  
 Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**LOAD CASE(S)**  
 Standard

Job 22-2667-R01	Truss R02	Truss Type Piggyback Base	Qty 4	Ply 1	LOT 64 CROSSING @ ANDERSON CREEK   233 TIMBER SKIP DRIVE SPR
Atlantic Building Components, Moncks Corner, South Carolina					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Apr 14 12:55:26 2022 Page 1  
 ID:NQLeVDd4PWwD4SswrTSDr\_y95ve-H7mOXBcTJ2os6uOS8YbYtqul60FoUWYkSKZrGKzQpA?



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.92	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 1.00	Vert(LL) -0.52 11-13 >775 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.28	Horz(CT) -0.72 11-13 >556 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-SH	0.08 9 n/a n/a		
	Code IRC2018/TPI2014			Weight: 206 lb	FT = 0%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2 \*Except\*  
 B3: 2x4 SP No.1  
 WEBS 2x4 SP No.3  
 SLIDER  
 Left 2x6 SP No.2 - 4-3-1,  
 Right 2x6 SP No.2 - 4-3-4

**BRACING-**  
 TOP CHORD  
 Structural wood sheathing directly applied.  
 BOT CHORD  
 Rigid ceiling directly applied or 1-4-12 oc bracing.  
 WEBS  
 1 Row at midpt 4-13, 6-13

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

**REACTIONS.** (lb/size)

2	=	1396/0-3-8 (min. 0-1-12)
9	=	1396/0-3-8 (min. 0-1-13)
Max Horz		
2	=	222(LC 9)
Max Uplift		
2	=	-169(LC 12)
9	=	-169(LC 13)
Max Grav		
2	=	1503(LC 20)
9	=	1513(LC 21)

**FORCES.** (lb)  
 Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD  
 2-3=-2084/190, 3-4=-1978/216,  
 4-5=-1626/214, 5-6=-1287/232,  
 6-7=-1866/274, 7-8=-1959/228,  
 8-9=-2063/203  
 BOT CHORD  
 2-16=-211/1695, 15-16=-211/1695,

**BOT CHORD**  
 2-16=-211/1695, 15-16=-211/1695,  
 15-17=-212/1694, 14-17=-212/1694,  
 13-14=-212/1694, 13-18=-9/1265,  
 12-18=-9/1265, 11-12=-9/1265,  
 11-19=-70/1578, 19-20=-70/1578,  
 9-20=-70/1578  
**WEBS**  
 4-15=0/280, 4-13=-501/223,  
 5-13=-40/555, 6-11=-121/751,  
 7-11=-295/252

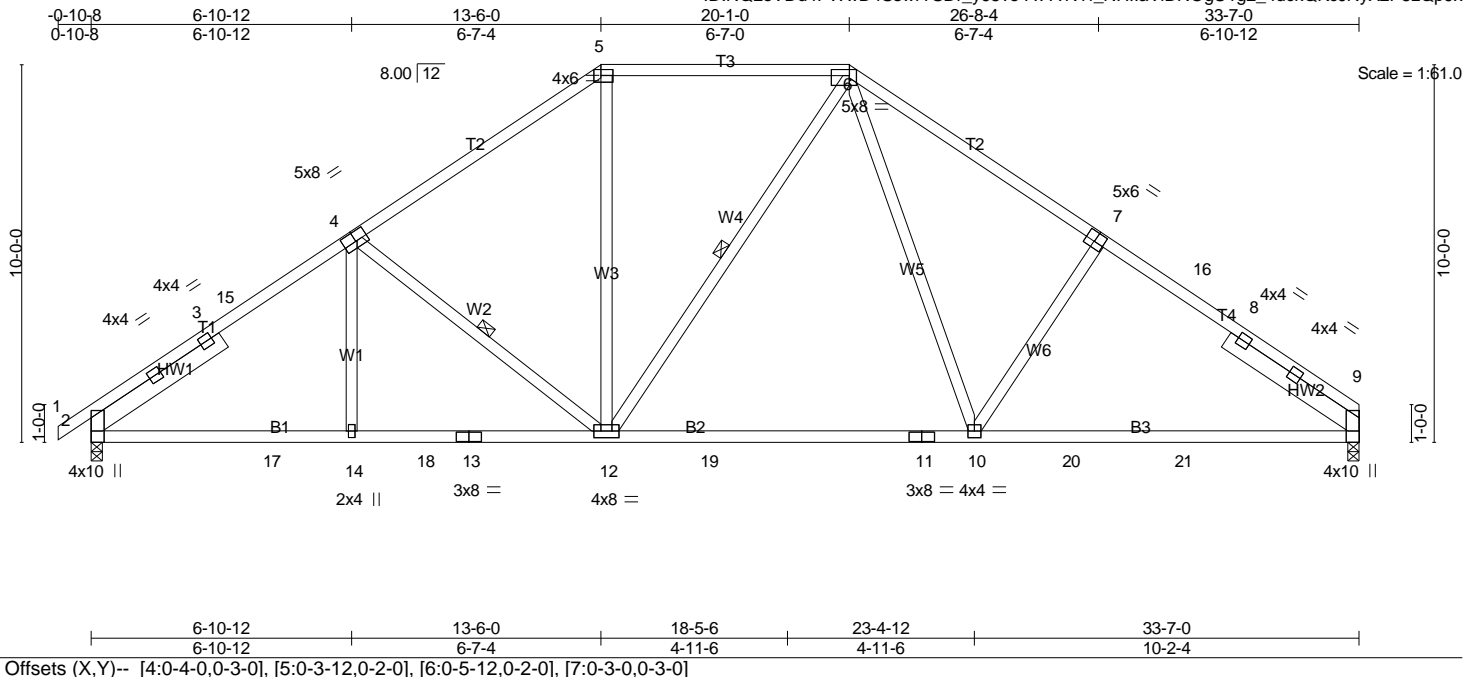
**NOTES-** (10-11)  
 1) Unbalanced roof live loads have been considered for this design.  
 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60  
 3) 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  
 4) 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.  
 5) Provide adequate drainage to prevent water ponding.  
 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.  
 7) \* 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.

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=169, 9=169.  
 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.  
 10) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.  
 11) 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.

**LOAD CASE(S)**  
 Standard

Job 22-2667-R01	Truss R02A	Truss Type PIGGYBACK BASE	Qty 2	Ply 1	LOT 64 CROSSING @ ANDERSON CREEK   233 TIMBER SKIP DRIVE SPR
Atlantic Building Components, Moncks Corner, South Carolina					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Apr 14 12:55:30 2022 Page 1  
 ID:NQLeVDd4PWwD4SswrTSDr\_y95ve-Av?vNYf\_NHllaViDNOgU1g2\_4dckQKJNyX2P5zQp9x



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.92	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.25	BC 1.00	Vert(LL) -0.52 10-12 >775 240		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.27	Vert(CT) -0.72 10-12 >556 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.08 9 n/a n/a		
	Code IRC2018/TPI2014			Weight: 204 lb	FT = 0%

**LOADING (psf)**  
 TCLL 20.0  
 TCDL 10.0  
 BCLL 0.0 \*  
 BCDL 10.0

**SPACING-**  
 2-0-0  
 Plate Grip DOL 1.25  
 Lumber DOL 1.25  
 Rep Stress Incr YES  
 Code IRC2018/TPI2014

**CSI.**  
 TC 0.92  
 BC 1.00  
 WB 0.27  
 Matrix-SH

**DEFL.**  
 in (loc) l/defl L/d  
 Vert(LL) -0.52 10-12 >775 240  
 Vert(CT) -0.72 10-12 >556 180  
 Horz(CT) 0.08 9 n/a n/a

**PLATES**  
 MT20

**GRIP**  
 244/190

Weight: 204 lb FT = 0%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2 \*Except\*  
 B3: 2x4 SP No.1  
 WEBS 2x4 SP No.3  
 SLIDER  
 Left 2x6 SP No.2 - 4-3-1,  
 Right 2x6 SP No.2 - 4-3-4

**BRACING-**  
 TOP CHORD  
 Structural wood sheathing directly applied.  
 BOT CHORD  
 Rigid ceiling directly applied or 1-4-12 oc bracing.  
 WEBS  
 1 Row at midpt 4-12, 6-12

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

**REACTIONS.** (lb/size)

2	=	1397/0-3-8 (min. 0-1-12)
9	=	1343/0-3-8 (min. 0-1-12)
Max Horz		
2	=	-223(LC 8)
Max Uplift		
2	=	-169(LC 12)
9	=	-151(LC 13)
Max Grav		
2	=	1503(LC 20)
9	=	1467(LC 3)

**FORCES.** (lb)  
 Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD  
 2-3=-2085/255, 3-15=-1979/265,  
 4-15=-1962/284, 4-5=-1627/316,  
 5-6=-1288/318, 6-7=-1868/348,  
 7-16=-1881/305, 8-16=-1962/287,  
 8-9=-2066/278  
 BOT CHORD  
 2-17=-210/1697, 14-17=-210/1697,

**NOTES-** (10-11)  
 1) Unbalanced roof live loads have been considered for this design.  
 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 6-8-9, Exterior(2R) 6-8-9 to 26-7-14, Interior(1) 26-7-14 to 28-9-6, Exterior(2E) 28-9-6 to 33-7-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60  
 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); 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  
 4) 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.  
 5) Provide adequate drainage to prevent water ponding.  
 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

7) \* 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.  
 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=169, 9=151.  
 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.  
 10) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.  
 11) 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.

**LOAD CASE(S)**  
 Standard

Job 22-2667-R01	Truss R03	Truss Type Piggyback Base	Qty 7	Ply 1	LOT 64 CROSSING @ ANDERSON CREEK   233 TIMBER SKIP DRIVE SPR
Atlantic Building Components, Moncks Corner, South Carolina					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Apr 14 12:55:35 2022 Page 1  
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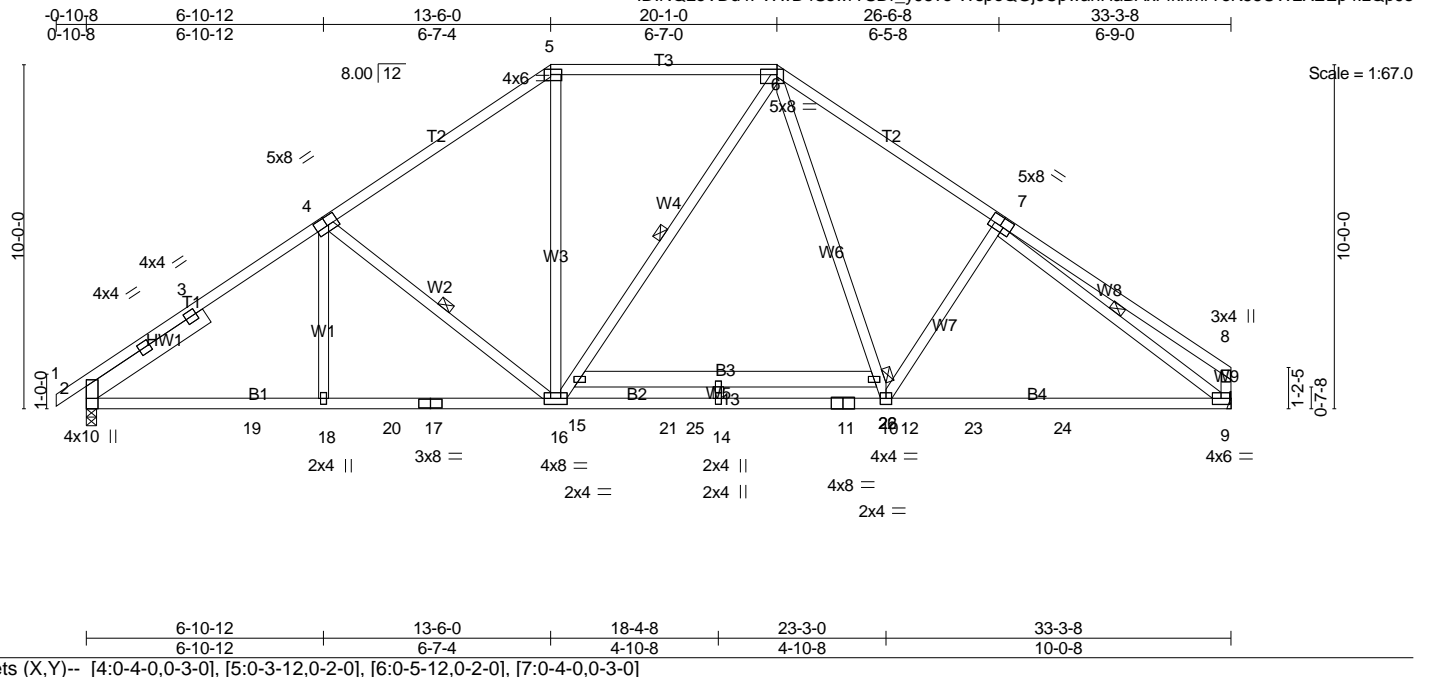


Plate Offsets (X,Y)--	[4:0-4-0,0-3-0], [5:0-3-12,0-2-0], [6:0-5-12,0-2-0], [7:0-4-0,0-3-0]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.87	Vert(LL) -0.33 12-13 >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.93	Vert(CT) -0.51 12-13 >787 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.74	Horz(CT) 0.09 9 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-SH		Weight: 227 lb	FT = 0%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2 \*Except\*  
 T1: 2x4 SP No.1  
 BOT CHORD 2x4 SP No.2 \*Except\*  
 B4: 2x4 SP No.1, B3: 2x6 SP No.2  
 WEBS 2x4 SP No.3  
 SLIDER  
 Left 2x6 SP No.2 - 4-3-1  
**BRACING-**  
 TOP CHORD  
 Structural wood sheathing directly applied, except end verticals.  
 BOT CHORD  
 Rigid ceiling directly applied or 10-0-0 oc bracing.  
 Except:  
 6-0-0 oc bracing: 12-15  
 WEBS  
 1 Row at midpt  
 4-16, 6-16, 7-9

**TOP CHORD**  
 2-3=-2302/126, 3-4=-2196/151,  
 4-5=-1835/148, 5-6=-1464/176,  
 6-7=-2110/183, 7-8=-452/120,  
 8-9=-380/126  
**BOT CHORD**  
 2-19=-162/1869, 18-19=-162/1869,  
 18-20=-162/1868, 17-20=-162/1868,  
 16-17=-162/1868, 16-21=0/1526,  
 14-21=0/1526, 14-22=0/1526,  
 11-22=0/1526, 10-11=0/1526,  
 10-23=-46/1734, 23-24=-46/1734,  
 9-24=-46/1734  
**WEBS**  
 4-18=0/301, 4-16=-498/228, 5-16=-2/667,  
 15-16=-261/107, 6-12=-70/875,  
 10-12=-117/619, 7-10=-222/260,  
 7-9=-1894/23

6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.  
 7) \* 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.  
 8) Refer to girder(s) for truss to truss connections.  
 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9 except (jt=lb) 2=129.  
 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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

**NOTES-** (11-12)  
 1) Unbalanced roof live loads have been considered for this design.  
 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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  
 3) 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  
 4) 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.  
 5) Provide adequate drainage to prevent water ponding.

11) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.  
 12) 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.

**REACTIONS.** (lb/size)

2	=	1457/0-3-8 (min. 0-1-15)
9	=	1425/Mechanical
Max Horz		
2	=	232(LC 9)
Max Uplift		
2	=	-129(LC 12)
9	=	-97(LC 13)
Max Grav		
2	=	1635(LC 20)
9	=	1643(LC 3)

**LOAD CASE(S)**  
 Standard

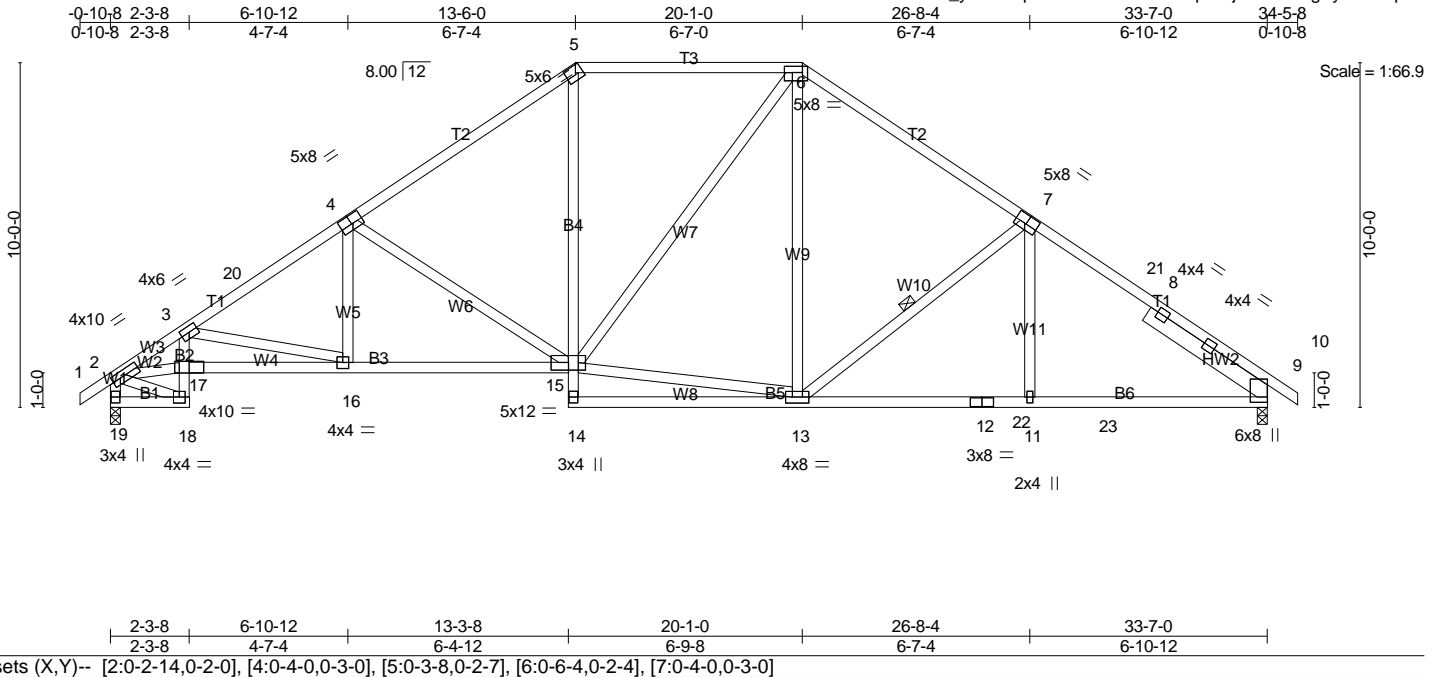
**FORCES.** (lb)  
 Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD  
 2-3=-2302/126, 3-4=-2196/151,  
 4-5=-1835/148, 5-6=-1464/176,

Job 22-2667-R01	Truss R04	Truss Type Piggyback Base	Qty 5	Ply 1	LOT 64 CROSSING @ ANDERSON CREEK   233 TIMBER SKIP DRIVE SPR
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Atlantic Building Components, Moncks Corner, South Carolina

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8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Apr 14 12:55:40 2022 Page 1

Job Reference (optional)



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.78	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.25	BC 0.66	Vert(LL) -0.09 15-16 >999 240		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.77	Vert(CT) -0.22 15-16 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.14 9 n/a n/a		
	Code IRC2018/TPI2014			Weight: 227 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2 \*Except\*  
 B2,B4: 2x4 SP No.3  
 WEBS 2x4 SP No.3

SLIDER  
**BRACING-**  
 TOP CHORD  
 Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.  
 BOT CHORD  
 Rigid ceiling directly applied or 6-0-0 oc bracing.  
 WEBS  
 1 Row at midpt 7-13

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

**REACTIONS.** (lb/size)

19 = 1399/0-3-8 (min. 0-1-10)  
 9 = 1390/0-3-8 (min. 0-1-10)  
 Max Horz  
 19 = 224(LC 11)  
 Max Uplift  
 19 = -171(LC 12)  
 9 = -169(LC 13)

**FORCES.** (lb)

Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD  
 2-3=-2511/389, 3-20=-2135/294,  
 4-20=-2008/314, 4-5=-1621/323,  
 5-6=-1245/323, 6-7=-1465/314,  
 7-21=-1750/279, 8-21=-1768/259,  
 8-9=-1881/250, 2-19=-1393/219  
 BOT CHORD  
 3-17=-69/254, 16-17=-456/2268,  
 15-16=-246/1741, 5-15=-29/502,  
 13-22=-139/1417, 12-22=-139/1417,  
 11-12=-139/1417, 11-23=-138/1418,

BOT CHORD  
 3-17=-69/254, 16-17=-456/2268,  
 15-16=-246/1741, 5-15=-29/502,  
 13-22=-139/1417, 12-22=-139/1417,  
 11-12=-139/1417, 11-23=-138/1418,  
 9-23=-138/1418  
 WEBS  
 3-16=-572/216, 4-16=0/355,  
 4-15=-635/238, 13-15=-31/1098,  
 6-15=-135/293, 6-13=-79/359,  
 7-13=-561/220, 7-11=0/348,  
 2-17=-374/1898, 2-18=-140/402

**NOTES-** (10-13)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 6-8-9, Exterior(2R) 6-8-9 to 26-7-14, Interior(1) 26-7-14 to 29-7-14, Exterior(2E) 29-7-14 to 34-5-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); 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
- 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.
- Provide adequate drainage to prevent water ponding.
- 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 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 19=171, 9=169.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.
- 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.
- 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.
- SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/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.

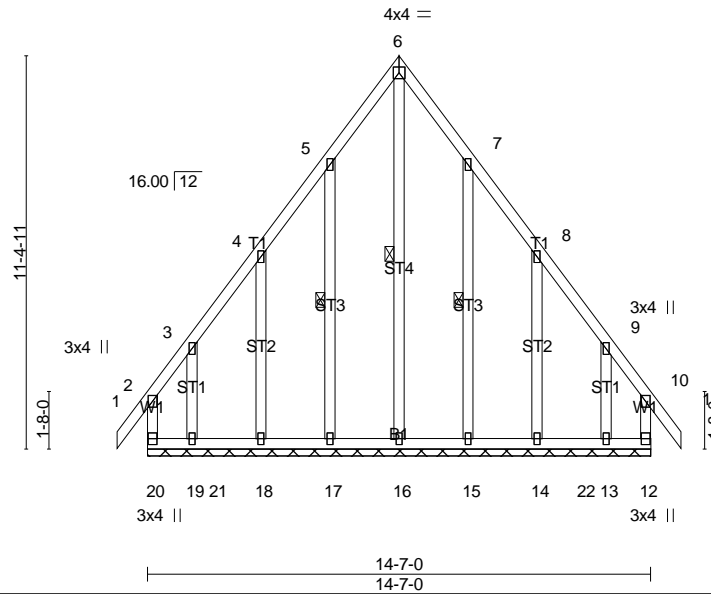
**LOAD CASE(S)**  
 Standard

Job 22-2667-R01	Truss R05	Truss Type Common Supported Gable	Qty 1	Ply 1	LOT 64 CROSSING @ ANDERSON CREEK   233 TIMBER SKIP DRIVE SPR
Atlantic Building Components, Moncks Corner, South Carolina					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Apr 14 12:55:43 2022 Page 1  
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-0-10-8 7-3-8 14-7-0 15-5-8  
 0-10-8 7-3-8 7-3-8 0-10-8

Scale = 1:66.8



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.37	Vert(LL)	-0.00 11	n/r	180	MT20	244/190
TCDL 10.0	Lumber DOL	1.25	BC 0.34	Vert(CT)	-0.01 11	n/r	80		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.41	Horz(CT)	0.00 12	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R						
								Weight: 132 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.3  
 WEBS 2x4 SP No.3  
 OTHERS 2x4 SP No.3

**BRACING-**

TOP CHORD  
 Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD  
 Rigid ceiling directly applied or 6-0-0 oc bracing.  
 WEBS  
 1 Row at midpt  
 6-16, 5-17, 7-15

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

**REACTIONS.** All bearings 14-7-0.

(lb) - Max Horz  
 20=-320(LC 10)  
 Max Uplift  
 All uplift 100 lb or less at joint(s)  
 except 20=-331(LC 8), 12=-309(LC 9),  
 17=-148(LC 12), 18=-151(LC 12),  
 19=-318(LC 12), 15=-148(LC 13),  
 14=-152(LC 13), 13=-312(LC 13)  
 Max Grav  
 All reactions 250 lb or less at joint(s)  
 except 20=383(LC 11), 12=359(LC 10),  
 16=509(LC 13), 17=306(LC 20),  
 18=278(LC 20), 19=377(LC 10),  
 15=305(LC 21), 14=279(LC 21),  
 13=363(LC 11)

**FORCES.** (lb)

Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD  
 2-20=-264/240, 2-3=-280/282,  
 4-5=-221/330, 5-6=-339/471,  
 6-7=-339/471, 7-8=-221/330,

TOP CHORD  
 2-20=-264/240, 2-3=-280/282,  
 4-5=-221/330, 5-6=-339/471,  
 6-7=-339/471, 7-8=-221/330,  
 9-10=-261/263  
 WEBS  
 6-16=-675/412

**NOTES-** (14-17)

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 3-11-2, Corner(3R) 3-11-2 to 10-7-14, Corner(3E) 10-7-14 to 15-5-8 zone; 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
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); 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
- 5) 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.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable requires continuous bottom chord bearing.
- 8) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 9) Gable studs spaced at 2-0-0 oc.
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 11) \* 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.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 331 lb uplift at joint 20, 309 lb uplift at joint 12, 148 lb uplift at joint 17, 151 lb uplift at joint 18, 318 lb uplift at joint 19, 148 lb uplift at joint 15, 152 lb uplift at joint 14 and 312 lb uplift at joint 13.
- 13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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



Job	Truss	Truss Type	Qty	Ply	LOT 64 CROSSING @ ANDERSON CREEK   233 TIMBER SKIP DRIVE SPR
22-2667-R01	R06	Common	3	1	Job Reference (optional)

Atlantic Building Components, Moncks Corner, South Carolina

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8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Apr 14 12:55:47 2022 Page 1

-0-10-8 7-3-8 14-7-0 15-5-8  
0-10-8 7-3-8 7-3-8 0-10-8

Scale = 1:64.9

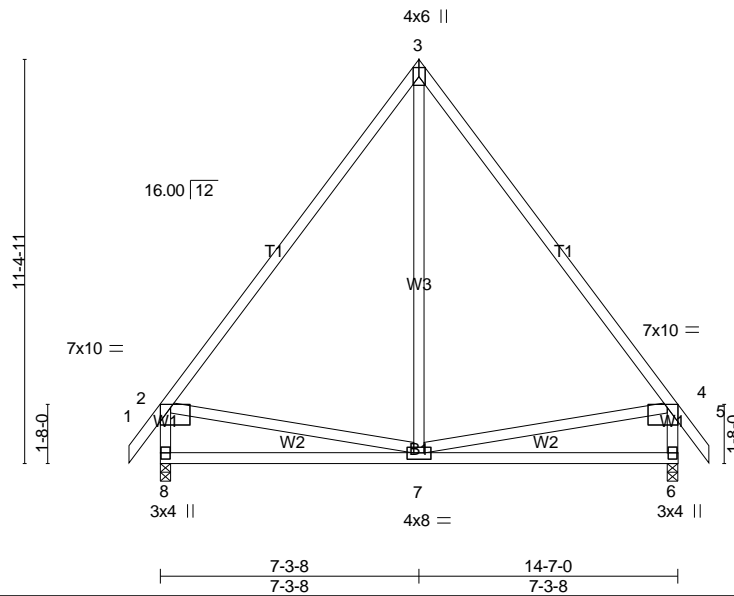


Plate Offsets (X,Y)-- [2:Edge,0-1-3], [4:Edge,0-1-3]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.70	Vert(LL) -0.05	7-8	>999	240	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.25	BC 0.45	Vert(CT) -0.11	7-8	>999	180		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.27	Horz(CT) -0.01	6	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-SH						
	Code IRC2018/TPI2014							
							Weight: 104 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3 \*Except\*  
W1: 2x4 SP No.2

**BRACING-**

TOP CHORD  
Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD  
Rigid ceiling directly applied or 9-1-6 oc bracing.

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

**REACTIONS.** (lb/size)

8 = 633/0-3-8 (min. 0-1-8)  
6 = 633/0-3-8 (min. 0-1-8)  
Max Horz  
8 = -320(LC 10)  
Max Uplift  
8 = -98(LC 13)  
6 = -98(LC 12)

**FORCES.** (lb)

Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD  
2-3=-527/171, 3-4=-527/171,  
2-8=-569/138, 4-6=-569/138  
BOT CHORD  
7-8=-412/511, 6-7=-246/312  
WEBS  
3-7=-57/301, 2-7=-261/437, 4-7=-265/438

**NOTES-** (9-12)

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Exterior(2R) 3-11-2 to 10-7-14, Exterior(2E) 10-7-14 to 15-5-8 zone; 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
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); 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
- 4) 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.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* 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.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 98 lb uplift at joint 8 and 98 lb uplift at joint 6.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

- 9) 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.
- 10) 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.
- 11) 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.
- 12) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/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.

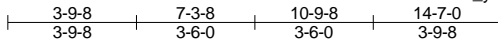
**LOAD CASE(S)**

Standard

Job 22-2667-R01	Truss R07	Truss Type Common Girder	Qty 1	Ply 2	LOT 64 CROSSING @ ANDERSON CREEK   233 TIMBER SKIP DRIVE SPR
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Atlantic Building Components, Moncks Corner, South Carolina

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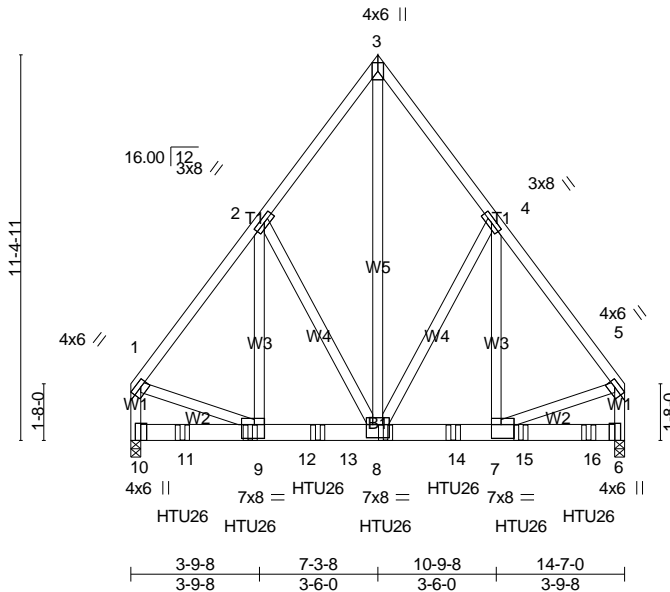


Plate Offsets (X,Y)-- [1:0-3-8,Edge], [5:0-3-8,Edge], [7:0-3-8,0-4-12], [8:0-4-0,0-4-8], [9:0-3-8,0-4-12]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.88	Vert(LL)	-0.06	8-9	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.25	BC 0.78	Vert(CT)	-0.11	8-9	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.69	Horz(CT)	0.01	6	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-SH						
								Weight: 278 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x6 SP No.2  
 WEBS 2x4 SP No.3 \*Except\*  
 W5: 2x4 SP No.2

**BRACING-**

TOP CHORD  
 Structural wood sheathing directly applied or 5-5-10 oc purlins, except end verticals.  
 BOT CHORD  
 Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size)

10 = 5327/0-3-8 (min. 0-2-1)  
 6 = 5652/0-3-8 (min. 0-2-3)  
 Max Horz  
 10 = -237(LC 6)  
 Max Uplift  
 10 = -455(LC 11)  
 6 = -479(LC 10)  
 Max Grav  
 10 = 6026(LC 3)  
 6 = 6401(LC 3)

**FORCES.** (lb)

Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD  
 1-2=-4987/423, 2-3=-3684/444,  
 3-4=-3684/445, 4-5=-4917/418,  
 1-10=-5064/407, 5-6=-4976/401  
 BOT CHORD  
 10-11=-260/384, 9-11=-260/384,  
 9-12=-299/2941, 12-13=-299/2941,  
 8-13=-299/2941, 8-14=-197/2899,  
 7-14=-197/2899, 7-15=-47/266,  
 15-16=-47/266, 6-16=-47/266  
 WEBS  
 3-8=-599/5614, 4-8=-1466/320,  
 4-7=-148/2103, 2-8=-1553/326,  
 2-9=-157/2235, 1-9=-195/2909,

**WEBS**

3-8=-599/5614, 4-8=-1466/320,  
 4-7=-148/2103, 2-8=-1553/326,  
 2-9=-157/2235, 1-9=-195/2909,  
 5-7=-191/2818

**NOTES-** (13-16)

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-5-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); 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
- 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 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.

- Bearing at joint(s) 10, 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 455 lb uplift at joint 10 and 479 lb uplift at joint 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 1-6-4 from the left end to 13-6-4 to connect truss(es) R03 (1 ply 2x4 SP) to back face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

Job	Truss	Truss Type	Qty	Ply	LOT 64 CROSSING @ ANDERSON CREEK   233 TIMBER SKIP DRIVE SPRING
22-2667-R01	R07	Common Girder	1	2	Job Reference (optional)

Atlantic Building Components, Moncks Corner, South Carolina

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Apr 14 12:55:54 2022 Page 2  
ID:NQLeVDd4PWwD4SswrTSDr\_y95ve-TWSzPly1jfKuTBXrnQ560k25gJrr252ruhLJFizQp9Z

**NOTES-** (13-16)

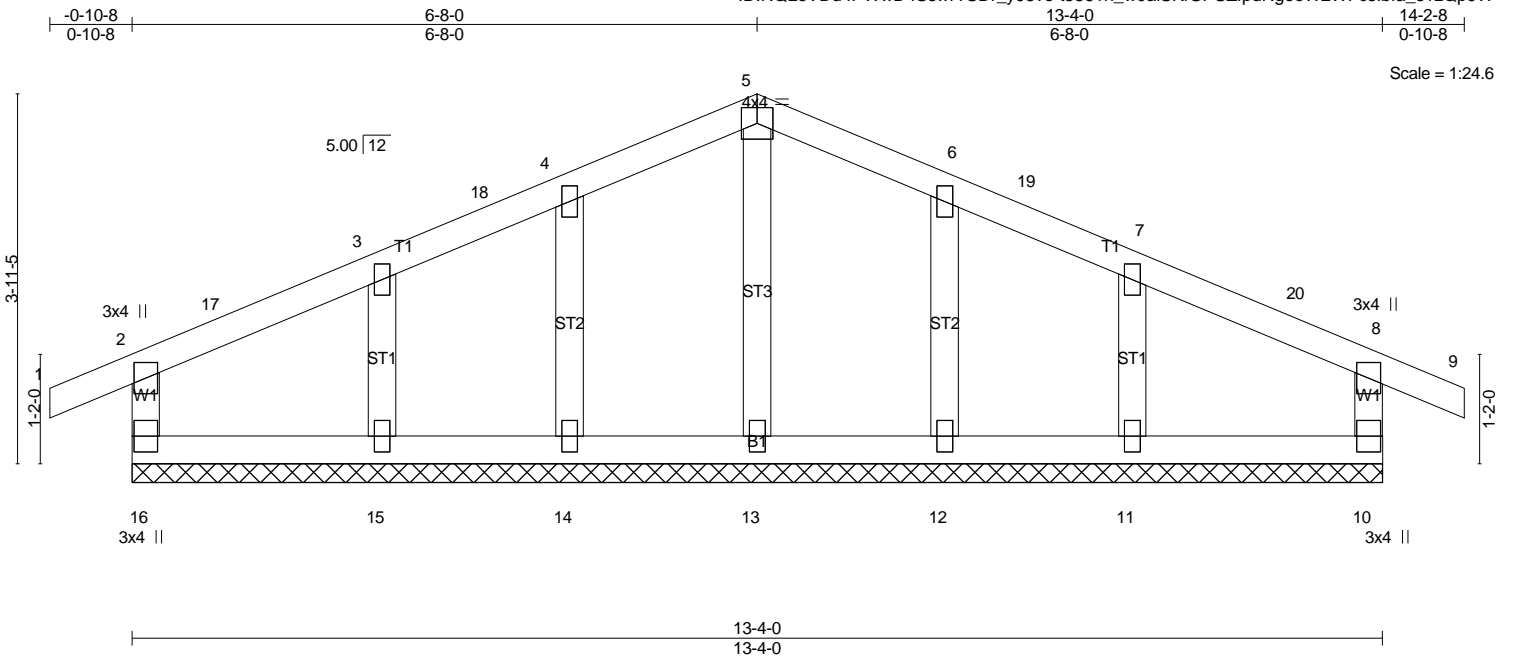
- 13) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 14) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 15) 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.
- 16) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/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
- 1) Dead + Snow (balanced): Lumber Increase=1.15,  
Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-60, 3-5=-60, 6-10=-20  
Concentrated Loads (lb)  
Vert: 8=-1405(B) 9=-1405(B) 11=-1405(B)  
13=-1405(B) 14=-1405(B) 15=-1405(B) 16=-1406(B)

Job 22-2667-R01	Truss R08	Truss Type Common Supported Gable	Qty 1	Ply 1	LOT 64 CROSSING @ ANDERSON CREEK   233 TIMBER SKIP DRIVE SPR
Atlantic Building Components, Moncks Corner, South Carolina					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Apr 14 12:55:57 2022 Page 1  
 ID:NQLeVDd4PWwD4SswrTSDr\_y95ve-t5861n\_w0aiSKfGPSZfpdNgooW2WFcslbfa\_s1zQp9W



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.12	Vert(LL) -0.00	8	n/r	180	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.25	BC 0.08	Vert(CT) -0.00	9	n/r	80		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.04	Horz(CT) -0.00	10	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-R						
	Code IRC2018/TPI2014							
							Weight: 64 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD  
 Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD  
 Rigid ceiling directly applied or 6-0-0 oc bracing.

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

**REACTIONS.** All bearings 13-4-0.  
 (lb) - Max Horz  
 16= -24(LC 12)  
 Max Uplift  
 All uplift 100 lb or less at joint(s)  
 16, 10, 14, 15, 12, 11  
 Max Grav  
 All reactions 250 lb or less at joint(s)  
 16, 10, 13, 14, 12 except 15=255(LC 21), 11=255(LC 22)

**FORCES.** (lb)  
 Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**NOTES-** (15-18)  
 1) Unbalanced roof live loads have been considered for this design.  
 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 3-11-2, Corner(3R) 3-11-2 to 9-4-14, Corner(3E) 9-4-14 to 14-2-8 zone; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); 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
- 5) Unbalanced snow loads have been considered for this design.
- 6) 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.
- 7) All plates are 2x4 MT20 unless otherwise indicated.
- 8) Gable requires continuous bottom chord bearing.
- 9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 10) Gable studs spaced at 2-0-0 oc.
- 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.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 10, 14, 15, 12, 11.
- 14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

- 15) 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.
- 16) 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.
- 17) 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.
- 18) 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

Job	Truss	Truss Type	Qty	Ply	LOT 64 CROSSING @ ANDERSON CREEK   233 TIMBER SKIP DRIVE SPR
22-2667-R01	R09	Common	1	1	Job Reference (optional)

Atlantic Building Components, Moncks Corner, South Carolina

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Apr 14 12:56:01 2022 Page 1  
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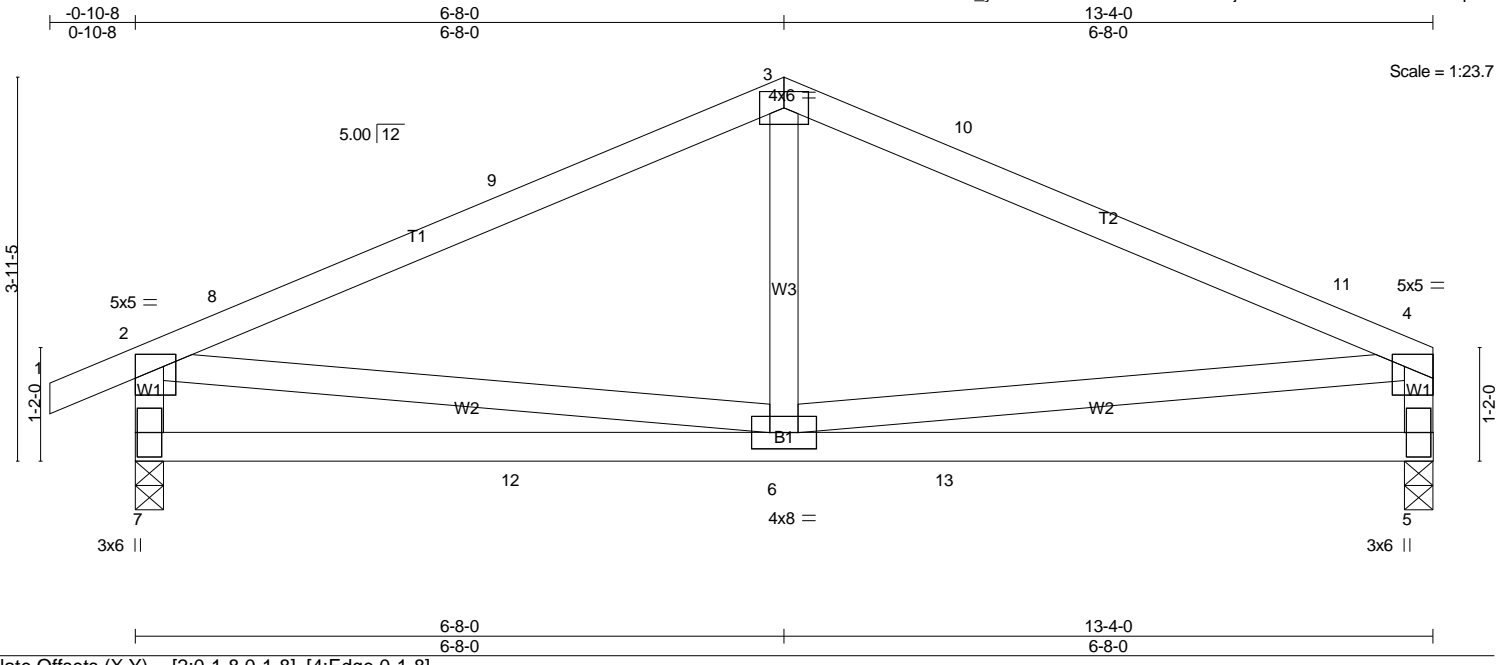


Plate Offsets (X,Y)-- [2:0-1-8,0-1-8], [4:Edge,0-1-8]	
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0
TCLL 20.0	Plate Grip DOL 1.25
TCDL 10.0	Lumber DOL 1.25
BCLL 0.0 *	Rep Stress Incr YES
BCDL 10.0	Code IRC2018/TPI2014
<b>CSI</b>	<b>DEFL.</b> in (loc) l/defl L/d
TC 0.92	Vert(LL) 0.09 6-7 >999 240
BC 0.38	Vert(CT) -0.08 5-6 >999 180
WB 0.33	Horz(CT) 0.01 5 n/a n/a
Matrix-SH	
<b>PLATES</b>	<b>GRIP</b>
MT20	244/190
Weight: 69 lb FT = 20%	

**LUMBER-**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.3 \*Except\*  
 W1: 2x4 SP No.2

**WEBS**  
 3-6=-320/216, 2-6=-324/410,  
 4-6=-399/422

**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.

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

**REACTIONS.** (lb/size)

7 = 585/0-3-8 (min. 0-1-8)  
 5 = 519/0-3-8 (min. 0-1-8)  
 Max Horz  
 7 = 33(LC 11)  
 Max Uplift  
 7 = -174(LC 10)  
 5 = -139(LC 10)  
 Max Grav  
 7 = 662(LC 21)  
 5 = 597(LC 22)

**FORCES.** (lb)

Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD  
 2-8=-684/727, 8-9=-575/738,  
 3-9=-564/749, 3-10=-532/747,  
 10-11=-575/735, 4-11=-682/725,  
 2-7=-603/512, 4-5=-538/456  
 BOT CHORD  
 7-12=-264/374, 6-12=-264/374,  
 6-13=-190/265, 5-13=-190/265  
 WEBS  
 3-6=-320/216, 2-6=-324/410,  
 4-6=-399/422

**NOTES-** (10-13)

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Exterior(2R) 3-11-2 to 8-4-10, Exterior(2E) 8-4-10 to 13-2-4 zone; end vertical left and right exposed; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); 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
- 4) Unbalanced snow loads have been considered for this design.
- 5) 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.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* 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.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=174, 5=139.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

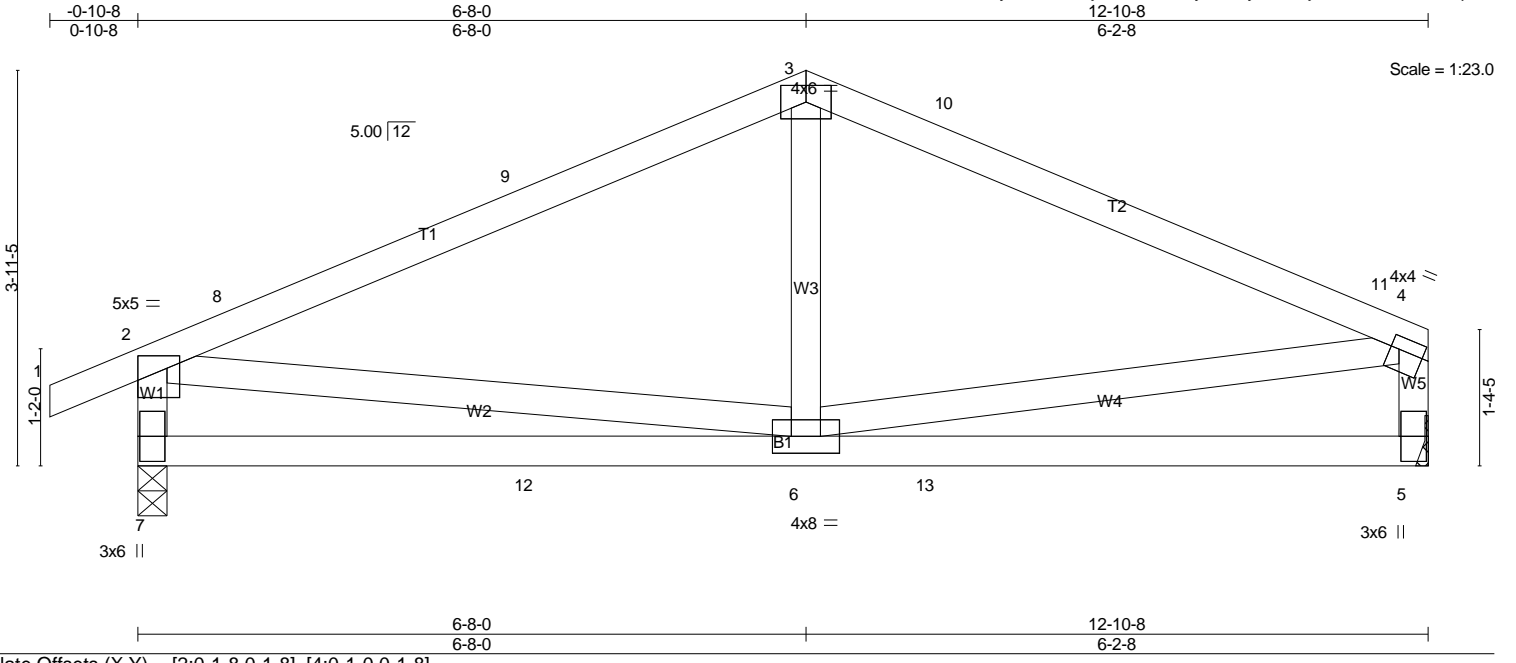
- 10) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 11) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 12) 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.
- 13) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/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

Job 22-2667-R01	Truss R10	Truss Type Common	Qty 4	Ply 1	LOT 64 CROSSING @ ANDERSON CREEK   233 TIMBER SKIP DRIVE SPR
Atlantic Building Components, Moncks Corner, South Carolina					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Apr 14 12:56:05 2022 Page 1  
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.78	Vert(LL)	0.10	6-7	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.25	BC 0.36	Vert(CT)	-0.08	6-7	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.32	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-SH						
								Weight: 67 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.3 \*Except\*  
 W1: 2x4 SP No.2

**BRACING-**  
 TOP CHORD  
 Structural wood sheathing directly applied or 3-8-11 oc purlins, except end verticals.  
 BOT CHORD  
 Rigid ceiling directly applied or 9-8-12 oc bracing.

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

**REACTIONS.** (lb/size)

7	=	567/0-3-8 (min. 0-1-8)
5	=	501/Mechanical
Max Horz		
7	=	48(LC 14)
Max Uplift		
7	=	-168(LC 10)
5	=	-135(LC 10)
Max Grav		
7	=	647(LC 21)
5	=	581(LC 22)

**FORCES.** (lb)  
 Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD  
 2-8=-653/679, 8-9=-537/691,  
 3-9=-532/702, 3-10=-502/703,  
 10-11=-621/692, 4-11=-631/680,  
 2-7=-586/490, 4-5=-527/456  
 BOT CHORD  
 7-12=-314/376, 6-12=-314/376  
 WEBS  
 3-6=-290/197, 2-6=-269/359,  
 4-6=-449/432

**NOTES-** (11-14)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Exterior(2R) 3-11-2 to 7-11-2, Exterior(2E) 7-11-2 to 12-8-12 zone; end vertical left exposed; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); 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
- Unbalanced snow loads have been considered for this design.
- 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.
- 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 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=168, 5=135.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

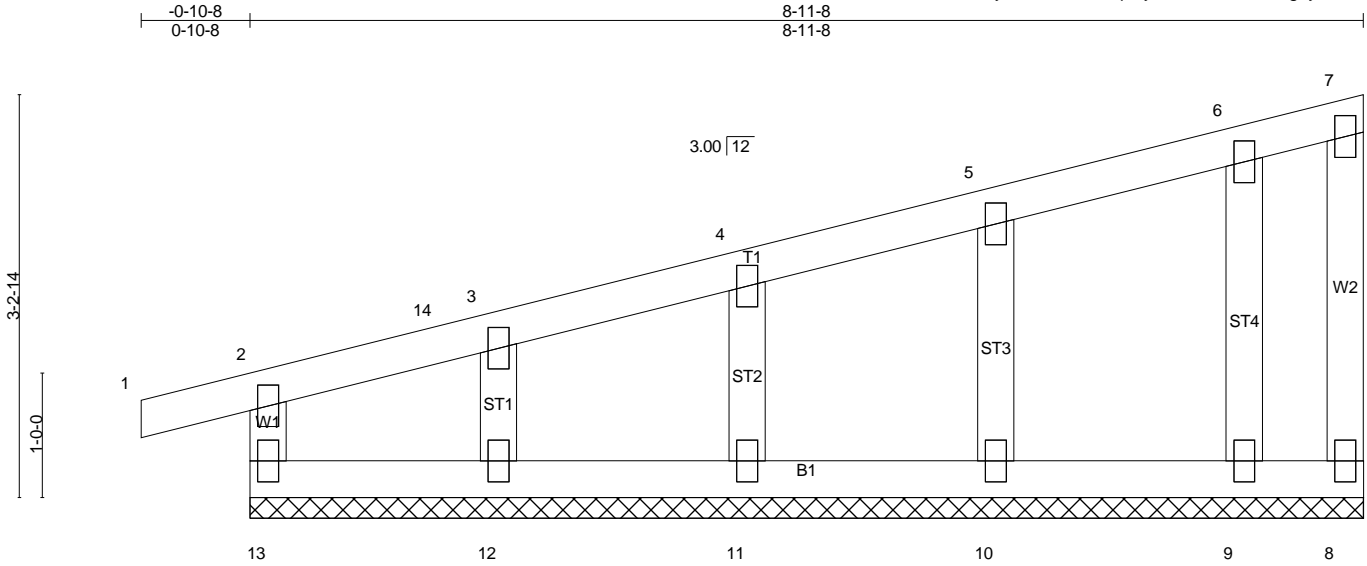
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- Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- Web bracing shown is for lateral support of individual 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.
- SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/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

Job	Truss	Truss Type	Qty	Ply	LOT 64 CROSSING @ ANDERSON CREEK   233 TIMBER SKIP DRIVE SPR
22-2667-R01	R14	GABLE	1	1	Job Reference (optional)

Atlantic Building Components, Moncks Corner, South Carolina

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Apr 14 12:56:08 2022 Page 1  
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Scale = 1:18.5

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.11	Vert(LL)	-0.00	1	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.07	Vert(CT)	-0.00	1	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	-0.00	8	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R						
								Weight: 43 lb	FT = 0%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.3  
 WEBS 2x4 SP No.3  
 OTHERS 2x4 SP No.3

**BRACING-**

TOP CHORD  
 Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD  
 Rigid ceiling directly applied or 6-0-0 oc bracing.

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

**REACTIONS.** All bearings 8-11-8.

(lb) - Max Horz  
 13= 111(LC 11)  
 Max Uplift  
 All uplift 100 lb or less at joint(s)  
 13, 8, 12, 11, 10, 9  
 Max Grav  
 All reactions 250 lb or less at joint(s)  
 13, 8, 12, 11, 10, 9

**FORCES.** (lb)

Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**NOTES-** (14-15)

1) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
 Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft;  
 Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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  
 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- 3) 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
- 4) Unbalanced snow loads have been considered for this design.
- 5) 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.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable requires continuous bottom chord bearing.
- 8) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 9) Gable studs spaced at 2-0-0 oc.
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) \* This truss has been designed for a live load of 30.Opsf 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.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13, 8, 12, 11, 10, 9.
- 13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 14) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. 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.

**LOAD CASE(S)**

Standard

Job 22-2667-R01	Truss R15	Truss Type Monopitch	Qty 3	Ply 1	LOT 64 CROSSING @ ANDERSON CREEK   233 TIMBER SKIP DRIVE SPR
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Atlantic Building Components, Moncks Corner, South Carolina

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Apr 14 12:56:11 2022 Page 1  
ID:NQLeVDd4PWwD4SswrTSDr\_y95ve-To\_PzZ9ijtTT?pk6HVv5CKF\_u9hMXuPMpqzjLDzQp9l

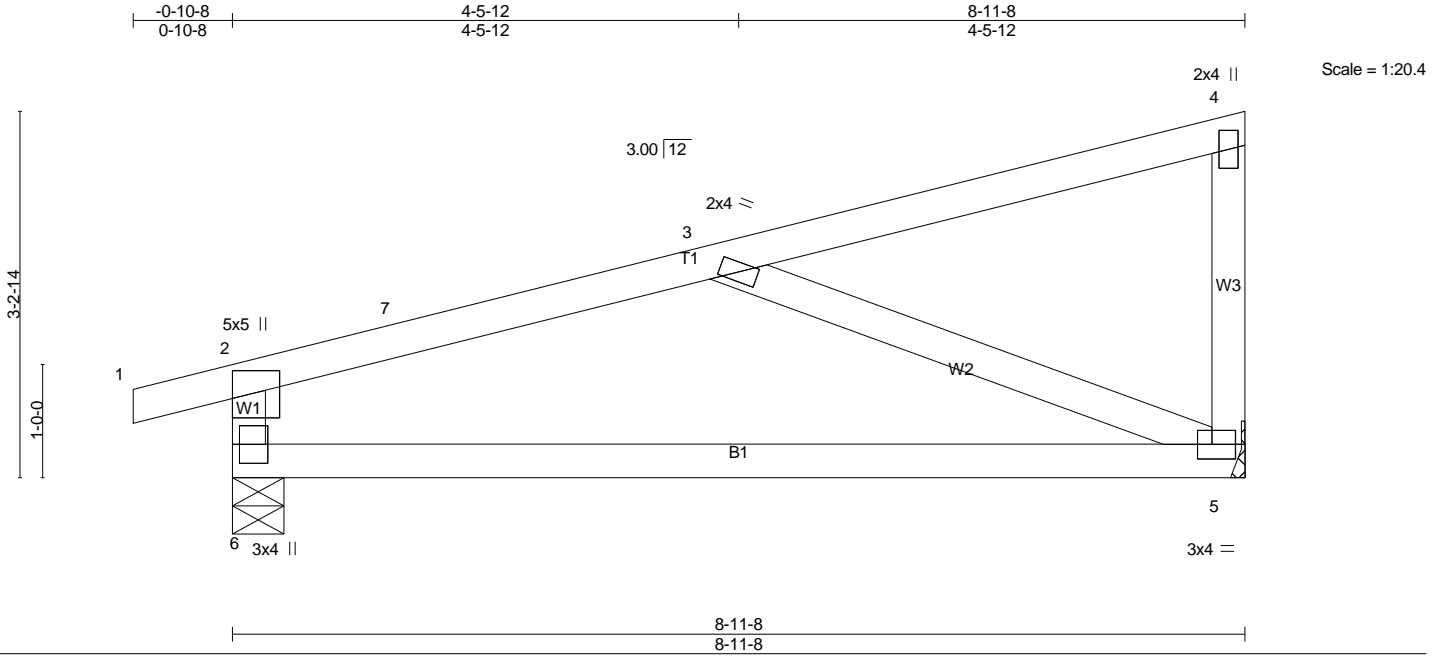


Plate Offsets (X,Y)-- [2:0-2-8,0-1-12], [5:0-1-8,0-1-8], [6:0-2-0,0-0-12]									
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.91	Vert(LL)	-0.19 5-6	>546	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.68	Vert(CT)	-0.37 5-6	>281	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.23	Horz(CT)	0.01 5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-SH					Weight: 40 lb	FT = 0%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3

**BRACING-**

TOP CHORD  
Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD  
Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** (lb/size)

5 = 343/Mechanical  
6 = 412/0-5-8 (min. 0-1-8)  
Max Horiz  
6 = 79(LC 10)  
Max Uplift  
5 = -84(LC 14)  
6 = -93(LC 10)  
Max Grav  
5 = 443(LC 21)  
6 = 483(LC 21)

**FORCES.** (lb)

Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD  
2-7=-573/103, 3-7=-552/112,  
2-6=-387/134  
BOT CHORD  
5-6=-159/509  
WEBS  
3-5=-502/177

**NOTES-** (10-11)

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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
- 3) Unbalanced snow loads have been considered for this design.
- 4) 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.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* 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.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
- 11) 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.

**LOAD CASE(S)**

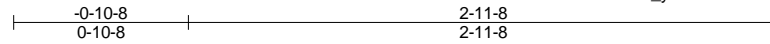
Standard

Scale = 1:20.4

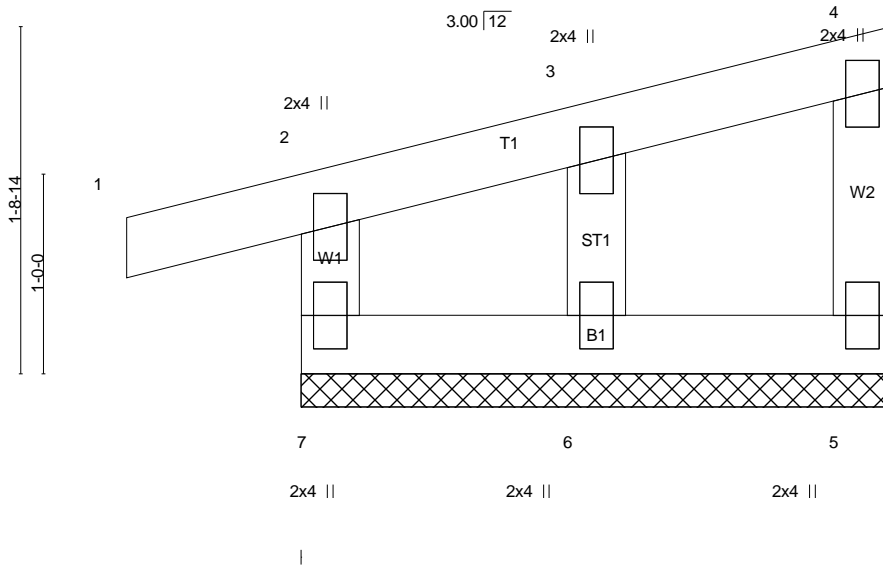


Job 22-2667-R01	Truss R16	Truss Type Monopitch Supported Gable	Qty 2	Ply 1	LOT 64 CROSSING @ ANDERSON CREEK   233 TIMBER SKIP DRIVE SPR
Atlantic Building Components, Moncks Corner, South Carolina					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Apr 14 12:56:14 2022 Page 1  
 ID:NQLeVDd4PWwD4SswrTSDr\_y95ve-tMfXcbBa0or2sG3hydSopytiYNsFkIToVoBNyXzQp9F



Scale = 1:11.5



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.11	Vert(LL)	-0.00	1	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	1	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	-0.00	5	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R						
								Weight: 14 lb	FT = 0%

- LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.3  
 WEBS 2x4 SP No.3  
 OTHERS 2x4 SP No.3
- BRACING-**  
 TOP CHORD  
 Structural wood sheathing directly applied or 2-11-8 oc purlins, except end verticals.  
 BOT CHORD  
 Rigid ceiling directly applied or 6-0-0 oc bracing.

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

**REACTIONS.** (lb/size)

7	=	131/2-11-8 (min. 0-1-8)
5	=	46/2-11-8 (min. 0-1-8)
6	=	97/2-11-8 (min. 0-1-8)

Max Horz

7	=	55(LC 11)
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Max Uplift

7	=	-54(LC 10)
5	=	-9(LC 10)
6	=	-24(LC 14)

Max Grav

7	=	172(LC 21)
5	=	58(LC 21)
6	=	120(LC 21)

**FORCES.** (lb)  
 Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**NOTES-** (13-14)  
 1) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
 Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft;  
 Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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

- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 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
- Unbalanced snow loads have been considered for this design.
- 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.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- 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 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 5, 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

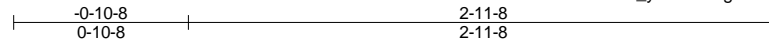
- Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
- Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

**LOAD CASE(S)**  
 Standard

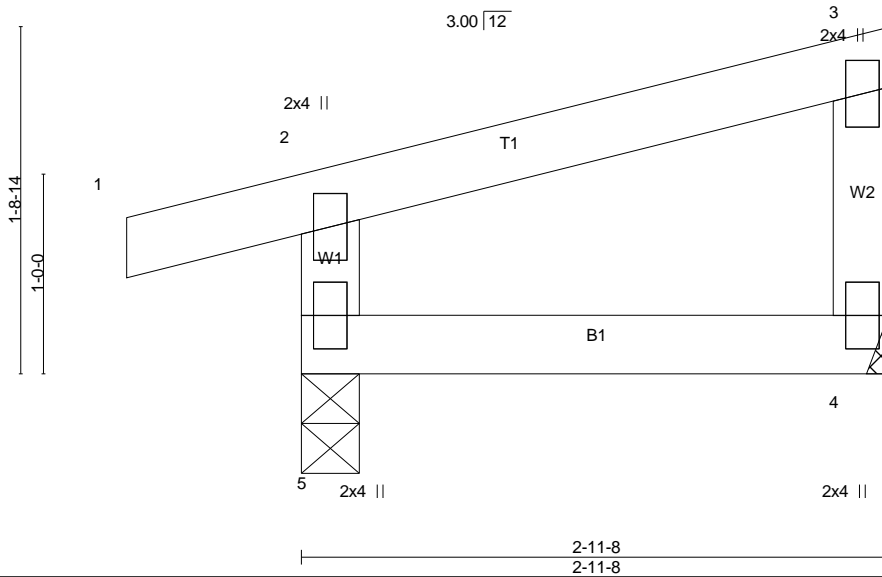
Job	Truss	Truss Type	Qty	Ply	LOT 64 CROSSING @ ANDERSON CREEK   233 TIMBER SKIP DRIVE SPR
22-2667-R01	R17	Monopitch	7	1	Job Reference (optional)

Atlantic Building Components, Moncks Corner, South Carolina

ID:NQLeVDd4PWwD4SswrTSDr\_y95ve-lxLgEdETjDdjkoFdI0VRbVDoauXxfUEBmQ1ZszQp9C  
8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Apr 14 12:56:17 2022 Page 1



Scale = 1:11.5



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.11	Vert(LL) -0.00	4-5	>999	240	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.06	Vert(CT) -0.00	4-5	>999	180		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Horz(CT) -0.00	4	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-R						
	Code IRC2018/TPI2014						Weight: 13 lb	FT = 0%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3

**BRACING-**

TOP CHORD  
Structural wood sheathing directly applied or 2-11-8 oc purlins, except end verticals.  
BOT CHORD  
Rigid ceiling directly applied or 6-0-0 oc bracing.

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

**REACTIONS.** (lb/size)

4 = 95/Mechanical  
5 = 180/0-3-8 (min. 0-1-8)  
Max Horz  
5 = 55(LC 11)  
Max Uplift  
4 = -21(LC 14)  
5 = -63(LC 10)  
Max Grav  
4 = 118(LC 21)  
5 = 232(LC 21)

**FORCES.** (lb)

Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**NOTES-** (10-11)

1) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft;  
Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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  
2) 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

3) Unbalanced snow loads have been considered for this design.

4) 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.

5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

6) \* 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.

7) Refer to girder(s) for truss to truss connections.

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5.

9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

10) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.

11) 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.

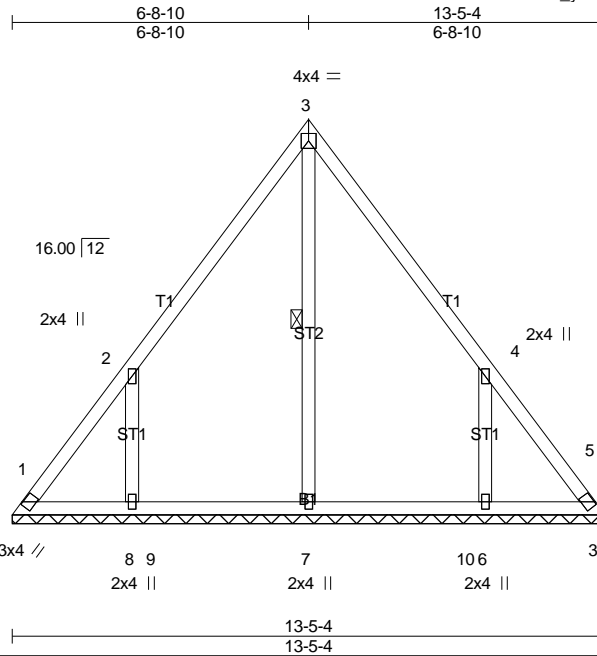
**LOAD CASE(S)**

Standard

Job 22-2667-R01	Truss VT01	Truss Type Valley	Qty 1	Ply 1	LOT 64 CROSSING @ ANDERSON CREEK   233 TIMBER SKIP DRIVE SPR
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Atlantic Building Components, Moncks Corner, South Carolina

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Apr 14 12:56:20 2022 Page 1  
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Scale = 1:52.2

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.21	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.25	BC 0.42	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.10	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-SH						
	Code IRC2018/TPI2014						Weight: 73 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.3  
 OTHERS 2x4 SP No.3

**BRACING-**

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

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

**REACTIONS.** All bearings 13-5-4.

(lb) - Max Horz  
 1=-213(LC 8)  
 Max Uplift  
 All uplift 100 lb or less at joint(s) 1,  
 5 except 8=-316(LC 12), 6=-316(LC 13)  
 Max Grav  
 All reactions 250 lb or less at joint(s)  
 1, 5 except 7=415(LC 22), 8=466(LC 19),  
 6=466(LC 20)

**FORCES.** (lb)

Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD  
 1-2=-266/196  
 WEBS  
 2-8=-391/346, 4-6=-391/346

**NOTES-** (9-12)

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-8 to 5-1-2, Exterior(2R) 5-1-2 to 8-4-2, Exterior(2E) 8-4-2 to 13-1-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); 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
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* 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.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=316, 6=316.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

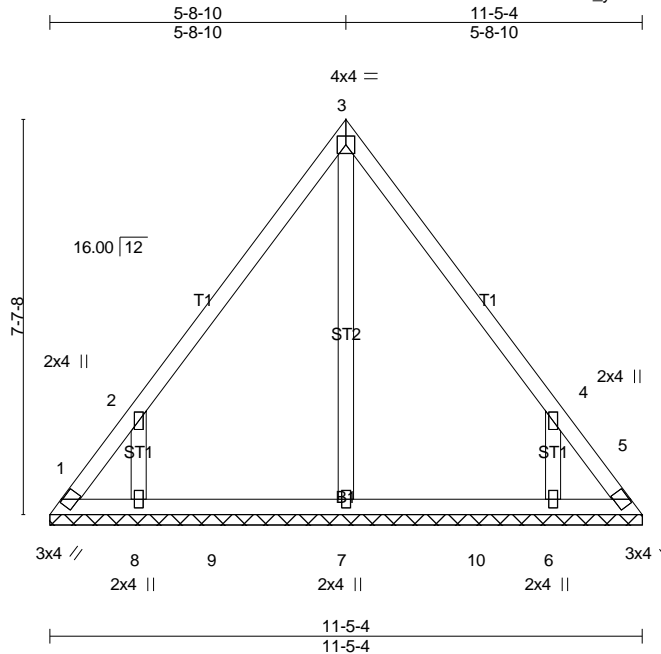
- 9) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 10) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 11) 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.
- 12) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/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

Job 22-2667-R01	Truss VT02	Truss Type Valley	Qty 1	Ply 1	LOT 64 CROSSING @ ANDERSON CREEK   233 TIMBER SKIP DRIVE SPR
Atlantic Building Components, Moncks Corner, South Carolina					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Apr 14 12:56:23 2022 Page 1  
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<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.24	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.25	BC 0.36	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.11	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.00 5 n/a n/a		
	Code IRC2018/TPI2014			Weight: 60 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.3  
 OTHERS 2x4 SP No.3

**BRACING-**  
 TOP CHORD  
 Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD  
 Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** All bearings 11-5-4.  
 (lb) - Max Horz  
 1=-180(LC 10)  
 Max Uplift  
 All uplift 100 lb or less at joint(s)  
 except 1=-139(LC 10), 5=-115(LC 11),  
 8=-306(LC 12), 6=-305(LC 13)  
 Max Grav  
 All reactions 250 lb or less at joint(s)  
 1, 5 except 7=374(LC 22), 8=420(LC 19),  
 6=419(LC 20)

**FORCES.** (lb)  
 Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD  
 1-2=-280/198, 4-5=-262/176  
 WEBS  
 2-8=-401/354, 4-6=-401/354

**NOTES-** (9-12)  
 1) Unbalanced roof live loads have been considered for this design.

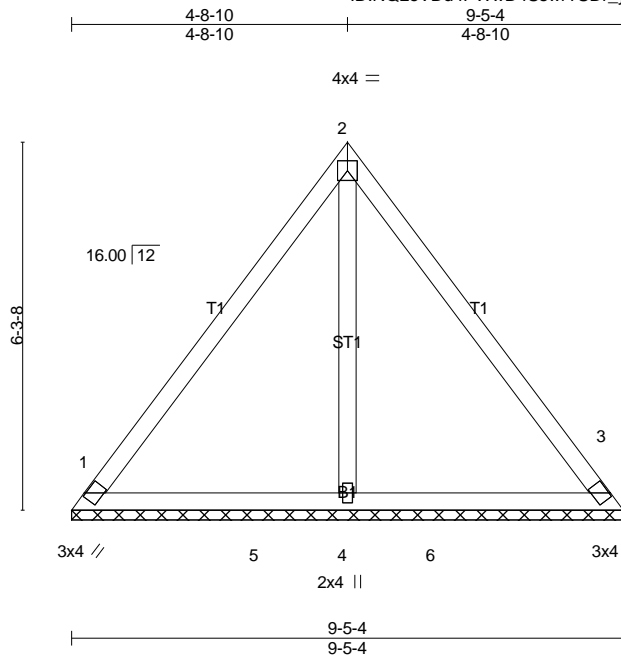
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-8 to 5-1-2, Exterior(2R) 5-1-2 to 6-4-2, Exterior(2E) 6-4-2 to 11-1-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60  
 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); 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  
 4) Gable requires continuous bottom chord bearing.  
 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.  
 6) \* 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.  
 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 139 lb uplift at joint 1, 115 lb uplift at joint 5, 306 lb uplift at joint 8 and 305 lb uplift at joint 6.  
 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

9) 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.  
 10) 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.  
 11) 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.  
 12) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/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

Job 22-2667-R01	Truss VT03	Truss Type Valley	Qty 1	Ply 1	LOT 64 CROSSING @ ANDERSON CREEK   233 TIMBER SKIP DRIVE SPR
Atlantic Building Components, Moncks Corner, South Carolina					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Apr 14 12:56:26 2022 Page 1  
 ID:NQLvDd4PWwD4SswrTSDr\_y95ve-XgO37iL6BUMLI6\_\_f8gcJUNitCs0YiGZFf50NrzQp93



Scale = 1:39.4

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0 Plate Grip DOL 1.25	TC 0.28	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL 1.25	BC 0.42	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.09	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-SH						
							Weight: 45 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.3  
 OTHERS 2x4 SP No.3

**BRACING-**

**TOP CHORD**

Structural wood sheathing directly applied or 6-0-0 oc purlins.

**BOT CHORD**

Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** (lb/size)

1 = 206/9-5-4 (min. 0-1-8)  
 3 = 206/9-5-4 (min. 0-1-8)  
 4 = 296/9-5-4 (min. 0-1-8)

**Max Horz**

1 = -147(LC 8)

**Max Uplift**

1 = -42(LC 13)  
 3 = -30(LC 12)  
 4 = -38(LC 12)

**Max Grav**

1 = 211(LC 20)  
 3 = 206(LC 1)  
 4 = 413(LC 19)

**FORCES.** (lb)

Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**NOTES-** (9-12)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); 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
- Gable requires continuous bottom chord bearing.
- 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 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 42 lb uplift at joint 1, 30 lb uplift at joint 3 and 38 lb uplift at joint 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

- 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.
- 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.
- 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.
- SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/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.

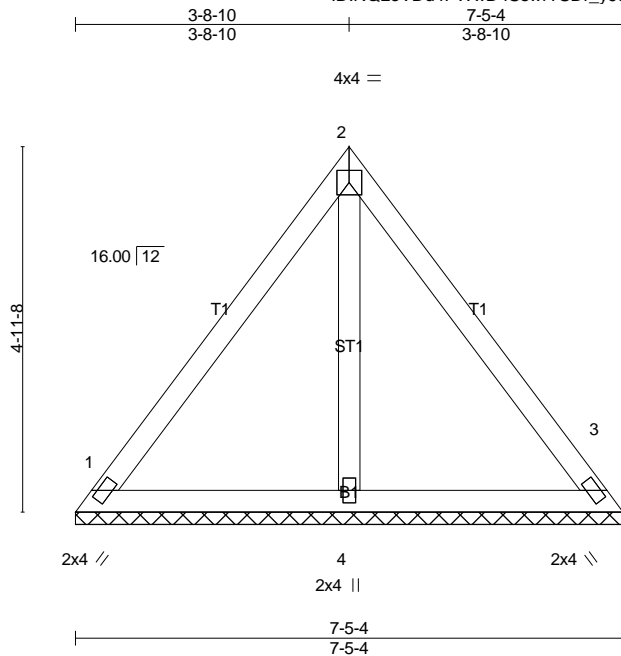
**LOAD CASE(S)**

Standard

Job	Truss	Truss Type	Qty	Ply	LOT 64 CROSSING @ ANDERSON CREEK   233 TIMBER SKIP DRIVE SPR
22-2667-R01	VT04	Valley	1	1	Job Reference (optional)

Atlantic Building Components, Moncks Corner, South Carolina

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Apr 14 12:56:29 2022 Page 1  
 ID:NQLeVDd4PWwD4SswrTSDr\_y95ve-xF4CjN\_UPkw9ajZKHDJw7?DjQx2l4m?xdKg\_AzQp90



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.31	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.25	BC 0.20	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.05	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P						
	Code IRC2018/TPI2014							
							Weight: 35 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.3  
 OTHERS 2x4 SP No.3

**BRACING-**

**TOP CHORD**

Structural wood sheathing directly applied or 6-0-0 oc purlins.

**BOT CHORD**

Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** (lb/size)

1 = 177/7-5-4 (min. 0-1-8)  
 3 = 177/7-5-4 (min. 0-1-8)  
 4 = 194/7-5-4 (min. 0-1-8)

**Max Horz**

1 = 114(LC 11)

**Max Uplift**

1 = -56(LC 13)  
 3 = -47(LC 12)

**Max Grav**

1 = 177(LC 1)  
 3 = 177(LC 1)  
 4 = 208(LC 5)

**FORCES.** (lb)

Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**NOTES-** (9-12)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); 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
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

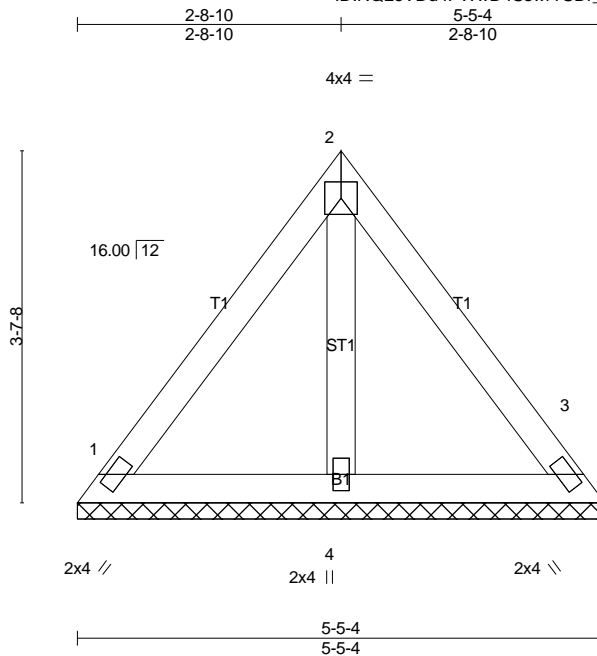
**LOAD CASE(S)**  
Standard

- \* 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 56 lb uplift at joint 1 and 47 lb uplift at joint 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.
- 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.
- 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.
- 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.

Job 22-2667-R01	Truss VT05	Truss Type Valley	Qty 1	Ply 1	LOT 64 CROSSING @ ANDERSON CREEK   233 TIMBER SKIP DRIVE SPR
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Atlantic Building Components, Moncks Corner, South Carolina

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Apr 14 12:56:31 2022 Page 1  
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Scale = 1:23.7

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.15	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.25	BC 0.10	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.02	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P						
	Code IRC2018/TPI2014							
							Weight: 25 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2

BOT CHORD 2x4 SP No.3

OTHERS 2x4 SP No.3

**BRACING-**

TOP CHORD

Structural wood sheathing directly applied or 5-5-4 oc purlins.

BOT CHORD

Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** (lb/size)

1 = 125/5-5-4 (min. 0-1-8)

3 = 125/5-5-4 (min. 0-1-8)

4 = 138/5-5-4 (min. 0-1-8)

Max Horz

1 = -80(LC 8)

Max Uplift

1 = -40(LC 13)

3 = -33(LC 12)

Max Grav

1 = 125(LC 1)

3 = 125(LC 1)

4 = 147(LC 5)

**FORCES.** (lb)

Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**NOTES-** (9-12)

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft;  
Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); 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

4) Gable requires continuous bottom chord bearing.  
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

6) \* 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.

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 40 lb uplift at joint 1 and 33 lb uplift at joint 3.

8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

9) 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.

10) 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.

11) 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.

12) 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.

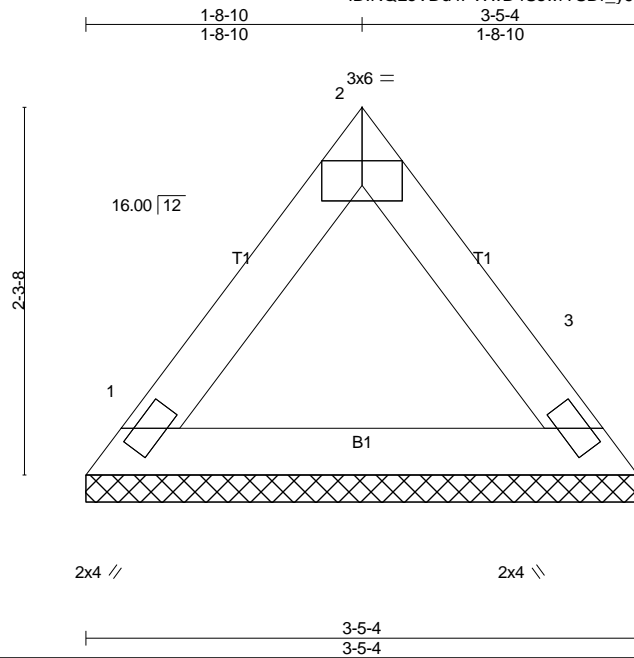
**LOAD CASE(S)**

Standard

Job	Truss	Truss Type	Qty	Ply	LOT 64 CROSSING @ ANDERSON CREEK   233 TIMBER SKIP DRIVE SPR
22-2667-R01	VT06	Valley	1	1	Job Reference (optional)

Atlantic Building Components, Moncks Corner, South Carolina

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Apr 14 12:56:34 2022 Page 1  
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Scale = 1:14.3

Plate Offsets (X,Y)-- [2:Edge,0-1-13]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.05	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.25	BC 0.16	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						
								Weight: 13 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP No.2

BOT CHORD 2x4 SP No.3

#### BRACING-

TOP CHORD

Structural wood sheathing directly applied or 3-5-4 oc purlins.

BOT CHORD

Rigid ceiling directly applied or 10-0-0 oc bracing.

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

#### REACTIONS. (lb/size)

1 = 114/3-5-4 (min. 0-1-8)  
3 = 114/3-5-4 (min. 0-1-8)

Max Horz

1 = -47(LC 8)

Max Uplift

1 = -16(LC 13)

3 = -16(LC 12)

#### FORCES. (lb)

Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

#### NOTES- (9-12)

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft;  
Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); 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

4) Gable requires continuous bottom chord bearing.

5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

6) \* 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.

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 16 lb uplift at joint 1 and 16 lb uplift at joint 3.

8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

9) 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.

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12) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/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