

Job	Truss	Truss Type	Qty	Ply	Wellons Reser
2000456-2000456A	A	Piggyback Base	5	1	Job Reference (optional)

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:26:48 2020 Page 1  
 ID:kQ1KS2Sn3ljdzGzjx5z8lzz3hVz-Dldl5u9ijumaAldlAEQPhFBPWAEvSrngNzqeOdyqsHr

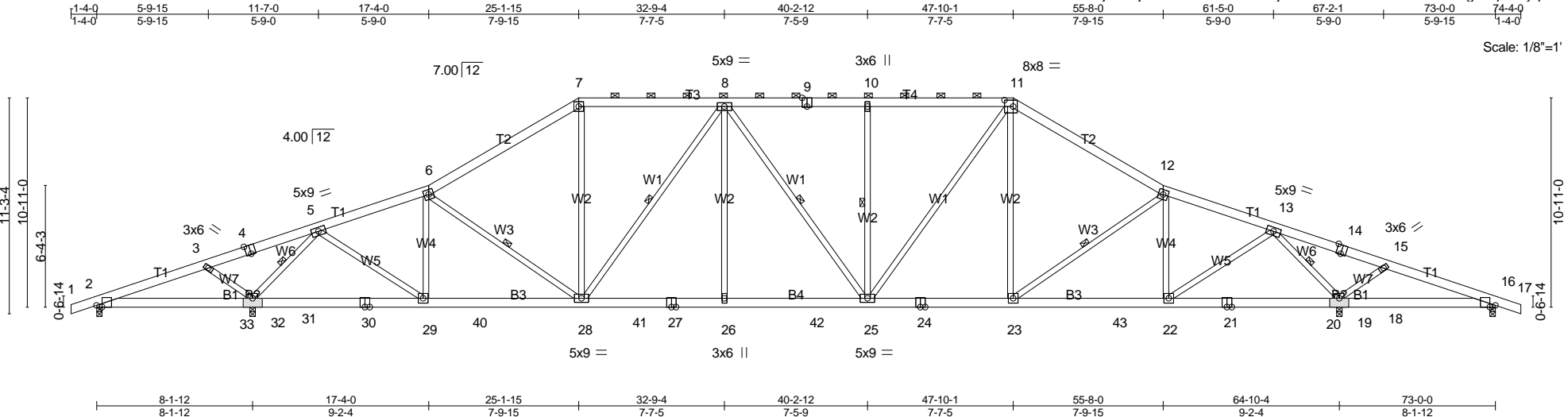


Plate Offsets (X,Y)--	[2:0-3-6,Edge], [4:0-3-0,Edge], [9:0-3-0,Edge], [11:0-5-8,0-4-0], [14:0-3-0,Edge], [16:0-3-6,Edge]
-----------------------	--

<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 0.51	Vert(LL)	-0.19	25-26	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.62	Vert(CT)	-0.37	25-26	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.82	Horz(CT)	0.11	19	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS					Weight: 566 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 SP No.2  
 BOT CHORD 2x6 SP No.2  
 WEBS 2x4 SP No.3 \*Except\*  
 W1: 2x4 SP No.2 or 2x4 SPF No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 3-9-1 oc purlins, except 2-0-0 oc purlins (4-2-6 max.): 7-11.  
 Rigid ceiling directly applied or 10-0-0 oc bracing, Except:  
 6-0-0 oc bracing: 2-32,16-19.  
 WEBS 1 Row at midpt 5-32, 6-28, 8-28, 8-25, 10-25, 12-23, 13-19

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

**REACTIONS.** All bearings 0-3-8 except (jt=length) 32=0-4-14 (input: 0-3-8 + bearing block), 19=0-4-14 (input: 0-3-8 + bearing block).  
 (lb) - Max Horz 2=180(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) except 2=270(LC 26), 32=-300(LC 12), 19=-262(LC 13), 16=-266(LC 25)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 16 except 32=3116(LC 1), 19=3111(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-183/1261, 3-4=-296/1509, 4-5=-284/1594, 5-6=-2477/542, 6-7=-2741/636, 7-8=-2298/614, 8-9=-2773/700, 9-10=-2773/700, 10-11=-2773/700, 11-12=-2757/637, 12-13=-2490/546, 13-14=-274/1590, 14-15=-285/1505, 15-16=-170/1257  
 BOT CHORD 2-33=-1136/225, 32-33=-1136/225, 31-32=-120/798, 30-31=-120/798, 29-30=-120/798, 29-40=-284/2327, 28-40=-284/2327, 28-41=-269/2795, 27-41=-269/2795, 26-27=-269/2795, 26-42=-269/2795, 25-42=-269/2795, 24-25=-182/2302, 23-24=-182/2302, 23-43=-287/2340, 22-43=-287/2340, 21-22=-93/805, 20-21=-93/805, 19-20=-93/805, 18-19=-1132/222, 16-18=-1132/222  
 WEBS 3-32=-492/237, 5-32=-3452/757, 5-29=-233/1860, 6-29=-880/246, 7-28=-110/949, 8-28=-955/221, 8-26=0/413, 10-25=-478/222, 11-25=-218/899, 11-23=-28/357, 12-22=-878/245, 13-22=-230/1866, 13-19=-3458/750, 15-19=-492/237

**NOTES-**  
 1) 2x6 SP No.2 bearing block 12" long at jt. 32 attached to front face with 3 rows of 10d (0.120"x3") nails spaced 3" o.c. 12 Total fasteners. User Defined Bearing crushing capacity= 425psi.  
 2) 2x6 SP No.2 bearing block 12" long at jt. 19 attached to front face with 3 rows of 10d (0.120"x3") nails spaced 3" o.c. 12 Total fasteners. User Defined Bearing crushing capacity= 425psi.  
 3) Unbalanced roof live loads have been considered for this design.  
 4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

Job	Truss	Truss Type	Qty	Ply	Wellons Reser
2000456-2000456A	A	Piggyback Base	5	1	Job Reference (optional)

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:26:48 2020 Page 2  
ID:kQ1KS2Sn3ljdzGzjx5z8lzz3hVz-Dldl5u9ijumaAldlAEQPhFBPWAEvSrngNzqeOdyqsHr

**NOTES-**

- 5) **WARNING:** This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
- 6) Provide adequate drainage to prevent water ponding.
- 7) All plates are 6x6 MT20 unless otherwise indicated.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 16. This connection is for uplift only and does not consider lateral forces.
- 11) Two H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 32 and 19. This connection is for uplift only and does not consider lateral forces.
- 12) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

Job 2000456-2000456A	Truss A1	Truss Type PIGGYBACK BASE	Qty 4	Ply 1	Wellons Reser Job Reference (optional)
-------------------------	-------------	------------------------------	----------	----------	---

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:26:51 2020 Page 1  
ID:kQ1KS2Sn3ljdzGzjx5z8lzz3hVz-dtJujwBb0p891DMKrNz6JupvfOfcCX63x3l?xyqsHo

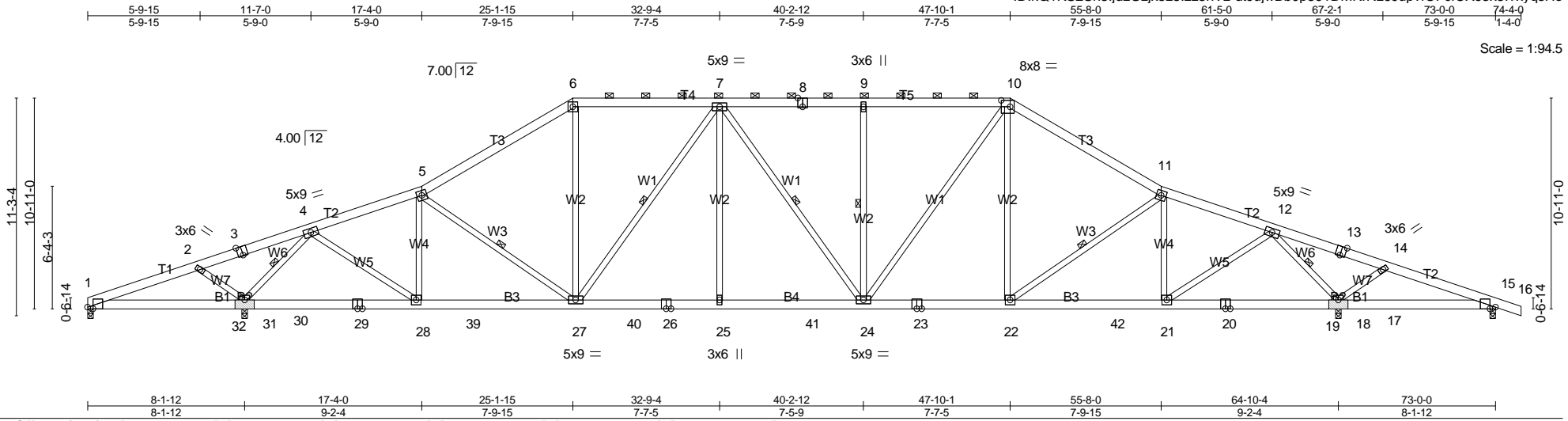


Plate Offsets (X,Y)-- [1:0-3-6,Edge], [3:0-3-0,Edge], [8:0-3-0,Edge], [10:0-5-8,0-4-0], [13:0-3-0,Edge], [15:0-3-6,Edge]
--

<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 0.51	Vert(LL)	-0.19	24-25	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.62	Vert(CT)	-0.37	24-25	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.82	Horz(CT)	0.11	18	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS					Weight: 562 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 SP No.2  
 BOT CHORD 2x6 SP No.2  
 WEBS 2x4 SP No.3 \*Except\*  
 W1: 2x4 SP No.2 or 2x4 SPF No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 3-9-1 oc purlins, except 2-0-0 oc purlins (4-2-6 max.): 6-10.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 1-31,15-18.  
 WEBS 1 Row at midpt 4-31, 5-27, 7-27, 7-24, 9-24, 11-22, 12-18

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

**REACTIONS.** All bearings 0-3-8 except (jt=length) 31=0-4-14 (input: 0-3-8 + bearing block), 18=0-4-14 (input: 0-3-8 + bearing block).  
 (lb) - Max Horz 1=-188(LC 13)  
 Max Uplift All uplift 100 lb or less at joint(s) except 1=-299(LC 26), 31=-302(LC 12), 18=-262(LC 13), 15=-265(LC 25)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 15 except 31=3123(LC 1), 18=3111(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-173/1254, 2-3=-293/1507, 3-4=-281/1592, 4-5=-2476/542, 5-6=-2741/636, 6-7=-2297/614, 7-8=-2773/700, 8-9=-2773/700, 9-10=-2773/700, 10-11=-2757/637, 11-12=-2490/546, 12-13=-273/1590, 13-14=-285/1505, 14-15=-169/1257  
 BOT CHORD 1-32=-1128/221, 31-32=-1128/221, 30-31=-120/798, 29-30=-120/798, 28-29=-120/798, 28-39=-284/2326, 27-39=-284/2326, 27-40=-269/2795, 26-40=-269/2795, 25-26=-269/2795, 25-41=-269/2795, 24-41=-269/2795, 23-24=-182/2302, 22-23=-182/2302, 22-42=-287/2340, 21-42=-287/2340, 20-21=-93/805, 19-20=-93/805, 18-19=-93/805, 17-18=-1132/222, 15-17=-1132/222  
 WEBS 2-31=-502/242, 4-31=-3449/753, 4-28=-233/1860, 5-28=-881/247, 6-27=-110/948, 7-27=-955/221, 7-25=0/413, 9-24=-478/222, 10-24=-218/899, 10-22=-28/357, 11-21=-878/245, 12-21=-230/1865, 12-18=-3458/750, 14-18=-492/237

**NOTES-**  
 1) 2x6 SP No.2 bearing block 12" long at jt. 31 attached to front face with 3 rows of 10d (0.120"x3") nails spaced 3" o.c. 12 Total fasteners. User Defined Bearing crushing capacity= 425psi.  
 2) 2x6 SP No.2 bearing block 12" long at jt. 18 attached to front face with 3 rows of 10d (0.120"x3") nails spaced 3" o.c. 12 Total fasteners. User Defined Bearing crushing capacity= 425psi.  
 3) Unbalanced roof live loads have been considered for this design.  
 4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCdL=6.0psf; BCdL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

Job	Truss	Truss Type	Qty	Ply	Wellons Reser
2000456-2000456A	A1	PIGGYBACK BASE	4	1	Job Reference (optional)

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:26:51 2020 Page 2  
ID:kQ1KS2Sn3IjdzGzjx5z8lzz3hVz-dtJujwBb0p891DMKrNz6JupvfOfcCX63x3l?xyqsHo

**NOTES-**

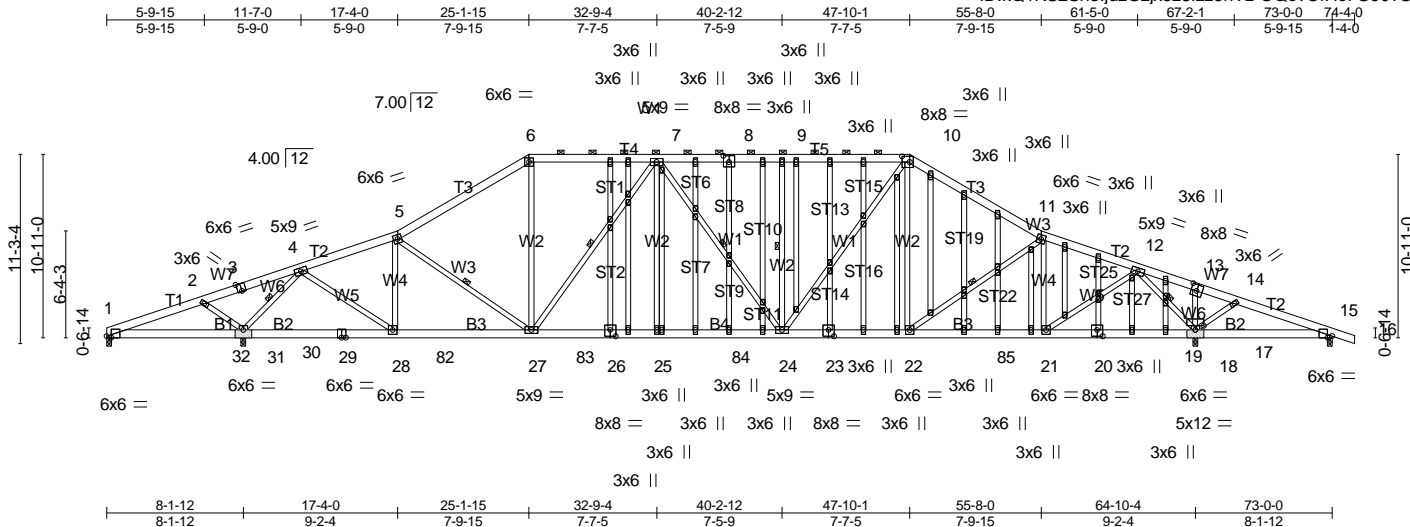
- 5) **WARNING:** This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
- 6) Provide adequate drainage to prevent water ponding.
- 7) All plates are 6x6 MT20 unless otherwise indicated.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 15. This connection is for uplift only and does not consider lateral forces.
- 11) Two H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 31 and 18. This connection is for uplift only and does not consider lateral forces.
- 12) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

Job 2000456-2000456A	Truss A1E	Truss Type GABLE	Qty 1	Ply 1	Wellons Reser Job Reference (optional)
-------------------------	--------------	---------------------	----------	----------	---

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:26:59 2020 Page 1  
ID:kQ1KS2Sn3ljdzGzix5z8lzz3hVz-OQovOfHc7G90?SztJ26?da8Hec\_TXqVlvB?jHUYqsHg



Scale = 1:137.2

Plate Offsets (X,Y)-- [1:0-3-6,Edge], [3:0-3-0,Edge], [8:0-4-0,0-4-8], [10:0-5-8,0-4-0], [13:0-4-0,0-4-8], [15:0-3-6,Edge], [18:0-6-0,0-3-0], [20:0-4-0,0-4-8], [23:0-4-0,0-4-8], [26:0-4-0,0-4-8]
--

<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	1.15	TC 0.51	Vert(LL)	-0.19	24-25	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.62	Vert(CT)	-0.37	24-25	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.82	Horz(CT)	0.11	18	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS						
								Weight: 773 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x6 SP No.2  
BOT CHORD 2x6 SP No.2  
WEBS 2x4 SP No.3 \*Except\*  
W1: 2x4 SP No.2 or 2x4 SPF No.2  
OTHERS 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 3-9-1 oc purlins, except 2-0-0 oc purlins (4-2-6 max.): 6-10.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 1-31,15-18.  
WEBS 1 Row at midpt 4-31, 5-27, 7-27, 7-24, 9-24, 11-22, 12-18

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

**REACTIONS.** All bearings 0-3-8 except (jt=length) 31=0-4-14 (input: 0-3-8 + bearing block), 18=0-4-14 (input: 0-3-8 + bearing block).  
(lb) - Max Horz 1=-188(LC 13)  
Max Uplift All uplift 100 lb or less at joint(s) except 1=-299(LC 26), 31=-302(LC 12), 18=-262(LC 13), 15=-265(LC 25)  
Max Grav All reactions 250 lb or less at joint(s) 1, 15 except 31=3123(LC 1), 18=3111(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-173/1254, 2-3=-293/1507, 3-4=-281/1592, 4-5=-2476/542, 5-6=-2741/636, 6-7=-2297/614, 7-8=-2773/700, 8-9=-2773/700, 9-10=-2773/700, 10-11=-2757/637, 11-12=-2490/546, 12-13=-273/1590, 13-14=-285/1505, 14-15=-169/1257  
BOT CHORD 1-32=-1128/221, 31-32=-1128/221, 30-31=-120/798, 29-30=-120/798, 28-29=-120/798, 28-82=-284/2326, 27-82=-284/2326, 27-83=-269/2795, 26-83=-269/2795, 25-26=-269/2795, 25-84=-269/2795, 24-84=-269/2795, 23-24=-182/2302, 22-23=-182/2302, 22-85=-287/2340, 21-85=-287/2340, 20-21=-93/805, 19-20=-93/805, 18-19=-93/805, 17-18=-1132/222, 15-17=-1132/222  
WEBS 2-31=-502/242, 4-31=-3449/753, 4-28=-233/1860, 5-28=-881/247, 6-27=-110/948, 7-27=-955/221, 7-25=0/413, 9-24=-478/222, 10-24=-218/899, 10-22=-28/357, 11-21=-878/245, 12-21=-230/1865, 12-18=-3458/750, 14-18=-492/237

**NOTES-**  
1) 2x6 SP No.2 bearing block 12" long at jt. 31 attached to front face with 3 rows of 10d (0.120"x3") nails spaced 3" o.c. 12 Total fasteners. User Defined Bearing crushing capacity= 425psi.  
2) 2x6 SP No.2 bearing block 12" long at jt. 18 attached to front face with 3 rows of 10d (0.120"x3") nails spaced 3" o.c. 12 Total fasteners. User Defined Bearing crushing capacity= 425psi.  
3) Unbalanced roof live loads have been considered for this design.  
4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60  
5) 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.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Wellons Reser
2000456-2000456A	A1E	GABLE	1	1	Job Reference (optional)

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:27:00 2020 Page 2  
ID:kQ1KS2Sn3IjdzGzjx5z8lzz3hVz-scMlc?IEuaHtcbY3tmdEAnhSNOKiGHIR7rkGqwyqsHf

**NOTES-**

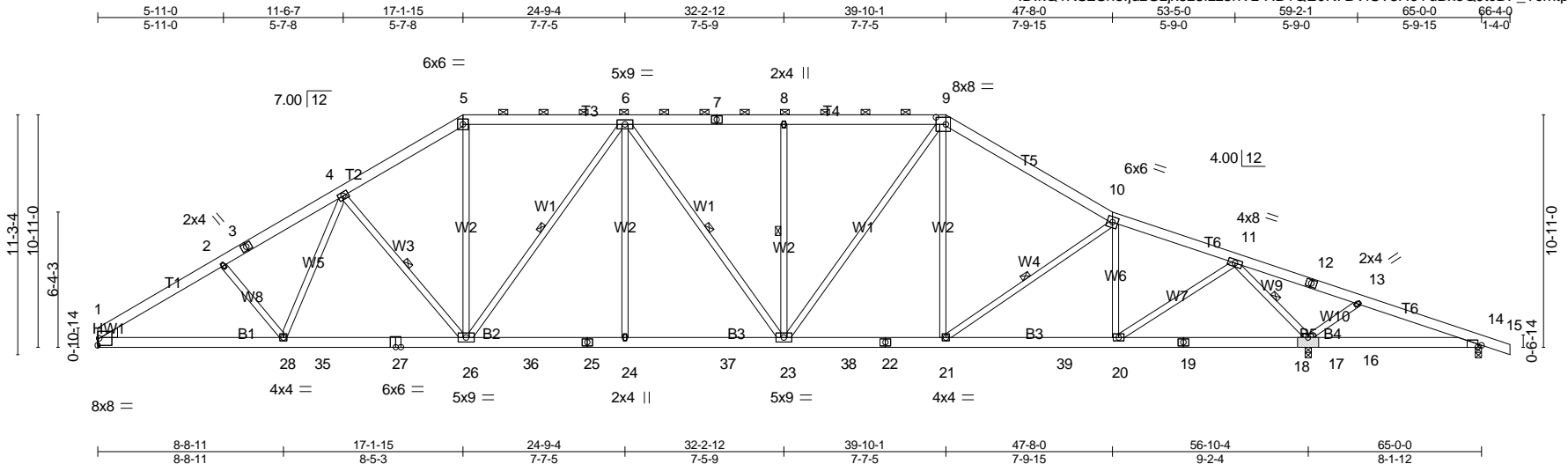
- 6) **WARNING:** This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
- 7) Provide adequate drainage to prevent water ponding.
- 8) All plates are 3x4 MT20 unless otherwise indicated.
- 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 12) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 15. This connection is for uplift only and does not consider lateral forces.
- 13) Two H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 31 and 18. This connection is for uplift only and does not consider lateral forces.
- 14) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

Job 2000456-2000456A	Truss A2	Truss Type Piggyback Base	Qty 12	Ply 1	Wellons Reser
-------------------------	-------------	------------------------------	-----------	----------	---------------

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:27:03 2020 Page 1  
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-HB1QE0K7BVfST3HeYuBxoQJtcDF\_TcmtpzXQFyqsHc



Scale: 1/8"=1'

Plate Offsets (X,Y)-- [9:0-5-8,0-4-0], [14:0-2-2,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 0.84	Vert(LL) -0.23 23-24 >999 240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.97	Vert(CT) -0.43 23-24 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.86	Horz(CT) 0.15 17 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS			
				Weight: 512 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 SP No.2  
 BOT CHORD 2x6 SP No.2  
 WEBS 2x4 SP No.3 \*Except\*  
 W1: 2x4 SP No.2 or 2x4 SPF No.2  
 WEDGE  
 Left: 2x6 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 2-6-3 oc purlins, except 2-0-0 oc purlins (4-0-10 max.): 5-9.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:  
 2-2-0 oc bracing: 1-28  
 6-0-0 oc bracing: 14-17.  
 WEBS 1 Row at midpt 4-26, 6-26, 6-23, 8-23, 10-21, 11-17

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

**REACTIONS.** (lb/size) 1=2191/Mechanical, 17=3255/(0-3-8 + bearing block) (req. 0-5-2), 14=-167/0-3-8 (min. 0-1-8)  
 Max Horz 1=-290(LC 8)  
 Max Uplift1=-168(LC 12), 17=-256(LC 13), 14=-323(LC 25)  
 Max Grav 1=2209(LC 2), 17=3255(LC 1), 14=11(LC 12)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-3660/675, 2-3=-3492/661, 3-4=-3458/689, 4-5=-3111/693, 5-6=-2633/642, 6-7=-2960/718, 7-8=-2960/718, 8-9=-2960/718,  
 9-10=-2890/650, 10-11=-2563/551, 11-12=-296/1768, 12-13=-308/1683, 13-14=-192/1431  
 BOT CHORD 1-28=-432/3038, 28-35=-336/2902, 27-35=-336/2902, 26-27=-336/2902, 26-36=-296/3053, 25-36=-296/3053, 24-25=-296/3053,  
 24-37=-296/3053, 23-37=-296/3053, 23-38=-193/2416, 22-38=-193/2416, 21-22=-193/2416, 21-39=-292/2411, 20-39=-292/2411,  
 19-20=-86/771, 18-19=-86/771, 17-18=-86/771, 16-17=-1296/242, 14-16=-1296/242  
 WEBS 4-28=-43/316, 4-26=-586/244, 5-26=-186/1234, 6-26=-831/270, 6-24=0/393, 8-23=-475/221, 9-23=-219/1017, 9-21=-29/336,  
 10-20=-947/254, 11-20=-245/1995, 11-17=-3660/773, 13-17=-498/238

**NOTES-**  
 1) 2x6 SP No.2 bearing block 12" long at jt. 17 attached to front face with 3 rows of 10d (0.120"x3") nails spaced 3" o.c. 12 Total fasteners. User Defined Bearing crushing capacity= 425psi.  
 2) Unbalanced roof live loads have been considered for this design.  
 3) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;  
 cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

Job	Truss	Truss Type	Qty	Ply	Wellons Reser
2000456-2000456A	A2	Piggyback Base	12	1	Job Reference (optional)

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:27:04 2020 Page 2  
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-INboSMLlypnJ5Dsq6biAKdr2MdbDC3012TiUzhyqsHb

**NOTES-**

- 4) **WARNING:** This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
- 5) Provide adequate drainage to prevent water ponding.
- 6) All plates are 4x6 MT20 unless otherwise indicated.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) Refer to girder(s) for truss to truss connections.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 168 lb uplift at joint 1.
- 11) Two H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 17. This connection is for uplift only and does not consider lateral forces.
- 12) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14. This connection is for uplift only and does not consider lateral forces.
- 13) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

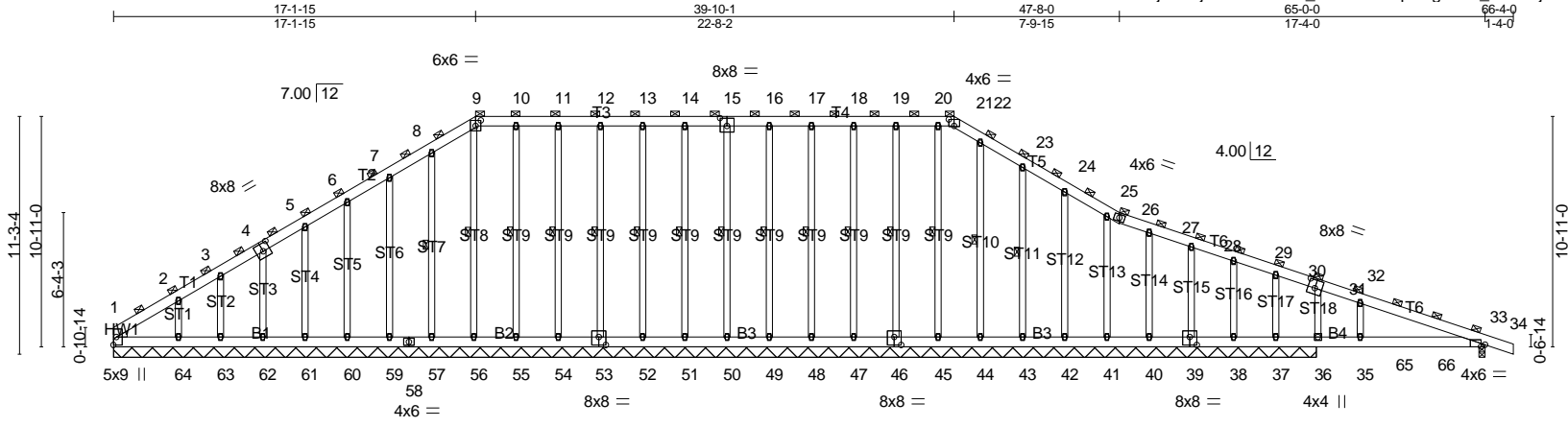
**LOAD CASE(S)** Standard



Job 2000456-2000456A	Truss A2E	Truss Type GABLE	Qty 1	Ply 1	Wellons Reser Job Reference (optional)
-------------------------	--------------	---------------------	----------	----------	---

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:27:13 2020 Page 1  
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-6eCKRSOqav1gb2Z8\_MHCXje9FjZpIRM7MOTngyqshS



Scale = 1:104.8

Plate Offsets (X,Y)--	[1:0-0-8,0-0-14], [1:0-1-0,0-5-11], [4:0-4-0,0-4-8], [9:0-3-0,0-3-4], [15:0-4-0,0-4-8], [21:0-3-0,0-3-12], [31:0-4-0,0-4-8], [33:0-2-6,Edge], [39:0-4-0,0-4-8], [46:0-4-0,0-4-8], [53:0-4-0,0-4-8]
-----------------------	--

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-2-0	TC 0.70	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.82	Vert(LL) 0.10 33-35 >964 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.21	Vert(CT) -0.19 33-35 >494 180		
BCDL 10.0	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.01 33 n/a n/a		
	Code IRC2015/TPI2014			Weight: 629 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 SP No.2  
 BOT CHORD 2x6 SP No.2  
 OTHERS 2x4 SP No.3  
 WEDGE  
 Left: 2x4 SP No.3

**BRACING-**  
 TOP CHORD 2-0-0 oc purlins (6-0-0 max.)  
 (Switched from sheeted: Spacing > 2-0-0).  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 15-50, 14-51, 13-52, 12-53, 11-54, 10-55, 9-56, 8-57, 16-49, 17-48, 18-47, 19-46, 20-45, 22-44, 23-43

**REACTIONS.** All bearings 57-0-0 except (jt=length) 33=0-3-8.  
 (lb) - Max Horz 1=-315(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 50, 51, 52, 53, 54, 55, 57, 59, 60, 61, 62, 63, 49, 48, 47, 46, 44 except  
 33=-184(LC 9), 64=-132(LC 35), 43=-160(LC 13), 42=-151(LC 13), 41=-156(LC 13), 40=-142(LC 9), 39=-120(LC 9),  
 38=-179(LC 13), 37=-537(LC 24), 36=-541(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 50, 51, 52, 53, 54, 55, 56, 57, 59, 60, 61, 62, 63, 49, 48, 47, 46, 45,  
 37 except 33=710(LC 1), 64=305(LC 19), 44=451(LC 24), 43=460(LC 1), 42=459(LC 1), 41=464(LC 1), 40=471(LC 1),  
 39=417(LC 24), 38=663(LC 1), 36=2132(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-287/275, 7-8=-154/260, 8-9=-196/307, 9-10=-182/288, 10-11=-182/289, 11-12=-182/289, 12-13=-182/289, 13-14=-182/289,  
 14-15=-182/289, 15-16=-182/289, 16-17=-182/289, 17-18=-182/289, 18-19=-182/289, 19-20=-183/289, 20-21=-183/289,  
 21-22=-194/297, 22-23=-176/285  
 WEBS 30-37=-52/305, 31-36=-925/255, 32-35=-158/322

**NOTES-**  
 1) Unbalanced roof live loads have been considered for this design.  
 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60  
 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.

Job	Truss	Truss Type	Qty	Ply	Wellons Reser
2000456-2000456A	A2E	GABLE	1	1	Job Reference (optional)

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:27:13 2020 Page 2  
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-\_6eCKRSOqav1gb2Z8\_MHCXje9FjZpIRM7MOTngyqshS

**NOTES-**

- 4) **WARNING:** This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
- 5) Provide adequate drainage to prevent water ponding.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1, 33, 50, 51, 52, 53, 54, 55, 57, 59, 60, 61, 62, 63, 64, 49, 48, 47, 46, 44, 43, 42, 41, 40, 39, 38, and 36. This connection is for uplift only and does not consider lateral forces.
- 11) Two H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 37. This connection is for uplift only and does not consider lateral forces.
- 12) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 286 lb down and 97 lb up at 40-11-4, 286 lb down and 97 lb up at 42-11-4, 286 lb down and 97 lb up at 44-11-4, 286 lb down and 97 lb up at 46-11-4, 286 lb down and 97 lb up at 48-11-4, 286 lb down and 97 lb up at 50-11-4, 286 lb down and 97 lb up at 52-11-4, 286 lb down and 97 lb up at 54-11-4, 286 lb down and 97 lb up at 56-11-4, 286 lb down and 81 lb up at 58-11-4, and 286 lb down and 78 lb up at 60-11-4, and 290 lb down and 79 lb up at 62-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 15) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-9=-65, 9-21=-65, 21-26=-65, 26-34=-65, 1-33=-22

Concentrated Loads (lb)

Vert: 44=-286(B) 43=-286(B) 42=-286(B) 41=-286(B) 40=-286(B) 39=-286(B) 38=-286(B) 37=-286(B) 36=-286(B) 35=-286(B) 65=-286(B) 66=-290(B)

Job 2000456-2000456A	Truss B	Truss Type Piggyback Base	Qty 14	Ply 1	Wellons Reser Job Reference (optional)
-------------------------	------------	------------------------------	-----------	----------	---

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:27:17 2020 Page 1  
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-sutjApVvuoQT9DLKNqRDMNuNys7Llzqx1\_MgwRyqSHO

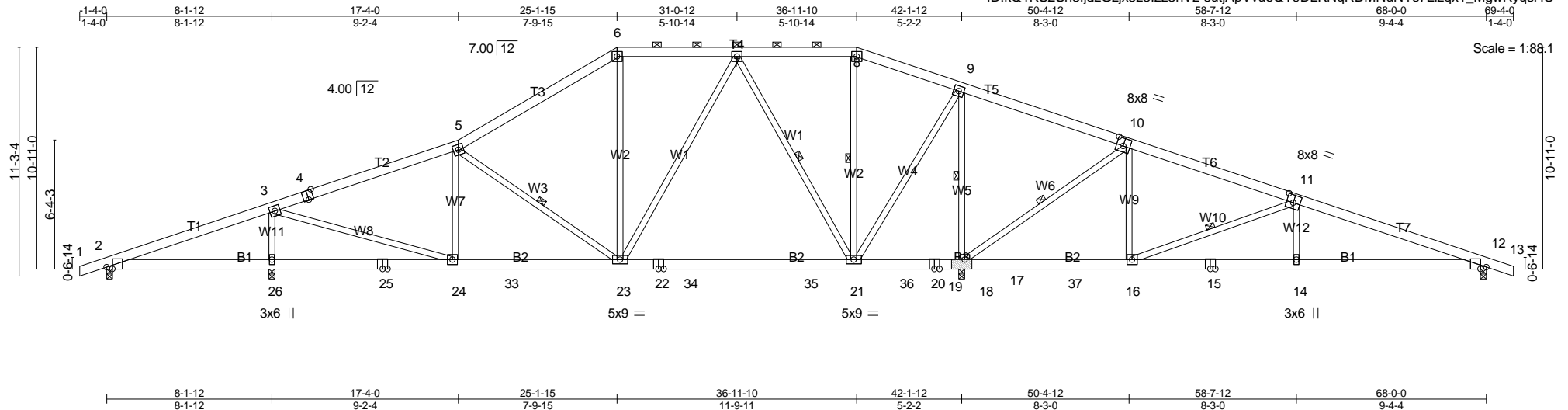


Plate Offsets (X,Y)-- [2:0-3-6,Edge], [4:0-3-0,Edge], [10:0-4-0,0-4-8], [11:0-4-0,0-4-8], [12:0-3-6,Edge]
---

<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 0.49	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.58	Vert(LL) -0.19 21-23 >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.83	Vert(CT) -0.33 21-23 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.03 12 n/a n/a		
	Code IRC2015/TPI2014			Weight: 506 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 SP No.2  
 BOT CHORD 2x6 SP No.2  
 WEBS 2x4 SP No.3

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-7-8 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 6-8.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
 WEBS 1 Row at midpt 5-23, 7-21, 8-21, 9-18, 10-18, 11-16

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

**REACTIONS.** All bearings 0-3-8 except (jt=length) 18=0-4-9 (input: 0-3-8 + bearing block).  
 (lb) - Max Horz 2=180(LC 13)  
 Max Uplift All uplift 100 lb or less at joint(s) except 2=116(LC 8), 26=267(LC 12), 18=434(LC 9), 12=197(LC 9)  
 Max Grav All reactions 250 lb or less at joint(s) except 2=318(LC 23), 26=1640(LC 23), 18=2902(LC 1), 12=836(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 3-4=-1410/286, 4-5=-1312/317, 5-6=-1109/312, 6-7=-872/329, 9-10=-74/972, 10-11=-299/147, 11-12=-1377/334  
 BOT CHORD 24-33=-151/1252, 23-33=-151/1252, 22-23=0/635, 22-34=0/635, 34-35=0/635, 21-35=0/635, 21-36=-851/391, 20-36=-851/391,  
 19-20=-851/391, 18-19=-851/391, 15-16=-217/1253, 14-15=-217/1253, 12-14=-214/1259  
 WEBS 3-26=-1406/416, 3-24=-137/1333, 5-24=-259/142, 5-23=-508/232, 7-23=-65/629, 7-21=-1013/248, 8-21=-284/79, 9-21=-206/1605,  
 9-18=-2028/465, 10-18=-1211/354, 10-16=-14/640, 11-16=-1130/342, 11-14=0/371

- NOTES-**
- 1) 2x6 SP No.2 bearing block 12" long at jt. 18 attached to front face with 3 rows of 10d (0.120"x3") nails spaced 3" o.c. 12 Total fasteners. User Defined Bearing crushing capacity= 425psi.
  - 2) Unbalanced roof live loads have been considered for this design.
  - 3) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 4) WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
  - 5) Provide adequate drainage to prevent water ponding.
  - 6) All plates are 6x6 MT20 unless otherwise indicated.
  - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Wellons Reser
2000456-2000456A	B	Piggyback Base	14	1	Job Reference (optional)

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:27:17 2020 Page 2  
ID:kQ1KS2Sn3ljdzGzjx5z8lzz3hVz-sutjApVvuoQT9DLKNqRDMNuNYs7Llzqx1\_MgwRyqSHO

**NOTES-**

- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 26, and 12. This connection is for uplift only and does not consider lateral forces.
- 10) Two H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 18. This connection is for uplift only and does not consider lateral forces.
- 11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

Job 2000456-2000456A	Truss B1	Truss Type ROOF TRUSS	Qty 3	Ply 1	Wellons Reser Job Reference (optional)
-------------------------	-------------	--------------------------	----------	----------	---

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:27:19 2020 Page 1  
ID:kQ1KS2Sn3ljdzGzjx5z8lzz3hVz-pG?TbUX9QQgBOWVjUFThRozi2grODtWEVIm\_KyqSHM

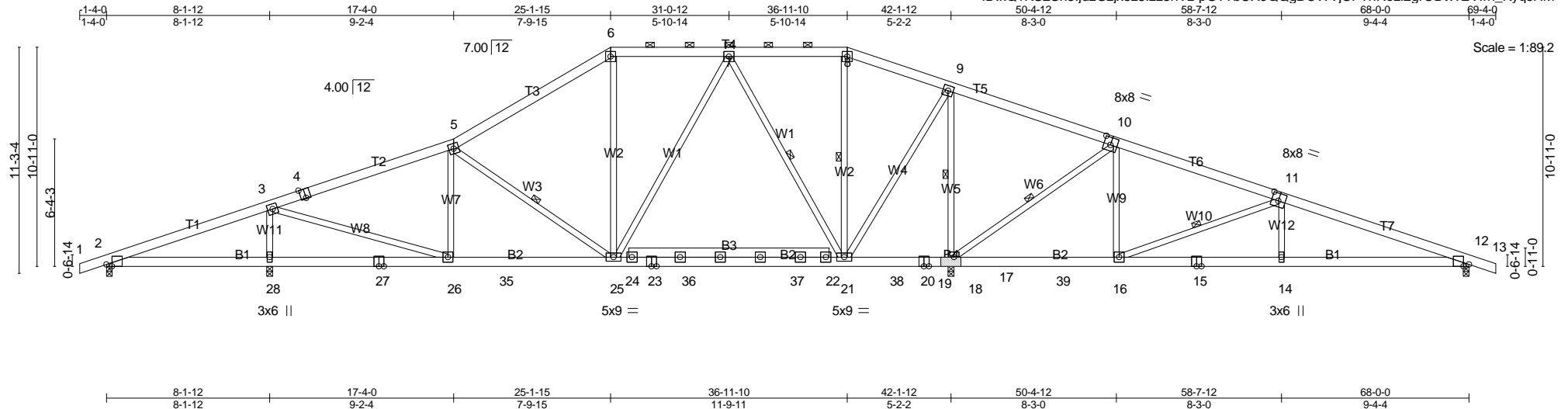


Plate Offsets (X,Y)-- [2:0-3-6,Edge], [4:0-3-0,Edge], [10:0-4-0,0-4-8], [11:0-4-0,0-4-8], [12:0-3-6,Edge]
---

<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 0.48	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.48	Vert(LL) -0.09 21-25 >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.81	Vert(CT) -0.16 21-25 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.02 12 n/a n/a		
	Code IRC2015/TPI2014			Weight: 530 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 SP No.2  
 BOT CHORD 2x6 SP No.2  
 WEBS 2x4 SP No.3

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-7-6 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 6-8.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
 WEBS 1 Row at midpt 5-25, 7-21, 8-21, 9-18, 10-18, 11-16

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

**REACTIONS.** All bearings 0-3-8 except (jt=length) 18=0-4-9 (input: 0-3-8 + bearing block).  
 (lb) - Max Horz 2=180(LC 13)  
 Max Uplift All uplift 100 lb or less at joint(s) except 2=115(LC 8), 28=268(LC 12), 18=436(LC 9), 12=196(LC 9)  
 Max Grav All reactions 250 lb or less at joint(s) except 2=322(LC 24), 28=1639(LC 24), 18=2896(LC 1), 12=838(LC 25)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 3-4=1423/281, 4-5=1326/313, 5-6=1100/313, 6-7=857/330, 9-10=79/958, 10-11=304/139, 11-12=1384/330  
 BOT CHORD 26-35=149/1264, 25-35=149/1264, 24-25=0/620, 23-24=0/620, 23-36=0/620, 36-37=0/620, 22-37=0/620, 21-22=0/620, 21-38=838/396, 20-38=838/396, 19-20=838/396, 18-19=838/396, 15-16=213/1260, 14-15=213/1260, 12-14=211/1266  
 WEBS 3-28=1409/415, 3-26=136/1331, 5-25=521/225, 7-25=63/629, 7-21=1015/247, 8-21=285/78, 9-21=218/1541, 9-18=1997/477, 10-18=1207/356, 10-16=15/634, 11-16=1131/341, 11-14=0/373

- NOTES-**
- 2x6 SP No.2 bearing block 12" long at jt. 18 attached to front face with 3 rows of 10d (0.120"x3") nails spaced 3" o.c. 12 Total fasteners. User Defined Bearing crushing capacity= 425psi.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - WARNING:** This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
  - Provide adequate drainage to prevent water ponding.
  - All plates are 6x6 MT20 unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Wellons Reser
2000456-2000456A	B1	ROOF TRUSS	3	1	Job Reference (optional)

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:27:20 2020 Page 2  
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-HSZsoqYnBjo20g4v2y\_w\_?Wto4BdyJmNkyaKXmyqsHL

**NOTES-**

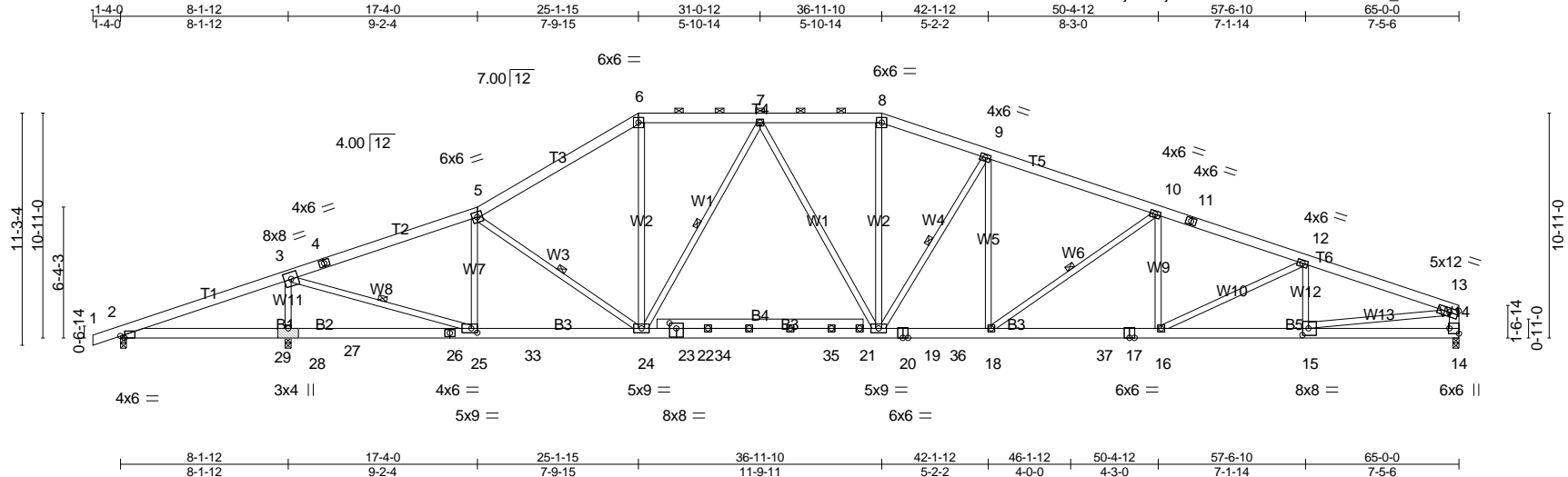
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 28, and 12. This connection is for uplift only and does not consider lateral forces.
- 10) Two H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 18. This connection is for uplift only and does not consider lateral forces.
- 11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

**LOAD CASE(S)** Standard

Job 2000456-2000456A	Truss B2	Truss Type ROOF TRUSS	Qty 3	Ply 1	Wellons Reser Job Reference (optional)
-------------------------	-------------	--------------------------	----------	----------	---

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:27:22 2020 Page 1  
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-DrhcDWZ1iL2mF\_EHAN1O3QbAEtnEQCPgBG3RbeyqshJ



Scale = 1:101.8

Plate Offsets (X,Y)-- [2:0-2-6,Edge], [14:Edge,0-5-8], [15:0-3-8,0-4-0], [22:0-4-0,0-3-0], [25:0-3-8,0-2-8]					
<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 0.68	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.79	Vert(LL) -0.26 20-24 >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.87	Vert(CT) -0.54 16-18 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.11 14 n/a n/a		
	Code IRC2015/TPI2014			Weight: 523 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 SP No.2  
 BOT CHORD 2x6 SP No.2  
 WEBS 2x4 SP No.3 \*Except\*  
 W8,W13: 2x4 SP No.2 or 2x4 SPF No.2, W14: 2x6 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 3-3-15 oc purlins, except end verticals, and 2-0-0 oc purlins (4-1-6 max.): 6-8.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
 WEBS 1 Row at midpt 3-25, 5-24, 7-24, 9-20, 10-18

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

**REACTIONS.** (lb/size) 2=21/0-3-8 (min. 0-1-8), 28=3032/(0-3-8 + bearing block) (req. 0-4-12), 14=2209/0-3-8 (min. 0-3-7)  
 Max Horz 2=190(LC 16)  
 Max Uplift 2=-152(LC 27), 28=-287(LC 12), 14=-356(LC 9)  
 Max Grav 2=114(LC 24), 28=3032(LC 1), 14=2209(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-219/958, 3-4=-2754/585, 4-5=-2660/617, 5-6=-2901/722, 6-7=-2435/687, 7-8=-2971/821, 8-9=-3172/843, 9-10=-3690/914, 10-11=-4156/1004, 11-12=-4278/990, 12-13=-4178/940, 13-14=-2102/516  
 BOT CHORD 2-29=-833/240, 28-29=-833/240, 27-28=-833/240, 26-27=-833/240, 25-26=-833/240, 25-33=-412/2545, 24-33=-412/2545, 23-24=-417/2785, 22-23=-417/2785, 22-34=-417/2785, 34-35=-417/2785, 21-35=-417/2785, 20-21=-417/2785, 19-20=-601/3436, 19-36=-601/3436, 18-36=-601/3436, 18-37=-799/4001, 17-37=-799/4001, 16-17=-799/4001, 15-16=-836/3893, 14-15=-106/404  
 WEBS 3-28=-2770/738, 3-25=-648/3516, 5-25=-918/306, 5-24=-283/187, 6-24=-175/1064, 7-24=-877/256, 7-20=-104/463, 8-20=-132/749, 9-20=-968/316, 9-18=-64/587, 10-18=-743/247, 10-16=0/294, 12-16=0/266, 12-15=-481/222, 13-15=-739/3535

- NOTES-**
- 1) 2x6 SP No.2 bearing block 12" long at jt. 28 attached to front face with 3 rows of 10d (0.120"x3") nails spaced 3" o.c. 12 Total fasteners. User Defined Bearing crushing capacity= 425psi.
  - 2) Unbalanced roof live loads have been considered for this design.
  - 3) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 4) WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
  - 5) Provide adequate drainage to prevent water ponding.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Wellons Reser
2000456-2000456A	B2	ROOF TRUSS	3	1	Job Reference (optional)

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:27:22 2020 Page 2  
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-DrhcDWZ1iL2mF\_EHAN1O3QbAEtnEQCPgBG3RbeyqsHJ

**NOTES-**

- 6) All plates are 4x4 MT20 unless otherwise indicated.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 14. This connection is for uplift only and does not consider lateral forces.
- 10) Two H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 28. This connection is for uplift only and does not consider lateral forces.
- 11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

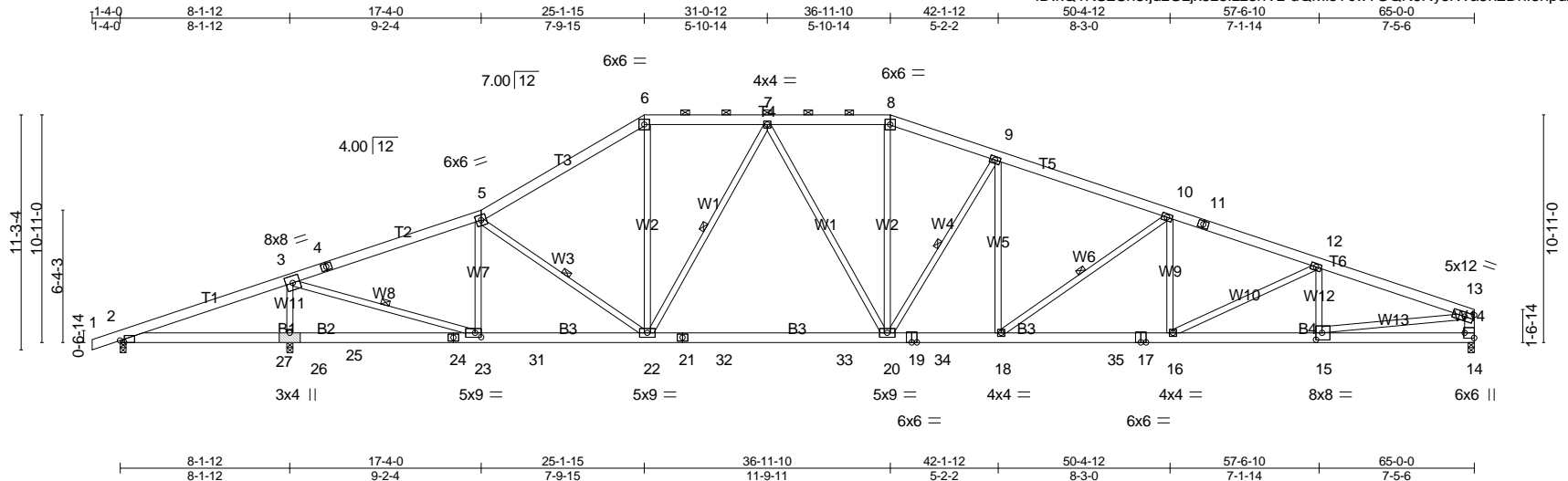
**LOAD CASE(S)** Standard



Job 2000456-2000456A	Truss B3	Truss Type Piggyback Base	Qty 1	Ply 1	Wellons Reser Job Reference (optional)
-------------------------	-------------	------------------------------	----------	----------	---

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:27:25 2020 Page 1  
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-dQMIsYcw?GQK6RysrWa5h2Dhl5npdZ27tEI5CzyqSHG



Scale = 1:101.0

Plate Offsets (X,Y)-- [2:0-2-6,Edge], [14:Edge,0-5-8], [15:0-3-8,0-4-0], [23:0-3-8,0-2-8]
---

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.69	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.92	Vert(LL) -0.36 20-22 >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.87	Vert(CT) -0.68 20-22 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.12 14 n/a n/a		
	Code IRC2015/TPI2014			Weight: 500 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.2  
 BOT CHORD 2x6 SP No.2  
 WEBS 2x4 SP No.3 \*Except\*  
 W8,W13: 2x4 SP No.2 or 2x4 SPF No.2, W14: 2x6 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 3-4-0 oc purlins, except end verticals, and 2-0-0 oc purlins (4-0-15 max.): 6-8.  
 BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.  
 WEBS 1 Row at midpt 3-23, 5-22, 7-22, 9-20, 10-18

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

**REACTIONS.** (lb/size) 2=-0/0-3-8 (min. 0-1-8), 26=3056/(0-3-8 + bearing block) (req. 0-4-13), 14=2206/0-3-8 (min. 0-3-7)  
 Max Horz 2=190(LC 16)  
 Max Uplift 2=-174(LC 26), 26=-286(LC 12), 14=-356(LC 9)  
 Max Grav 2=97(LC 23), 26=3056(LC 1), 14=2206(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-228/1023, 3-4=-2726/584, 4-5=-2639/615, 5-6=-2920/717, 6-7=-2451/683, 7-8=-2997/816, 8-9=-3199/837, 9-10=-3693/914,  
 10-11=-4155/1003, 11-12=-4272/988, 12-13=-4171/939, 13-14=-2099/516  
 BOT CHORD 2-27=-895/247, 26-27=-895/247, 25-26=-895/247, 24-25=-895/247, 23-24=-895/247, 23-31=-411/2526, 22-31=-411/2526,  
 21-22=-411/2805, 21-32=-411/2805, 32-33=-411/2805, 20-33=-411/2805, 19-20=-601/3439, 19-34=-601/3439, 18-34=-601/3439,  
 18-35=-798/3995, 17-35=-798/3995, 16-17=-798/3995, 15-16=-836/3887, 14-15=-106/404  
 WEBS 3-26=-2790/743, 3-23=-655/3560, 5-23=-937/301, 5-22=-261/193, 6-22=-172/1072, 7-22=-882/254, 7-20=-103/473, 8-20=-130/757,  
 9-20=-949/328, 9-18=-76/542, 10-18=-747/245, 10-16=0/300, 12-16=0/270, 12-15=-481/221, 13-15=-739/3529

**NOTES-**

- 1) 2x6 SP No.2 bearing block 12" long at jt. 26 attached to front face with 3 rows of 10d (0.120"x3") nails spaced 3" o.c. 12 Total fasteners. User Defined Bearing crushing capacity= 425psi.
- 2) Unbalanced roof live loads have been considered for this design.
- 3) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 4) WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
- 5) Provide adequate drainage to prevent water ponding.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Wellons Reser
2000456-2000456A	B3	Piggyback Base	1	1	Job Reference (optional)

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:27:25 2020 Page 2  
ID:kQ1KS2Sn3ljdzGzjx5z8lzz3hVz-dQMIsYcw?GQK6RysrWa5h2Dh15npdZ27tEI5CzyqsHG

**NOTES-**

- 6) All plates are 4x6 MT20 unless otherwise indicated.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 14. This connection is for uplift only and does not consider lateral forces.
- 10) Two H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 26. This connection is for uplift only and does not consider lateral forces.
- 11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

Job 2000456-2000456A	Truss BE	Truss Type GABLE	Qty 1	Ply 1	Wellons Reser Job Reference (optional)
-------------------------	-------------	---------------------	----------	----------	---

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:27:32 2020 Page 1  
ID:kQ1KS2Sn3IjdzGzjx5z8lzz3hVz-wmHOKxhJMPJLSW?CIUckTX0xmvFrmIX8UpUzy3yqsh9

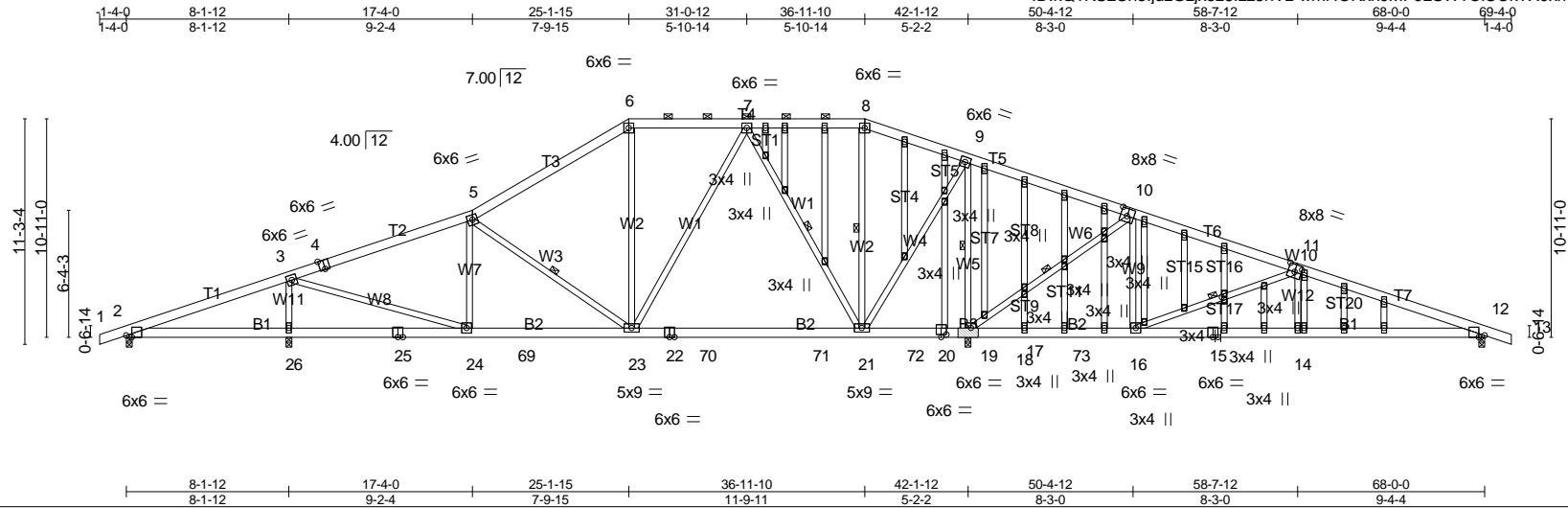


Plate Offsets (X,Y)-- [2:0-3-6,Edge], [4:0-3-0,Edge], [10:0-4-0-0-4-8], [11:0-4-0-0-4-8], [12:0-3-6,Edge], [20:0-0-0-0-2-12], [20:0-3-0-0-1-8], [36:0-1-12,0-0-0], [54:0-1-12,0-1-8], [58:0-3-0-0-1-4]
--

<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 0.49	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.58	Vert(LL) -0.19 21-23 >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.83	Vert(CT) -0.33 21-23 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.03 12 n/a n/a		
	Code IRC2015/TPI2014			Weight: 617 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.2  
 BOT CHORD 2x6 SP No.2  
 WEBS 2x4 SP No.3  
 OTHERS 2x4 SP No.3

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-7-8 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 6-8.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
 WEBS 1 Row at midpt 5-23, 7-21, 8-21, 9-18, 10-18, 11-16

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

**REACTIONS.**

All bearings 0-3-8 except (jt=length) 18=0-4-9 (input: 0-3-8 + bearing block).  
 (lb) - Max Horz 2=180(LC 13)  
 Max Uplift All uplift 100 lb or less at joint(s) except 2=116(LC 8), 26=267(LC 12), 18=434(LC 9), 12=197(LC 9)  
 Max Grav All reactions 250 lb or less at joint(s) except 2=318(LC 23), 26=1640(LC 23), 18=2902(LC 1), 12=836(LC 24)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 3-4=1410/286, 4-5=1312/317, 5-6=1109/312, 6-7=872/329, 9-10=74/972, 10-11=299/147, 11-12=1377/334  
 BOT CHORD 24-69=151/1252, 23-69=151/1252, 22-23=0/635, 22-70=0/635, 70-71=0/635, 21-71=0/635, 21-72=851/391, 20-72=851/391,  
 19-20=851/391, 18-19=851/391, 15-16=217/1253, 14-15=217/1253, 12-14=214/1259  
 WEBS 3-26=1406/416, 3-24=137/1333, 5-24=259/142, 5-23=508/232, 7-23=65/629, 7-21=1013/248, 8-21=284/79, 9-21=206/1605,  
 9-18=2028/465, 10-18=1211/354, 10-16=14/640, 11-16=1130/342, 11-14=0/371

**NOTES-**

- 2x6 SP No.2 bearing block 12" long at jt. 18 attached to front face with 3 rows of 10d (0.120"x3") nails spaced 3" o.c. 12 Total fasteners. User Defined Bearing crushing capacity= 425psi.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- WARNING:** This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
- Provide adequate drainage to prevent water ponding.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Wellons Reser
2000456-2000456A	BE	GABLE	1	1	Job Reference (optional)

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:27:32 2020 Page 2  
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-wmHOKxhJMPJLSW?CIUCkTX0xmvFrmIX8UpUzy3yqsh9

**NOTES-**

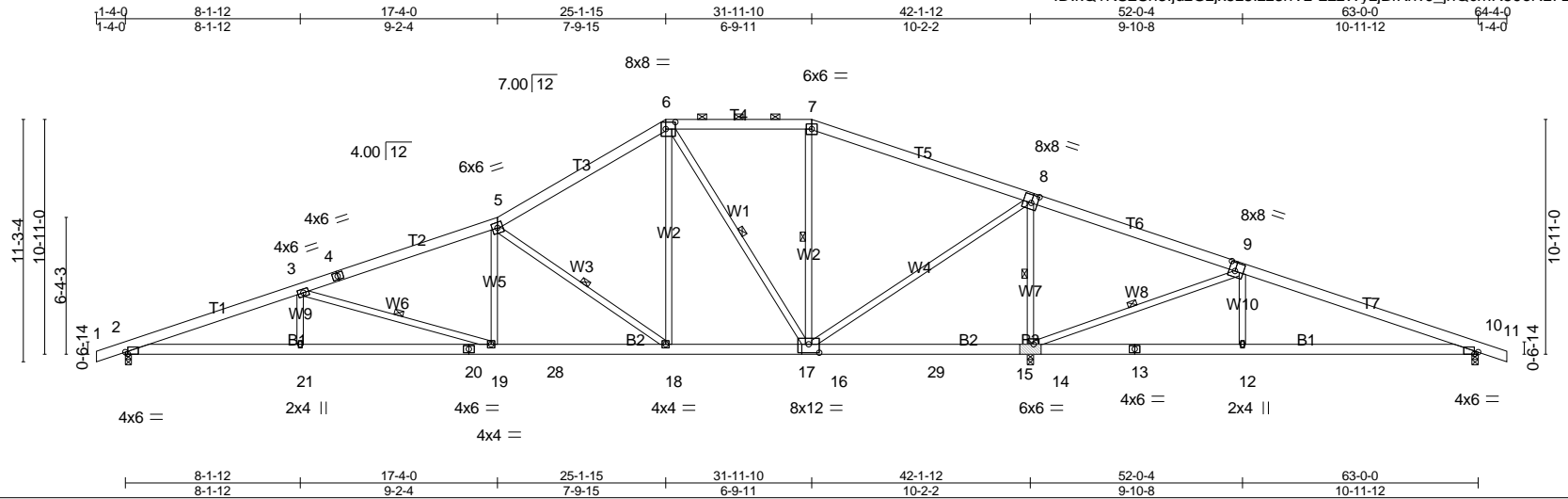
- 7) All plates are 3x6 MT20 unless otherwise indicated.
- 8) Gable studs spaced at 2-0-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 26, and 12. This connection is for uplift only and does not consider lateral forces.
- 12) Two H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 18. This connection is for uplift only and does not consider lateral forces.
- 13) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

Job 2000456-2000456A	Truss C	Truss Type Piggyback Base	Qty 3	Ply 1	Wellons Reser Job Reference (optional)
-------------------------	------------	------------------------------	----------	----------	---

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:27:35 2020 Page 1  
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-LLzWyzjBfKhvJ\_jnQcmR59eNz7EzZ3sbAnjdZOyqsH6



Scale = 1:100.9

Plate Offsets (X,Y)-- [2:0-1-6,Edge], [6:0-5-8,0-4-0], [8:0-3-8,0-4-8], [9:0-3-4,0-4-12], [10:0-2-2,Edge], [16:0-6-0,0-4-12], [17:0-0-0,0-2-12]
---

<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 0.74	Vert(LL)	-0.18	19-21	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.70	Vert(CT)	-0.39	19-21	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.98	Horz(CT)	0.07	14	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS						
								Weight: 448 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x6 SP No.2  
BOT CHORD 2x6 SP No.2  
WEBS 2x4 SP No.3 \*Except\*  
W4: 2x4 SP No.2 or 2x4 SPF No.2

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 3-7-7 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 6-7.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
WEBS 1 Row at midpt 3-19, 5-18, 6-17, 7-16, 8-14, 9-14

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

**REACTIONS.** (lb/size) 2=1541/0-3-8 (min. 0-2-7), 14=3190/(0-3-8 + bearing block) (req. 0-5-0), 10=463/0-3-8 (min. 0-1-8)  
Max Horz 2=-180(LC 13)  
Max Uplift 2=-241(LC 12), 14=-381(LC 9), 10=-175(LC 9)  
Max Grav 2=1541(LC 1), 14=3190(LC 1), 10=588(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-3627/819, 3-4=-2541/567, 4-5=-2450/599, 5-6=-1394/433, 6-7=-589/348, 7-8=-734/318, 8-9=-185/1380, 9-10=-470/471  
BOT CHORD 2-21=-647/3389, 20-21=-647/3389, 19-20=-647/3389, 19-28=-317/2312, 18-28=-317/2312, 17-18=-36/1112, 16-29=-1263/420, 15-29=-1263/420, 14-15=-1263/420, 13-14=-423/370, 12-13=-423/370, 10-12=-407/389  
WEBS 3-21=0/328, 3-19=-1116/354, 5-19=-1/609, 5-18=-1508/430, 6-18=-163/1042, 6-16=-1011/177, 16-17=-36/1112, 7-16=-340/153, 8-16=-362/2237, 8-14=-2479/672, 9-14=-1332/398, 9-12=0/441

- NOTES-**
- 1) 2x6 SP No.2 bearing block 12" long at jt. 14 attached to front face with 3 rows of 10d (0.120"x3") nails spaced 3" o.c. 12 Total fasteners. User Defined Bearing crushing capacity= 425psi.
  - 2) Unbalanced roof live loads have been considered for this design.
  - 3) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 4) WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
  - 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.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Wellons Reser
2000456-2000456A	C	Piggyback Base	3	1	Job Reference (optional)

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:27:35 2020 Page 2  
ID:kQ1KS2Sn3IjdzGzjx5z8lzz3hVz-LLzWyzjBfKhvJ\_jnQcmR59eNz7EZz3sbAnjdZOyqsH6

**NOTES-**

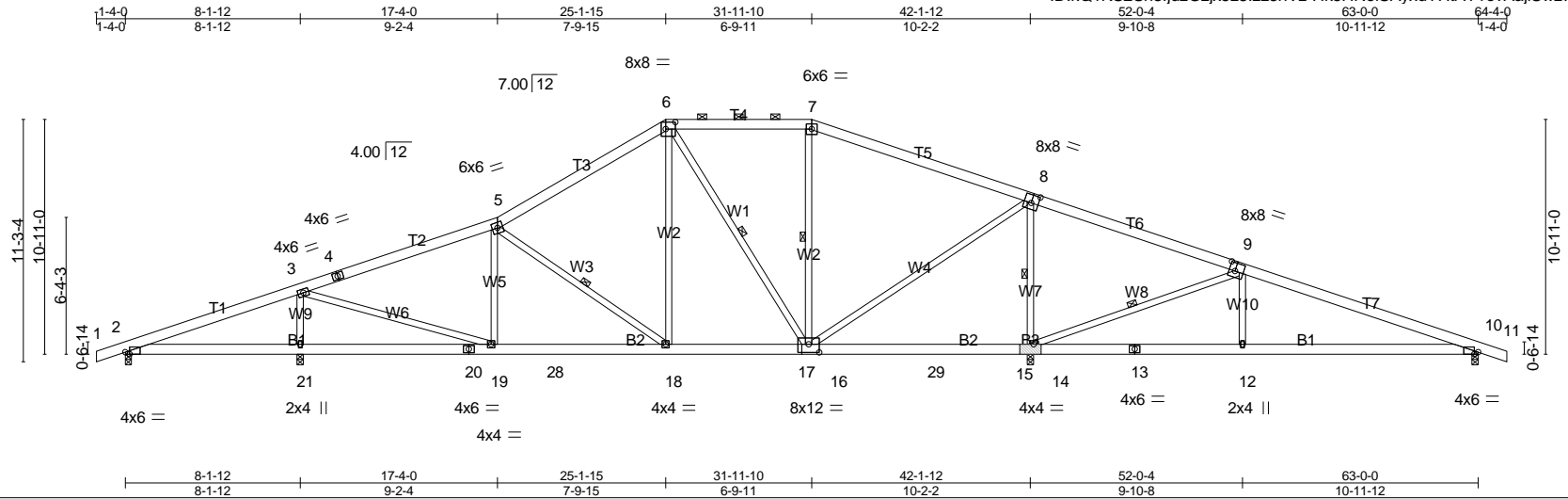
- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 14, and 10. This connection is for uplift only and does not consider lateral forces.
- 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

Job 2000456-2000456A	Truss C1	Truss Type Piggyback Base	Qty 1	Ply 1	Wellons Reser Job Reference (optional)
-------------------------	-------------	------------------------------	----------	----------	---

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:27:37 2020 Page 1  
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-Hk5HNeISayxYHtAY1ovAajlSwz7R1wue5CkdHyqsH4



Scale = 1:100.9

Plate Offsets (X,Y)-- [2:0-2-6,Edge], [6:0-5-8,0-4-0], [8:0-4-0,0-4-8], [9:0-3-4,0-4-8], [10:0-2-2,Edge], [16:0-6-0,0-4-8], [17:0-0-0,0-2-12]

<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 0.62	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.57	Vert(LL) 0.12 12-27 >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.75	Vert(CT) -0.25 12-27 >996 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.02 10 n/a n/a		
	Code IRC2015/TPI2014			Weight: 448 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x6 SP No.2  
BOT CHORD 2x6 SP No.2  
WEBS 2x4 SP No.3 \*Except\*  
W4: 2x4 SP No.2 or 2x4 SPF No.2

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-7-8 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 6-7.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
WEBS 1 Row at midpt 5-18, 6-17, 7-16, 8-14, 9-14

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

**REACTIONS.** All bearings 0-3-8 except (jt=length) 14=0-3-15 (input: 0-3-8 + bearing block).  
(lb) - Max Horz 2=-180(LC 13)  
Max Uplift All uplift 100 lb or less at joint(s) except 2=-120(LC 8), 21=-271(LC 12), 14=-357(LC 9), 10=-184(LC 9)  
Max Grav All reactions 250 lb or less at joint(s) except 2=323(LC 23), 21=1672(LC 1), 14=2499(LC 1), 10=731(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 3-4=-1454/337, 4-5=-1356/369, 5-6=-1136/378, 6-7=-641/359, 7-8=-788/329, 8-9=-24/616, 9-10=-905/242  
BOT CHORD 19-28=-151/1293, 18-28=-151/1293, 17-18=0/883, 16-29=-527/264, 15-29=-527/264, 14-15=-527/264, 13-14=-117/782, 12-13=-117/782, 10-12=-110/801  
WEBS 3-21=-1443/442, 3-19=-179/1375, 5-19=-257/165, 5-18=-524/221, 6-18=-41/543, 6-16=-496/92, 16-17=0/883, 7-16=-330/152, 8-16=-188/1413, 8-14=-1795/527, 9-14=-1312/394, 9-12=0/436

- NOTES-**
- 1) 2x6 SP No.2 bearing block 12" long at jt. 14 attached to front face with 3 rows of 10d (0.120"x3") nails spaced 3" o.c. 12 Total fasteners. User Defined Bearing crushing capacity= 425psi.
  - 2) Unbalanced roof live loads have been considered for this design.
  - 3) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 4) WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
  - 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.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Wellons Reser
2000456-2000456A	C1	Piggyback Base	1	1	Job Reference (optional)

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:27:37 2020 Page 2  
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-Hk5HNeISaydYHtAY1ovAajSwz7R1wue5CkdHyqsH4

**NOTES-**

- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 21, 14, and 10. This connection is for uplift only and does not consider lateral forces.
- 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

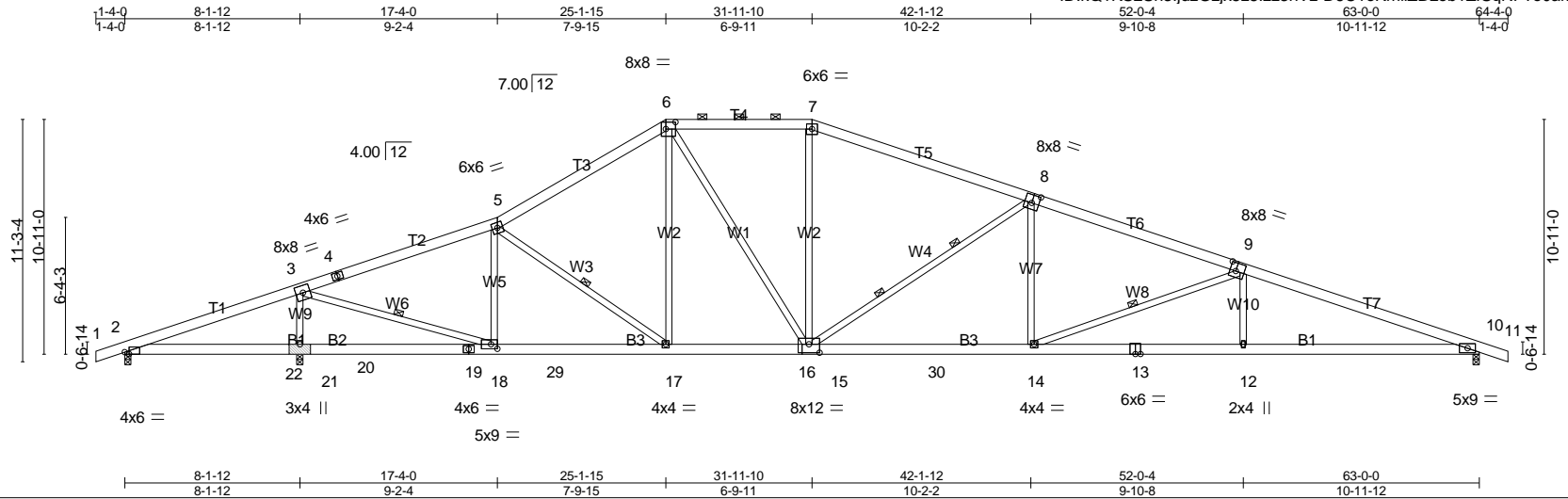
**LOAD CASE(S)** Standard



Job 2000456-2000456A	Truss C2	Truss Type Piggyback Base	Qty 4	Ply 1	Wellons Reser Job Reference (optional)
-------------------------	-------------	------------------------------	----------	----------	---

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:27:39 2020 Page 1  
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-D6C1oKmiizBLob1ZfSgNF?o0akYpvs?A5Phri9yqsH2



Scale = 1:100.9

Plate Offsets (X,Y)-- [2:0-2-6,Edge], [6:0-5-8,0-4-0], [8:0-4-0,0-4-8], [9:0-3-4,0-4-8], [15:0-6-0,0-4-12], [16:0-0-0,0-2-12], [18:0-3-8,0-2-8]
---

<b>LOADING</b> (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	<b>SPACING-</b> 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2015/TPI2014	<b>CSI.</b> TC 0.96 BC 1.00 WB 0.97 Matrix-MS	<b>DEFL.</b> in (loc) l/defl L/d Vert(LL) -0.32 14-15 >999 240 Vert(CT) -0.68 14-15 >962 180 Horz(CT) 0.14 10 n/a n/a	<b>PLATES</b> MT20 <b>GRIP</b> 197/144  Weight: 448 lb FT = 20%
---	---	---	--	--

**LUMBER-**  
TOP CHORD 2x6 SP No.2  
BOT CHORD 2x6 SP DSS \*Except\*  
B3: 2x6 SP No.2  
WEBS 2x4 SP No.3 \*Except\*  
W6,W4: 2x4 SP No.2 or 2x4 SPF No.2

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (4-4-10 max.): 6-7.  
BOT CHORD Rigid ceiling directly applied or 1-4-12 oc bracing.  
WEBS 1 Row at midpt 3-18, 5-17, 9-14  
2 Rows at 1/3 pts 8-15

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

**REACTIONS.** (lb/size) 2=-101/0-3-8 (min. 0-1-8), 21=3099/(0-3-8 + bearing block) (req. 0-4-14), 10=2196/0-3-8 (min. 0-3-7)  
Max Horz 2=-180(LC 13)  
Max Uplift 2=-251(LC 24), 21=-288(LC 12), 10=-396(LC 9)  
Max Grav 2=49(LC 23), 21=3099(LC 1), 10=2196(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-245/1309, 3-4=-2484/555, 4-5=-2383/586, 5-6=-2673/704, 6-7=-2609/777, 7-8=-2853/768, 8-9=-4184/1002, 9-10=-5364/1206  
BOT CHORD 2-22=-1153/323, 21-22=-1153/323, 20-21=-1153/323, 19-20=-1153/323, 18-19=-1153/323, 18-29=-313/2284, 17-29=-313/2284,  
16-17=-210/2208, 15-30=-691/3898, 14-30=-691/3898, 13-14=-1031/4986, 12-13=-1031/4986, 10-12=-1023/5001  
WEBS 3-21=-2815/739, 3-18=-656/3575, 5-18=-945/313, 6-17=-19/366, 6-15=-214/871, 15-16=-210/2208, 7-15=0/481, 8-15=-1559/450,  
8-14=0/773, 9-14=-1192/366, 9-12=0/406

- NOTES-**
- 1) 2x6 SP DSS bearing block 12" long at jt. 21 attached to front face with 3 rows of 10d (0.120"x3") nails spaced 3" o.c. 12 Total fasteners. User Defined Bearing crushing capacity= 425psi.
  - 2) Unbalanced roof live loads have been considered for this design.
  - 3) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 4) WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
  - 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.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Wellons Reser
2000456-2000456A	C2	Piggyback Base	4	1	Job Reference (optional)

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:27:39 2020 Page 2  
 ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-D6C1oKmiiZBLob1ZfSqNF?o0akYpvs?A5Phri9yqsh2

**NOTES-**

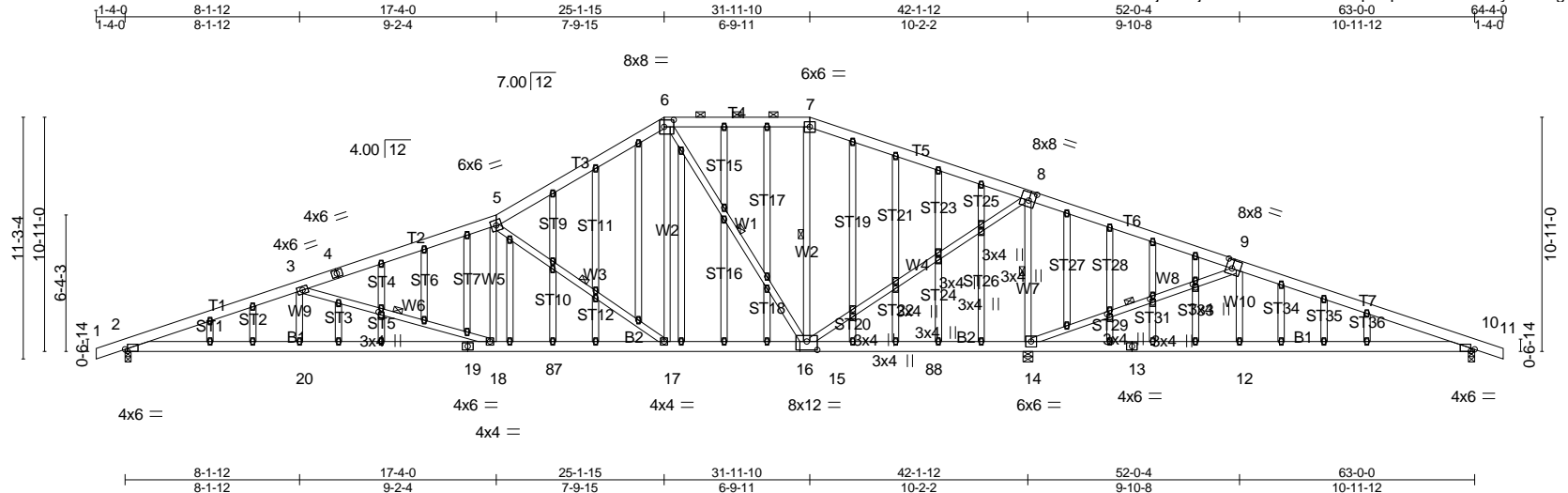
- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 21, and 10. This connection is for uplift only and does not consider lateral forces.
- 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

Job 2000456-2000456A	Truss CE	Truss Type GABLE	Qty 1	Ply 1	Wellons Reser Job Reference (optional)
-------------------------	-------------	---------------------	----------	----------	---

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:27:44 2020 Page 1  
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-a40wr2qrX5peuMvWS?QYy3VwiiJga74wFhOcmNyqsGz



Scale = 1:100.9

Plate Offsets (X,Y)--	[2:0-1-6,Edge], [6:0-5-8,0-4-0], [8:0-3-8,0-4-8], [9:0-3-4,0-4-12], [10:0-2-2,Edge], [15:0-6-0,0-4-12], [16:0-0-0,0-2-12], [43:0-1-10,0-1-8], [68:0-1-12,0-1-8], [71:0-1-12,0-1-8], [74:0-1-12,0-1-8]
-----------------------	---

<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	1.15	TC 0.74	Vert(LL)	-0.18	18-20	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.70	Vert(CT)	-0.39	18-20	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.98	Horz(CT)	0.07	14	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS						
								Weight: 640 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x6 SP No.2  
BOT CHORD 2x6 SP No.2  
WEBS 2x4 SP No.3 \*Except\*  
W4: 2x4 SP No.2 or 2x4 SPF No.2  
OTHERS 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 3-7-7 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 6-7.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
WEBS 1 Row at midpt 3-18, 5-17, 6-16, 7-15, 8-14, 9-14

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

**REACTIONS.** (lb/size) 2=1541/0-3-8 (min. 0-2-7), 14=3190/0-5-8 (min. 0-5-0), 10=463/0-3-8 (min. 0-1-8)  
Max Horz 2=-180(LC 13)  
Max Uplift 2=-241(LC 12), 14=-381(LC 9), 10=-175(LC 9)  
Max Grav 2=1541(LC 1), 14=3190(LC 1), 10=588(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-3627/819, 3-4=-2541/567, 4-5=-2450/599, 5-6=-1394/433, 6-7=-589/348, 7-8=-734/318, 8-9=-185/1380, 9-10=-470/471  
BOT CHORD 2-20=-647/3389, 19-20=-647/3389, 18-19=-647/3389, 18-87=-317/2312, 17-87=-317/2312, 16-17=-36/1112, 15-88=-1263/420, 14-88=-1263/420, 13-14=-423/370, 12-13=-423/370, 10-12=-407/389  
WEBS 3-20=0/328, 3-18=-1116/354, 5-18=-1/609, 5-17=-1508/430, 6-17=-163/1042, 6-15=-1011/177, 15-16=-36/1112, 7-15=-340/153, 8-15=-362/2237, 8-14=-2479/672, 9-14=-1332/398, 9-12=0/441

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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.
  - WARNING:** This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
  - Provide adequate drainage to prevent water ponding.
  - All plates are 2x4 MT20 unless otherwise indicated.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Wellons Reser
2000456-2000456A	CE	GABLE	1	1	Job Reference (optional)

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:27:45 2020 Page 2  
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-2Gal2NrTIPxVWWUi0ixnVG25S9fwJaK3TL89upyqsGy

**NOTES-**

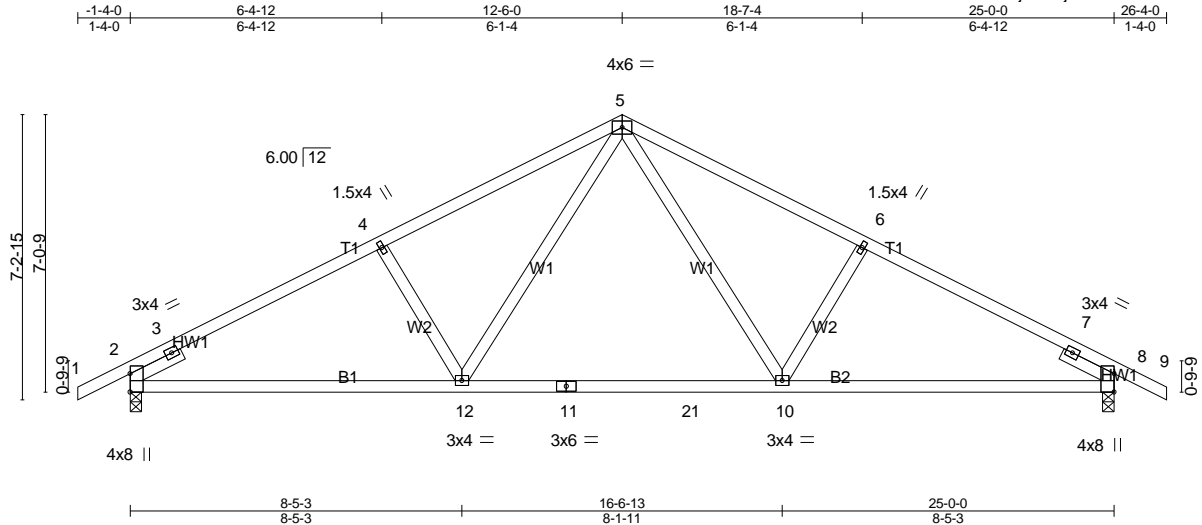
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 14, and 10. This connection is for uplift only and does not consider lateral forces.
- 11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

Job 2000456-2000456A	Truss D	Truss Type Common	Qty 9	Ply 1	Wellons Reser Job Reference (optional)
-------------------------	------------	----------------------	----------	----------	---

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:27:46 2020 Page 1  
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-WT7hGjs53j4M8g3vaQS01UbGuZ?V2DhCi?tiRFyqsGx



Scale = 1:58.5

<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 0.76	Vert(LL) -0.23 10-12 >999 240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.75	Vert(CT) -0.38 10-12 >791 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.21	Horz(CT) 0.06 8 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS			
				Weight: 122 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 WEBS 2x4 SP No.3  
 SLIDER Left 2x4 SP No.3 -ü 1-6-0, Right 2x4 SP No.3 -ü 1-6-0

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 2-9-7 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=1080/0-3-8 (min. 0-1-11), 8=1080/0-3-8 (min. 0-1-11)  
 Max Horz 2=115(LC 12)  
 Max Uplift 2=-144(LC 12), 8=-144(LC 13)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-435/0, 3-4=-1546/405, 4-5=-1387/425, 5-6=-1387/425, 6-7=-1546/405, 7-8=-435/0  
 BOT CHORD 2-12=-245/1312, 11-12=-79/926, 11-21=-79/926, 10-21=-79/926, 8-10=-250/1312  
 WEBS 5-10=-111/495, 6-10=-315/227, 5-12=-111/495, 4-12=-315/227

**NOTES-**

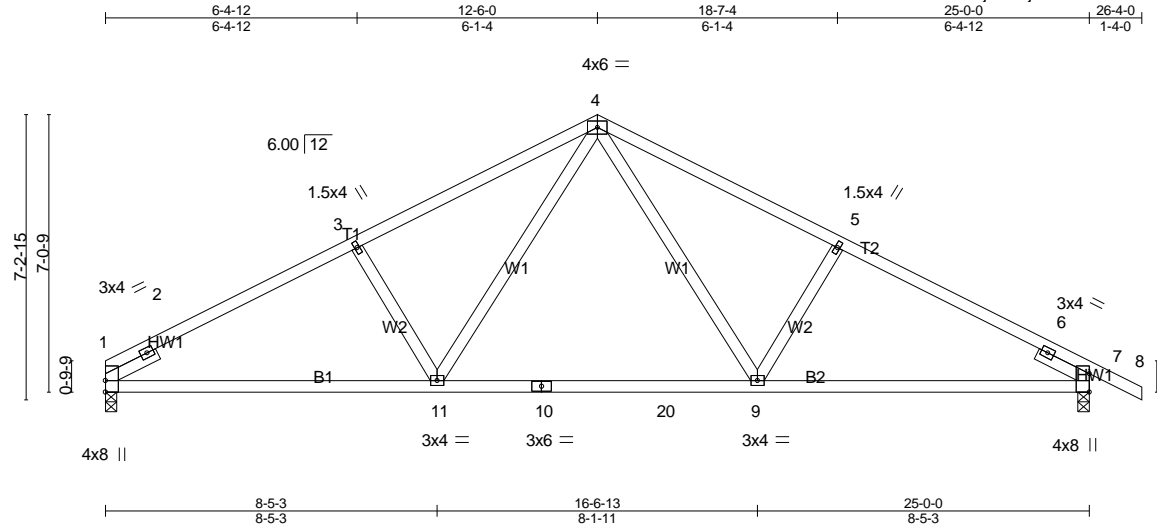
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 8. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job 2000456-2000456A	Truss D1	Truss Type Common	Qty 5	Ply 1	Wellons Reser Job Reference (optional)
-------------------------	-------------	----------------------	----------	----------	---

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:27:48 2020 Page 1  
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-SrFRhPtLbKK3N\_DHhrUU7vgcNMgyW77VAJMpV8yqsGv



<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 0.76	Vert(LL)	-0.23 9-11	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.75	Vert(CT)	-0.37 9-11	>803	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.21	Horz(CT)	0.06 7	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS					Weight: 120 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 WEBS 2x4 SP No.3  
 SLIDER Left 2x4 SP No.3 -ü 1-6-0, Right 2x4 SP No.3 -ü 1-6-0

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 2-9-3 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=998/0-3-8 (min. 0-1-9), 7=1082/0-3-8 (min. 0-1-11)  
 Max Horz 1=-126(LC 13)  
 Max Uplift1=-116(LC 12), 7=-145(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-468/0, 2-3=-1558/411, 3-4=-1399/430, 4-5=-1391/428, 5-6=-1550/408, 6-7=-436/0  
 BOT CHORD 1-11=-256/1325, 10-11=-82/930, 10-20=-82/930, 9-20=-82/930, 7-9=-253/1316  
 WEBS 4-9=-110/495, 5-9=-315/227, 4-11=-115/506, 3-11=-322/229

**NOTES-**

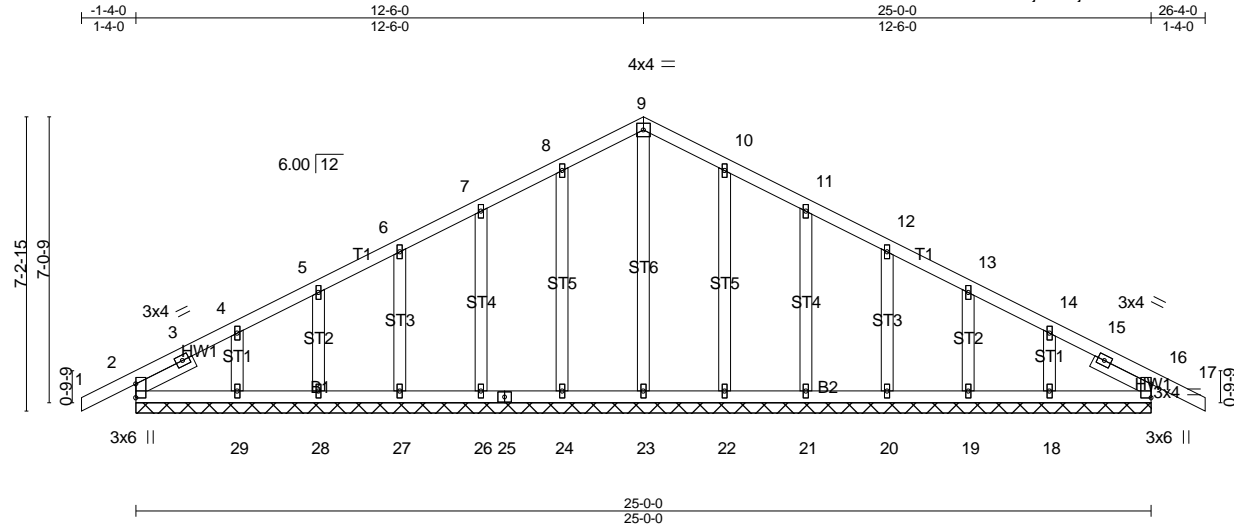
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 7. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job 2000456-2000456A	Truss DE	Truss Type Common Supported Gable	Qty 1	Ply 1	Wellons Reser Job Reference (optional)
-------------------------	-------------	--------------------------------------	----------	----------	---

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:27:50 2020 Page 1  
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-PENB55vb6xancHNgpGXyCKI51AXQ\_3Eoddrwa1yqsGt



Scale = 1:56.7

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.11	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.04	Vert(LL) -0.00 17 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.11	Vert(CT) -0.00 17 n/r 90		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 16 n/a n/a		
	Code IRC2015/TPI2014			Weight: 150 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 OTHERS 2x4 SP No.3  
 SLIDER Left 2x4 SP No.3 -ü 1-7-8, Right 2x4 SP No.3 -ü 1-7-8

**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.

**REACTIONS.**

All bearings 25-0-0.  
 (lb) - Max Horz 2=115(LC 16)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 24, 26, 27, 28, 29, 22, 21, 20, 19, 18, 16  
 Max Grav All reactions 250 lb or less at joint(s) 2, 23, 24, 26, 27, 28, 29, 22, 21, 20, 19, 18, 16

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

**NOTES-**

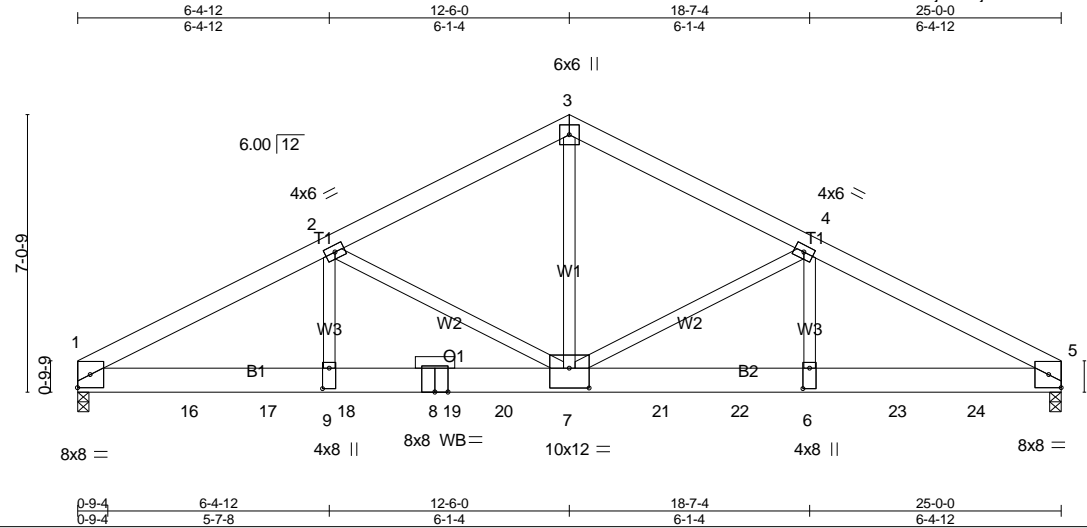
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 24, 26, 27, 28, 29, 22, 21, 20, 19, 18, and 16. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job 2000456-2000456A	Truss DGR	Truss Type COMMON GIRDER	Qty 1	Ply 4	Wellons Reser Job Reference (optional)
-------------------------	--------------	-----------------------------	----------	----------	---

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:27:58 2020 Page 1  
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-AmsDnq?dEPafaW\_CHXgqW05PpO96sWOzTsolSzyqsGI



Scale = 1:58.6

Plate Offsets (X,Y)-- [6:0-6-4,0-2-0], [7:0-6-0,0-6-0], [9:0-6-4,0-2-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.38	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.50	Vert(LL) -0.14 7-9 >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.73	Vert(CT) -0.29 7-9 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.07 5 n/a n/a		
	Code IRC2015/TPI2014			Weight: 727 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.2  
 BOT CHORD 2x8 SP DSS  
 WEBS 2x4 SP No.3 \*Except\*  
 W1: 2x4 SP No.1  
 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.

**REACTIONS.** (lb/size) 1=14839/0-3-8 (req. 0-3-12), 5=13218/0-3-8 (min. 0-3-5)

Max Horz 1=104(LC 39)  
 Max Uplift1=-1261(LC 12), 5=-1128(LC 13)

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

TOP CHORD 1-2=-23025/2180, 2-3=-16458/1626, 3-4=-16456/1626, 4-5=-22781/2160  
 BOT CHORD 1-16=-1861/20477, 16-17=-1861/20477, 9-17=-1861/20477, 9-18=-1861/20477, 18-19=-1861/20477, 8-19=-1861/20477,  
 8-20=-1861/20477, 7-20=-1861/20477, 7-21=-1842/20249, 21-22=-1842/20249, 6-22=-1842/20249, 6-23=-1842/20249,  
 23-24=-1842/20249, 5-24=-1842/20249  
 WEBS 3-7=-1251/14126, 4-7=-6384/693, 4-6=-413/5869, 2-7=-6646/714, 2-9=-430/6085

**NOTES-**

- 4-ply truss to be connected together with 10d (0.120"x3") nails as follows:  
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x8 - 3 rows staggered at 0-4-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, Except member 2-9 2x4 - 2 rows staggered at 0-4-0 oc.  
 Attach BC w/ 1/2" diam. bolts (ASTM A-307) in the center of the member w/washers at 4-0-0 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 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

Continued on page 2



Job	Truss	Truss Type	Qty	Ply	Wellons Reser
2000456-2000456A	DGR	COMMON GIRDER	1	4	Job Reference (optional)

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:27:58 2020 Page 2  
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-AmsDnq?dEPafaW\_CHxgqW05PpO96sWOzTsoLsZyqsGI

**NOTES-**

- 7) WARNING: Required bearing size at joint(s) 1 greater than input bearing size.
- 8) One HTS20 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1. This connection is for uplift only and does not consider lateral forces.
- 9) Two H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.
- 10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2191 lb down and 185 lb up at 0-9-4, 2189 lb down and 188 lb up at 2-9-4, 2189 lb down and 188 lb up at 4-9-4, 2189 lb down and 188 lb up at 6-9-4, 2189 lb down and 188 lb up at 8-9-4, 2189 lb down and 188 lb up at 10-9-4, 2189 lb down and 188 lb up at 12-9-4, 2189 lb down and 188 lb up at 14-9-4, 2189 lb down and 188 lb up at 16-9-4, 2189 lb down and 188 lb up at 18-9-4, and 2189 lb down and 188 lb up at 20-9-4, and 2189 lb down and 188 lb up at 22-9-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

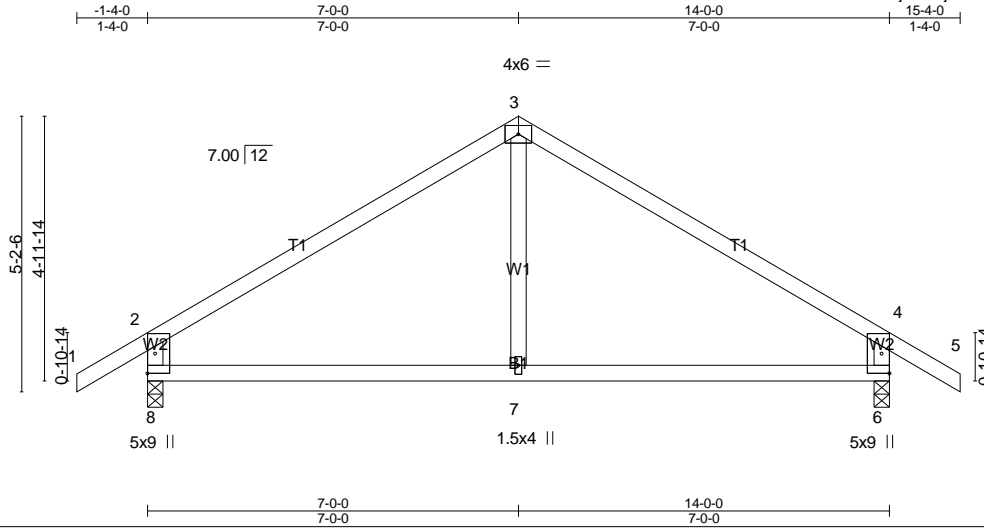
**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
  - Uniform Loads (plf)
    - Vert: 1-3=-60, 3-5=-60, 10-13=-20
  - Concentrated Loads (lb)
    - Vert: 6=-2171(F) 7=-2171(F) 12=-2174(F) 16=-2171(F) 17=-2171(F) 18=-2171(F) 19=-2171(F) 20=-2171(F) 21=-2171(F) 22=-2171(F) 23=-2171(F) 24=-2171(F)

Job 2000456-2000456A	Truss E	Truss Type Common	Qty 2	Ply 1	Wellons Reser Job Reference (optional)
-------------------------	------------	----------------------	----------	----------	---

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:27:59 2020 Page 1  
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-ezQb\_A0F?iiWBgZPqfB33DdSUoWvb7O7iWXuO?yqsGk



Scale = 1:43.5

Plate Offsets (X,Y)-- [2:0-1-0,0-1-12], [4:0-1-0,0-1-12], [6:0-0-0,0-1-12], [8:0-0-0,0-1-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.83	Vert(LL)	-0.05	6-7	>999	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.40	Vert(CT)	-0.10	6-7	>999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.11	Horz(CT)	0.01	6	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MR						
	Code IRC2015/TPI2014						Weight: 58 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
BOT CHORD 2x4 SP No.2 or 2x4 SPF 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) 8=637/0-3-8 (min. 0-1-8), 6=637/0-3-8 (min. 0-1-8)  
Max Horz 8=-145(LC 10)  
Max Uplift 8=-92(LC 12), 6=-92(LC 13)

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

TOP CHORD 2-3=-612/126, 3-4=-612/126, 2-8=-570/208, 4-6=-570/208  
BOT CHORD 7-8=0/435, 6-7=0/435  
WEBS 3-7=0/291

**NOTES-**

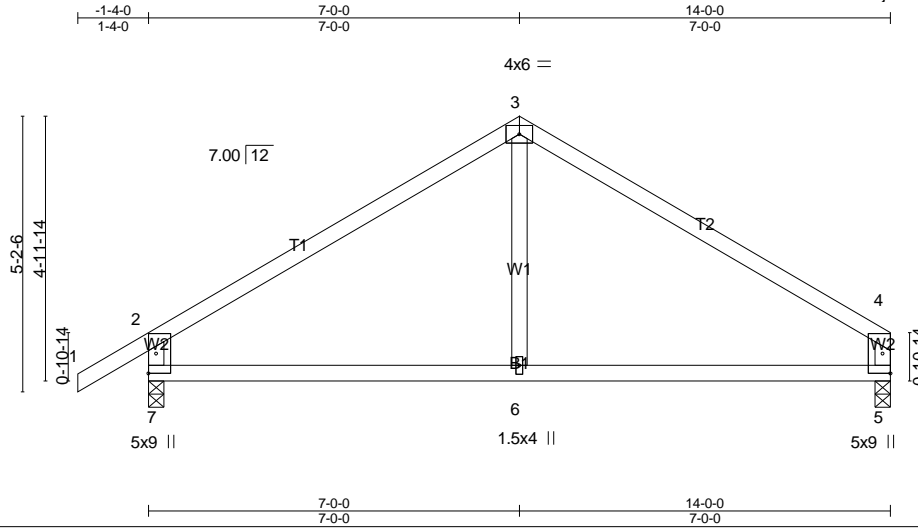
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8 and 6. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job 2000456-2000456A	Truss E1	Truss Type Common	Qty 4	Ply 1	Wellons Reser Job Reference (optional)
-------------------------	-------------	----------------------	----------	----------	---

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:28:01 2020 Page 1  
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-aLXMPs1VXKyDRzjny3DX8ejp3cBb31wQ9q0?SuyqsGi



Scale = 1:43.5

Plate Offsets (X,Y)-- [2:0-1-0,0-1-12], [4:0-1-0,0-1-12], [5:0-0-0,0-1-12], [7:0-0-0,0-1-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.83	Vert(LL)	-0.05	6-7	>999	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.39	Vert(CT)	-0.11	6-7	>999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.11	Horz(CT)	0.01	5	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MR						
	Code IRC2015/TPI2014						Weight: 56 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-3-13 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=642/0-3-8 (min. 0-1-8), 5=544/0-3-8 (min. 0-1-8)  
 Max Horz 7=138(LC 9)  
 Max Uplift 7=-92(LC 12), 5=-59(LC 13)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-619/129, 3-4=-612/127, 2-7=-572/208, 4-5=-469/137  
 BOT CHORD 6-7=-34/435, 5-6=-34/435  
 WEBS 3-6=0/285

**NOTES-**

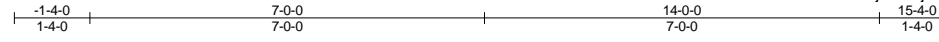
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 7 and 5. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

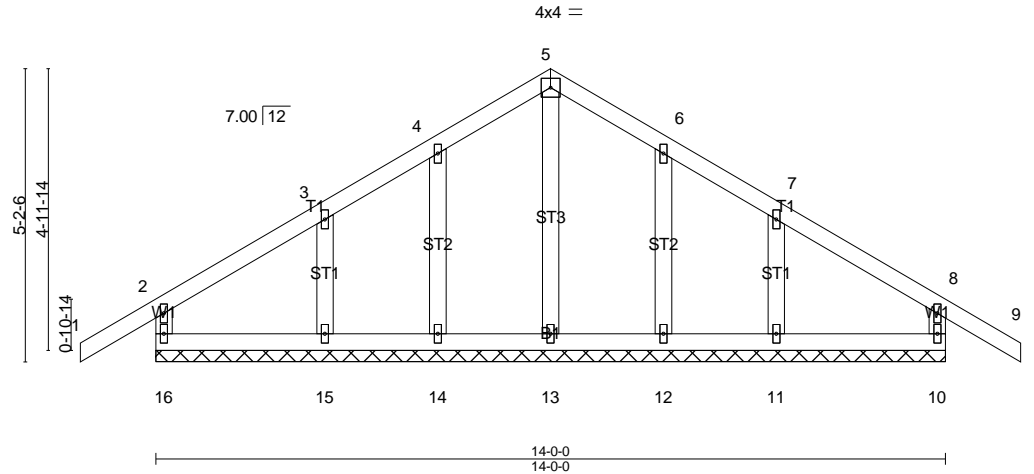
Job 2000456-2000456A	Truss EE	Truss Type Common Supported Gable	Qty 1	Ply 1	Wellons Reser Job Reference (optional)
-------------------------	-------------	--------------------------------------	----------	----------	---

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:28:03 2020 Page 1  
ID:kQ1KS2Sn3ljdzGzjx5z8lzz3hVz-Wkf6qX3l2xDxgHsA3UG?D3oJ8PzGXyJjc8V6XmyqsGg



Scale = 1:40.8



<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 1.15	TC 0.15	Vert(LL) -0.01 9 n/r 120	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.06	Vert(CT) -0.01 9 n/r 90		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.05	Horz(CT) 0.00 10 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-R		Weight: 74 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2  
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 14-0-0.  
(lb) - Max Horz 16=-145(LC 10)  
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, 15, 12, 11

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

**NOTES-**

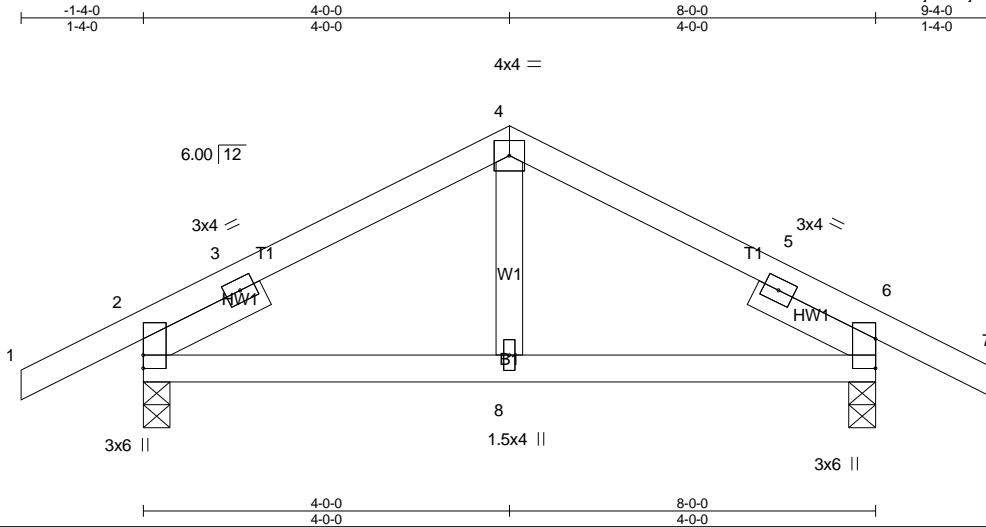
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- All plates are 1.5x4 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 16, 10, 14, 15, 12, and 11. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job 2000456-2000456A	Truss F	Truss Type Common	Qty 3	Ply 1	Wellons Reser Job Reference (optional)
-------------------------	------------	----------------------	----------	----------	---

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:28:05 2020 Page 1  
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-T7nsFD50aYtFvb0YBvITJUfDdW?si?4S\_DcfyqsGe



Scale = 1:25.2

<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 0.15	Vert(LL) -0.01 8-15 >999 240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.13	Vert(CT) -0.01 8-15 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.06	Horz(CT) -0.00 2 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MP		Weight: 38 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 WEBS 2x4 SP No.3  
 SLIDER Left 2x4 SP No.3 -ü 1-6-0, Right 2x4 SP No.3 -ü 1-6-0

**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=400/0-3-8 (min. 0-1-8), 6=400/0-3-8 (min. 0-1-8)  
 Max Horz 2=-45(LC 13)  
 Max Uplift2=-65(LC 12), 6=-65(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 3-4=-277/128, 4-5=-277/128

**NOTES-**

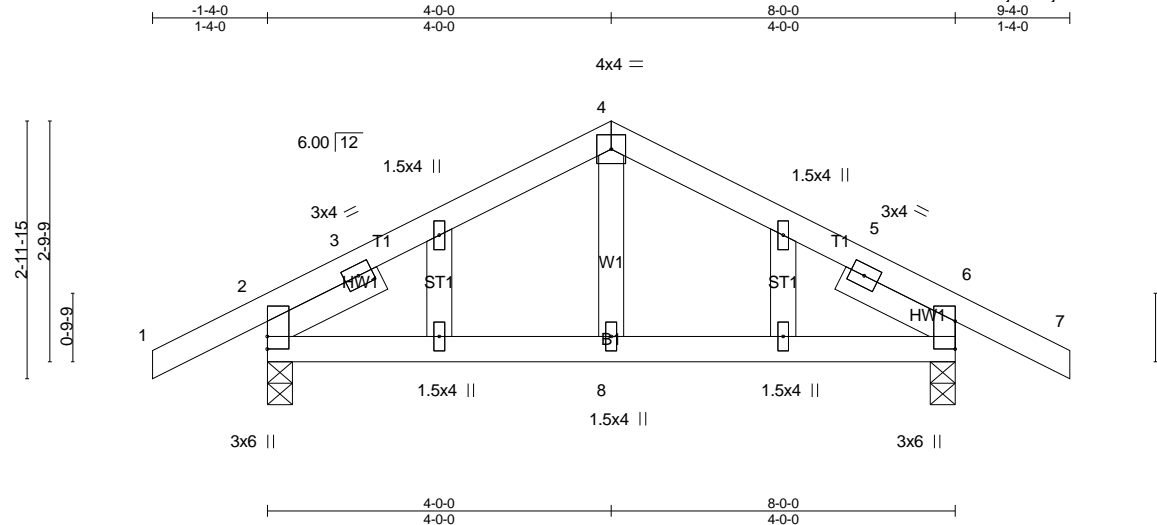
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.
- 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job 2000456-2000456A	Truss FE	Truss Type GABLE	Qty 1	Ply 1	Wellons Reser Job Reference (optional)
-------------------------	-------------	---------------------	----------	----------	---

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:28:07 2020 Page 1  
ID:kQ1KS2Sn3IjdzGzjx5z8lzz3hVz-PVvdgv6G6AjN9uAxIKKxOvy\_70I\_TmClXmTJgXyqsGc



Scale = 1:26.8

<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 1.15	TC 0.15	Vert(LL) -0.01 8-19 >999 240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.13	Vert(CT) -0.01 8-19 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.06	Horz(CT) -0.00 2 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MP		Weight: 41 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 WEBS 2x4 SP No.3  
 OTHERS 2x4 SP No.3  
 SLIDER Left 2x4 SP No.3 -ü 1-6-0, Right 2x4 SP No.3 -ü 1-6-0

**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=400/0-3-8 (min. 0-1-8), 6=400/0-3-8 (min. 0-1-8)  
 Max Horz 2=-45(LC 13)  
 Max Uplift 2=-65(LC 12), 6=-65(LC 13)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 3-4=-277/128, 4-5=-277/128

**NOTES-**

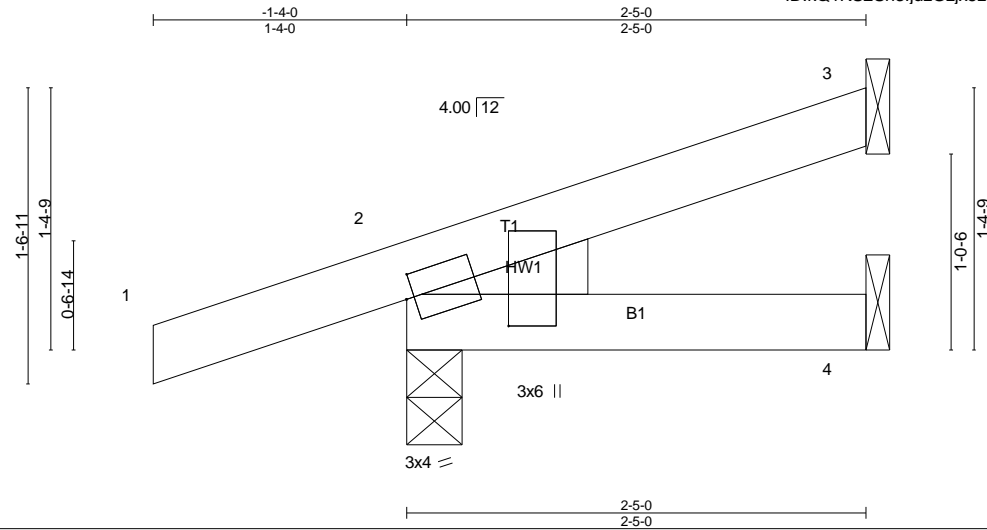
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) Gable studs spaced at 2-0-0 oc.
- 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.
- 8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job 2000456-2000456A	Truss J1	Truss Type Jack-Open	Qty 2	Ply 1	Wellons Reser Job Reference (optional)
-------------------------	-------------	-------------------------	----------	----------	---

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:28:09 2020 Page 1  
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-Lu0N5b8Wenz5OCKKQINPTK2LAq0wxgbb?4yQIQyqsGa



Scale = 1:12.1

Plate Offsets (X,Y)-- [2:0-0-8,0-1-8], [2:0-1-11,0-6-7]

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	7	>999	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.04	Vert(CT)	-0.00	7	>999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Horz(CT)	0.00	2	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MP						
	Code IRC2015/TPI2014						Weight: 11 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 WEDGE  
 Left: 2x4 SP No.3

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 2-5-0 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) 3=47/Mechanical, 2=197/0-3-8 (min. 0-1-8), 4=25/Mechanical  
 Max Horz 2=53(LC 8)  
 Max Uplift 3=-21(LC 12), 2=-76(LC 8)  
 Max Grav 3=47(LC 1), 2=197(LC 1), 4=37(LC 3)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
- 6) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job 2000456-2000456A	Truss J1H	Truss Type Half Hip Girdler	Qty 1	Ply 1	Wellons Reser Job Reference (optional)
-------------------------	--------------	--------------------------------	----------	----------	---

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:28:13 2020 Page 1  
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-EfGuwyB1i0TWtpd5fbRLdAC0qRLdtQNBwiweuByqsGW

Scale = 1:17.0

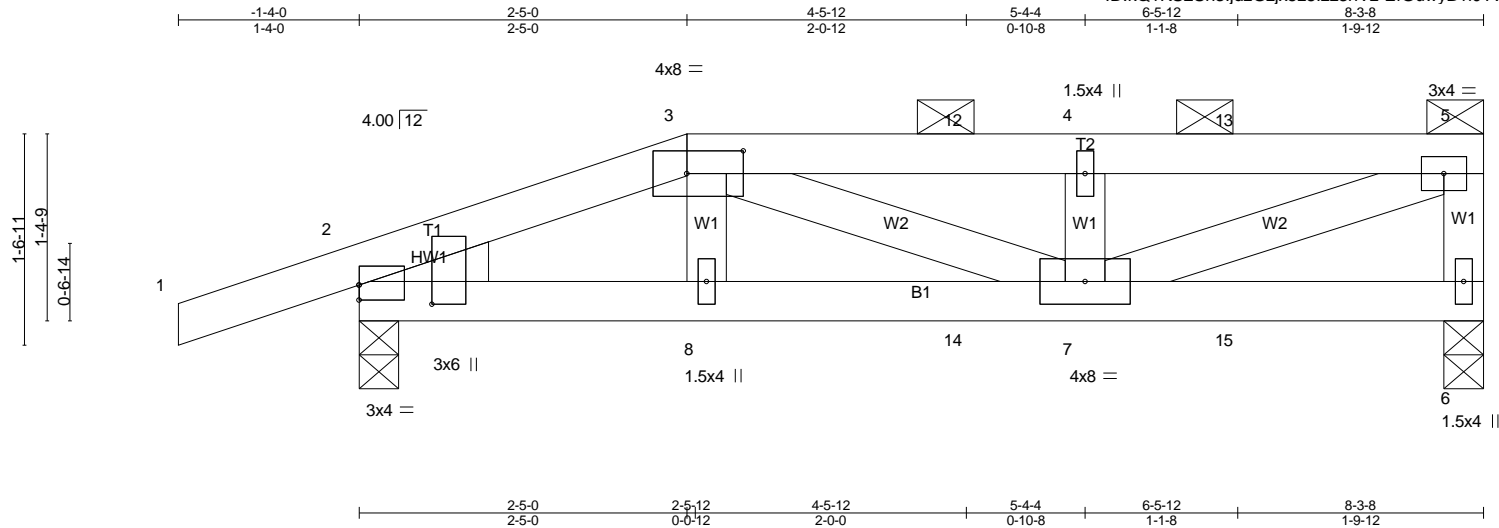


Plate Offsets (X,Y)-- [2:0-1-11,0-6-7], [2:0-0-0,0-1-5], [3:0-5-0,0-2-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.14	Vert(LL)	-0.01	7	>999	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.18	Vert(CT)	-0.02	7-8	>999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.27	Horz(CT)	0.00	6	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-MP						
	Code IRC2015/TPI2014						Weight: 40 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 WEBS 2x4 SP No.3  
 WEDGE  
 Left: 2x4 SP No.3

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.); 3-5.  
 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) 6=340/0-3-8 (min. 0-1-8), 2=422/0-3-8 (min. 0-1-8)

Max Horz 2=51(LC 11)  
 Max Uplift6=-66(LC 9), 2=-118(LC 8)

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

TOP CHORD 2-3=-540/181, 3-12=-607/238, 4-12=-607/238, 4-13=-607/238, 5-13=-607/238, 5-6=-307/137  
 BOT CHORD 2-8=-205/492, 8-14=-201/496, 7-14=-201/496  
 WEBS 5-7=-252/651

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6 and 2. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 19 lb down and 49 lb up at 2-5-0, and 19 lb down and 46 lb up at 4-5-12, and 22 lb down and 52 lb up at 6-5-12 on top chord, and 8 lb down and 0 lb up at 2-5-12, and 8 lb down and 0 lb up at 4-5-12, and 17 lb down and 16 lb up at 6-5-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

Continued on page 2



Job	Truss	Truss Type	Qty	Ply	Wellons Reser
2000456-2000456A	J1H	Half Hip Girder	1	1	Job Reference (optional)

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:28:13 2020 Page 2  
 ID:kQ1KS2Sn3JldzGzjx5z8lzz3hVz-EfGuwyB1i0TWtpd5fbRLdAC0qRLdtQNBwiweuByqsGW

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-60, 3-5=-60, 6-9=-20

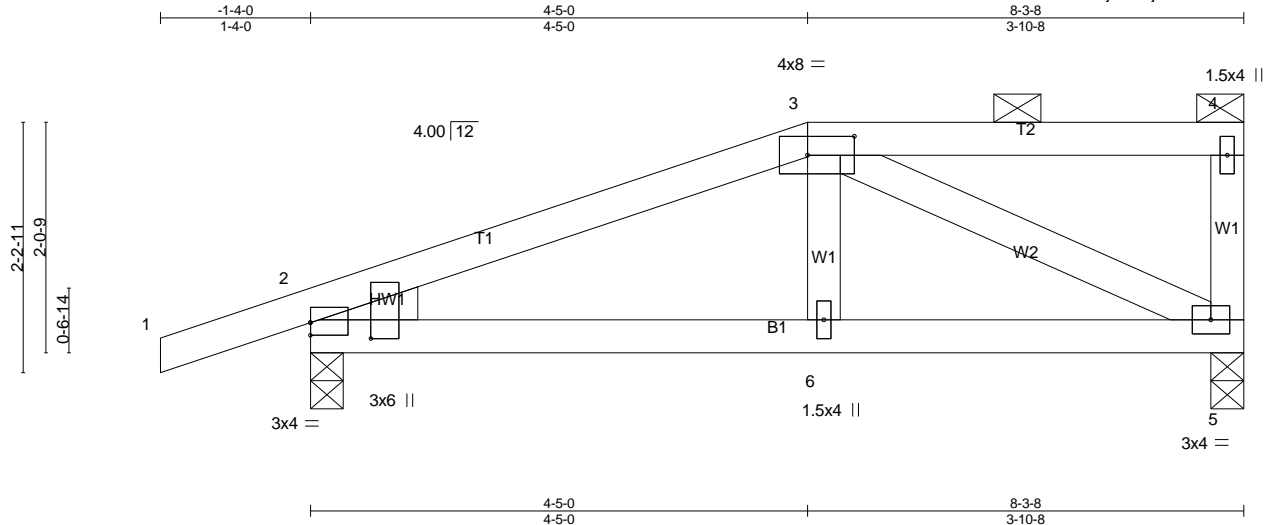
Concentrated Loads (lb)

Vert: 8=-5(B) 13=-3(B) 14=-5(B) 15=-17(B)

Job 2000456-2000456A	Truss J1H1	Truss Type Half Hip	Qty 1	Ply 1	Wellons Reser Job Reference (optional)
-------------------------	---------------	------------------------	----------	----------	---

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:28:15 2020 Page 1  
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-A2OeLeCHEdjE67nTm0TpbjIKFF0vLLrUN0Pky4yqsGU



Scale = 1:20.5

Plate Offsets (X,Y)-- [2:0-0-0,0-1-5], [2:0-1-11,0-6-7], [3:0-5-0,0-2-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.27	Vert(LL)	-0.01	6-9	>999	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.19	Vert(CT)	-0.02	6-9	>999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.14	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MP						
	Code IRC2015/TPI2014						Weight: 38 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 WEBS 2x4 SP No.3  
 WEDGE  
 Left: 2x4 SP No.3

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.  
 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=412/0-3-8 (min. 0-1-8), 5=319/0-3-8 (min. 0-1-8)

Max Horz 2=79(LC 11)  
 Max Uplift 2=-113(LC 8), 5=-59(LC 8)

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

TOP CHORD 2-3=-436/144  
 BOT CHORD 2-6=-177/379, 5-6=-174/388  
 WEBS 3-5=-429/170

**NOTES-**

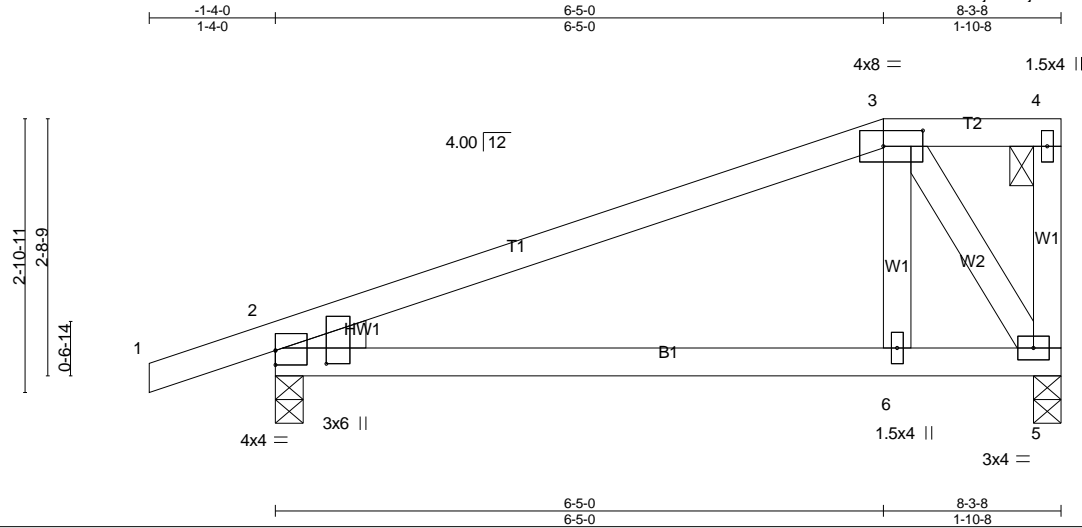
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 5. This connection is for uplift only and does not consider lateral forces.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

Job 2000456-2000456A	Truss J1H2	Truss Type Half Hip	Qty 1	Ply 1	Wellons Reser Job Reference (optional)
-------------------------	---------------	------------------------	----------	----------	---

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:28:17 2020 Page 1  
ID:kQ1KS2Sn3ljdzGzjx5z8lzz3hVz-6QVPmKEXIE\_yMRxsuRWHO0Nck2e7pGwmqJur1yyqsGS



Scale = 1:24.3

Plate Offsets (X,Y)-- [2:0-0-0,0-1-13], [2:0-1-11,0-6-7], [3:0-5-0,0-2-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.53	Vert(LL) 0.06	6-9	>999	240	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.47	Vert(CT) -0.11	6-9	>931	180		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.11	Horz(CT) 0.02	2	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MP						
	Code IRC2015/TPI2014						Weight: 39 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 WEBS 2x4 SP No.3  
 WEDGE  
 Left: 2x4 SP No.3

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.  
 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=412/0-3-8 (min. 0-1-8), 5=319/0-3-8 (min. 0-1-8)

Max Horz 2=107(LC 11)  
 Max Uplift 2=-110(LC 8), 5=-62(LC 8)

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

TOP CHORD 2-3=-299/92  
 WEBS 3-6=-11/276, 3-5=-420/168

**NOTES-**

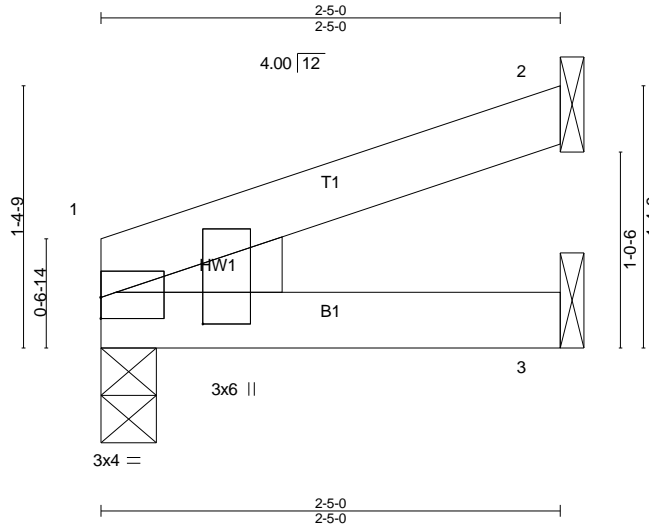
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 5. This connection is for uplift only and does not consider lateral forces.
- 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

Job 2000456-2000456A	Truss J2	Truss Type Jack-Open	Qty 1	Ply 1	Wellons Reser Job Reference (optional)
-------------------------	-------------	-------------------------	----------	----------	---

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:28:19 2020 Page 1  
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-2pd9B?FoHsEgk5F?rYltRS4asQmHB33ldNy5ryqsGQ



Scale = 1:12.1

Plate Offsets (X,Y)-- [1:0-0-0,0-1-5], [1:0-1-11,0-6-7]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.06	Vert(LL)	-0.00	6	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.07	Vert(CT)	-0.00	6	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	1	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MP						Weight: 9 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 WEDGE  
 Left: 2x4 SP No.3

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-5-0 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=57/Mechanical, 3=37/Mechanical, 1=94/0-3-8 (min. 0-1-8)  
 Max Horz 1=30(LC 8)  
 Max Uplift 2=-24(LC 8), 3=-1(LC 8), 1=-9(LC 8)  
 Max Grav 2=57(LC 1), 3=41(LC 3), 1=94(LC 1)

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

#### NOTES-

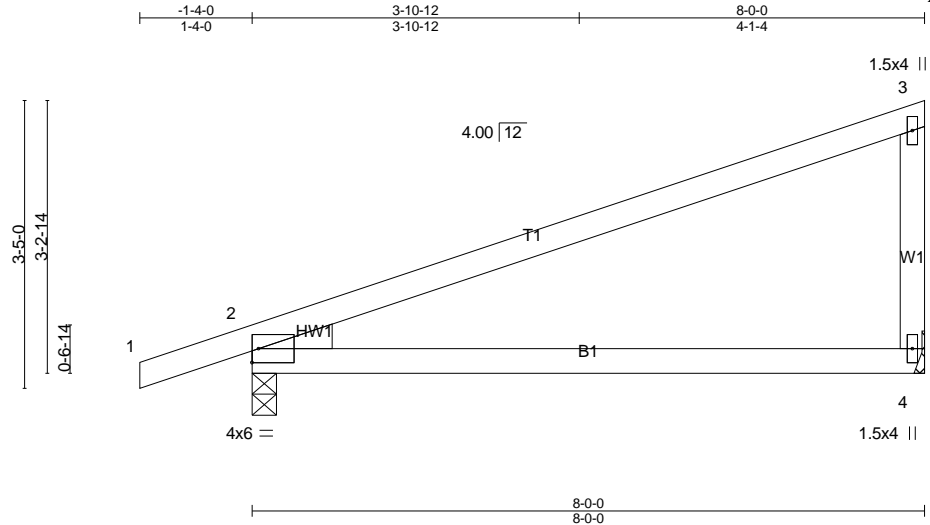
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 3.
- 6) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1. This connection is for uplift only and does not consider lateral forces.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job 2000456-2000456A	Truss J3	Truss Type Jack-Partial	Qty 9	Ply 1	Wellons Reser Job Reference (optional)
-------------------------	-------------	----------------------------	----------	----------	---

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:28:21 2020 Page 1  
ID:kQ1KS2Sn3IjdzGzjx5z8lzz3hVz-?ClvchH2pTUOq2Ed7GaDysYBwgxcl5oMlxs3AkyqsGO



Scale = 1:27.4

Plate Offsets (X,Y)-- [2:0-0-8,0-0-3], [2:0-7-15,0-0-5]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.96	Vert(LL)	0.20	4-7	>483	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.75	Vert(CT)	-0.39	4-7	>243		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.05	Horz(CT)	0.05	2	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MP						
	Code IRC2015/TPI2014						Weight: 32 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 WEBS 2x4 SP No.3  
 WEDGE  
 Left: 2x4 SP No.3

**BRACING-**

TOP CHORD Structural wood sheathing directly applied.  
 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=401/0-3-8 (min. 0-1-8), 4=307/Mechanical  
 Max Horz 2=124(LC 8)  
 Max Uplift2=-94(LC 8), 4=-76(LC 12)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4.
- 6) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job 2000456-2000456A	Truss J4	Truss Type Jack-Open	Qty 3	Ply 1	Wellons Reser Job Reference (optional)
-------------------------	-------------	-------------------------	----------	----------	---

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:28:22 2020 Page 1  
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-TOJlp1lgancFSCpph\_5SV44Zu3S9UYpV\_bcciAyqsGN

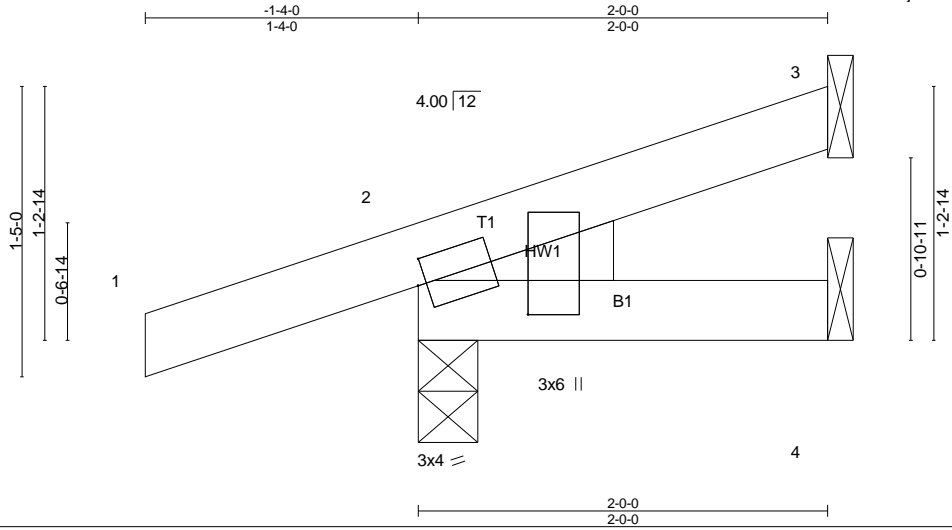


Plate Offsets (X,Y)-- [2:0-0-8,0-1-8], [2:0-1-11,0-6-7]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.12	Vert(LL)	-0.00	7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	7	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MP							
									Weight: 10 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 WEDGE  
 Left: 2x4 SP No.3

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 2-0-0 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) 3=34/Mechanical, 2=186/0-3-8 (min. 0-1-8), 4=18/Mechanical  
 Max Horz 2=48(LC 8)  
 Max Uplift 3=-15(LC 12), 2=-76(LC 8)  
 Max Grav 3=34(LC 1), 2=186(LC 1), 4=30(LC 3)

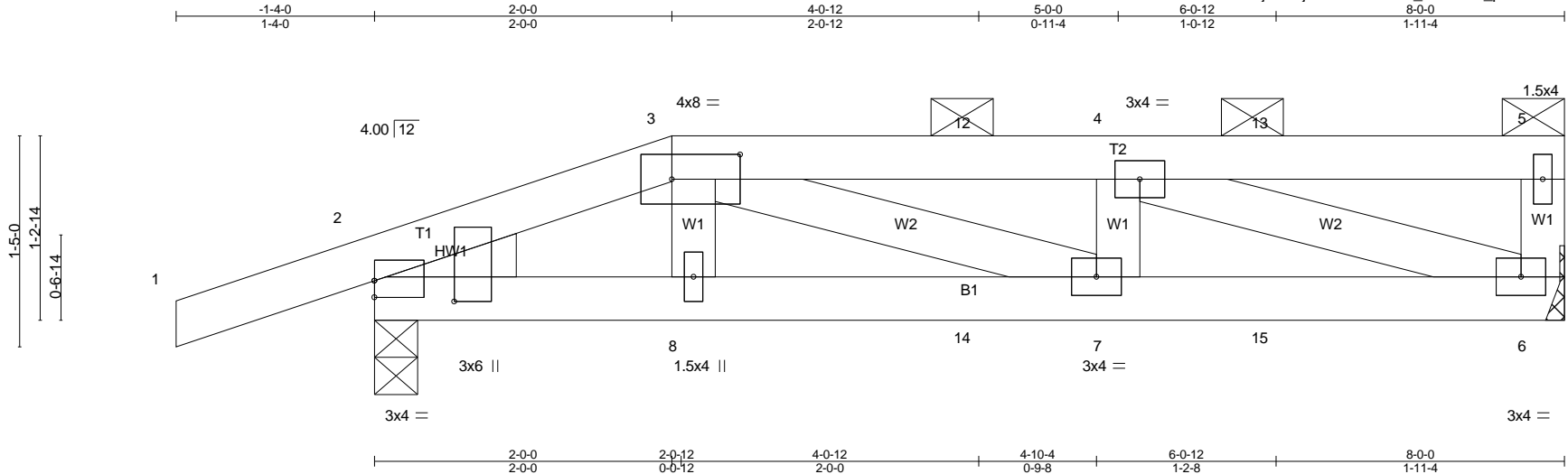
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
- 6) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job 2000456-2000456A	Truss J4H	Truss Type Half Hip Girder	Qty 1	Ply 1	Wellons Reser
84 Components, Dunn, NC 28334					Job Reference (optional)



Scale = 1:14.0

Plate Offsets (X,Y)-- [2:0-1-11,0-6-7], [2:0-0-0,0-1-5], [3:0-5-8,0-2-0]

<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 0.15	Vert(LL)	-0.01	7	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.22	Vert(CT)	-0.02	7-8	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.16	Horz(CT)	0.01	6	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MP						
								Weight: 38 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 WEBS 2x4 SP No.3  
 WEDGE  
 Left: 2x4 SP No.3

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.); 3-5.  
 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=405/0-3-8 (min. 0-1-8), 6=312/Mechanical  
 Max Horz 2=45(LC 11)  
 Max Uplift 2=-114(LC 8), 6=-56(LC 9)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-506/173, 3-12=-629/244, 4-12=-629/244  
 BOT CHORD 2-8=-191/461, 8-14=-187/465, 7-14=-187/465, 7-15=-254/629, 6-15=-254/629  
 WEBS 4-6=-663/256

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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) 6.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 13 lb down and 41 lb up at 2-0-0, and 13 lb down and 38 lb up at 6-0-12 on top chord, and 5 lb down at 2-0-12, and 5 lb down at 4-0-12, and 5 lb down at 6-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Wellons Reser
2000456-2000456A	J4H	Half Hip Girder	1	1	Job Reference (optional)

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:28:25 2020 Page 2  
 ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-tz\_QS3KYti\_pJfYOM6f96ii3eHRsht?ygZqGJVyqsGK

**NOTES-**

12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-60, 3-5=-60, 6-9=-20

Concentrated Loads (lb)

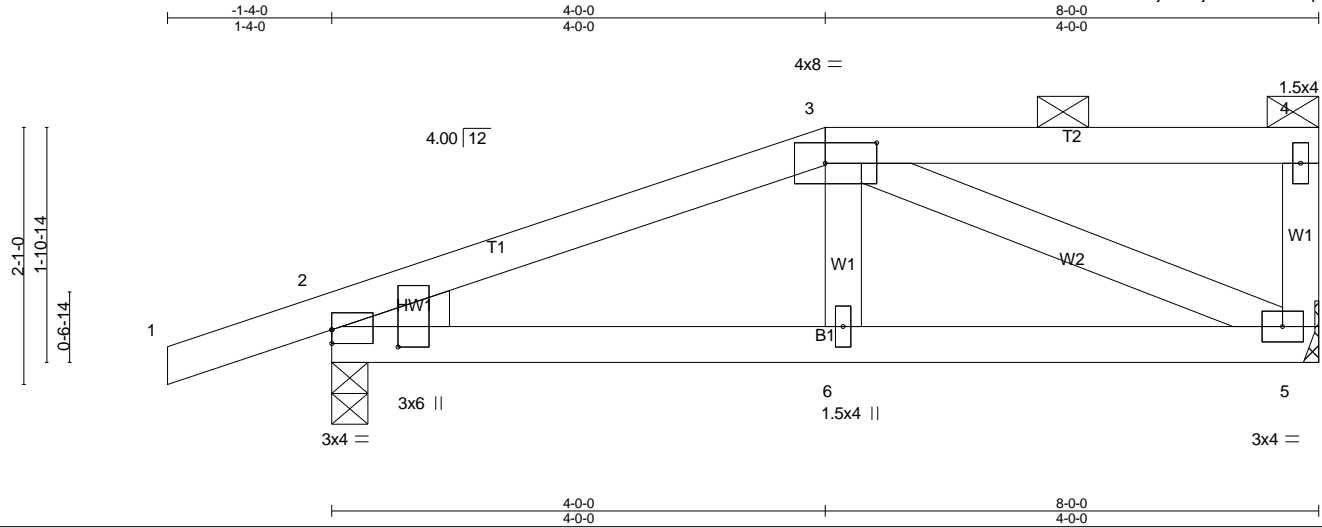
Vert: 8=-3(B) 14=-3(B) 15=-3(B)



Job 2000456-2000456A	Truss J4H1	Truss Type Half Hip	Qty 1	Ply 1	Wellons Reser Job Reference (optional)
-------------------------	---------------	------------------------	----------	----------	---

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:28:27 2020 Page 1  
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-pL6BslMpPJEXYzinTXhdC7nNv4709noF8tJNNNyqsGI



Scale = 1:18.7

Plate Offsets (X,Y)-- [2:0-0-0,0-1-5], [2:0-1-11,0-6-7], [3:0-5-0,0-2-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.29	Vert(LL)	-0.01	5-6	>999	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.17	Vert(CT)	-0.02	5-6	>999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.14	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MP						
	Code IRC2015/TPI2014						Weight: 37 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 WEBS 2x4 SP No.3  
 WEDGE  
 Left: 2x4 SP No.3

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.  
 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=401/0-3-8 (min. 0-1-8), 5=307/Mechanical

Max Horz 2=73(LC 11)  
 Max Uplift 2=-112(LC 8), 5=-56(LC 8)

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

TOP CHORD 2-3=-433/144  
 BOT CHORD 2-6=-176/379, 5-6=-173/388  
 WEBS 3-5=-421/167

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5.
- 7) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- 8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

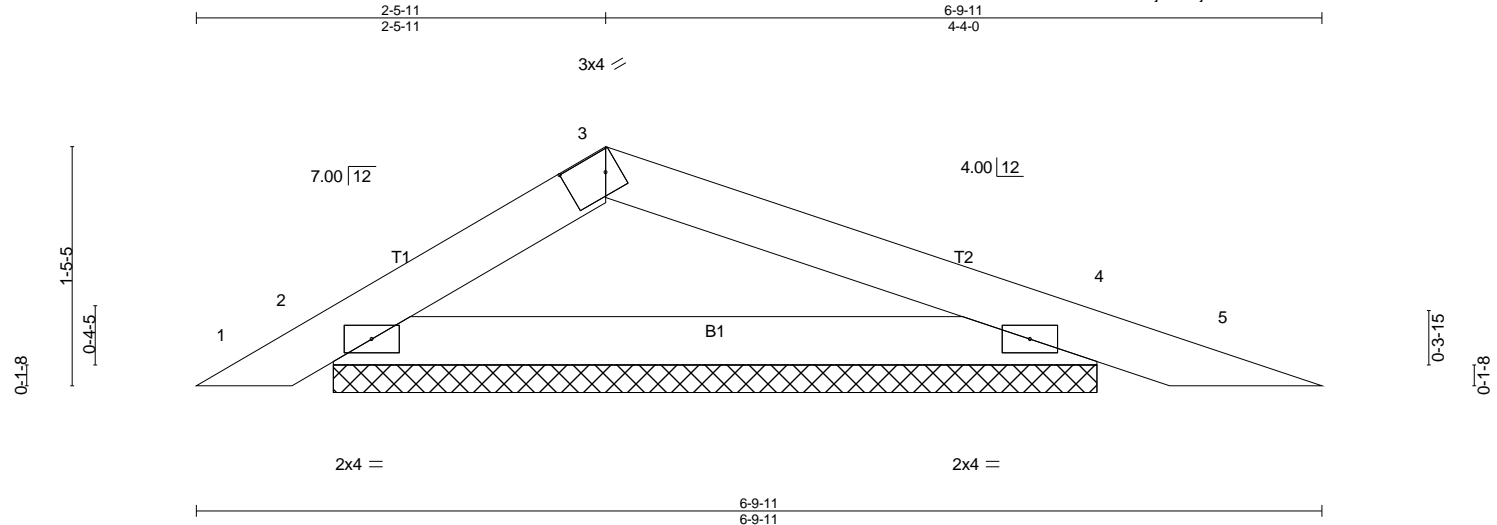
**LOAD CASE(S)** Standard



Job 2000456-2000456A	Truss PB1	Truss Type Piggyback	Qty 1	Ply 1	Wellons Reser Job Reference (optional)
-------------------------	--------------	-------------------------	----------	----------	---

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:28:30 2020 Page 1  
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-EwoJVmOHiEc6PRQM9fFKpmPwfl7CMAnhqrY1\_iyqsGF



Scale = 1:13.9

Plate Offsets (X,Y)-- [3:0-3-0,0-1-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.13	Vert(LL)	0.00	5	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.27	Vert(CT)	0.01	5	n/r	90		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P							
									Weight: 18 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2

**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=214/4-7-7 (min. 0-1-8), 4=242/4-7-7 (min. 0-1-8)  
Max Horz 2=-38(LC 10)  
Max Uplift 2=-28(LC 12), 4=-66(LC 9)

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

**NOTES-**

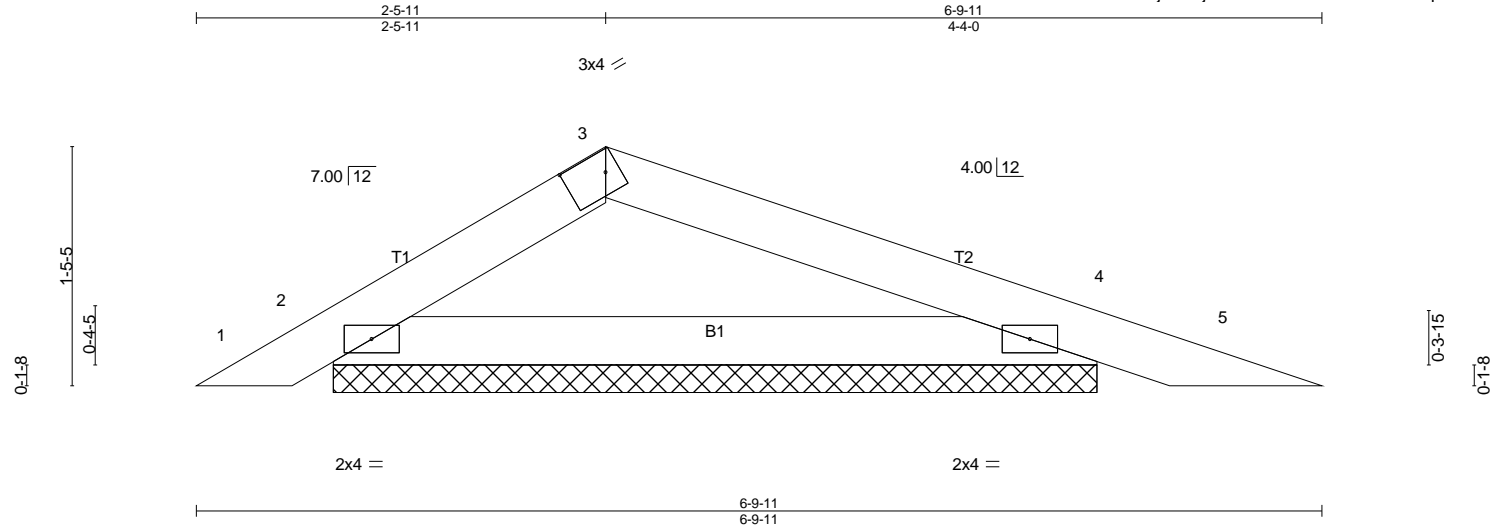
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- One MTS12 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 4. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard

Job 2000456-2000456A	Truss PB2	Truss Type Piggyback	Qty 8	Ply 1	Wellons Reser Job Reference (optional)
-------------------------	--------------	-------------------------	----------	----------	---

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:28:32 2020 Page 1  
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-AJv4wSPxDrsofkakG4HovBVG85ogq4H\_H9183byqsGD



Scale = 1:13.9

Plate Offsets (X,Y)-- [3:0-3-0,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.13	Vert(LL)	0.00	5	n/r	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.27	Vert(CT)	0.01	5	n/r		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Horz(CT)	0.00	4	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P						
	Code IRC2015/TPI2014						Weight: 18 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2

**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=214/4-7-7 (min. 0-1-8), 4=242/4-7-7 (min. 0-1-8)  
Max Horz 2=-38(LC 10)  
Max Uplift 2=-28(LC 12), 4=-66(LC 9)

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

**NOTES-**

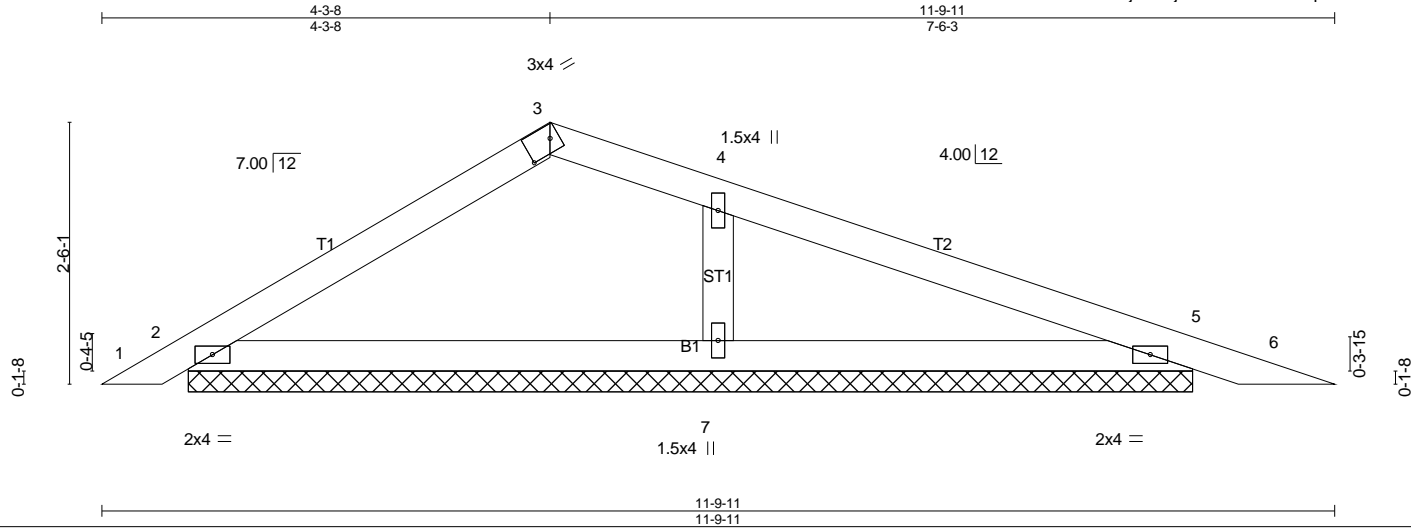
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- One MTS12 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 4. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard

Job 2000456-2000456A	Truss PB4	Truss Type Piggyback	Qty 1	Ply 1	Wellons Reser Job Reference (optional)
-------------------------	--------------	-------------------------	----------	----------	---

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:28:34 2020 Page 1  
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-6i1qK8RCIT7Yu2k7OVJG\_cabCvVrlz\_HITWF7TyqsGB



Scale = 1:22.1

Plate Offsets (X,Y)-- [3:0-3-0,0-1-8]									
<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	1.15	TC 0.22	Vert(LL)	0.01	6	n/r	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.23	Vert(CT)	0.02	6	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 35 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 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=237/9-7-7 (min. 0-1-8), 5=241/9-7-7 (min. 0-1-8), 7=378/9-7-7 (min. 0-1-8)  
 Max Horz 2=-69(LC 10)  
 Max Uplift 2=-55(LC 12), 5=-62(LC 9), 7=-64(LC 13)  
 Max Grav 2=244(LC 23), 5=241(LC 1), 7=382(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 4-7=-255/173

**NOTES-**

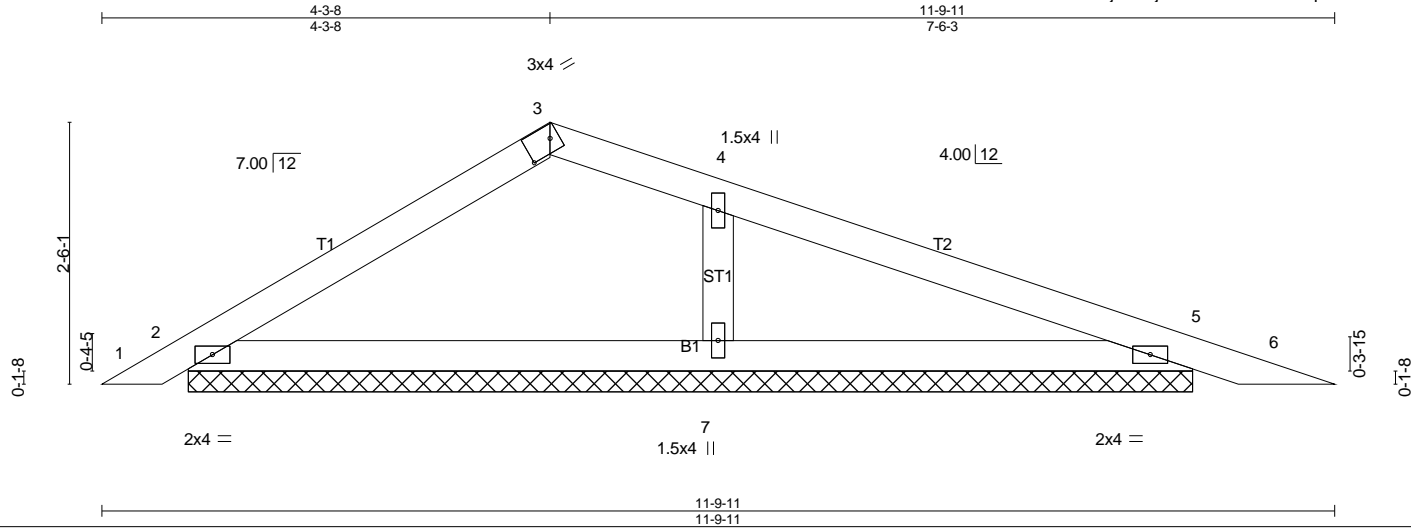
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 7. This connection is for uplift only and does not consider lateral forces.
- One MTS12 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard

Job 2000456-2000456A	Truss PB5	Truss Type Piggyback	Qty 21	Ply 1	Wellons Reser Job Reference (optional)
-------------------------	--------------	-------------------------	-----------	----------	---

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:28:36 2020 Page 1  
ID:kQ1KS2Sn3jdzGzjx5z8lzz3hVz-249alqTSH4NG7MuVWvMk31fxiiBJmiTZCn?MCMYqsG9



Scale = 1:22.1

Plate Offsets (X,Y)-- [3:0-3-0,0-1-8]									
<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	1.15	TC 0.22	Vert(LL)	0.01	6	n/r	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.23	Vert(CT)	0.02	6	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 35 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 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=237/9-7-7 (min. 0-1-8), 5=241/9-7-7 (min. 0-1-8), 7=378/9-7-7 (min. 0-1-8)  
 Max Horz 2=-69(LC 10)  
 Max Uplift 2=-55(LC 12), 5=-62(LC 9), 7=-64(LC 13)  
 Max Grav 2=244(LC 23), 5=241(LC 1), 7=382(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 4-7=-255/173

**NOTES-**

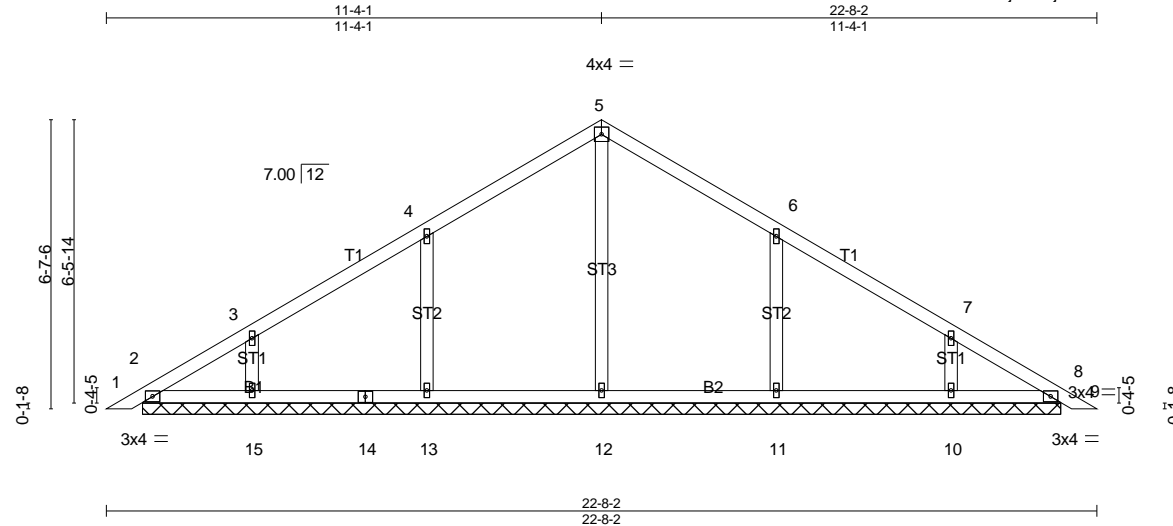
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 7. This connection is for uplift only and does not consider lateral forces.
- One MTS12 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard

Job 2000456-2000456A	Truss PB6	Truss Type Piggyback	Qty 21	Ply 1	Wellons Reser Job Reference (optional)
-------------------------	--------------	-------------------------	-----------	----------	---

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:28:38 2020 Page 1  
ID:kQ1KS2Sn3ljdzGzjx5z8lzz3hVz-?THLAVUiphdzNf2udLOC8SIGYWuNEIfsf5USGEyqsG7



Scale = 1:52.7

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.20	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.19	Vert(LL) 0.00 8 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.14	Vert(CT) 0.00 8 n/r 90		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 8 n/a n/a		
	Code IRC2015/TPI2014			Weight: 94 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 OTHERS 2x4 SP No.2

**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 21-0-4.  
 (lb) - Max Horz 2=159(LC 11)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 15, 10 except 13=-126(LC 12), 11=-126(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 8 except 12=390(LC 19), 13=422(LC 19), 15=287(LC 19), 11=422(LC 20), 10=286(LC 20)

**FORCES.**

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

WEBS 4-13=-282/176, 6-11=-282/176

**NOTES-**

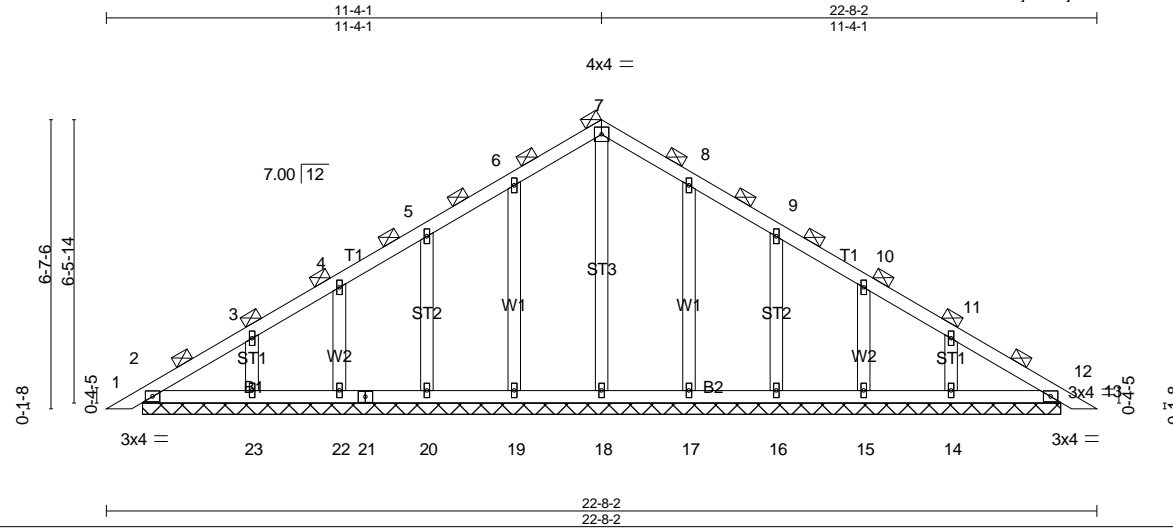
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 1.5x4 MT20 unless otherwise indicated.
- 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 13, 15, 11, and 10. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard

Job 2000456-2000456A	Truss PB7	Truss Type Piggyback	Qty 2	Ply 1	Wellons Reser Job Reference (optional)
-------------------------	--------------	-------------------------	----------	----------	---

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:28:40 2020 Page 1  
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-xrO5bBWzLlthczBHKmQgDtqeuKbwigl97OzZL7yqsG5



Scale = 1:52.7

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-2-0	TC 0.08	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.06	Vert(LL) 0.00 12 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.10	Vert(CT) 0.00 13 n/r 90		
BCDL 10.0	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.00 12 n/a n/a		
	Code IRC2015/TPI2014			Weight: 115 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD 2-0-0 oc purlins (6-0-0 max.)  
 (Switched from sheeted: Spacing > 2-0-0).  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

All bearings 21-0-4.  
 (lb) - Max Horz 2=-173(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 20, 23, 16, 14, 22, 19, 17, 15  
 Max Grav All reactions 250 lb or less at joint(s) 2, 18, 20, 23, 16, 14, 12, 22, 19, 17, 15

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 1.5x4 MT20 unless otherwise indicated.
- 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 20, 23, 16, 14, 22, 19, 17, and 15. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

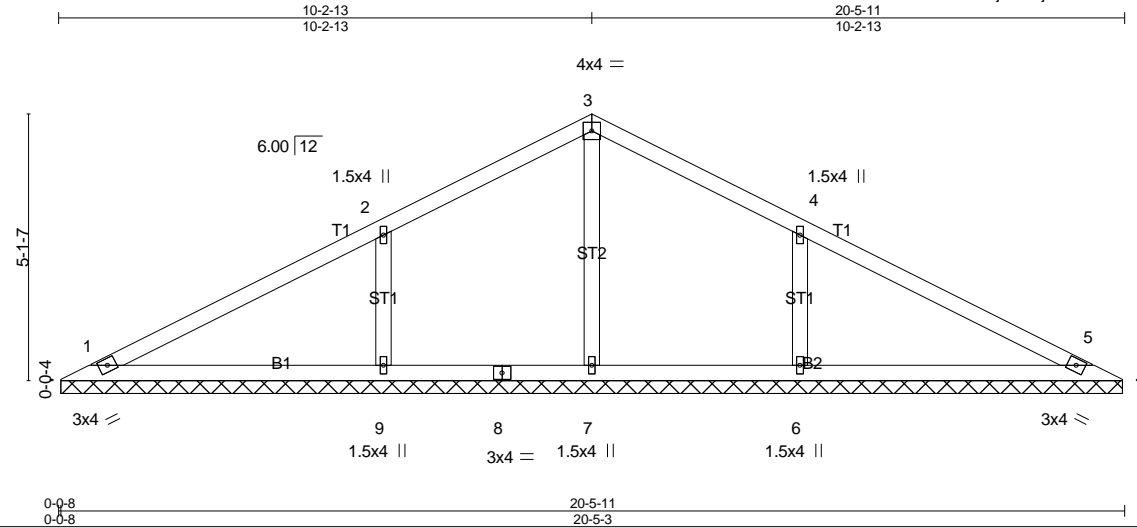
**LOAD CASE(S)** Standard



Job 2000456-2000456A	Truss V1	Truss Type Valley	Qty 1	Ply 1	Wellons Reser Job Reference (optional)
-------------------------	-------------	----------------------	----------	----------	---

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:28:42 2020 Page 1  
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-tEWs0tXDtw7PsHLfsBS8JlvrQ7BaAaRSaiSgP0yqsG3



Scale = 1:44.3

<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 0.66	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.43	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.08	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 5 n/a n/a		
	Code IRC2015/TPI2014			Weight: 77 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.3  
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 20-4-11.  
(lb) - Max Horz 1=80(LC 16)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 9=-149(LC 12), 6=-149(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 9=485(LC 23), 6=485(LC 24)

**FORCES.**

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

WEBS 2-9=-354/236, 4-6=-354/236

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- One MTS12 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 5. This connection is for uplift only and does not consider lateral forces.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 9 and 6. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

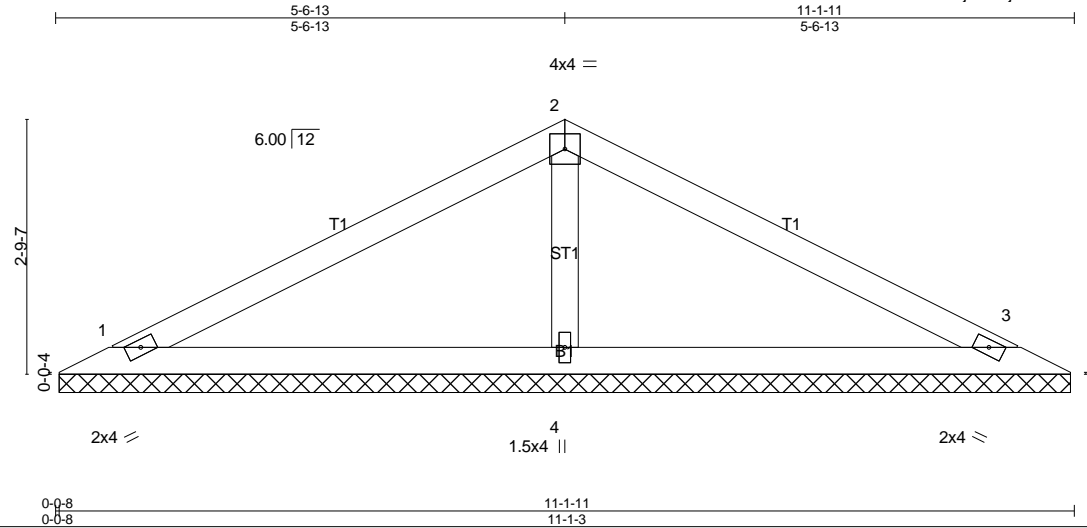
**LOAD CASE(S)** Standard



Job 2000456-2000456A	Truss V3	Truss Type Valley	Qty 1	Ply 1	Wellons Reser Job Reference (optional)
-------------------------	-------------	----------------------	----------	----------	---

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:28:45 2020 Page 1  
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-lpC\_euZ59rV\_jk4EXJ0rwwXNjLCZNxVuGggK0KyqsG0



Scale = 1:25.2

<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 0.59	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.41	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						Weight: 36 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.3  
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=179/11-0-11 (min. 0-1-8), 3=179/11-0-11 (min. 0-1-8), 4=432/11-0-11 (min. 0-1-8)

Max Horz 1=41(LC 12)

Max Uplift1=36(LC 12), 3=44(LC 13), 4=21(LC 12)

Max Grav 1=181(LC 23), 3=181(LC 24), 4=432(LC 1)

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

WEBS 2-4=-287/151

**NOTES-**

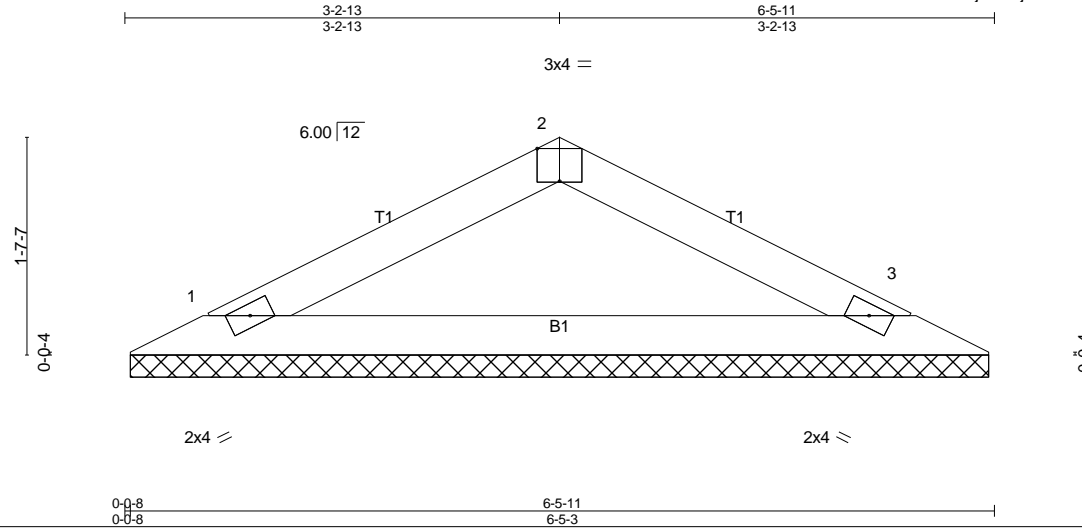
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- One MTS12 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 3. This connection is for uplift only and does not consider lateral forces.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 4. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job 2000456-2000456A	Truss V4	Truss Type Valley	Qty 1	Ply 1	Wellons Reser Job Reference (optional)
-------------------------	-------------	----------------------	----------	----------	---

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:28:47 2020 Page 1  
ID:kQ1KS2Sn3ljdzGzjx5z8lzz3hVz-ECJl3abMhSliy2Edek2J0LcpC8r7rs?Bk\_9R5DyqsG\_



Scale = 1:17.1

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.21	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.59	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P							
									Weight: 18 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.3  
BOT CHORD 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=208/6-4-11 (min. 0-1-8), 3=208/6-4-11 (min. 0-1-8)  
Max Horz 1=-22(LC 13)  
Max Uplift1=-25(LC 12), 3=-25(LC 13)

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

**NOTES-**

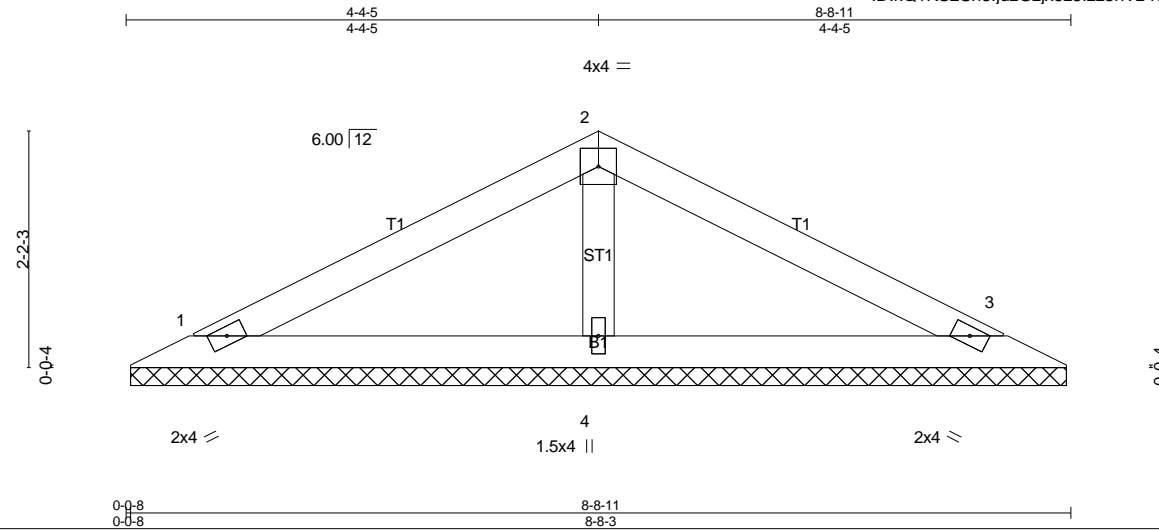
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BC DL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- One MTS12 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 3. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job 2000456-2000456A	Truss V5	Truss Type Valley	Qty 1	Ply 1	Wellons Reser Job Reference (optional)
-------------------------	-------------	----------------------	----------	----------	---

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:28:48 2020 Page 1  
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-iOt7Gwc\_SmtZaCopCRZY9xYDYHxaJbKzev\_cfyqsFz



Scale = 1:21.3

<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 0.44	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.24	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.04	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 3 n/a n/a		
	Code IRC2015/TPI2014			Weight: 28 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.3  
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=151/8-7-11 (min. 0-1-8), 3=151/8-7-11 (min. 0-1-8), 4=296/8-7-11 (min. 0-1-8)  
Max Horz 1=31(LC 12)  
Max Uplift1=-35(LC 12), 3=-41(LC 13), 4=-1(LC 12)

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

**NOTES-**

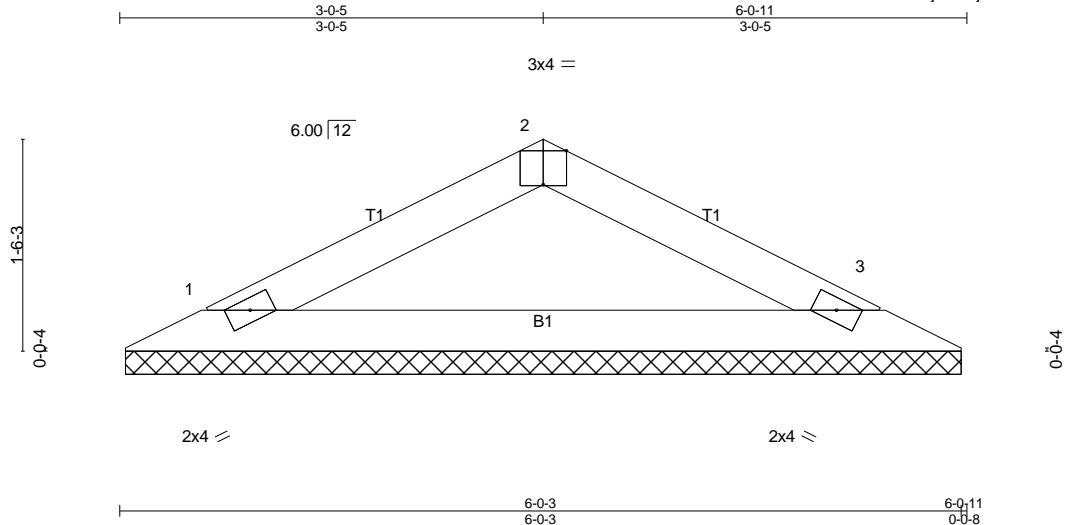
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- One MTS12 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 3. This connection is for uplift only and does not consider lateral forces.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 4. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job 2000456-2000456A	Truss V6	Truss Type Valley	Qty 1	Ply 1	Wellons Reser Job Reference (optional)
-------------------------	-------------	----------------------	----------	----------	---

84 Components, Dunn, NC 28334

8.330 s Feb 24 2020 MiTek Industries, Inc. Wed Aug 5 16:28:50 2020 Page 1  
ID:kQ1KS2Sn3ljdzGzjx5z8lzz3hVz-en?thcdE\_N8GpVyCKsc0d\_EL\_MvL2DkdQyO5gYyqsFx



Scale = 1:16.5

Plate Offsets (X,Y)-- [2:0-2-0,Edge]	6-0-3 6-0-3	6-0-11 0-0-8
--------------------------------------	----------------	-----------------

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.50	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P							
									Weight: 17 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.3  
BOT CHORD 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=192/5-11-11 (min. 0-1-8), 3=192/5-11-11 (min. 0-1-8)  
Max Horz 1=-20(LC 13)  
Max Uplift1=-23(LC 12), 3=-23(LC 13)

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BC DL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- One MTS12 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 3. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard