

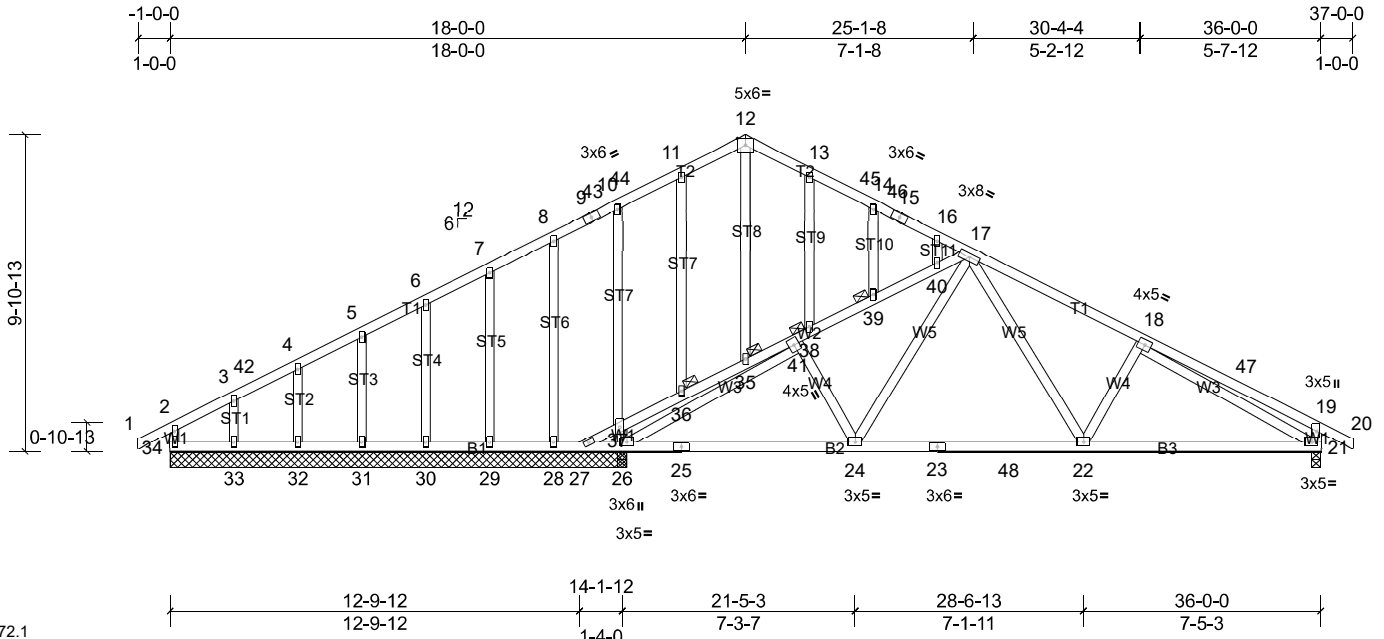
Job 22080109	Truss A01	Truss Type Common Structural Gable	Qty 1	Ply 1	Job Reference (optional)
-----------------	--------------	---------------------------------------	----------	----------	--------------------------

Carter Components - Sanford, Sanford, NC, user

Run: 8.53 S Mar 28 2022 Print: 8.530 S Mar 28 2022 MiTek Industries, Inc. Tue Aug 23 16:53:20

Page: 1

ID:LFiqsngWNK349SFMD6SFTEyI9JY-aiK1F3Q7ibeik\_ZE6pJfP8ZN4NmMrVvOqcEQyI3tk



Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP		
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.45	Vert(LL)	-0.10	22-24	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.17	22-24	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.80	Horz(CT)	0.04	21	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
										Weight: 265 lb	FT = 20%	

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

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

**JOINTS**  
1 Brace at Jt(s): 35, 36, 38, 39

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

**REACTIONS** All bearings 14-3-8. except 21=0-3-8  
(lb) - Max Horiz 34=-121 (LC 13)  
Max Uplift All uplift 100 (lb) or less at joint(s)  
21, 28, 29, 30, 31 except 27=-104 (LC 20), 33=-102 (LC 15)  
Max Grav All reactions 250 (lb) or less at joint (s)  
27, 28, 29, 30, 31, 32, 33 except 21=975 (LC 2), 26=930 (LC 2), 34=266 (LC 2)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 17-18=-1233/171, 18-47=-306/118, 19-47=-380/102, 19-21=-369/182  
BOT CHORD 26-27=0/334, 25-26=0/1084, 24-25=0/1084, 23-24=0/853, 23-48=0/853, 22-48=0/853, 21-22=-39/1132  
WEBS 38-41=-1077/218, 38-39=-1023/155, 39-40=-979/139, 17-40=-983/146, 26-37=-323/93, 17-24=0/352, 17-22=-24/383, 18-21=-1012/31, 26-41=-927/162

**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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) -0-11-9 to 2-7-10, Interior (1) 2-7-10 to 18-0-0, Exterior (2) 18-0-0 to 21-7-3, Interior (1) 21-7-3 to 36-11-9 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=1.33
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- 7) All plates are 2x4 MT20 unless otherwise indicated.
- 8) Gable studs spaced at 2-0-0 oc.
- 9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 10) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 34, 21, 28, 29, 30, 31, 32, 33, and 26. This connection is for uplift only and does not consider lateral forces.
- 11) One RT16A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 27. 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.

**LOAD CASE(S)** Standard

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
22080109	A02	Common	2	1	

Carter Components - Sanford, Sanford, NC, user

Run: 8.53 S Mar 28 2022 Print: 8.530 S Mar 28 2022 MiTek Industries, Inc. Tue Aug 23 16:53:21

Page: 1

ID:486JC824\_ru7HjpDG\_USymyI9GT-W5snAx4heKrMxe8xMXmkqEsPuxkqprCMIjJyJl3ti

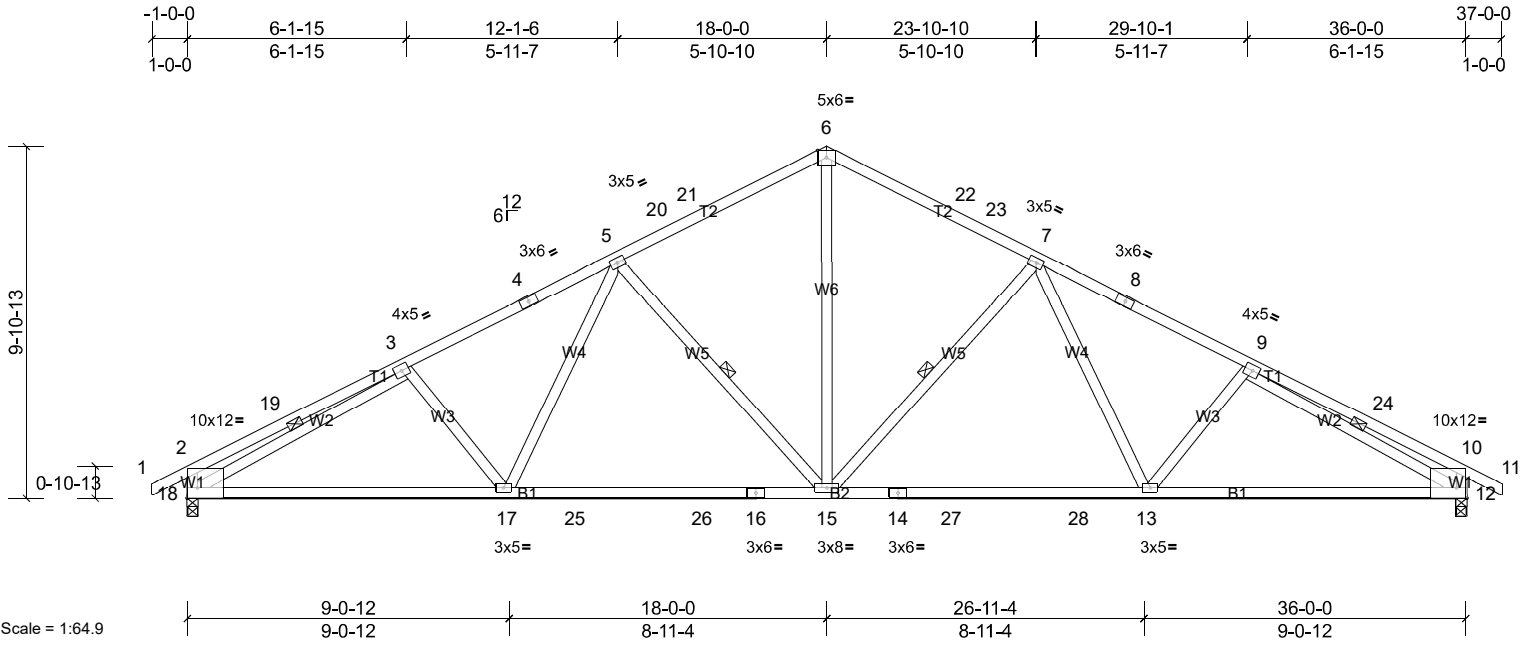


Plate Offsets (X, Y): [2:Edge,0-3-8], [10:Edge,0-3-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP		
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.23	15-17	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-0.42	15-17	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.11	12	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 212 lb	FT = 20%

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

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 3-7-7 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.  
WEBS 1 Row at midpt 3-18, 9-12, 5-15, 7-15

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

**REACTIONS** (lb/size) 12=1262/0-3-8, (min. 0-1-12), 18=1262/0-3-8, (min. 0-1-12)  
Max Horiz 18=-121 (LC 13)  
Max Uplift 12=-5 (LC 16), 18=-5 (LC 15)  
Max Grav 12=1495 (LC 2), 18=1495 (LC 2)

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

TOP CHORD  
2-19=-543/117, 3-19=-459/135,  
3-4=-2162/264, 4-5=-2035/294,  
5-20=-1595/271, 20-21=-1534/280,  
6-21=-1508/299, 6-22=-1508/299,  
22-23=-1534/280, 7-23=-1595/271,  
7-8=-2035/294, 8-9=-2162/264,  
9-24=-459/135, 10-24=-543/117,  
2-18=-461/195, 10-12=-461/195

BOT CHORD  
17-18=-158/1959, 17-25=-89/1725,  
25-26=-89/1725, 16-26=-89/1725,  
15-16=-89/1725, 14-15=-76/1725,  
14-27=-76/1725, 27-28=-76/1725,  
13-28=-76/1725, 12-13=-155/1959

WEBS  
6-15=-119/1070, 3-18=-1816/156,  
9-12=-1816/155, 5-17=0/374, 5-15=-591/159,  
7-15=-591/159, 7-13=0/374

**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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) -0-11-9 to 2-7-10, Interior (1) 2-7-10 to 18-0-0, Exterior (2) 18-0-0 to 21-7-3, Interior (1) 21-7-3 to 36-11-9 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=1.33
- 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 18 and 12. 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

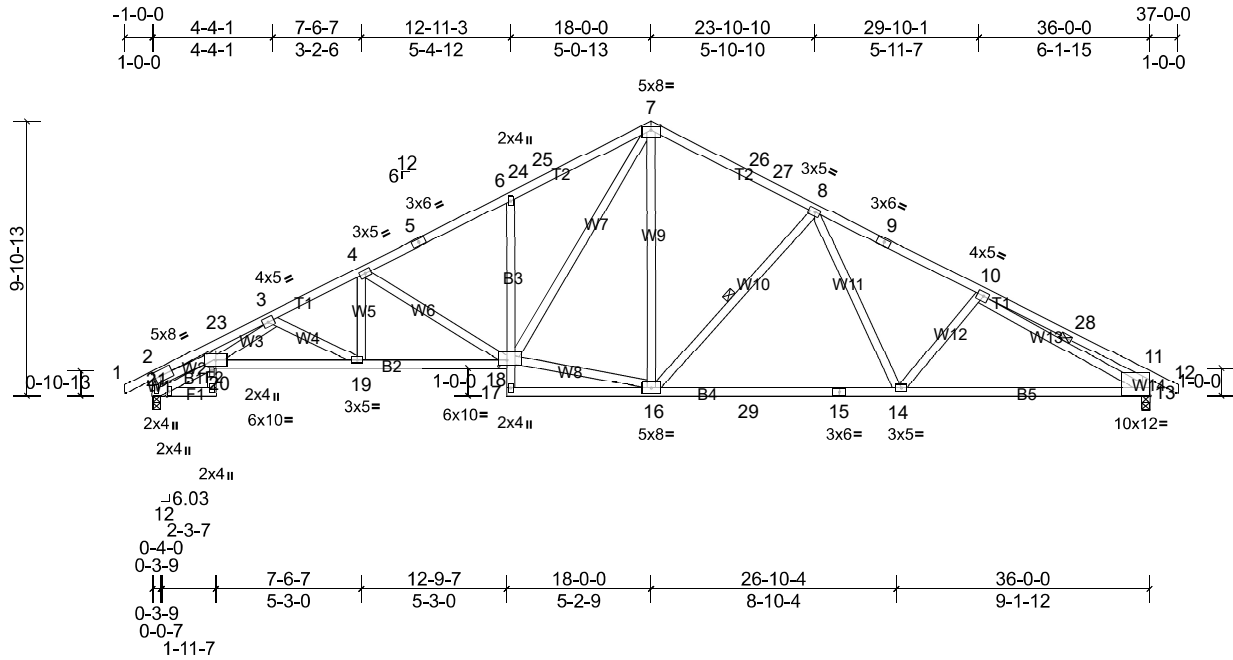
Job 22080109	Truss A03	Truss Type Roof Special	Qty 4	Ply 1	Job Reference (optional)
-----------------	--------------	----------------------------	----------	----------	--------------------------

Carter Components - Sanford, Sanford, NC, user

Run: 8.53 S Mar 28 2022 Print: 8.530 S Mar 28 2022 MiTek Industries, Inc. Tue Aug 23 16:53:21

Page: 1

ID:k51H8UWkqraXi9VPPFRpnVyl9ZE-W5snAx4heKrMxe8xMxrnkqEsPuz9qprCMIjJlJy13ti



Scale = 1:83.2

Plate Offsets (X, Y): [2:0-2-11,0-2-8], [13:Edge,0-3-8], [18:0-3-8,0-2-8], [20:0-1-6,0-1-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	-0.26	14-16	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	Vert(CT)	-0.49	14-16	>878	180		
TCDL	10.0	Rep Stress Incr	YES	WB	Horz(CT)	0.20	13	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH							
BCDL	10.0										
										Weight: 234 lb	FT = 20%

**LUMBER**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2 \*Except\* B2:2x4 SP 2400F 2.0E, B3,F1:2x4 SP No.3  
WEBS 2x4 SP No.3 \*Except\* W2:2x4 SP 2400F 2.0E

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 2-5-7 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 10-13, 8-16

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

**REACTIONS** (lb/size) 13=1262/0-3-8, (min. 0-1-12), 21=1262/0-3-8, (min. 0-1-8)  
Max Horiz 21=-122 (LC 13)  
Max Uplift 13=-5 (LC 16), 21=-5 (LC 15)  
Max Grav 13=1495 (LC 2), 21=1495 (LC 2)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-21=-1461/239, 2-23=-4093/329, 3-23=-4026/340, 3-4=-2849/309, 4-5=-2251/286, 5-6=-2183/303, 6-24=-2241/373, 24-25=-2200/374, 7-25=-2168/397, 7-26=-1509/302, 26-27=-1536/283, 8-27=-1597/274, 8-9=-2013/292, 9-10=-2159/263, 10-28=-459/135, 11-28=-544/117, 11-13=-462/196  
BOT CHORD 19-20=-241/2944, 18-19=-155/2529, 6-18=-338/170, 16-29=-76/1725, 15-29=-76/1725, 14-15=-76/1725, 13-14=-155/1958  
WEBS 2-20=-208/3552, 4-19=0/367, 4-18=-679/90, 16-18=0/1288, 7-18=-188/1167, 7-16=-36/439, 10-13=-1815/156, 8-16=-594/157, 8-14=0/382, 3-19=-469/97, 3-20=-7/881

**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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) -0-11-9 to 2-7-10, Interior (1) 2-7-10 to 18-0-0, Exterior (2) 18-0-0 to 21-7-3, Interior (1) 21-7-3 to 36-11-9 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=1.33
- 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Bearing at joint(s) 21 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 21 and 13. 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.

**LOAD CASE(S)** Standard

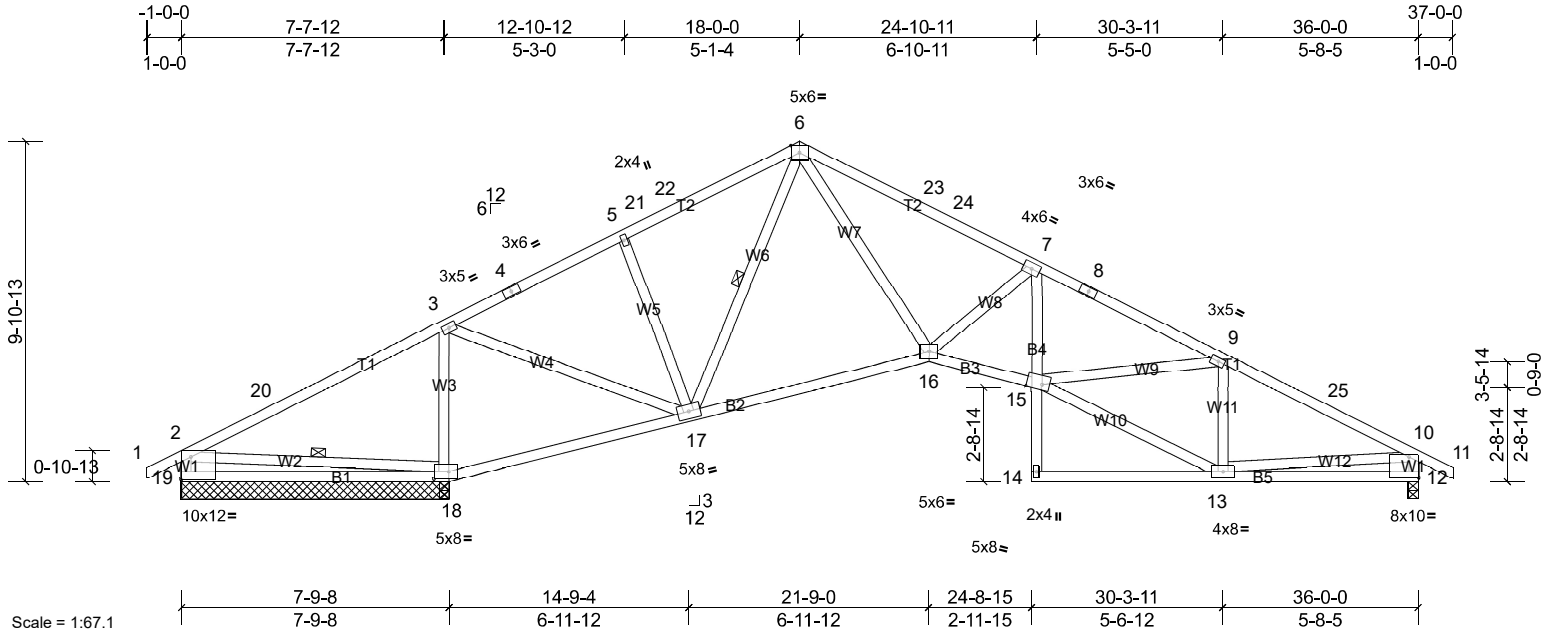
Job 22080109	Truss A04	Truss Type Roof Special	Qty 1	Ply 1	Job Reference (optional)
-----------------	--------------	----------------------------	----------	----------	--------------------------

Carter Components - Sanford, Sanford, NC, user

Run: 8.53 S Mar 28 2022 Print: 8.530 S Mar 28 2022 MiTek Industries, Inc. Tue Aug 23 16:53:21

Page: 1

ID:cD4MzCF6DmvrCB2ICLmCb8yI9GD-W5snAx4heKrmXe8MXrnrkqEqXu30qnlCMiJJJyl3ti



Scale = 1:67.1

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP		
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.79	Vert(LL)	-0.10	15-16	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.22	16-17	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.12	12	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
Weight: 221 lb FT = 20%												

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

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:  
6-0-0 oc bracing: 17-18.  
WEBS 1 Row at midpt 6-17, 2-18

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

**REACTIONS** (lb/size)  
12=890/0-3-8, (min. 0-1-8),  
18=1738/7-9-8, (min. 0-2-5),  
19=-104/7-9-8, (min. 0-2-5)  
Max Horiz 19=-121 (LC 13)  
Max Uplift 12=-26 (LC 16), 19=-269 (LC 34)  
Max Grav 12=1056 (LC 2), 18=2051 (LC 2),  
19=78 (LC 33)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-20=-44/820, 3-20=-23/954, 3-4=-735/134,  
4-5=-609/159, 5-21=-621/173,  
21-22=-579/179, 6-22=-553/198,  
6-23=-1538/220, 23-24=-1551/201,  
7-24=-1639/196, 7-8=-1988/237,  
8-9=-2118/211, 9-25=-1429/191,  
10-25=-1507/175, 2-19=-4/342,  
10-12=-998/222  
BOT CHORD 18-19=-145/391, 17-18=-856/135,  
16-17=0/736, 15-16=-48/1918,  
12-13=-48/270  
WEBS 3-18=-1605/214, 3-17=-59/1490,  
5-17=-267/134, 6-17=-560/9, 6-16=-44/1290,  
7-16=-651/183, 13-15=-79/1378, 9-15=0/592,  
9-13=-656/118, 2-18=-1105/187,  
10-13=-28/1015

- 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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) -0-11-9 to 2-7-10, Interior (1) 2-7-10 to 18-0-0, Exterior (2) 18-0-0 to 21-7-3, Interior (1) 21-7-3 to 36-11-9 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=1.33
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 19 and 12. This connection is for uplift only and does not consider lateral forces.
- One RT16A MiTek 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.
- 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

**NOTES**

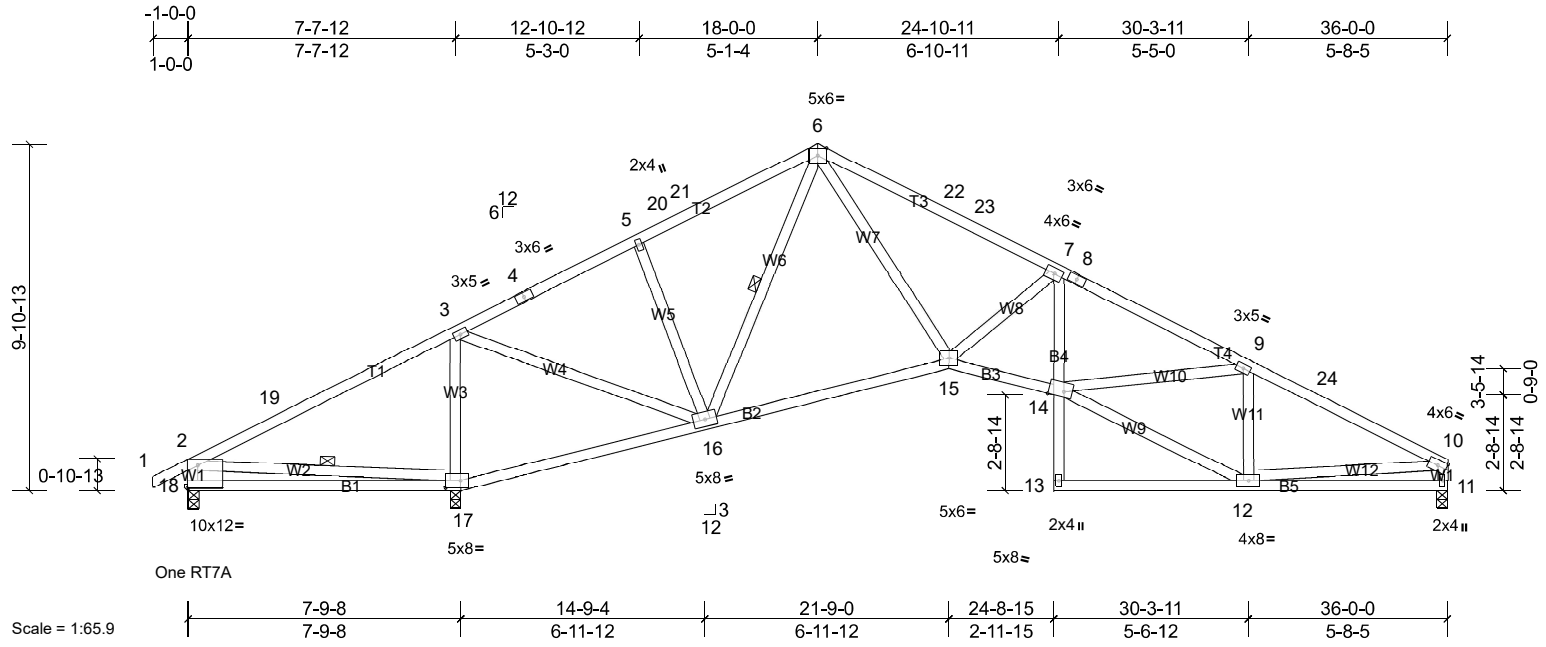
Job 22080109	Truss A05	Truss Type Roof Special	Qty 2	Ply 1	Job Reference (optional)
-----------------	--------------	----------------------------	----------	----------	--------------------------

Carter Components - Sanford, Sanford, NC, user

Run: 8.53 S Mar 28 2022 Print: 8.530 S Mar 28 2022 MiTek Industries, Inc. Tue Aug 23 16:53:21

Page: 1

ID:QNRdqJtpcf?w6VSYctcrPyl9G7-W5snAx4heKrmXe8xMxrnkqEqXu3OqnlCMiJjJl3ti



Scale = 1:65.9

7-9-8	14-9-4	21-9-0	24-8-15	30-3-11	36-0-0
7-9-8	6-11-12	6-11-12	2-11-15	5-6-12	5-8-5

Plate Offsets (X, Y): [14:0-5-4,0-1-12], [17:0-5-4,0-2-8], [18:Edge,0-7-13]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP		
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.79	Vert(LL)	-0.10	14-15	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.22	15-16	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.12	11	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 219 lb	FT = 20%

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

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:  
6-0-0 oc bracing: 16-17.  
WEBS 1 Row at midpt 6-16, 2-17

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

**REACTIONS** (lb/size)  
11=835/0-3-8, (min. 0-1-8),  
17=1742/0-3-8, (min. 0-2-7),  
18=106/0-3-8, (min. 0-1-8)  
Max Horiz 18=123 (LC 14)  
Max Uplift 11=14 (LC 16), 18=271 (LC 34)  
Max Grav 11=987 (LC 2), 17=2056 (LC 2),  
18=77 (LC 33)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-19=-73/825, 3-19=-52/959, 3-4=-734/132,  
4-5=-608/158, 5-20=-620/171,  
20-21=-578/177, 6-21=-552/196,  
6-22=-1540/242, 22-23=-1553/223,  
7-23=-1641/218, 7-8=-1977/266,  
8-9=-2123/263, 9-24=-1418/201,  
10-24=-1514/185, 2-18=-3/345,  
10-11=-929/166  
BOT CHORD 17-18=-151/385, 16-17=-861/132,  
15-16=0/736, 14-15=-103/1922, 7-14=-5/253  
WEBS 3-17=-1608/235, 3-16=-84/1494,  
5-16=-267/133, 6-16=-563/16,  
6-15=-65/1293, 7-15=-653/183,  
12-14=-130/1392, 9-14=0/582,  
9-12=-671/146, 2-17=-1110/210,  
10-12=-58/1079

**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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) -0-11-9 to 2-7-10, Interior (1) 2-7-10 to 18-0-0, Exterior (2) 18-0-0 to 21-7-3, Interior (1) 21-7-3 to 35-10-4 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=1.33
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 18 and 11. This connection is for uplift only and does not consider lateral forces.
- One RT16A MiTek 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.
- 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

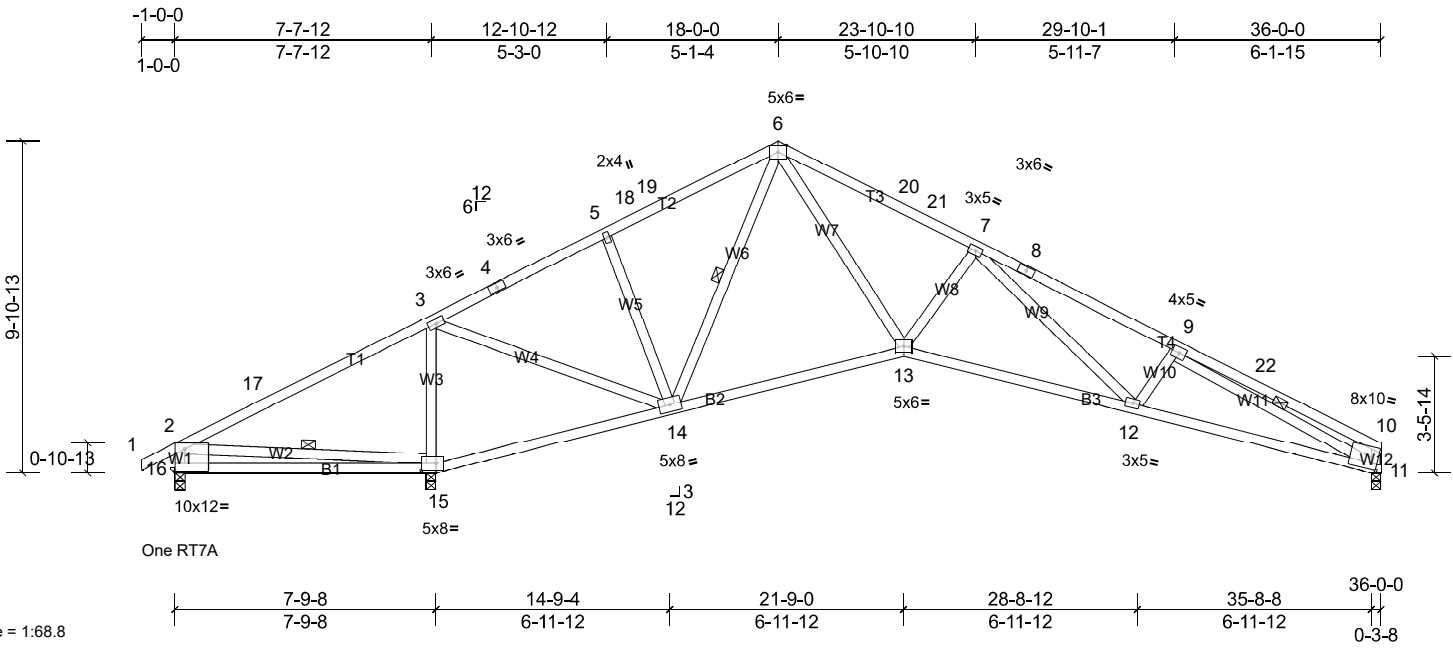
Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
22080109	A06	Roof Special	6	1	

Carter Components - Sanford, Sanford, NC, user

Run: 8.53 S Mar 28 2022 Print: 8.530 S Mar 28 2022 MiTek Industries, Inc. Tue Aug 23 16:53:22

Page: 1

ID:g6U1jkQXhNojVUHba?Yjlyl9G\_-HQANG5JPdcZoj7vFMOG2m\_LIL8ZE3MbM2Hrly3th



Scale = 1:68.8

Plate Offsets (X, Y): [10:0-2-0,0-2-4], [15:0-5-4,0-2-8], [16:Edge,0-8-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP		
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.85	Vert(LL)	-0.14	12-13	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.31	12-13	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.68	Horz(CT)	0.16	11	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
										Weight: 204 lb	FT = 20%	

- LUMBER**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3
- BRACING**  
TOP CHORD Structural wood sheathing directly applied or 3-6-9 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:  
5-6-3 oc bracing: 14-15.  
WEBS 1 Row at midpt 6-14, 2-15, 9-11

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

- REACTIONS (lb/size)**  
11=807/0-3-8, (min. 0-1-8),  
15=1875/0-3-8, (min. 0-2-10),  
16=-210/0-3-8, (min. 0-1-8)  
Max Horiz 16=124 (LC 14)  
Max Uplift 11=14 (LC 16), 16=-386 (LC 34)  
Max Grav 11=953 (LC 2), 15=2213 (LC 2),  
16=7 (LC 33)

- FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.**  
TOP CHORD 2-17=-94/1060, 3-17=-73/1194,  
3-4=-607/126, 4-5=-481/151, 5-18=-494/165,  
18-19=-452/171, 6-19=-423/190,  
6-20=-1441/245, 20-21=-1466/225,  
7-21=-1528/216, 7-8=-2089/314,  
8-9=-2236/285, 9-22=-327/134,  
10-22=-424/116, 2-16=0/459, 10-11=-329/132  
BOT CHORD 15-16=-152/373, 14-15=-1080/145,  
13-14=0/646, 12-13=-74/1641,  
11-12=-221/2088  
WEBS 3-15=-1694/243, 3-14=-95/1600,  
5-14=-268/136, 6-14=-628/16,  
6-13=-77/1292, 2-15=-1305/227,  
9-11=-2000/171, 7-13=-530/183,  
7-12=-84/536

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) -0-11-9 to 2-7-10, Interior (1) 2-7-10 to 18-0-0, Exterior (2) 18-0-0 to 21-7-3, Interior (1) 21-7-3 to 35-10-4 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=1.33
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 16 and 11. This connection is for uplift only and does not consider lateral forces.
- One RT16A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 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.

**LOAD CASE(S)** Standard

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

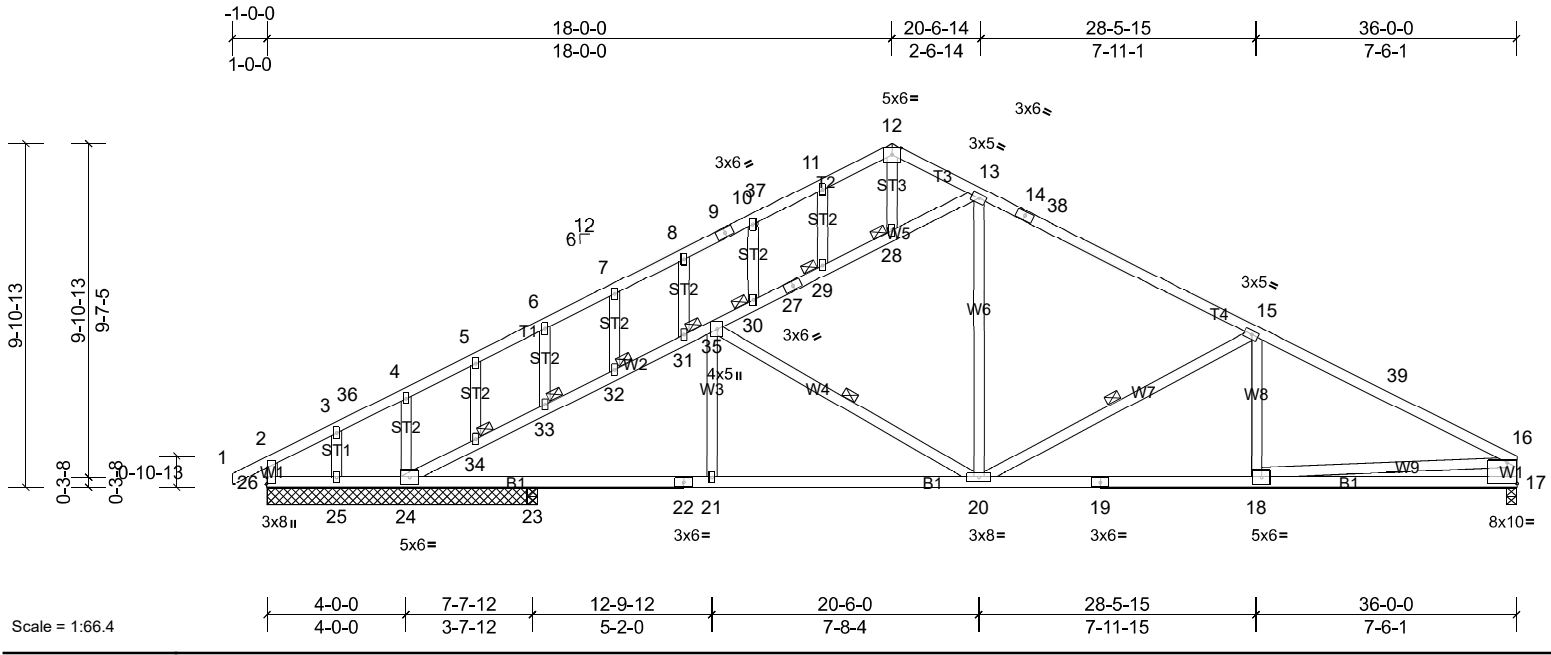
Job 22080109	Truss A07	Truss Type Common Structural Gable	Qty 1	Ply 1	Job Reference (optional)
-----------------	--------------	---------------------------------------	----------	----------	--------------------------

Carter Components - Sanford, Sanford, NC, user

Run: 8.53 S Mar 28 2022 Print: 8.530 S Mar 28 2022 MiTek Industries, Inc. Tue Aug 23 16:53:22

Page: 1

ID: Nrf5WbAnJ7U3KsrvfJ81hAyl9F1-\_HQANG5JPdzCZoj7vFMOG2m0vLzZA9MbM2Hrly3th



Scale = 1:66.4

Plate Offsets (X, Y): [17:Edge,0-7-4]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP		
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.11	20-21	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.27	20-21	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.93	Horz(CT)	0.07	17	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
										Weight: 234 lb	FT = 20%	

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

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 15-20, 20-35  
JOINTS 1 Brace at Jt(s): 28, 29, 30, 31, 32, 33, 34

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

**REACTIONS** All bearings 7-9-8, except 17=0-3-8, 23=0-3-8 (lb) - Max Horiz 26=123 (LC 12)  
Max Uplift All uplift 100 (lb) or less at joint(s) except 24=155 (LC 15), 25=115 (LC 22)  
Max Grav All reactions 250 (lb) or less at joint (s) 23, 25 except 17=1263 (LC 2), 24=1323 (LC 2), 26=327 (LC 22)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-272/16, 4-5=-289/0, 10-37=-267/60, 13-14=-130/1/242, 14-38=-1332/231, 15-38=-1494/203, 15-39=-1849/235, 16-39=-2027/211, 2-26=-277/0, 16-17=-1190/191  
BOT CHORD 23-24=-130/1728, 22-23=-130/1728, 21-22=-130/1728, 20-21=-130/1728, 19-20=-136/1735, 18-19=-136/1735, 17-18=-85/325

**WEBS** 24-34=-1809/365, 33-34=-1807/368, 32-33=-1768/351, 31-32=-1757/347, 31-35=-1659/303, 30-35=-1302/275, 27-30=-1231/244, 27-29=-1231/244, 28-29=-1204/233, 13-28=-1236/247, 4-24=-438/178, 13-20=-45/735, 15-20=-591/144, 20-35=-596/140, 16-18=-61/1416

- 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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) -0-11-9 to 2-7-10, Interior (1) 2-7-10 to 18-0-0, Exterior (2) 18-0-0 to 21-7-3, Interior (1) 21-7-3 to 35-10-4 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=1.33
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
  - Unbalanced snow loads have been considered for this design.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable studs spaced at 2-0-0 oc.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
  - One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 26, 17, and 25. This connection is for uplift only and does not consider lateral forces.

- One RT16A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 24 and 23. 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 22080109	Truss B01	Truss Type Common Supported Gable	Qty 1	Ply 1	Job Reference (optional)
-----------------	--------------	--------------------------------------	----------	----------	--------------------------

Carter Components - Sanford, Sanford, NC, user

Run: 8.53 S Mar 28 2022 Print: 8.530 S Mar 28 2022 MiTek Industries, Inc. Tue Aug 23 16:53:22

Page: 1

ID: IQdXzBSv7?yufJXTQHZ7WkyI9DM-\_HQANG5JPdzCzO7vFMOG2m9RIVMZCMbM2HryI3th

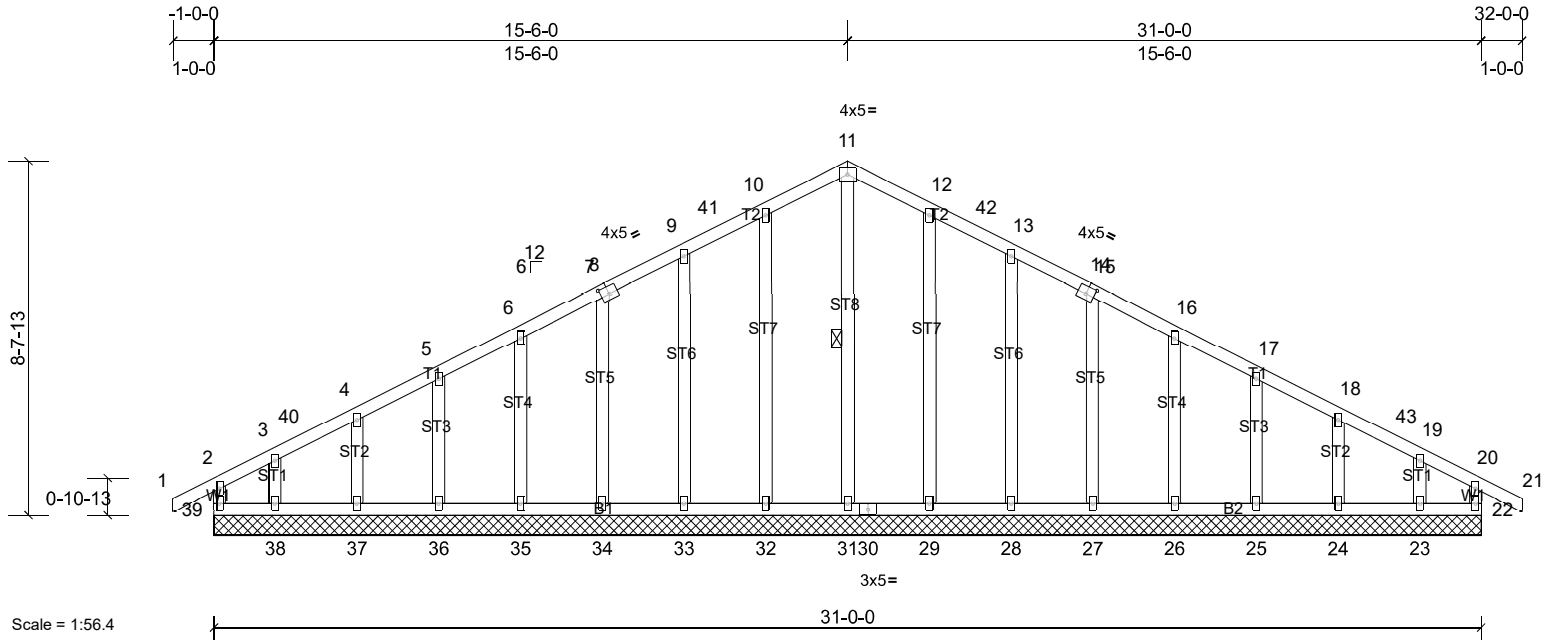


Plate Offsets (X, Y): [8:0-2-8,0-2-4], [14:0-2-8,0-2-4]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.00	22	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MR								
BCDL	10.0											
											Weight: 200 lb	FT = 20%

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

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 6'-0" oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6'-0" oc bracing.  
WEBS 1 Row at midpt 11-31

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

**REACTIONS** All bearings 31'-0".  
(lb) - Max Horiz 39=108 (LC 14)  
Max Uplift All uplift 100 (lb) or less at joint(s)  
22, 23, 24, 25, 26, 27, 28, 29, 32, 33, 34, 35, 36, 37, 38, 39  
Max Grav All reactions 250 (lb) or less at joint (s)  
22, 23, 24, 25, 26, 27, 28, 29, 31, 32, 33, 34, 35, 36, 37, 38, 39

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 9-41=-93/268, 10-41=-84/274,  
10-11=-110/317, 11-12=-110/311,  
12-42=-84/268, 13-42=-93/262

**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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Corner  
(3) -0-11-9 to 2-1-10, Exterior (2) 2-1-10 to 15-6-0, Corner (3) 15-6-0 to 18-7-3, Exterior (2) 18-7-3 to 31-11-9 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=1.33

3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.  
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10  
5) Unbalanced snow loads have been considered for this design.  
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.  
7) All plates are 2x4 MT20 unless otherwise indicated.  
8) Gable requires continuous bottom chord bearing.  
9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).  
10) Gable studs spaced at 2'-0" oc.  
11) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-06"-00 tall by 2'-00"-00 wide will fit between the bottom chord and any other members.  
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 39, 22, 32, 33, 34, 35, 36, 37, 38, 29, 28, 27, 26, 25, 24, 23.  
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.

**LOAD CASE(S)** Standard



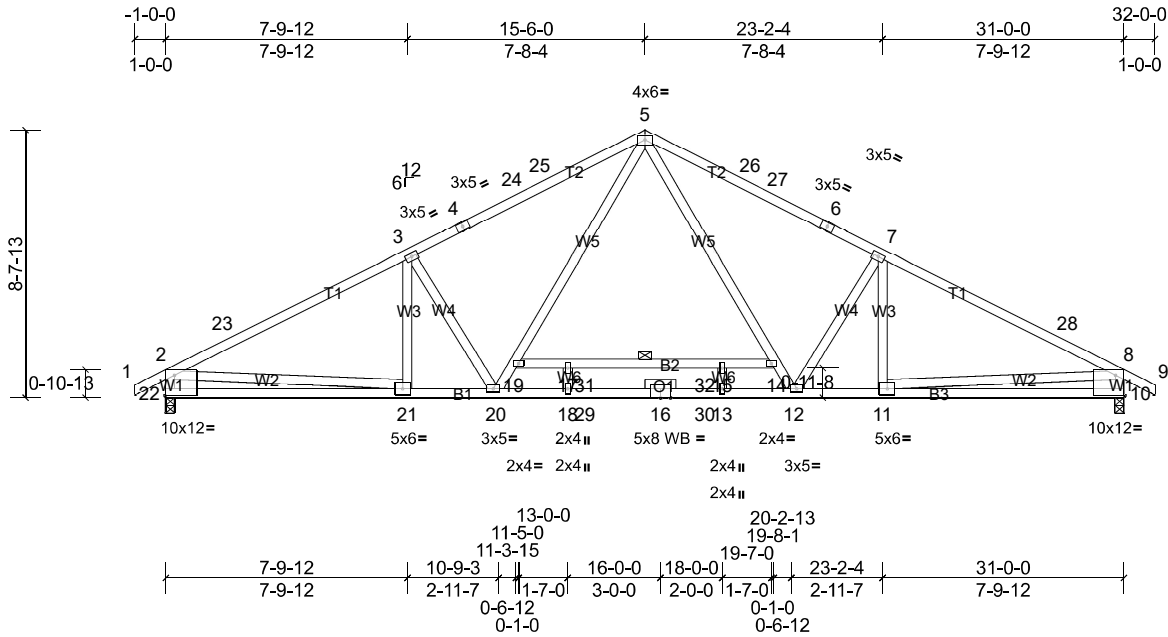
Job 22080109	Truss B02	Truss Type Common	Qty 5	Ply 1	Job Reference (optional)
-----------------	--------------	----------------------	----------	----------	--------------------------

Carter Components - Sanford, Sanford, NC, user

Run: 8.53 S Mar 28 2022 Print: 8.530 S Mar 28 2022 MiTek Industries, Inc. Tue Aug 23 16:53:22

Page: 1

ID:XRzIRod3nb0s7boYLCNnAuyI9IJ\_-HQANG5JPdzCZoj7vFM0G2myTIHIZFJMbM2HrlyI3th



Scale = 1:74.5

Plate Offsets (X, Y): [10:Edge,0-7-13], [22:Edge,0-7-13]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	I/defl	L/d	PLATES	GRIP		
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.97	Vert(LL)	-0.26	15-17	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.96	Vert(CT)	-0.63	15-17	>589	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.04	10	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 196 lb	FT = 20%

**LUMBER**  
 TOP CHORD 2x4 SP 2400F 2.0E  
 BOT CHORD 2x4 SP 2400F 2.0E \*Except\* B2:2x4 SP No.2  
 WEBS 2x4 SP No.3  
 OTHERS 2x4 SP No.3

**BRACING**  
 TOP CHORD Structural wood sheathing directly applied or 5-3-2 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:  
 6-0-0 oc bracing: 14-19

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

**REACTIONS** (lb/size) 10=1278/0-3-8, (min. 0-1-8),  
 22=1278/0-3-8, (min. 0-1-8)  
 Max Horiz 22=108 (LC 14)  
 Max Grav 10=1480 (LC 2), 22=1480 (LC 2)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-23=-2281/0, 3-23=-2095/0, 3-4=-2147/0,  
 4-24=-2065/0, 24-25=-2055/0, 5-25=-2045/0,  
 5-26=-2045/0, 26-27=-2055/0, 6-27=-2065/0,  
 6-7=-2147/0, 7-28=-2095/0, 8-28=-2281/0,  
 2-22=-1391/103, 8-10=-1391/103  
 BOT CHORD 21-22=-76/574, 20-21=0/1975, 18-20=0/1460,  
 18-29=0/1460, 16-29=0/1460, 16-30=0/1460,  
 13-30=0/1460, 12-13=0/1460, 11-12=0/1949,  
 10-11=-42/531  
 WEBS 2-21=0/1444, 8-11=0/1444, 5-14=0/878,  
 12-14=0/782, 19-20=0/782, 5-19=0/878,  
 3-20=-354/229, 7-12=-354/229

**NOTES**  
 1) 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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) -0-11-9 to 2-1-10, Interior (1) 2-1-10 to 15-6-0, Exterior (2) 15-6-0 to 18-7-3, Interior (1) 18-7-3 to 31-11-9 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=1.33
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- 200.0lb AC unit load placed on the bottom chord, 15-6-0 from left end, supported at two points, 5-0-0 apart.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 22 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.

**LOAD CASE(S)** Standard

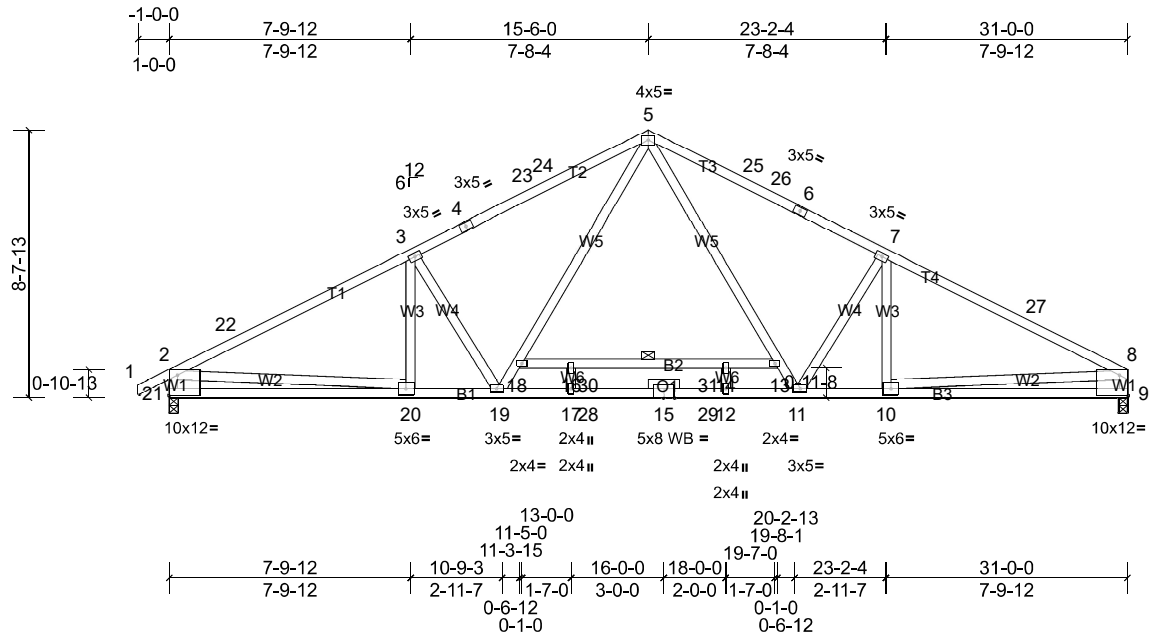
Job 22080109	Truss B03	Truss Type Common	Qty 2	Ply 1	Job Reference (optional)
-----------------	--------------	----------------------	----------	----------	--------------------------

Carter Components - Sanford, Sanford, NC, user

Run: 8.53 S Mar 28 2022 Print: 8.530 S Mar 28 2022 MiTek Industries, Inc. Tue Aug 23 16:53:23

Page: 1

ID:7DwifqcVToLEzB3I9Qr0VByl9H1-ST\_Ybc6xAx53BylKYuFpFJ7Dii\_IhoVq0oqNByl3tg



Scale = 1:74.5

Plate Offsets (X, Y): [9:Edge,0-7-13], [21:Edge,0-7-13]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	I/defl	L/d	PLATES	GRIP		
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.97	Vert(LL)	-0.23	14-16	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.57	14-16	>651	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.04	9	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 194 lb	FT = 20%

**LUMBER**

- TOP CHORD 2x4 SP 2400F 2.0E
- BOT CHORD 2x4 SP 2400F 2.0E
- WEBS 2x4 SP No.3
- OTHERS 2x4 SP No.3

**BRACING**

- TOP CHORD Structural wood sheathing directly applied or 5-0-6 oc purlins, except end verticals.
- BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 6-0-0 oc bracing: 13-18

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

**REACTIONS**

- (lb/size) 9=1224/0-3-8, (min. 0-1-8), 21=1279/0-3-8, (min. 0-1-8)
- Max Horiz 21=109 (LC 12)
- Max Grav 9=1412 (LC 2), 21=1481 (LC 2)

**FORCES**

- (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
- TOP CHORD 2-22=-2284/0, 3-22=-2099/0, 3-4=-2140/0, 4-23=-2052/0, 23-24=-2047/0, 5-24=-2037/0, 5-25=-2044/0, 25-26=-2052/0, 6-26=-2064/0, 6-7=-2146/0, 7-27=-2194/0, 8-27=-2287/0, 2-21=-1393/102, 8-9=-1324/51
- BOT CHORD 20-21=-83/566, 19-20=0/1973, 17-19=0/1470, 17-28=0/1470, 15-28=0/1470, 15-29=0/1470, 12-29=0/1470, 11-12=0/1470, 10-11=0/1963, 9-10=-53/415
- WEBS 5-13=0/882, 11-13=0/746, 18-19=0/738, 5-18=0/874, 3-19=-366/221, 2-20=0/1450, 8-10=0/1561, 7-11=-376/222

**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; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) -0-11-9 to 2-1-10, Interior (1) 2-1-10 to 15-6-0, Exterior (2) 15-6-0 to 18-7-3, Interior (1) 18-7-3 to 30-10-4 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=1.33
- 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- 6) 200.0lb AC unit load placed on the bottom chord, 15-6-0 from left end, supported at two points, 5-0-0 apart.
- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 9 and 21. 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.

**LOAD CASE(S)** Standard

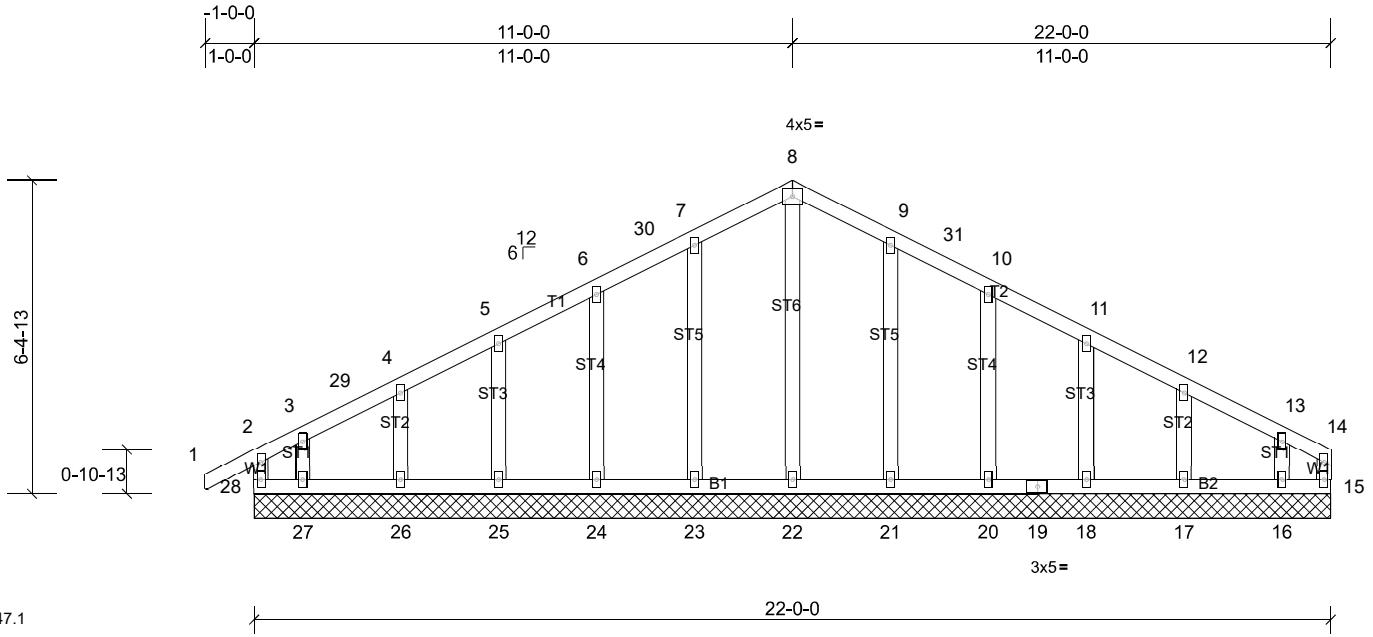
Job 22080109	Truss C01	Truss Type Common Supported Gable	Qty 1	Ply 1	Job Reference (optional)
-----------------	--------------	--------------------------------------	----------	----------	--------------------------

Carter Components - Sanford, Sanford, NC, user

Run: 8.53 S Mar 28 2022 Print: 8.530 S Mar 28 2022 MiTek Industries, Inc. Tue Aug 23 16:53:23

Page: 1

ID:SdmleQnrmHM2PSS5fVSY56RyI9Cx-ST\_Ybc6xAX53ByIKTyuFpJLgirvlqIVq0oqNByl3tg



Scale = 1:47.1

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	15	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MR								
BCDL	10.0											
											Weight: 124 lb	FT = 20%

**LUMBER**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP 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 22-0-0.  
(lb) - Max Horiz 28=85 (LC 12)  
Max Uplift All uplift 100 (lb) or less at joint(s)  
15, 16, 17, 18, 20, 21, 23, 24, 25, 26, 27, 28  
Max Grav All reactions 250 (lb) or less at joint (s)  
15, 16, 17, 18, 20, 21, 22, 23, 24, 25, 26, 27, 28

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

**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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Corner (3) -0-11-9 to 2-0-7, Exterior (2) 2-0-7 to 11-0-0, Corner (3) 11-0-0 to 14-0-0, Exterior (2) 14-0-0 to 21-10-4 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=1.33
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10

- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- 7) All plates are 2x4 MT20 unless otherwise indicated.
- 8) Gable requires continuous bottom chord bearing.
- 9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 10) Gable studs spaced at 2'-0-0 oc.
- 11) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-06-00 tall by 2'-00-00 wide will fit between the bottom chord and any other members.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 28, 15, 23, 24, 25, 26, 27, 21, 20, 18, 17, 16.
- 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.

**LOAD CASE(S)** Standard

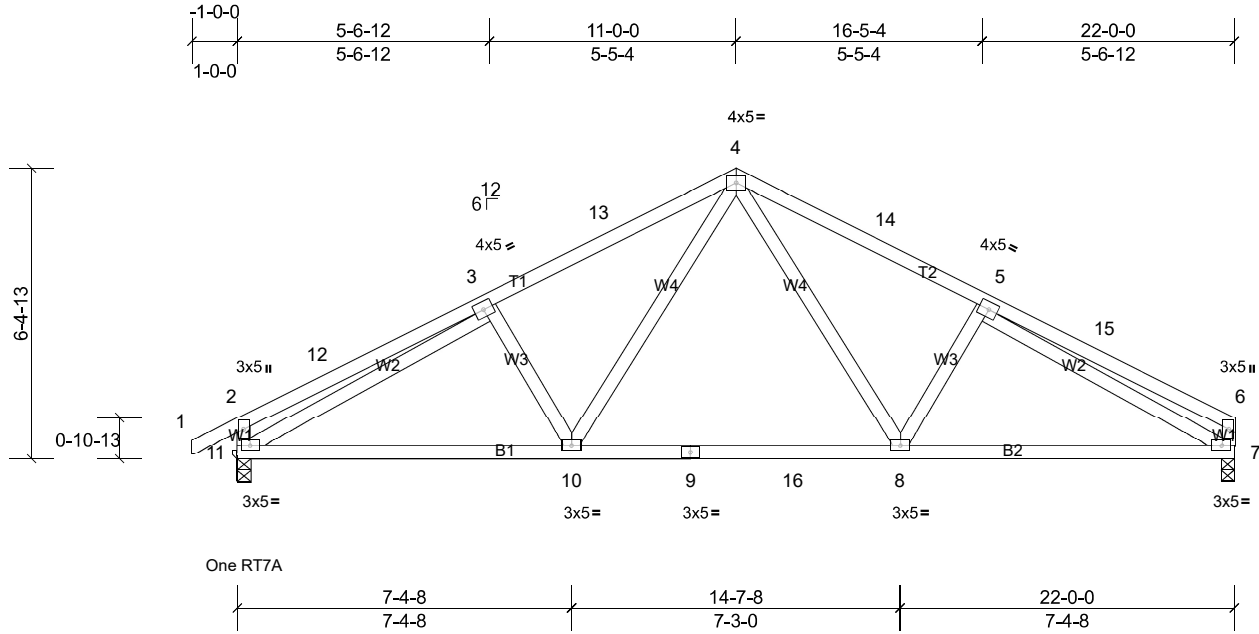
Job 22080109	Truss C02	Truss Type Common	Qty 10	Ply 1	Job Reference (optional)
-----------------	--------------	----------------------	-----------	----------	--------------------------

Carter Components - Sanford, Sanford, NC, user

Run: 8.53 S Mar 28 2022 Print: 8.530 S Mar 28 2022 MiTek Industries, Inc. Tue Aug 23 16:53:23

Page: 1

ID:paZeh7r\_aq\_LVD\_dl?7dpUyl9Cs-ST\_Ybc6xAX53BylKTyuFpFJG7ikslfbVq0oqNByl3tg



Scale = 1:50.8

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	-0.10	8-10	>999	240	MT20 244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.17	8-10	>999	180	
TCDL	10.0	Rep Stress Incr	YES	WB	0.79	Horz(CT)	0.04	7	n/a	n/a	
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH							
BCDL	10.0										Weight: 121 lb FT = 20%

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

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 4-11-6 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=734/0-3-8, (min. 0-1-8), 11=789/0-3-8, (min. 0-1-8)  
Max Horiz 11=85 (LC 14)  
Max Uplift 11=7 (LC 15)  
Max Grav 7=867 (LC 2), 11=937 (LC 2)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-12=-353/81, 3-13=-1168/193, 4-13=-1088/208, 4-14=-1093/219, 5-14=-1174/192, 6-15=-308/78, 2-11=-351/167, 6-7=-253/104  
BOT CHORD 10-11=-121/1078, 9-10=-33/777, 9-16=-33/777, 8-16=-33/777, 7-8=-123/1088  
WEBS 4-8=-39/420, 4-10=-35/411, 3-11=-974/93, 5-7=-1027/118

**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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 0-11-9 to 2-0-7, Interior (1) 2-0-7 to 11-0-0, Exterior (2) 11-0-0 to 14-0-0, Interior (1) 14-0-0 to 21-10-4 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=1.33  
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10

- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 11 and 7. 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

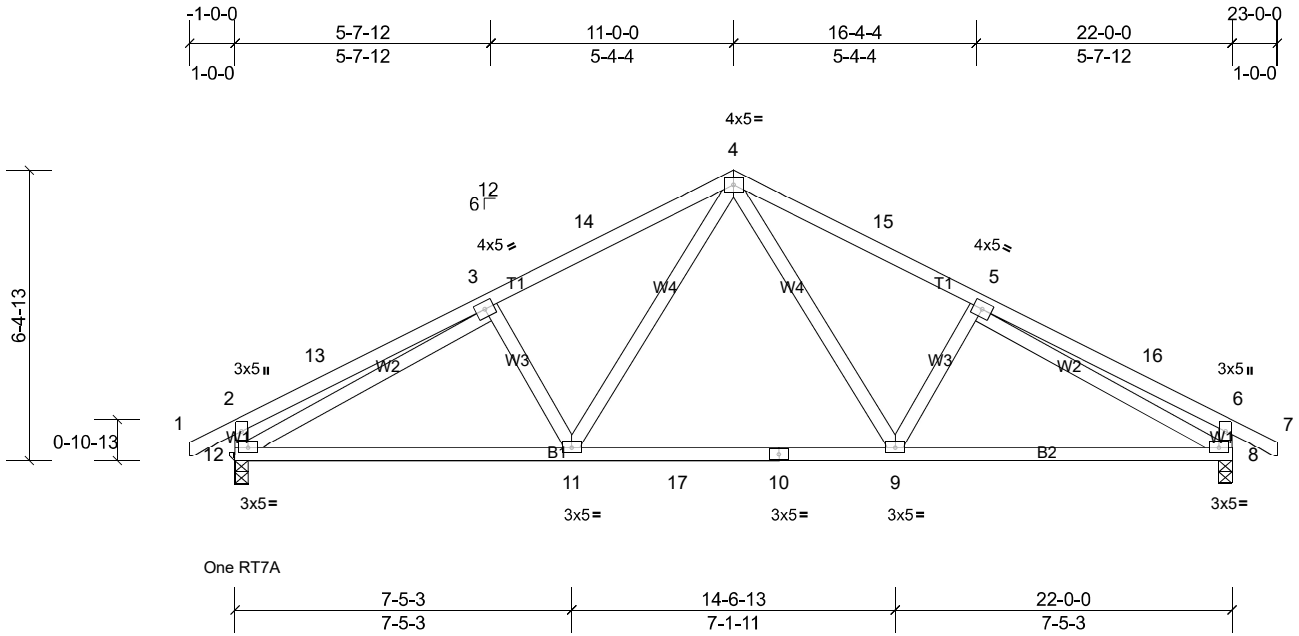
Job 22080109	Truss C03	Truss Type Common	Qty 2	Ply 1	Job Reference (optional)
-----------------	--------------	----------------------	----------	----------	--------------------------

Carter Components - Sanford, Sanford, NC, user

Run: 8.53 S Mar 28 2022 Print: 8.530 S Mar 28 2022 MiTek Industries, Inc. Tue Aug 23 16:53:23

Page: 1

ID:kwh\_W6GlihSXEdO3QIN2mmyI9LM-ST\_Ybc6xAx53ByIKTyuFpFJGqiksgDVq0oqNByl3tg



Scale = 1:50.8

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.42	Vert(LL)	-0.10	9-11	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.16	9-11	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.04	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 123 lb	FT = 20%

**LUMBER**

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

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 5-0-8 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=788/0-3-8, (min. 0-1-8), 12=788/0-3-8, (min. 0-1-8)  
 Max Horiz 12=83 (LC 14)  
 Max Uplift 8=-7 (LC 16), 12=-7 (LC 15)  
 Max Grav 8=935 (LC 2), 12=935 (LC 2)

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

TOP CHORD 2-13=-366/84, 3-14=-1161/192, 4-14=-1083/208, 4-15=-1083/208, 5-15=-1161/192, 6-16=-366/84, 2-12=-360/170, 6-8=-360/170  
 BOT CHORD 11-12=-90/1073, 11-17=0/774, 10-17=0/774, 9-10=0/774, 8-9=-74/1073  
 WEBS 4-9=-39/411, 4-11=-39/411, 3-12=-955/88, 5-8=-955/88

**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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 0-11-9 to 2-0-7, Interior (1) 2-0-7 to 11-0-0, Exterior (2) 11-0-0 to 14-0-0, Interior (1) 14-0-0 to 22-11-9 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=1.33
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10

- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 12 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

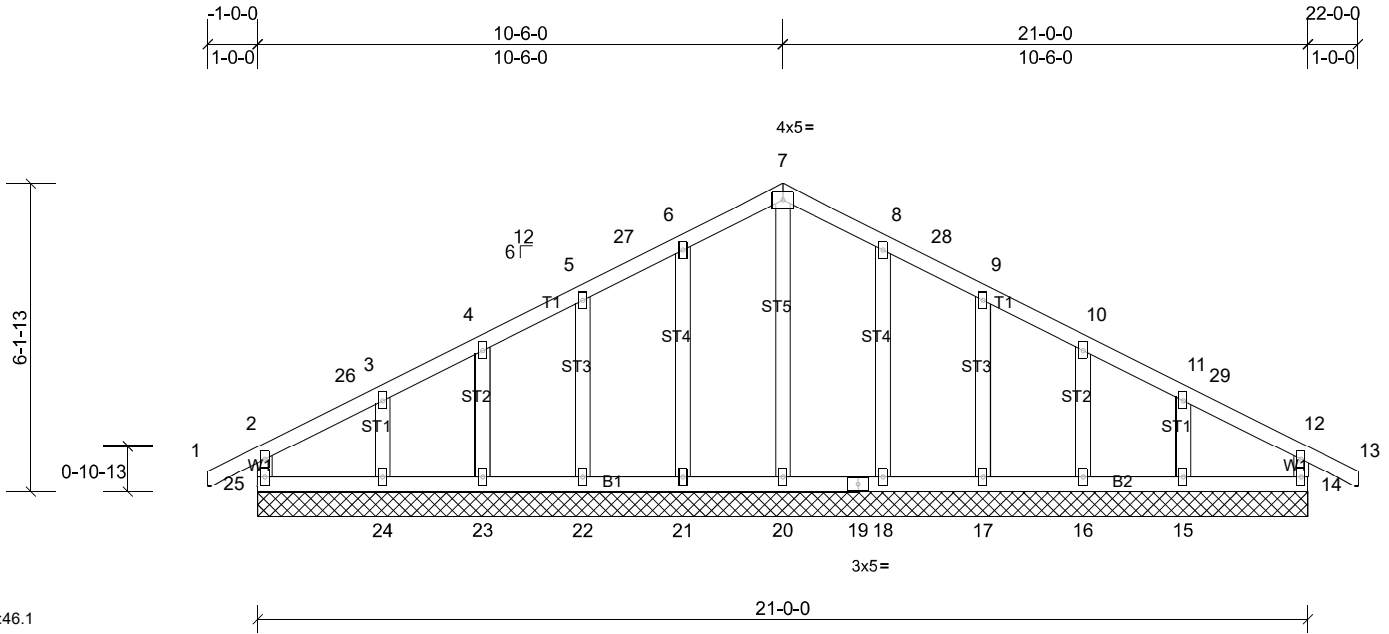
Job 22080109	Truss D01	Truss Type Common Supported Gable	Qty 1	Ply 1	Job Reference (optional)
-----------------	--------------	--------------------------------------	----------	----------	--------------------------

Carter Components - Sanford, Sanford, NC, user

Run: 8.53 S Mar 28 2022 Print: 8.530 S Mar 28 2022 MiTek Industries, Inc. Tue Aug 23 16:53:23

Page: 1

ID:ekwvyBwkAgIUD8RmeGE13lyI9Cm-ST\_Ybc6xAx53ByIKTyuFpFJLpir3lqIvq0oqNByI3tg



Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	14	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MR								
BCDL	10.0											
											Weight: 116 lb	FT = 20%

**LUMBER**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP 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 21-0-0.  
(lb) - Max Horiz 25=81 (LC 14)  
Max Uplift All uplift 100 (lb) or less at joint(s)  
14, 15, 16, 17, 18, 21, 22, 23, 24, 25  
Max Grav All reactions 250 (lb) or less at joint (s)  
14, 15, 16, 17, 18, 20, 21, 22, 23, 24, 25

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

**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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Corner (3) -0-11-9 to 2-0-7, Exterior (2) 2-0-7 to 10-6-0, Corner (3) 10-6-0 to 13-6-0, Exterior (2) 13-6-0 to 21-11-9 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=1.33  
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.  
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10

- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 25, 14, 21, 22, 23, 24, 18, 17, 16, 15.
- 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

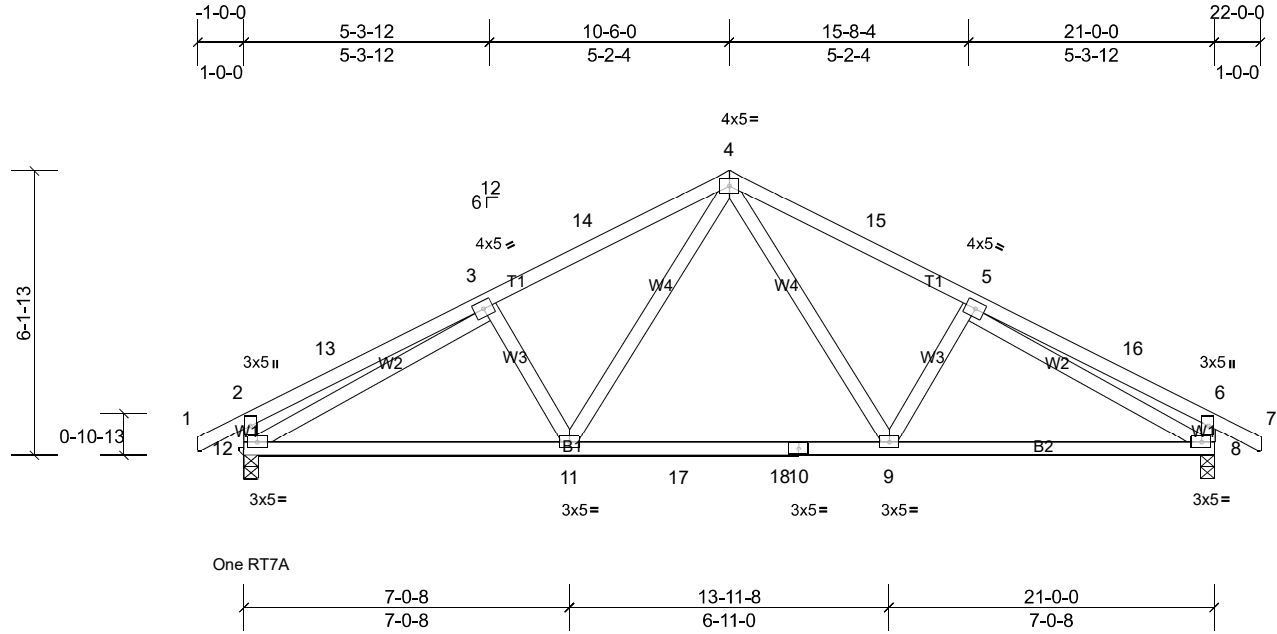
Job 22080109	Truss D02	Truss Type Common	Qty 7	Ply 1	Job Reference (optional)
-----------------	--------------	----------------------	----------	----------	--------------------------

Carter Components - Sanford, Sanford, NC, user

Run: 8.53 S Mar 28 2022 Print: 8.530 S Mar 28 2022 MiTek Industries, Inc. Tue Aug 23 16:53:24

Page: 1

ID: \_iko?u\_t?CNnJwJkRpqCmpyl9Ch-xfXwoy7ZxFDwp6tW1fPUMTsSv54k181e2gXNweyl3f



Scale = 1:49.9

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	-0.09	9-11	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.14	9-11	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.03	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 118 lb	FT = 20%

**LUMBER**

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

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 5-2-7 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.

- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 12 and 8. 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

**REACTIONS** (lb/size) 8=754/0-3-8, (min. 0-1-8),  
 12=754/0-3-8, (min. 0-1-8)  
 Max Horiz 12=81 (LC 14)  
 Max Uplift 8=-7 (LC 16), 12=-7 (LC 15)  
 Max Grav 8=895 (LC 2), 12=895 (LC 2)

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

TOP CHORD 2-13=-324/76, 3-14=-1101/182,  
 4-14=-1026/198, 4-15=-1026/198,  
 5-15=-1101/182, 6-16=-324/76,  
 2-12=-333/162, 6-8=-333/163  
 BOT CHORD 11-12=-85/1014, 11-17=0/734, 17-18=0/734,  
 10-18=0/734, 9-10=0/734, 8-9=-69/1014  
 WEBS 4-9=-36/386, 4-11=-36/386, 3-12=-929/88,  
 5-8=-929/88

**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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 0-11-9 to 2-0-7, Interior (1) 2-0-7 to 10-6-0, Exterior (2) 10-6-0 to 13-6-0, Interior (1) 13-6-0 to 21-11-9 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=1.33
- 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10

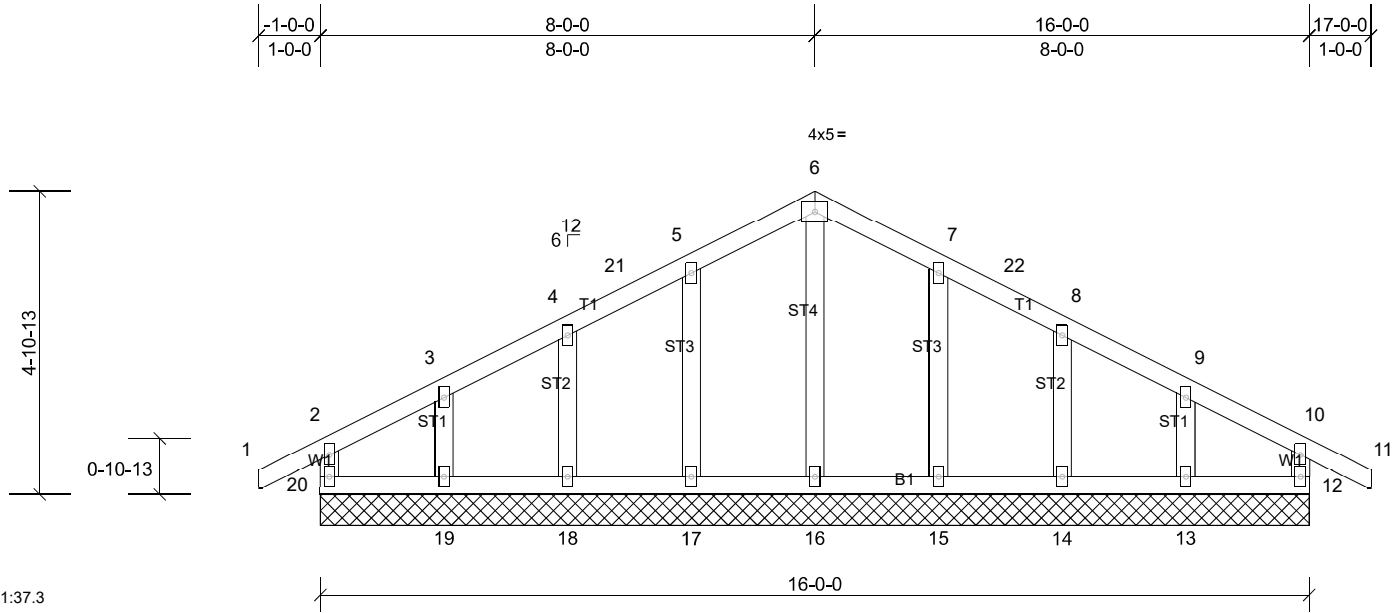
Job 22080109	Truss E01	Truss Type Common Supported Gable	Qty 1	Ply 1	Job Reference (optional)
-----------------	--------------	--------------------------------------	----------	----------	--------------------------

Carter Components - Sanford, Sanford, NC, user

Run: 8.53 S Mar 28 2022 Print: 8.530 S Mar 28 2022 MiTek Industries, Inc. Tue Aug 23 16:53:24

Page: 1

ID:TzOtUUp9IP3\_5W5?\_oZN3MyI9Bc-xfXwoy7ZxFDwp6tW1fPUMTsWZ5B11Oe2gXNweyl3f



Scale = 1:37.3

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	12	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MR								
BCDL	10.0											
											Weight: 83 lb	FT = 20%

**LUMBER**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP 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 16-0-0.  
(lb) - Max Horiz 20=67 (LC 14)  
Max Uplift All uplift 100 (lb) or less at joint(s) 12, 13, 14, 15, 17, 18, 19, 20  
Max Grav All reactions 250 (lb) or less at joint (s) 12, 13, 14, 15, 16, 17, 18, 19, 20

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

**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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Corner (3) -0-11-9 to 2-0-0, Exterior (2) 2-0-0 to 8-0-0, Corner (3) 8-0-0 to 11-0-0, Exterior (2) 11-0-0 to 16-11-9 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=1.33  
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.  
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10

- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- 7) All plates are 2x4 MT20 unless otherwise indicated.
- 8) Gable requires continuous bottom chord bearing.
- 9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 10) Gable studs spaced at 2-0-0 oc.
- 11) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 20, 12, 17, 18, 19, 15, 14, 13.
- 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.

**LOAD CASE(S)** Standard



Job 22080109	Truss E02	Truss Type Common	Qty 5	Ply 1	Job Reference (optional)
-----------------	--------------	----------------------	----------	----------	--------------------------

Carter Components - Sanford, Sanford, NC, user

Run: 8.53 S Mar 28 2022 Print: 8.530 S Mar 28 2022 MiTek Industries, Inc. Tue Aug 23 16:53:24

Page: 1

ID:iiRHNZwpdACjgvHj?BEVwFyI9BT-xfXwoy7ZxFDwp6TW1fPUMTsLd55C1HJe2gXNweyl3f

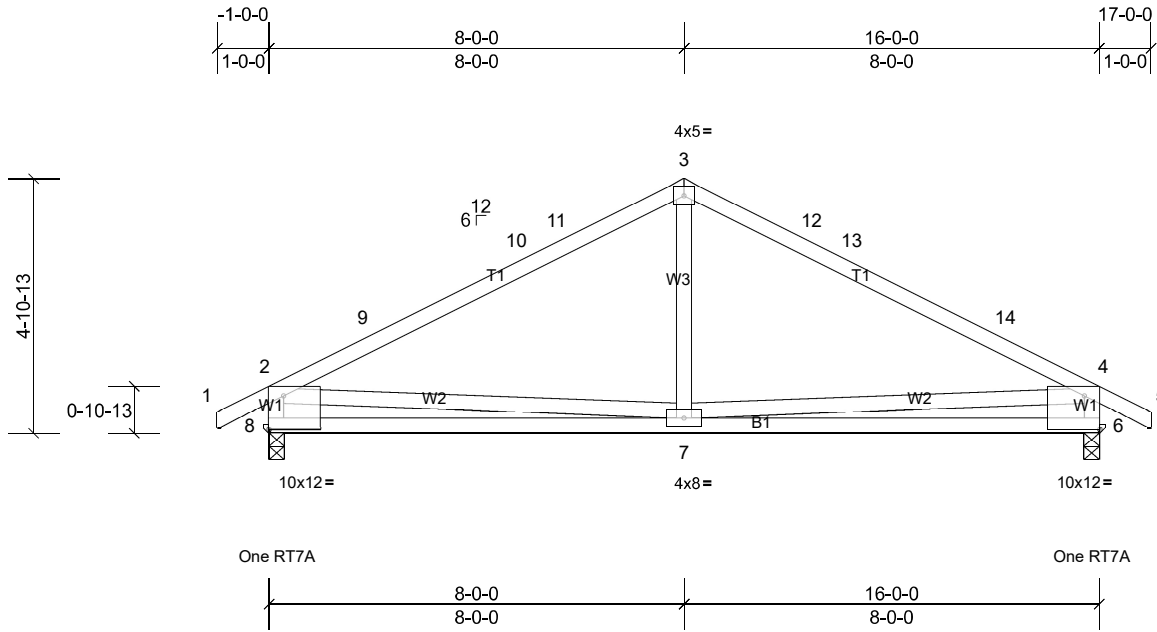


Plate Offsets (X, Y): [6:Edge,0-7-13], [8:Edge,0-7-13]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	-0.01	7	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.09	7-8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 84 lb	FT = 20%

**LUMBER**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.3 \*Except\* W1:2x4 SP 2400F 2.0E

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 5-6-4 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) 6=585/0-3-8, (min. 0-1-8),  
 8=585/0-3-8, (min. 0-1-8)  
 Max Horiz 8=67 (LC 14)  
 Max Uplift 6=-8 (LC 16), 8=-8 (LC 15)  
 Max Grav 6=695 (LC 2), 8=695 (LC 2)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-9=-778/89, 9-10=-663/107, 10-11=-648/111,  
 3-11=-627/127, 3-12=-627/127,  
 12-13=-648/111, 13-14=-663/107,  
 4-14=-778/89, 2-8=-627/200, 4-6=-627/200  
 BOT CHORD 7-8=-189/547, 6-7=-170/547  
 WEBS 2-7=-98/250, 4-7=-98/250

**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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) -0-11-9 to 2-0-7, Interior (1) 2-0-7 to 8-0-0, Exterior (2) 8-0-0 to 11-0-0, Interior (1) 11-0-0 to 16-11-9 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=1.33

- 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 7) One RT7A MiTek 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.
- 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 22080109	Truss E03	Truss Type Common	Qty 1	Ply 1	Job Reference (optional)
-----------------	--------------	----------------------	----------	----------	--------------------------

Carter Components - Sanford, Sanford, NC, user

Run: 8.53 S Mar 28 2022 Print: 8.530 S Mar 28 2022 MiTek Industries, Inc. Tue Aug 23 16:53:24

Page: 1

ID:blCDnKA\_hdrkh7Omk66QHyl9B8-xfXwoy7ZxFDwp6tW1fPUMTsJS55V1G9e2gXNweyl3f

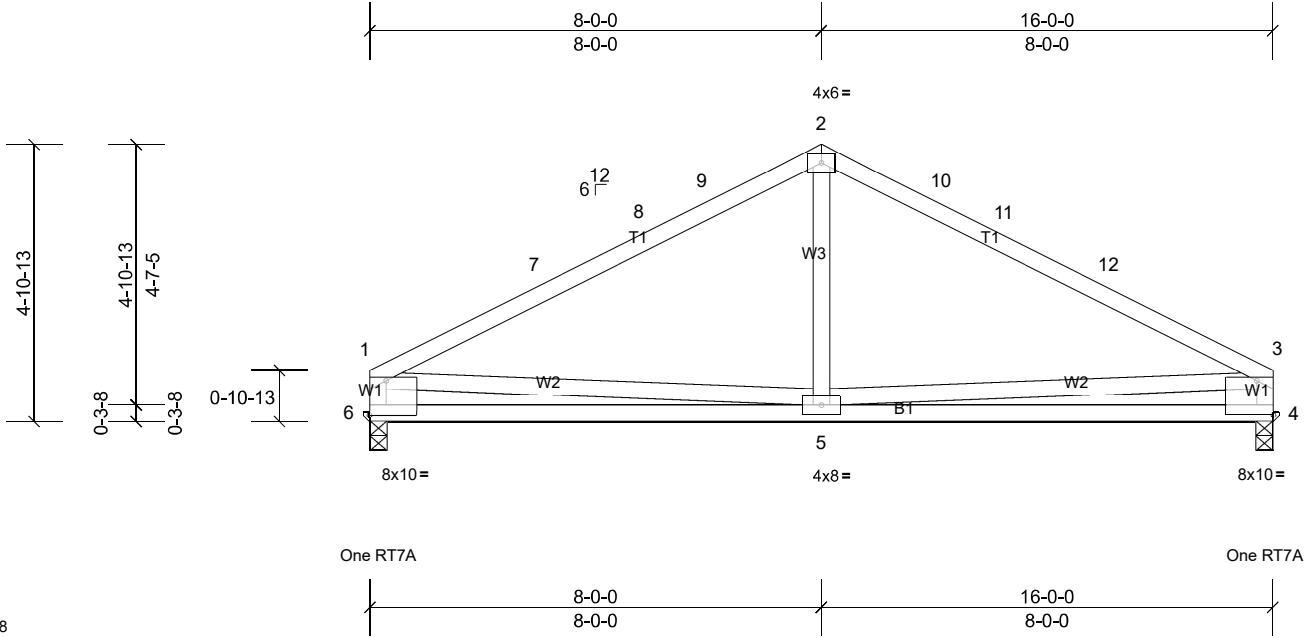


Plate Offsets (X, Y): [4:Edge,0-7-4], [6:Edge,0-7-4]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.94	Vert(LL)	-0.01	5	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.09	5-6	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 81 lb	FT = 20%

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

**BRACING**  
TOP CHORD Structural wood sheathing directly applied, 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.

- Unbalanced snow loads have been considered for this design.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit BETWEEN the bottom chord and any other members.
- One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6 and 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.

**REACTIONS** (lb/size) 4=532/0-3-8, (min. 0-1-8), 6=532/0-3-8, (min. 0-1-8)  
Max Horiz 6=-61 (LC 11)  
Max Grav 4=628 (LC 2), 6=628 (LC 2)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-7=-785/108, 7-8=-681/110, 8-9=-655/118, 2-9=-625/134, 2-10=-625/134, 10-11=-655/118, 11-12=-681/111, 3-12=-785/108, 1-6=-559/148, 3-4=-559/148  
BOT CHORD 5-6=-118/378, 4-5=-112/378  
WEBS 1-5=0/310, 3-5=0/310

- 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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 0-1-12 to 3-1-12, Interior (1) 3-1-12 to 8-0-0, Exterior (2) 8-0-0 to 11-0-0, Interior (1) 11-0-0 to 15-10-4 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=1.33
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10

**LOAD CASE(S)** Standard

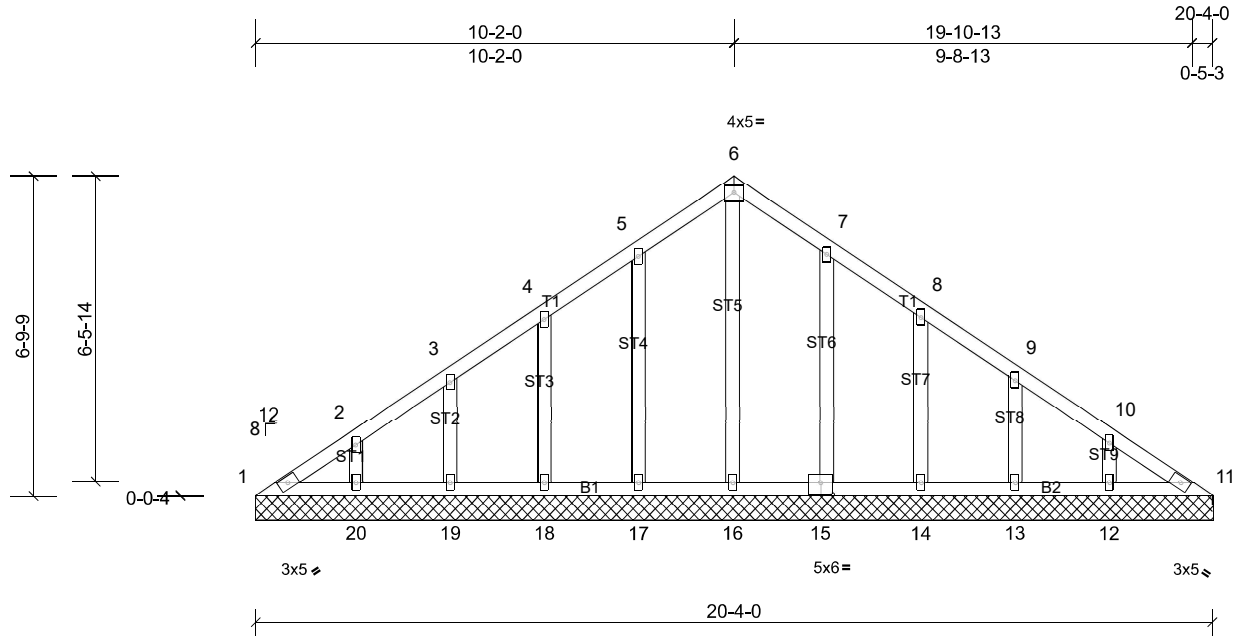
Job 22080109	Truss VL01	Truss Type Valley	Qty 1	Ply 1	Job Reference (optional)
-----------------	---------------	----------------------	----------	----------	--------------------------

Carter Components - Sanford, Sanford, NC, user

Run: 8.53 S Mar 28 2022 Print: 8.530 S Mar 28 2022 MiTek Industries, Inc. Tue Aug 23 16:53:24

Page: 1

ID:O7EO5mSb?JxEbOdRcire4SyI9ZJ-xfXwoy7ZxFDwp6tW1fPUMTsXL5Bz1Hme2gXNweyl3f



Scale = 1:49

Plate Offsets (X, Y): [15:0-3-0,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.05	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horiz(TL)	0.00	11	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 109 lb	FT = 20%

**LUMBER**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP 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 6-0-0 oc bracing.

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

- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 1, 17, 18, 19, 20, 15, 14, 13, 12.
- 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

**REACTIONS** All bearings 20-4-0.

(lb) - Max Horiz 1=131 (LC 10)  
 Max Uplift All uplift 100 (lb) or less at joint(s) 1, 12, 13, 14, 15, 17, 18, 19, 20  
 Max Grav All reactions 250 (lb) or less at joint (s) 1, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20

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

**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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Corner (3) 0-0-6 to 3-0-6, Exterior (2) 3-0-6 to 10-2-6, Corner (3) 10-2-6 to 13-2-6, Exterior (2) 13-2-6 to 20-4-6 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=1.33
- 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.

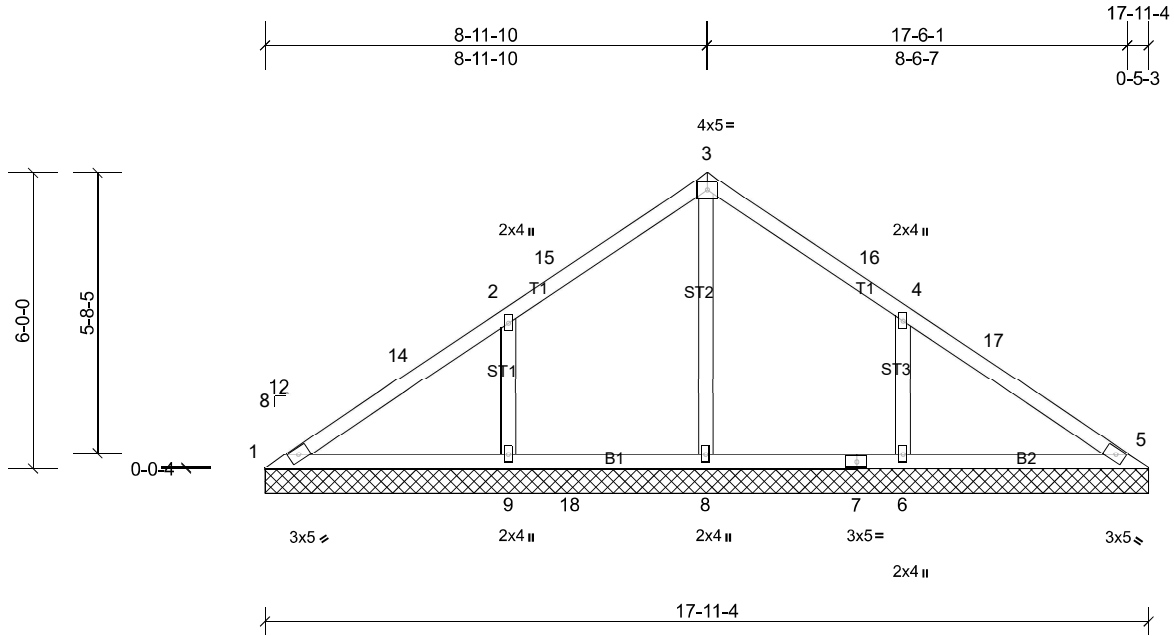
Job 22080109	Truss VL02	Truss Type Valley	Qty 1	Ply 1	Job Reference (optional)
-----------------	---------------	----------------------	----------	----------	--------------------------

Carter Components - Sanford, Sanford, NC, user

Run: 8.53 S Mar 28 2022 Print: 8.530 S Mar 28 2022 MiTek Industries, Inc. Tue Aug 23 16:53:24

Page: 1

ID:07E05mSb?JxEbOdRcire4Syl9ZJ-xfXwoy7ZxFDwp6tW1fPUMTsTR58U1GWe2gXNweyl3f



Scale = 1:46.8

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.21	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.17	Horiz(TL)	0.00	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 73 lb	FT = 20%

**LUMBER**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP 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 6-0-0 oc bracing.

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

- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 9, 6.
- 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

**REACTIONS** All bearings 17-11-4.  
(lb) - Max Horiz 1=115 (LC 10)  
Max Uplift All uplift 100 (lb) or less at joint(s) 6, 9  
Max Grav All reactions 250 (lb) or less at joint (s) 1, 5 except 6=460 (LC 25), 8=442 (LC 24), 9=469 (LC 24)

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

**WEBS** 3-8=-273/0, 2-9=-314/156, 4-6=-306/156

- 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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 0-0-6 to 3-0-6, Interior (1) 3-0-6 to 9-0-0, Exterior (2) 9-0-0 to 12-0-0, Interior (1) 12-0-0 to 17-6-4 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=1.33
  - 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
  - 4) Gable requires continuous bottom chord bearing.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

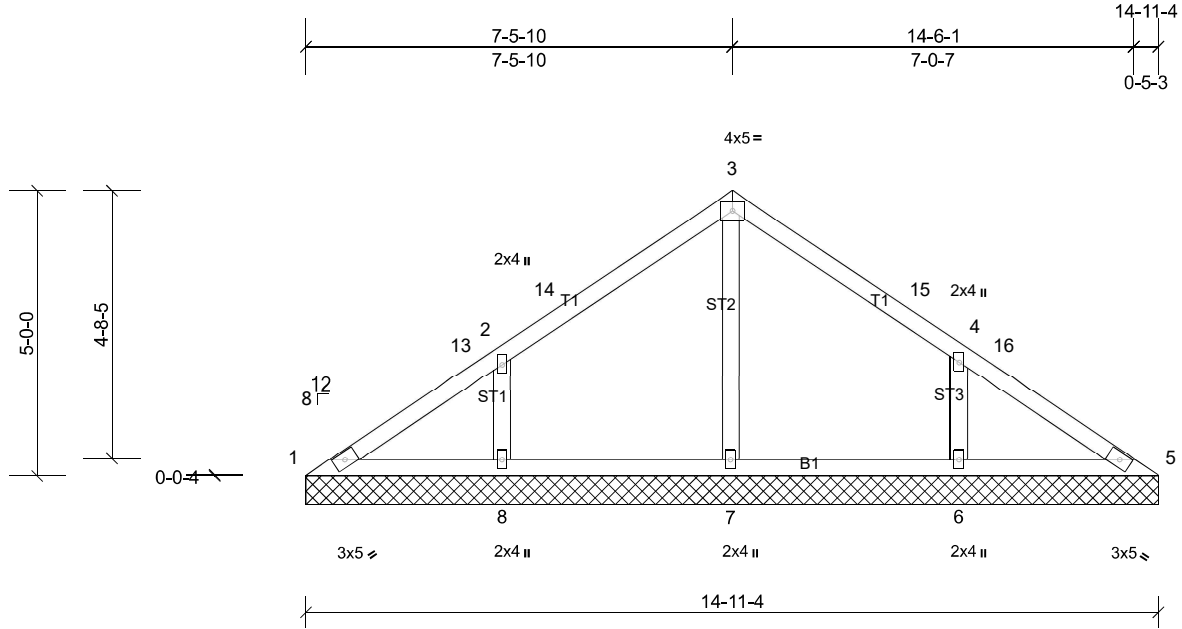
Job 22080109	Truss VL03	Truss Type Valley	Qty 1	Ply 1	Job Reference (optional)
-----------------	---------------	----------------------	----------	----------	--------------------------

Carter Components - Sanford, Sanford, NC, user

Run: 8.53 S Mar 28 2022 Print: 8.530 S Mar 28 2022 MiTek Industries, Inc. Tue Aug 23 16:53:24

Page: 1

ID:O7EO5mSb?JxEbOdRcire4Syl9ZJ-xfXwoy7ZxFDwp6tW1fPUMTsUs5AL1HTe2gXNweyl3f



Scale = 1:40.4

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.09	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 59 lb	FT = 20%

#### LUMBER

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP 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 6-0-0 oc bracing.

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

- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 1, 8, 6.
- 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

#### REACTIONS

All bearings 14-11-4.  
(lb) - Max Horiz 1=-95 (LC 9)  
Max Uplift All uplift 100 (lb) or less at joint(s) 1, 6, 8  
Max Grav All reactions 250 (lb) or less at joint (s) 1, 5 except 6=359 (LC 25), 7=321 (LC 2), 8=361 (LC 24)

#### FORCES

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

#### WEBS

2-8=-266/142, 4-6=-263/141

#### 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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 0-0-6 to 3-0-6, Interior (1) 3-0-6 to 7-6-0, Exterior (2) 7-6-0 to 10-6-0, Interior (1) 10-6-0 to 14-11-10 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=1.33
- 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- 4) Gable requires continuous bottom chord bearing.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

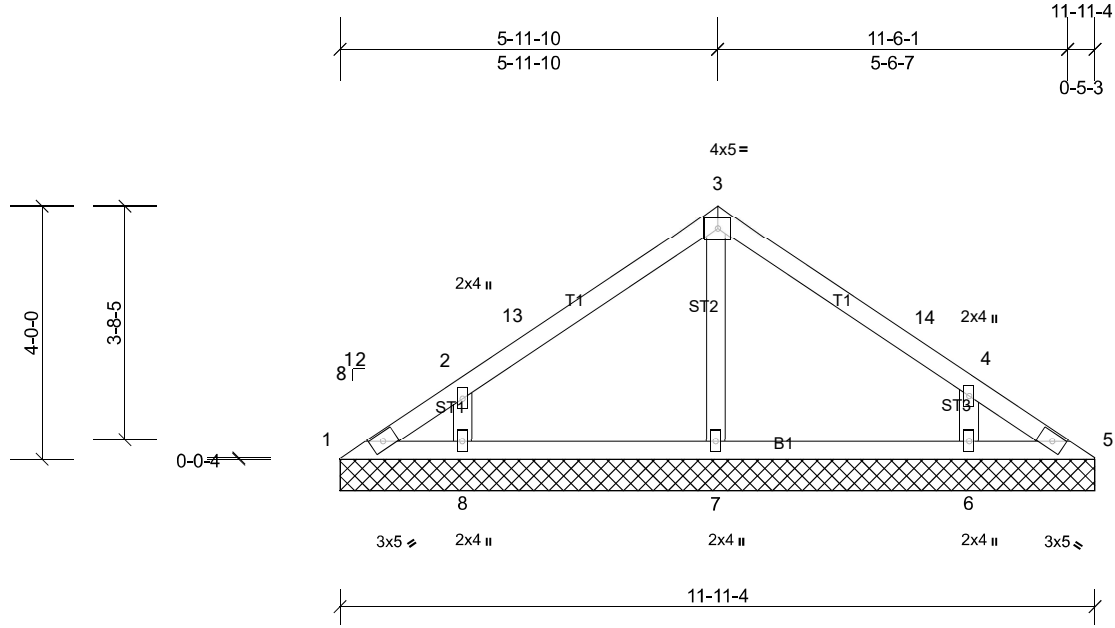
Job 22080109	Truss VL04	Truss Type Valley	Qty 1	Ply 1	Job Reference (optional)
-----------------	---------------	----------------------	----------	----------	--------------------------

Carter Components - Sanford, Sanford, NC, user

Run: 8.53 S Mar 28 2022 Print: 8.530 S Mar 28 2022 MiTek Industries, Inc. Tue Aug 23 16:53:25

Page: 1

ID:07EO5mSb?JxEbOdRcire4Syl9ZJ-xfXwoy7ZxFDwp6tW1fPUMTsVJ5AL1Oe2gXNweyl3f



Scale = 1:36.4

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.09	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 45 lb	FT = 20%

**LUMBER**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP 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.

- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 1, 8, 6.
- 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

**REACTIONS** All bearings 11-11-4.  
(lb) - Max Horiz 1=-76 (LC 11)  
Max Uplift All uplift 100 (lb) or less at joint(s) 1, 6, 8  
Max Grav All reactions 250 (lb) or less at joint (s) 1, 5 except 6=307 (LC 25), 7=260 (LC 2), 8=312 (LC 24)

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

**WEBS** 2-8=-262/161, 4-6=-254/156

- 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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 0-0-6 to 3-0-6, Interior (1) 3-0-6 to 6-0-0, Exterior (2) 6-0-0 to 9-0-0, Interior (1) 9-0-0 to 11-11-10 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=1.33
  - 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
  - 4) Gable requires continuous bottom chord bearing.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

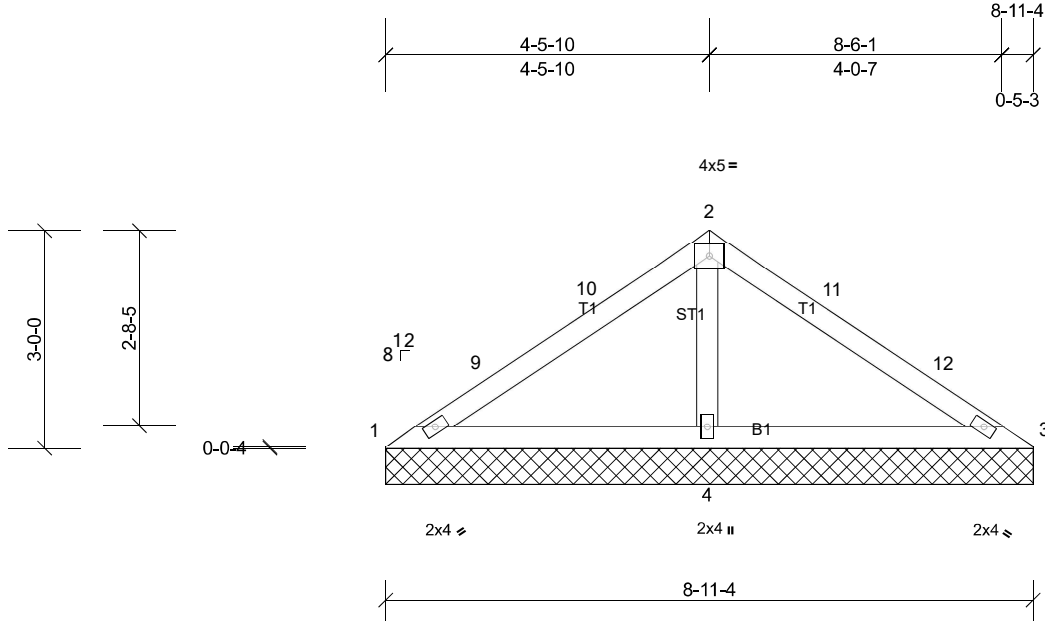
Job 22080109	Truss VL05	Truss Type Valley	Qty 1	Ply 1	Job Reference (optional)
-----------------	---------------	----------------------	----------	----------	--------------------------

Carter Components - Sanford, Sanford, NC, user

Run: 8.53 S Mar 28 2022 Print: 8.530 S Mar 28 2022 MiTek Industries, Inc. Tue Aug 23 16:53:25

Page: 1

ID: fryb8wDsh9f7ztuv4wkkWjyI9GF-Ps5I?17BiYLnQGRibNwjugOeqVUFmKjoHKHxS4yI3te



Scale = 1:31.8

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.24	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 31 lb	FT = 20%

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

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 8-11-4 oc purlins.  
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.

- Gable requires continuous bottom chord bearing.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 26 lb uplift at joint 1, 23 lb uplift at joint 3 and 13 lb uplift at joint 4.
- 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

**REACTIONS** (lb/size)  
1=21/8-11-4, (min. 0-1-8),  
3=25/8-11-4, (min. 0-1-8),  
4=56/8-11-4, (min. 0-1-8)  
Max Horiz 1=-56 (LC 11)  
Max Uplift 1=-26 (LC 29), 3=-23 (LC 28),  
4=-13 (LC 13)  
Max Grav 1=63 (LC 28), 3=67 (LC 29), 4=662 (LC 2)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 9-10=-77/268, 2-10=-77/311, 2-11=-74/304,  
11-12=-75/261  
BOT CHORD 1-4=-269/132, 3-4=-264/130  
WEBS 2-4=-490/160

- 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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 0-0-6 to 3-0-6, Interior (1) 3-0-6 to 4-6-0, Exterior (2) 4-6-0 to 7-6-0, Interior (1) 7-6-0 to 8-11-10 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=1.33
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10

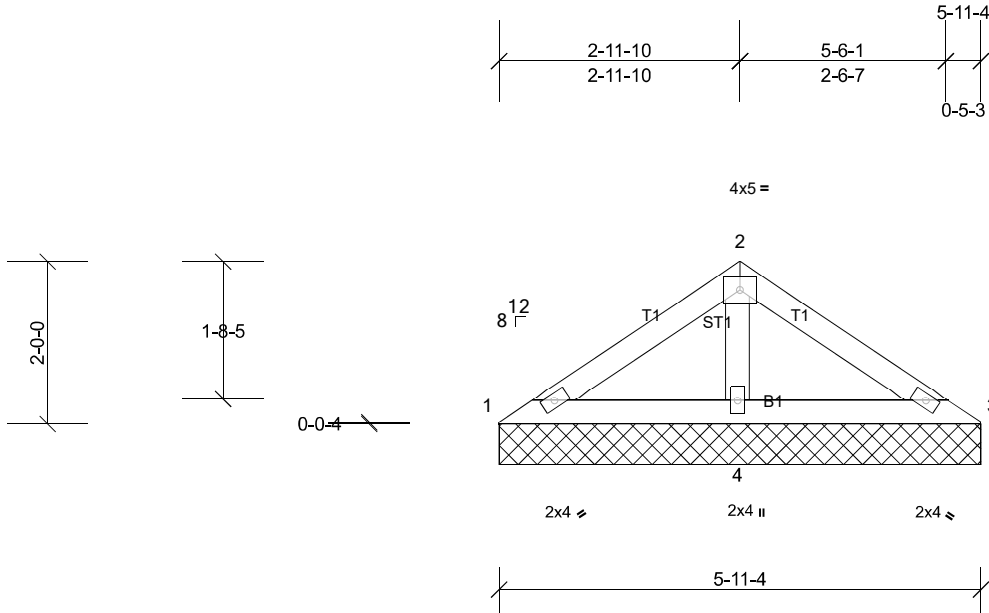
Job 22080109	Truss VL06	Truss Type Valley	Qty 1	Ply 1	Job Reference (optional)
-----------------	---------------	----------------------	----------	----------	--------------------------

Carter Components - Sanford, Sanford, NC, user

Run: 8.53 S Mar 28 2022 Print: 8.530 S Mar 28 2022 MiTek Industries, Inc. Tue Aug 23 16:53:25

Page: 1

ID:u57sF8GN1nkk1CQ6e4k339y9B1-Ps5l?7BiYLnQGRibNwjugOhJVWHmleoHKHxS4yI3te



Scale = 1:28.4

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.11	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0											
										Weight: 20 lb	FT = 20%	

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

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

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 5-11-4 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

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

**REACTIONS** (lb/size) 1=41/5-11-4, (min. 0-1-8), 3=45/5-11-4, (min. 0-1-8), 4=316/5-11-4, (min. 0-1-8)  
Max Horiz 1=-36 (LC 9)  
Max Uplift 3=-3 (LC 14)  
Max Grav 1=66 (LC 28), 3=69 (LC 29), 4=373 (LC 2)

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

- 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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.33
  - 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
  - 4) Gable requires continuous bottom chord bearing.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 3 lb uplift at joint 3.



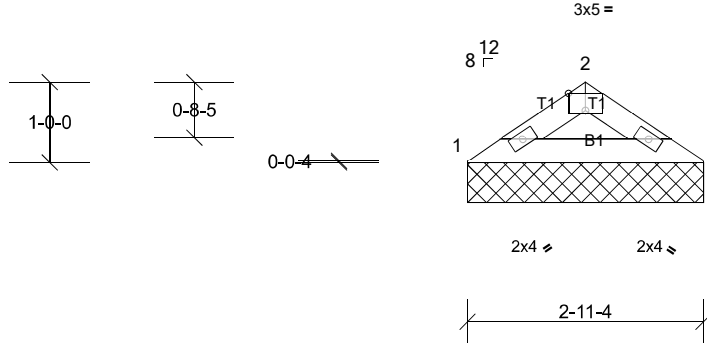
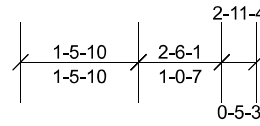
Job 22080109	Truss VL07	Truss Type Valley	Qty 1	Ply 1	Job Reference (optional)
-----------------	---------------	----------------------	----------	----------	--------------------------

Carter Components - Sanford, Sanford, NC, user

Run: 8.53 S Mar 28 2022 Print: 8.530 S Mar 28 2022 MiTek Industries, Inc. Tue Aug 23 16:53:25

Page: 1

ID:qUFdgpHdZO\_SHWaUmVmX8ayI9B?-Ps5I?I7BiYLnQGRibNwjugOiyVX3mlQoHKHxS4yl3te



Scale = 1:28.7

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.06	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 8 lb	FT = 20%

**LUMBER**

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

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 2-11-4 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS** (lb/size) 1=99/2-11-4, (min. 0-1-8),  
 3=99/2-11-4, (min. 0-1-8)  
 Max Horiz 1=-16 (LC 11)  
 Max Grav 1=117 (LC 2), 3=117 (LC 2)

**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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.33
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- Gable requires continuous bottom chord bearing.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 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

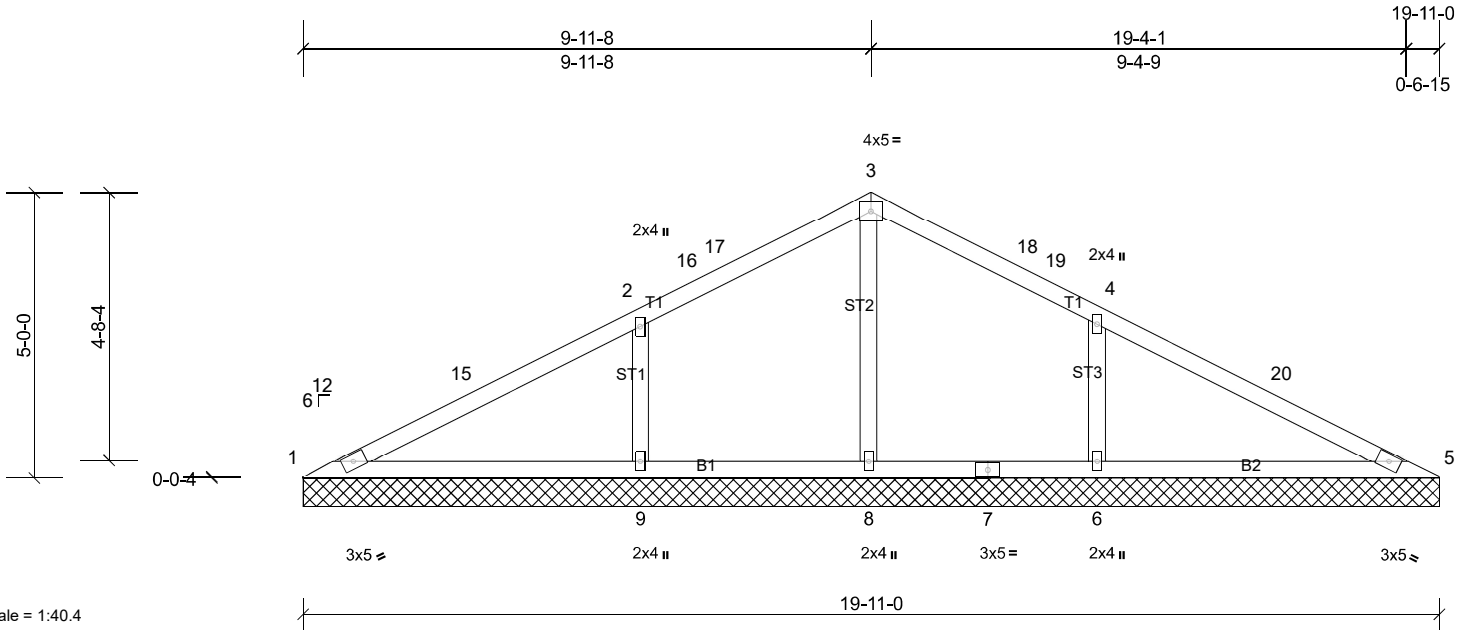
Job 22080109	Truss VL08	Truss Type Valley	Qty 1	Ply 1	Job Reference (optional)
-----------------	---------------	----------------------	----------	----------	--------------------------

Carter Components - Sanford, Sanford, NC, user

Run: 8.53 S Mar 28 2022 Print: 8.530 S Mar 28 2022 MiTek Industries, Inc. Tue Aug 23 16:53:25

Page: 1

ID:LO?FUUnLqWsUt4PQklcOHHy9Ct-Ps5I?7BiYLnQGRibNwjugObOV/TcmhCoHKHxS4yI3te



Scale = 1:40.4

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.48	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.28	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.27	Horiz(TL)	-0.01	14	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 75 lb	FT = 20%

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

**BRACING**  
 TOP CHORD Structural wood sheathing directly applied or 10-0-0 oc purlins.  
 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 19-11-0.  
 (lb) - Max Horiz 1=-52 (LC 11)  
 Max Uplift All uplift 100 (lb) or less at joint(s) 1, 6, 9  
 Max Grav All reactions 250 (lb) or less at joint (s) 1, 5, 14 except 6=482 (LC 33), 8=651 (LC 2), 9=488 (LC 32)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-15=-121/497, 2-15=-99/576, 2-16=-30/476, 16-17=-22/482, 3-17=-18/538, 3-18=-2/529, 18-19=-10/449, 4-19=-15/434, 4-20=-92/572, 5-20=-102/491  
 BOT CHORD 1-9=-446/143, 8-9=-446/143, 7-8=-440/142, 6-7=-440/142, 5-6=-440/142  
 WEBS 3-8=-615/90, 2-9=-337/147, 4-6=-337/150

**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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 0-0-8 to 3-0-8, Interior (1) 3-0-8 to 10-0-0, Exterior (2) 10-0-0 to 13-0-0, Interior (1) 13-0-0 to 19-11-8 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=1.33

- 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) Gable requires continuous bottom chord bearing.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 1, 9, 6.
- 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

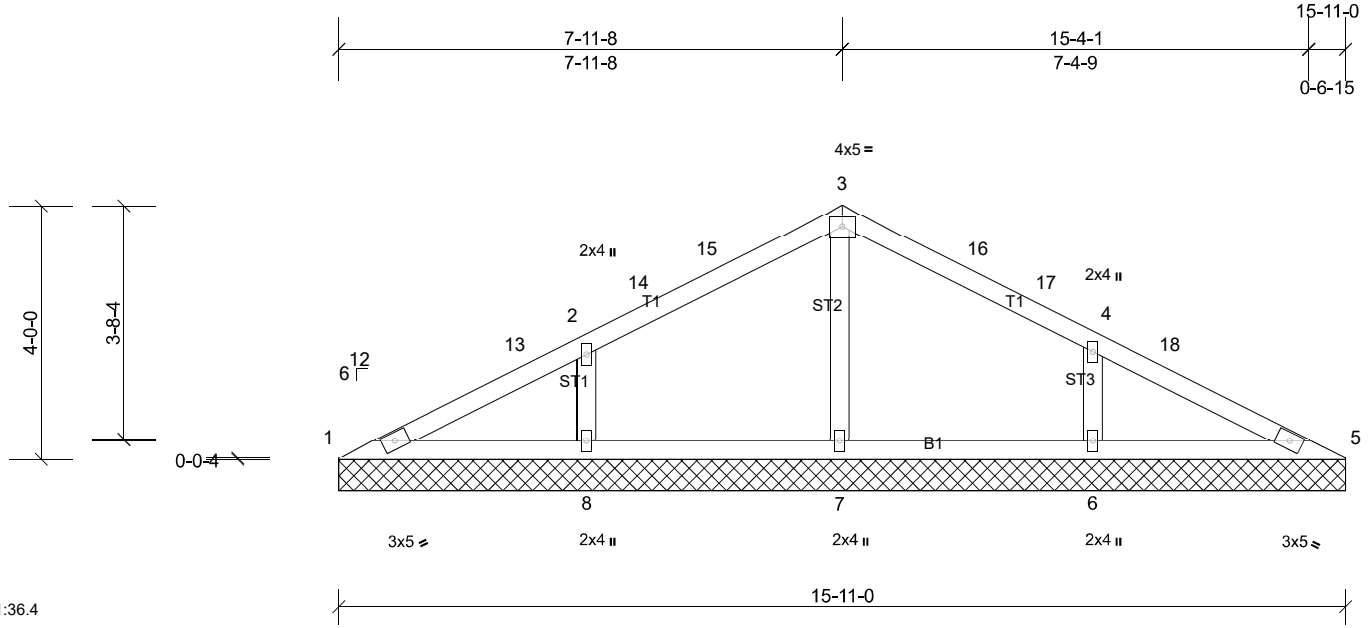
Job 22080109	Truss VL09	Truss Type Valley	Qty 1	Ply 1	Job Reference (optional)
-----------------	---------------	----------------------	----------	----------	--------------------------

Carter Components - Sanford, Sanford, NC, user

Run: 8.53 S Mar 28 2022 Print: 8.530 S Mar 28 2022 MiTek Industries, Inc. Tue Aug 23 16:53:25

Page: 1

ID:E2xllrKVsjM18z13RdJEmDyI9Ay-Ps5I?17BiYLnQGRibNwjugOfHVW7mk0oHKHxS4yI3te



Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 58 lb	FT = 20%

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

**BRACING**  
 TOP CHORD Structural wood sheathing directly applied or 10-0-0 oc purlins.  
 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.

- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 8, 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

**REACTIONS** All bearings 15-11-0.  
 (lb) - Max Horiz 1=41 (LC 12)  
 Max Uplift All uplift 100 (lb) or less at joint(s) 6, 8  
 Max Grav All reactions 250 (lb) or less at joint (s) 1, 5 except 6=374 (LC 33), 7=350 (LC 2), 8=373 (LC 32)

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

**WEBS** 3-7=-282/45, 2-8=-269/130, 4-6=-268/129

- 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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 0-0-8 to 3-0-8, Interior (1) 3-0-8 to 8-0-0, Exterior (2) 8-0-0 to 11-0-0, Interior (1) 11-0-0 to 15-11-8 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=1.33
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
  - Unbalanced snow loads have been considered for this design.
  - Gable requires continuous bottom chord bearing.

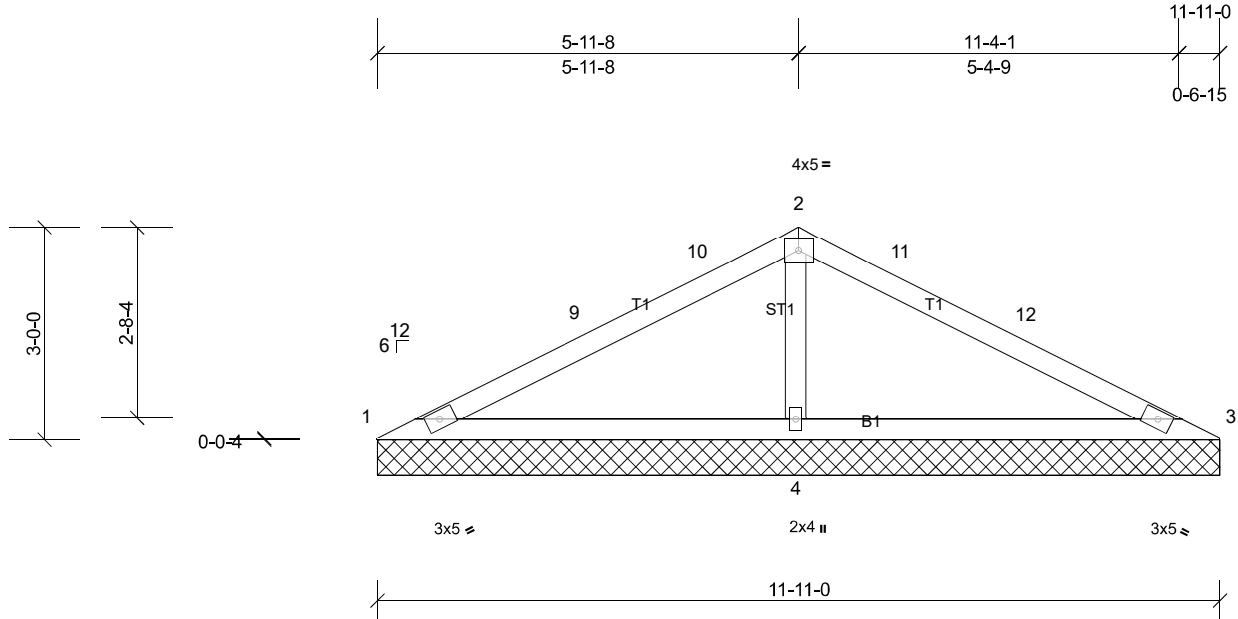
Job 22080109	Truss VL10	Truss Type Valley	Qty 2	Ply 1	Job Reference (optional)
-----------------	---------------	----------------------	----------	----------	--------------------------

Carter Components - Sanford, Sanford, NC, user

Run: 8.53 S Mar 28 2022 Print: 8.530 S Mar 28 2022 MiTek Industries, Inc. Tue Aug 23 16:53:25

Page: 1

ID: BwwfVPPuw3gsuL6\_011UA5yI9G?-Ps5!7B7iYLnQGRibNwjugOckVSCmjxoHKHxS4yI3te



Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.42	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.37	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.16	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 39 lb	FT = 20%

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

**BRACING**  
 TOP CHORD Structural wood sheathing directly applied or 10-0-0 oc purlins.  
 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.

- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 42 lb uplift at joint 1 and 38 lb uplift at joint 3.
- 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

**REACTIONS** (lb/size)  
 1=19/11-11-0, (min. 0-1-8),  
 3=25/11-11-0, (min. 0-1-8),  
 4=763/11-11-0, (min. 0-1-8)  
 Max Horiz 1=-30 (LC 11)  
 Max Uplift 1=-42 (LC 33), 3=-38 (LC 32)  
 Max Grav 1=77 (LC 32), 3=82 (LC 33), 4=901 (LC 2)

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

**TOP CHORD**  
 1-9=-124/425, 9-10=-110/434,  
 2-10=-105/505, 2-11=-101/493,  
 11-12=-107/422, 3-12=-120/413

**BOT CHORD** 1-4=-388/159, 3-4=-377/156

**WEBS** 2-4=-701/224

**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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 0-0-8 to 3-0-8, Interior (1) 3-0-8 to 6-0-0, Exterior (2) 6-0-0 to 9-0-0, Interior (1) 9-0-0 to 11-11-8 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=1.33
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10

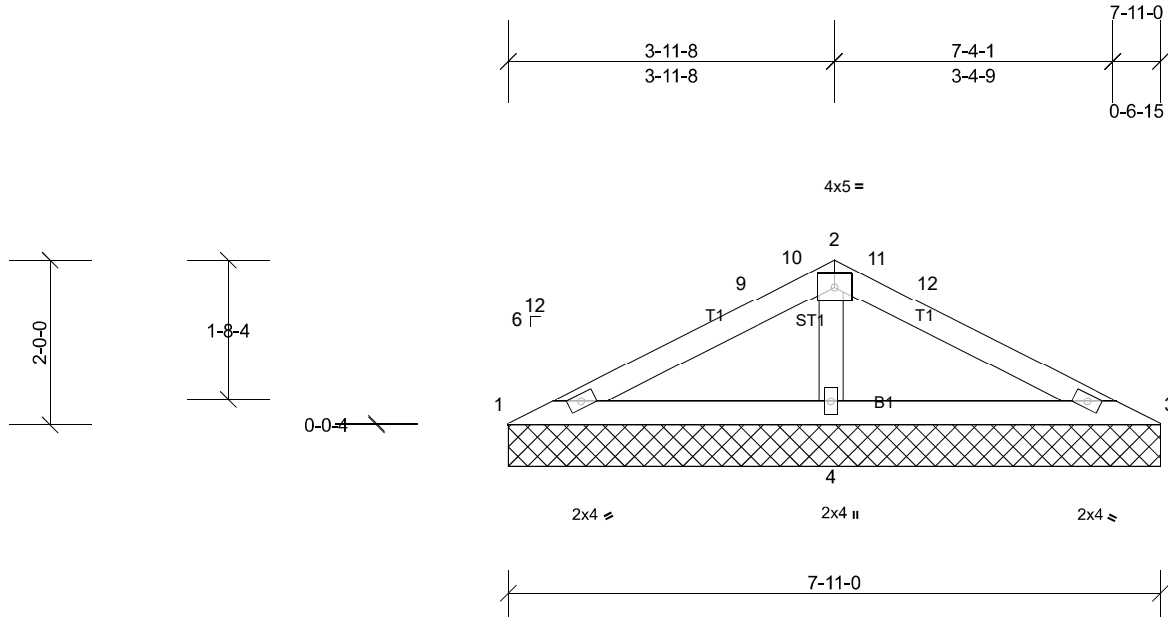
Job 22080109	Truss VL11	Truss Type Valley	Qty 2	Ply 1	Job Reference (optional)
-----------------	---------------	----------------------	----------	----------	--------------------------

Carter Components - Sanford, Sanford, NC, user

Run: 8.53 S Mar 28 2022 Print: 8.530 S Mar 28 2022 MiTek Industries, Inc. Tue Aug 23 16:53:25

Page: 1

ID:b0keLYOegr\_KEIB1EAvPTGyl9At-Ps5l?l7BiYLnQGRibNwjugOg3VV1mkKoHKHxS4yl3te



Scale = 1:28

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.19	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 25 lb	FT = 20%

**LUMBER**

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

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 7-11-0 oc purlins.  
 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.

- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2 lb uplift at joint 1 and 6 lb uplift at joint 3.
- 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

**REACTIONS** (lb/size) 1=43/7-11-0, (min. 0-1-8),  
 3=48/7-11-0, (min. 0-1-8),  
 4=446/7-11-0, (min. 0-1-8)  
 Max Horiz 1=-20 (LC 11)  
 Max Uplift 1=-2 (LC 15), 3=-6 (LC 16)  
 Max Grav 1=78 (LC 32), 3=82 (LC 33), 4=527 (LC 2)

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

TOP CHORD 2-10=-77/259  
 WEBS 2-4=-365/154

**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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 0-0-8 to 3-0-8, Interior (1) 3-0-8 to 4-0-0, Exterior (2) 4-0-0 to 6-9-3, Interior (1) 6-9-3 to 7-11-8 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=1.33
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.

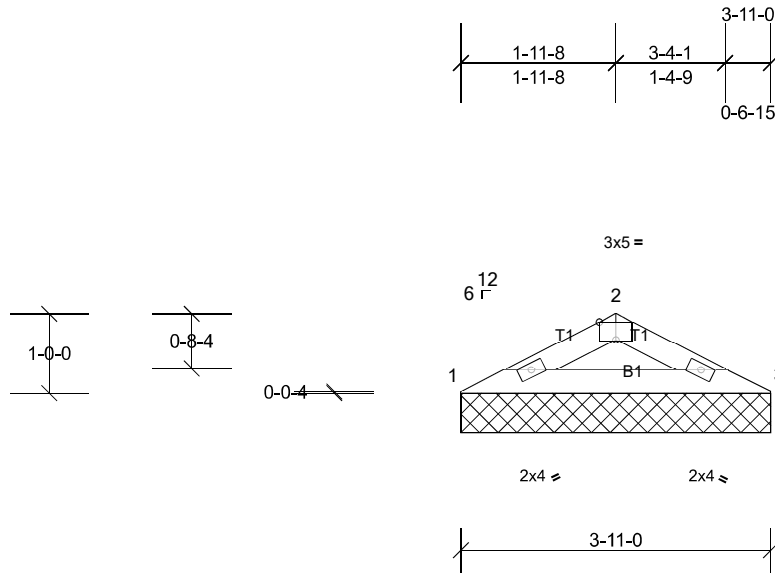
Job 22080109	Truss VL12	Truss Type Valley	Qty 2	Ply 1	Job Reference (optional)
-----------------	---------------	----------------------	----------	----------	--------------------------

Carter Components - Sanford, Sanford, NC, user

Run: 8.53 S Mar 28 2022 Print: 8.530 S Mar 28 2022 MiTek Industries, Inc. Tue Aug 23 16:53:25

Page: 1

ID:Tn\_9BwR9k4VjMUoT0\_Ld6yI9Ap-Ps5I?I7BiYLnQGRibNwjugOhAVWHmlQoHKHxS4yI3te



Scale = 1:29.1

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.11	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0											
										Weight: 10 lb	FT = 20%	

**LUMBER**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 3-11-0 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=133/3-11-0, (min. 0-1-8),  
3=133/3-11-0, (min. 0-1-8)  
Max Horiz 1=-9 (LC 13)  
Max Grav 1=157 (LC 2), 3=157 (LC 2)

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

TOP CHORD 1-2=-271/114

**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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.33
- 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) Gable requires continuous bottom chord bearing.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

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