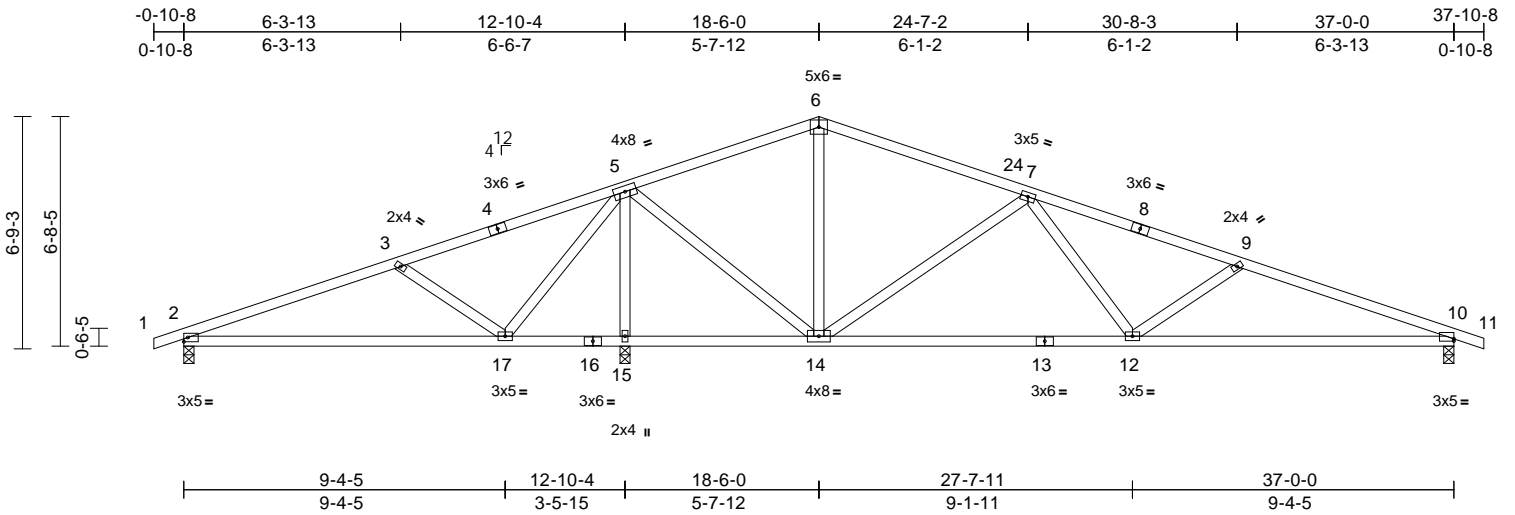


Job 20020068-A	Truss T1	Truss Type Common	Qty 9	Ply 1	19 Sweetwater-Roof Job Reference (optional)	E14200250
-------------------	-------------	----------------------	----------	----------	--	-----------

Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Mar 10 2020 Print: 8.330 S Mar 10 2020 MiTek Industries, Inc. Wed Mar 18 12:39:37
ID:PrYU4ZbdzvH04CzCfS7wTozaNPb-W4rgJdl5hR1V0U_qR1Z5WN2zGbo_xaGlgj22PTzZi2d

Page: 1



Scale = 1:67.1

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

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	0.59	Vert(LL)	-0.08	12-14	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.19	17-20	>794	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.85	Horz(CT)	0.03	10	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 179 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x4 SP No.2 *Except* 9-12,3-17,5-15:2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-1-6 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS

(size) 2=0-3-8, 10=0-3-8, 15=0-3-8
 Max Horiz 2=64 (LC 15)
 Max Uplift 2=-22 (LC 11), 10=-42 (LC 12), 15=-32 (LC 11)
 Max Grav 2=419 (LC 33), 10=891 (LC 2), 15=1846 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/21, 2-3=-438/183, 3-4=-129/306, 4-5=-116/347, 5-6=-390/143, 6-24=-410/140, 7-24=-418/117, 7-8=-1369/310, 8-9=-1426/297, 9-10=-1779/425, 10-11=0/21
 BOT CHORD 2-17=-144/385, 16-17=-635/307, 15-16=-635/307, 14-15=-635/307, 13-14=-126/1005, 12-13=-126/1005, 10-12=-334/1633
 WEBS 6-14=-100/75, 7-14=-857/298, 7-12=-25/515, 9-12=-409/237, 3-17=-509/268, 5-17=-82/595, 5-15=-1807/494, 5-14=-241/1213

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) 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 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 10, and 15. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



March 18, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



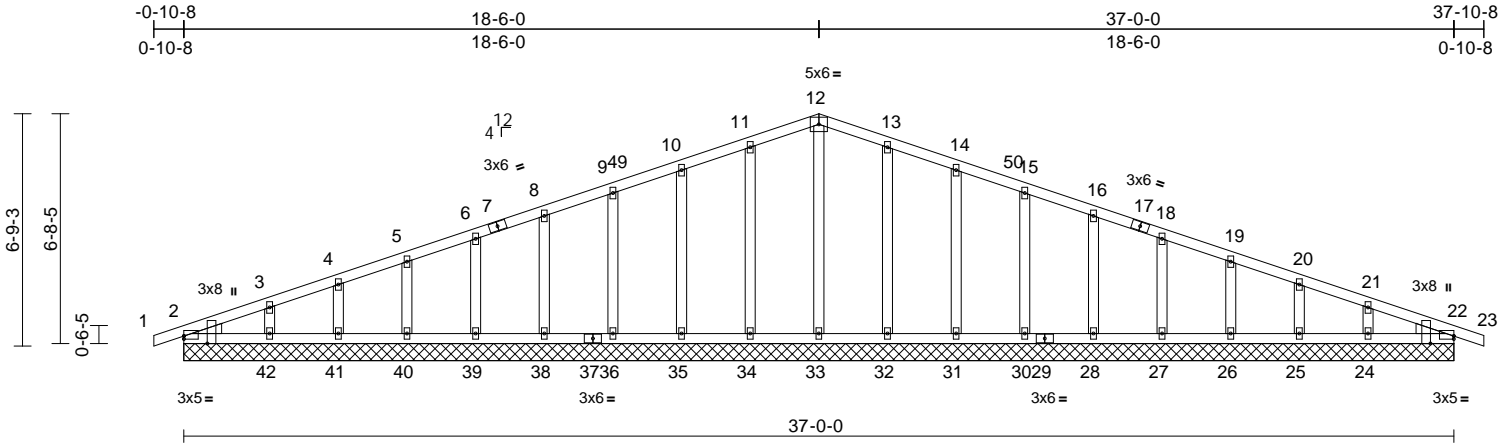
818 Soundside Road
Edenton, NC 27932

Job 20020068-A	Truss T1GE	Truss Type Common Supported Gable	Qty 1	Ply 1	19 Sweetwater-Roof Job Reference (optional)	E14200251
-------------------	---------------	--------------------------------------	----------	----------	--	-----------

Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Mar 10 2020 Print: 8.330 S Mar 10 2020 MiTek Industries, Inc. Wed Mar 18 12:39:40
ID:MDgVFVduVWxjW7antAOYDzaNPZ-LEDxahpsHHoekPS_olgVleI7u0?CLTedCfVMc7zZi2X

Page: 1



Scale = 1:67.1

Plate Offsets (X, Y): [2:Edge,0-1-1], [2:0-2-10,Edge], [22:Edge,0-1-1], [22:0-2-10,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	0.04	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	22	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 202 lb	FT = 20%

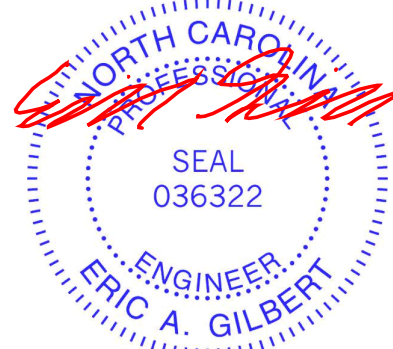
LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3 *Except* 33-12,34-11,32-13:2x4 SP No.2
WEDGE Left: 2x4 SP No.3
Right: 2x4 SP No.3

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

REACTIONS (size)
2=37-0-0, 22=37-0-0, 24=37-0-0,
25=37-0-0, 26=37-0-0, 27=37-0-0,
28=37-0-0, 30=37-0-0, 31=37-0-0,
32=37-0-0, 33=37-0-0, 34=37-0-0,
35=37-0-0, 36=37-0-0, 38=37-0-0,
39=37-0-0, 40=37-0-0, 41=37-0-0,
42=37-0-0, 43=37-0-0, 46=37-0-0
Max Horiz 2=64 (LC 15), 46=64 (LC 15)
Max Uplift 2=-4 (LC 11), 22=-14 (LC 12),
24=-20 (LC 16), 25=-11 (LC 12),
26=-12 (LC 16), 27=-12 (LC 12),
28=-12 (LC 16), 30=-12 (LC 16),
31=-12 (LC 12), 32=-12 (LC 16),
34=-12 (LC 15), 35=-12 (LC 11),
36=-12 (LC 15), 38=-12 (LC 15),
39=-12 (LC 11), 40=-13 (LC 15),
41=-10 (LC 11), 42=-24 (LC 15),
43=-14 (LC 12), 46=-4 (LC 11)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/21, 2-3=-74/38, 3-4=-58/39,
4-5=-49/44, 5-6=-41/56, 6-7=-34/70,
7-8=-28/76, 8-9=-45/106, 9-49=-55/129,
10-49=-49/136, 10-11=-66/167,
11-12=-77/196, 12-13=-77/196,
13-14=-66/167, 14-50=-49/136,
15-50=-55/129, 15-16=-45/106,
16-17=-28/76, 17-18=-34/70, 18-19=-28/46,
19-20=-28/17, 20-21=-36/13, 21-22=-53/26,
22-23=0/21
BOT CHORD 2-42=-23/86, 41-42=-23/86, 40-41=-23/86,
39-40=-23/86, 38-39=-23/86, 37-38=-23/86,
36-37=-23/86, 35-36=-23/86, 34-35=-23/86,
33-34=-23/86, 32-33=-23/86, 31-32=-23/86,
30-31=-23/86, 29-30=-23/86, 28-29=-23/86,
27-28=-23/86, 26-27=-23/86, 25-26=-23/86,
24-25=-23/86, 22-24=-23/86
WEBS 12-33=-103/0, 11-34=-152/70,
10-35=-141/72, 9-36=-120/71, 8-38=-120/71,
6-39=-120/71, 5-40=-121/71, 4-41=-117/71,
3-42=-130/73, 13-32=-152/70,
14-31=-141/72, 15-30=-120/71,
16-28=-120/71, 18-27=-120/71,
19-26=-121/71, 20-25=-117/71,
21-24=-130/73

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; and 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.



March 18, 2020

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



818 Soundside Road
Edenton, NC 27932

Job 20020068-A	Truss T1GE	Truss Type Common Supported Gable	Qty 1	Ply 1	19 Sweetwater-Roof Job Reference (optional)	E14200251
-------------------	---------------	--------------------------------------	----------	----------	--	-----------

Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Mar 10 2020 Print: 8.330 S Mar 10 2020 MiTek Industries, Inc. Wed Mar 18 12:39:40
ID:MDgFVfduVWxjW7antAOYDzaNPZ-LEDxahpsHHoekPS_olgVlel7u0?CLTedCfVMc7zZiX

Page: 2

- 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) Gable studs spaced at 2-0-0 oc.
- 10) * 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.
- 11) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 22, 34, 35, 36, 38, 39, 40, 41, 42, 32, 31, 30, 28, 27, 26, 25, 24, and 2. 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

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



818 Soundside Road
Edenton, NC 27932

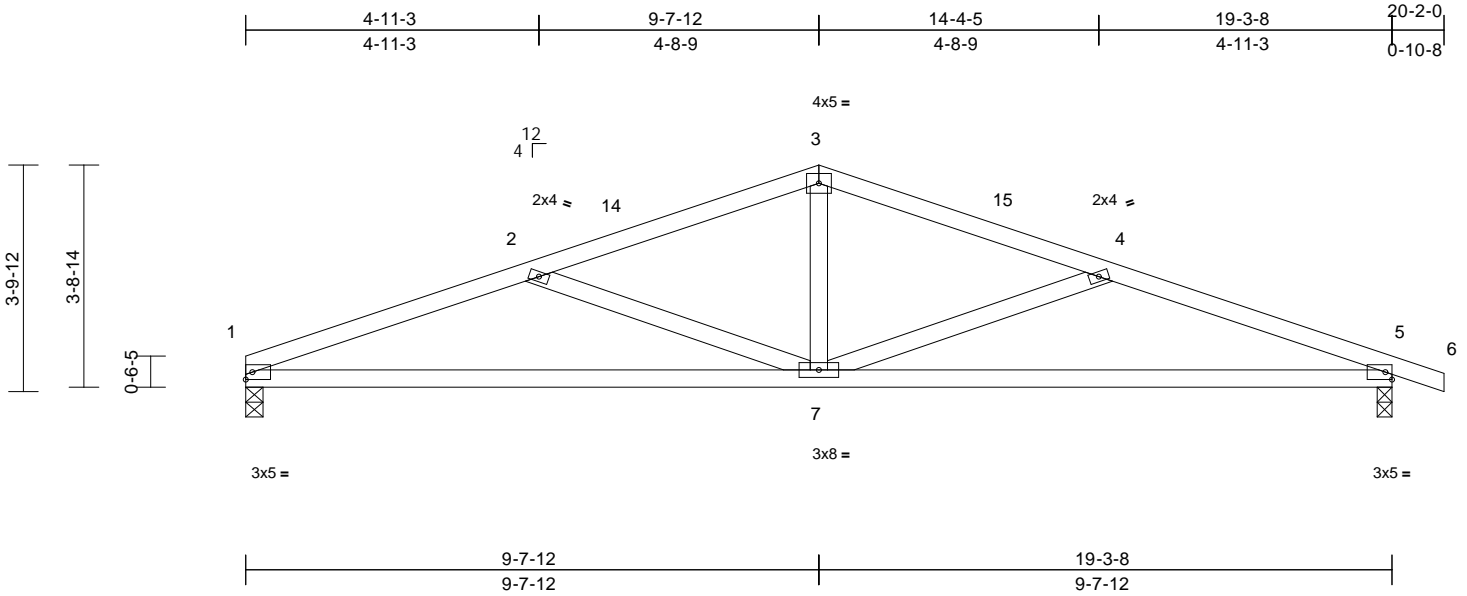
Job 20020068-A	Truss T2	Truss Type Common	Qty 2	Ply 1	19 Sweetwater-Roof Job Reference (optional)	E14200252
-------------------	-------------	----------------------	----------	----------	--	-----------

Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Mar 10 2020 Print: 8.330 S Mar 10 2020 MiTek Industries, Inc. Wed Mar 18 12:39:41

Page: 1

ID:MDgFVfVduVWXjJW7antAOYDzaNPZ-pQmJn0qU2bwVMZ1AM?BklsqDPPBC4uZnRJFw8ZzZi2W



Scale = 1:38.8

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	0.33	Vert(LL)	-0.08	7	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.19	7-10	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.04	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 80 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 4-4-1 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-5-9 oc bracing.

REACTIONS

(size) 1=0-3-8, 5=0-3-0
Max Horiz 1=-38 (LC 16)
Max Uplift 1=-9 (LC 11), 5=-34 (LC 12)
Max Grav 1=770 (LC 2), 5=825 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension

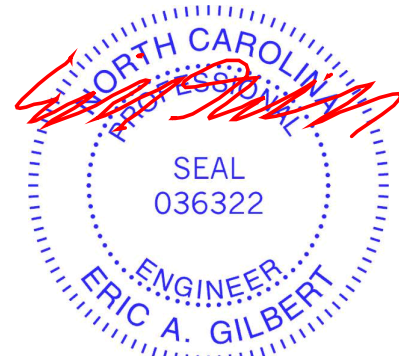
TOP CHORD 1-2=-1657/451, 2-14=-1246/281,
3-14=-1199/294, 3-15=-1199/293,
4-15=-1246/282, 4-5=-1650/448, 5-6=0/21
BOT CHORD 1-7=-368/1528, 5-7=-366/1521
WEBS 3-7=-25/462, 2-7=-450/225, 4-7=-442/222

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust)
Vasd=103mph; 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) 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 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 5. This connection is for uplift only and does not consider lateral forces.
- 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



March 18, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

ENGINEERING BY
TRENCO
A MiTek Affiliate

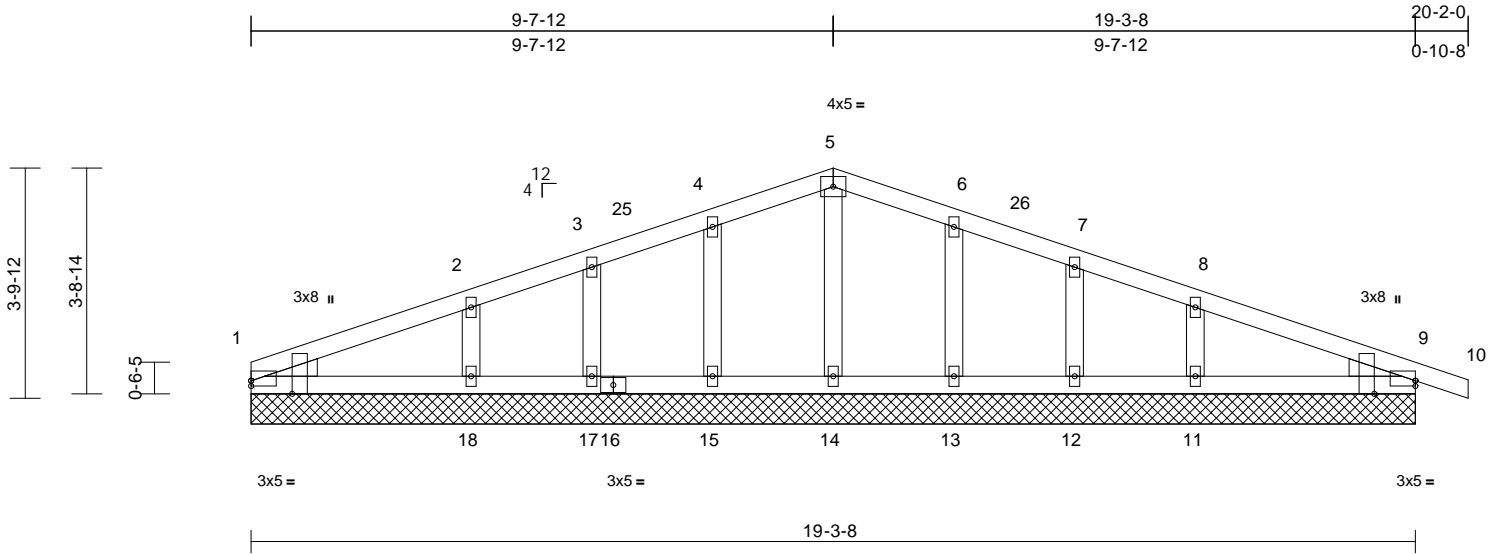
818 Soundside Road
Edenton, NC 27932

Job 20020068-A	Truss T2GE	Truss Type Common Supported Gable	Qty 1	Ply 1	19 Sweetwater-Roof Job Reference (optional)	E14200253
-------------------	---------------	--------------------------------------	----------	----------	--	-----------

Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Mar 10 2020 Print: 8.330 S Mar 10 2020 MiTek Industries, Inc. Wed Mar 18 12:39:41
ID:qQEEdibdWGqfaxghnLbhd5RzaNPY-pQmJn0qU2bwVMZ1AM?BklsqHuPJ?4xgnRJFw8ZzZi2W

Page: 1



Scale = 1:38.2

Plate Offsets (X, Y): [1:Edge,0-1-1], [1:0-2-10,Edge], [9:Edge,0-1-1], [9:0-2-10,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	0.13	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	1	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
OTHERS 2x4 SP No.3
WEDGE Left: 2x4 SP No.3
Right: 2x4 SP No.3

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

REACTIONS (size)
1=19-3-8, 9=19-3-8, 11=19-3-8,
12=19-3-8, 13=19-3-8, 14=19-3-8,
15=19-3-8, 17=19-3-8, 18=19-3-8,
19=19-3-8, 22=19-3-8
Max Horiz 1=-38 (LC 16), 19=-38 (LC 16)
Max Uplift 9=-27 (LC 12), 11=-23 (LC 16),
12=-9 (LC 12), 13=-15 (LC 16),
15=-15 (LC 15), 17=-6 (LC 11),
18=-26 (LC 15), 22=-27 (LC 12)
Max Grav 1=140 (LC 2), 9=201 (LC 2),
11=278 (LC 34), 12=113 (LC 2),
13=181 (LC 34), 14=111 (LC 2),
15=182 (LC 33), 17=108 (LC 2),
18=289 (LC 33), 19=140 (LC 2),
22=201 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-88/25, 2-3=-78/57, 3-25=-69/79,
4-25=-57/84, 4-5=-75/115, 5-6=-75/115,
6-26=-56/84, 7-26=-69/80, 7-8=-77/57,
8-9=-63/19, 9-10=0/21
BOT CHORD 1-18=-10/78, 17-18=0/55, 16-17=0/55,
15-16=0/55, 14-15=0/55, 13-14=0/55,
12-13=0/55, 11-12=0/55, 9-11=0/55

WEBS 5-14=-74/0, 4-15=-136/76, 3-17=-93/61,
2-18=-189/98, 6-13=-135/75, 7-12=-95/63,
8-11=-183/96

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
- 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 requires continuous bottom chord bearing.
- 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 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 15, 17, 18, 13, 12, 11, and 9. 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



March 18, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



818 Soundside Road
Edenton, NC 27932

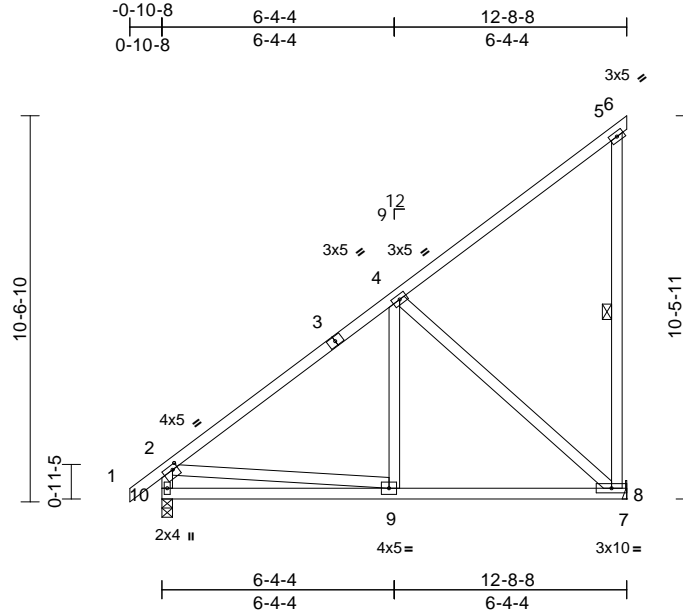
Job 20020068-A	Truss T3	Truss Type Monopitch	Qty 4	Ply 1	19 Sweetwater-Roof Job Reference (optional)	E14200254
-------------------	-------------	-------------------------	----------	----------	--	-----------

Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Mar 10 2020 Print: 8.330 S Mar 10 2020 MiTek Industries, Inc. Wed Mar 18 12:39:41

Page: 1

ID:EjNkmpTkZWuZGwD5WeRLXUzaNPm-pQmJn0qU2bwVMZ1AM?Bklsq8NPHR4oxnRJFw8ZzZi2W



Scale = 1:63

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

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	0.66	Vert(LL)	0.05	8-9	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.08	8-9	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.01	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 88 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x4 SP No.2 *Except* 10-2:2x4 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 7-1-11 oc bracing.
 WEBS 1 Row at midpt 5-8

REACTIONS

(size) 8= Mechanical, 10=0-3-8
 Max Horiz 10=316 (LC 10)
 Max Uplift 8=-91 (LC 10)
 Max Grav 8=551 (LC 25), 10=555 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension

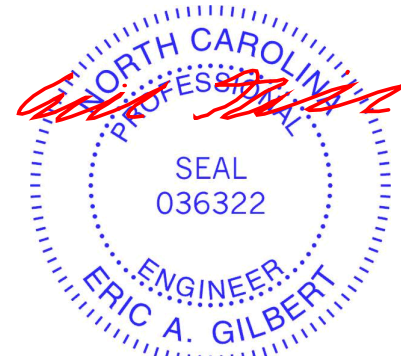
TOP CHORD 1-2=0/46, 2-3=-557/91, 3-4=-389/114,
 4-5=-240/231, 5-6=-8/0, 5-8=-254/188,
 2-10=-500/165
 BOT CHORD 9-10=-664/752, 8-9=-289/524, 7-8=0/0
 WEBS 4-9=0/176, 4-8=-524/238, 2-9=-230/378

NOTES

- 1) 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
- 2) 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

- 3) 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.
- 4) * 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.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 91 lb uplift at joint 8.
- 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



March 18, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



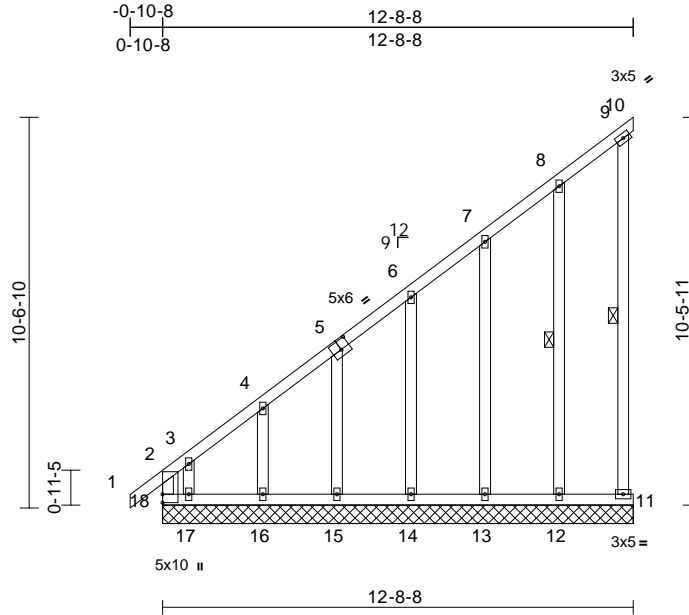
818 Soundside Road
 Edenton, NC 27932

Job 20020068-A	Truss T3GE	Truss Type Monopitch Supported Gable	Qty 1	Ply 1	19 Sweetwater-Roof Job Reference (optional)	E14200255
-------------------	---------------	---	----------	----------	--	-----------

Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Mar 10 2020 Print: 8.330 S Mar 10 2020 MiTek Industries, Inc. Wed Mar 18 12:39:42
ID:qQEEdibWgqfaxghnLbhd5RzaNPY-HcKl?Mr6pu2MzjbNvjzq3NJPPccpMlwgz_Th?zZi2V

Page: 1



Scale = 1:62.2

Plate Offsets (X, Y): [5:0-3-0,0-3-0]

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	0.70	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	-0.02	10	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MR								
BCDL	10.0											
											Weight: 101 lb	FT = 20%

LUMBER	
TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3 *Except* 9-11:2x4 SP No.2
OTHERS	2x4 SP No.2 *Except* 15-5,16-4,17-3:2x4 SP No.3

BRACING	
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 9-11, 8-12

REACTIONS	(size)
Max Horiz	10=12-8-8, 11=12-8-8, 12=12-8-8, 13=12-8-8, 14=12-8-8, 15=12-8-8, 16=12-8-8, 17=12-8-8, 18=12-8-8
Max Uplift	10=-101 (LC 9), 11=-225 (LC 12), 12=-49 (LC 13), 13=-32 (LC 13), 14=-37 (LC 13), 15=-37 (LC 13), 16=-31 (LC 13), 17=-359 (LC 10), 18=-278 (LC 11)
Max Grav	10=141 (LC 12), 11=200 (LC 9), 12=165 (LC 25), 13=171 (LC 25), 14=166 (LC 25), 15=168 (LC 25), 16=171 (LC 25), 17=291 (LC 11), 18=519 (LC 10)

FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	2-18=-638/523, 1-2=0/46, 2-3=-769/682, 3-4=-535/488, 4-5=-462/427, 5-6=-391/369, 6-7=-318/309, 7-8=-254/259, 8-9=-142/151, 9-10=-140/129, 9-11=-225/187
BOT CHORD	17-18=-160/175, 16-17=-160/175, 15-16=-160/175, 14-15=-159/174, 13-14=-159/174, 12-13=-159/174, 11-12=-159/174

WEBS	
8-12	=216/163, 7-13=-159/119,
6-14	=139/97, 5-15=-137/95, 4-16=-143/99,
3-17	=363/384

NOTES

- 1) 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
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) TCLL: ASCE 7-10; 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) 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.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 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.
- 10) Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

- 11) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 18, 10, 11, 12, 13, 14, 15, 16, and 17. 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



March 18, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



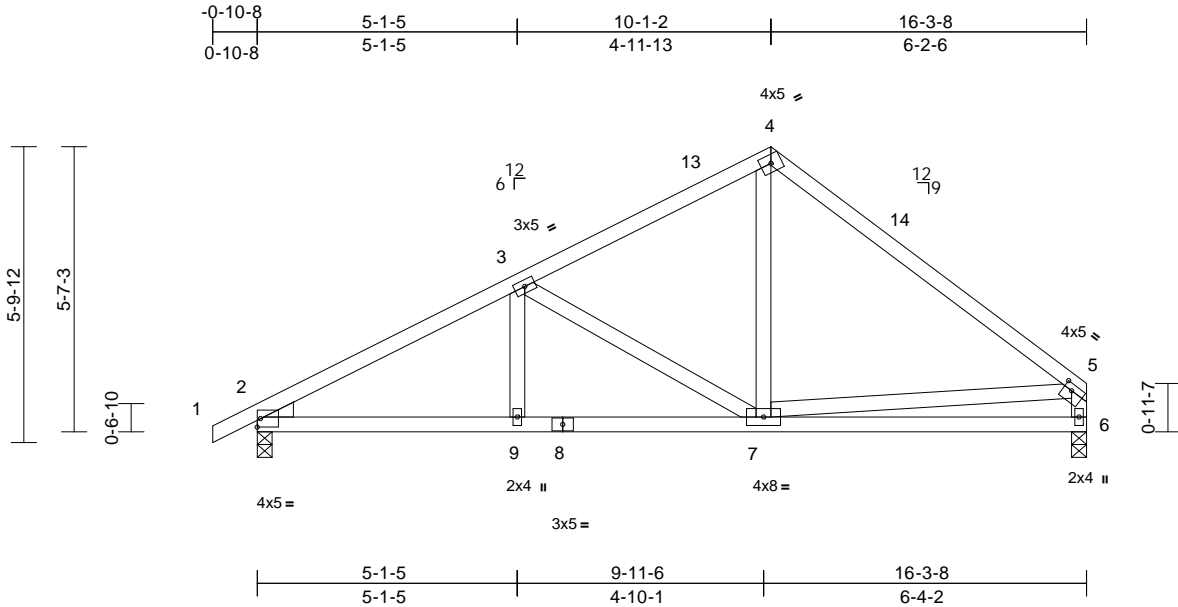
818 Soundside Road
Edenton, NC 27932

Job 20020068-A	Truss T4	Truss Type Roof Special	Qty 4	Ply 1	19 Sweetwater-Roof Job Reference (optional)	E14200256
-------------------	-------------	----------------------------	----------	----------	--	-----------

Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Mar 10 2020 Print: 8.330 S Mar 10 2020 MiTek Industries, Inc. Wed Mar 18 12:39:42
ID: bhBdpWWtOx3sMHV2JC0WEYzaNPh-HcKi?Mr6pu2MzjbNvjzq3NLCpb7pL0wgz_Th?zZi2V

Page: 1



Scale = 1:45.3

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

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	0.52	Vert(LL)	-0.02	7-9	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.05	6-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.02	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* 7-3,7-5:2x4 SP No.2
 WEDGE Left: 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-5-3 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 2=0-3-8, 6=0-3-8
 Max Horiz 2=119 (LC 14)
 Max Uplift 2=-12 (LC 15)
 Max Grav 2=700 (LC 2), 6=644 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/30, 2-3=-1014/236, 3-13=-634/176, 4-13=-513/189, 4-14=-587/180, 5-14=-724/158, 5-6=-585/166
 BOT CHORD 2-9=-210/845, 8-9=-210/845, 7-8=-210/845, 6-7=-98/240
 WEBS 3-9=0/84, 3-7=-417/179, 4-7=-24/305, 5-7=-15/293

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) 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 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- 8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



March 18, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



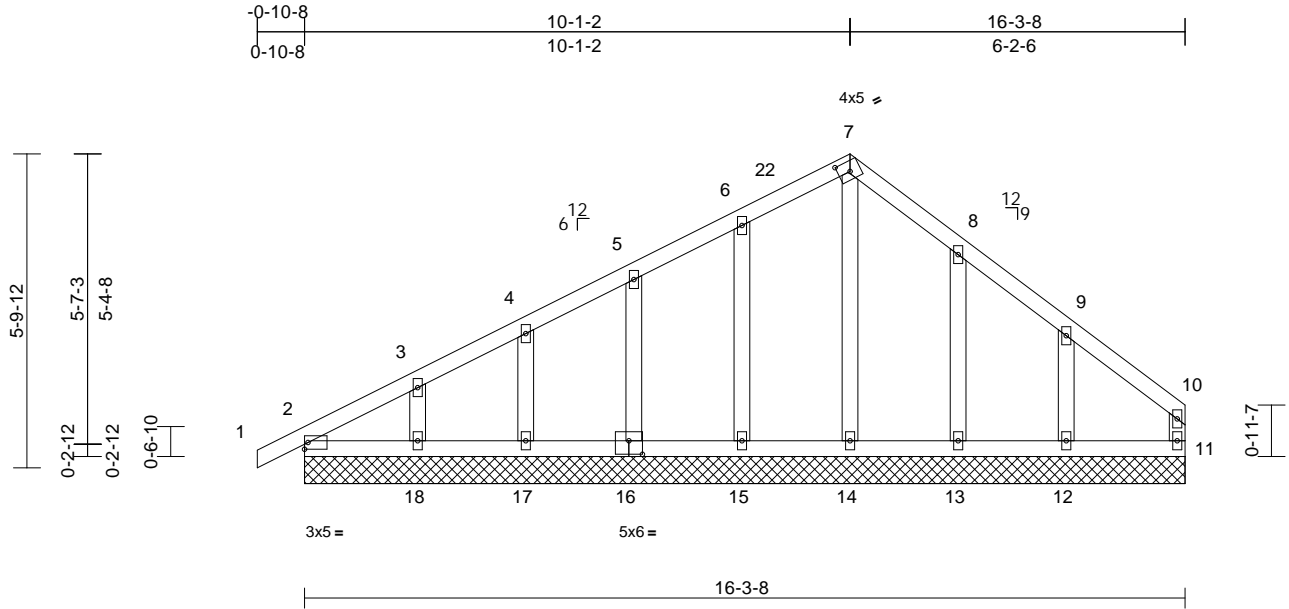
818 Soundside Road
Edenton, NC 27932

Job 20020068-A	Truss T4GE	Truss Type Roof Special Supported Gable	Qty 1	Ply 1	19 Sweetwater-Roof Job Reference (optional)	E14200257
-------------------	---------------	--	----------	----------	--	-----------

Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Mar 10 2020 Print: 8.330 S Mar 10 2020 MiTek Industries, Inc. Wed Mar 18 12:39:43
ID:3t1b1sXV9Mfj_R4EtVYmIzaNPg-HcKi?Mr6pu2MzjbNvjzq3NSLpgwpOawgz_Th?zZ2V

Page: 1



Scale = 1:42.6

Plate Offsets (X, Y): [7:0-2-10,0-2-4], [16:0-3-0,0-3-0]

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	0.07	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	0.06	Horz(CT)	0.00	11	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 86 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 10-0-0 oc bracing.

REACTIONS

(size)	2=16-3-8, 11=16-3-8, 12=16-3-8, 13=16-3-8, 14=16-3-8, 15=16-3-8, 16=16-3-8, 17=16-3-8, 18=16-3-8, 19=16-3-8
Max Horiz	2=119 (LC 14), 19=119 (LC 14)
Max Uplift	2=-18 (LC 11), 12=-54 (LC 16), 13=-33 (LC 16), 15=-18 (LC 15), 16=-21 (LC 15), 17=-17 (LC 15), 18=-31 (LC 15), 19=-18 (LC 11)
Max Grav	2=146 (LC 30), 11=86 (LC 2), 12=191 (LC 30), 13=169 (LC 30), 14=139 (LC 32), 15=170 (LC 33), 16=161 (LC 2), 17=157 (LC 2), 18=168 (LC 33), 19=146 (LC 30)

FORCES

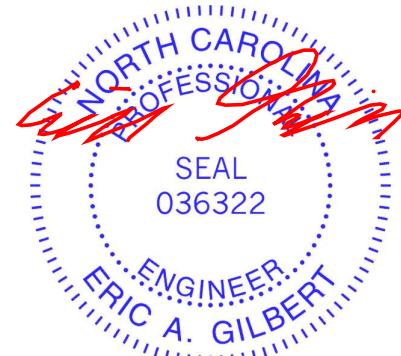
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/30, 2-3=-111/50, 3-4=-100/51, 4-5=-114/68, 5-6=-135/111, 6-22=-150/152, 7-22=-142/158, 7-8=-154/171, 8-9=-97/104, 9-10=-55/25, 10-11=-68/29
BOT CHORD	2-18=-90/40, 17-18=-29/36, 16-17=-29/36, 15-16=-27/34, 14-15=-27/34, 13-14=-27/34, 12-13=-27/34, 11-12=-27/34
WEBS	7-14=-110/64, 6-15=-129/83, 5-16=-121/88, 4-17=-120/84, 3-18=-123/93, 8-13=-136/88, 9-12=-156/108

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
- 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 requires continuous bottom chord bearing.
- 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 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 15, 17, 18, 13, and 12. This connection is for uplift only and does not consider lateral forces.
- One RT16A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 16. This connection is for uplift only and does not consider lateral forces.

- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



March 18, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



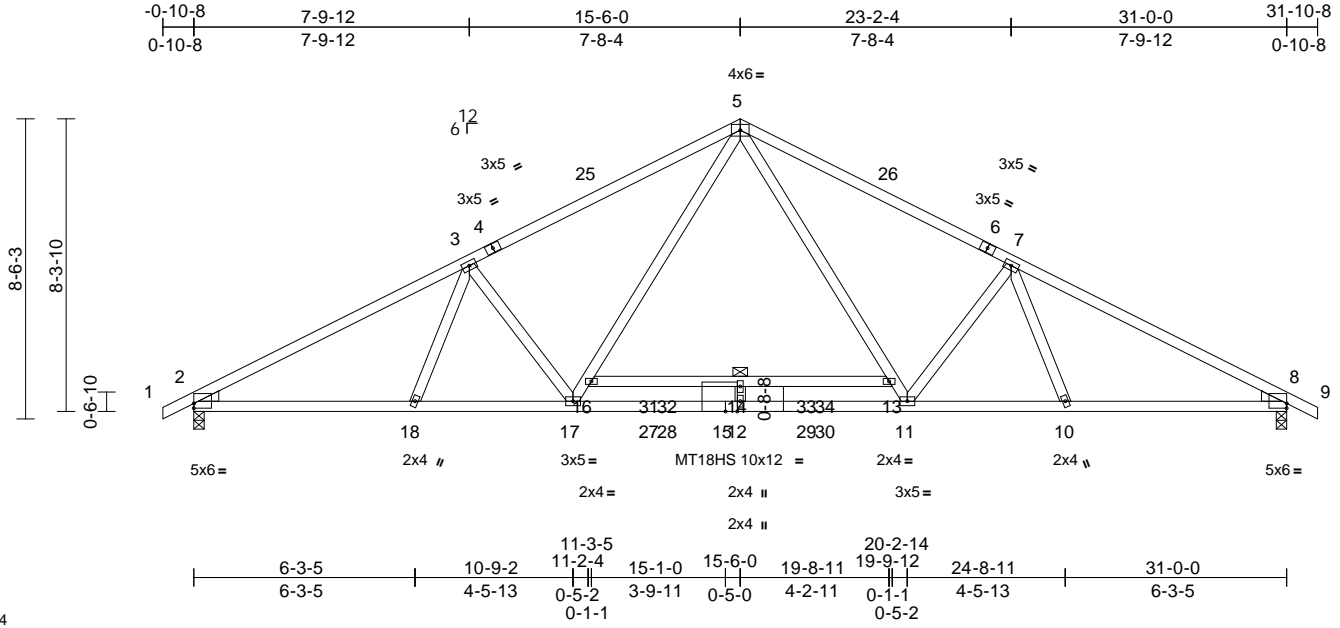
818 Soundside Road
Edenton, NC 27932

Job 20020068-A	Truss T5	Truss Type Common	Qty 9	Ply 1	19 Sweetwater-Roof Job Reference (optional)	E14200258
-------------------	-------------	----------------------	----------	----------	--	-----------

Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Mar 10 2020 Print: 8.330 S Mar 10 2020 MiTek Industries, Inc. Wed Mar 18 12:39:43
ID: X41_ECY7vgnabbfRQc3_JzzaNPf-Ipu4CiskZCADbtAZTQDCNHwQIDqzYnq3udk0DRzZi2U

Page: 1



Scale = 1:65.4

Plate Offsets (X, Y): [2:Edge,0-1-10], [8:Edge,0-1-10], [15:0-4-0,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	0.92	Vert(LL)	-0.28	14	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.69	14	>538	180	MT18HS	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.07	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 170 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1 *Except* 1-4,6-9:2x4 SP No.2
BOT CHORD 2x4 SP 2400F 2.0E *Except* 16-13:2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 17-5,11-5:2x4 SP No.2
WEDGE Left: 2x4 SP No.3
Right: 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
6-0-0 oc bracing: 13-16

REACTIONS (size) 2=0-3-8, 8=0-3-8
Max Horiz 2=-88 (LC 13)
Max Grav 2=1480 (LC 2), 8=1480 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/30, 2-3=-2518/219, 3-4=-2314/154,
4-25=-2299/174, 5-25=-2223/196,
5-26=-2223/196, 6-26=-2299/174,
6-7=-2314/154, 7-8=-2518/219, 8-9=0/30
BOT CHORD 2-18=-235/2173, 17-18=-72/2199,
17-27=0/1624, 27-28=0/1624, 15-28=0/1624,
12-15=0/1624, 12-29=0/1624, 29-30=0/1624,
11-30=0/1624, 10-11=-74/2165,
8-10=-81/2159, 16-31=-116/0, 31-32=-116/0,
14-32=-116/0, 14-33=-116/0, 33-34=-116/0,
13-34=-116/0
WEBS 3-18=-85/2, 3-17=-444/326, 16-17=-27/819,
5-16=0/970, 5-13=0/970, 11-13=-27/818,
7-11=-444/326, 7-10=-85/2, 12-14=-92/0

- 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
- 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.
- All plates are MT20 plates unless otherwise indicated.
- * 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.
- 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.



March 18, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



818 Soundside Road
Edenton, NC 27932

Job 20020068-A	Truss T5GE	Truss Type Common Supported Gable	Qty 1	Ply 1	19 Sweetwater-Roof Job Reference (optional)	E14200259
-------------------	---------------	--------------------------------------	----------	----------	--	-----------

Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Mar 10 2020 Print: 8.330 S Mar 10 2020 MiTek Industries, Inc. Wed Mar 18 12:39:44
ID:?GsMSYZIq_vRDIEd_KaDrAzaNPe-D?SSQ2iMKWI4D1I118kRwUSordMJHGWD7HTaluzZi2T

Page: 2

- 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) Gable studs spaced at 2-0-0 oc.
- 10) * 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.
- 11) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 31, 32, 33, 34, 35, 36, 37, 28, 27, 26, 25, 24, 23, and 22. 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

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



818 Soundside Road
Edenton, NC 27932

Job 20020068-A	Truss T5SE	Truss Type Common Structural Gable	Qty 1	Ply 1	19 Sweetwater-Roof Job Reference (optional)	E14200260
-------------------	---------------	---------------------------------------	----------	----------	--	-----------

Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Mar 10 2020 Print: 8.330 S Mar 10 2020 MiTek Industries, Inc. Wed Mar 18 12:39:44
ID:TSQkfuaNRH11ruppY15SONzNPd-D7SSQ2IMKW14D1I18kRwUS6dCUHCID7HTaluzZi2T

Page: 1

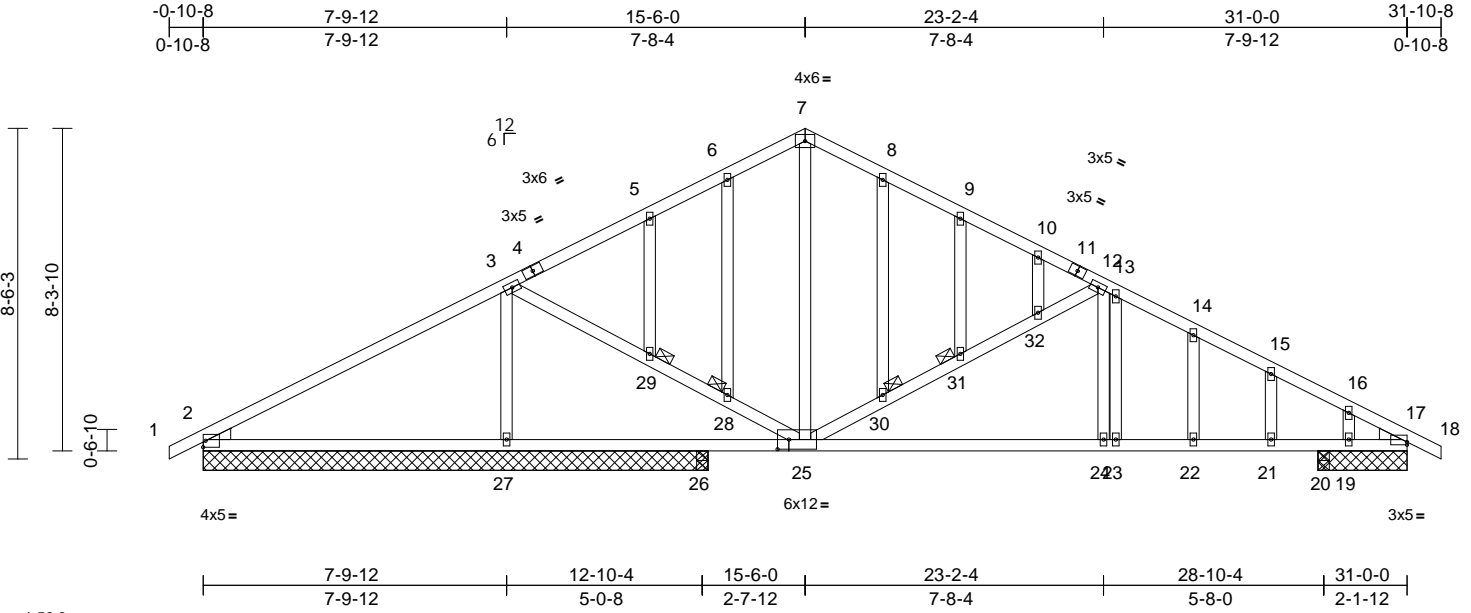


Plate Offsets (X, Y): [17:Edge,0-0-14], [25:0-3-8,0-3-0]

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	0.75	Vert(LL)	-0.06	27-35	>999	240
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.18	27-35	>529	180
TCDL	10.0	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.04	17	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 No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2 *Except* 12-24,3-27:2x4 SP No.3
OTHERS 2x4 SP No.3 *Except* 28-6,30-8:2x4 SP No.2
WEDGE Left: 2x4 SP No.3
Right: 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-9-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 28, 29, 30, 31

REACTIONS (size)
2=13-0-0, 17=2-3-8, 19=2-3-8, 20=0-3-8, 26=0-3-8, 27=13-0-0, 33=13-0-0, 36=2-3-8
Max Horiz 2=-88 (LC 13), 33=-88 (LC 13)
Max Uplift 2=-36 (LC 15), 19=-524 (LC 2), 20=-34 (LC 16), 33=-36 (LC 15)
Max Grav 2=454 (LC 33), 17=912 (LC 2), 19=-13 (LC 16), 20=620 (LC 2), 26=49 (LC 34), 27=1122 (LC 2), 33=454 (LC 33), 36=912 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/30, 2-3=-401/174, 3-4=-787/277, 4-5=-769/295, 5-6=-696/316, 6-7=-651/332, 7-8=-649/330, 8-9=-700/321, 9-10=-711/279, 10-11=-758/284, 11-12=-776/276, 12-13=-1149/295, 13-14=-1268/382, 14-15=-1314/358, 15-16=-1304/307, 16-17=-1308/264, 17-18=0/30

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) 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.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 34 lb uplift at joint 20.
11) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 19. This connection is for uplift only and does not consider lateral forces.
12) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



March 18, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

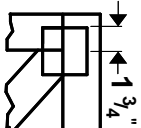
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



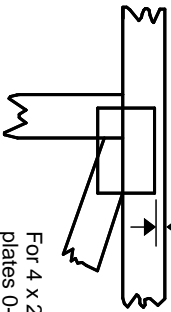
818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 1/8" from outside edge of truss.



This symbol indicates the required direction of slots in connector plates.

* Plate location details available in **MITrak 20/20 software or upon request.**

PLATE SIZE

4 X 4

The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

BEARING



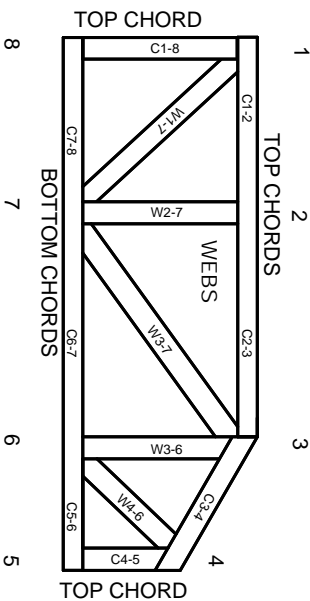
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI 1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System

6-4-8
dimensions shown in ft-in-sixteenths
(Drawings not to scale)



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

© 2012 MITTEK® All Rights Reserved



MITek Engineering Reference Sheet: MII-7473 rev. 10/03/2015



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.