

RE: 20080007
A&G RESIDENTIAL - SVG043

Trenco
818 Soundside Rd
Edenton, NC 27932

Site Information:

Customer: A&G Residential Project Name: 20080007
Lot/Block: 43 Model: Hampton B
Address: Subdivision: Sierra Village
City: State:

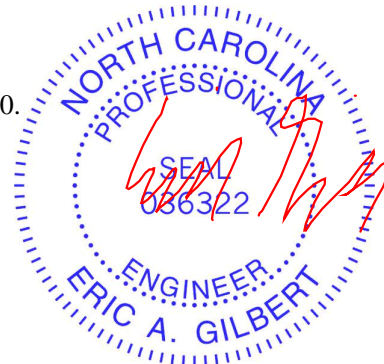
General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.4
Wind Code: N/A Wind Speed: 130 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 14 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date
1	E14786007	A01	9/30/2020
2	E14786008	A02	9/30/2020
3	E14786009	A03	9/30/2020
4	E14786010	A04	9/30/2020
5	E14786011	A05	9/30/2020
6	E14786012	A06	9/30/2020
7	E14786013	B01	9/30/2020
8	E14786014	B02	9/30/2020
9	E14786015	C01	9/30/2020
10	E14786016	C02	9/30/2020
11	E14786017	J01	9/30/2020
12	E14786018	J02	9/30/2020
13	E14786019	J03	9/30/2020
14	E14786020	J04	9/30/2020

The truss drawing(s) referenced above have been prepared by
Truss Engineering Co. under my direct supervision
based on the parameters provided by Carter Components (Sanford, NC)).
Truss Design Engineer's Name: Gilbert, Eric
My license renewal date for the state of North Carolina is December 31, 2020.
North Carolina COA: C-0844



IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to TRENCO. Any project specific information included is for TRENCO customers file reference purpose only, and was not taken into account in the preparation of these designs. TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

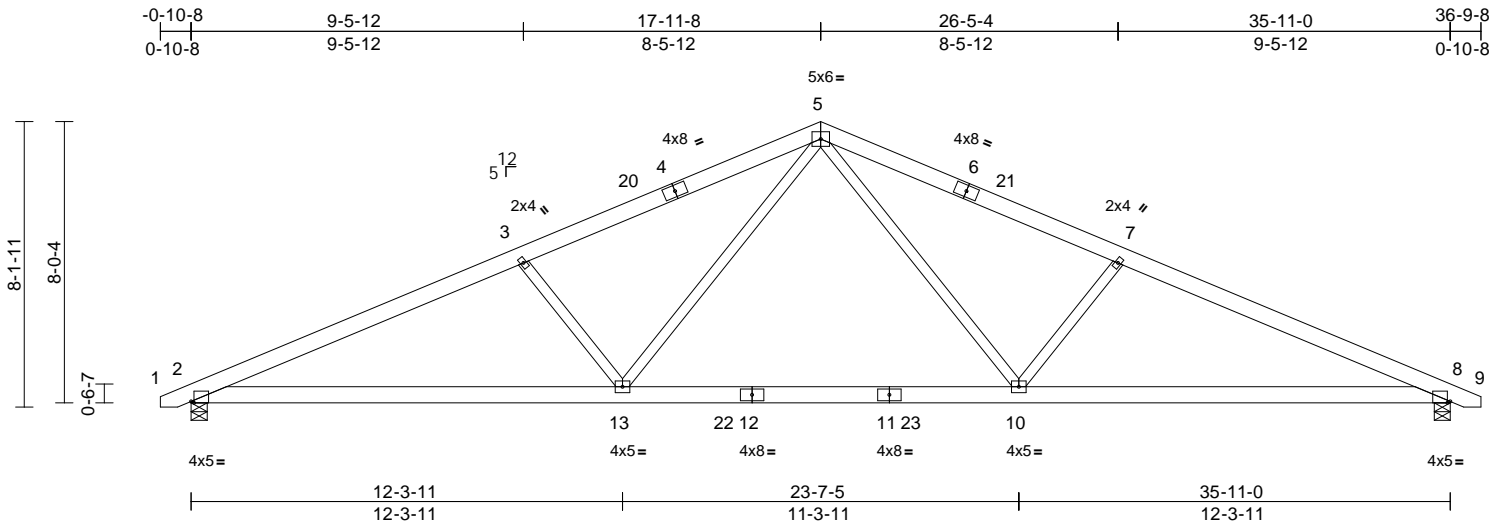
September 30, 2020

Job 20080007	Truss A01	Truss Type Common	Qty 4	Ply 1	A&G RESIDENTIAL - SVG043 Job Reference (optional)	E14786007
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.41 S May 22 2020 Print: 8.410 S May 22 2020 MiTek Industries, Inc. Tue Aug 25 18:04:32
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Page: 1



Scale = 1:65.7

Plate Offsets (X, Y): [2:0-1-0,Edge], [8:0-1-0,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	0.49	Vert(LL)	-0.23	10-13	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.39	13-16	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.09	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 220 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2
 BOT CHORD 2x6 SP No.2
 WEBS 2x4 SP No.2 *Except* 10-7,13-3:2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-6-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS

(size) 2=0-5-8, 8=0-5-8
 Max Horiz 2=73 (LC 15)
 Max Grav 2=1598 (LC 3), 8=1598 (LC 3)

FORCES

(lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/18, 2-3=-3120/0, 3-20=-2853/0,
 4-20=-2767/0, 4-5=-2759/0, 5-6=-2759/0,
 6-21=-2767/0, 7-21=-2853/0, 7-8=-3120/0,
 8-9=0/18
 BOT CHORD 2-13=-3/2844, 13-22=0/1891, 12-22=0/1891,
 11-12=0/1891, 11-23=0/1891, 10-23=0/1891,
 8-10=0/2844
 WEBS 5-10=0/1108, 7-10=-590/157, 5-13=0/1108,
 3-13=-590/157

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; 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 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 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) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



August 26, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



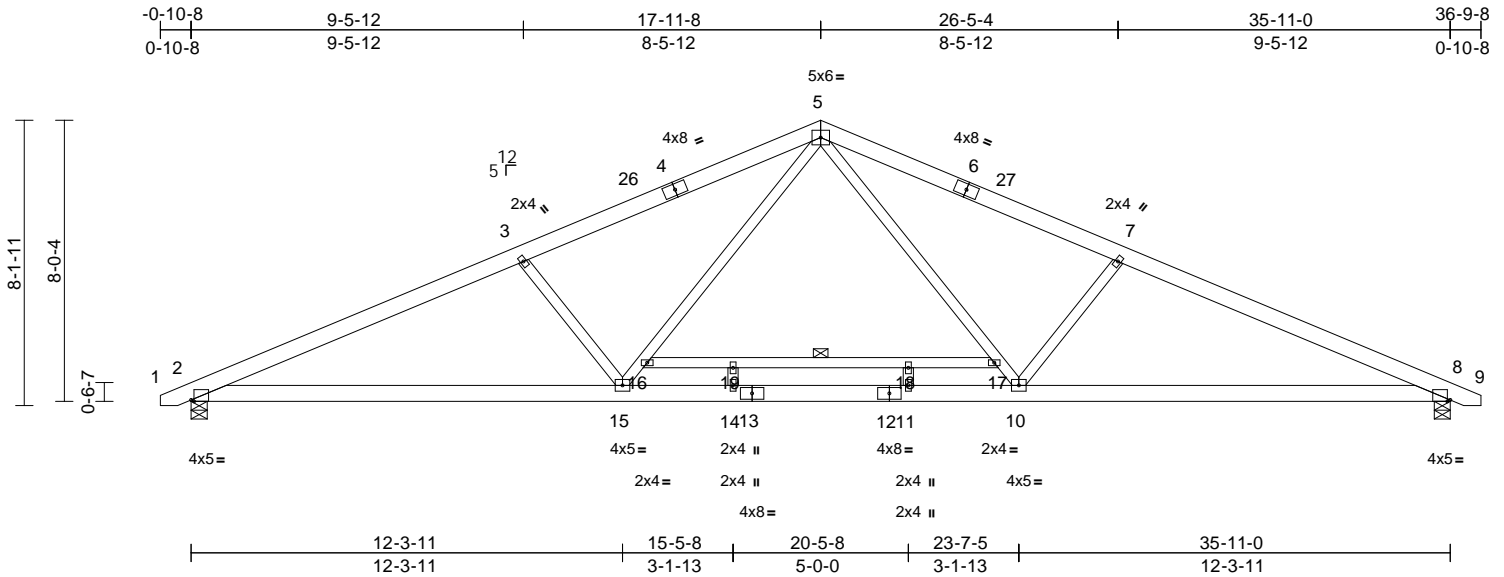
818 Soundside Road
 Edenton, NC 27932

Job 20080007	Truss A02	Truss Type Common	Qty 2	Ply 1	A&G RESIDENTIAL - SVG043 Job Reference (optional)	E14786008
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Carter Components (Sanford), Sanford, NC - 27332,

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Page: 1



Scale = 1:65.7

Plate Offsets (X, Y): [2:0-1-0,Edge], [8:0-1-0,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	0.47	Vert(LL)	-0.13	15-22	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.40	11-14	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.09	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 237 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2
 BOT CHORD 2x6 SP No.2
 WEBS 2x4 SP No.3 *Except* 10-5,15-5,16-17:2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-7-5 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

WEBS 1 Row at midpt 16-17

REACTIONS (size) 2=0-5-8, 8=0-5-8
 Max Horiz 2=73 (LC 15)
 Max Grav 2=1574 (LC 2), 8=1574 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/18, 2-3=-3150/0, 3-26=-2837/0, 4-26=-2733/0, 4-5=-2726/0, 5-6=-2726/0, 6-27=-2734/0, 7-27=-2837/0, 7-8=-3150/0, 8-9=0/18
 BOT CHORD 2-15=0/2856, 14-15=0/2019, 13-14=0/2019, 12-13=0/2019, 11-12=0/2019, 10-11=0/2019, 8-10=0/2856
 WEBS 5-17=0/1050, 10-17=0/976, 7-10=-579/168, 15-16=0/976, 5-16=0/1050, 3-15=-579/167, 16-19=-129/0, 18-19=-129/0, 17-18=-129/0, 11-18=0/24, 14-19=0/24

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; 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 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- 6) 200.0lb AC unit load placed on the bottom chord, 17-11-8 from left end, supported at two points, 5-0-0 apart.
- 7) All plates are 2x4 MT20 unless otherwise indicated.
- 8) * 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.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



August 26, 2020

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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, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



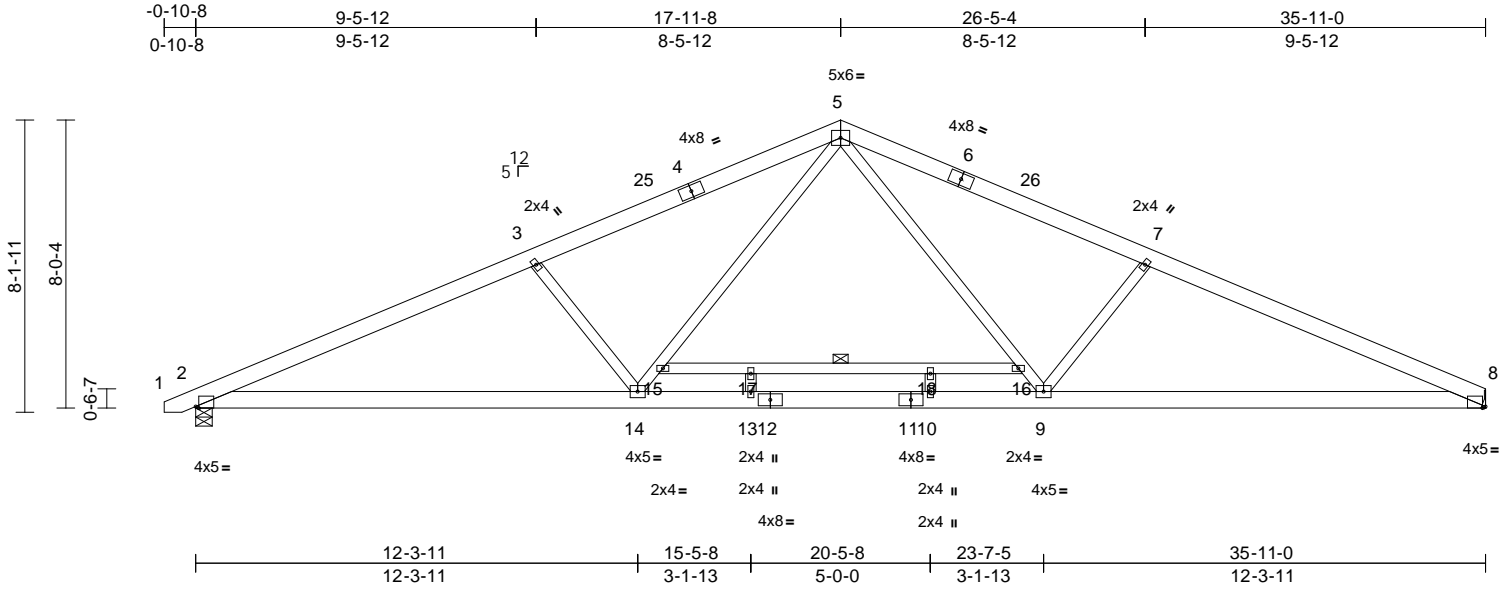
818 Soundside Road
 Edenton, NC 27932

Job 20080007	Truss A03	Truss Type Common	Qty 5	Ply 1	A&G RESIDENTIAL - SVG043 Job Reference (optional)	E14786009
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Carter Components (Sanford), Sanford, NC - 27332,

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Page: 1



Scale = 1:64.2

Plate Offsets (X, Y): [2:0-1-0,Edge], [8:0-1-0,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	0.47	Vert(LL)	-0.13	9-24	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.39	10-13	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.09	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 235 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2
 BOT CHORD 2x6 SP No.2
 WEBS 2x4 SP No.3 *Except* 9-5,14-5,15-16:2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-7-4 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 15-16

REACTIONS

(size) 2=0-5-8, 8= Mechanical
 Max Horiz 2=76 (LC 15)
 Max Grav 2=1575 (LC 2), 8=1536 (LC 2)

FORCES

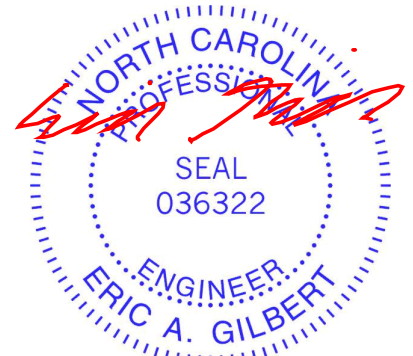
(lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/18, 2-3=-3151/0, 3-25=-2837/0, 4-25=-2734/0, 4-5=-2727/0, 5-6=-2717/0, 6-26=-2728/0, 7-26=-2839/0, 7-8=-3152/0
 BOT CHORD 2-14=0/2856, 13-14=0/2019, 12-13=0/2019, 11-12=0/2019, 10-11=0/2019, 9-10=0/2019, 8-9=0/2858
 WEBS 5-16=0/1052, 9-16=0/978, 7-9=-580/168, 14-15=0/975, 5-15=0/1050, 3-14=-579/167, 15-17=-129/0, 17-18=-129/0, 16-18=-129/0, 13-17=0/24, 10-18=0/23

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; 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 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- 6) 200.0lb AC unit load placed on the bottom chord, 17-11-8 from left end, supported at two points, 5-0-0 apart.
- 7) All plates are 2x4 MT20 unless otherwise indicated.
- 8) * 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.
- 9) Refer to girder(s) for truss to truss connections.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



August 26, 2020

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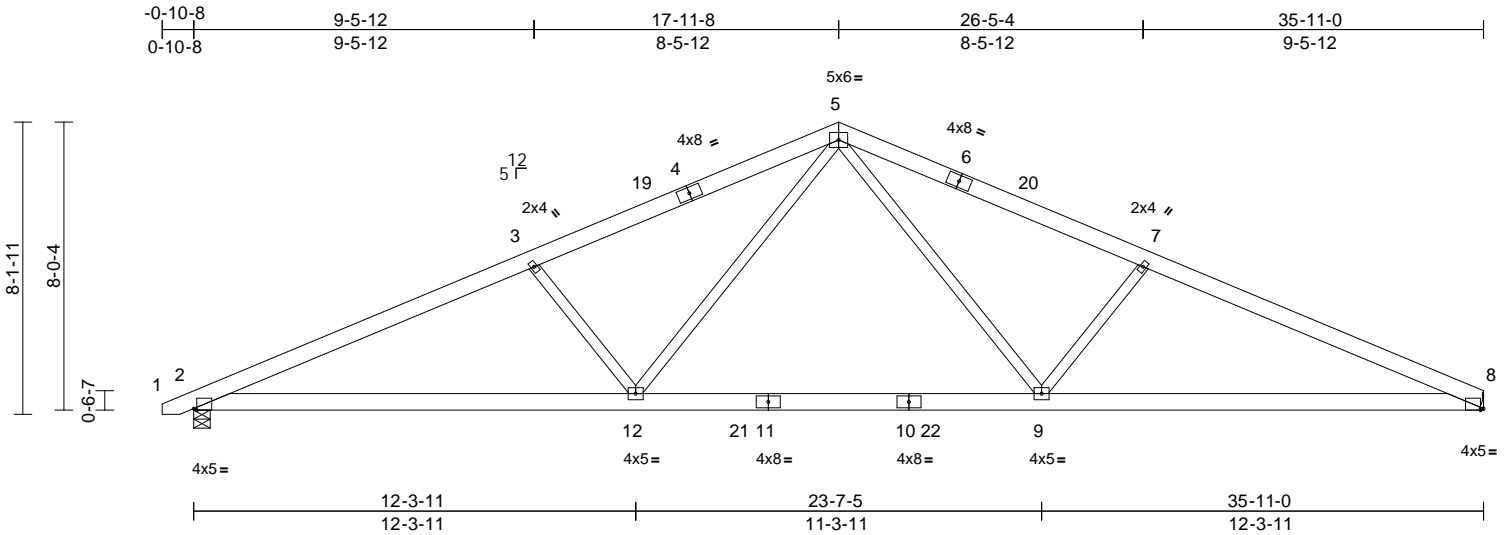
818 Soundside Road
 Edenton, NC 27932

Job 20080007	Truss A04	Truss Type Common	Qty 3	Ply 1	A&G RESIDENTIAL - SVG043 Job Reference (optional)	E14786010
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Carter Components (Sanford), Sanford, NC - 27332,

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Page: 1



Scale = 1:64.2

Plate Offsets (X, Y): [2:0-1-0,Edge], [8:0-1-0,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	Vert(LL)	-0.23	9-12	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	Vert(CT)	-0.39	9-18	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	Horz(CT)	0.09	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH							
BCDL	10.0									Weight: 218 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2
 BOT CHORD 2x6 SP No.2
 WEBS 2x4 SP No.2 *Except* 9-7,12-3;2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-5-14 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS

(size) 2=0-5-8, 8= Mechanical
 Max Horiz 2=76 (LC 15)
 Max Grav 2=1598 (LC 3), 8=1566 (LC 3)

FORCES

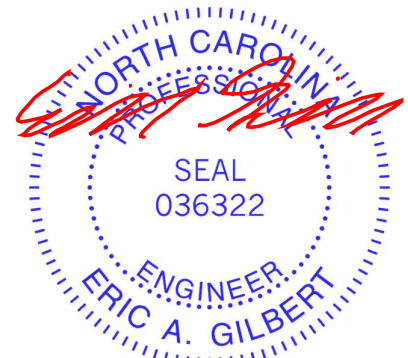
(lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/18, 2-3=-3121/0, 3-19=-2853/0, 4-19=-2767/0, 4-5=-2759/0, 5-6=-2753/0, 6-20=-2760/0, 7-20=-2855/0, 7-8=-3122/0
 BOT CHORD 2-12=-5/2845, 12-21=0/1892, 11-21=0/1892, 10-11=0/1892, 10-22=0/1892, 9-22=0/1892, 8-9=0/2847
 WEBS 5-9=0/1110, 7-9=-591/157, 5-12=0/1108, 3-12=-590/157

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; 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 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 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) Refer to girder(s) for truss connections.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



August 26, 2020

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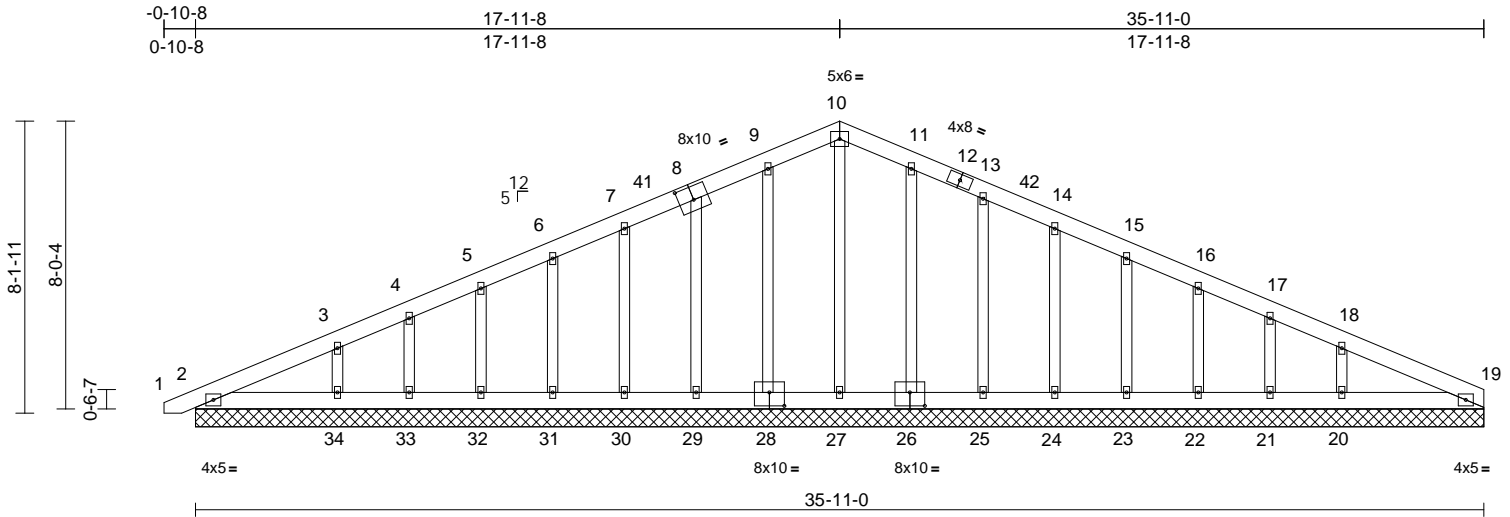
818 Soundside Road
 Edenton, NC 27932

Job 20080007	Truss A05	Truss Type Common Supported Gable	Qty 1	Ply 1	A&G RESIDENTIAL - SVG043 Job Reference (optional)	E14786011
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.41 S May 22 2020 Print: 8.410 S May 22 2020 MiTek Industries, Inc. Tue Aug 25 18:04:36
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Page: 1



Scale = 1:64.2

Plate Offsets (X, Y): [8:0-5-0,0-4-8], [26:0-5-0,0-4-8], [28:0-5-0,0-4-8]

Loading	(psf)	Spacing	1-11-4	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	0.07	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.00	19	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 267 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
OTHERS 2x4 SP No.3 *Except*
27-10,28-9,29-8,26-11,25-13:2x4 SP No.2

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

REACTIONS (size)
2=35-11-0, 19=35-11-0,
20=35-11-0, 21=35-11-0,
22=35-11-0, 23=35-11-0,
24=35-11-0, 25=35-11-0,
26=35-11-0, 27=35-11-0,
28=35-11-0, 29=35-11-0,
30=35-11-0, 31=35-11-0,
32=35-11-0, 33=35-11-0,
34=35-11-0, 35=35-11-0,
38=35-11-0

Max Horiz 2=73 (LC 15), 35=73 (LC 15)
Max Uplift 20=-25 (LC 16), 21=-7 (LC 16),
22=-12 (LC 16), 23=-11 (LC 16),
24=-11 (LC 16), 25=-15 (LC 16),
26=-2 (LC 16), 28=-6 (LC 15),
29=-14 (LC 16), 29=-9 (LC 15),
31=12 (LC 15), 32=-12 (LC 15),
33=-7 (LC 15), 34=-24 (LC 15)

Max Grav 2=174 (LC 2), 19=132 (LC 2),
20=309 (LC 36), 21=93 (LC 2),
22=168 (LC 36), 23=153 (LC 2),
24=155 (LC 2), 25=179 (LC 23),
26=188 (LC 23), 27=137 (LC 32),
28=196 (LC 22), 29=178 (LC 22),
30=148 (LC 2), 31=154 (LC 35),
32=168 (LC 35), 33=96 (LC 2),
34=303 (LC 35), 35=174 (LC 2),
38=132 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/18, 2-3=-84/46, 3-4=-73/38,
4-5=-55/52, 5-6=-47/66, 6-7=-48/80,
7-8=-61/86, 8-9=-53/93, 8-9=-75/108,
9-10=-87/119, 10-11=-87/116, 11-12=-71/96,
12-13=-76/91, 13-14=-52/73, 14-15=-60/68,
14-15=-46/51, 15-16=-37/35, 16-17=-35/21,
17-18=-48/8, 18-19=-56/34
BOT CHORD 2-34=-32/70, 33-34=-32/70, 32-33=-32/70,
31-32=-32/70, 30-31=-32/70, 29-30=-32/70,
28-29=-34/70, 27-28=-34/70, 26-27=-34/70,
25-26=-34/70, 24-25=-34/70, 23-24=-34/70,
22-23=-34/70, 21-22=-34/70, 20-21=-34/70,
19-20=-34/70
WEBS 10-27=-99/4, 9-28=-157/30, 8-29=-139/38,
7-30=-109/32, 6-31=-117/35, 5-32=-121/36,
4-33=-88/30, 3-34=-196/49, 11-26=-149/25,
13-25=-140/39, 14-24=-115/34,
15-23=-116/35, 16-22=-121/36,
17-21=-87/30, 18-20=-199/49

- Wind: ASCE 7-16; 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 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 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.

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

August 26, 2020

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road
Edenton, NC 27932

Job 20080007	Truss A05	Truss Type Common Supported Gable	Qty 1	Ply 1	A&G RESIDENTIAL - SVG043 Job Reference (optional)	E14786011
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.41 S May 22 2020 Print: 8.410 S May 22 2020 MiTek Industries, Inc. Tue Aug 25 18:04:36
ID:P7UFY_6lLmC6v_t8c4VEl5ykEPG-2OS5qcAlsjOXngTyRulqy7sSU4h78PzmWiYpWKyKE5v

Page: 2

- 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) 28, 29, 30, 31, 32, 33, 34, 26, 25, 24, 23, 22, 21, and 20. This connection is for uplift only and does not consider lateral forces.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 13) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road
Edenton, NC 27932

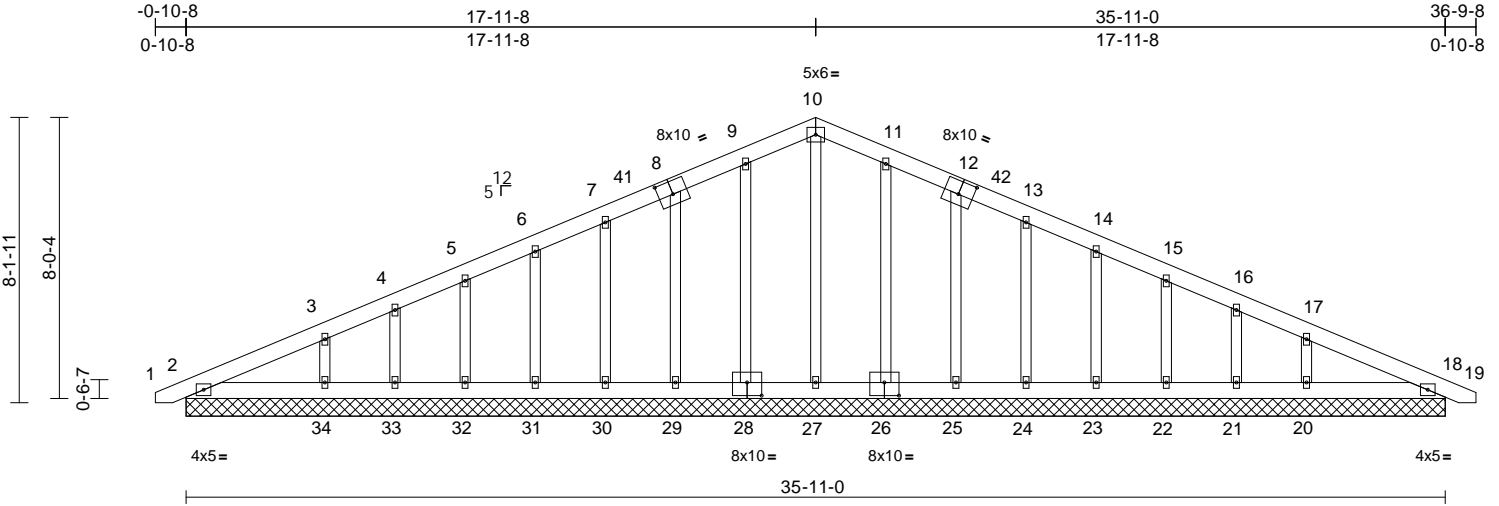
Job 20080007	Truss A06	Truss Type Common Supported Gable	Qty 1	Ply 1	A&G RESIDENTIAL - SVG043 Job Reference (optional)	E14786012
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.41 S May 22 2020 Print: 8.410 S May 22 2020 MiTek Industries, Inc. Tue Aug 25 18:04:37

Page: 1

ID:Xdn9HRGRHmqFz_NetJEHKrykEP3-Wb0T1yAwd0W0Oq28?bq3VLOdJU2Ots9vIMHMM2nykE5u



Scale = 1:65.7

Plate Offsets (X, Y): [8:0-5-0,0-4-8], [12:0-5-0,0-4-8], [26:0-5-0,0-4-8], [28:0-5-0,0-4-8]

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	0.06	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(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.00	18	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 269 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
OTHERS 2x4 SP No.3 *Except*
27-10,28-9,29-8,26-11,25-12:2x4 SP No.2

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

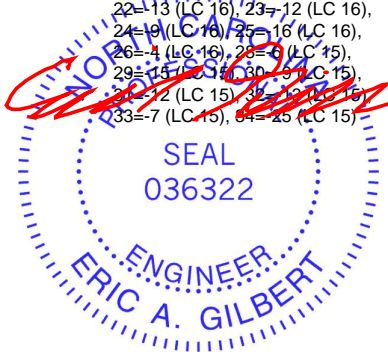
REACTIONS (size)
2=35-11-0, 18=35-11-0,
20=35-11-0, 21=35-11-0,
22=35-11-0, 23=35-11-0,
24=35-11-0, 25=35-11-0,
26=35-11-0, 27=35-11-0,
28=35-11-0, 29=35-11-0,
30=35-11-0, 31=35-11-0,
32=35-11-0, 33=35-11-0,
34=35-11-0, 35=35-11-0,
38=35-11-0

Max Horiz 2=73 (LC 15), 35=73 (LC 15)
Max Uplift 20=-24 (LC 16), 21=-8 (LC 16),
22=-13 (LC 16), 23=-12 (LC 16),
24=-19 (LC 16), 25=-16 (LC 16),
26=-4 (LC 16), 28=-6 (LC 15),
29=-15 (LC 15), 30=-15 (LC 15),
31=-12 (LC 15), 32=-16 (LC 16),
33=-7 (LC 15), 34=-25 (LC 15)

Max Grav 2=179 (LC 2), 18=179 (LC 2),
20=312 (LC 36), 21=99 (LC 2),
22=173 (LC 36), 23=158 (LC 2),
24=153 (LC 2), 25=184 (LC 23),
26=202 (LC 23), 27=142 (LC 32),
28=202 (LC 22), 29=184 (LC 22),
30=153 (LC 2), 31=158 (LC 2),
32=173 (LC 35), 33=99 (LC 2),
34=312 (LC 35), 35=179 (LC 2),
38=179 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/18, 2-3=-86/50, 3-4=-73/41,
4-5=-55/55, 5-6=-46/70, 6-7=-51/85,
7-8=-64/90, 8-9=-56/98, 8-9=-79/113,
9-10=-91/125, 10-11=-91/121,
11-12=-79/101, 12-13=-56/77, 13-14=-64/69,
13-14=-51/56, 14-15=-40/38, 15-16=-39/24,
16-17=-50/9, 17-18=-54/34, 18-19=0/18
BOT CHORD 2-3=-36/75, 33-34=-36/75, 32-33=-36/75,
31-32=-36/75, 30-31=-36/75, 29-30=-36/75,
28-29=-38/76, 27-28=-38/76, 26-27=-38/76,
25-26=-38/76, 24-25=-36/75, 23-24=-36/75,
22-23=-36/75, 21-22=-36/75, 20-21=-36/75,
18-20=-36/75
WEBS 10-27=-104/5, 9-28=-162/30, 8-29=-143/39,
7-30=-112/33, 6-31=-121/36, 5-32=-125/37,
4-33=-91/31, 3-34=-202/51, 11-26=-162/28,
12-25=-143/40, 13-24=-112/33,
14-23=-121/36, 15-22=-125/37,
16-21=-91/31, 17-20=-202/50

- Wind: ASCE 7-16; 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 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 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.



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

August 26, 2020

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road
Edenton, NC 27932

Job 20080007	Truss A06	Truss Type Common Supported Gable	Qty 1	Ply 1	A&G RESIDENTIAL - SVG043 Job Reference (optional)	E14786012
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.41 S May 22 2020 Print: 8.410 S May 22 2020 MiTek Industries, Inc. Tue Aug 25 18:04:37
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Page: 2

- 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) 28, 29, 30, 31, 32, 33, 34, 26, 25, 24, 23, 22, 21, and 20. This connection is for uplift only and does not consider lateral forces.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 13) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



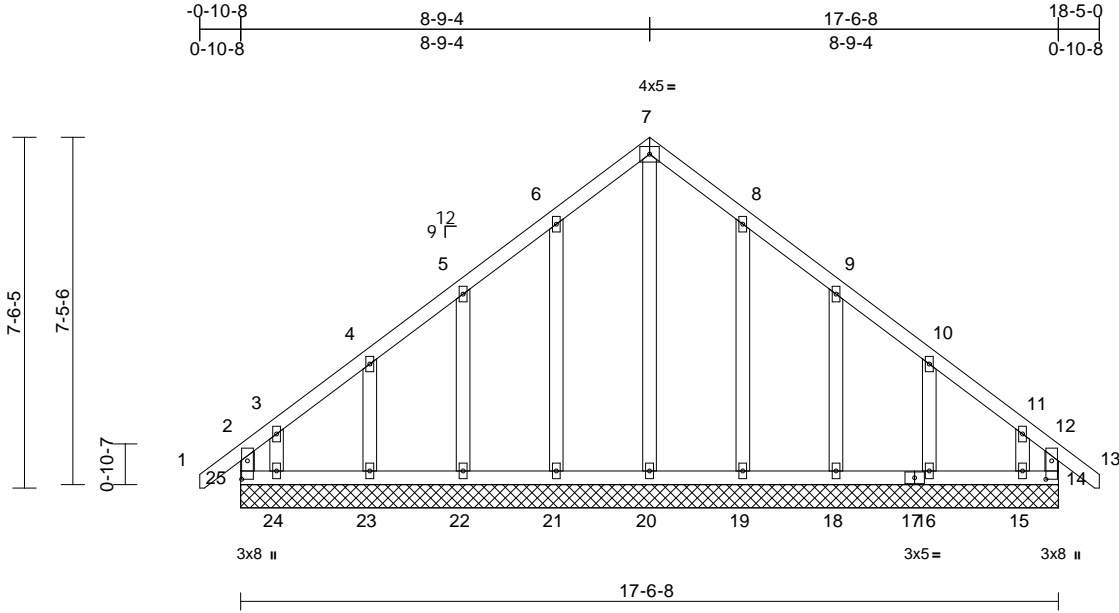
818 Soundside Road
Edenton, NC 27932

Job 20080007	Truss B01	Truss Type Common Supported Gable	Qty 1	Ply 1	A&G RESIDENTIAL - SVG043 Job Reference (optional)	E14786013
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.41 S May 22 2020 Print: 8.410 S May 22 2020 MiTek Industries, Inc. Tue Aug 25 18:04:38
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Page: 1



Scale = 1:49.4

Plate Offsets (X, Y): [14:0-4-12,0-1-8], [25:0-4-12,0-1-8]

Loading	(psf)	Spacing	1-11-4	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.09	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(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.00	14	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MR								
BCDL	10.0											
											Weight: 111 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 *Except* 20-7,21-6,19-8:2x4 SP No.2

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

REACTIONS (size)
14=17-6-8, 15=17-6-8, 16=17-6-8, 18=17-6-8, 19=17-6-8, 20=17-6-8, 21=17-6-8, 22=17-6-8, 23=17-6-8, 24=17-6-8, 25=17-6-8
Max Horiz 25=-148 (LC 11)
Max Uplift 14=-70 (LC 10), 15=-90 (LC 14), 16=-29 (LC 14), 18=-33 (LC 14), 19=-29 (LC 14), 21=-29 (LC 13), 22=-33 (LC 13), 23=-28 (LC 13), 24=-113 (LC 10), 25=-111 (LC 9)
Max Grav 14=136 (LC 25), 15=140 (LC 12), 16=166 (LC 26), 18=159 (LC 26), 19=169 (LC 26), 20=160 (LC 28), 21=170 (LC 25), 22=159 (LC 25), 23=166 (LC 25), 24=168 (LC 11), 25=170 (LC 26)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/43, 2-3=-132/116, 3-4=-85/86, 4-5=-78/77, 5-6=-81/94, 6-7=-118/121, 7-8=-118/114, 8-9=-81/84, 9-10=-55/53, 10-11=-63/63, 11-12=-97/78, 12-13=0/43, 2-25=-132/77, 12-14=-108/48

BOT CHORD 24-25=-67/79, 23-24=-67/79, 22-23=-67/79, 21-22=-67/79, 20-21=-67/79, 19-20=-67/79, 18-19=-67/79, 17-18=-67/79, 16-17=-67/79, 15-16=-67/79, 14-15=-67/79
WEBS 7-20=-121/51, 6-21=-131/53, 5-22=-120/55, 4-23=-127/55, 3-24=-99/76, 8-19=-130/52, 9-18=-120/55, 10-16=-128/55, 11-15=-94/71

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; 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 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 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.

- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 25, 21, 22, 23, 24, 19, 18, 16, 15, and 14. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



August 26, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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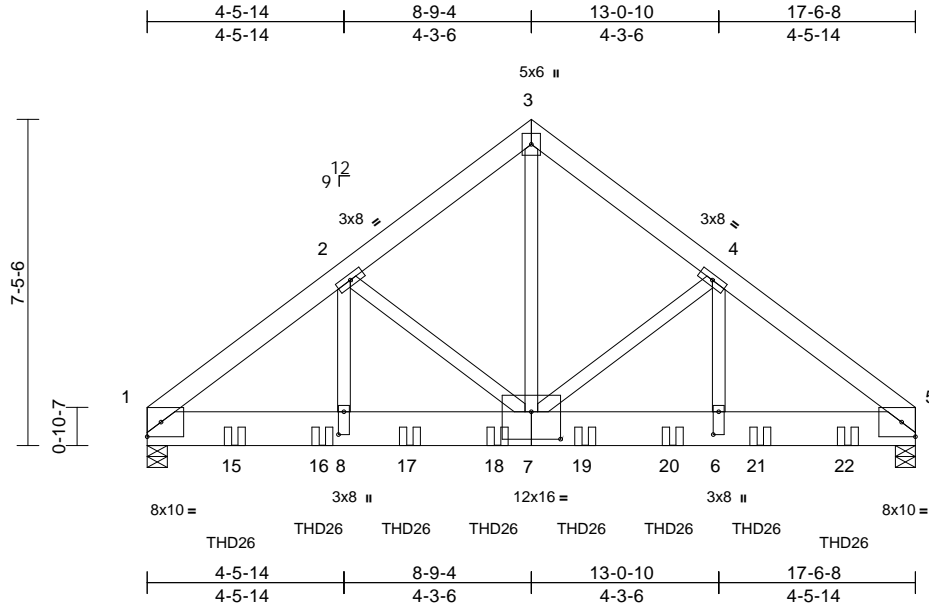
818 Soundside Road
Edenton, NC 27932

Job 20080007	Truss B02	Truss Type Common Girder	Qty 1	Ply 2	A&G RESIDENTIAL - SVG043 Job Reference (optional)	E14786014
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Carter Components (Sanford), Sanford, NC - 27332,

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Page: 1



Scale = 1:52.6

Plate Offsets (X, Y): [6:0-6-4,0-1-8], [7:0-8-0,0-7-8], [8:0-6-4,0-1-8]

Loading	(psf)	Spacing	1-11-4	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	-0.06	6-7	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.13	6-7	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.85	Horz(CT)	0.03	5	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 309 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2
 BOT CHORD 2x10 SP No.2
 WEBS 2x4 SP No.3 *Except* 7-3:2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-2-15 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 1=0-5-8, 5=0-5-8
 Max Horiz 1=120 (LC 8)
 Max Grav 1=6357 (LC 2), 5=6838 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=-8275/0, 2-3=-6099/0, 3-4=-6100/0, 4-5=-8484/0
 BOT CHORD 1-15=0/6541, 15-16=0/6541, 8-16=0/6541, 8-17=0/6541, 17-18=0/6541, 7-18=0/6541, 7-19=0/6725, 19-20=0/6725, 6-20=0/6725, 6-21=0/6725, 21-22=0/6725, 5-22=0/6725
 WEBS 2-8=0/2834, 2-7=-2393/0, 3-7=0/6892, 4-7=-2429/0, 4-6=0/2831

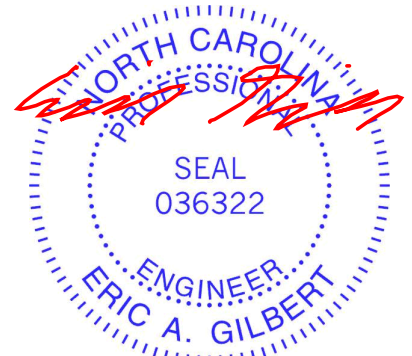
NOTES

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
 Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-6-0 oc.
 Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.33
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- * 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.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Use USP THD26 (With 18-16d nails into Girder & 12-10d x 1-1/2 nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-0-0 from the left end to 16-0-0 to connect truss(es) to back face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (lb/ft)
 Vert: 1-3=-46, 3-5=-46, 9-12=-19
 Concentrated Loads (lb)
 Vert: 15=-1197 (B), 16=-1197 (B), 17=-1197 (B), 18=-1297 (B), 19=-1297 (B), 20=-1297 (B), 21=-1297 (B), 22=-1297 (B)



August 26, 2020

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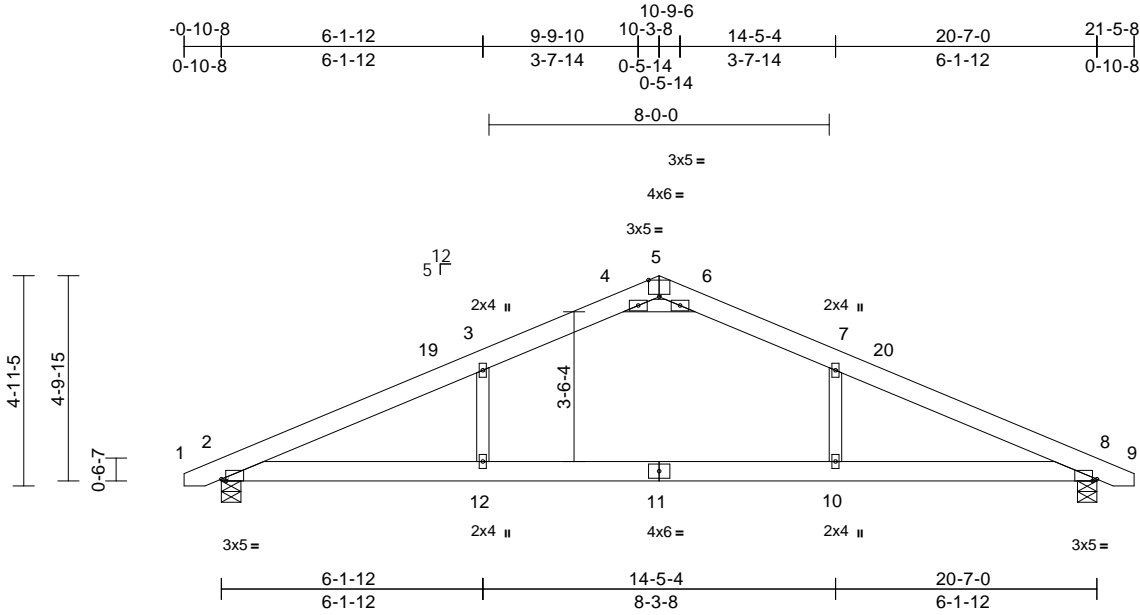
818 Soundside Road
 Edenton, NC 27932

Job 20080007	Truss C01	Truss Type Common	Qty 5	Ply 1	A&G RESIDENTIAL - SVG043 Job Reference (optional)	E14786015
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.41 S May 22 2020 Print: 8.410 S May 22 2020 MiTek Industries, Inc. Tue Aug 25 18:04:39
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Page: 1



Scale = 1:54.2

Plate Offsets (X, Y): [2:0-1-4,Edge], [5:0-3-0,Edge], [8:0-1-4,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	0.78	Vert(LL)	-0.14	12-15	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.27	10-12	>905	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.02	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 114 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-10-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 2=0-5-8, 8=0-5-8
Max Horiz 2=-43 (LC 20)
Max Grav 2=861 (LC 2), 8=861 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension

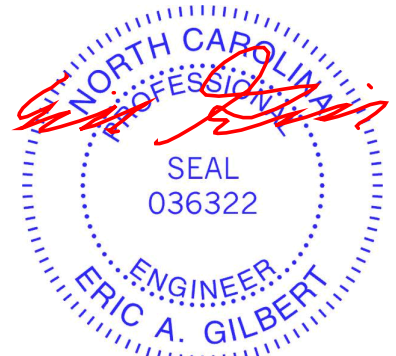
TOP CHORD 1-2=0/18, 2-19=-1395/0, 3-19=-1295/0, 3-4=-1199/13, 4-5=0/1076, 5-6=0/1076, 6-7=-1199/13, 7-20=-1295/0, 8-20=-1395/0, 8-9=0/18
BOT CHORD 2-12=0/1196, 11-12=0/1196, 10-11=0/1196, 8-10=0/1196
WEBS 3-12=0/241, 7-10=0/241, 4-6=-2364/0

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; 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 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.

- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 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) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



August 26, 2020

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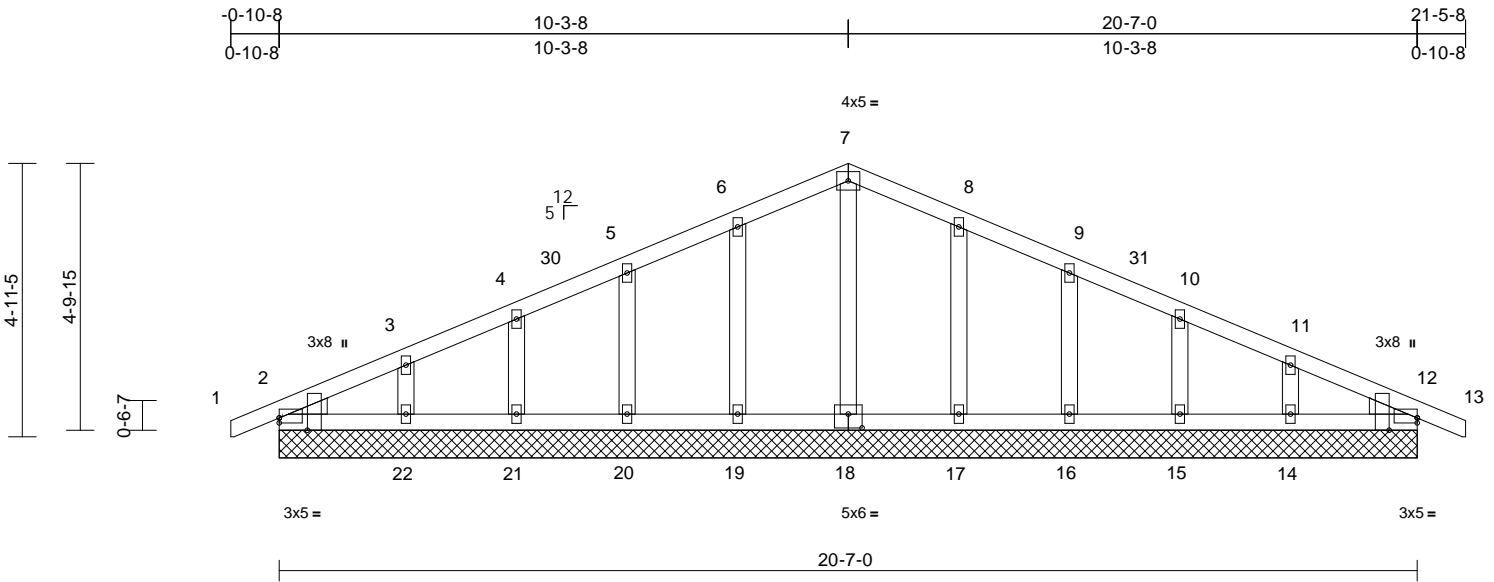
818 Soundside Road
Edenton, NC 27932

Job 20080007	Truss C02	Truss Type Common Supported Gable	Qty 1	Ply 1	A&G RESIDENTIAL - SVG043 Job Reference (optional)	E14786016
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.41 S May 22 2020 Print: 8.410 S May 22 2020 MiTek Industries, Inc. Tue Aug 25 18:04:39
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Page: 1



Scale = 1:41.7

Plate Offsets (X, Y): [2:Edge,0-1-1], [2:0-2-11,Edge], [12:Edge,0-1-1], [12:0-2-11,Edge], [18:0-3-0,0-3-0]

Loading	(psf)	Spacing	1-11-4	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	0.03	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	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 101 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.2
Right: 2x4 SP No.2

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

REACTIONS (size)
2=20-7-0, 12=20-7-0, 14=20-7-0, 15=20-7-0, 16=20-7-0, 17=20-7-0, 18=20-7-0, 19=20-7-0, 20=20-7-0, 21=20-7-0, 22=20-7-0, 23=20-7-0, 27=20-7-0
Max Horiz 2=42 (LC 15), 23=42 (LC 15)
Max Uplift 2=5 (LC 11), 12=6 (LC 12), 14=18 (LC 16), 15=10 (LC 16), 16=12 (LC 16), 17=12 (LC 16), 19=13 (LC 15), 20=12 (LC 15), 21=9 (LC 15), 22=21 (LC 15), 23=5 (LC 11), 27=6 (LC 12)
Max Grav 2=140 (LC 2), 12=140 (LC 2), 14=175 (LC 36), 15=150 (LC 2), 16=178 (LC 23), 17=193 (LC 23), 18=133 (LC 2), 19=193 (LC 22), 20=178 (LC 22), 21=150 (LC 2), 22=175 (LC 35), 23=140 (LC 2), 27=140 (LC 2)

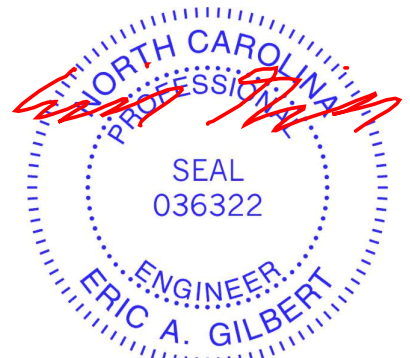
FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/24, 2-3=-44/26, 3-4=-46/31, 4-30=-38/37, 5-30=-24/45, 5-6=-43/59, 6-7=-58/73, 7-8=-58/70, 8-9=-43/47, 9-31=-24/27, 10-31=-38/20, 10-11=-38/13, 11-12=-28/14, 12-13=0/24

BOT CHORD 2-22=-18/43, 21-22=-18/43, 20-21=-18/43, 19-20=-18/43, 18-19=-18/43, 17-18=-18/43, 16-17=-18/43, 15-16=-18/43, 14-15=-18/43, 12-14=-18/43
WEBS 7-18=-94/0, 6-19=-155/36, 5-20=-139/35, 4-21=-115/35, 3-22=-120/36, 8-17=-155/36, 9-16=-139/35, 10-15=-115/35, 11-14=-120/35

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; 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 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 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, 19, 20, 21, 22, 17, 16, 15, 14, and 12. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



August 26, 2020

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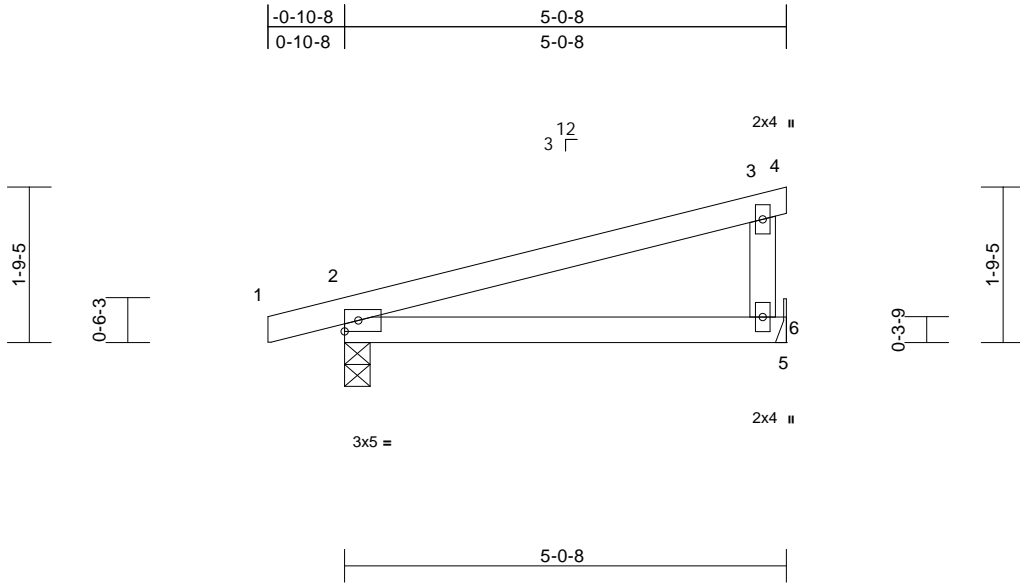
818 Soundside Road
Edenton, NC 27932

Job 20080007	Truss J01	Truss Type Monopitch	Qty 8	Ply 1	A&G RESIDENTIAL - SVG043 Job Reference (optional)	E14786017
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.41 S May 22 2020 Print: 8.410 S May 22 2020 MiTek Industries, Inc. Tue Aug 25 18:04:40
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Page: 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	0.38	Vert(LL)	0.03	6-9	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.05	6-9	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	2	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0											
										Weight: 18 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.

REACTIONS (size) 2=0-3-8, 6= Mechanical
Max Horiz 2=43 (LC 14)
Max Uplift 2=-67 (LC 11), 6=-45 (LC 11)
Max Grav 2=273 (LC 22), 6=230 (LC 22)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-3=-45/66, 3-4=-4/0, 3-6=-162/32
BOT CHORD 2-6=-29/84, 5-6=0/0

- * 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.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 45 lb uplift at joint 6.
 - 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.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- LOAD CASE(S)** Standard

- NOTES**
- Wind: ASCE 7-16; 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; porch 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 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.



August 26, 2020

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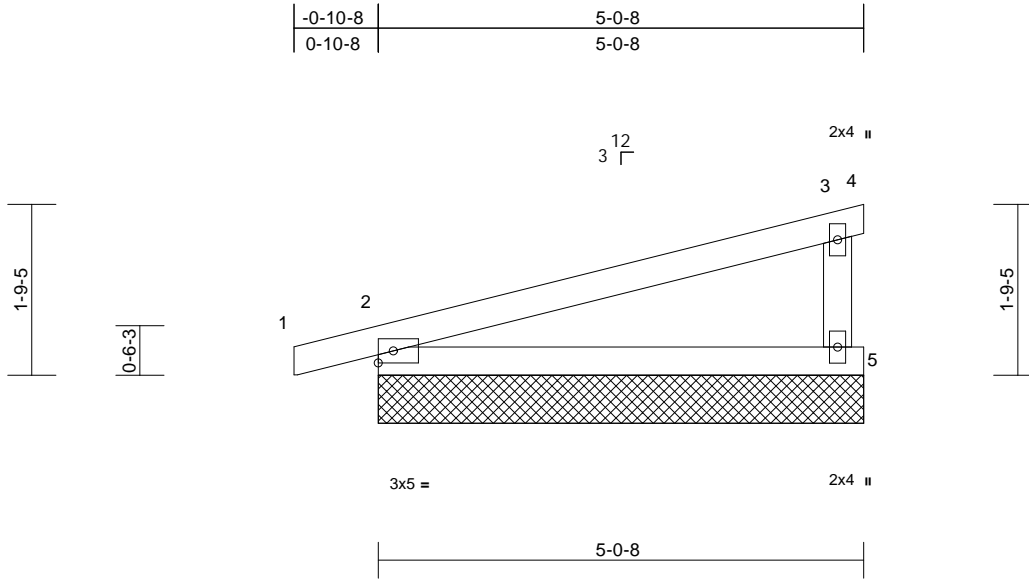
818 Soundside Road
Edenton, NC 27932

Job 20080007	Truss J02	Truss Type Monopitch Supported Gable	Qty 2	Ply 1	A&G RESIDENTIAL - SVG043 Job Reference (optional)	E14786018
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.41 S May 22 2020 Print: 8.410 S May 22 2020 MiTek Industries, Inc. Tue Aug 25 18:04:40
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Page: 1



Scale = 1:23.9

Loading	(psf)	Spacing	1-11-4	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	2	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 18 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.

REACTIONS

(size) 2=5-0-8, 5=5-0-8, 6=5-0-8
Max Horiz 2=42 (LC 14), 6=42 (LC 14)
Max Uplift 2=-24 (LC 11), 5=-5 (LC 15), 6=-24 (LC 11)
Max Grav 2=265 (LC 22), 5=222 (LC 22), 6=265 (LC 22)

FORCES

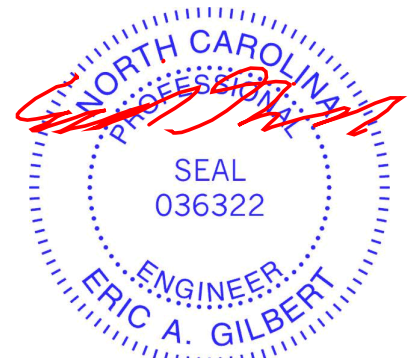
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/15, 2-3=-48/54, 3-4=-4/0, 3-5=-157/26
BOT CHORD 2-5=-32/78

NOTES

- 1) Wind: ASCE 7-16; 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 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.

- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 2-0-0 oc.
- 8) * 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.
- 9) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 5. This connection is for uplift only and does not consider lateral forces.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



August 26, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

ENGINEERING BY
TRENCO
A MiTek Affiliate

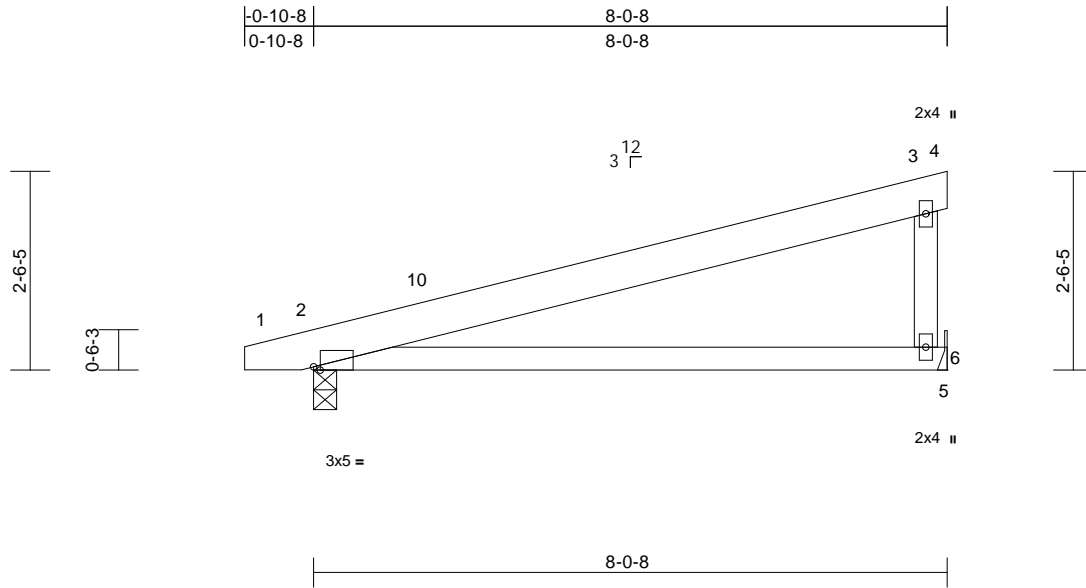
818 Soundside Road
Edenton, NC 27932

Job 20080007	Truss J03	Truss Type Monopitch	Qty 6	Ply 1	A&G RESIDENTIAL - SVG043 Job Reference (optional)	E14786019
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.41 S May 22 2020 Print: 8.410 S May 22 2020 MiTek Industries, Inc. Tue Aug 25 18:04:40
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Page: 1



Scale = 1:29.2

Plate Offsets (X, Y): [2:0-1-0,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	0.57	Vert(LL)	0.12	6-9	>759	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.20	6-9	>464	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	2	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 36 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size) 2=0-3-8, 6= Mechanical
Max Horiz 2=62 (LC 14)
Max Uplift 2=-84 (LC 11), 6=-75 (LC 11)
Max Grav 2=342 (LC 2), 6=363 (LC 22)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/9, 2-10=-234/45, 3-10=-52/64,
3-4=-4/0, 3-6=-282/59
BOT CHORD 2-6=-38/162, 5-6=0/0

NOTES

- 1) Wind: ASCE 7-16; 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; porch 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 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15
Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum
DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully
Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this
design.
- 4) This truss has been designed for greater of min roof live
load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on
overhangs non-concurrent with other live loads.

- 5) * This truss has been designed for a live load of 20.0psf
on the bottom chord in all areas where a rectangle
3-06-00 tall by 2-00-00 wide will fit between the bottom
chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 75 lb uplift at joint
6.
- 8) 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.
- 9) This truss is designed in accordance with the 2018
International Residential Code sections R502.11.1 and
R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



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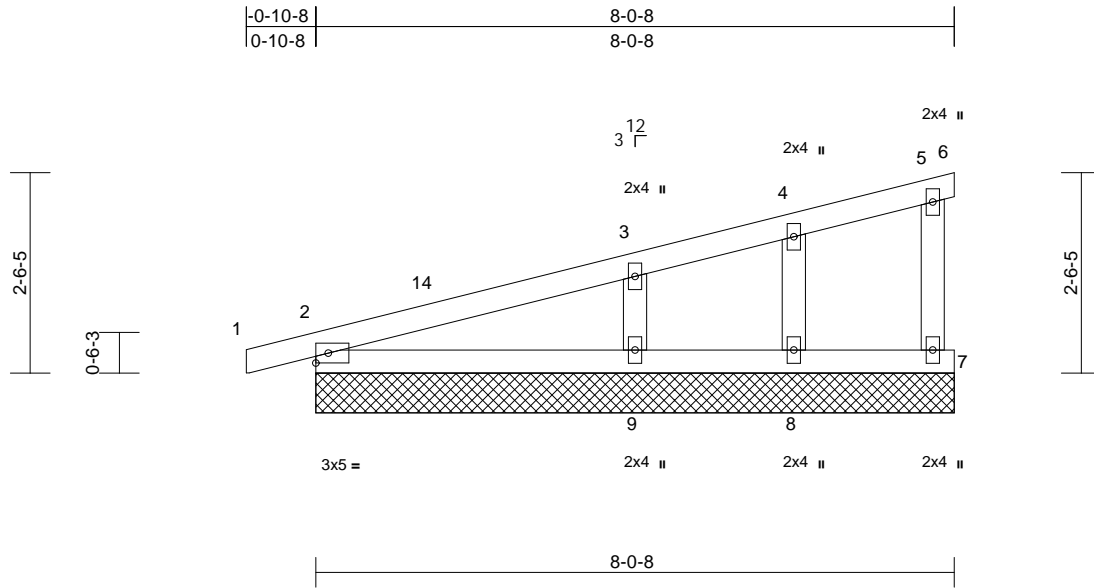
818 Soundside Road
Edenton, NC 27932

Job 20080007	Truss J04	Truss Type Monopitch Supported Gable	Qty 2	Ply 1	A&G RESIDENTIAL - SVG043 Job Reference (optional)	E14786020
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Carter Components (Sanford), Sanford, NC - 27332,

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Page: 1



Scale = 1:29

Loading	(psf)	Spacing	1-11-4	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.17	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(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 32 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=8-0-8, 7=8-0-8, 8=8-0-8, 9=8-0-8, 10=8-0-8
Max Horiz	2=63 (LC 14), 10=63 (LC 14)
Max Uplift	2=-19 (LC 11), 7=-2 (LC 15), 8=-4 (LC 11), 9=-15 (LC 15), 10=-19 (LC 11)
Max Grav	2=184 (LC 2), 7=90 (LC 22), 8=109 (LC 22), 9=330 (LC 22), 10=184 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/15, 2-14=-43/59, 3-14=-38/71, 3-4=-40/42, 4-5=-35/40, 5-6=-4/0, 5-7=-72/10
BOT CHORD	2-9=-37/70, 8-9=-34/38, 7-8=-34/38
WEBS	3-9=-234/48, 4-8=-94/24

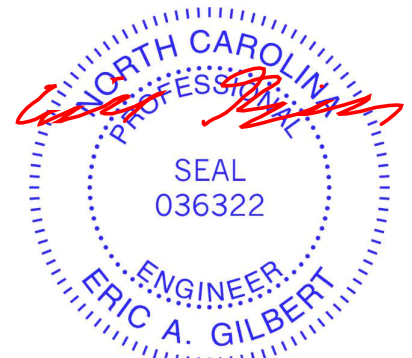
NOTES

- 1) Wind: ASCE 7-16; 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 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 2-0-0 oc.
- 8) * 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.
- 9) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 7, 9, and 8. This connection is for uplift only and does not consider lateral forces.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S)

Standard



August 26, 2020

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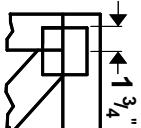
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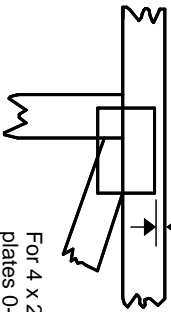
818 Soundside Road
Edenton, NC 27932

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- 1/16" from outside edge of truss.



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

* Plate location details available in **MITek 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



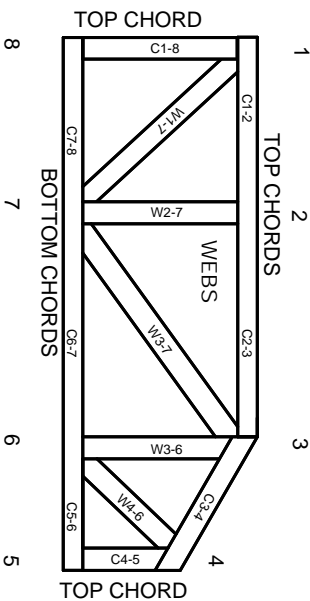
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI 1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing, 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.

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MITek Engineering Reference Sheet: Mill-7473 rev. 5/19/2020

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 T or 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.
21. The design does not take into account any dynamic or other loads other than those expressly stated.