

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 20020079
KMB - Cedar Plan

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Carter Components (Sanford, NC)).

Pages or sheets covered by this seal: E14101460 thru E14101472

My license renewal date for the state of North Carolina is December 31, 2020.

North Carolina COA: C-0844



February 21, 2020

Gilbert, Eric

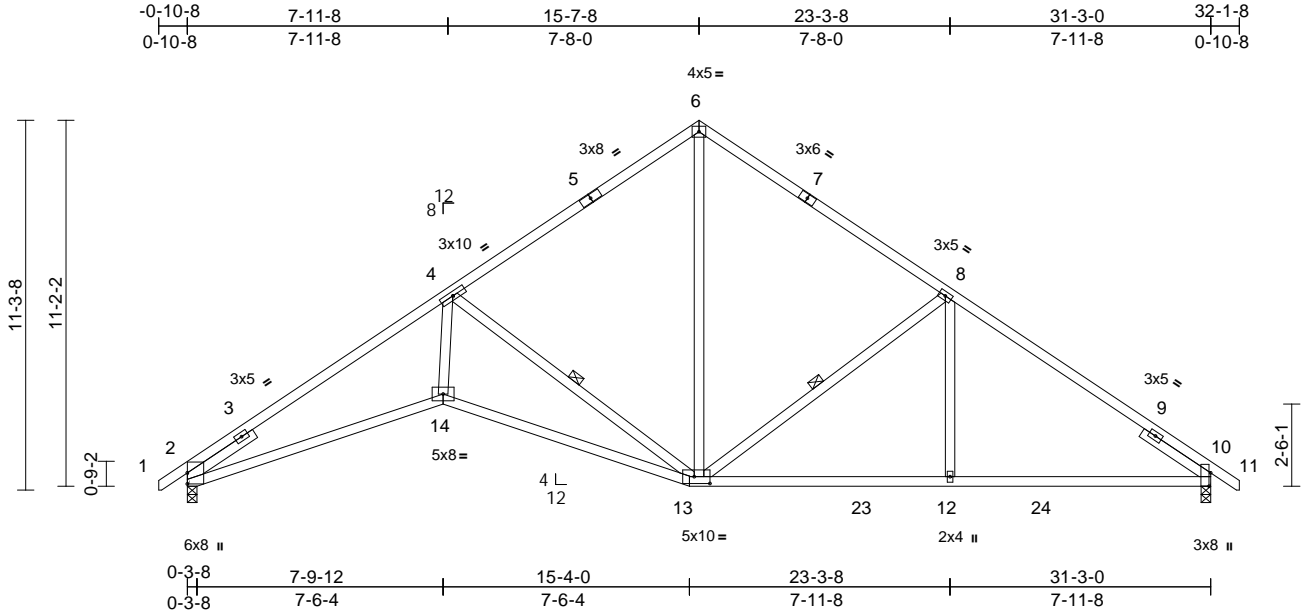
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or 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.

Job 20020079	Truss A1	Truss Type Roof Special	Qty 7	Ply 1	KMB - Cedar Plan Job Reference (optional)	E14101460
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MiTek Industries, Inc. Fri Feb 21 15:07:32
ID:c:DVEMi?PINC5J7HwoVrpuDziy5t-ZvCijBYcaPAxbxEkd?LPaxpvXHeSgE1Yy67Mrzidh

Page: 1



Scale = 1:70.4

Plate Offsets (X, Y): [10:0-4-14,Edge], [13:0-5-12,0-2-8]

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	0.80	Vert(LL)	-0.20	13-14	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.49	13-14	>766	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.25	10	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 171 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.1 *Except* 1-5,7-11:2x4 SP 2400F 2.0E
 BOT CHORD 2x4 SP No.2 *Except* 2-14:2x4 SP No.1
 WEBS 2x4 SP No.2 *Except* 14-4:2x4 SP No.3
 SLIDER Left 2x4 SP No.3 -- 2-6-0, Right 2x4 SP No.3 -- 2-6-0

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 2-14.
 WEBS 1 Row at midpt 4-13, 8-13

REACTIONS

(lb/size) 2=1098/0-3-8, 10=1098/0-3-8
 Max Horiz 2=217 (LC 12)
 Max Grav 2=1300 (LC 2), 10=1318 (LC 26)

FORCES

(lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/35, 2-3=-584/0, 3-4=-2970/438, 4-5=-1245/315, 5-6=-1100/338, 6-7=-1085/333, 7-8=-1230/311, 8-9=-1708/312, 9-10=-601/0, 10-11=0/35
 BOT CHORD 2-14=-256/2631, 13-14=-251/2556, 13-23=-127/1378, 12-23=-127/1378, 12-24=-127/1378, 10-24=-127/1378
 WEBS 4-14=-70/1727, 4-13=-1824/350, 6-13=-181/840, 8-13=-715/226, 8-12=0/356

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
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Bearings are assumed to be: Joint 2 SP No.1 crushing capacity of 565 psi, Joint 10 SP No.2 crushing capacity of 565 psi.
- Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 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



February 21, 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.



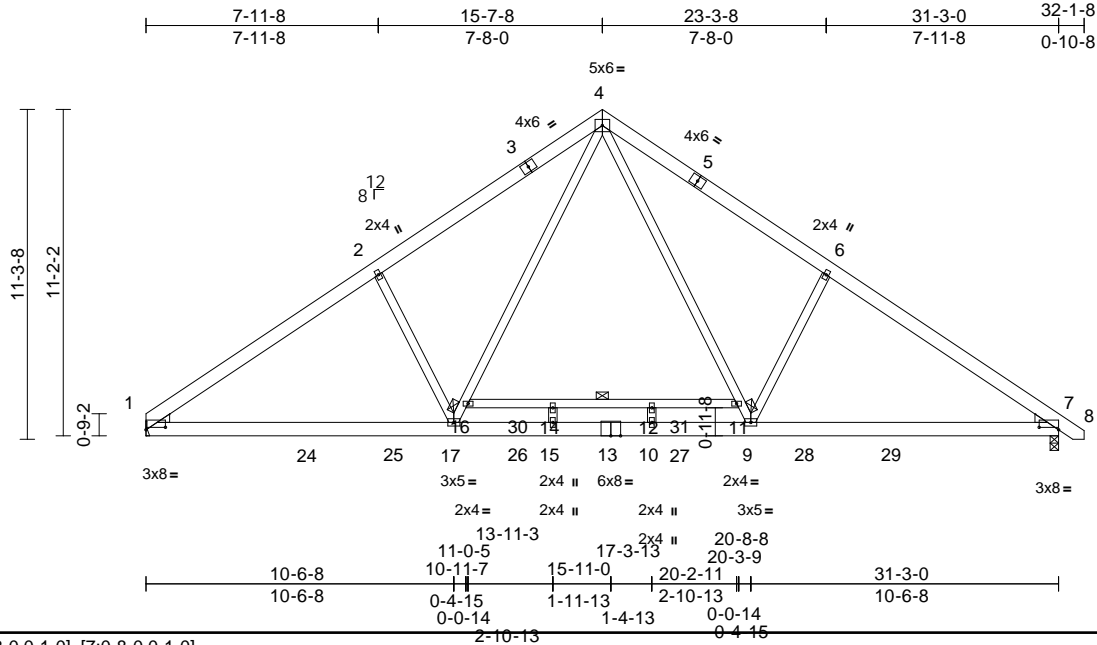
818 Soundside Road
Edenton, NC 27932

Job 20020079	Truss A2	Truss Type Common	Qty 10	Ply 1	KMB - Cedar Plan Job Reference (optional)	E14101461
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MiTek Industries, Inc. Fri Feb 21 15:07:34
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Page: 1



Scale = 1:78.9

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	-0.23	12-14	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.38	12-14	>995	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.05	7	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 232 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2
 BOT CHORD 2x6 SP No.2 *Except* 16-11:2x4 SP No.2
 WEBS 2x4 SP No.2 *Except* 14-15,12-10:2x4 SP No.3
 WEDGE Left: 2x4 SP No.3
 Right: 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-10-2 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
 6-0-0 oc bracing: 11-16

REACTIONS

(lb/size) 1=1153/ Mechanical, 7=1186/0-3-8
 Max Horiz 1=212 (LC 9)
 Max Grav 1=1500 (LC 25), 7=1538 (LC 26)

FORCES

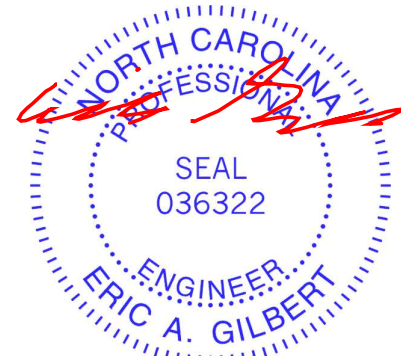
(lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=-2210/227, 2-3=-2060/294,
 3-4=-1915/317, 4-5=-1934/316,
 5-6=-2059/293, 6-7=-2209/226, 7-8=0/28
 BOT CHORD 1-24=-81/1893, 24-25=-62/1893,
 17-25=-62/1893, 17-26=0/1351,
 15-26=0/1351, 13-15=0/1351, 10-13=0/1351,
 10-27=0/1351, 9-27=0/1351, 9-28=-61/1743,
 28-29=-61/1743, 7-29=-61/1743,
 16-30=-111/1, 14-30=-111/1, 12-14=-111/1,
 12-31=-111/1, 11-31=-111/1
 WEBS 16-17=-107/966, 4-16=-87/1060,
 2-17=-445/289, 4-11=-86/1058,
 9-11=-107/963, 6-9=-445/289, 14-15=-145/0,
 10-12=-145/0

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
- 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.
- * 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.
- Bearings are assumed to be: , Joint 7 SP No.2 crushing
 capacity of 565 psi.
- Refer to girder(s) for truss to truss connections.
- 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



February 21, 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.



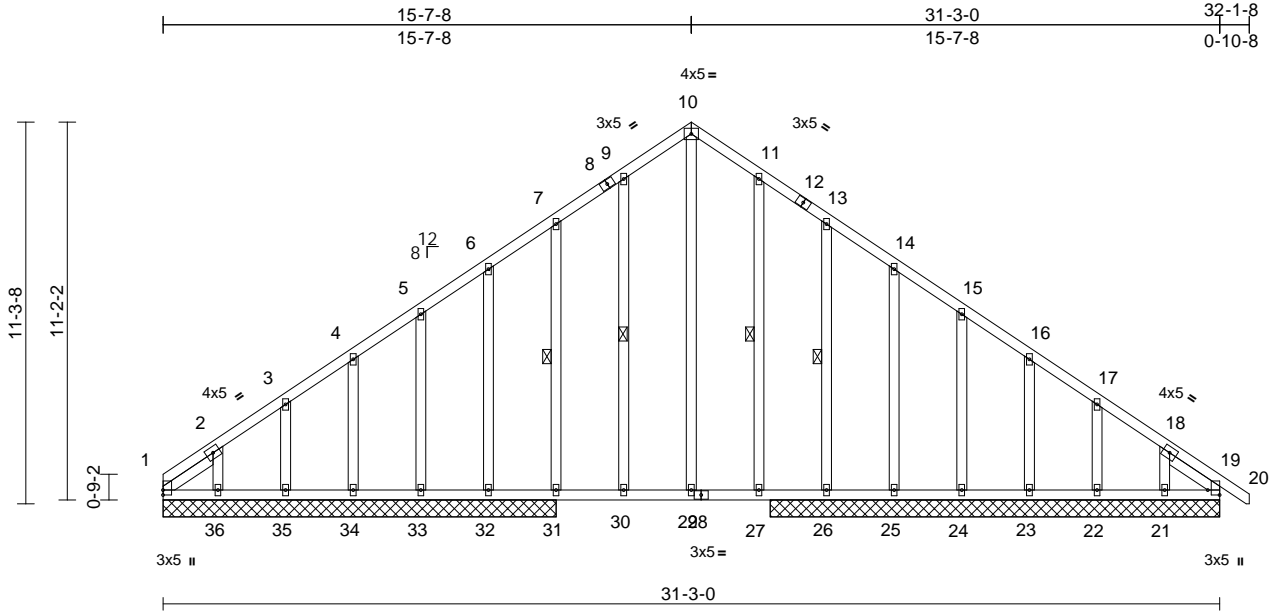
818 Soundside Road
 Edenton, NC 27932

Job 20020079	Truss A3	Truss Type Common	Qty 1	Ply 1	KMB - Cedar Plan Job Reference (optional)	E14101462
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MiTek Industries, Inc. Fri Feb 21 15:07:34
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Page: 1



Scale = 1:68.1

Plate Offsets (X, Y): [19:Edge,0-4-3]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	-0.01	29-30	>999	240
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	-0.03	27-29	>999	180
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.01	19	n/a	n/a
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH						
BCDL	10.0									
										Weight: 236 lb FT = 20%

LUMBER		FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	2x4 SP No.2	TOP CHORD	1-2=-134/0, 2-3=-330/23, 3-4=-320/0, 4-5=-310/0, 5-6=-303/0, 6-7=-282/0, 7-8=-315/51, 8-9=-259/55, 9-10=-273/105, 10-11=-273/105, 11-12=-259/55, 12-13=-315/48, 13-14=-279/0, 14-15=-295/0, 15-16=-300/0, 16-17=-311/0, 17-18=-326/23, 18-19=-117/16, 19-20=0/35
BOT CHORD	2x4 SP No.2	BOT CHORD	1-36=-75/298, 35-36=-75/298, 34-35=-75/298, 33-34=-75/298, 32-33=-75/298, 31-32=-75/298, 30-31=-75/298, 29-30=-75/298, 28-29=-75/298, 27-28=-75/298, 26-27=-75/298, 25-26=-75/298, 24-25=-75/298, 23-24=-75/298, 22-23=-75/298, 21-22=-75/298, 19-21=-75/298
OTHERS	2x4 SP No.2 *Except* 34-4,35-3,36-2,23-16,22-17,21-18:2x4 SP No.3	WEBS	10-29=-39/148, 9-30=-61/63, 7-31=-196/82, 6-32=-109/85, 5-33=-133/81, 4-34=-126/82, 3-35=-130/80, 2-36=-137/139, 11-27=-61/63, 13-26=-191/82, 14-25=-109/85, 15-24=-132/81, 16-23=-126/82, 17-22=-130/81, 18-21=-137/137
SLIDER	Left 2x4 SP No.3 -- 1-10-2, Right 2x4 SP No.3 -- 1-10-2	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
BRACING			
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.		
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.		
WEBS	1 Row at midpt 9-30, 7-31, 11-27, 13-26		
REACTIONS	(lb/size)		
	1=216/11-7-8, 19=267/13-3-8, 21=66/13-3-8, 22=144/13-3-8, 23=130/13-3-8, 24=151/13-3-8, 25=73/13-3-8, 26=267/13-3-8, 31=267/11-7-8, 32=73/11-7-8, 33=151/11-7-8, 34=130/11-7-8, 35=142/11-7-8, 36=78/11-7-8, 37=216/11-7-8, 41=267/13-3-8		
	Max Horiz 1=-213 (LC 9), 37=-213 (LC 9)		
	Max Uplift 21=-102 (LC 14), 22=-24 (LC 14), 23=-31 (LC 14), 24=-27 (LC 14), 25=-39 (LC 14), 26=-26 (LC 14), 31=-33 (LC 13), 32=-34 (LC 13), 33=-28 (LC 13), 34=-31 (LC 13), 35=-24 (LC 13), 36=-104 (LC 13)		
	Max Grav 1=295 (LC 27), 19=329 (LC 28), 21=118 (LC 26), 22=173 (LC 26), 23=160 (LC 26), 24=184 (LC 26), 25=95 (LC 26), 26=321 (LC 26), 31=332 (LC 25), 32=88 (LC 25), 33=185 (LC 25), 34=160 (LC 25), 35=171 (LC 25), 36=135 (LC 25), 37=295 (LC 27), 41=329 (LC 28)		

- 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
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.



February 21, 2020

Continued on page 2

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818 Soundside Road
Edenton, NC 27932

Job 20020079	Truss A3	Truss Type Common	Qty 1	Ply 1	KMB - Cedar Plan Job Reference (optional)	E14101462
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Carter Components (Sanford), Sanford, NC - 27332,

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Page: 2

- 10) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 31, 32, 33, 34, 35, 36, 26, 25, 24, 23, 22, and 21. This connection is for uplift only and does not consider lateral forces.
- 11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

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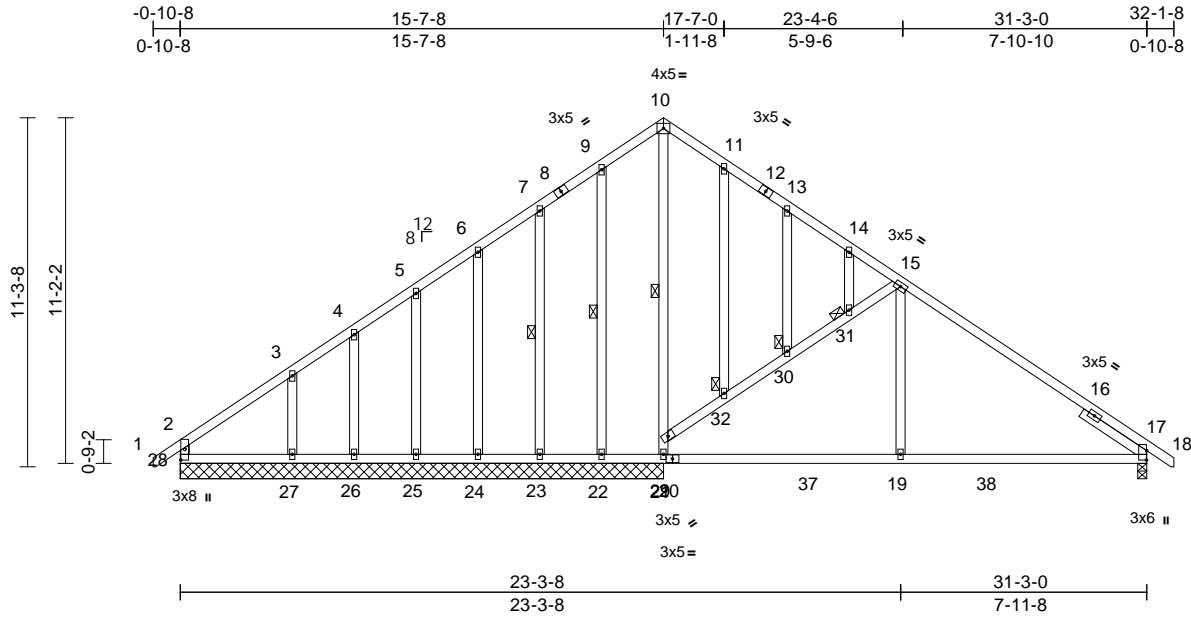
818 Soundside Road
Edenton, NC 27932

Job 20020079	Truss A4	Truss Type Common Supported Gable	Qty 1	Ply 1	KMB - Cedar Plan Job Reference (optional)	E14101463
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Carter Components (Sanford), Sanford, NC - 27332,

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Page: 1



Scale = 1:74.5

Plate Offsets (X, Y): [17:0-3-10,0-0-2], [28:0-4-1,0-1-8]

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	0.66	Vert(LL)	-0.09	19-35	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.21	19-35	>900	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.80	Horz(CT)	-0.02	17	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 222 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2 *Except* 28-2:2x4 SP No.3
OTHERS 2x4 SP No.2 *Except* 21-10:2x4 SP No.1, 26-4,27-3,30,13,31-14:2x4 SP No.3
SLIDER Right 2x4 SP No.3 -- 2-6-0

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.
WEBS 1 Row at midpt 10-21, 9-22, 7-23
JOINTS 1 Brace at Jt(s): 30, 31, 32

REACTIONS (lb/size)
17=609/0-3-8, 21=560/15-7-8, 22=-1/15-7-8, 23=162/15-7-8, 24=123/15-7-8, 25=138/15-7-8, 26=111/15-7-8, 27=188/15-7-8, 28=234/15-7-8
Max Horiz 28=-222 (LC 11)
Max Uplift 17=-72 (LC 14), 22=-85 (LC 32), 23=-26 (LC 13), 24=-29 (LC 13), 25=-33 (LC 13), 26=-9 (LC 13), 27=-78 (LC 13), 28=-44 (LC 9)
Max Grav 17=764 (LC 26), 21=764 (LC 26), 22=69 (LC 29), 23=197 (LC 25), 24=150 (LC 25), 25=173 (LC 25), 26=132 (LC 2), 27=272 (LC 25), 28=291 (LC 26)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-28=-248/83, 1-2=0/40, 2-3=-270/127, 3-4=-229/111, 4-5=-229/156, 5-6=-280/216, 6-7=-324/270, 7-8=-384/328, 8-9=-370/335, 9-10=-377/357, 10-11=-319/331, 11-12=-327/316, 12-13=-336/308, 13-14=-300/265, 14-15=-366/282, 15-16=-765/308, 16-17=-303/0, 17-18=0/34

BOT CHORD 27-28=-39/154, 26-27=-39/154, 25-26=-39/154, 24-25=-39/154, 23-24=-39/154, 22-23=-39/154, 21-22=-39/154, 20-21=-120/611, 20-37=-120/611, 19-37=-120/611, 19-38=-120/611, 17-38=-120/611

WEBS 29-32=-760/232, 30-32=-755/231, 30-31=-700/193, 15-31=-743/222, 21-29=-595/0, 10-29=-240/142, 9-22=-93/49, 7-23=-146/95, 6-24=-119/75, 5-25=-130/84, 4-26=-100/61, 3-27=-197/133, 13-30=-104/67, 14-31=-53/83, 11-32=-10/3, 15-19=0/354

- 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
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 28, 22, 23, 24, 25, 26, 27, and 17. This connection is for uplift only and does not consider lateral forces.



February 21, 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 20020079	Truss A4	Truss Type Common Supported Gable	Qty 1	Ply 1	KMB - Cedar Plan Job Reference (optional)	E14101463
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MiTek Industries, Inc. Fri Feb 21 15:07:35
ID:MzTP?CcSmKFRZ8zWJF503fzixvT-vs?bmuclPxp1N6hQYwaH?XooY4L7wnmeEpu22zitdc

Page: 2

- 1) 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.
- 2) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 13) 2 X 4 notch at 20000 o.c. is allowed along the stacked top chord. No notches allowed in overhang and 1008 from left end and 1008 from right end or 12" along rake from scarf, whichever is larger. Minimum 1.5x4 tie plates required at 2-0-0 o.c. maximum between the stacking chords. For edge-wise notching, provide at least one tie plate between each notch.

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.



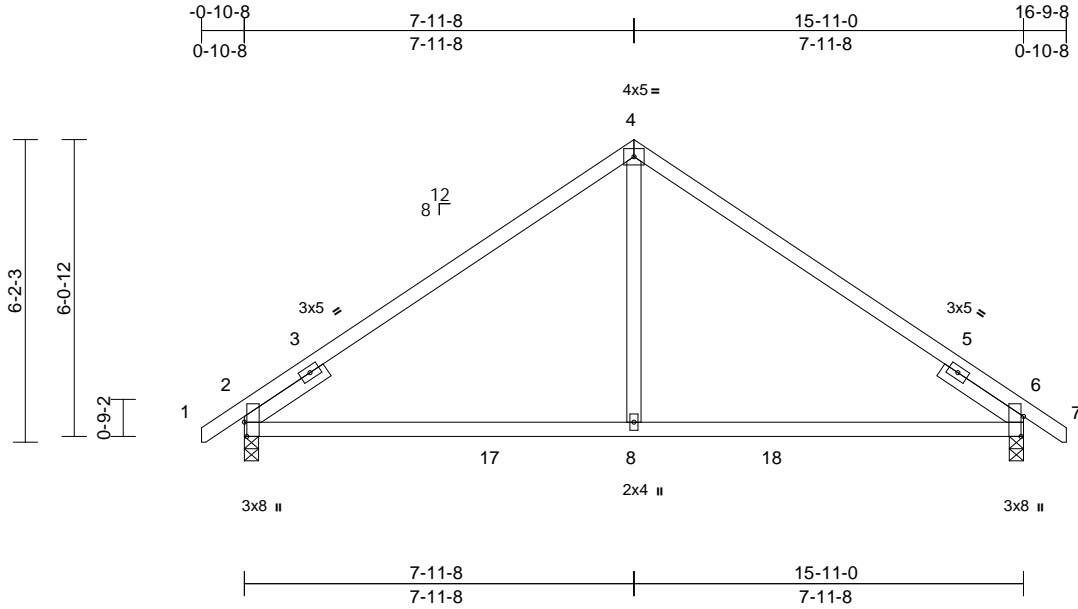
818 Soundside Road
Edenton, NC 27932

Job 20020079	Truss B1	Truss Type Common	Qty 2	Ply 1	KMB - Cedar Plan Job Reference (optional)	E14101464
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MITek Industries, Inc. Fri Feb 21 15:07:35
ID:R15UHQrACKG0BLOyftIQhVzixt6-vs?bmuclPxpU1N6hQYwaH?Xl6Y2g75nmeEpu22zitdc

Page: 1



Scale = 1:47.1

Plate Offsets (X, Y): [2:0-3-8,Edge], [6:0-4-14,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	0.83	Vert(LL)	-0.12	8-15	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.20	8-15	>971	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.05	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 70 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x4 SP No.2
 SLIDER Left 2x4 SP No.3 -- 2-0-0, Right 2x4 SP No.3 -- 2-0-0

BRACING

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

REACTIONS

(lb/size) 2=579/0-3-8, 6=579/0-3-8
 Max Horiz 2=116 (LC 12)
 Max Uplift 2=-1 (LC 13), 6=-1 (LC 14)
 Max Grav 2=717 (LC 25), 6=717 (LC 26)

FORCES

(lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/35, 2-3=-458/217, 3-4=-700/158, 4-5=-700/158, 5-6=-332/93, 6-7=0/35
 BOT CHORD 2-17=-215/605, 8-17=0/605, 8-18=0/605, 6-18=0/605
 WEBS 4-8=0/388

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33

- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.
- 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



February 21, 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.



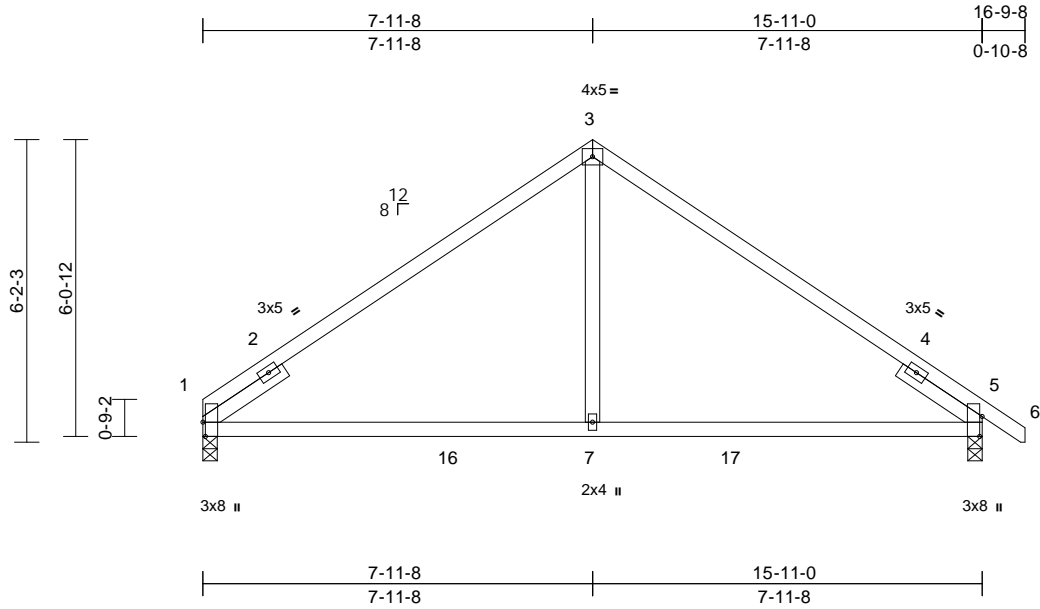
818 Soundside Road
Edenton, NC 27932

Job 20020079	Truss B2	Truss Type Common	Qty 3	Ply 1	KMB - Cedar Plan Job Reference (optional)	E14101465
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MiTek Industries, Inc. Fri Feb 21 15:07:35
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Page: 1



Scale = 1:47.1

Plate Offsets (X, Y): [1:0-3-8,Edge], [5:0-4-14,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	0.84	Vert(LL)	-0.12	7-10	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.20	7-10	>939	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.05	1	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 68 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x4 SP No.2
 SLIDER Left 2x4 SP No.3 -- 2-0-0, Right 2x4 SP No.3 -- 2-0-0

BRACING

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

REACTIONS (lb/size) 1=538/0-3-8, 5=580/0-3-8
 Max Horiz 1=-112 (LC 11)
 Max Uplift 5=-1 (LC 14)
 Max Grav 1=670 (LC 25), 5=717 (LC 26)

FORCES

(lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=-447/200, 2-3=-703/159, 3-4=-703/159, 4-5=-332/93, 5-6=0/35
 BOT CHORD 1-16=-220/607, 7-16=0/607, 7-17=0/607, 5-17=0/607
 WEBS 3-7=0/388

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33

- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



February 21, 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.



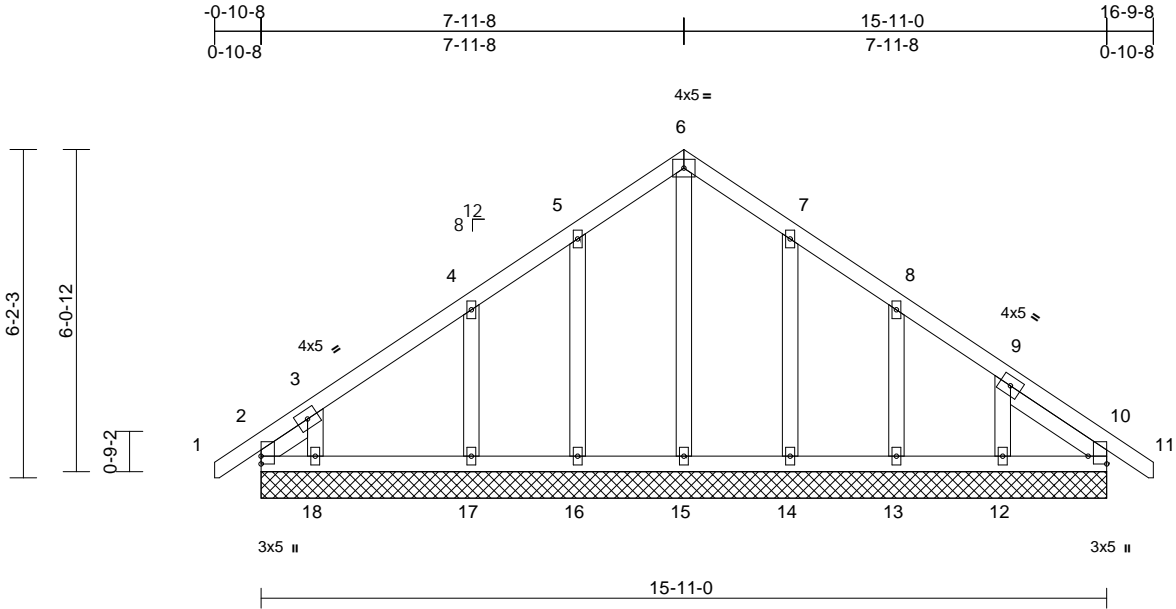
818 Soundside Road
Edenton, NC 27932

Job 20020079	Truss B3	Truss Type Common Supported Gable	Qty 1	Ply 1	KMB - Cedar Plan Job Reference (optional)	E14101466
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MITek Industries, Inc. Fri Feb 21 15:07:36
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Page: 1



Scale = 1:43.4

Plate Offsets (X, Y): [10:Edge,0-4-3]

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	0.03	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	10	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 93 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3 *Except* 15-6:2x4 SP No.2
SLIDER Left 2x4 SP No.3 -- 1-1-6, Right 2x4 SP No.3 -- 2-2-15

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

REACTIONS (lb/size)
2=62/15-11-0, 10=111/15-11-0,
12=130/15-11-0, 13=131/15-11-0,
14=135/15-11-0, 15=110/15-11-0,
16=123/15-11-0, 17=172/15-11-0,
18=148/15-11-0, 19=62/15-11-0,
23=111/15-11-0
Max Horiz 2=112 (LC 12), 19=112 (LC 12)
Max Uplift 2=55 (LC 9), 12=46 (LC 14),
13=27 (LC 14), 14=30 (LC 14),
16=28 (LC 13), 17=37 (LC 13),
18=69 (LC 13), 19=55 (LC 9)
Max Grav 2=108 (LC 26), 10=135 (LC 2),
12=169 (LC 26), 13=159 (LC 26),
14=167 (LC 26), 15=137 (LC 28),
16=153 (LC 25), 17=210 (LC 25),
18=209 (LC 25), 19=108 (LC 26),
23=135 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/34, 2-3=65/107, 3-4=-101/72,
4-5=-81/79, 5-6=-123/132, 6-7=-124/133,
7-8=-75/76, 8-9=-56/26, 9-10=-40/22,
10-11=0/34
BOT CHORD 2-18=-58/91, 17-18=-58/91, 16-17=-58/91,
15-16=-58/91, 14-15=-58/91, 13-14=-58/91,
12-13=-58/91, 10-12=-58/91

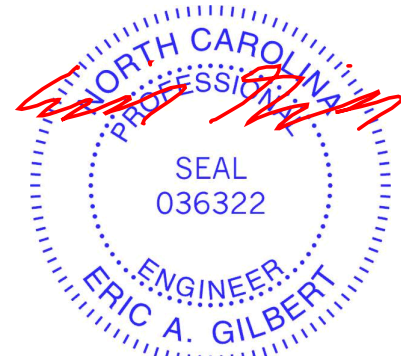
WEBS 3-18=-175/127, 6-15=-97/29, 5-16=-118/72,
4-17=-163/106, 7-14=-129/79, 8-13=-125/82,
9-12=-141/91

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
- 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.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.

- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 18, 16, 17, 14, 13, and 12. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



February 21, 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.



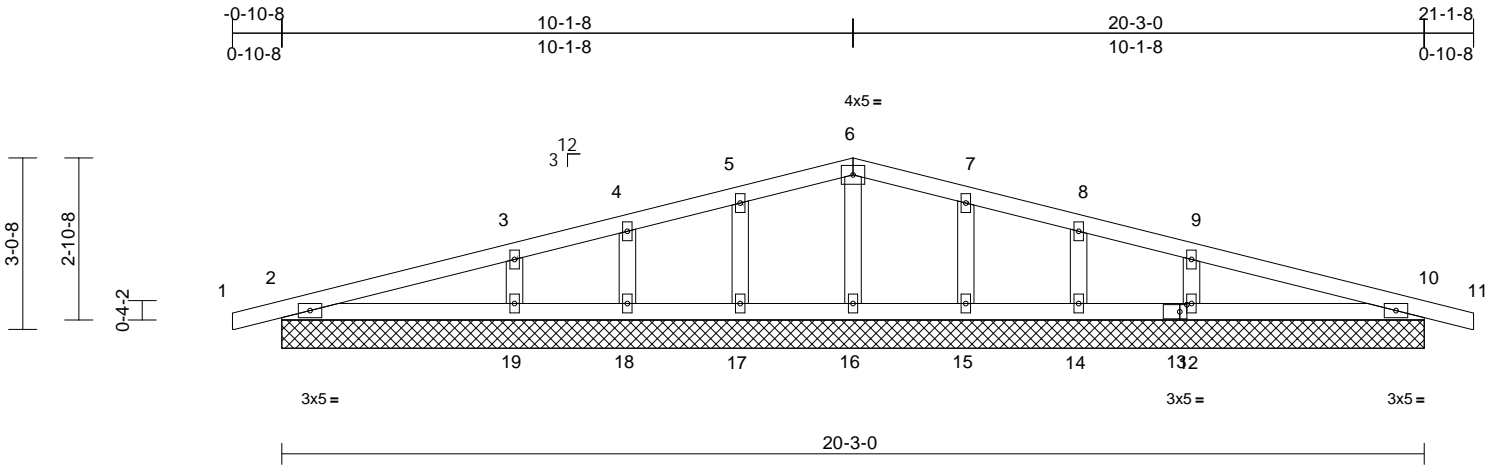
818 Soundside Road
Edenton, NC 27932

Job 20020079	Truss C1	Truss Type Common Supported Gable	Qty 1	Ply 1	KMB - Cedar Plan Job Reference (optional)	E14101467
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MiTek Industries, Inc. Fri Feb 21 15:07:36
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Page: 1



Scale = 1:40.8

Plate Offsets (X, Y): [13:0-1-8,0-1-8]

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	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	24	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 79 lb	FT = 20%

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

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

REACTIONS (lb/size)
2=159/20-3-0, 10=159/20-3-0,
12=267/20-3-0, 14=71/20-3-0,
15=152/20-3-0, 16=110/20-3-0,
17=152/20-3-0, 18=71/20-3-0,
19=267/20-3-0, 20=159/20-3-0,
24=159/20-3-0
Max Horiz 2=-26 (LC 16), 20=-26 (LC 16)
Max Uplift 2=-26 (LC 11), 10=-29 (LC 12),
12=-17 (LC 16), 14=-7 (LC 12),
15=-12 (LC 16), 17=-12 (LC 15),
18=-7 (LC 11), 19=-17 (LC 15),
20=-26 (LC 11), 24=-29 (LC 12)
Max Grav 2=191 (LC 2), 10=191 (LC 2),
12=315 (LC 35), 14=84 (LC 2),
15=182 (LC 35), 16=129 (LC 2),
17=182 (LC 34), 18=84 (LC 2),
19=315 (LC 34), 20=191 (LC 2),
24=191 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/15, 2-3=-73/26, 3-4=-36/40,
4-5=-29/58, 5-6=-39/81, 6-7=-39/81,
7-8=-29/58, 8-9=-36/40, 9-10=-25/19,
10-11=0/15
BOT CHORD 2-19=-2/61, 18-19=-2/33, 17-18=-2/33,
16-17=-2/33, 15-16=-2/33, 14-15=-2/33,
13-14=-2/33, 12-13=-2/33, 10-12=-2/33

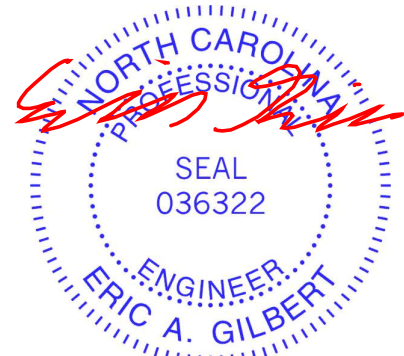
WEBS 6-16=-95/17, 5-17=-135/71, 4-18=-77/52,
3-19=-208/100, 7-15=-135/71, 8-14=-77/52,
9-12=-208/100

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 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.

- 12) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 17, 18, 19, 15, 14, 12, and 10. This connection is for uplift only and does not consider lateral forces.
- 13) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 10, 24.
- 14) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



February 21, 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.



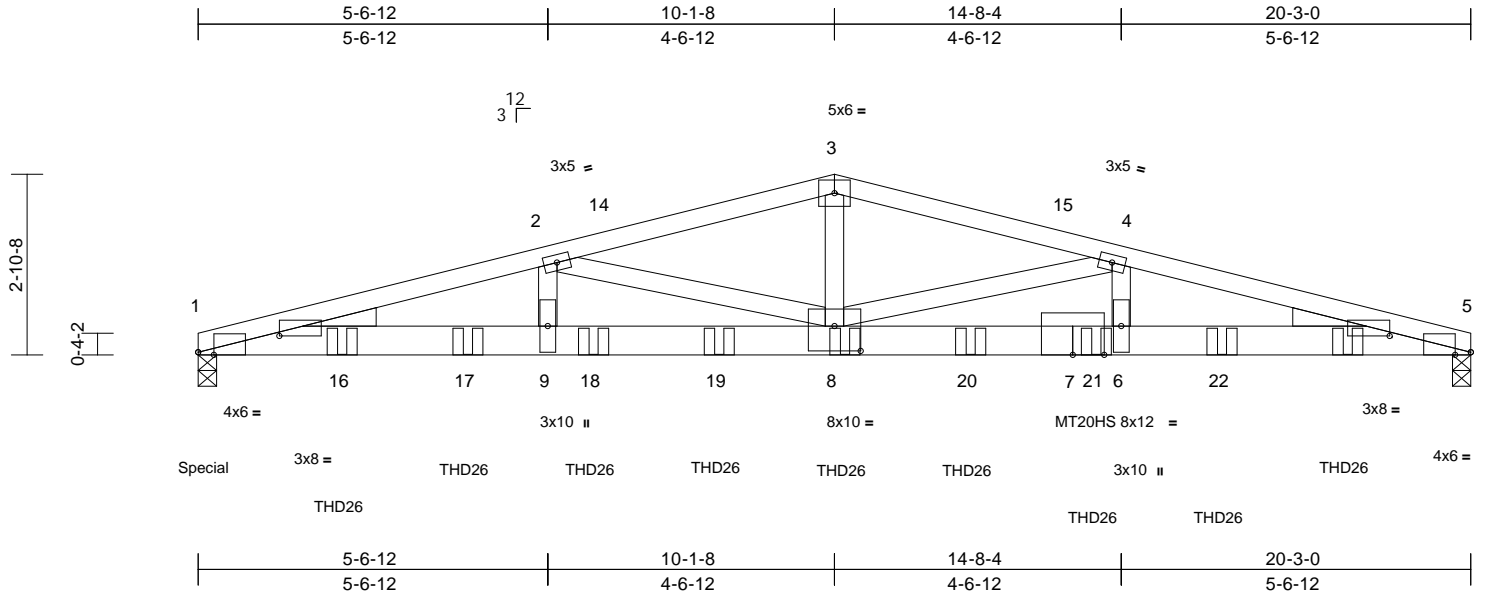
818 Soundside Road
Edenton, NC 27932

Job 20020079	Truss C2	Truss Type Common Girder	Qty 1	Ply 3	KMB - Cedar Plan Job Reference (optional)	E14101468
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Carter Components (Sanford), Sanford, NC - 27332,

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Page: 1



Scale = 1:36.7

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

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	0.73	Vert(LL)	-0.27	8-9	>876	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.55	8-9	>439	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	NO	WB	0.63	Horz(CT)	0.10	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 304 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP 2400F 2.0E
 BOT CHORD 2x6 SP 2400F 2.0E
 WEBS 2x4 SP No.3 *Except* 8-3:2x4 SP No.2
 WEDGE Left: 2x4 SP No.3
 Right: 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-4-1 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(lb/size) 1=6823/0-3-8, 5=5866/0-3-8
 Max Horiz 1=25 (LC 42)
 Max Grav 1=8423 (LC 3), 5=7222 (LC 3)

FORCES

(lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=-22988/0, 2-14=-16664/0,
 3-14=-16657/0, 3-15=-16658/0,
 4-15=-16664/0, 4-5=-22786/0
 BOT CHORD 1-16=0/22293, 16-17=0/22293,
 9-17=0/22293, 9-18=0/22293,
 18-19=0/22293, 8-19=0/22293,
 8-20=0/22099, 7-20=0/22099, 7-21=0/22099,
 6-21=0/22099, 6-22=0/22099, 5-22=0/22099
 WEBS 2-9=0/3188, 2-8=-6423/0, 3-8=0/7690,
 4-8=-6221/0, 4-6=0/3071

NOTES

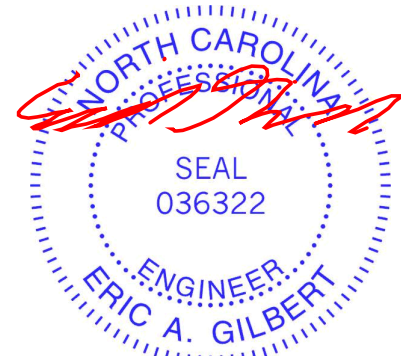
- 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x4 - 1 row at 0-6-0 oc.
 Bottom chords connected as follows: 2x6 - 3 rows staggered at 0-5-0 oc.
 Web connected as follows: 2x4 - 1 row at 0-9-0 oc.

- 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 7-10; 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 7-10; 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.
- 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.
- All bearings are assumed to be SP 2400F 2.0E crushing capacity of 805 psi.
- 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.
- 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 2-3-8 from the left end to 18-3-8 to connect truss(es) to front face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1433 lb down at 0-1-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (lb/ft)
 Vert: 1-3=-48, 3-5=-48, 1-5=-20
 Concentrated Loads (lb)
 Vert: 1=-1142 (F), 8=-1133 (F), 13=-1133 (F),
 16=-1133 (F), 17=-1133 (F), 18=-1133 (F), 19=-1133 (F),
 20=-1133 (F), 21=-1133 (F), 22=-1133 (F)



February 21, 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



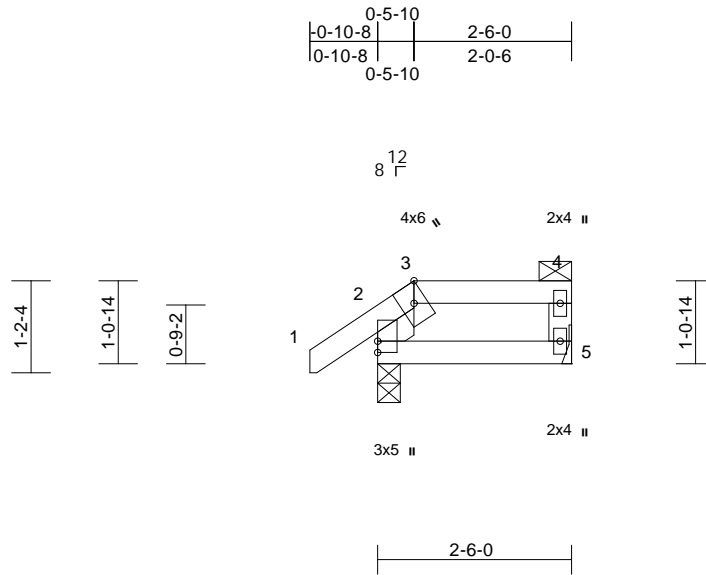
818 Soundside Road
 Edenton, NC 27932

Job 20020079	Truss G1	Truss Type Half Hip	Qty 1	Ply 1	KMB - Cedar Plan Job Reference (optional)	E14101469
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Carter Components (Sanford), Sanford, NC - 27332,

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Page: 1



Scale = 1:29.7

Plate Offsets (X, Y): [3:0-2-15,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	0.07	Vert(LL)	0.00	8	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	5-8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MR								
BCDL	10.0											
											Weight: 11 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x4 SP No.3
 SLIDER Left 2x4 SP No.3 -- 0-7-9

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-6-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=134/0-3-8, 5=84/ Mechanical
 Max Horiz 2=28 (LC 12)
 Max Uplift 2=-4 (LC 13), 5=-7 (LC 10)
 Max Grav 2=153 (LC 2), 5=89 (LC 29)

FORCES (lb) - Maximum Compression/Maximum Tension

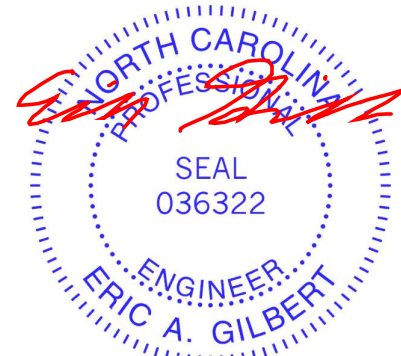
TOP CHORD 1-2=0/35, 2-3=-68/53, 3-4=-46/30, 4-5=-62/51
 BOT CHORD 2-5=-49/45

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=18.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10, Lu=50-0-0

- 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.
- Provide adequate drainage to prevent water ponding.
- * 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.
- Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 7 lb uplift at joint 5.
- 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 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



February 21, 2020

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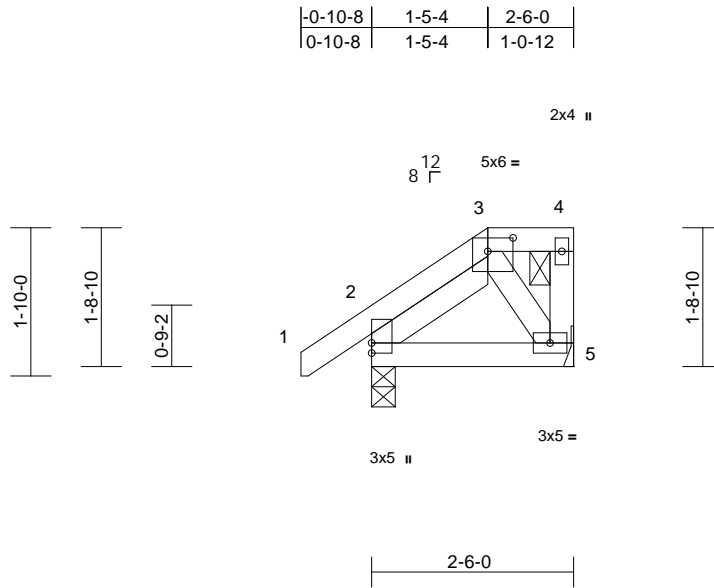
818 Soundside Road
 Edenton, NC 27932

Job 20020079	Truss G2	Truss Type Half Hip	Qty 1	Ply 1	KMB - Cedar Plan Job Reference (optional)	E14101470
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Carter Components (Sanford), Sanford, NC - 27332,

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Page: 1



Scale = 1:28.5

Plate Offsets (X, Y): [3:0-3-12,0-2-0]

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	0.07	Vert(LL)	0.00	5-8	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	5-8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 16 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x4 SP No.3
 SLIDER Left 2x4 SP No.3 -- 1-9-8

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-6-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=124/0-3-8, 5=78/ Mechanical
 Max Horiz 2=46 (LC 14)
 Max Uplift 2=6 (LC 15), 5=12 (LC 12)
 Max Grav 2=200 (LC 35), 5=95 (LC 34)

FORCES (lb) - Maximum Compression/Maximum Tension

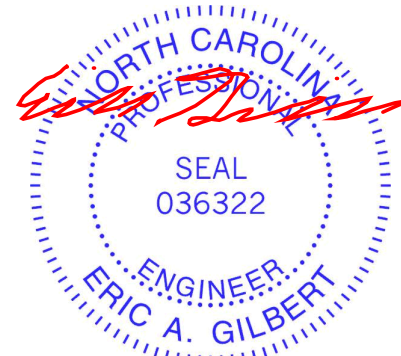
TOP CHORD 1-2=0/40, 2-3=-59/33, 3-4=-25/27, 4-5=-40/22
 BOT CHORD 2-5=-62/55
 WEBS 3-5=-65/54

NOTES

- 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=18.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10, Lu=50-0-0
- 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.
- Provide adequate drainage to prevent water ponding.
- * 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.
- Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 12 lb uplift at joint 5.
- 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 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



February 21, 2020

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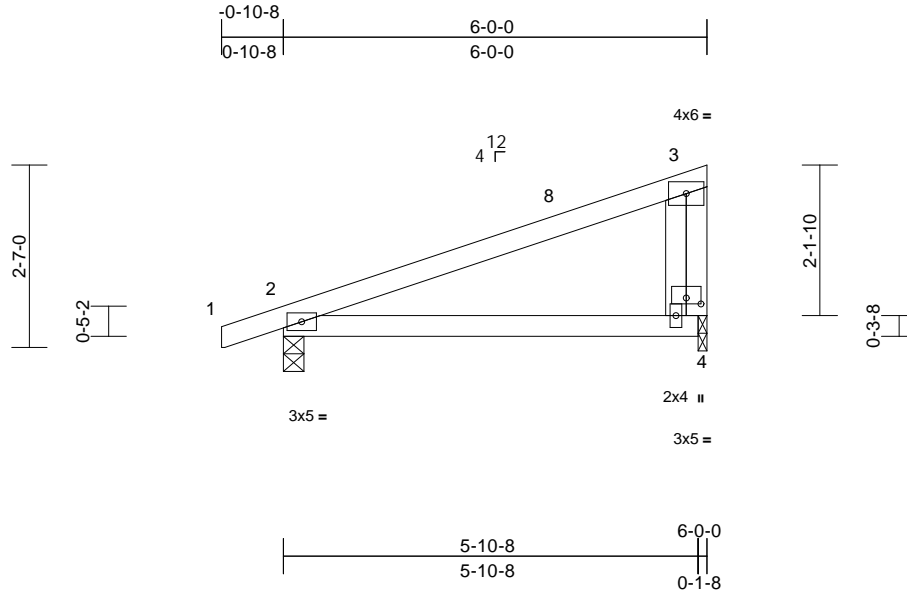
818 Soundside Road
 Edenton, NC 27932

Job 20020079	Truss J1	Truss Type Monopitch	Qty 7	Ply 1	KMB - Cedar Plan Job Reference (optional)	E14101471
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Carter Components (Sanford), Sanford, NC - 27332,

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Page: 1



Scale = 1:32.6

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

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	0.48	Vert(LL)	0.05	4-7	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.10	4-7	>657	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 25 lb	FT = 20%

LUMBER

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

(lb/size) 2=230/0-3-8, 4=184/0-1-8
Max Horiz 2=65 (LC 14)
Max Uplift 2=-29 (LC 11), 4=-12 (LC 15)
Max Grav 2=274 (LC 2), 4=218 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension

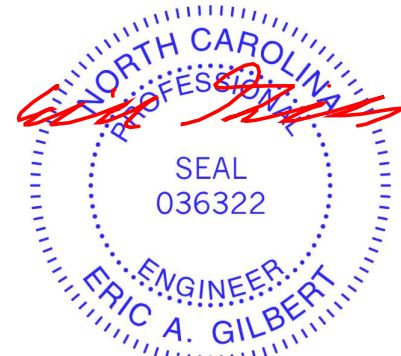
TOP CHORD 1-2=0/20, 2-8=-81/47, 3-8=-68/60,
3-4=-146/122
BOT CHORD 2-4=-84/88

NOTES

- 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.
- Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi, Joint 4 SP No.3 crushing capacity of 565 psi.
- Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



February 21, 2020

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818 Soundside Road
Edenton, NC 27932

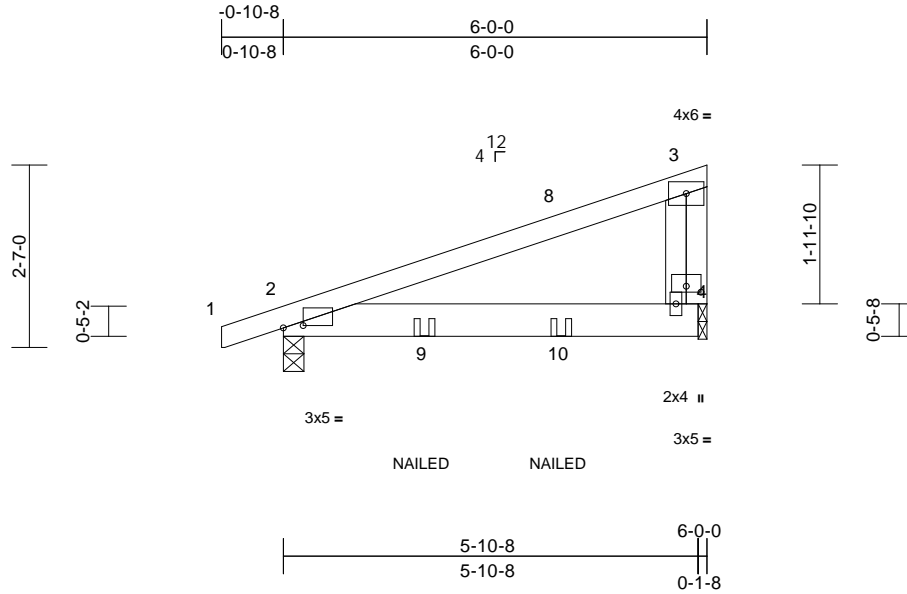
Job 20020079	Truss J2	Truss Type Monopitch Girder	Qty 1	Ply 1	KMB - Cedar Plan Job Reference (optional)	E14101472
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Carter Components (Sanford), Sanford, NC - 27332,

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Page: 1

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Scale = 1:32.6

Plate Offsets (X, Y): [2:0-3-6,0-0-6], [4:0-2-8,0-1-0]

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	0.41	Vert(LL)	-0.03	4-7	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.06	4-7	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 29 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(lb/size) 2=299/0-3-8, 4=262/0-1-8
 Max Horiz 2=64 (LC 32)
 Max Uplift 2=49 (LC 7), 4=34 (LC 11)
 Max Grav 2=340 (LC 2), 4=286 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/20, 2-8=88/0, 3-8=27/31, 3-4=127/30
 BOT CHORD 2-9=22/102, 9-10=22/16, 4-10=22/16

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); cantilever left and right exposed; end vertical left and right exposed; 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) 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) Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi, Joint 4 SP No.3 crushing capacity of 565 psi.
- 7) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 9) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral forces.
- 10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (lb/ft)
 Vert: 1-3=-46, 4-5=-19
 Concentrated Loads (lb)
 Vert: 9=-70 (B), 10=-76 (B)



February 21, 2020

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

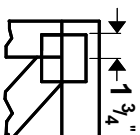
Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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.



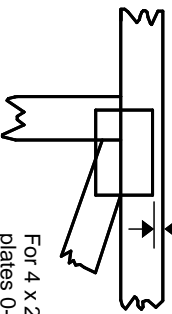
818 Soundside Road
 Edenton, NC 27932

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- 1/16" from outside edge of truss.



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

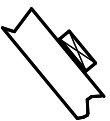
* Plate location details available in **MITrak 20/20 software or upon request.**

PLATE SIZE

4 X 4

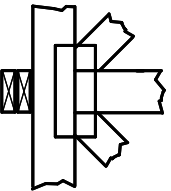
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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



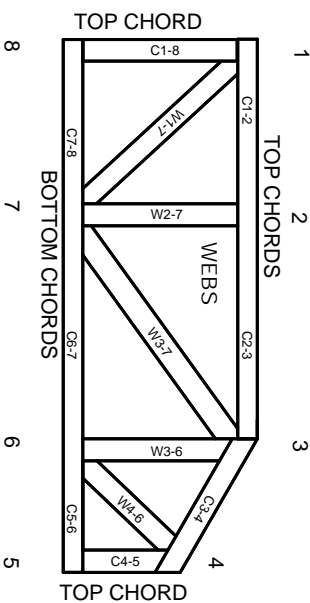
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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.

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MITek Engineering Reference Sheet: MI-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.