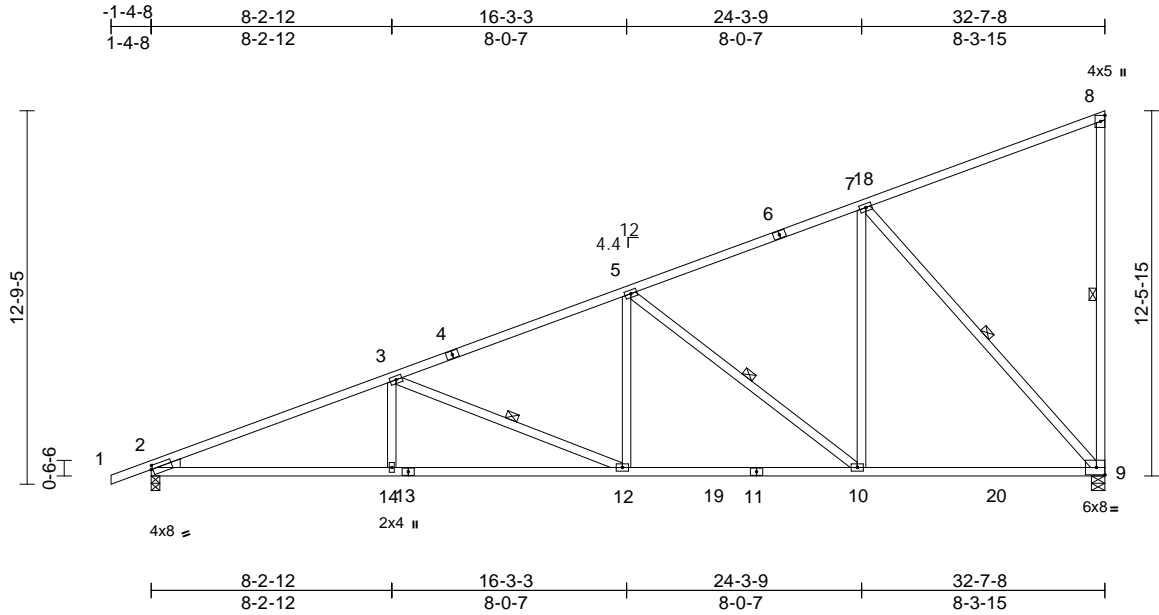


Job 20030003-A	Truss T1	Truss Type Monopitch	Qty 16	Ply 1	Jose Moreno-Roof Job Reference (optional)	E14442356
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Tue May 26 15:13:01  
ID:jowHHpLKNZT2objaqezyaUzCeuM-hfjher5Xdavpqw\_p6pt\_F6?bKlw2JbAl8q\_skzCbEp

Page: 1



Scale = 1:78.8

Plate Offsets (X, Y): [2:0-0-10,0-1-9]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	-0.18	9-10	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.38	12-14	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.94	Horz(CT)	0.10	9	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 192 lb	FT = 20%

**LUMBER**

TOP CHORD 2x4 SP No.1 \*Except\* 1-4:2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.2 \*Except\* 8-9:2x4 SP 2400F  
 2.0E, 3-14:2x4 SP No.3  
 WEDGE Left: 2x4 SP No.3

**BRACING**

TOP CHORD Structural wood sheathing directly applied or  
 2-2-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 2-2-0 oc  
 bracing.  
 WEBS 1 Row at midpt 8-9, 3-12, 5-10, 7-9

**REACTIONS**

(size) 2=0-3-8, 9=0-5-8  
 Max Horiz 2=395 (LC 14)  
 Max Uplift 2=-58 (LC 11), 9=-75 (LC 15)  
 Max Grav 2=1383 (LC 2), 9=1339 (LC 22)

**FORCES**

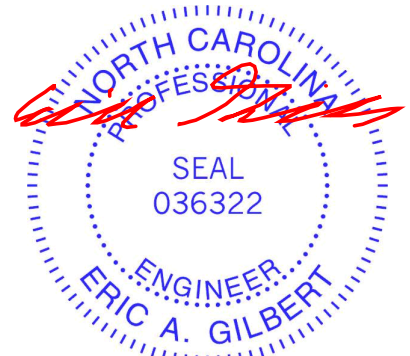
(lb) - Maximum Compression/Maximum  
 Tension  
 TOP CHORD 1-2=0/36, 2-3=-2800/588, 3-4=-1963/427,  
 4-5=-1881/457, 5-6=-1108/299,  
 6-7=-984/316, 7-18=-209/120,  
 8-18=-201/154, 8-9=-295/149  
 BOT CHORD 2-14=-921/2546, 13-14=-921/2546,  
 12-13=-921/2546, 12-19=-651/1766,  
 11-19=-651/1766, 10-11=-651/1766,  
 10-20=-389/933, 9-20=-389/933  
 WEBS 3-14=0/153, 3-12=-841/292, 5-12=-20/503,  
 5-10=-1063/331, 7-10=-120/924,  
 7-9=-1381/424

**NOTES**

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

- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber  
 DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground  
 snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15  
 Plate DOL=1.15); Category II; Exp B; Fully Exp.;  
 Ct=1.10
- Unbalanced snow loads have been considered for this  
 design.
- This truss has been designed for greater of min roof live  
 load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on  
 overhangs non-concurrent with other live loads.
- All plates are 3x5 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.
- One RT7A USP connectors recommended to connect  
 truss to bearing walls due to UPLIFT at jt(s) 9 and 2.  
 This connection is for uplift only and does not consider  
 lateral forces.
- This truss is designed in accordance with the 2015  
 International Residential Code sections R502.11.1 and  
 R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard



May 27, 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  
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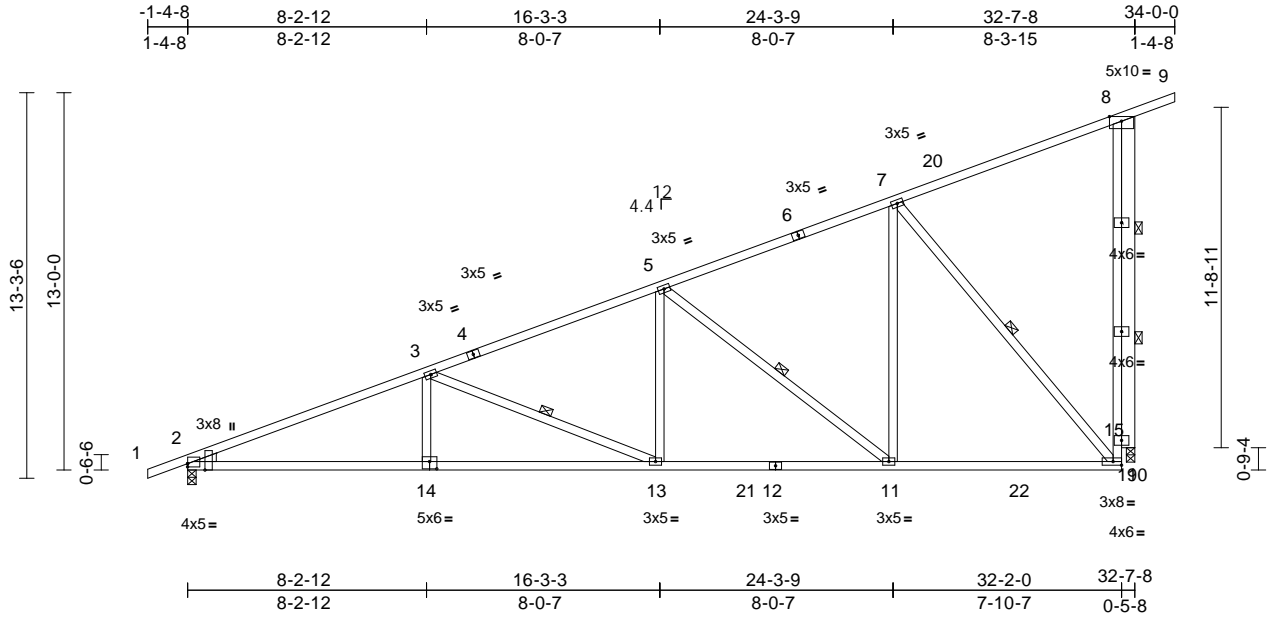
Job 20030003-A	Truss T1A	Truss Type Monopitch	Qty 4	Ply 1	Jose Moreno-Roof Job Reference (optional)	E14442357
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Tue May 26 15:13:04

Page: 1

ID:jowHHpLKNZT2objaqeyzaUzCeuM-Vo5yvu9HDGzYqN89MwHDWL1dkrSS2R373HJ4OzCbEj



Scale = 1:79.4

Plate Offsets (X, Y): [2:Edge,0-1-5], [2:0-2-10,Edge], [14:0-3-0,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.79	Vert(LL)	-0.15	13-14	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.36	13-14	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.86	Horz(CT)	0.09	19	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 220 lb	FT = 20%

**LUMBER**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.2 \*Except\* 3-14:2x4 SP No.3  
OTHERS 2x6 SP No.2  
WEDGE Left: 2x4 SP No.2

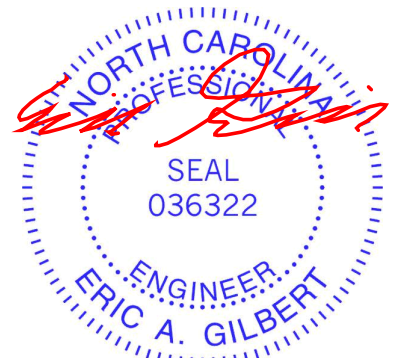
**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 2-11-2 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-4-10 oc bracing.  
WEBS 1 Row at midpt 3-13, 5-11, 7-10  
WEBS 2 Rows at 1/3 pts 8-19

**REACTIONS** (size) 2=0-3-8, 19=0-3-8  
Max Horiz 2=336 (LC 11)  
Max Uplift 2=-15 (LC 11), 19=-129 (LC 15)  
Max Grav 2=1381 (LC 2), 19=1430 (LC 22)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/36, 2-3=-2781/390, 3-4=-1958/209, 4-5=-1878/239, 5-6=-1052/72, 6-7=-964/89, 7-20=-171/0, 8-20=-91/30, 8-9=-57/0, 10-19=-266/1105, 8-19=-266/1105  
BOT CHORD 2-14=-823/2543, 13-14=-820/2547, 13-21=-556/1763, 12-21=-556/1763, 11-12=-556/1763, 11-22=-289/917, 10-22=-289/917  
WEBS 3-14=0/155, 3-13=-846/285, 5-13=-11/505, 5-11=-1077/337, 7-11=-101/917, 7-10=-1317/396, 8-19=-1431/519

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- 2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- 3) 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) All plates are 3x5 MT20 unless otherwise indicated.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Bearing at joint(s) 19 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 19. This connection is for uplift only and does not consider lateral forces.
- 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 27, 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.



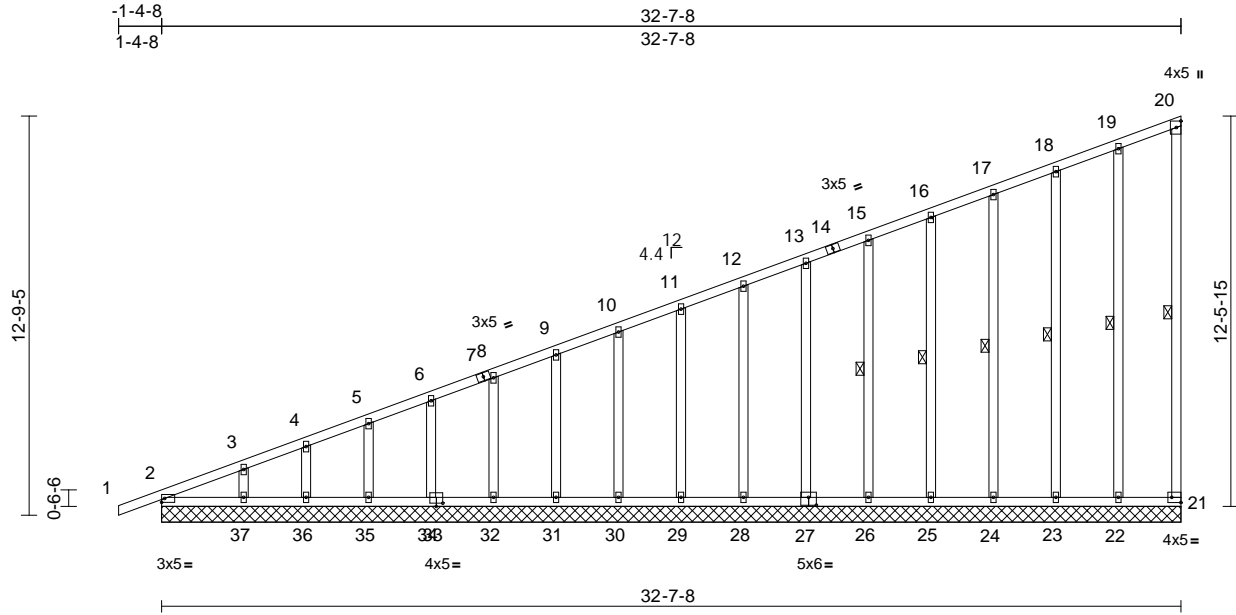
818 Soundside Road  
Edenton, NC 27932

Job 20030003-A	Truss T1GE	Truss Type Monopitch Supported Gable	Qty 2	Ply 1	Jose Moreno-Roof Job Reference (optional)	E14442358
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8:33 S May 6 2020 Print: 8:33 S May 6 2020 MiTek Industries, Inc. Tue May 26 15:13:04  
ID:7NcQwqNCGUrdf3R9VmgC7zCeuJ-Vo5yvu9HDQgzYqN89MwHDWL3ekx6SEr373HJ4OzCbEj

Page: 1



Scale = 1:73.7

Plate Offsets (X, Y): [21:Edge,0-2-0], [27-0-3-0,0-3-0], [33-0-2-8,0-1-4]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.66	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	-0.01	21	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 256 lb	FT = 20%

**LUMBER**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.1  
OTHERS 2x4 SP No.2 \*Except\*  
31-9,32-8,34-6,35-5,36-4,37-3:2x4 SP No.3

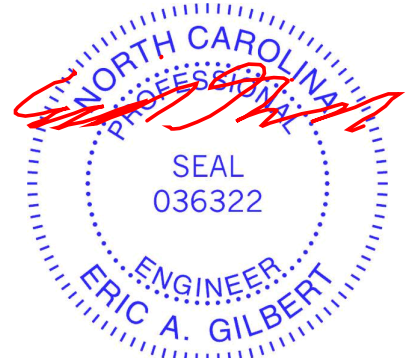
**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 20-21, 19-22, 18-23, 17-24, 16-25, 15-26

**REACTIONS** (size)  
2=32-7-8, 21=32-7-8, 22=32-7-8,  
23=32-7-8, 24=32-7-8, 25=32-7-8,  
26=32-7-8, 27=32-7-8, 28=32-7-8,  
29=32-7-8, 30=32-7-8, 31=32-7-8,  
32=32-7-8, 34=32-7-8, 35=32-7-8,  
36=32-7-8, 37=32-7-8, 38=32-7-8  
Max Horiz 2=395 (LC 14), 38=395 (LC 14)  
Max Uplift 21=38 (LC 14), 22=25 (LC 11),  
23=7 (LC 12), 24=18 (LC 15),  
25=11 (LC 15), 26=14 (LC 15),  
27=13 (LC 15), 28=12 (LC 15),  
29=13 (LC 15), 30=13 (LC 15),  
31=13 (LC 15), 32=13 (LC 15),  
34=12 (LC 15), 35=16 (LC 15),  
36=6 (LC 11), 37=48 (LC 15)  
Max Grav 2=228 (LC 30), 21=79 (LC 22),  
22=214 (LC 22), 23=206 (LC 22),  
24=209 (LC 22), 25=171 (LC 22),  
26=159 (LC 2), 27=160 (LC 2),  
28=161 (LC 2), 29=160 (LC 2),  
30=160 (LC 2), 31=160 (LC 2),  
32=160 (LC 2), 34=160 (LC 2),  
35=162 (LC 2), 36=154 (LC 2),  
37=182 (LC 2), 38=228 (LC 30)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/36, 2-3=-640/323, 3-4=-588/299,  
4-5=-560/291, 5-6=-526/279, 6-7=-493/260,  
7-8=-485/267, 8-9=-459/255, 9-10=-426/244,  
10-11=-393/232, 11-12=-359/221,  
12-13=-326/209, 13-14=-293/186,  
14-15=-289/198, 15-16=-260/187,  
16-17=-227/175, 17-18=-193/163,  
18-19=-178/165, 19-20=-140/142,  
20-21=-94/102  
BOT CHORD 2-37=-435/252, 36-37=-169/188,  
35-36=-169/188, 34-35=-169/188,  
33-34=-169/188, 32-33=-169/188,  
31-32=-169/188, 30-31=-169/188,  
29-30=-169/188, 28-29=-169/188,  
27-28=-169/188, 26-27=-170/189,  
25-26=-170/189, 24-25=-170/189,  
23-24=-170/189, 22-23=-170/189,  
21-22=-170/189  
WEBS 19-22=-182/164, 18-23=-167/98,  
17-24=-169/74, 16-25=-131/73,  
15-26=-120/72, 13-27=-120/74,  
12-28=-120/72, 11-29=-120/73,  
10-30=-120/73, 9-31=-120/73, 8-32=-120/73,  
6-34=-120/72, 5-35=-121/77, 4-36=-116/66,  
3-37=-135/125

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

- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- 4) 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) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable requires continuous bottom chord bearing.
- 8) Gable studs spaced at 2-0-0 oc.
- 9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.



May 27, 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.**

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818 Soundside Road  
Edenton, NC 27932

Job 20030003-A	Truss T1GE	Truss Type Monopitch Supported Gable	Qty 2	Ply 1	Jose Moreno-Roof Job Reference (optional)	E14442358
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Tue May 26 15:13:04  
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Page: 2

- 10) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 34, 35, 36, and 37. 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

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

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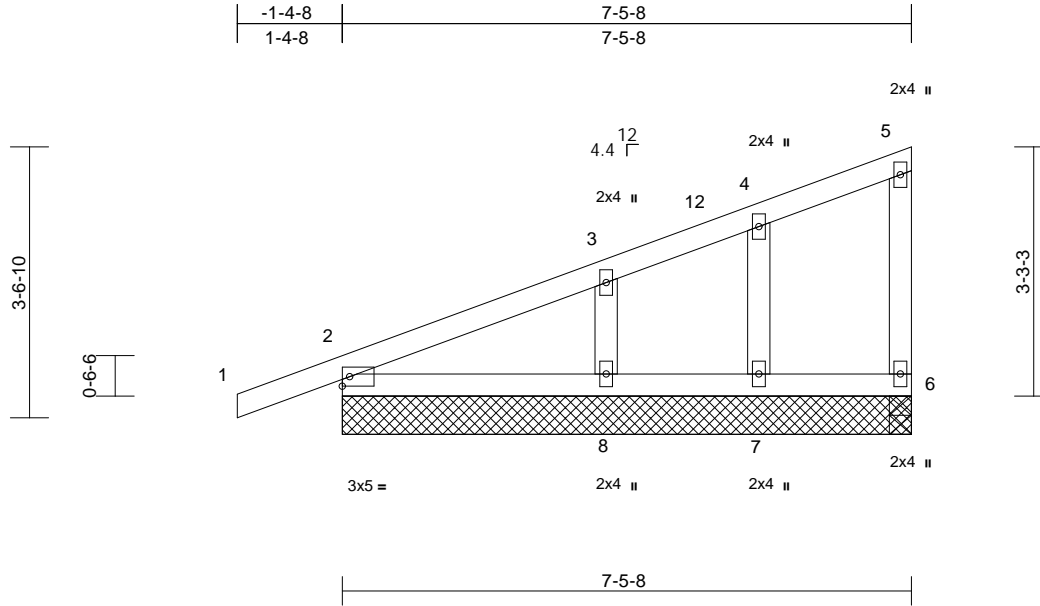
818 Soundside Road  
Edenton, NC 27932

Job 20030003-A	Truss T1SE	Truss Type Monopitch Structural Gable	Qty 2	Ply 1	Jose Moreno-Roof Job Reference (optional)	E14442359
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Tue May 26 15:13:05  
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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	0.16	Vert(LL)	0.00	8-11	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	-0.01	8-11	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 34 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.

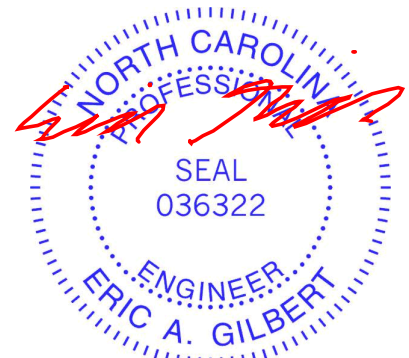
**REACTIONS** (size) 2=7-5-8, 6=7-5-8, 7=7-5-8, 8=7-5-8, 9=7-5-8  
Max Horiz 2=99 (LC 14), 9=99 (LC 14)  
Max Uplift 2=-35 (LC 11), 6=-6 (LC 12), 7=-13 (LC 11), 8=-24 (LC 15), 9=-35 (LC 11)  
Max Grav 2=217 (LC 2), 6=64 (LC 2), 7=140 (LC 2), 8=247 (LC 2), 9=217 (LC 2)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/36, 2-3=-161/130, 3-12=-96/53, 4-12=-89/65, 4-5=-58/52, 5-6=-48/52  
BOT CHORD 2-8=-146/75, 7-8=-51/55, 6-7=-51/55  
WEBS 4-7=-108/91, 3-8=-177/149

**NOTES**  
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33  
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- 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.
- 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, 6, 7, and 8. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard



May 27, 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

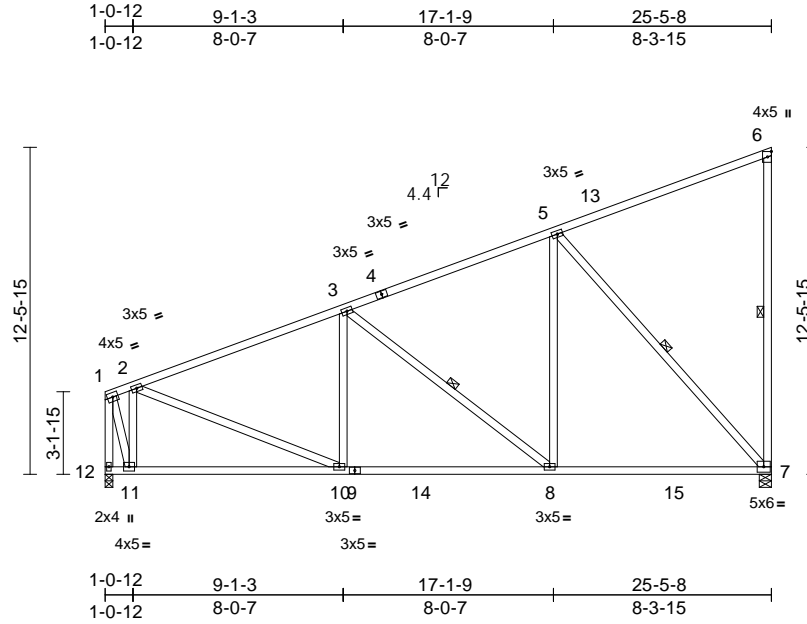


Job 20030003-A	Truss T2	Truss Type Monopitch	Qty 12	Ply 1	Jose Moreno-Roof Job Reference (optional)	E14442360
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Tue May 26 15:13:05  
ID:3lkAKWPTB55LvMbXcBY8HYzCeuH-z?fk6EAw\_koqA\_yKj4RWmkuDr8CLBYFCMj0scqzCbEi

Page: 1



Scale = 1:88

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	0.76	Vert(LL)	-0.17	7-8	>999	240	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.30	7-8	>999	180	
TCDL	10.0	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.03	7	n/a	n/a	
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH							
BCDL	10.0										
											Weight: 175 lb FT = 20%

**LUMBER**

TOP CHORD 2x4 SP No.1 \*Except\* 1-4:2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.2 \*Except\* 6-7:2x4 SP 2400F  
 2.0E, 2-11,12-1,11-1:2x4 SP No.3

**BRACING**

TOP CHORD Structural wood sheathing directly applied or  
 4-5-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 6-11-15 oc  
 bracing.  
 WEBS 1 Row at midpt 6-7, 3-8, 5-7

**REACTIONS**

(size) 7=0-5-8, 12=0-3-8  
 Max Horiz 12=380 (LC 12)  
 Max Uplift 7=-67 (LC 15), 12=-10 (LC 11)  
 Max Grav 7=1035 (LC 5), 12=1007 (LC 2)

**FORCES**

(lb) - Maximum Compression/Maximum  
 Tension

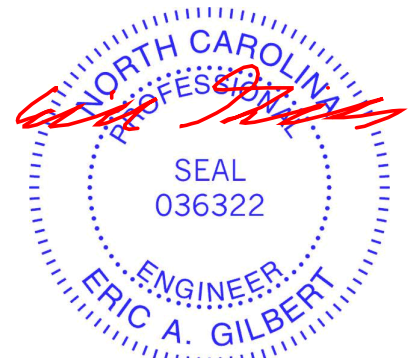
TOP CHORD 1-2=-317/40, 2-3=-1155/268, 3-4=-856/227,  
 4-5=-732/257, 5-13=-208/130,  
 6-13=-174/162, 6-7=-268/151,  
 1-12=-1064/141  
 BOT CHORD 11-12=-659/442, 10-11=-702/668,  
 9-10=-583/1007, 9-14=-583/1007,  
 8-14=-583/1007, 8-15=-369/688,  
 7-15=-369/688  
 WEBS 2-11=-1036/425, 2-10=-98/738,  
 3-10=-89/140, 3-8=-428/269, 5-8=-38/559,  
 5-7=-1014/385, 1-11=-308/1247

**NOTES**

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

- 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 a live load of 20.0psf  
 on the bottom chord in all areas where a rectangle  
 3-06-00 tall by 2-00-00 wide will fit between the bottom  
 chord and any other members, with BCDL = 10.0psf.
- One RT7A USP connectors recommended to connect  
 truss to bearing walls due to UPLIFT at jt(s) 7 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.

**LOAD CASE(S)** Standard



May 27, 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.



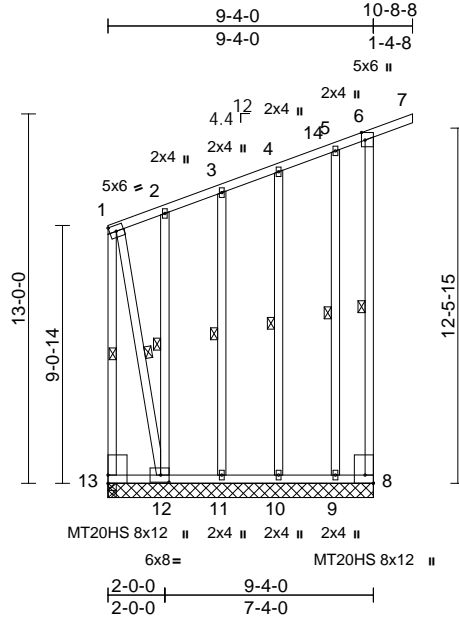
818 Soundside Road  
 Edenton, NC 27932

Job 20030003-A	Truss T2SE	Truss Type Monopitch Structural Gable	Qty 2	Ply 1	Jose Moreno-Roof Job Reference (optional)	E14442361
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Tue May 26 15:13:06  
ID:08sxlCQjilJ28glwkcacMzzCeuF-SBCiKaBY11who8XXHnyJxRRXyUw?rLbNmP8GzCbEh

Page: 1



Scale = 1:81

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.57	Vert(LL)	0.00	12-13	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	0.00	12-13	>999	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.67	Horz(CT)	0.00	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 136 lb	FT = 20%

LUMBER	TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2	
WEBS	2x4 SP 2400F 2.0E *Except* 1-12:2x4 SP No.2	
OTHERS	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.	
WEBS	1 Row at midpt 6-8, 1-13, 2-12, 3-11, 4-10, 5-9, 1-12	
REACTIONS	(size)	8=9-4-0, 9=9-4-0, 10=9-4-0, 11=9-4-0, 12=9-4-0, 13=0-3-8
Max Horiz	13=379 (LC 12)	
Max Uplift	8=-117 (LC 12), 9=-29 (LC 11), 10=-14 (LC 12), 11=-22 (LC 11), 12=-1090 (LC 12), 13=-324 (LC 13)	
Max Grav	8=194 (LC 21), 9=115 (LC 30), 10=164 (LC 2), 11=160 (LC 2), 12=402 (LC 13), 13=1153 (LC 12)	
FORCES	(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-308/211, 2-3=-310/233, 3-4=-257/208, 4-14=-220/184, 5-14=-212/196, 5-6=-149/134, 6-7=-39/0, 6-8=-189/342, 1-13=-2310/1716	
BOT CHORD	12-13=-628/527, 11-12=-208/226, 10-11=-208/226, 9-10=-208/226, 8-9=-208/226	
WEBS	2-12=-166/160, 3-11=-121/132, 4-10=-123/101, 5-9=-235/181, 1-12=-1786/2365	

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- All plates are MT20 plates unless otherwise indicated.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1090 lb uplift at joint 12.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8, 13, 11, 10, and 9. This connection is for uplift only and does not consider lateral forces.

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

**LOAD CASE(S)** Standard



May 27, 2020

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

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



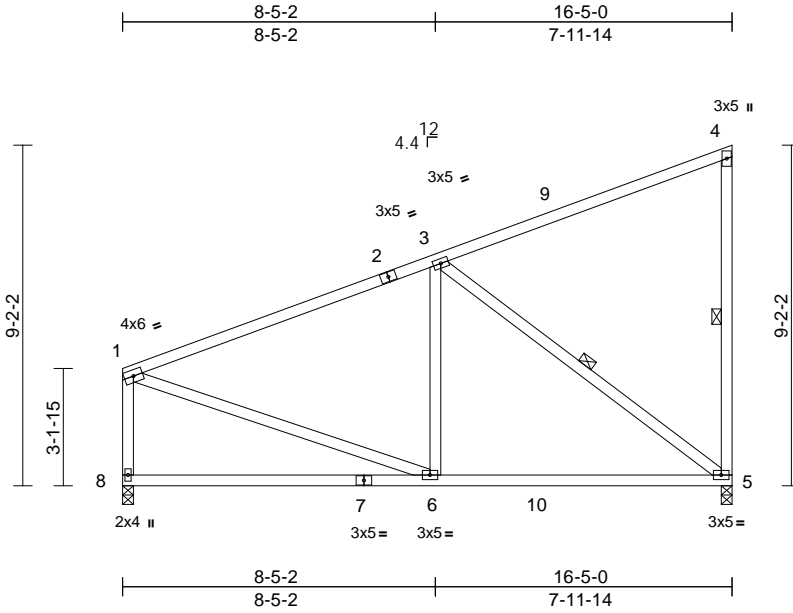
818 Soundside Road  
Edenton, NC 27932

Job 20030003-A	Truss T3	Truss Type Monopitch	Qty 4	Ply 1	Jose Moreno-Roof Job Reference (optional)	E14442362
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Tue May 26 15:13:06  
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Page: 1



Scale = 1:62.1

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	0.93	Vert(LL)	-0.08	5-6	>999	240	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.16	5-6	>999	180	
TCDL	10.0	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.01	5	n/a	n/a	
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH							
BCDL	10.0										
										Weight: 102 lb	FT = 20%

**LUMBER**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.2 \*Except\* 8-1:2x4 SP No.3

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 8-1-8 oc bracing.  
 WEBS 1 Row at midpt 4-5, 3-5

**REACTIONS**

(size) 5=0-3-8, 8=0-3-8  
 Max Horiz 8=274 (LC 12)  
 Max Uplift 5=48 (LC 12), 8=7 (LC 11)  
 Max Grav 5=645 (LC 2), 8=645 (LC 2)

**FORCES**

(lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=-642/147, 2-3=-514/166, 3-9=-179/91, 4-9=-140/131, 4-5=-212/139, 1-8=-572/195  
 BOT CHORD 7-8=-503/384, 6-7=-503/384, 6-10=-351/540, 5-10=-351/540  
 WEBS 1-6=-95/544, 3-6=0/183, 3-5=-653/324

**NOTES**

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- 2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.

- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5 and 8. This connection is for uplift only and does not consider lateral forces.
- 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard



May 27, 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.



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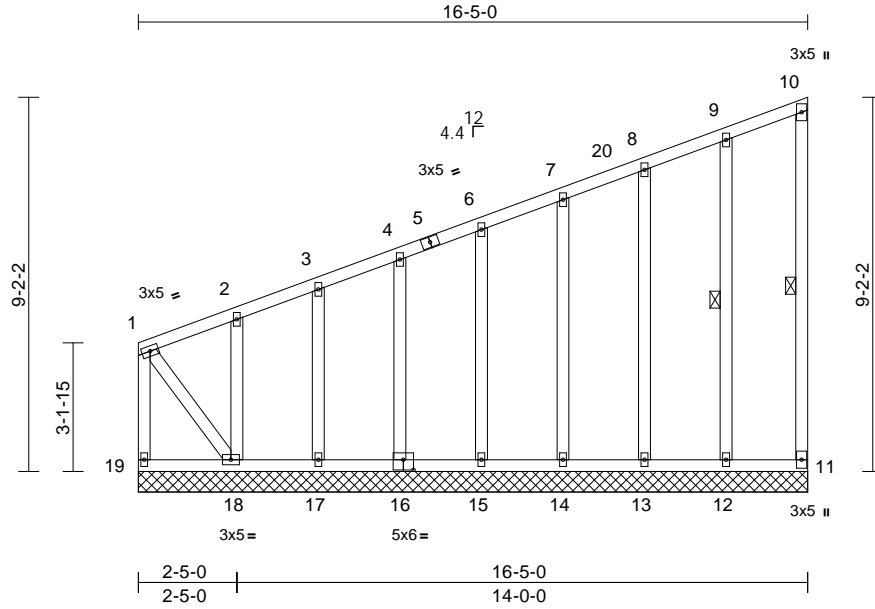


Job 20030003-A	Truss T3GE	Truss Type Monopitch Supported Gable	Qty 2	Ply 1	Jose Moreno-Roof Job Reference (optional)	E14442363
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Tue May 26 15:13:06  
ID:nhKyRxWkrAmw5vMSChjUhfzCeu7-SBCiKaBY11who8XXHnyJxRSnYgAw7MLbNmP8GzCbEh

Page: 1



Scale = 1:56.5

Plate Offsets (X, Y): [16:0-3:0,0-3:0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.49	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.24	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.19	Horiz(TL)	0.00	11	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 131 lb	FT = 20%

LUMBER	
TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2 *Except* 19-1:2x4 SP No.1, 1-18:2x4 SP No.3
OTHERS	2x4 SP No.2 *Except* 16-4,17-3,18-2:2x4 SP No.3

BOT CHORD	
18-19	=481/340, 17-18=-137/151, 16-17=-137/151, 15-16=-138/152, 14-15=-138/152, 13-14=-138/152, 12-13=-138/152, 11-12=-138/152
WEBS	9-12=-145/134, 8-13=-130/92, 7-14=-120/76, 6-15=-120/75, 4-16=-120/75, 3-17=-115/74, 2-18=-141/91, 1-18=-383/635

- 10) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 11, 12, 13, 14, 15, 16, 17, and 18. This connection is for uplift only and does not consider lateral forces.
- 11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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, Except: 8-6-6 oc bracing: 18-19.
WEBS	1 Row at midpt 10-11, 9-12

REACTIONS	(size)
Max Horiz	11=16-5-0, 12=16-5-0, 13=16-5-0, 14=16-5-0, 15=16-5-0, 16=16-5-0, 17=16-5-0, 18=16-5-0, 19=16-5-0
Max Uplift	19=274 (LC 12)
Max Grav	11=-22 (LC 12), 12=-17 (LC 11), 13=-10 (LC 15), 14=-15 (LC 15), 15=-13 (LC 15), 16=-13 (LC 15), 17=-12 (LC 15), 18=-250 (LC 12)
	11=67 (LC 21), 12=187 (LC 21), 13=169 (LC 21), 14=160 (LC 2), 15=158 (LC 2), 16=161 (LC 2), 17=154 (LC 2), 18=190 (LC 2), 19=316 (LC 12)

FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-352/204, 2-3=-314/190, 3-4=-281/178, 4-5=-248/155, 5-6=-244/168, 6-7=-214/156, 7-20=-180/137, 8-20=-175/143, 8-9=-149/136, 9-10=-124/123, 10-11=-53/56, 1-19=-586/331

- NOTES**
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
  - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
  - 4) Unbalanced snow loads have been considered for this design.
  - 5) All plates are 2x4 MT20 unless otherwise indicated.
  - 6) Gable requires continuous bottom chord bearing.
  - 7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - 8) Gable studs spaced at 2-0-0 oc.
  - 9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

**LOAD CASE(S)** Standard



May 27, 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.



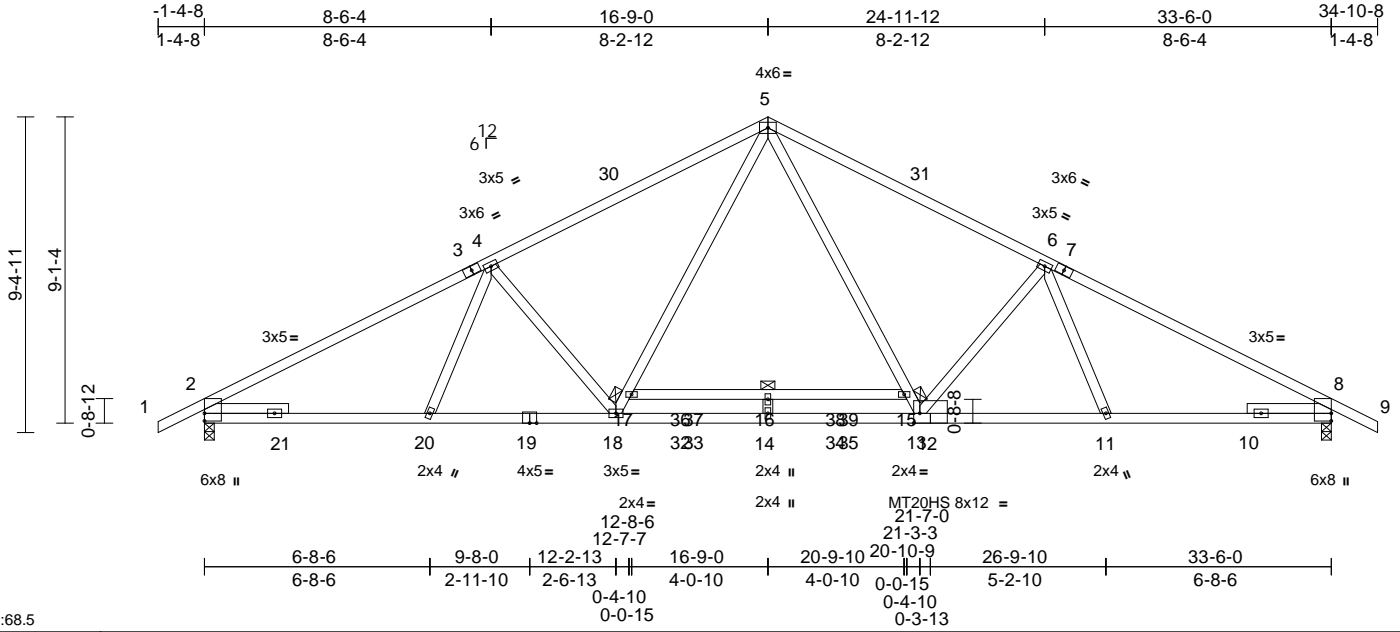
818 Soundside Road  
Edenton, NC 27932

Job 20030003-A	Truss T4	Truss Type Common	Qty 10	Ply 1	Jose Moreno-Roof Job Reference (optional)	E14442364
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Tue May 26 15:13:07  
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Page: 1



Scale = 1:68.5  
Plate Offsets (X, Y): [12:0-2-3,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	0.86	Vert(LL)	-0.31	16	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.96	Vert(CT)	-0.73	16	>553	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.09	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 191 lb	FT = 20%

**LUMBER**  
TOP CHORD 2x4 SP 2400F 2.0E \*Except\* 1-3,7-9:2x4 SP No.2  
BOT CHORD 2x4 SP No.1 \*Except\* 17-15:2x4 SP No.2  
WEBS 2x4 SP No.2 \*Except\* 20-4,11-6,14-16:2x4 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.  
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing. Except: 6-0-0 oc bracing: 15-17

**REACTIONS** (size) 2=0-3-8, 8=0-3-8  
Max Horiz 2=97 (LC 14)  
Max Grav 2=1607 (LC 2), 8=1607 (LC 2)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/46, 2-3=-2557/250, 3-4=-2338/253, 4-30=-2330/212, 5-30=-2232/235, 5-31=-2232/235, 6-31=-2330/212, 6-7=-2338/253, 7-8=-2557/250, 8-9=0/46  
BOT CHORD 2-21=-388/610, 20-21=-85/2209, 19-20=-90/2238, 18-19=-90/2238, 18-32=0/1689, 32-33=0/1689, 14-33=0/1689, 14-34=0/1689, 34-35=0/1689, 13-35=0/1689, 12-13=-94/2202, 11-12=-94/2202, 10-11=-91/2187, 8-10=-406/610, 17-36=-98/0, 36-37=-98/0, 16-37=-98/0, 16-38=-98/0, 38-39=-98/0, 15-39=-98/0  
WEBS 4-20=-86/14, 4-18=-468/332, 17-18=-42/779, 5-17=0/929, 5-15=0/929, 13-15=-42/778, 6-13=-468/332, 6-11=-87/14, 14-16=-67/8

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

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- 200.0lb AC unit load placed on the bottom chord, 16-9-0 from left end, supported at two points, 5-0-0 apart.
- All plates are MT20 plates unless otherwise indicated.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard



May 27, 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 20030003-A	Truss T4GE	Truss Type Common Supported Gable	Qty 2	Ply 1	Jose Moreno-Roof Job Reference (optional)	E14442365
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Tue May 26 15:13:08  
ID:j3SjsdY\_NnceLCWrJilym4zCeu5-wNm4XwCAWL2YPl6jrVT\_r9ziy2MfatVp1VzhizCbEg

Page: 2

- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- 7) All plates are 2x4 MT20 unless otherwise indicated.
- 8) Gable requires continuous bottom chord bearing.
- 9) Gable studs spaced at 2-0-0 oc.
- 10) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 11) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 33, 34, 35, 37, 38, 39, 40, 31, 30, 28, 27, 26, 25, and 24. This connection is for uplift only and does not consider lateral forces.
- 12) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

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

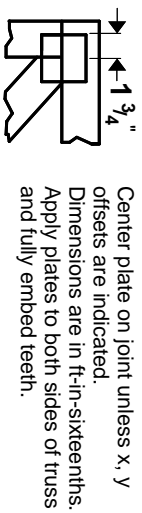
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



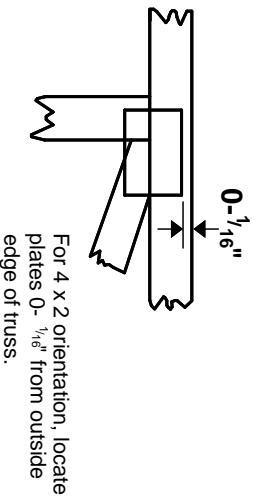
818 Soundside Road  
Edenton, NC 27932

# Symbols

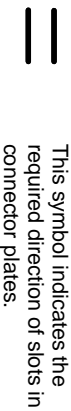
## PLATE LOCATION AND ORIENTATION



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 SIZE

4 X 4

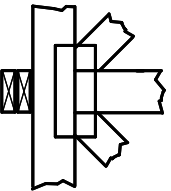
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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

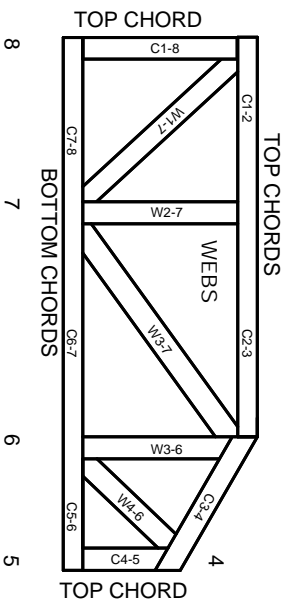


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## 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



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-1-7473 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.