Trenco

818 Soundside Rd
Edenton, NC 27932

Re: 20090082
22 Mitchell MAnor - Hampton El C

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: E14880759 thru E14880786

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

North Carolina COA: C-0844

NORTH CAROLINA
PROFESSIONAL
SEAL
036322
ENGINEER
ERIC A. GILBERT

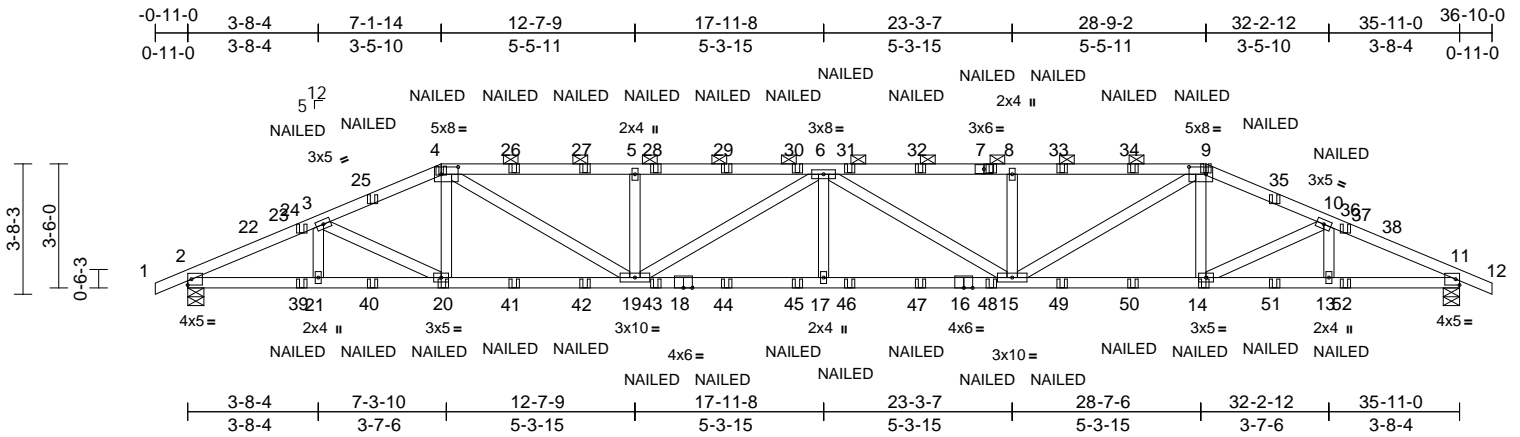September 18,2020

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	Truss	Truss Type	Qty	Ply	22 Mitchell MAnor - Hampton El C	
20090082	A01	Hip Girder	1	**2**	Job Reference (optional)	E14880759

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

Run: 8.42 S Aug 25 2020 Print: 8.420 S Aug 25 2020 MiTek Industries, Inc. Fri Sep 18 08:30:12   Page: 1
ID:TbwUYn0TWMEt8CRb?hJNUEzsBTZ-Mock Me

Scale = 1:65.1

Plate Offsets (X, Y): [4:0-5-12,0-2-8], [9:0-5-12,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.46	Vert(LL)	0.26	17	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.25	BC	0.70	Vert(CT)	-0.44	17-19	>959	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.20	Horz(CT)	0.12	11	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-S								
BCDL	10.0										Weight: 367 lb	FT = 20%

LUMBER
TOP CHORD   2x4 SP No.2
BOT CHORD   2x4 SP No.2
WEBS   2x4 SP No.3 *Except*
19-4,19-6,15-6,15-9:2x4 SP No.2

BRACING
TOP CHORD   Structural wood sheathing directly applied or 5-11-1 oc purlins, except
2-0-0 oc purlins (4-10-13 max.): 4-9.
BOT CHORD   Rigid ceiling directly applied or 9-1-10 oc bracing.

REACTIONS (size)   2=0-5-8, 11=0-5-8
Max Uplift 2=-888 (LC 6), 11=-887 (LC 6)
Max Grav 2=2235 (LC 15), 11=2234 (LC 15)

FORCES   (lb) - Maximum Compression/Maximum Tension

TOP CHORD   1-2=0/14, 2-22=-4513/1544,
22-23=-4470/1544, 23-24=-4453/1544,
3-24=-4444/1543, 3-25=-4353/1492,
4-25=-4330/1496, 4-26=-5803/1989,
26-27=-5802/1989, 5-27=-5802/1989,
5-28=-5802/1989, 28-29=-5802/1989,
29-30=-5802/1989, 6-30=-5802/1989,
6-31=-5801/1989, 31-32=-5801/1989,
7-32=-5801/1989, 7-8=-5801/1989,
8-33=-5800/1988, 33-34=-5800/1988,
9-34=-5800/1988, 9-35=-4327/1495,
10-35=-4350/1491, 10-36=-4442/1542,
36-37=-4451/1543, 37-38=-4468/1543,
11-38=-4511/1543, 11-12=0/14

BOT CHORD   2-39=-1318/3977, 21-39=-1318/3977,
21-40=-1318/3977, 20-40=-1318/3977,
20-41=-1245/3978, 41-42=-1245/3978,
19-42=-1245/3978, 19-43=-1986/6331,
18-43=-1986/6331, 18-44=-1986/6331,
44-45=-1986/6331, 17-45=-1986/6331,
17-46=-1986/6331, 46-47=-1986/6331,
16-47=-1986/6331, 16-48=-1986/6331,
15-48=-1986/6331, 15-49=-1244/3976,
49-50=-1244/3976, 14-50=-1244/3976,
14-51=-1317/3975, 13-51=-1317/3975,
13-52=-1317/3975, 11-52=-1317/3975

WEBS   3-21=-1/195, 3-20=-76/155, 4-20=0/294,
4-19=-661/2065, 5-19=-565/336,
6-19=-666/198, 6-17=0/299, 6-15=-669/199,
8-15=-564/336, 9-15=-661/2065, 9-14=0/294,
10-14=-75/153, 10-13=-1/195

NOTES
1)   2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2)   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.
3)   This truss has been checked for uniform roof live load only, except as noted.

4)   Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=0.0psf; BCDL=0.0psf; h=0ft; Cat. II; Exp C; Enclosed; C-C Exterior (2) -0-11-0 to 2-1-0, Interior (1) 2-1-0 to 2-11-0, Exterior (2) 2-11-0 to 11-4-13, Interior (1) 11-4-13 to 24-6-3, Exterior (2) 24-6-3 to 33-0-0, Interior (1) 33-0-0 to 33-10-0, Exterior (2) 33-10-0 to 36-10-0; cantilever left and right exposed ; end vertical right exposed; Lumber DOL=1.60 plate grip DOL=1.00.
5)   TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.00); Pg=20.0 psf (ground snow); Pf=20.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp C; Partially Exp.; Ct=1.10, Lu=0-0-0
6)   This truss has been checked for uniform snow load only, except as noted.
7)   This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
8)   Provide adequate drainage to prevent water ponding.
9)   This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

NORTH CAROLINA
PROFESSIONAL
SEAL
036322
ERIC A. GILBERT
ENGINEER

September 18,2020

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Mitchell MAnor - Hampton El C	
20090082	A01	Hip Girder	1	**2**	Job Reference (optional)	E14880759

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

Run: 8.42 S Aug 25 2020 Print: 8.420 S Aug 25 2020 MiTek Industries, Inc. Fri Sep 18 08:30:12   Page: 2
ID:TbwUYn0TWMEt8CRb?hJNUEzsBTZ-Mock Me

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 888 lb uplift at joint 2 and 887 lb uplift at joint 11.

12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

13) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.

LOAD CASE(S)   Standard

1)   Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.00
   Uniform Loads (lb/ft)
      Vert: 1-4=-51, 4-9=-61, 9-12=-51, 2-11=-20
   Concentrated Loads (lb)
      Vert: 4=-27 (B), 7=-22 (B), 9=-27 (B), 20=-15 (B),
      14=-15 (B), 24=-16 (B), 26=-22 (B), 27=-22 (B),
      28=-22 (B), 29=-22 (B), 30=-22 (B), 31=-22 (B),
      32=-22 (B), 33=-22 (B), 34=-22 (B), 36=-16 (B),
      39=-61 (B), 40=-75 (B), 41=-15 (B), 42=-15 (B),
      43=-15 (B), 44=-15 (B), 45=-15 (B), 46=-15 (B),
      47=-15 (B), 48=-15 (B), 49=-15 (B), 50=-15 (B),
      51=-75 (B), 52=-61 (B)

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Mitchell MAnor - Hampton El C	
20090082	A02	Hip	1	1		E14880760
					Job Reference (optional)	

Carter Components (Sanford), Sanford, NC - 27332,
Run: 8.42 S Aug 25 2020 Print: 8.420 S Aug 25 2020 MiTek Industries, Inc. Fri Sep 18 08:30:14 Page: 1
ID:i8YA8Ik6OooMLQ07WIORwuzsBSd-Mock Me
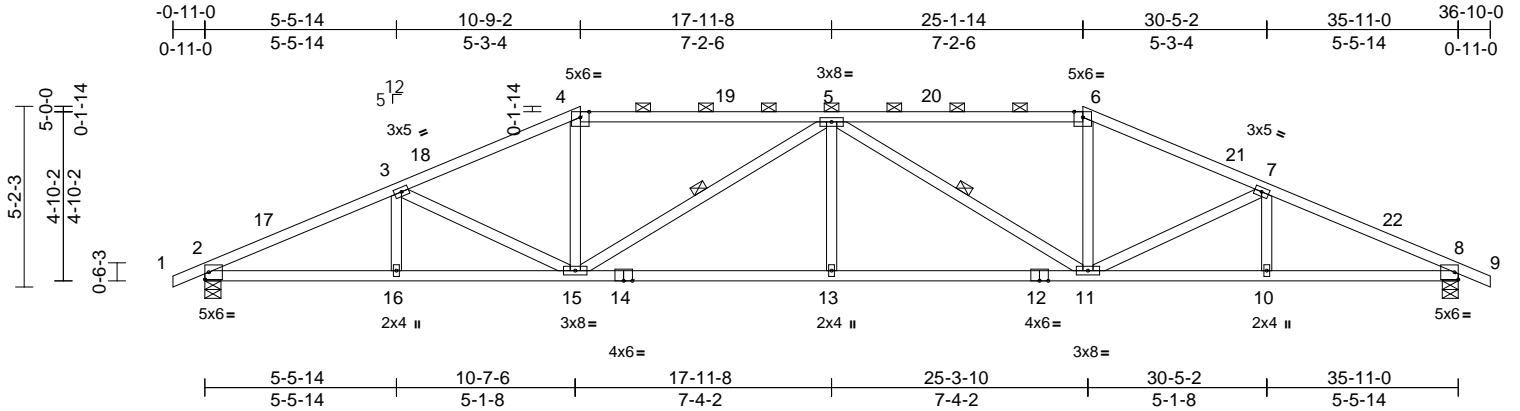
Scale = 1:66

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.94	Vert(LL)	-0.21	13	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.25	BC	0.81	Vert(CT)	-0.45	11-13	>944	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.16	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-S								
BCDL	10.0										Weight: 179 lb	FT = 20%

LUMBER
TOP CHORD   2x4 SP No.2
BOT CHORD   2x4 SP No.2
WEBS   2x4 SP No.3 *Except*
15-3,15-5,11-5,11-7:2x4 SP No.2

BRACING
TOP CHORD   Structural wood sheathing directly applied or
             3-0-12 oc purlins, except
             2-0-0 oc purlins (2-2-0 max.): 4-6.
BOT CHORD   Rigid ceiling directly applied or 4-10-11 oc
             bracing.
WEBS   1 Row at midpt   5-15, 5-11
REACTIONS (size)   2=0-5-8, 8=0-5-8
             Max Uplift 2=-895 (LC 6), 8=-895 (LC 6)
             Max Grav   2=1508 (LC 11), 8=1508 (LC 11)

FORCES   (lb) - Maximum Compression/Maximum
             Tension
TOP CHORD   1-2=0/14, 2-17=-3000/1607,
             3-17=-2949/1607, 3-18=-2618/1469,
             4-18=-2567/1469, 4-19=-2374/1404,
             5-19=-2376/1404, 5-20=-2376/1404,
             6-20=-2374/1404, 6-21=-2567/1469,
             7-21=-2618/1469, 7-22=-2949/1607,
             8-22=-3000/1607, 8-9=0/14
BOT CHORD   2-16=-1384/2650, 15-16=-1384/2650,
             14-15=-1486/2872, 13-14=-1486/2872,
             12-13=-1486/2872, 11-12=-1486/2872,
             10-11=-1384/2650, 8-10=-1384/2650
WEBS   3-16=0/201, 3-15=-352/213, 4-15=-286/635,
             5-15=-663/356, 5-13=0/307, 5-11=-663/356,
             6-11=-286/635, 7-11=-352/213, 7-10=0/201

NOTES
1) This truss has been checked for uniform roof live load
   only, except as noted.

2) Wind: ASCE 7-10; Vult=130mph (3-second gust)
   Vasd=103mph; TCDL=0.0psf; BCDL=0.0psf; h=0ft; Cat.
   II; Exp C; Enclosed; C-C Exterior (2) -0-11-0 to 2-1-0,
   Interior (1) 2-1-0 to 6-6-3, Exterior (2) 6-6-3 to 15-0-0,
   Interior (1) 15-0-0 to 20-11-0, Exterior (2) 20-11-0 to
   29-4-13, Interior (1) 29-4-13 to 33-10-0, Exterior (2)
   33-10-0 to 36-10-0; cantilever left and right exposed ;
   end vertical right exposed; Lumber DOL=1.60 plate grip
   DOL=1.00
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber
   DOL=1.25 Plate DOL=1.00); Pg=20.0 psf (ground
   snow); Pf=20.4 psf (flat roof snow: Lumber DOL=1.15
   Plate DOL=1.00); Category II; Exp C; Partially Exp.;
   Ct=1.10, Lu=0-0-0
4) This truss has been checked for uniform snow load only,
   except as noted.
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 15.4 psf on
   overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom
   chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf
   on the bottom chord in all areas where a rectangle
   3-06-00 tall by 2-00-00 wide will fit between the bottom
   chord and any other members.
9) Provide mechanical connection (by others) of truss to
   bearing plate capable of withstanding 895 lb uplift at
   joint 2 and 895 lb uplift at joint 8.
10) 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

September 18,2020

ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Mitchell MAnor - Hampton El C	
20090082	A03	Hip	1	1	Job Reference (optional)	E14880761

Carter Components (Sanford), Sanford, NC - 27332,
Run: 8.42 S Aug 25 2020 Print: 8.420 S Aug 25 2020 MiTek Industries, Inc. Fri Sep 18 08:30:14   Page: 1
ID:mITGrE7AseqpBLTGO0zyDezsBS7-Mock Me
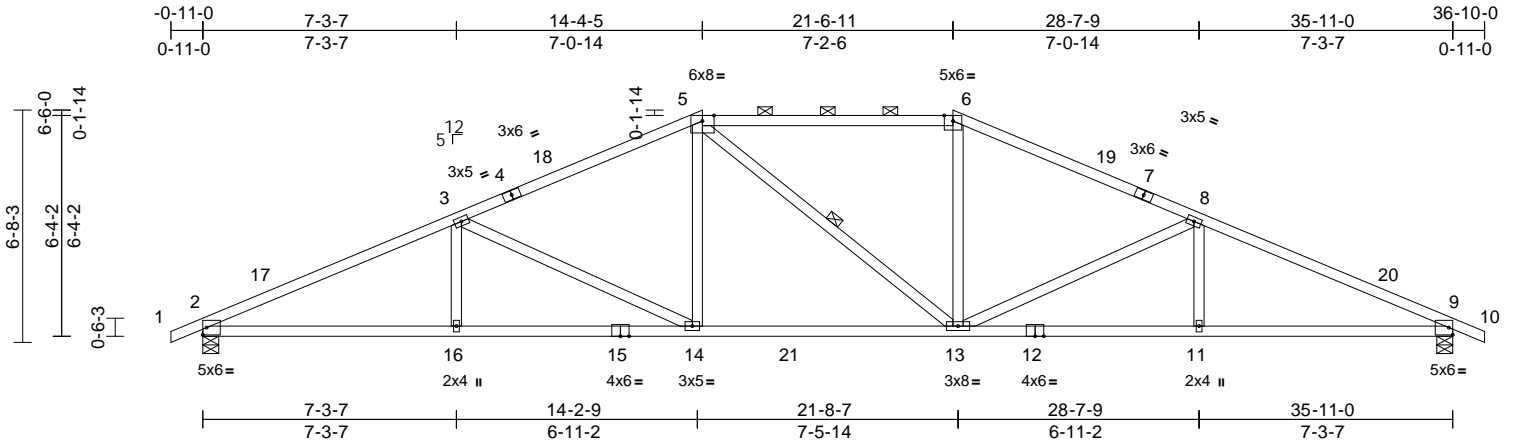
Scale = 1:66.2

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.96	Vert(LL)	-0.18	13-14	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.25	BC	0.83	Vert(CT)	-0.40	13-14	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.67	Horz(CT)	0.14	9	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-S								
BCDL	10.0										Weight: 176 lb	FT = 20%

LUMBER
TOP CHORD   2x4 SP No.2 *Except* 5-6:2x4 SP No.1
BOT CHORD   2x4 SP No.2
WEBS   2x4 SP No.2 *Except* 3-16,8-11:2x4 SP No.3
BRACING
TOP CHORD   Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (2-2-0 max.): 5-6.
BOT CHORD   Rigid ceiling directly applied or 5-0-0 oc bracing.
WEBS   1 Row at midpt   5-13
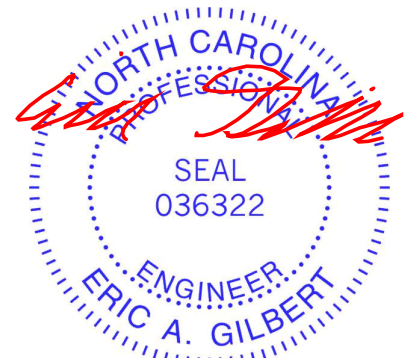**REACTIONS** (size)   2=0-5-8, 9=0-5-8
    Max Uplift 2=-877 (LC 6), 9=-877 (LC 6)
    Max Grav   2=1564 (LC 11), 9=1553 (LC 11)

FORCES   (lb) - Maximum Compression/Maximum Tension
TOP CHORD   1-2=0/14, 2-17=-3103/1554,
    3-17=-3039/1554, 3-4=-2460/1308,
    4-18=-2405/1307, 5-18=-2384/1307,
    5-6=-2189/1273, 6-19=-2354/1307,
    7-19=-2375/1307, 7-8=-2431/1308,
    8-20=-3014/1554, 9-20=-3078/1554,
    9-10=0/14
BOT CHORD   2-16=-1334/2743, 15-16=-1334/2743,
    14-15=-1334/2743, 14-21=-995/2134,
    13-21=-995/2134, 12-13=-1334/2720,
    11-12=-1334/2720, 9-11=-1334/2720
WEBS   3-16=-6/300, 3-14=-659/370, 5-14=-157/499,
    5-13=-47/1, 6-13=-157/480, 8-13=-664/370,
    8-11=-6/299

NOTES
1) This truss has been checked for uniform roof live load only, except as noted.

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=0.0psf; BCDL=0.0psf; h=0ft; Cat. II; Exp C; Enclosed; C-C Exterior (2) -0-11-0 to 2-1-0, Interior (1) 2-1-0 to 10-1-6, Exterior (2) 10-1-6 to 25-9-10, Interior (1) 25-9-10 to 33-10-0, Exterior (2) 33-10-0 to 36-10-0; cantilever left and right exposed ; end vertical right exposed; Lumber DOL=1.60 plate grip DOL=1.00
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.00); Pg=20.0 psf (ground snow); Pf=20.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp C; Partially Exp.; Ct=1.10, Lu=0-0-0
4) This truss has been checked for uniform snow load only, except as noted.
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 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 877 lb uplift at joint 2 and 877 lb uplift at joint 9.
10) 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

SEAL 036322
ERIC A. GILBERT
NORTH CAROLINA PROFESSIONAL ENGINEER

September 18,2020

ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Mitchell MAnor - Hampton El C	
20090082	A04	Common	2	1	Job Reference (optional)	E14880762

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

Run: 8.42 S Aug 25 2020 Print: 8.420 S Aug 25 2020 MiTek Industries, Inc. Fri Sep 18 08:30:15   Page: 1
ID:JSY0Uy8s4RPvGFuPJfUedMzsBQp-Mock Me
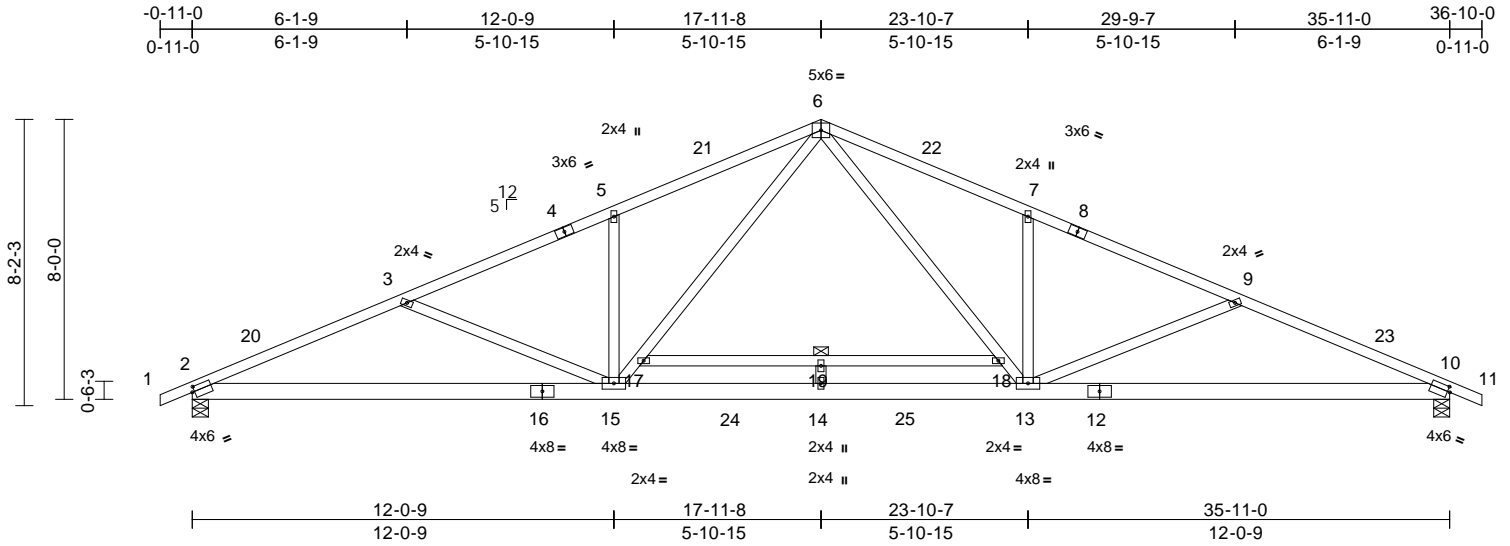
Scale = 1:65.8

Plate Offsets (X, Y): [2:0-0-13,0-1-12], [10:0-0-13,0-1-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.54	Vert(LL)	-0.18	10-13	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.25	BC	0.86	Vert(CT)	-0.52	14	>825	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.45	Horz(CT)	0.09	10	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-S								
BCDL	10.0										Weight: 222 lb	FT = 20%

LUMBER
TOP CHORD   2x4 SP No.2
BOT CHORD   2x6 SP No.2
WEBS   2x4 SP No.2 *Except* 15-5,13-7,19-14:2x4 SP No.3

BRACING
TOP CHORD   Structural wood sheathing directly applied or 2-11-1 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 7-2-4 oc bracing.
WEBS   1 Row at midpt   17-18

REACTIONS (size)   2=0-5-8, 10=0-5-8
Max Uplift 2=-718 (LC 6), 10=-718 (LC 6)
Max Grav   2=1628 (LC 11), 10=1628 (LC 11)

FORCES   (lb) - Maximum Compression/Maximum Tension
TOP CHORD   1-2=0/20, 2-20=-3267/1186,
3-20=-3214/1186, 3-4=-2891/990,
4-5=-2785/990, 5-21=-2932/1100,
6-21=-2871/1100, 6-22=-2871/1100,
7-22=-2932/1100, 7-8=-2785/990,
8-9=-2891/990, 9-23=-3214/1186,
10-23=-3267/1186, 10-11=0/20
BOT CHORD   2-16=-1003/2911, 15-16=-1003/2911,
15-24=-507/1853, 14-24=-507/1853,
14-25=-507/1853, 13-25=-507/1853,
12-13=-1003/2911, 10-12=-1003/2911
WEBS   5-15=-413/286, 15-17=-380/1160,
6-17=-366/1179, 3-15=-376/286,
6-18=-366/1179, 13-18=-380/1160,
7-13=-413/286, 9-13=-376/286, 17-19=-14/0,
18-19=-14/0, 14-19=0/36

NOTES
1) This truss has been checked for uniform roof live load only, except as noted.

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=0.0psf; BCDL=0.0psf; h=0ft; Cat. II; Exp C; Enclosed; C-C Exterior (2) -0-11-0 to 2-1-0, Interior (1) 2-1-0 to 14-11-8, Exterior (2) 14-11-8 to 20-11-8, Interior (1) 20-11-8 to 33-10-0, Exterior (2) 33-10-0 to 36-10-0; cantilever left and right exposed ; end vertical right exposed; Lumber DOL=1.60 plate grip DOL=1.00
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.00); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp C; Partially Exp.; Ct=1.10
4) This truss has been checked for uniform snow load only, except as noted.
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 15.4 psf on overhangs non-concurrent with other live loads.
6) 200.0lb AC unit load placed on the bottom chord, 17-11-8 from left end, supported at two points, 5-0-0 apart.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 718 lb uplift at joint 10 and 718 lb uplift at joint 2.

LOAD CASE(S) Standard

SEAL 036322
ERIC A. GILBERT
NORTH CAROLINA PROFESSIONAL ENGINEER

September 18,2020

ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Mitchell MAnor - Hampton EI C	
20090082	A05	Common	5	1	Job Reference (optional)	E14880763

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

Run: 8.42 S Aug 25 2020 Print: 8.420 S Aug 25 2020 MiTek Industries, Inc. Fri Sep 18 08:30:15   Page: 1
ID:UI8v4HfnV9MaS6qjzFmG?wzsBRR-Mock Me
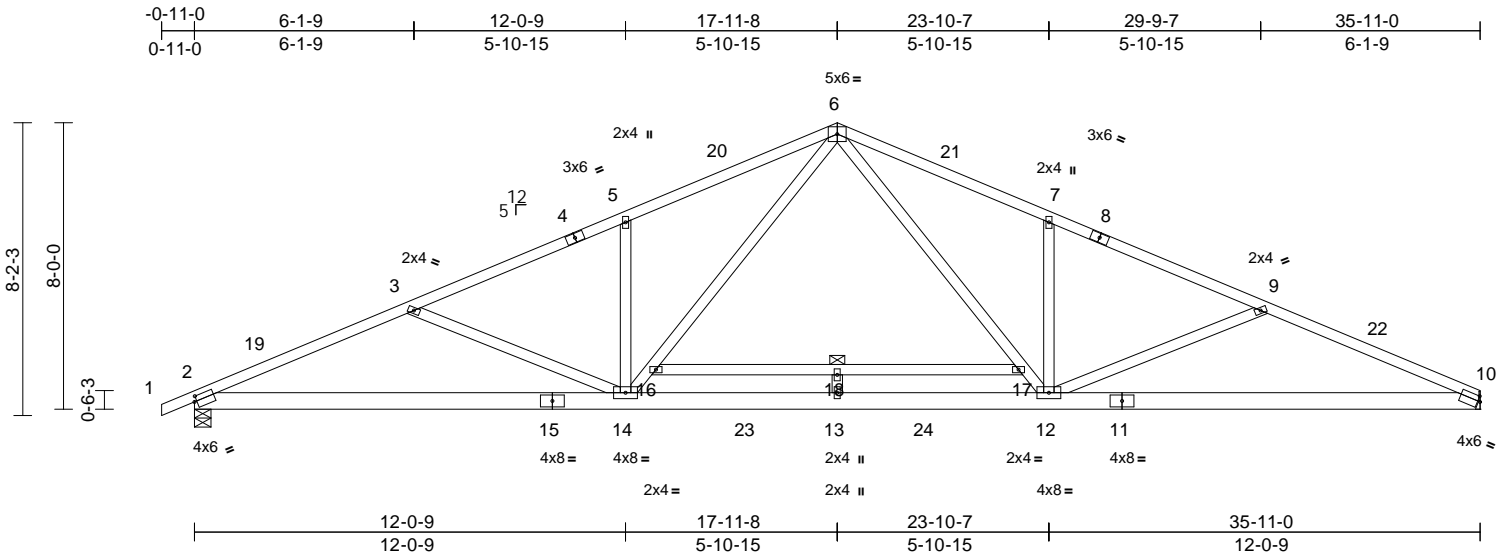
Scale = 1:64.4

Plate Offsets (X, Y): [2:0-0-13,0-1-12], [10:0-0-13,0-1-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.67	Vert(LL)	-0.20	10-12	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.25	BC	0.90	Vert(CT)	-0.52	13	>815	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.09	10	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-S								
BCDL	10.0										Weight: 220 lb	FT = 20%

LUMBER
TOP CHORD   2x4 SP No.2
BOT CHORD   2x6 SP No.2
WEBS   2x4 SP No.2 *Except* 14-5,12-7,18-13:2x4
            SP No.3

BRACING
TOP CHORD   Structural wood sheathing directly applied or
            2-5-6 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 6-10-11 oc
            bracing.
WEBS   1 Row at midpt   16-17
REACTIONS (size)   2=0-5-8, 10= Mechanical
            Max Horiz   2=13 (LC 6)
            Max Uplift 2=-724 (LC 6), 10=-641 (LC 6)
            Max Grav   2=1636 (LC 11), 10=1586 (LC 11)

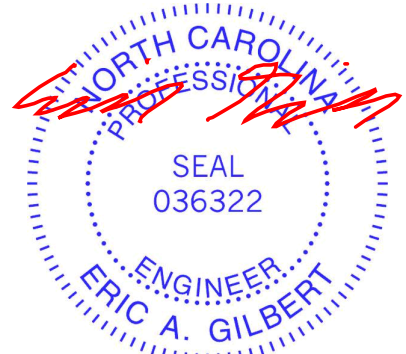**FORCES**   (lb) - Maximum Compression/Maximum
            Tension
TOP CHORD   1-2=0/20, 2-19=-3287/1200,
            3-19=-3234/1200, 3-4=-2911/1004,
            4-5=-2805/1004, 5-20=-2953/1114,
            6-20=-2891/1114, 6-21=-2911/1128,
            7-21=-2973/1128, 7-8=-2827/1020,
            8-9=-2933/1020, 9-22=-3295/1252,
            10-22=-3356/1252
BOT CHORD   2-15=-1029/2927, 14-15=-1029/2927,
            14-23=-534/1870, 13-23=-534/1870,
            13-24=-534/1870, 12-24=-534/1870,
            11-12=-1088/3006, 10-11=-1088/3006
WEBS   5-14=-413/285, 14-16=-379/1159,
            6-16=-365/1178, 3-14=-375/286,
            6-17=-387/1209, 12-17=-401/1189,
            7-12=-409/279, 9-12=-441/336, 16-18=-14/0,
            17-18=-14/0, 13-18=0/35

NOTES
1) This truss has been checked for uniform roof live load
   only, except as noted.

2) Wind: ASCE 7-10; Vult=130mph (3-second gust)
   Vasd=103mph; TCDL=0.0psf; BCDL=0.0psf; h=0ft; Cat.
   II; Exp C; Enclosed; C-C Exterior (2) -0-11-0 to 2-1-0,
   Interior (1) 2-1-0 to 14-11-8, Exterior (2) 14-11-8 to
   20-11-8, Interior (1) 20-11-8 to 32-10-4, Exterior (2)
   32-10-4 to 35-10-4; cantilever left and right exposed ;
   end vertical right exposed; Lumber DOL=1.60 plate grip
   DOL=1.00
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber
   DOL=1.25 Plate DOL=1.00); Pg=20.0 psf (ground
   snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15
   Plate DOL=1.00); Category II; Exp C; Partially Exp.;
   Ct=1.10
4) This truss has been checked for uniform snow load only,
   except as noted.
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 15.4 psf on
   overhangs non-concurrent with other live loads.
6) 200.0lb AC unit load placed on the bottom chord,
   17-11-8 from left end, supported at two points, 5-0-0
   apart.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom
   chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf
   on the bottom chord in all areas where a rectangle
   3-06-00 tall by 2-00-00 wide will fit between the bottom
   chord and any other members.
10) Refer to girder(s) for truss to truss connections.
11) Provide mechanical connection (by others) of truss to
    bearing plate capable of withstanding 724 lb uplift at
    joint 2 and 641 lb uplift at joint 10.

LOAD CASE(S)   Standard

September 18,2020

Job	Truss	Truss Type	Qty	Ply	22 Mitchell MAnor - Hampton El C	
20090082	A06	Hip	1	1	Job Reference (optional)	E14880764

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

Run: 8.42 S Aug 25 2020 Print: 8.420 S Aug 25 2020 MiTek Industries, Inc. Fri Sep 18 08:30:16   Page: 1
ID:4GZTkVRYB7ZMm5IDHPQW8dzsBQQ-Mock Me
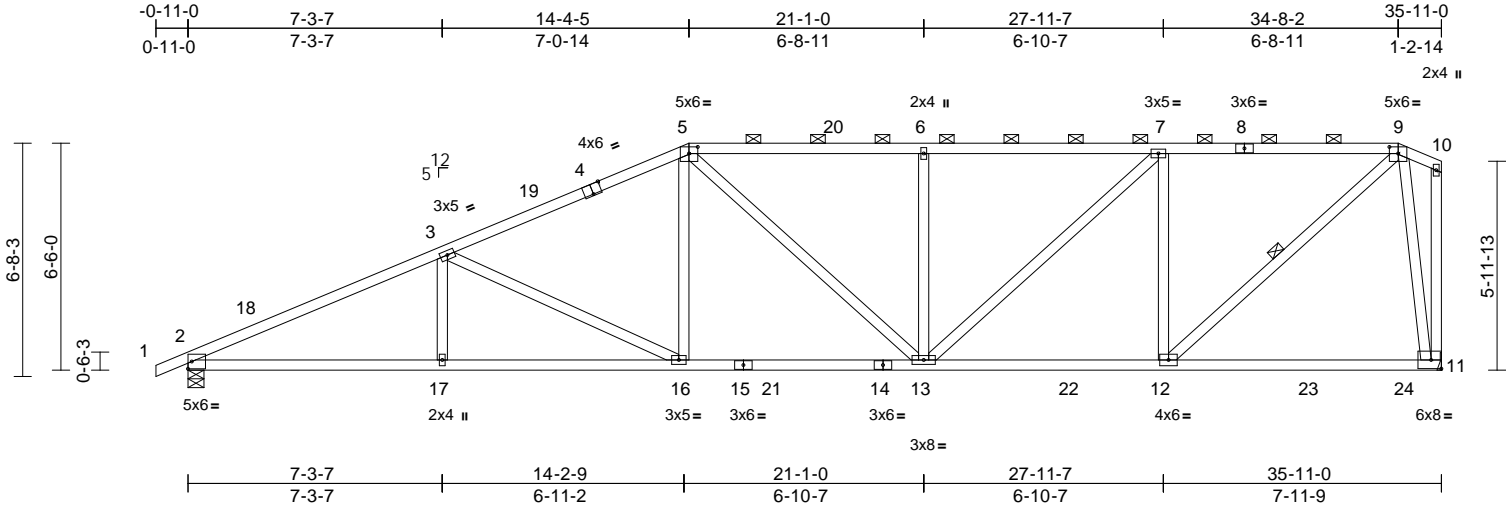
Scale = 1:66

Plate Offsets (X, Y): [4:0-3-0,Edge], [5:0-3-0,0-2-4], [9:0-3-0,0-2-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.80	Vert(LL)	-0.16	13-16	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.25	BC	0.84	Vert(CT)	-0.33	13-16	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.96	Horz(CT)	0.10	11	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-S								
BCDL	10.0										Weight: 209 lb	FT = 20%

LUMBER
TOP CHORD   2x4 SP No.2
BOT CHORD   2x4 SP No.2
WEBS   2x4 SP No.2 *Except* 3-17:2x4 SP No.3
BRACING
TOP CHORD   Structural wood sheathing directly applied or
            2-2-0 oc purlins, except end verticals, and
            2-0-0 oc purlins (3-2-14 max.): 5-9.
BOT CHORD   Rigid ceiling directly applied or 4-11-14 oc
            bracing.
WEBS   1 Row at midpt   9-12
REACTIONS (size)   2=0-5-8, 11= Mechanical
            Max Horiz 2=90 (LC 7)
            Max Uplift 2=-859 (LC 6), 11=-788 (LC 6)
            Max Grav   2=1589 (LC 11), 11=1607 (LC 11)

FORCES   (lb) - Maximum Compression/Maximum
            Tension
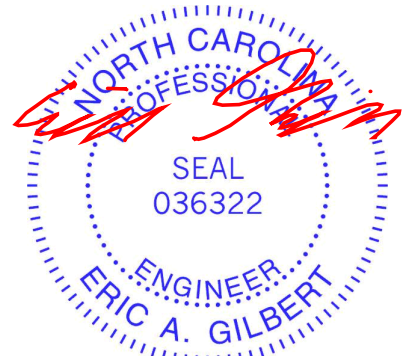TOP CHORD   1-2=0/14, 2-18=-3169/1516,
            3-18=-3107/1516, 3-19=-2498/1252,
            4-19=-2422/1252, 4-5=-2416/1252,
            5-20=-2284/1221, 6-20=-2284/1221,
            6-7=-2284/1221, 7-8=-1690/907,
            8-9=-1690/907, 9-10=-136/134, 10-11=-88/75
BOT CHORD   2-17=-1344/2737, 16-17=-1344/2737,
            15-16=-981/2091, 15-21=-981/2091,
            14-21=-981/2091, 13-14=-981/2091,
            13-22=-670/1540, 12-22=-670/1540,
            12-23=-27/254, 23-24=-27/254,
            11-24=-27/254
WEBS   3-17=-5/302, 3-16=-701/397, 5-16=-170/506,
            5-13=-4/101, 6-13=-430/289, 7-13=-423/800,
            7-12=-975/587, 9-12=-875/1824,
            9-11=-1456/729

NOTES
1) This truss has been checked for uniform roof live load
    only, except as noted.

2) Wind: ASCE 7-10; Vult=130mph (3-second gust)
    Vasd=103mph; TCDL=0.0psf; BCDL=0.0psf; h=0ft; Cat.
    II; Exp C; Enclosed; C-C Exterior (2) -0-11-0 to 2-1-0,
    Interior (1) 2-1-0 to 10-1-6, Exterior (2) 10-1-6 to 18-7-3,
    Interior (1) 18-7-3 to 30-5-4, Exterior (2) 30-5-4 to
    35-9-4; cantilever left and right exposed ; end vertical
    right exposed; Lumber DOL=1.60 plate grip DOL=1.00
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber
    DOL=1.25 Plate DOL=1.00); Pg=20.0 psf (ground
    snow); Pf=20.4 psf (flat roof snow: Lumber DOL=1.15
    Plate DOL=1.00); Category II; Exp C; Partially Exp.;
    Ct=1.10, Lu=0-0-0
4) This truss has been checked for uniform snow load only,
    except as noted.
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 15.4 psf on
    overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom
    chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf
    on the bottom chord in all areas where a rectangle
    3-06-00 tall by 2-00-00 wide will fit between the bottom
    chord and any other members, with BCDL = 10.0psf.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to
    bearing plate capable of withstanding 859 lb uplift at
    joint 2 and 788 lb uplift at joint 11.
11) 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

September 18, 2020

ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Carter Components (Sanford), Sanford, NC - 27332,
Run: 8.42 S Aug 25 2020 Print: 8.420 S Aug 25 2020 MiTek Industries, Inc. Fri Sep 18 08:30:16 Page: 1
ID:rL5LYsyuI1rOoYWIkDBMrUzsBPm-Mock Me
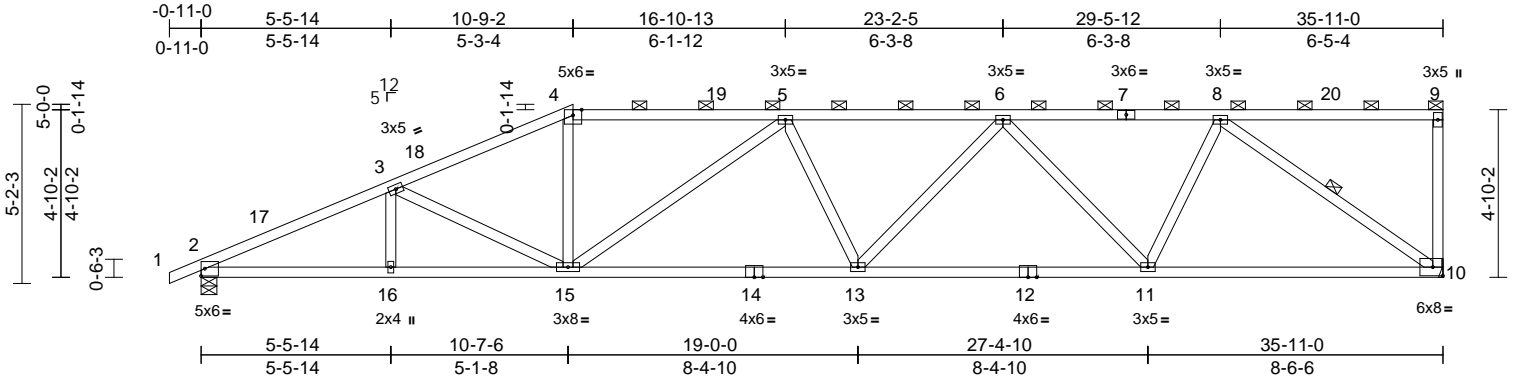
Scale = 1:66.6

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.61	Vert(LL)	-0.19	13-15	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.25	BC	0.91	Vert(CT)	-0.45	13-15	>940	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.77	Horz(CT)	0.14	10	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-S								
BCDL	10.0										Weight: 188 lb	FT = 20%

LUMBER
TOP CHORD   2x4 SP No.2
BOT CHORD   2x4 SP No.2
WEBS   2x4 SP No.3 *Except*
15-3,5-15,8-10,13-6,11-6:2x4 SP No.2

BRACING
TOP CHORD   Structural wood sheathing directly applied or 3-0-14 oc purlins, except end verticals, and 2-0-0 oc purlins (3-1-13 max.): 4-9.
BOT CHORD   Rigid ceiling directly applied or 4-11-10 oc bracing.
WEBS   1 Row at midpt   8-10

REACTIONS   (size)   2=0-5-8, 10= Mechanical
Max Horiz 2=72 (LC 7)
Max Uplift 2=-876 (LC 6), 10=-763 (LC 6)
Max Grav   2=1511 (LC 11), 10=1434 (LC 11)

FORCES   (lb) - Maximum Compression/Maximum Tension
TOP CHORD   1-2=0/14, 2-17=-3007/1562,
3-17=-2957/1562, 3-18=-2628/1419,
4-18=-2575/1419, 4-19=-2381/1357,
5-19=-2382/1357, 5-6=-2856/1560,
6-7=-2090/1135, 7-8=-2090/1135,
8-20=-96/98, 9-20=-96/98, 9-10=-171/131
BOT CHORD   2-16=-1394/2603, 15-16=-1394/2603,
14-15=-1441/2799, 13-14=-1441/2799,
12-13=-1290/2560, 11-12=-1290/2560,
10-11=-803/1658
WEBS   4-15=-286/668, 3-15=-352/221, 3-16=0/189,
5-15=-727/315, 8-10=-2032/1080,
5-13=-69/121, 6-13=-148/333,
6-11=-817/479, 8-11=-389/860

NOTES
1) This truss has been checked for uniform roof live load only, except as noted.

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=0.0psf; BCDL=0.0psf; h=0ft; Cat. II; Exp C; Enclosed; C-C Exterior (2) -0-11-0 to 2-1-0, Interior (1) 2-1-0 to 6-6-3, Exterior (2) 6-6-3 to 15-0-0, Interior (1) 15-0-0 to 32-9-4, Exterior (2) 32-9-4 to 35-9-4; cantilever left and right exposed ; end vertical right exposed; Lumber DOL=1.60 plate grip DOL=1.00
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.00); Pg=20.0 psf (ground snow); Pf=20.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp C; Partially Exp.; Ct=1.10, Lu=0-0-0
4) This truss has been checked for uniform snow load only, except as noted.
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 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 763 lb uplift at joint 10 and 876 lb uplift at joint 2.
11) 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

September 18,2020

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Mitchell MAnor - Hampton El C	
20090082	A08	Half Hip Girder	1	**2**	Job Reference (optional)	E14880766

Carter Components (Sanford), Sanford, NC - 27332,
Run: 8.42 S Aug 25 2020 Print: 8.420 S Aug 25 2020 MiTek Industries, Inc. Fri Sep 18 08:30:17   Page: 1
ID:NQ3PvK8wXxs7j?kMgaT6UszsBPW-Mock Me
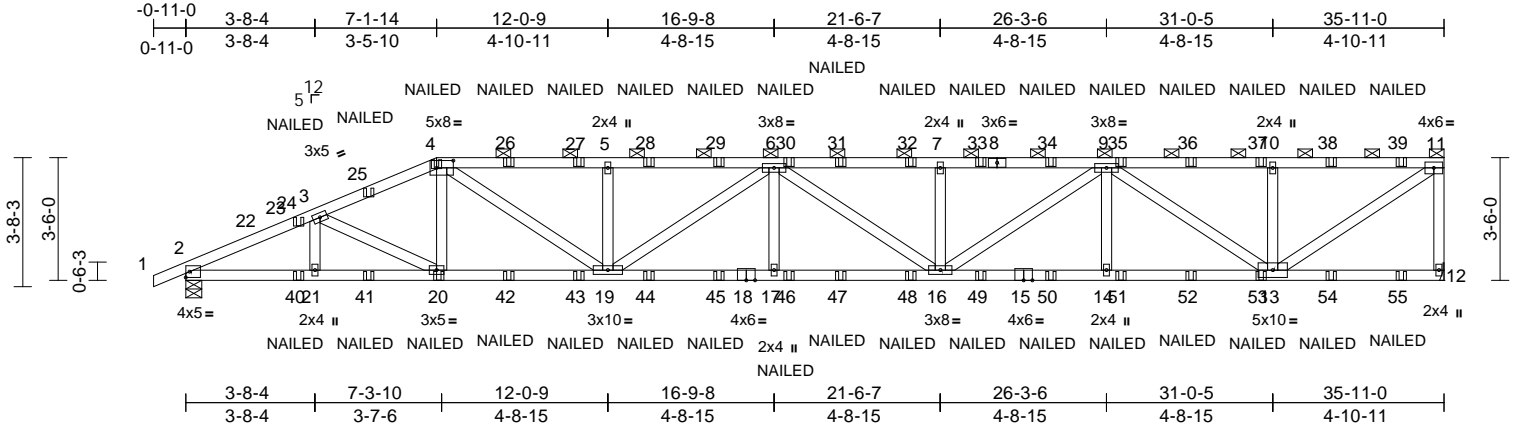
Scale = 1:65.8

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.39	Vert(LL)	0.25	16-17	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.25	BC	0.68	Vert(CT)	-0.43	16-17	>981	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.34	Horz(CT)	0.11	12	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-S								
BCDL	10.0										Weight: 390 lb	FT = 20%

LUMBER
TOP CHORD   2x4 SP No.2
BOT CHORD   2x4 SP No.2
WEBS   2x4 SP No.3 *Except*
19-4,19-6,16-6,16-9,13-9,13-11:2x4 SP No.2

BRACING
TOP CHORD   Structural wood sheathing directly applied or 5-8-13 oc purlins, except end verticals, and 2-0-0 oc purlins (4-9-13 max.): 4-11.
BOT CHORD   Rigid ceiling directly applied or 9-2-9 oc bracing.

REACTIONS (size)   2=0-5-8, 12= Mechanical
Max Horiz   2=54 (LC 13)
Max Uplift 2=-826 (LC 6), 12=-728 (LC 6)
Max Grav   2=2367 (LC 11), 12=2376 (LC 11)

FORCES   (lb) - Maximum Compression/Maximum Tension
TOP CHORD   1-2=0/14, 2-22=-4797/1420,
22-23=-4754/1420, 23-24=-4736/1420,
3-24=-4724/1419, 3-25=-4593/1425,
4-25=-4570/1429, 4-26=-5967/1872,
26-27=-5967/1872, 5-27=-5966/1872,
5-28=-5967/1873, 28-29=-5967/1873,
6-29=-5967/1873, 6-30=-6453/1995,
30-31=-6453/1995, 31-32=-6453/1995,
7-32=-6453/1995, 7-33=-6453/1995,
8-33=-6453/1995, 8-34=-6453/1995,
9-34=-6453/1995, 9-35=-3169/1006,
35-36=-3169/1006, 36-37=-3169/1006,
10-37=-3169/1006, 10-38=-3169/1006,
38-39=-3169/1006, 11-39=-3169/1006,
11-12=-2310/760

BOT CHORD   2-40=-1261/4191, 21-40=-1261/4191,
21-41=-1261/4191, 20-41=-1261/4191,
20-42=-1236/4160, 42-43=-1236/4160,
19-43=-1236/4160, 19-44=-1953/6611,
44-45=-1953/6611, 18-45=-1953/6611,
17-18=-1953/6611, 17-46=-1953/6611,
46-47=-1953/6611, 47-48=-1953/6611,
16-48=-1953/6611, 16-49=-1520/5191,
15-49=-1520/5191, 15-50=-1520/5191,
14-50=-1520/5191, 14-51=-1520/5191,
51-52=-1520/5191, 52-53=-1520/5191,
13-53=-1520/5191, 13-54=-21/78,
54-55=-21/78, 12-55=-21/78

WEBS   3-21=0/206, 3-20=-45/113, 4-20=0/280,
4-19=-618/2063, 5-19=-525/297,
6-19=-875/241, 6-17=0/267, 6-16=-288/93,
7-16=-509/277, 9-16=-429/1427, 9-14=0/255,
9-13=-2537/765, 10-13=-536/296,
11-13=-1126/3728

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
   Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
   Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
   Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) 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.
3) This truss has been checked for uniform roof live load only, except as noted.

4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=0.0psf; BCDL=0.0psf; h=0ft; Cat. II; Exp C; Enclosed; C-C Exterior (2) -0-11-0 to 2-1-0, Interior (1) 2-1-0 to 2-11-0, Exterior (2) 2-11-0 to 11-4-13, Interior (1) 11-4-13 to 32-9-4, Exterior (2) 32-9-4 to 35-9-4; cantilever left and right exposed ; end vertical right exposed; Lumber DOL=1.60 plate grip DOL=1.00.
5) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.00); Pg=20.0 psf (ground snow); Pf=20.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp C; Partially Exp.; Ct=1.10, Lu=0-0-0
6) This truss has been checked for uniform snow load only, except as noted.
7) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
8) Provide adequate drainage to prevent water ponding.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

September 18,2020

TRENCO
ENGINEERING BY
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Mitchell MAnor - Hampton El C	
20090082	A08	Half Hip Girder	1	**2**	Job Reference (optional)	E14880766

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

Run: 8.42 S Aug 25 2020 Print: 8.420 S Aug 25 2020 MiTek Industries, Inc. Fri Sep 18 08:30:17   Page: 2
ID:NQ3PvK8wXxs7j?kMgaT6UszsBPW-Mock Me

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) Refer to girder(s) for truss to truss connections.
12) Provide mechanical connection (by others) of truss to
    bearing plate capable of withstanding 728 lb uplift at
    joint 12 and 826 lb uplift at joint 2.
13) Graphical purlin representation does not depict the size
    or the orientation of the purlin along the top and/or
    bottom chord.
14) "NAILED" indicates 3-10d (0.148"x3") or 3-12d
    (0.148"x3.25") toe-nails per NDS guidlines.

LOAD CASE(S)   Standard
1)   Dead + Snow (balanced): Lumber Increase=1.15, Plate
     Increase=1.00
     Uniform Loads (lb/ft)
       Vert: 1-4=-51, 4-11=-61, 2-12=-20
     Concentrated Loads (lb)
       Vert: 4=-27 (F), 20=-15 (F), 24=-16 (F), 26=-22 (F),
       27=-22 (F), 28=-22 (F), 29=-22 (F), 30=-22 (F),
       31=-22 (F), 32=-22 (F), 33=-22 (F), 34=-22 (F),
       35=-22 (F), 36=-22 (F), 37=-22 (F), 38=-22 (F),
       39=-22 (F), 40=-61 (F), 41=-75 (F), 42=-15 (F),
       43=-15 (F), 44=-15 (F), 45=-15 (F), 46=-15 (F),
       47=-15 (F), 48=-15 (F), 49=-15 (F), 50=-15 (F),
       51=-15 (F), 52=-15 (F), 53=-15 (F), 54=-15 (F),
       55=-15 (F)

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

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

Run: 8.42 S Aug 25 2020 Print: 8.420 S Aug 25 2020 MiTek Industries, Inc. Fri Sep 18 08:30:18   Page: 1
ID:5bGPLk_owD?GFM_Zens?8_zsCiL-Mock Me
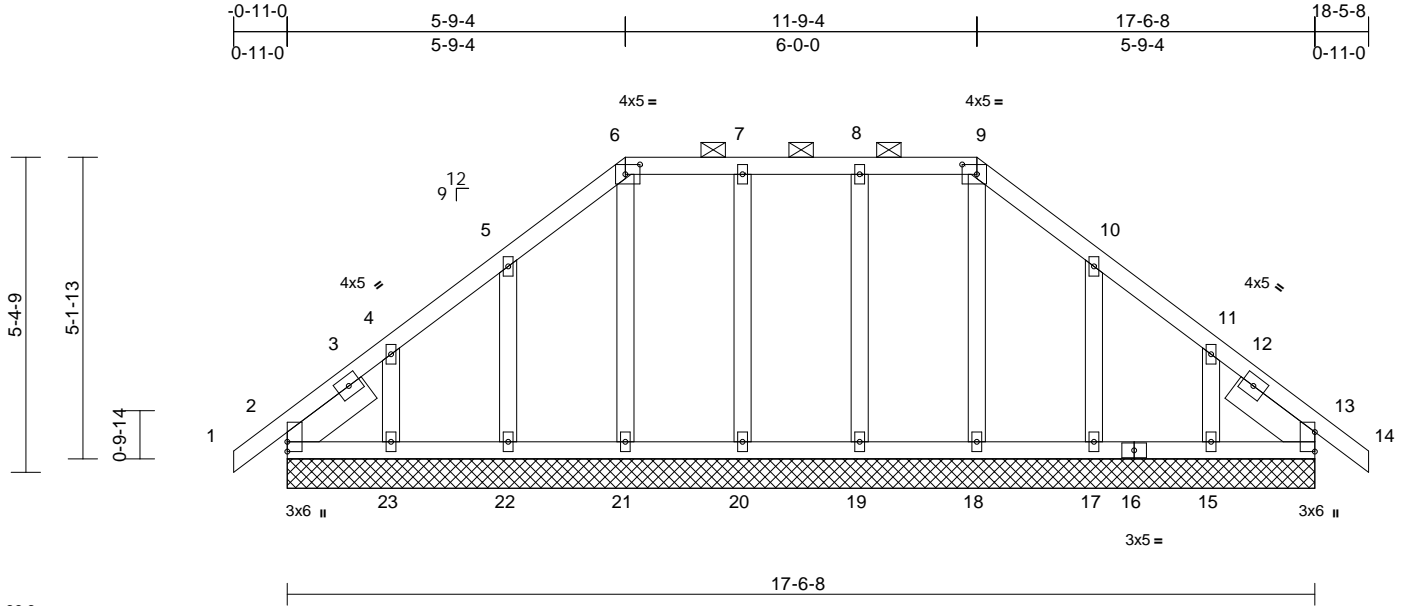
Scale = 1:39.3

Plate Offsets (X, Y): [6:0-3-0,0-2-0], [9:0-3-0,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.25	BC	0.03	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	13	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-S								
BCDL	10.0										Weight: 109 lb	FT = 20%

LUMBER
TOP CHORD   2x4 SP No.2
BOT CHORD   2x4 SP No.2
OTHERS   2x4 SP No.3
SLIDER   Left 2x6 SP No.2 -- 1-8-1, Right 2x6 SP No.2 -- 1-8-1

BRACING
TOP CHORD   Structural wood sheathing directly applied or 6-0-0 oc purlins, except
2-0-0 oc purlins (6-0-0 max.): 6-9.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size)   2=17-6-8, 13=17-6-8, 15=17-6-8, 17=17-6-8, 18=17-6-8, 19=17-6-8, 20=17-6-8, 21=17-6-8, 22=17-6-8, 23=17-6-8
Max Uplift   2=-71 (LC 6), 13=-71 (LC 6), 15=-141 (LC 6), 17=-147 (LC 6), 18=-6 (LC 6), 19=-96 (LC 6), 20=-96 (LC 6), 21=-6 (LC 6), 22=-147 (LC 6), 23=-141 (LC 6)
Max Grav   2=147 (LC 2), 13=147 (LC 2), 15=231 (LC 11), 17=239 (LC 11), 18=135 (LC 2), 19=167 (LC 1), 20=167 (LC 1), 21=135 (LC 2), 22=239 (LC 11), 23=231 (LC 11)

FORCES   (lb) - Maximum Compression/Maximum Tension
TOP CHORD   1-2=0/15, 2-3=-70/45, 3-4=-36/50, 4-5=-73/47, 5-6=-133/136, 6-7=-118/140, 7-8=-118/140, 8-9=-118/140, 9-10=-133/136, 10-11=-73/47, 11-12=-36/50, 12-13=-70/45, 13-14=0/15
BOT CHORD   2-23=-55/88, 22-23=-55/88, 21-22=-55/88, 20-21=-55/88, 19-20=-55/88, 18-19=-55/88, 17-18=-55/88, 16-17=-55/88, 15-16=-55/88, 13-15=-55/88
WEBS   9-18=-95/6, 8-19=-127/96, 7-20=-127/96, 6-21=-95/6, 5-22=-200/148, 4-23=-188/139, 10-17=-200/148, 11-15=-188/139

NOTES
1) This truss has been checked for uniform roof live load only, except as noted.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=0.0psf; BCDL=0.0psf; h=0ft; Cat. II; Exp C; Enclosed; C-C Corner (3) -0-11-0 to 2-1-0, Exterior (2) 2-1-0 to 2-9-4, Corner (3) 2-9-4 to 14-9-4, Exterior (2) 14-9-4 to 15-5-8, Corner (3) 15-5-8 to 18-5-8; cantilever left and right exposed ; end vertical right exposed; Lumber DOL=1.60 plate grip DOL=1.00
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=1.25 Plate DOL=1.00); Pg=20.0 psf (ground snow); Pf=20.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp C; Partially Exp.; Ct=1.10, Lu=0-0-0
5) This truss has been checked for uniform snow load only, except as noted.
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 15.4 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) All plates are 2x4 MT20 unless otherwise indicated.
9) Gable requires continuous bottom chord bearing.
10) Gable studs spaced at 2-0-0 oc.
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * 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.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 71 lb uplift at joint 2, 6 lb uplift at joint 18, 96 lb uplift at joint 19, 96 lb uplift at joint 20, 6 lb uplift at joint 21, 147 lb uplift at joint 22, 141 lb uplift at joint 23, 147 lb uplift at joint 17, 141 lb uplift at joint 15 and 71 lb uplift at joint 13.
14) 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

September 18,2020

ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Mitchell MAnor - Hampton El C	
20090082	B02	Hip Girder	1	**2**	Job Reference (optional)	E14880768

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

Run: 8.42 S Aug 25 2020 Print: 8.420 S Aug 25 2020 MiTek Industries, Inc. Fri Sep 18 08:30:18   Page: 1
ID:e1saXHD98FjxstCz2UAhkHzsCgm-Mock Me

Scale = 1:48

Plate Offsets (X, Y): [2:0-0-14,0-2-12], [4:0-2-2,Edge], [5:Edge,0-2-13], [7:Edge,0-2-12], [8:0-5-8,0-1-8], [10:0-6-0,0-6-4], [11:0-3-8,0-5-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.76	Vert(LL)	-0.07	10-11	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.25	BC	0.45	Vert(CT)	-0.15	10-11	>999	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	NO	WB	0.85	Horz(CT)	0.03	7	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-S								
BCDL	10.0										Weight: 274 lb	FT = 20%

LUMBER
TOP CHORD   2x4 SP No.2 *Except* 4-5:2x4 SP No.3
BOT CHORD   2x8 SP 2400F 2.0E
WEBS   2x4 SP No.3 *Except* 10-4:2x4 SP No.2
WEDGE   Left: 2x8 SP 2400F 2.0E
Right: 2x10 SP 2400F 2.0E

BRACING
TOP CHORD   Structural wood sheathing directly applied or 3-10-4 oc purlins, except
2-0-0 oc purlins (4-3-8 max.): 4-5.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size)   2=0-5-8, 7=0-5-8
Max Horiz   2=21 (LC 12)
Max Uplift   2=-1247 (LC 6), 7=-1858 (LC 6)
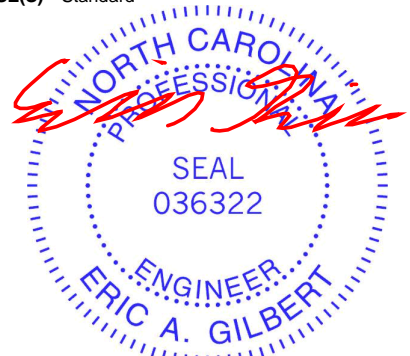Max Grav   2=6587 (LC 11), 7=7695 (LC 11)

FORCES   (lb) - Maximum Compression/Maximum Tension
TOP CHORD   1-2=0/27, 2-13=-9059/1519, 13-14=-8996/1519, 3-14=-8982/1519, 3-4=-7743/1324, 4-5=-6344/1440, 5-6=-8107/1771, 6-7=-9377/2176
BOT CHORD   2-12=-1059/6627, 12-15=-1059/6627, 11-15=-1059/6627, 11-16=-863/5918, 16-17=-863/5918, 17-18=-863/5918, 10-18=-863/5918, 9-10=-1553/6878, 9-19=-1553/6878, 8-19=-1553/6878, 8-20=-1553/6878, 7-20=-1553/6878
WEBS   3-12=-255/1729, 3-11=-825/262, 4-11=-198/4033, 4-10=-550/579, 5-10=-903/4600, 6-10=-767/451, 6-8=-547/1730

NOTES

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-4-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) 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.
3) This truss has been checked for uniform roof live load only, except as noted.
4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=0.0psf; BCDL=0.0psf; h=0ft; Cat. II; Exp C; Enclosed; C-C Exterior (2) -0-11-0 to 2-1-0, Interior (1) 2-1-0 to 2-6-0, Exterior (2) 2-6-0 to 17-3-12; cantilever left and right exposed ; end vertical right exposed; Lumber DOL=1.60 plate grip DOL=1.00
5) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.00); Pg=20.0 psf (ground snow); Pf=20.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp C; Partially Exp.; Ct=1.10, Lu=0-0-0
6) This truss has been checked for uniform snow load only, except as noted.
7) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
8) Provide adequate drainage to prevent water ponding.
9) All plates are MT20 plates unless otherwise indicated.
10) The Fabrication Tolerance at joint 7 = 12%
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

12) * 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.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1247 lb uplift at joint 2 and 1858 lb uplift at joint 7.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
15) Use USP THDH26-2 (With 22-16d nails into Girder & 8-16d nails into Truss) or equivalent at 3-8-5 from the left end to connect truss(es) to back face of bottom chord.
16) 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 5-7-9 from the left end to 16-3-7 to connect truss(es) to back face of bottom chord.
17) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S)   Standard

September 18, 2020

TRENCO
ENGINEERING BY
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Mitchell MAnor - Hampton El C	
20090082	B02	Hip Girder	1	**2**	Job Reference (optional)	E14880768

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

Run: 8.42 S Aug 25 2020 Print: 8.420 S Aug 25 2020 MiTek Industries, Inc. Fri Sep 18 08:30:18   Page: 2
ID:e1saXHD98FjxstCz2UAhkHzsCgm-Mock Me

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate
    Increase=1.00
    Uniform Loads (lb/ft)
       Vert: 1-4=-51, 4-5=-61, 5-7=-51, 2-7=-20
    Concentrated Loads (lb)
       Vert: 12=-1751 (B), 8=-1340 (B), 15=-1399 (B),
       16=-1376 (B), 17=-1340 (B), 18=-1340 (B),
       19=-1340 (B), 20=-1340 (B)

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Mitchell MAnor - Hampton El C	
20090082	C01	Common	4	1	Job Reference (optional)	E14880769

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

Run: 8.42 S Aug 25 2020 Print: 8.420 S Aug 25 2020 MiTek Industries, Inc. Fri Sep 18 08:30:18   Page: 1
ID:TCq8e9K595ofeWk6QS33aaycavY-Mock Me
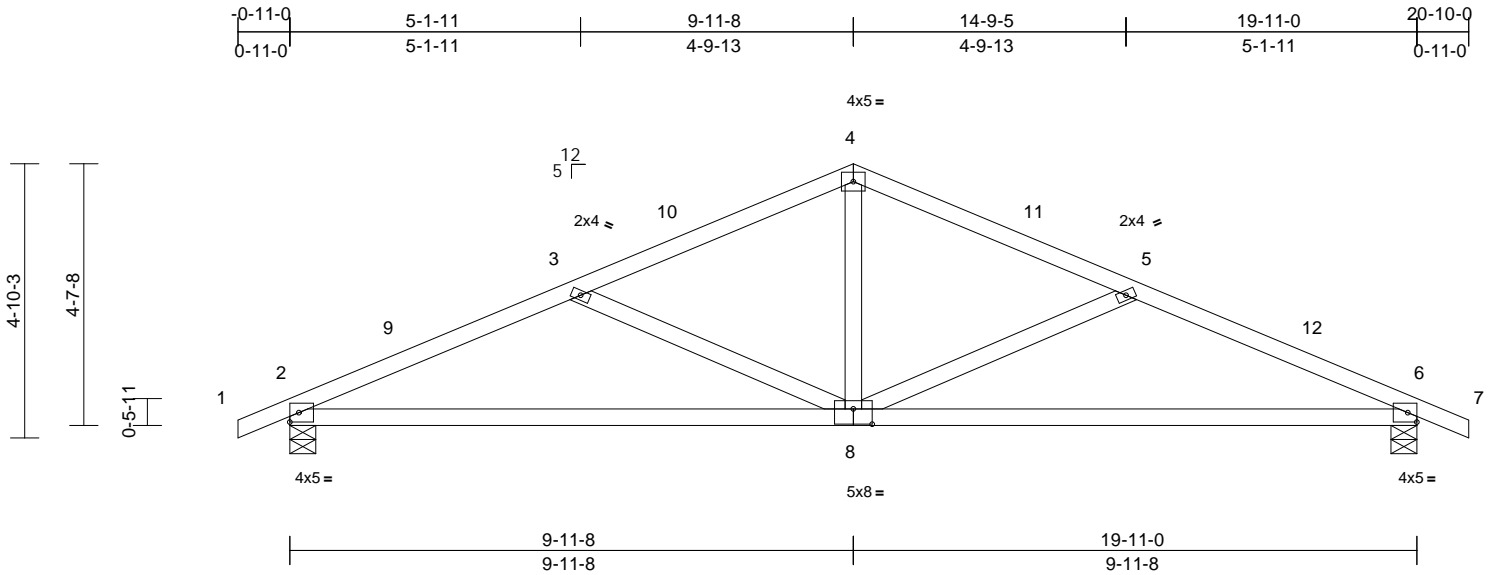
Scale = 1:40.7

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.29	Vert(LL)	-0.17	2-8	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.25	BC	0.74	Vert(CT)	-0.36	2-8	>648	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.03	6	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-S								
BCDL	10.0										Weight: 87 lb	FT = 20%

LUMBER
TOP CHORD   2x4 SP No.2
BOT CHORD   2x4 SP No.1
WEBS   2x4 SP No.2 *Except* 8-4:2x4 SP No.3

BRACING
TOP CHORD   Structural wood sheathing directly applied or 4-7-8 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 7-11-8 oc bracing.

REACTIONS (size)   2=0-5-8, 6=0-5-8
Max Uplift 2=-524 (LC 6), 6=-524 (LC 6)
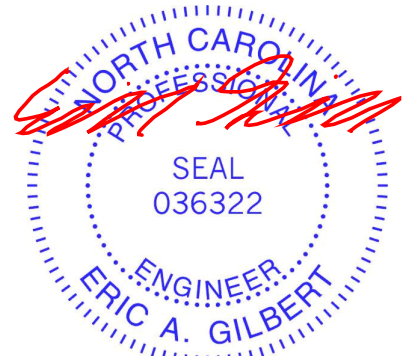Max Grav   2=860 (LC 11), 6=860 (LC 11)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD   1-2=0/17, 2-9=-1470/770, 3-9=-1440/770, 3-10=-1125/590, 4-10=-1072/590, 4-11=-1072/590, 5-11=-1125/590, 5-12=-1440/770, 6-12=-1470/770, 6-7=0/17
BOT CHORD   2-8=-631/1292, 6-8=-631/1292
WEBS   4-8=-221/547, 5-8=-380/269, 3-8=-380/269

NOTES
1) This truss has been checked for uniform roof live load only, except as noted.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=0.0psf; BCDL=0.0psf; h=0ft; Cat. II; Exp C; Enclosed; C-C Exterior (2) -0-11-0 to 2-1-0, Interior (1) 2-1-0 to 6-11-8, Exterior (2) 6-11-8 to 12-11-8, Interior (1) 12-11-8 to 17-10-0, Exterior (2) 17-10-0 to 20-10-0; cantilever left and right exposed ; end vertical right exposed; Lumber DOL=1.60 plate grip DOL=1.00
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.00); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp C; Partially Exp.; Ct=1.10

4) This truss has been checked for uniform snow load only, except as noted.
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 15.4 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 524 lb uplift at joint 2 and 524 lb uplift at joint 6.

LOAD CASE(S)   Standard

September 18, 2020

Scale = 1:41.5

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

Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.25	Vert(LL)	0.07	13	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.25	BC	0.49	Vert(CT)	-0.13	13	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.10	Horz(CT)	0.05	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-S								
BCDL	10.0										Weight: 101 lb	FT = 20%

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

BRACING
TOP CHORD   Structural wood sheathing directly applied or 3-11-1 oc purlins, except
2-0-0 oc purlins (3-11-15 max.): 4-6.
BOT CHORD   Rigid ceiling directly applied or 7-5-12 oc bracing.

REACTIONS (size)   2=0-5-8, 8=0-5-8
Max Uplift 2=-524 (LC 6), 8=-524 (LC 6)
Max Grav   2=1140 (LC 11), 8=1140 (LC 11)

FORCES   (lb) - Maximum Compression/Maximum Tension
TOP CHORD   1-2=0/16, 2-3=-2183/767, 3-16=-1957/699, 16-17=-1924/706, 4-17=-1901/707, 4-18=-2030/768, 5-18=-2030/768, 5-19=-2030/768, 6-19=-2030/768, 6-20=-1902/707, 20-21=-1925/706, 7-21=-1958/699, 7-8=-2183/767, 8-9=0/16
BOT CHORD   2-15=-627/1912, 15-22=-627/1912, 22-23=-627/1912, 14-23=-627/1912, 14-24=-519/1733, 13-24=-519/1733, 13-25=-519/1734, 12-25=-519/1734, 12-26=-627/1912, 11-26=-627/1912, 10-11=-627/1912, 8-10=-627/1912
WEBS   3-15=0/138, 3-14=-186/121, 4-14=-46/298, 4-13=-114/337, 5-13=-361/213, 6-13=-114/337, 6-12=-46/299, 7-12=-185/121, 7-10=0/137

NOTES
1) This truss has been checked for uniform roof live load only, except as noted.

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=0.0psf; BCDL=0.0psf; h=0ft; Cat. II; Exp C; Enclosed; C-C Exterior (2); cantilever left and right exposed ; end vertical right exposed; Lumber DOL=1.60 plate grip DOL=1.00

3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.00); Pg=20.0 psf (ground snow); Pf=20.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp C; Partially Exp.; Ct=1.10, Lu=0-0-0

4) This truss has been checked for uniform snow load only, except as noted.

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 15.4 psf on overhangs non-concurrent with other live loads.

6) Provide adequate drainage to prevent water ponding.

7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 524 lb uplift at joint 2 and 524 lb uplift at joint 8.

10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

11) "NAILED" indicates 3-10d (0.148"x3) or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.

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=1.00
Uniform Loads (lb/ft)
Vert: 1-4=-49, 4-6=-59, 6-9=-49, 2-8=-19

Concentrated Loads (lb)
Vert: 11=-47 (B), 13=-12 (B), 5=-13 (B), 16=-26 (B), 18=-13 (B), 19=-13 (B), 21=-26 (B), 22=-47 (B), 23=-77 (B), 24=-12 (B), 25=-12 (B), 26=-77 (B)

(Seal: NORTH CAROLINA PROFESSIONAL ENGINEER, SEAL 036322, ERIC A. GILBERT)

September 18, 2020

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

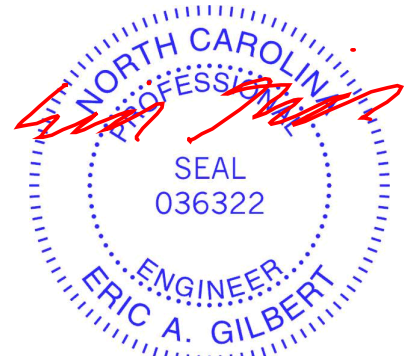| Job	Truss	Truss Type	Qty	Ply	22 Mitchell MAnor - Hampton El C	
20090082	D01	Monopitch	6	1		E14880771
					Job Reference (optional)	

Scale = 1:25.1

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.88	Vert(LL)	-0.21	2-4	>437	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.25	BC	0.80	Vert(CT)	-0.42	2-4	>218	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-P								
BCDL	10.0										Weight: 28 lb	FT = 20%

LUMBER
TOP CHORD   2x4 SP No.1
BOT CHORD   2x4 SP No.2
WEBS   2x4 SP No.3

BRACING
TOP CHORD   Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size)   2=0-3-8, 4= Mechanical
Max Horiz 2=41 (LC 7)
Max Uplift 2=-299 (LC 6), 4=-214 (LC 6)
Max Grav 2=383 (LC 11), 4=330 (LC 11)

FORCES   (lb) - Maximum Compression/Maximum Tension
TOP CHORD   1-2=0/16, 2-5=-54/0, 5-6=-20/0, 3-6=-15/45, 3-4=-253/214
BOT CHORD   2-4=-42/46

NOTES
1) This truss has been checked for uniform roof live load only, except as noted.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=0.0psf; BCDL=0.0psf; h=0ft; Cat. II; Exp C; Enclosed; C-C Exterior (2) -0-11-0 to 2-1-0, Interior (1) 2-1-0 to 4-10-4, Exterior (2) 4-10-4 to 7-10-4; cantilever left and right exposed ; end vertical right exposed; Lumber DOL=1.60 plate grip DOL=1.00
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.00); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp C; Partially Exp.; Ct=1.10
4) This truss has been checked for uniform snow load only, except as noted.

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 15.4 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 214 lb uplift at joint 4 and 299 lb uplift at joint 2.

LOAD CASE(S)   Standard

September 18,2020

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Mitchell MAnor - Hampton El C	
20090082	D02	Monopitch Supported Gable	2	1	Job Reference (optional)	E14880772

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

Run: 8.42 S Aug 25 2020 Print: 8.420 S Aug 25 2020 MiTek Industries, Inc. Fri Sep 18 08:30:19   Page: 1
ID:xfwxQJYOvd35pH6ZTEOHINycavG-Mock Me

Scale = 1:26

Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.25	BC	0.12	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-P								
BCDL	10.0										Weight: 31 lb	FT = 20%

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

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

REACTIONS (size)   2=8-0-0, 6=8-0-0, 7=8-0-0, 8=8-0-0
Max Horiz   2=83 (LC 6)
Max Uplift   2=-253 (LC 6), 6=-70 (LC 6), 7=-152 (LC 6), 8=-284 (LC 6)
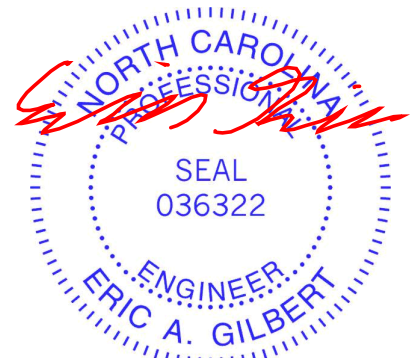Max Grav   2=188 (LC 2), 6=67 (LC 2), 7=113 (LC 11), 8=340 (LC 11)

FORCES   (lb) - Maximum Compression/Maximum Tension
TOP CHORD   1-2=0/16, 2-9=-72/0, 3-9=-72/32, 3-10=-41/0, 4-10=-33/6, 4-5=-41/34, 5-6=-50/70
BOT CHORD   2-8=-40/53, 7-8=-40/53, 6-7=-40/53
WEBS   4-7=-89/152, 3-8=-261/284

NOTES
1) This truss has been checked for uniform roof live load only, except as noted.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=0.0psf; BCDL=0.0psf; h=0ft; Cat. II; Exp C; Enclosed; C-C Corner (3) -0-11-0 to 2-1-0, Exterior (2) 2-1-0 to 4-10-4, Corner (3) 4-10-4 to 7-10-4; cantilever left and right exposed ; end vertical right exposed; Lumber DOL=1.60 plate grip DOL=1.00
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=1.25 Plate DOL=1.00); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp C; Partially Exp.; Ct=1.10
5) This truss has been checked for uniform snow load only, except as noted.
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 15.4 psf on overhangs non-concurrent with other live loads.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 70 lb uplift at joint 6, 253 lb uplift at joint 2, 152 lb uplift at joint 7 and 284 lb uplift at joint 8.

LOAD CASE(S)   Standard

September 18,2020

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Mitchell MAnor - Hampton El C	
20090082	J01	Jack-Open	2	1	Job Reference (optional)	E14880773

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

```
       -0-11-0       1-9-1       3-2-4
      |0-11-0 |      1-9-1 |      1-5-3 |
```

Special


```
        1-10-13      3-2-4
       |1-10-13 |   |1-3-7 |
```

Special

Scale = 1:32.9

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.13	Vert(LL)	0.01	6-7	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.25	BC	0.18	Vert(CT)	-0.02	6-7	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.02	Horz(CT)	0.02	4	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-P								
BCDL	10.0										Weight: 15 lb	FT = 20%

LUMBER
TOP CHORD   2x4 SP No.2
BOT CHORD   2x4 SP No.2
WEBS   2x4 SP No.2 *Except* 3-6:2x4 SP No.3

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

REACTIONS (size)   4= Mechanical, 5= Mechanical, 7=0-5-8
Max Horiz   7=124 (LC 6)
Max Uplift   4=-51 (LC 6), 5=-14 (LC 6), 7=-111 (LC 6)
Max Grav   4=86 (LC 11), 5=93 (LC 11), 7=222 (LC 2)

FORCES   (lb) - Maximum Compression/Maximum Tension
TOP CHORD   2-7=-158/112, 1-2=0/52, 2-3=-69/20, 3-4=-1/1
BOT CHORD   6-7=-7/6, 5-6=0/0
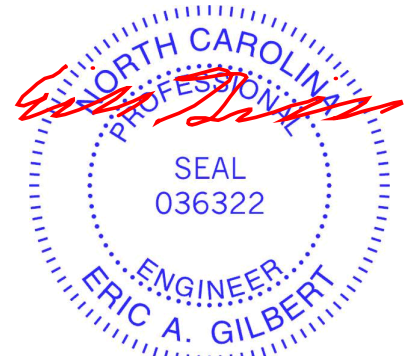WEBS   3-6=-78/83

NOTES
1) This truss has been checked for uniform roof live load only, except as noted.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=0.0psf; BCDL=0.0psf; h=0ft; Cat. II; Exp C; Enclosed; C-C Exterior (2); cantilever left and right exposed ; end vertical right exposed; Lumber DOL=1.60 plate grip DOL=1.00
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.00); Pg=20.0 psf (ground snow); Pf=20.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp C; Partially Exp.; Ct=1.10, Lu=0-0-0

4) This truss has been checked for uniform snow load only, except as noted.
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 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 111 lb uplift at joint 7, 51 lb uplift at joint 4 and 14 lb uplift at joint 5.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 264 lb down at 1-9-1 on top chord, and 69 lb down at 1-9-1 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
13) 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=1.00
Uniform Loads (lb/ft)
Vert: 1-2=-51, 2-3=-51, 3-4=-61, 5-7=-20
Concentrated Loads (lb)
Vert: 3=-26 (B), 6=-26 (B)

NORTH CAROLINA
PROFESSIONAL
SEAL
036322
ENGINEER
ERIC A. GILBERT

September 18,2020

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Scale = 1:23.4

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.21	Vert(LL)	-0.01	2-4	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.25	BC	0.15	Vert(CT)	-0.02	2-4	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-P								
BCDL	10.0										Weight: 14 lb	FT = 20%

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

BRACING
TOP CHORD   Structural wood sheathing directly applied or 3-10-12 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size)   2=0-5-8, 3= Mechanical, 4= Mechanical
Max Horiz   2=142 (LC 6)
Max Uplift   2=-206 (LC 6), 3=-142 (LC 6)
Max Grav   2=224 (LC 2), 3=126 (LC 11), 4=72 (LC 5)

FORCES   (lb) - Maximum Compression/Maximum Tension
TOP CHORD   1-2=0/17, 2-3=-62/48
BOT CHORD   2-4=0/0

NOTES
1) This truss has been checked for uniform roof live load only, except as noted.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=0.0psf; BCDL=0.0psf; h=0ft; Cat. II; Exp C; Enclosed; C-C Exterior (2); cantilever left and right exposed ; end vertical right exposed; Lumber DOL=1.60 plate grip DOL=1.00
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.00); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp C; Partially Exp.; Ct=1.10
4) This truss has been checked for uniform snow load only, except as noted.
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 15.4 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 142 lb uplift at joint 3 and 206 lb uplift at joint 2.

LOAD CASE(S)   Standard

September 18,2020

Job	Truss	Truss Type	Qty	Ply	22 Mitchell MAnor - Hampton El C	
20090082	J03	Jack-Open	3	1	Job Reference (optional)	E14880775

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

Run: 8.42 S Aug 25 2020 Print: 8.420 S Aug 25 2020 MiTek Industries, Inc. Fri Sep 18 08:30:20   Page: 1
ID:nyl7xgaKP6SA4Zj?M2Dn_LzsBY?-Mock Me

Scale = 1:24.3

Plate Offsets (X, Y): [5:0-2-11,0-1-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.57	Vert(LL)	0.01	4-5	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.25	BC	0.20	Vert(CT)	0.01	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-R								
BCDL	10.0										Weight: 12 lb	FT = 20%

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

BRACING
TOP CHORD   Structural wood sheathing directly applied or
             2-7-8 oc purlins, except end verticals.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc
             bracing.

REACTIONS (size)   3= Mechanical, 4= Mechanical,
                         5=0-10-0
             Max Horiz 5=195 (LC 6)
             Max Uplift 3=-66 (LC 6), 4=-13 (LC 8), 5=-499
                         (LC 6)
             Max Grav   3=60 (LC 11), 4=35 (LC 5), 5=298
                         (LC 8)

FORCES   (lb) - Maximum Compression/Maximum
             Tension
TOP CHORD   2-5=-238/470, 1-2=0/59, 2-3=-36/17
BOT CHORD   4-5=0/0

NOTES
1) This truss has been checked for uniform roof live load
   only, except as noted.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust)
   Vasd=103mph; TCDL=0.0psf; BCDL=0.0psf; h=0ft; Cat.
   II; Exp C; Enclosed; C-C Corner (3); cantilever left and
   right exposed ; end vertical right exposed; Lumber
   DOL=1.60 plate grip DOL=1.00
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber
   DOL=1.25 Plate DOL=1.00); Pg=20.0 psf (ground
   snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15
   Plate DOL=1.00); Category II; Exp C; Partially Exp.;
   Ct=1.10
4) This truss has been checked for uniform snow load only,
   except as noted.

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 15.4 psf on
   overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom
   chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf
   on the bottom chord in all areas where a rectangle
   3-06-00 tall by 2-00-00 wide will fit between the bottom
   chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to
   bearing plate capable of withstanding 499 lb uplift at
   joint 5, 66 lb uplift at joint 3 and 13 lb uplift at joint 4.

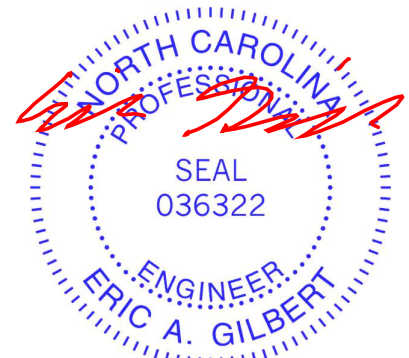**LOAD CASE(S)**   Standard

September 18,2020

ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Mitchell MAnor - Hampton El C	
20090082	J04	Jack-Open	6	1	Job Reference (optional)	E14880776

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

Run: 8.42 S Aug 25 2020 Print: 8.420 S Aug 25 2020 MiTek Industries, Inc. Fri Sep 18 08:30:20   Page: 1
ID:0yKyOZueH5kUBZi?uVht1qzsBXb-Mock Me

```
              -0-11-0           3-1-14
              0-11-0            3-1-14
```



```
                                    12
                                  5 ⌐

                                         3
2-0-3


       0-6-3            2

               1                         4

                      3x5 =


                        3-1-14
```

Scale = 1:22.9

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.12	Vert(LL)	0.00	2-4	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.25	BC	0.09	Vert(CT)	-0.01	2-4	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-P								
BCDL	10.0										Weight: 11 lb	FT = 20%

LUMBER
TOP CHORD   2x4 SP No.2
BOT CHORD   2x4 SP No.2
BRACING
TOP CHORD   Structural wood sheathing directly applied or 3-1-14 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size)   2=0-5-8, 3= Mechanical, 4= Mechanical
Max Horiz 2=120 (LC 6)
Max Uplift 2=-187 (LC 6), 3=-109 (LC 6)
Max Grav   2=197 (LC 2), 3=98 (LC 11), 4=57 (LC 5)

FORCES   (lb) - Maximum Compression/Maximum Tension
TOP CHORD   1-2=0/14, 2-3=-51/39
BOT CHORD   2-4=0/0

NOTES
1) This truss has been checked for uniform roof live load only, except as noted.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=0.0psf; BCDL=0.0psf; h=0ft; Cat. II; Exp C; Enclosed; C-C Exterior (2); cantilever left and right exposed ; end vertical right exposed; Lumber DOL=1.60 plate grip DOL=1.00
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.00); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp C; Partially Exp.; Ct=1.10
4) This truss has been checked for uniform snow load only, except as noted.
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 15.4 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 109 lb uplift at joint 3 and 187 lb uplift at joint 2.

LOAD CASE(S)   Standard

September 18,2020

ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Mitchell MAnor - Hampton El C	
20090082	J05	Jack-Open Girder	3	1	Job Reference (optional)	E14880777

Scale = 1:37.4

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.10	Vert(LL)	-0.04	5-6	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.25	BC	0.39	Vert(CT)	-0.06	5-6	>715	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.03	Horz(CT)	0.06	4	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-P								
BCDL	10.0										Weight: 19 lb	FT = 20%

LUMBER
TOP CHORD   2x4 SP No.2
BOT CHORD   2x4 SP No.2
WEBS   2x4 SP No.3
SLIDER   Left 2x6 SP No.2 -- 1-9-7
BRACING
TOP CHORD   Structural wood sheathing directly applied or
             3-6-13 oc purlins, except
             2-0-0 oc purlins: 3-4.
BOT CHORD   Rigid ceiling directly applied or 6-0-0 oc
             bracing.
REACTIONS (size)   2=0-5-8, 4= Mechanical, 5=
                          Mechanical
             Max Horiz 2=94 (LC 6)
             Max Uplift 2=-108 (LC 6), 4=-72 (LC 6), 5=-2
                          (LC 6)
             Max Grav   2=217 (LC 2), 4=78 (LC 11), 5=116
                          (LC 13)
FORCES   (lb) - Maximum Compression/Maximum
                Tension
TOP CHORD   1-2=0/15, 2-3=-66/40, 3-7=0/0, 4-7=0/0
BOT CHORD   2-6=-8/15, 6-8=0/0, 5-8=0/0
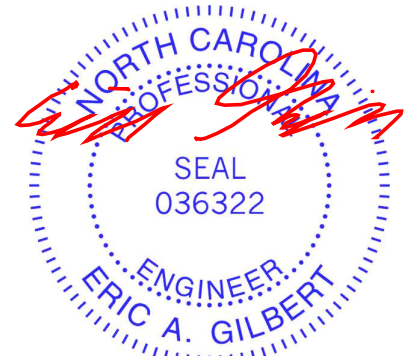WEBS   3-6=-164/90
NOTES
1) This truss has been checked for uniform roof live load
   only, except as noted.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust)
   Vasd=103mph; TCDL=0.0psf; BCDL=0.0psf; h=0ft; Cat.
   II; Exp C; Enclosed; C-C Exterior (2); cantilever left and
   right exposed ; end vertical right exposed; Lumber
   DOL=1.60 plate grip DOL=1.00
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber
   DOL=1.25 Plate DOL=1.00); Pg=20.0 psf (ground
   snow); Pf=20.4 psf (flat roof snow: Lumber DOL=1.15
   Plate DOL=1.00); Category II; Exp C; Partially Exp.;
   Ct=1.10, Lu=0-0-0

4) This truss has been checked for uniform snow load only,
   except as noted.
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 15.4 psf on
   overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom
   chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf
   on the bottom chord in all areas where a rectangle
   3-06-00 tall by 2-00-00 wide will fit between the bottom
   chord and any other members.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to
    bearing plate capable of withstanding 72 lb uplift at joint
    4, 108 lb uplift at joint 2 and 2 lb uplift at joint 5.
11) Graphical purlin representation does not depict the size
    or the orientation of the purlin along the top and/or
    bottom chord.
12) "NAILED" indicates 3-10d (0.148"x3) or 3-12d
    (0.148"x3.25") toe-nails per NDS guidlines.
13) Hanger(s) or other connection device(s) shall be
    provided sufficient to support concentrated load(s) 238
    lb down and 10 lb up at 1-4-3 on top chord, and 66 lb
    down and 1 lb up at 1-4-3 on bottom chord. The
    design/selection of such connection device(s) is the
    responsibility of others.
14) 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=1.00
    Uniform Loads (lb/ft)
      Vert: 1-3=-51, 3-4=-61, 2-5=-20
    Concentrated Loads (lb)
      Vert: 3=-5 (F), 6=-1 (F), 7=-4 (F), 8=-9 (F)

NORTH CAROLINA
PROFESSIONAL
SEAL
036322
ENGINEER
ERIC A. GILBERT

September 18,2020

ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Mitchell MAnor - Hampton El C	
20090082	J06	Jack-Open	3	1	Job Reference (optional)	E14880778

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

Run: 8.42 S Aug 25 2020 Print: 8.420 S Aug 25 2020 MiTek Industries, Inc. Fri Sep 18 08:30:21   Page: 1
ID:Z7Pi0HvKVvJZGT78p8CZRYzsBWH-Mock Me

Scale = 1:29.4

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.16	Vert(LL)	0.01	2-7	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.25	BC	0.22	Vert(CT)	-0.02	2-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.02	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-P								
BCDL	10.0										Weight: 20 lb	FT = 20%

LUMBER
TOP CHORD   2x4 SP No.2
BOT CHORD   2x4 SP No.2
WEBS   2x4 SP No.3
SLIDER   Left 2x6 SP No.2 -- 1-7-10

BRACING
TOP CHORD   Structural wood sheathing directly applied or
             3-6-13 oc purlins, except
             2-0-0 oc purlins: 4-5.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc
             bracing.

REACTIONS (size)   2=0-5-8, 5= Mechanical, 6=
                        Mechanical
             Max Horiz 2=138 (LC 6)
             Max Uplift 2=-130 (LC 6), 5=-39 (LC 6),
                        6=-104 (LC 6)
             Max Grav   2=202 (LC 2), 5=34 (LC 10), 6=149
                        (LC 11)
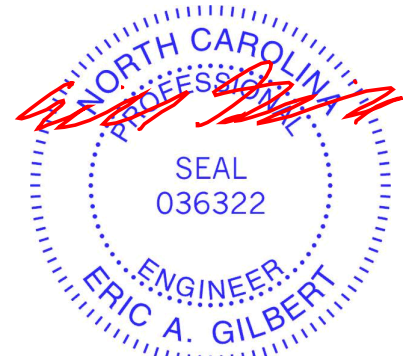
FORCES   (lb) - Maximum Compression/Maximum
             Tension
TOP CHORD   1-2=0/15, 2-3=-72/48, 3-4=-56/60, 4-5=-1/0
BOT CHORD   2-7=-9/9, 6-7=0/0
WEBS   4-7=-154/141

NOTES
1) This truss has been checked for uniform roof live load
   only, except as noted.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust)
   Vasd=103mph; TCDL=0.0psf; BCDL=0.0psf; h=0ft; Cat.
   II; Exp C; Enclosed; C-C Exterior (2); cantilever left and
   right exposed ; end vertical right exposed; Lumber
   DOL=1.60 plate grip DOL=1.00
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber
   DOL=1.25 Plate DOL=1.00); Pg=20.0 psf (ground
   snow); Pf=20.4 psf (flat roof snow: Lumber DOL=1.15
   Plate DOL=1.00); Category II; Exp C; Partially Exp.;
   Ct=1.10, Lu=0-0-0

4) This truss has been checked for uniform snow load only,
   except as noted.
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 15.4 psf on
   overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom
   chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf
   on the bottom chord in all areas where a rectangle
   3-06-00 tall by 2-00-00 wide will fit between the bottom
   chord and any other members.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to
    bearing plate capable of withstanding 39 lb uplift at joint
    5, 130 lb uplift at joint 2 and 104 lb uplift at joint 6.
11) 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

September 18,2020

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Mitchell MAnor - Hampton El C	
20090082	J07	Jack-Open	27	1	Job Reference (optional)	E14880779

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

Run: 8.42 S Aug 25 2020 Print: 8.420 S Aug 25 2020 MiTek Industries, Inc. Fri Sep 18 08:30:21   Page: 1
ID:Lq68FWefb9S7Yb8qFOnLGvzsBU1-Mock Me

Scale = 1:27.3

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.32	Vert(LL)	-0.01	2-5	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.25	BC	0.14	Vert(CT)	-0.02	2-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-P								
BCDL	10.0										Weight: 19 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
SLIDER   Left 2x6 SP No.2 -- 2-4-0

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-6-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-5-8, 4= Mechanical, 5= Mechanical
Max Horiz 2=176 (LC 6)
Max Uplift 2=-97 (LC 6), 4=-153 (LC 6)
Max Grav 2=202 (LC 2), 4=180 (LC 11), 5=70 (LC 5)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/15, 2-3=-92/78, 3-4=-92/97
BOT CHORD 2-5=0/0

NOTES
1) This truss has been checked for uniform roof live load only, except as noted.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=0.0psf; BCDL=0.0psf; h=0ft; Cat. II; Exp C; Enclosed; C-C Exterior (2); cantilever left and right exposed ; end vertical right exposed; Lumber DOL=1.60 plate grip DOL=1.00
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.00); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp C; Partially Exp.; Ct=1.10
4) This truss has been checked for uniform snow load only, except as noted.
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 15.4 psf on overhangs non-concurrent with other live loads.

6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 153 lb uplift at joint 4 and 97 lb uplift at joint 2.

LOAD CASE(S) Standard

September 18,2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601
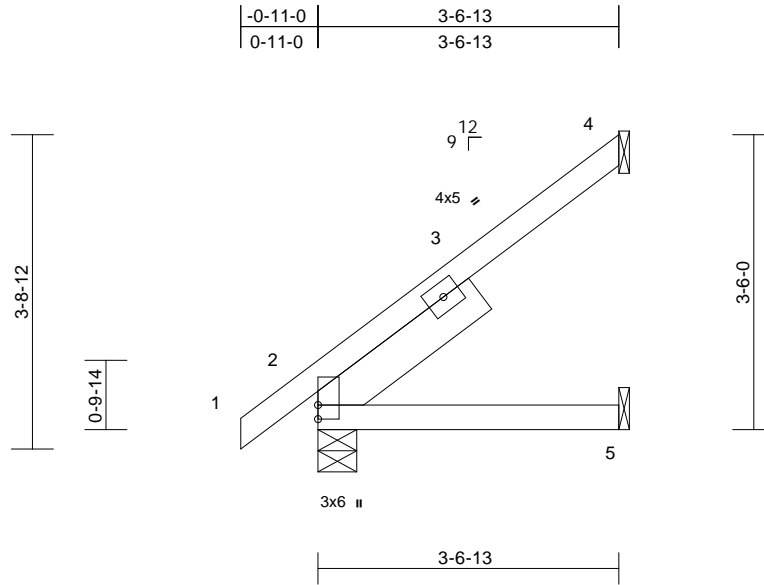
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Mitchell MAnor - Hampton El C	
20090082	J08	Jack-Open	2	1	Job Reference (optional)	E14880780

Carter Components (Sanford), Sanford, NC - 27332,
Run: 8.42 S Aug 25 2020 Print: 8.420 S Aug 25 2020 MiTek Industries, Inc. Fri Sep 18 08:30:21   Page: 1
ID:NszglMeSrXFMvt9ZD6yWv?zsB5V-Mock Me
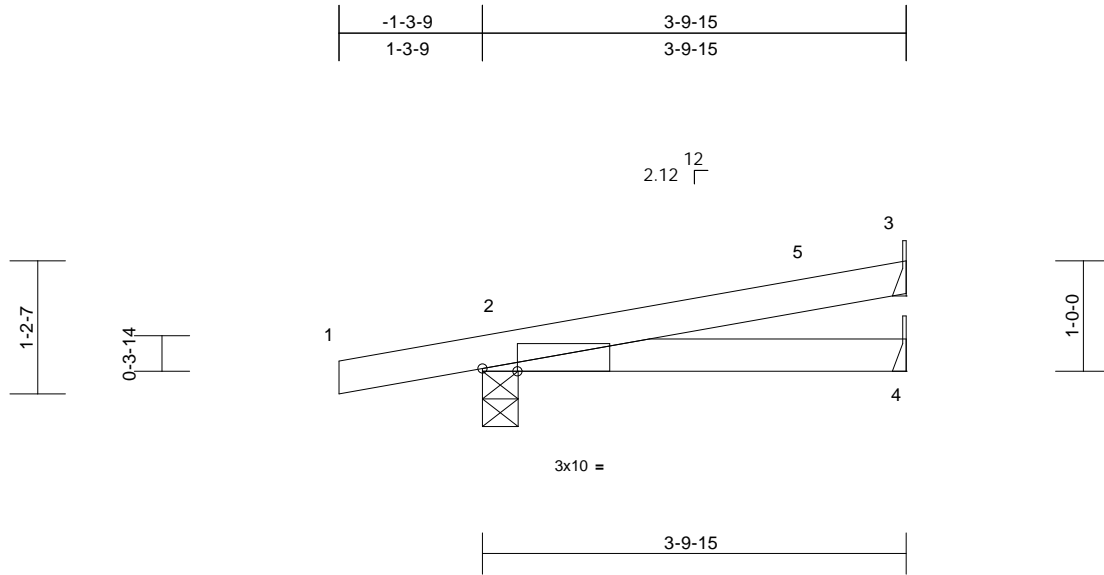
Scale = 1:20.8

Plate Offsets (X, Y): [2:0-3-13,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.23	Vert(LL)	-0.01	2-4	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.25	BC	0.15	Vert(CT)	-0.02	2-4	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-P								
BCDL	10.0										Weight: 14 lb	FT = 20%

LUMBER
TOP CHORD   2x4 SP No.2
BOT CHORD   2x4 SP No.2
BRACING
TOP CHORD   Structural wood sheathing directly applied or 3-9-15 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.
REACTIONS (size)   2=0-3-14, 3= Mechanical, 4= Mechanical
Max Horiz 2=95 (LC 6)
Max Uplift 2=-422 (LC 6), 3=-128 (LC 6)
Max Grav 2=249 (LC 2), 3=115 (LC 11), 4=72 (LC 5)
FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD   1-2=0/16, 2-5=-24/9, 3-5=-24/18
BOT CHORD   2-4=0/0

NOTES
1) This truss has been checked for uniform roof live load only, except as noted.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=0.0psf; BCDL=0.0psf; h=0ft; Cat. II; Exp C; Enclosed; C-C Corner (3) -1-3-9 to 2-11-6, Exterior (2) 2-11-6 to 3-9-3; cantilever left and right exposed ; end vertical right exposed; Lumber DOL=1.60 plate grip DOL=1.00
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.00); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp C; Partially Exp.; Ct=1.10
4) This truss has been checked for uniform snow load only, except as noted.

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 15.4 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 128 lb uplift at joint 3 and 422 lb uplift at joint 2.

LOAD CASE(S) Standard

September 18,2020

ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Mitchell MAnor - Hampton El C	
20090082	J09	Jack-Open	2	1	Job Reference (optional)	E14880781

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

Run: 8.42 S Aug 25 2020 Print: 8.420 S Aug 25 2020 MiTek Industries, Inc. Fri Sep 18 08:30:21 Page: 1
ID:FdDBbjhzvmmoNUTKSy0S3rzsB5R-Mock Me
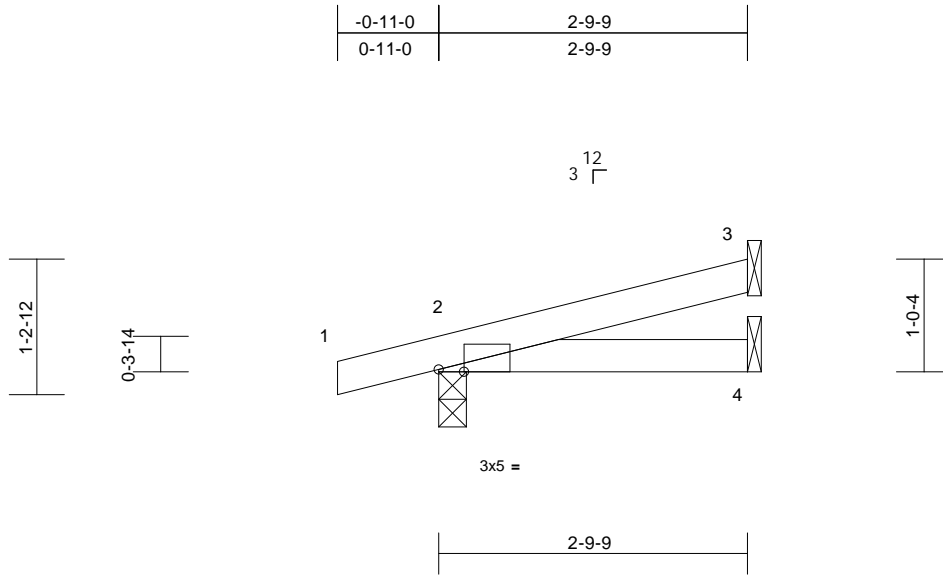
Scale = 1:20.9

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.10	Vert(LL)	0.00	2-4	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.25	BC	0.08	Vert(CT)	-0.01	2-4	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-P								
BCDL	10.0										Weight: 10 lb	FT = 20%

LUMBER
TOP CHORD   2x4 SP No.2
BOT CHORD   2x4 SP No.2
BRACING
TOP CHORD   Structural wood sheathing directly applied or 2-9-9 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.
REACTIONS (size)   2=0-3-0, 3= Mechanical, 4= Mechanical
Max Horiz   2=67 (LC 6)
Max Uplift   2=-189 (LC 6), 3=-81 (LC 6)
Max Grav   2=179 (LC 2), 3=85 (LC 14), 4=52 (LC 5)

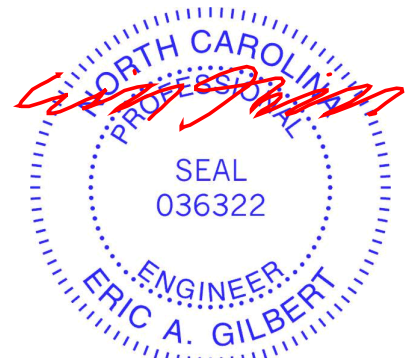**FORCES**   (lb) - Maximum Compression/Maximum Tension
TOP CHORD   1-2=0/16, 2-3=-24/19
BOT CHORD   2-4=0/0

NOTES
1) This truss has been checked for uniform roof live load only, except as noted.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=0.0psf; BCDL=0.0psf; h=0ft; Cat. II; Exp C; Enclosed; C-C Exterior (2); cantilever left and right exposed ; end vertical right exposed; Lumber DOL=1.60 plate grip DOL=1.00
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.00); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp C; Partially Exp.; Ct=1.10
4) This truss has been checked for uniform snow load only, except as noted.
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 15.4 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 2.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 81 lb uplift at joint 3 and 189 lb uplift at joint 2.

LOAD CASE(S)   Standard

NORTH CAROLINA
PROFESSIONAL
SEAL
036322
ENGINEER
ERIC A. GILBERT

September 18,2020

ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Mitchell MAnor - Hampton El C	
20090082	J10	Roof Special Girder	2	1	Job Reference (optional)	E14880782

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

Run: 8.42 S Aug 25 2020 Print: 8.420 S Aug 25 2020 MiTek Industries, Inc. Fri Sep 18 08:30:22   Page: 1
ID:RINLvUqsJ88ECApSbmj109zsB5G-Mock Me
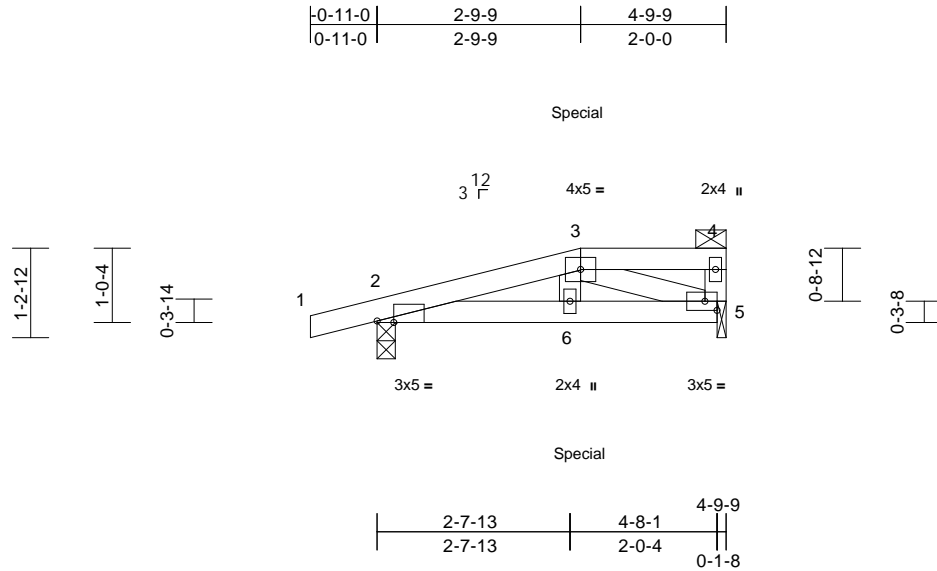
Scale = 1:31.7

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.11	Vert(LL)	0.00	6	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.25	BC	0.13	Vert(CT)	-0.01	6	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.06	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-P								
BCDL	10.0										Weight: 20 lb	FT = 20%

LUMBER
TOP CHORD   2x4 SP No.2 *Except* 3-4:2x4 SP No.3
BOT CHORD   2x4 SP No.2
WEBS   2x4 SP No.3

BRACING
TOP CHORD   Structural wood sheathing directly applied or
4-9-9 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 (size)   2=0-3-0, 5=0-1-8
Max Horiz 2=33 (LC 6)
Max Uplift 2=-207 (LC 6), 5=-91 (LC 6)
Max Grav 2=262 (LC 2), 5=208 (LC 10)

FORCES   (lb) - Maximum Compression/Maximum
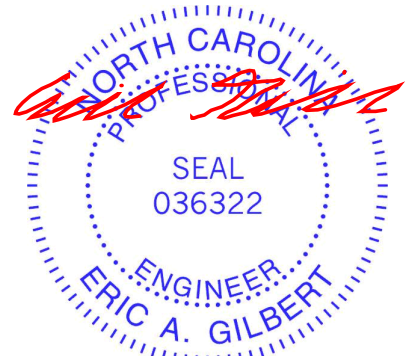Tension
TOP CHORD   1-2=0/16, 2-3=-366/37, 3-4=-16/17,
4-5=-59/69
BOT CHORD   2-6=-23/318, 5-6=-35/307
WEBS   3-6=0/129, 3-5=-343/57

NOTES
1) This truss has been checked for uniform roof live load only, except as noted.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=0.0psf; BCDL=0.0psf; h=0ft; Cat. II; Exp C; Enclosed; C-C Exterior (2); cantilever left and right exposed ; end vertical right exposed; Lumber DOL=1.60 plate grip DOL=1.00
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.00); Pg=20.0 psf (ground snow); Pf=20.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp C; Partially Exp.; Ct=1.10, Lu=0-0-0
4) This truss has been checked for uniform snow load only, except as noted.

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 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 91 lb uplift at joint 5 and 207 lb uplift at joint 2.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 292 lb down and 27 lb up at 2-9-9 on top chord, and 62 lb down at 2-9-9 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

14) 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=1.00
Uniform Loads (lb/ft)
Vert: 1-3=-51, 3-4=-61, 2-5=-20
Concentrated Loads (lb)
Vert: 6=-14 (B), 3=-21 (B)

September 18,2020

Job	Truss	Truss Type	Qty	Ply	22 Mitchell MAnor - Hampton El C	
20090082	J11	Monopitch	5	1	Job Reference (optional)	E14880783

Carter Components (Sanford), Sanford, NC - 27332,
Run: 8.42 S Aug 25 2020 Print: 8.420 S Aug 25 2020 MiTek Industries, Inc. Fri Sep 18 08:30:22   Page: 1
ID:CHsMaDwtRb959PQ_3SsvKrzsB58-Mock Me
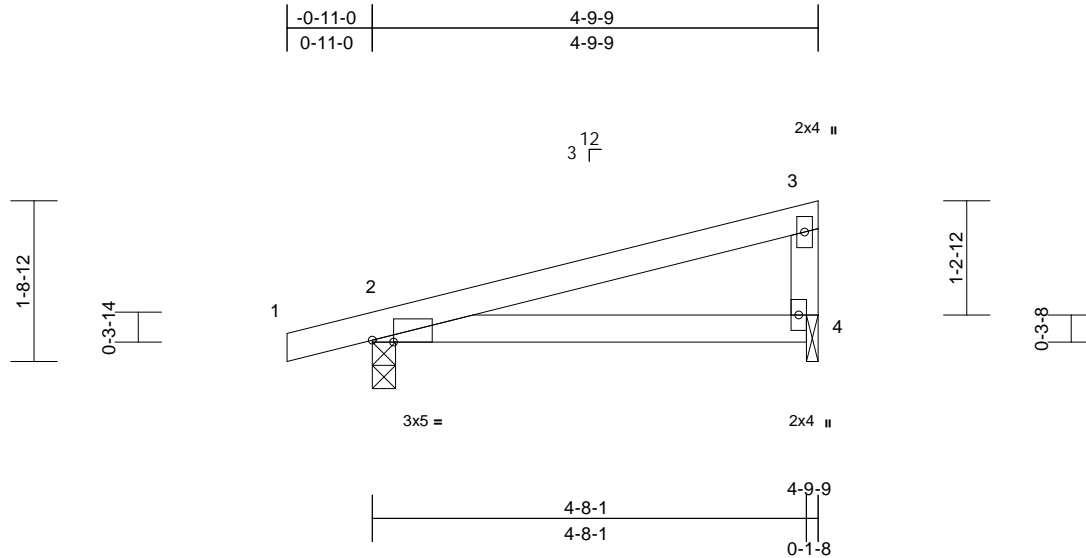
Scale = 1:24.8

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.35	Vert(LL)	-0.03	2-4	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.25	BC	0.25	Vert(CT)	-0.05	2-4	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-P								
BCDL	10.0										Weight: 17 lb	FT = 20%

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

BRACING
TOP CHORD   Structural wood sheathing directly applied or 4-9-9 oc purlins, except end verticals.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size)   2=0-3-0, 4=0-1-8
Max Horiz 2=44 (LC 6)
Max Uplift 2=-252 (LC 6), 4=-153 (LC 6)
Max Grav 2=251 (LC 2), 4=195 (LC 11)

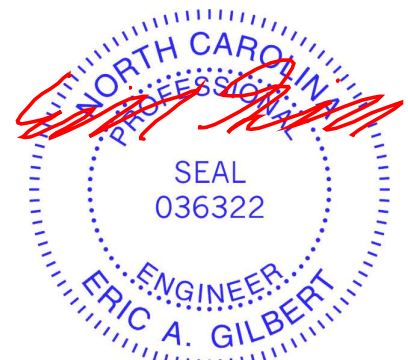**FORCES**   (lb) - Maximum Compression/Maximum Tension
TOP CHORD   1-2=0/16, 2-3=-36/26, 3-4=-150/153
BOT CHORD   2-4=-26/28

NOTES
1) This truss has been checked for uniform roof live load only, except as noted.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=0.0psf; BCDL=0.0psf; h=0ft; Cat. II; Exp C; Enclosed; C-C Exterior (2); cantilever left and right exposed ; end vertical right exposed; Lumber DOL=1.60 plate grip DOL=1.00
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.00); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp C; Partially Exp.; Ct=1.10
4) This truss has been checked for uniform snow load only, except as noted.
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 15.4 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) 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.
9) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 252 lb uplift at joint 2 and 153 lb uplift at joint 4.

LOAD CASE(S) Standard

North Carolina Professional Engineer
SEAL
036322
ERIC A. GILBERT

September 18,2020

ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Mitchell MAnor - Hampton El C	
20090082	J12	Jack-Open Structural Gable	2	1	Job Reference (optional)	E14880784

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

Run: 8.42 S Aug 25 2020 Print: 8.420 S Aug 25 2020 MiTek Industries, Inc. Fri Sep 18 08:30:22   Page: 1
ID:p9e1htNEzeQxlHd3D?fEHeycavT-Mock Me
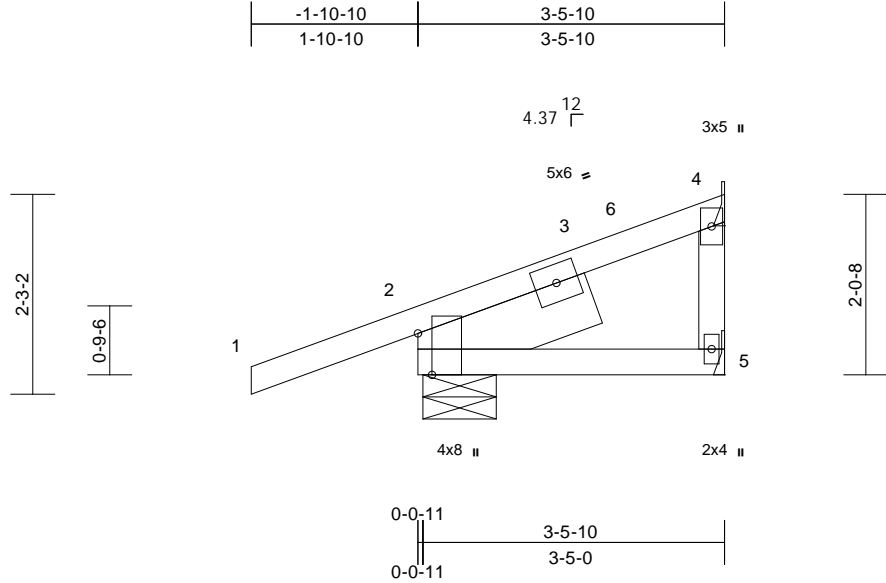
Scale = 1:26.1

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.40	Vert(LL)	-0.01	2-5	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.25	BC	0.13	Vert(CT)	-0.01	2-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-P								
BCDL	10.0										Weight: 22 lb	FT = 20%

LUMBER
TOP CHORD   2x4 SP No.2
BOT CHORD   2x4 SP No.2
WEBS   2x4 SP No.3
SLIDER   Left 2x8 SP 2400F 2.0E -- 2-0-12

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

REACTIONS (size)   2=0-10-0, 4= Mechanical, 5= Mechanical
Max Horiz 2=112 (LC 6)
Max Uplift 2=-486 (LC 6), 4=-89 (LC 6)
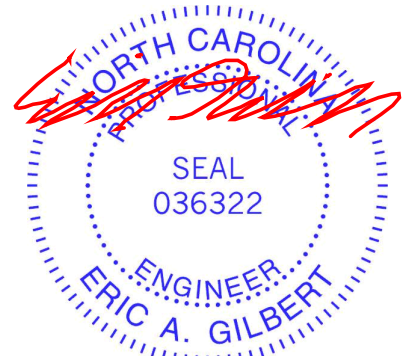Max Grav 2=278 (LC 2), 4=90 (LC 11), 5=66 (LC 5)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD   1-2=0/17, 2-3=-71/14, 3-6=-22/8, 4-6=-19/16, 4-5=0/0
BOT CHORD   2-5=-37/41

NOTES
1) This truss has been checked for uniform roof live load only, except as noted.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=0.0psf; BCDL=0.0psf; h=0ft; Cat. II; Exp C; Enclosed; C-C Corner (3) -1-10-10 to 2-4-4, Exterior (2) 2-4-4 to 3-3-14; cantilever left and right exposed ; end vertical right exposed; Lumber DOL=1.60 plate grip DOL=1.00
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=1.25 Plate DOL=1.00); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp C; Partially Exp.; Ct=1.10
5) This truss has been checked for uniform snow load only, except as noted.
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 15.4 psf on overhangs non-concurrent with other live loads.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Refer to girder(s) for truss to truss connections.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 89 lb uplift at joint 4 and 486 lb uplift at joint 2.
12) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

LOAD CASE(S) Standard

September 18,2020

ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Mitchell MAnor - Hampton El C	
20090082	J13	Jack-Open	2	1	Job Reference (optional)	E14880785

Scale = 1:28.6

Plate Offsets (X, Y): [2:0-6-0,0-1-8], [3:0-3-4,0-2-5], [6:0-4-0,0-2-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.21	Vert(LL)	0.01	5-6	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.25	BC	0.31	Vert(CT)	-0.01	5-6	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.02	4	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-P								
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
SLIDER   Left 2x8 SP 2400F 2.0E -- 1-9-3
BRACING
TOP CHORD   Structural wood sheathing directly applied or
             3-2-4 oc purlins, except end verticals, and
             2-0-0 oc purlins: 3-4.
BOT CHORD   Rigid ceiling directly applied or 6-0-0 oc
             bracing.

REACTIONS (size)   2=0-5-8, 4= Mechanical, 5=
                         Mechanical
             Max Horiz 2=28 (LC 6)
             Max Uplift 2=-154 (LC 6), 4=-3 (LC 7), 5=-76
                         (LC 6)
             Max Grav   2=185 (LC 2), 4=5 (LC 2), 5=142
                         (LC 11)

FORCES   (lb) - Maximum Compression/Maximum
               Tension
TOP CHORD   1-2=0/19, 2-3=-107/189, 3-4=-59/63, 4-5=0/0
BOT CHORD   2-6=-160/143, 5-6=-58/63
WEBS   3-6=-253/172

NOTES
1) This truss has been checked for uniform roof live load
   only, except as noted.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust)
   Vasd=103mph; TCDL=0.0psf; BCDL=0.0psf; h=0ft; Cat.
   II; Exp C; Enclosed; C-C Exterior (2); cantilever left and
   right exposed ; end vertical right exposed; Lumber
   DOL=1.60 plate grip DOL=1.00
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber
   DOL=1.25 Plate DOL=1.00); Pg=20.0 psf (ground
   snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15
   Plate DOL=1.00); Category II; Exp C; Partially Exp.;
   Ct=1.10, Lu=0-0-0

4) This truss has been checked for uniform snow load only,
   except as noted.
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 15.4 psf on
   overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom
   chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf
   on the bottom chord in all areas where a rectangle
   3-06-00 tall by 2-00-00 wide will fit between the bottom
   chord and any other members.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to
    bearing plate capable of withstanding 3 lb uplift at joint
    4, 76 lb uplift at joint 5 and 154 lb uplift at joint 2.
11) Graphical purlin representation does not depict the size
    or the orientation of the purlin along the top and/or
    bottom chord.
12) Gap between inside of top chord bearing and first
    diagonal or vertical web shall not exceed 0.500in.

LOAD CASE(S)   Standard

September 18, 2020

ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

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

Run: 8.42 S Aug 25 2020 Print: 8.420 S Aug 25 2020 MiTek Industries, Inc. Fri Sep 18 08:30:23   Page: 1
ID:HLCPvDOskxYoNRCFmiATprycavS-Mock Me
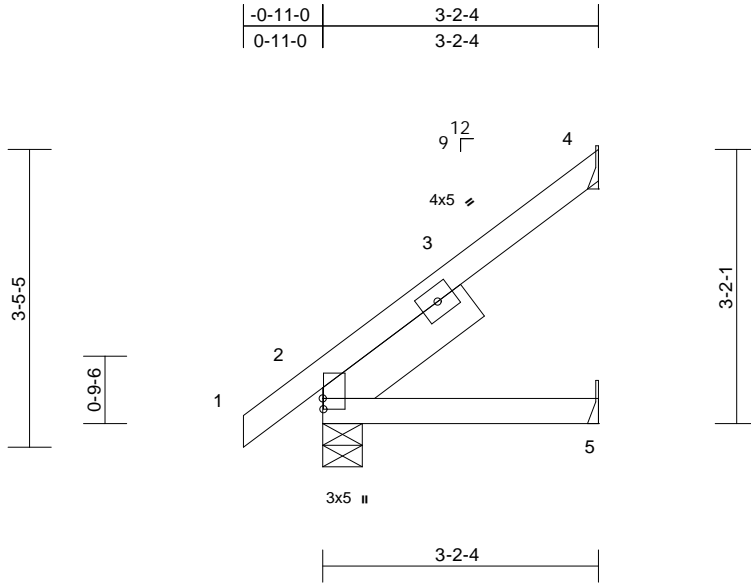
Scale = 1:26.6

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

Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.24	Vert(LL)	-0.01	2-5	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.25	BC	0.11	Vert(CT)	-0.01	2-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-P								
BCDL	10.0										Weight: 18 lb	FT = 20%

LUMBER
TOP CHORD   2x4 SP No.2
BOT CHORD   2x4 SP No.2
SLIDER   Left 2x6 SP No.2 -- 2-0-13
BRACING
TOP CHORD   Structural wood sheathing directly applied or 3-2-4 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.
REACTIONS (size)   2=0-5-8, 4= Mechanical, 5= Mechanical
Max Horiz   2=157 (LC 6)
Max Uplift   2=-93 (LC 6), 4=-130 (LC 6)
Max Grav   2=182 (LC 2), 4=155 (LC 11), 5=61 (LC 5)
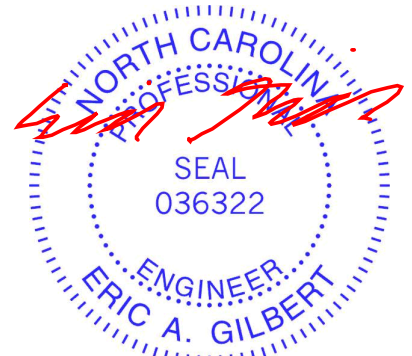
FORCES   (lb) - Maximum Compression/Maximum Tension
TOP CHORD   1-2=0/18, 2-3=-78/67, 3-4=-78/83
BOT CHORD   2-5=0/0

NOTES
1) This truss has been checked for uniform roof live load only, except as noted.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=0.0psf; BCDL=0.0psf; h=0ft; Cat. II; Exp C; Enclosed; C-C Exterior (2); cantilever left and right exposed ; end vertical right exposed; Lumber DOL=1.60 plate grip DOL=1.00
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.00); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp C; Partially Exp.; Ct=1.10
4) This truss has been checked for uniform snow load only, except as noted.

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 15.4 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 130 lb uplift at joint 4 and 93 lb uplift at joint 2.

LOAD CASE(S)   Standard

September 18,2020

ENGINEERING BY
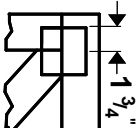**TRENCO**
A MiTek Affiliate
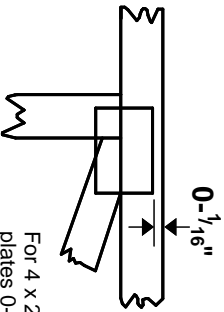818 Soundside Road
Edenton, NC 27932

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- $\frac{1}{16}$" from outside edge of truss.

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

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

PLATE SIZE

4 x 4

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

LATERAL BRACING LOCATION

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

BEARING

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

Industry Standards:

ANSI/TPI1: 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

dimensions shown in ft-in-sixteenths
(Drawings not to scale)
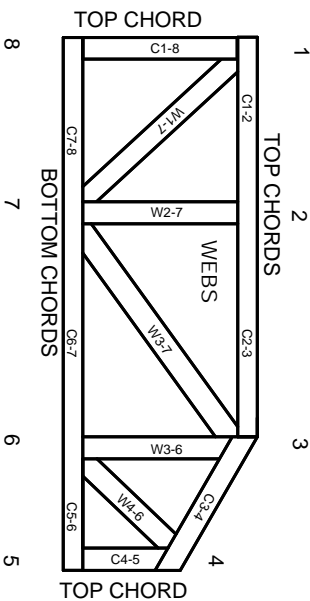
JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

© 2012 MiTek® All Rights Reserved

⚠ 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.

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