# Mark Morris, P.E. #126, 1317-M, Summerville, SC 29483 843 209-5784, Fax (866)-213-4614

The truss drawing(s) listed below have been prepared by **Atlantic Building Components** under my direct supervision based on the parameters provided by the truss designers.

AST #: 53758 JOB: 24-0290-R01 JOB NAME: LOT 91 PROVIDENCE CREEK Wind Code: ASCE7-16 Wind Speed: Vult= 120mph Exposure Category: B Mean Roof Height (feet): 35 These truss designs comply with IRC 2018 as well as IRC 2021. 20 Truss Design(s)

Trusses: J01, J03, J04, J05, J06, R01, R02, R02A, R03, R04, R05, R06, R07, R08, R09, SP01, SP02, V01, V02, V03



#### Warning !--- Verify design parameters and read notes before use.



- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs
- non-concurrent with other live loads.

- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 2=122.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum
- sheetrock be applied directly to the bottom chord.







#### **NOTES-** (9)

- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs
- non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6)\* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit
- between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.

LOAD CASE(S) Standard





REACTIONS. (lb/size) 4=250/Mechanical, 2=342/0-3-8 (min. 0-1-8) Max Horz 2=82(LC 11) Max Uplift4=-77(LC 8), 2=-113(LC 8) Max Grav 4=288(LC 19), 2=446(LC 19)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown.

NOTES- (11)

- 1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60
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4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.

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

6) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.

7) Refer to girder(s) for truss to truss connections.

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 2=113.

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

10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf) Vert: 1-3=-60, 4-5=-20 Concentrated Loads (lb) Vert: 8=-43(F) 9=-123(F)





- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.

- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.





of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI 1 National Design Standard for Metal Plate Connected Wood Truss Construction and BCSI 1-03 Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.





	9-6-14		19-0-0			28-5-2			37-8-8			
9-0-14 Plate Offsets (X,Y) [2:0-3-0.0-1-12]			9-5-2			9-5-2				9-3-0		
LOADING (psf) TCLL (roof) Snow (Pf) TCDL BCLL	20.0 F 20.0 F 10.0 L 0.0 * F	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.15 1.15 YES 2014	<b>CSI.</b> TC 0.77 BC 0.96 WB 0.71	DI Ve Ve	<b>EFL.</b> ert(LL) ert(CT) orz(CT)	in ( -0.37 14 -0.59 14 0.13	loc) I-16 I-16 I-16 11	l/defl >999 >755 n/a	L/d 240 180 n/a	PLATES MT20	<b>GRIP</b> 244/190
BCDL	10.0		2014	Watrix-AS							weight. 212 h	5 FI - 20%
LUMBER- TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 *Except* B2: 2x4 SP No.1				BRACIN TOP CH BOT CH WEBS	<b>ig-</b> Iord Iord	Structural wood sheathing directly applied, except end verticals. Rigid ceiling directly applied. 1 Row at midpt 5-14, 7-14, 3-17, 9-11						
WEBS 2X4 SP No.3							MI I ek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.					
REACTIONS. (Ib/size) 17=1559/0-3-8 (min. 0-1-13), 11=1496/Mechanical Max Horz 17=108(LC 14) Max Uplift17=-207(LC 14), 11=-185(LC 15)												
<b>FORCES.</b> (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 2-18=-571/84, 3-18=-457/97, 3-4=-2592/386, 4-19=-2521/399, 5-19=-2448/401, 5-6=-1954/390, 6-7=-1954/390, 7-20=-2402/404, 8-20=-2474/402, 8-9=-2546/388, 9-21=-334/86, 10-21=-415/73, 2-17=-446/142, 10-11=-305/89												
BOT CHORD WEBS	BOT CHORD 16-17=-377/2390, 15-16=-225/2098, 15-22=-225/2098, 14-23=-214/2080, 13-23=-214/2080, 12-13=-214/2080, 11-12=-291/2312 WEBS 5-16=-45/4/1 5-14=-712/225 6-14=-165/1257 7-14=-684/222 7-12=-39/399											
NOTES- (11) 1) Unbalanced r 2) Wind: ASCE (envelope) ga Interior(1) 24- exposed;C-C 3) TCLL: ASCE Cat B; Partial 4) Unbalanced s 5) This truss has non-concurre 6) This truss has 10) This truss das sheetrock base	3-17=-2256/329, 9 coof live loads have 7-16; Vult=120mph able end zone and ( 0-15 to 32-9-2, Ext for members and fi 7-16; Pr=20.0 psf ( ly Exp.; Ce=1.0; Cs snow loads have be s been designed fo at with other live los s been designed fo as been designed fo as been designed for as been des been designed for as been des been des been des	<ul> <li>Inter-2339/334</li> <li>been considered (3-second gust) N C-C Exterior(2E) -( terior(2E) 32-9-2 tc forces &amp; MWFRS f (roof LL: Lum DOL s=1.00; Ct=1.10 sen considered for r greater of min ro rads. ra 10.0 psf botton for a live load of 3( any other members ss connections. (by others) of truss a minimum of 7/1( b the bottom chord</li> </ul>	for this desig /asd=95mph; 0-10-8 to 3-12 zon for reactions s = 1.15 Plate D this design. of live load of n chord live load of n chord live load 0.0psf on the s, with BCDL s to bearing p 6" structural w	n. ; TCDL=5.0psf; B 1-2, Interior(1) 3-1 ie; cantilever left a shown; Lumber D DOL=1.15); Pf=20 f 12.0 psf or 2.00 pad nonconcurrer bottom chord in a = 10.0psf. plate capable of w vood sheathing bo	CDL=5.0psf; h 1-2 to 13-11-1 and right expoo OL=1.60 plate .0 psf (Lum D times flat roof it with any othe ill areas where ithstanding 10 e applied direct	=35ft; C , Exteric sed ; enc grip DO OL=1.15 load of 2 er live loa e a rectar 0 lb uplif tly to the	at. II; Exp r(2R) 13- d vertical VL=1.60 Plate DC 20.0 psf c ads. ngle 3-6-0 it at joint( t at joint(	o B; E -11-1 Ieft a OL=1. 0 tall I s) exc rd and	nclosed to 24-0- nd right 15); Is= erhangs by 1-0-0 cept (jt=l d 1/2" gy	; MWFRS 15, 1.0; Roug wide will b) 17=20 psum	TH CARO AND SEAL 28147	ALL A BUILD

Warning !—Verify design parameters and read notes before use. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – not truss designer or truss engineer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI 1 *National Design Standard for Metal Plate Connected Wood Truss Construction* and BCSI 1-03 Guide to *Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses* from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

10/30/2024



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Job	Truss	Truss Type	Qty	Ply	LOT 91 PROVIDENCE CREEK   59 DAVINHALL DRIVE	FUQUAY-VARINA, NC
24-0290-R01	R07	Common Girder	1	2	Job Reference (optional) #	53758
	·	Run: 8.4 ID:zS	30 s Feb 12 nl_VDJTy	2 2021 Prin hu?pmO	t: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Oct 30 21 jJgrKyZRJv-V961B7431vD5dCDjwhnhO3YpvGFqF	:16:14 2024 Page 2 IK_APMPiwyO6uV

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf) Vert: 1-4=-60, 4-7=-60, 11-15=-20

Concentrated Loads (lb)

Vert: 17=-1563(B) 19=-1476(B) 20=-1476(B) 21=-1476(B) 22=-1476(B) 23=-1476(B)





FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown.

NOTES-(14)

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

2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 4-0-0, Corner(3R) 4-0-0 to 8-0-0, Corner(3E) 8-0-0 to 12-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10

5) Unbalanced snow loads have been considered for this design.

6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs

- non-concurrent with other live loads.

- 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will profession of the between the bottom chord and any other members.
  13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift of table? 8) Gable requires com...
  9) Truss to be fully sheathed from one race or com...
  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 come.
  12) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tan by commentary fit between the bottom chord and any other members.
  13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 10, 14, 15, 12 11.

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Job	Truss	Truss Type	Qty	Ply	LOT 91 PROVIDENCE CREEK   59 DAVINHALL	DRIVE FUQUAY-VARINA, NC
24-0290-R01	R09	Common Girder	1	2	Job Reference (optional)	# 53758
		Run: 8. ID:	430 s Feb 1 zSnl_VDJT	2 2021 Prin y_hu?pm(	t: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed DjJgrKyZRJv-RYEocp5JZWTptWN626p9TU	Oct 30 21:16:16 2024 Page 2 JdCd3tFjBSHejrVnpyO6uT

Uniform Loads (plf) Vert: 1-3=-60, 3-5=-60, 7-11=-20

Concentrated Loads (lb) Vert: 6=-1476(B) 15=-1476(B) 16=-1476(B) 17=-1476(B) 18=-1476(B)









**NOTES-** (9)

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

2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10

4) Unbalanced snow loads have been considered for this design.

5) Gable requires continuous bottom chord bearing.

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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 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 100 lb uplift at joint(s) 1, 3, 4.

LOAD CASE(S) Standard





TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.3 BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 4-1-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing. MiTek recommends that Stabilizers and required cross bracing

be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 1=105/4-1-0 (min. 0-1-8), 3=105/4-1-0 (min. 0-1-8) Max Horz 1=-8(LC 15) Max Uplift1=-13(LC 14), 3=-13(LC 15) Max Grav 1=111(LC 20), 3=111(LC 21)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown.

NOTES- (9

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

4) Unbalanced snow loads have been considered for this design.

5) Gable requires continuous bottom chord bearing.

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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 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 100 lb uplift at joint(s) 1, 3.

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LOAD CASE(S) Standard
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2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
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LOAD CASE(S) Standard

