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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 #: 39807 JOB: 23-4638-R01 JOB NAME: LOT 0.0045 HONEYCUTT HILLS Wind Code: 37 Wind Speed: Vult= 120mph Exposure Category: B Mean Roof Height (feet): 23 These truss designs comply with IRC 2015 as well as IRC 2018. 23 Truss Design(s)

Trusses:

J01, R01, R02, R03, R04, R05, R06, R07, R08, R09, R10, R11, R12, R13, R14, R15, R16, R17, R18, VT01, VT02, VT03, VT04



## 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* 



Max Uplift3=-21(LC 14), 2=-46(LC 10) Max Grav 3=63(LC 21), 4=41(LC 7), 2=209(LC 21)

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

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

- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone;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=1.25 Plate DOL=1.25); 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.

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LOAD CASE(S) Standard
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7/5/2023



		Gety	гіу	LOT 0.0045 HONEYCUTT HILLS   114 S	SHELBY MEADOW LANE ANGIER, NC
23-4638-R01 R07	Common Girder	1	2	Job Reference (optional)	# 39807

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## LOAD CASE(S) Standard

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

Uniform Loads (plf) Vert: 1-3=-60, 3-5=-60, 1-5=-20 Concentrated Loads (lb)

Vert: 6=-1247(B) 9=-1247(B) 10=-1247(B) 11=-1247(B) 12=-1247(B) 13=-1247(B) 14=-1247(B) 15=-1348(B) 16=-1348(B)



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Max Horz 2=61(LC 10) Max Uplift6=-20(LC 10), 2=-32(LC 10), 7=-32(LC 14)

Max Grav 6=112(LC 21), 2=206(LC 21), 7=276(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) 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=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); 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) 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. 6) Gable studs spaced at 2-0-0 oc

- 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 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.

Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2, 7.
 Non Standard bearing condition. Review required.

LOAD CASE(S) Standard





REACTIONS. (lb/size) 4=182/0-1-8 (min. 0-1-8), 2=256/0-3-8 (min. 0-1-8) Max Horz 2=61(LC 10) Max Uplift4=-32(LC 14), 2=-51(LC 10) Max Grav 4=243(LC 21), 2=351(LC 21)

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

NOTES- (10)

- 1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone;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=1.25 Plate DOL=1.25); 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

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) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

8) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.

LOAD CASE(S) Standard



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![](_page_16_Figure_0.jpeg)

- 6)\* This truss has been designed for a five load of 30.0ps for 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) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.

10) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 2-4-0

- from the left end to 4-4-0 to connect truss(es) R15 (1 ply 2x4 SP), R16 (1 ply 2x4 SP) to front face of bottom chord.
- 11) Fill all nail holes where hanger is in contact with lumber.
- 12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

# LOAD CASE(S) Standard

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

Uniform Loads (plf) Vert: 1-3=-60, 2-4=-20 Concentrated Loads (lb) Vert: 5=-366(F) 6=-315(F)

![](_page_16_Picture_12.jpeg)

![](_page_17_Figure_0.jpeg)

![](_page_18_Figure_0.jpeg)

![](_page_19_Figure_0.jpeg)

![](_page_20_Figure_0.jpeg)

5) \* 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.

6) Bearing at joint(s) 3 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of

bearing surface. 7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 3.

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

LOAD CASE(S) Standard

![](_page_20_Picture_6.jpeg)

![](_page_21_Figure_0.jpeg)

- 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=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-13 to 5-2-7, Exterior(2R) 5-2-7 to 9-1-13, Exterior(2E) 9-1-13 to 13-11-7 zone;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=1.25 Plate DOL=1.25); 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) Gable requires continuous bottom chord bearing.
- 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, with BCDL = 10.0psf.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=134, 6=133.

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LOAD CASE(S) Standard
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![](_page_21_Picture_10.jpeg)

![](_page_22_Figure_0.jpeg)

- Unbalanced roof live loads have been considered for this design.
  Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS
- (envelope) gable end zone and C-C Exterior(2E) zone;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=1.25 Plate DOL=1.25); 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) Gable requires continuous bottom chord bearing.

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=137, 6=136.

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LOAD CASE(S) Standard
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![](_page_22_Picture_9.jpeg)

![](_page_23_Figure_0.jpeg)

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

#### NOTES-(8)

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=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone;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=1.25 Plate DOL=1.25); 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) Gable requires continuous bottom chord bearing.

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

LOAD CASE(S) Standard

![](_page_23_Picture_12.jpeg)

![](_page_24_Figure_0.jpeg)

REACTIONS. (Ib/size) 1=63/3-6-10 (min. 0-1-8), 3=63/3-6-10 (min. 0-1-8), 4=94/3-6-10 (min. 0-1-8) Max Horz 1=22(LC 9) Max Uplift1=-10(LC 13), 3=-13(LC 13)

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

#### NOTES-(8)

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=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone;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=1.25 Plate DOL=1.25); 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) Gable requires continuous bottom chord bearing.

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

LOAD CASE(S) Standard

![](_page_24_Picture_13.jpeg)