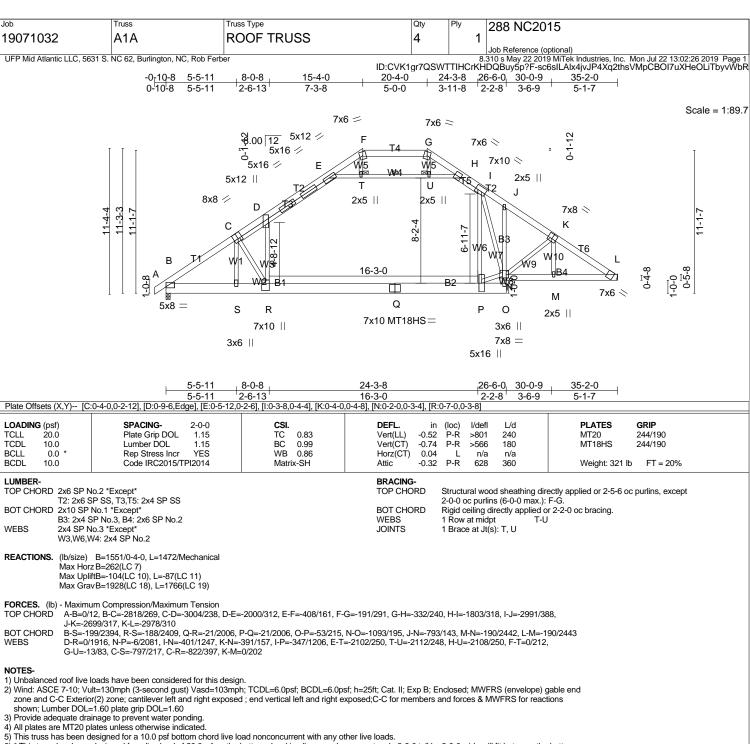
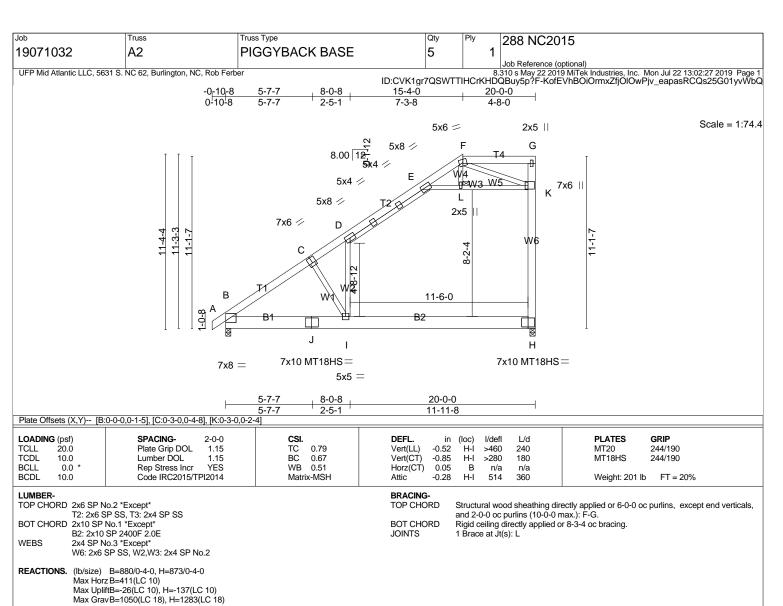


- 7) Ceiling dead load (5.0 psf) on member(s). D-E, H-I, E-R, R-S, H-S 8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. N-P
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 103 lb uplift at joint B and 88 lb uplift at joint L.
- 10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) Attic room checked for L/360 deflection.



- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Ceiling dead load (5.0 psf) on member(s). D-E, H-I, E-T, T-U, H-U
- 8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. P-R
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 104 lb uplift at joint B and 87 lb uplift at joint L.

  10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) Attic room checked for L/360 deflection.



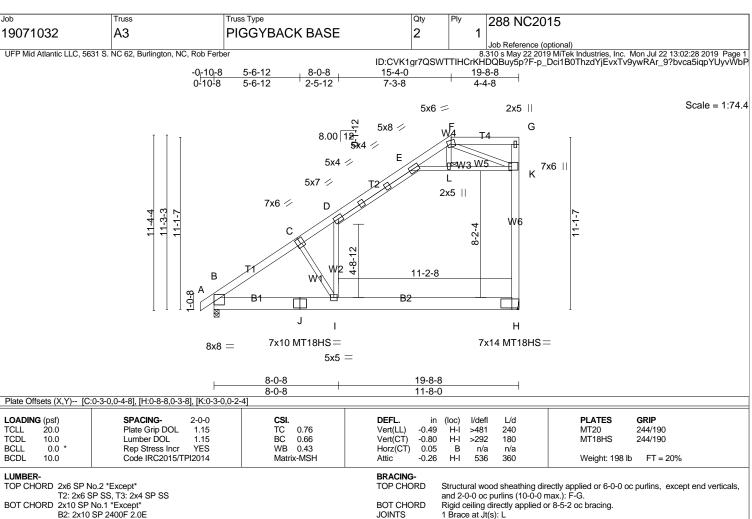
FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD A-B=0/29, B-C=-841/0, C-D=-752/0, D-E=-341/29, E-F=-272/117, F-G=-209/900, H-K=-514/216, G-K=-118/70
BOT CHORD B-J=-321/786, I-J=-321/786, I-I=-203/342

**WEBS** D-I=0/761, E-L=-321/250, K-L=-324/247, F-L=0/50, F-K=-1168/479, C-I=-932/254

### NOTES-

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

- 1) Unio: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and G-C Exterior(2) zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.4) All plates are MT20 plates unless otherwise indicated.
- 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Ceiling dead load (5.0 psf) on member(s). D-E, E-L, K-L
- 8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. H-I
  9) Bearing at joint(s) H 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 capable of withstanding 26 lb uplift at joint B and 137 lb uplift at joint H.
- 11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) Attic room checked for L/360 deflection.



B2: 2x10 SP 2400F 2.0E 2x4 SP No.3 \*Except\* WEBS

W6: 2x6 SP SS, W2,W3: 2x4 SP No.2

REACTIONS. (lb/size) B=867/0-4-0, H=859/Mechanical

Max Horz B=411(LC 10)
Max UpliftB=-24(LC 10), H=-141(LC 10)
Max GravB=1031(LC 18), H=1267(LC 18)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD A-B=0/29, B-C=-821/0, C-D=-728/0, D-E=-329/41, E-F=-234/102, F-G=-206/874, H-K=-504/215, G-K=-107/67
BOT CHORD B-J=-320/766, I-J=-320/766, I-I=-202/336

**WEBS** D-I=0/736, E-L=-308/225, K-L=-310/222, F-L=0/48, F-K=-1116/463, C-I=-915/254

### NOTES-

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

- 1) Unio: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and G-C Exterior(2) zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.4) All plates are MT20 plates unless otherwise indicated.
- 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Ceiling dead load (5.0 psf) on member(s). D-E, E-L, K-L
- 8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. H-I 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 24 lb uplift at joint B and 141 lb uplift at joint H.
- 10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) Attic room checked for L/360 deflection.

Job Truss Truss Type 288 NC2015 19071032 PIGGYBACK BASE A4 Job Reference (optional) 8.310 s May 22 2019 MiTek Industries, Inc. Mon Jul 22 13:02:29 2019 Page 1 ID:CVK1gr7QSWTTIHCrKHDQBuy5p?F-HBn\_wNCeE?5UAto6VAQOU8\_K2ORRKJOjKMaM4wyvWbO UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Rob Ferber 23-8-0 36-8-0 15-4-0 | 17-10-0 | 20-4-0 | 22-11-3 | 25-8-0 | 2-7-3 | 2-6-0 | 2-6-0 | 2-7-3 | 2-8-13 12-8-13 35-8-0 2-2-0 1-0-0 2-0-0 Scale = 1:89.07x6 = 7x6 >5x12 // 0-1-12 ₹8.00 12 5x1 F 7x6 < 5x16 / W5 7x8 < G 5x16 🥢 Н 5x12 || ٧ W 8x8 / 2x5 || 2x5 || 11-3-3 11-1-7 7x8 < В 8-2-4 T6<sub>B6</sub> 5x8 ≥ 15-7-8 W10 W11 J WK ∕HW1 B<sub>2</sub> 8x8 =Ν S AA Ū Q<sub>2x</sub>= 2x5 || 8x8 = 7x14 MT18HS= 3x4 =5x5 =7x8 = 3x6 | 9x12 MT18HS= 3x12 =25-8-0 23-10-0 35-8-0 23-9-12 0-1-12 35-4-8 1-10-8 8-0-8 2-6-13 0-3-8 0-0-4 1-10-0 Plate Offsets (X,Y)-- [A:0-8-9,0-3-6], [A:0-2-8,0-1-11], [B:0-4-0,0-2-12], [C:0-9-6,Edge], [D:0-6-13,0-2-8], [D:0-6-13,0-2-8], [D:0-4-0,0-4-8], [J:0-3-8,0-2-4], [O:0-3-8,0-2-12], [O:0-5-8,Edge], [T:0-3-8,0-6-0] CSI. TC BC LOADING (psf) SPACING-2-0-0 DFFL. (loc) Q-T **PLATES** GRIP Plate Grip DOL 1.15 0.73 Vert(LL) -0.45 244/190 TCLL 20.0 >630 240 MT20 -0.75 Q-T **TCDL** 10.0 Lumber DOL 1.15 0.90 Vert(CT) >381 180 MT18HS 244/190 **BCLL** Rep Stress Incr WB 0.59 0.05 0.0 Horz(CT) Q-T **BCDI** 10.0 Code IRC2015/TPI2014 Matrix-MSH Attic -0.33576 360 Weight: 624 lb FT = 20%LUMBER-BRACING-TOP CHORD 2x6 SP No.2 \*Except\* TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except T2: 2x6 SP SS, T3,T5: 2x4 SP SS 2-0-0 oc purlins (6-0-0 max.): E-F. Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: O-P,P-Q. 1 Brace at Jt(s): V, W BOT CHORD 2x4 SP No.2 \*Except\* **BOT CHORD** B1: 2x10 SP No.1, B2: 2x10 SP 2400F 2.0E, B5: 2x4 SP No.3, B3: 2x6 SP SS B8: 2x8 SP No.2 JOINTS **WEBS** 2x4 SP No.3 \*Except W3.W4.W6: 2x4 SP No.2 WEDGE Left: 2x4 SP No.2 REACTIONS. (lb/size) A=1887/Mechanical, Q=1469/0-3-8, K=1610/Mechanical Max Horz A=250(LC 5) Max UpliftA=-236(LC 8), Q=-437(LC 4), K=-192(LC 8) Max Grav A=2290(LC 16), Q=1802(LC 17), K=1854(LC 16) FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD A-B=-3338/364, B-C=-3818/393, C-D=-2269/347, D-E=-211/263, E-F=-34/466, F-G=-224/322, G-H=-2162/365, H-I=-2863/429, I-J=-3132/379
BOT CHORD A-U=-396/2935, T-U=-397/2975, S-T=-247/2473, S-AA=-247/2473, Q-AA=-247/2473, K-L=-4/48, L-M=0/32, O-R=-75/16, N-O=-270/2583, M-N=-270/2583, J-M=-263/2529, O-P=-1874/184, P-Q=-59/14, J-K=-1853/203 C-T=-180/2840, D-V=-2787/491, V-W=-2796/489, G-W=-2789/490, Q-R=-321/1730, H-R=-323/1704, I-N=0/183, B-U=-1251/175, I-O=-439/188, WEBS H-O=-668/232, O-Q=-277/2920, J-L=-10/16, B-T=-1010/311, E-V=0/146, F-W=0/114 NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.

Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-4-0 oc, 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc, 2x8 - 2 rows staggered

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

4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

5) Provide adequate drainage to prevent water ponding. 6) All plates are MT20 plates unless otherwise indicated.

- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

- 9) Ceiling dead load (5.0 psf) on member(s). C-D, G-H, D-V, V-W, G-W 10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. Q-T
- 11) Bearing at joint(s) Q considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

  12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 236 lb uplift at joint A, 437 lb uplift at joint Q and 192 lb uplift at joint K.
- 13) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

- 14) Magnitude of user added load(s) on this truss have been applied uniformly across all gravity load cases with no adjustments.
  15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 16) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2011 lb down and 366 lb up at 19-10-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 17) Attic room checked for L/360 deflection.

| PPMG Assertic LLC, CRC 18 No. RQ. Burlington, NC, Rob Fenar   IDCWKrg/TOSWTTHCKHDQBogsg/F-H8n_wh05eE78JAnd6WnQOUS_RQ/DR06M-Ng/Wh05   DCWKrg/TOSWTTHCKHDQBogsg/F-H8n_wh05eE78JAnd6WnQOUS_RQ/DR06M-Ng/Wh05   DCWKrg/TOSWTTHCKHDQBo | <sup>Јоь</sup><br>19071032  | Truss<br>A4 | Truss Type PIGGYBACK BASE | Qty<br>1 | Ply | 288 NC2015   |  |  |  |  |  |  |
|--|---|-------------|---------------------------|----------|-----|--|--|--|--|--|--|--|
| .OAD CASE(S) Standard  1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  Uniform Loads (plf)  Vert: A-C=-60, C-D=-70, D-E=-60, E-F=-60, G-H=-70, H-J=-60, P-X=-20, D-G=-10, K-L=-20, M-O=-20  |   |             | C. Rob Ferber             | '        | 8   | Job Reference (optional) .310 s May 22 2019 MiTek Industries, Inc. Mon Jul 22 13:02:29 2019 Page 2 |  |  |  |  |  |  |
| Uniform Loads (plf) Vert: A-C=-60, C-D=-70, D-E=-60, E-F=-60, F-G=-60, G-H=-70, H-J=-60, P-X=-20, D-G=-10, K-L=-20, M-O=-20  |   |             |                           |          |     |  |  |  |  |  |  |  |
| Vert: A-C=-60, C-D=-70, D-E=-60, E-F=-60, F-G=-60, G-H=-70, H-J=-60, P-X=-20, D-G=-10, K-L=-20, M-O=-20  | LOAD CASE(S) Standard  1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15        |             |                           |          |     |  |  |  |  |  |  |  |
| Vest: AA-200007)   | Vert: A-C=-60, C-D=-70, D-E=-60, E-F=-60, F-G=-60, G-H=-70, H-J=-60, P-X=-20, D-G=-10, K-L=-20, M-O=-20 |             |                           |          |     |  |  |  |  |  |  |  |
|  | Vert: AA=-2000(F)   |             |                           |          |     |  |  |  |  |  |  |  |
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Job Truss Truss Type Qty 288 NC2015 2 19071032 PIGGYBACK BASE A<sub>5</sub> 1 Job Reference (optional) B.310 s May 22 2019 MiTek Industries, Inc. Mon Jul 22 13:02:31 2019 Page 1 ID:CVK1gr7QSWTTIHCrKHDQBuy5p?F-DZvIL3EumcLCPByUdbSsZZ3fgC6zoBK0ng3T9oyvWbM UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Rob Ferber 36-8-0 15-4-0 7-3-8 35-8-0 2-2-0 1-0-0 Scale = 1:87.67x6 = 7x6 = 8.00 12 5x1 5x12 🗸 0-1-12 F 7x6 < 5x16 🕢 W5 7x8 < G W5 5x16 🥢 Н 5x12 || W  $\sqrt{2}$ 8x8 / 2x5 || 2x5 || 11-3-3 7x8 < 11-1-7 8-2-4 В T6<sub>B6</sub> 5x8 ≥ 15-7-8 W10 W11 -2-13 |-3-8 HW1 8 9 B2 2x5 8x8 =Ν <sub>₽</sub>¹ W 5 S U Т  $Q_{2x5}P =$ L 2x5 || 8x8 = 7x14 MT18HS= 3x4 =5x5 =7x8 =3x6 || 9x12 MT18HS= 3x12 =25-8-0 23-10-0 35-8-0 8-0-8 2-6-13 23-9-12 0-1-12 35-4-8 1-10-8 5-5-11 5-5-11 0-0-4 0-3-8 Plate Offsets (X,Y)-- [A:0-8-9,0-3-6], [A:0-2-8,0-1-11], [B:0-4-0,0-2-12], [C:0-9-6,Edge], [D:0-6-13,0-2-8], [D:0-6-13,0-2-8], [D:0-4-0,0-4-8], [J:0-3-8,0-2-4], [O:0-3-8,0-2-12], [O:0-6-0,Edge], [T:0-3-8,0-6-0] CSI. TC BC LOADING (psf) SPACING-2-0-0 DFFL. (loc) Q-T I/defl **PLATES** GRIP Plate Grip DOL 1.15 0.78 Vert(LL) -0.55 >516 244/190 TCLL 20.0 240 MT20 TCDL Q-T 10.0 Lumber DOL 1.15 0.96 Vert(CT) -0.80 >357 180 MT18HS 244/190 **BCLL** Rep Stress Incr YES WB 0.76 Horz(CT) 0.08 0.0 Code IRC2015/TPI2014 Q-T Weight: 312 lb **BCDI** 10.0 Matrix-MSH Attic -0.38496 360 FT = 20%LUMBER-BRACING-TOP CHORD 2x6 SP No.2 \*Except\* TOP CHORD Structural wood sheathing directly applied or 3-1-9 oc purlins, except T2: 2x6 SP SS, T3,T5: 2x4 SP SS 2-0-0 oc purlins (6-0-0 max.): E-F. BOT CHORD 2x4 SP No.2 \*Except\* **BOT CHORD** Rigid ceiling directly applied or 2-2-0 oc bracing. B1: 2x10 SP No.1, B2: 2x10 SP 2400F 2.0E, B5: 2x4 SP No.3, B3: 2x6 SP SS WFRS 1 Row at midpt V-W, H-Q JOINTS B8: 2x8 SP No.2 1 Brace at Jt(s): V. W 2x4 SP No.3 \*Except **WEBS** W3.W4.W6: 2x4 SP No.2 WEDGE Left: 2x4 SP No.2 REACTIONS. (lb/size) A=1399/Mechanical, Q=287/0-3-8, K=1280/Mechanical Max Horz A=250(LC 7) Max UpliftA=-146(LC 10), Q=-221(LC 6), K=-132(LC 10) Max Grav A=1799(LC 18), Q=614(LC 19), K=1522(LC 18) FORCES. (lb) - Maximum Compression/Maximum Tension

TOP CHORD A-B=-2598/267, B-C=-2645/224, C-D=-1720/303, D-E=-389/167, E-F=-272/221, F-G=-429/152, G-H=-1614/314, H-I=-2262/319, I-J=-2541/283

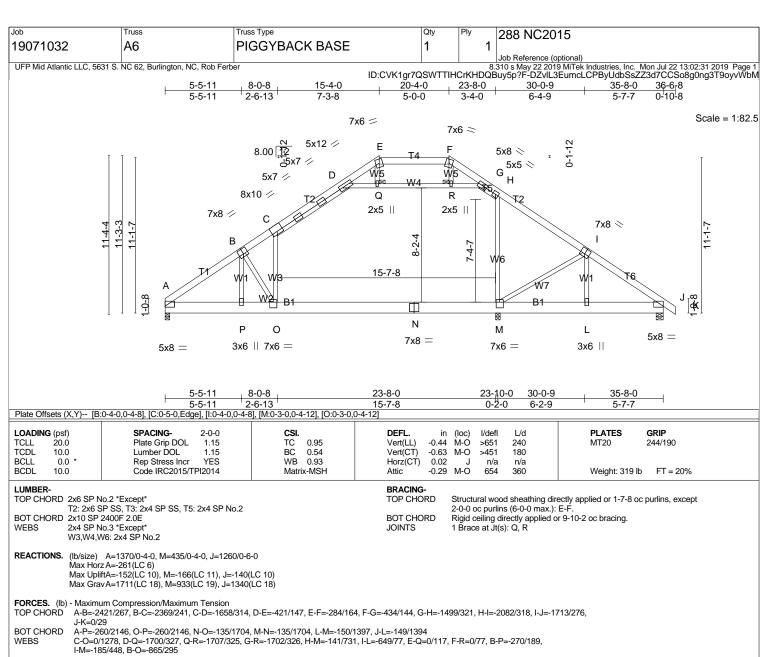
BOT CHORD A-U=-281/2307, T-U=-276/2317, S-T=-126/1808, Q-S=-126/1808, K-L=-3/40, L-M=0/28, O-R=-18/37, N-O=-180/2090, M-N=-180/2090, J-M=-174/2042, O-P=-812/0, P-Q=-19/36, J-K=-1519/175 C-T=0/1713, D-V=-1878/325, V-W=-1884/323, G-W=-1877/324, Q-R=-390/690, H-R=-400/671, I-N=0/201, E-V=0/106, F-W=0/100, WEBS B-U=-487/139, I-O=-442/188, H-O=-72/486, O-Q=-111/2011, B-T=-1026/312, J-L=-10/19

### NOTES-

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

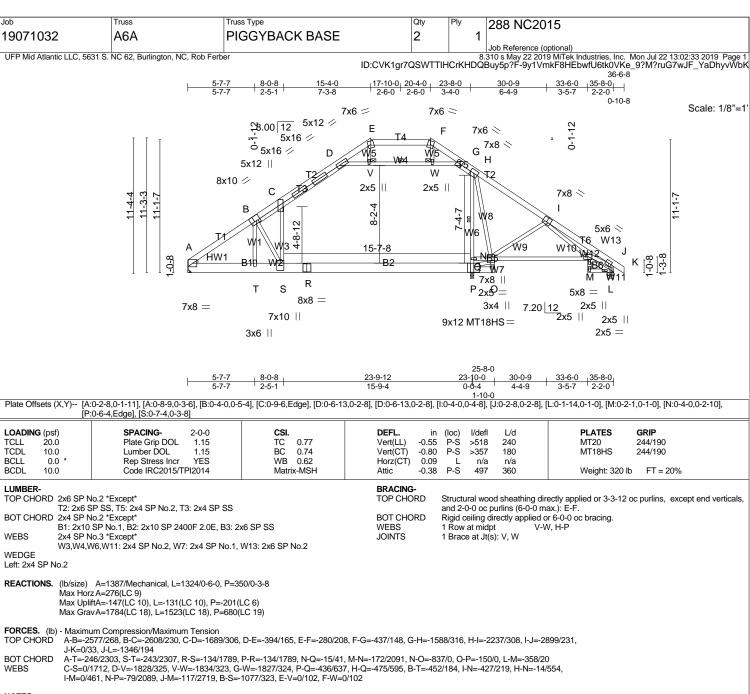
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
  5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom
- chord and any other members.
  7) Ceiling dead load (5.0 psf) on member(s). C-D, G-H, D-V, V-W, G-W
- 8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. Q-T
- 9) Bearing at joint(s) Q 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 capable of withstanding 146 lb uplift at joint A, 221 lb uplift at joint Q and 132 lb uplift at
- joint K.
- 11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

13) Attic room checked for L/360 deflection.



# NOTES-

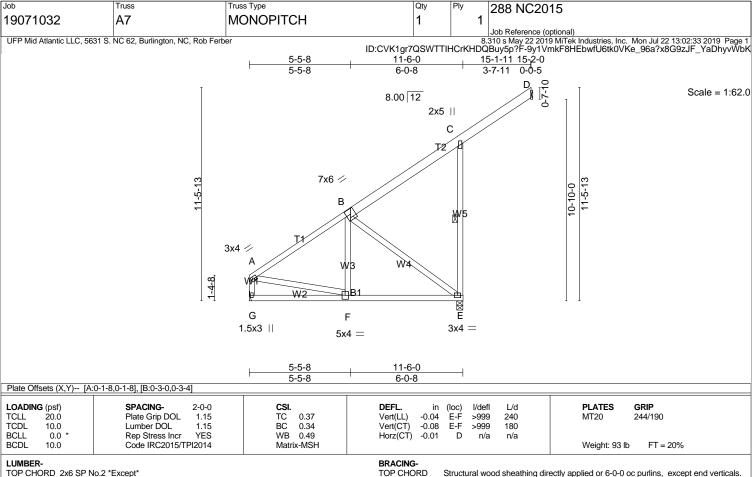
- Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
  4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Ceiling dead load (5.0 psf) on member(s). C-D, G-H, D-Q, Q-R, G-R
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 152 lb uplift at joint A, 166 lb uplift at joint M and 140 lb uplift at
- 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 11) Attic room checked for L/360 deflection.



### NOTES-

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

- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
  5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  7) Ceiling dead load (5.0 psf) on member(s). C-D, G-H, D-V, V-W, G-W
- 8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. P-S
- 9) Bearing at joint(s) L, P 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 capable of withstanding 147 lb uplift at joint A, 131 lb uplift at joint L and 201 lb uplift at
- 11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) Attic room checked for L/360 deflection.



BOT CHORD

WEBS

Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. Rigid ceiling directly applied or 9-0-8 oc bracing.

C-E

LUMBER-

TOP CHORD 2x6 SP No.2 \*Except\* T1: 2x4 SP No.2

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

REACTIONS. (lb/size) D=75/Mechanical, E=610/0-4-0, G=436/Mechanical

Max Horz G=366(LC 10) Max UpliftD=-57(LC 10), E=-329(LC 10)

Max GravD=82(LC 17), E=663(LC 17), G=436(LC 1)

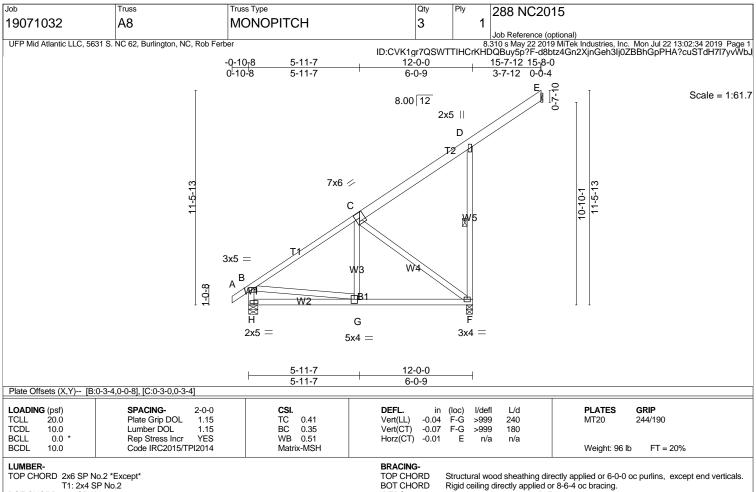
FORCES. (lb) - Maximum Compression/Maximum Tension

F-G=-422/394, E-F=-171/368 B-E=-467/220, B-F=0/221, A-F=-22/291

BOT CHORD

WFBS

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 57 lb uplift at joint D and 329 lb uplift at joint E. 5) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



WEBS

TOP CHORD 2x6 SP No.2 \*Except\* T1: 2x4 SP No.2 BOT CHORD 2x4 SP No.2

WEBS 2x4 SP No.3

REACTIONS. (lb/size) E=75/Mechanical, F=627/0-4-0, H=520/0-6-0

Max Horz H=406(LC 10) Max UpliftE=-57(LC 10), F=-325(LC 10)

Max GravE=82(LC 17), F=677(LC 17), H=520(LC 1)

FORCES. (lb) - Maximum Compression/Maximum Tension

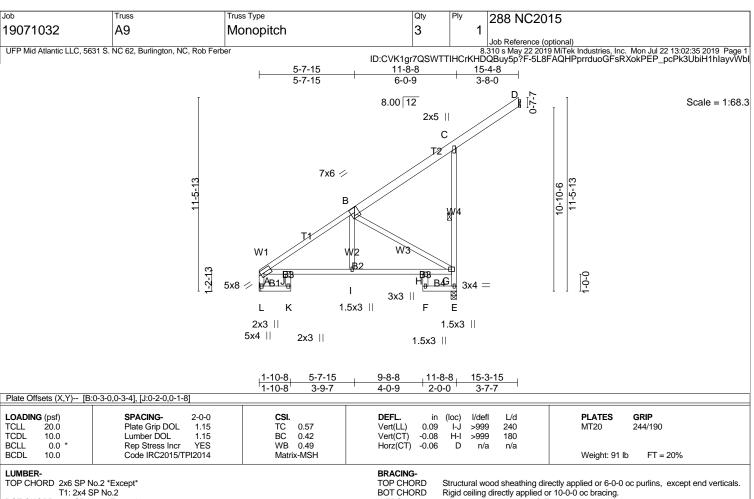
A-B=0/34, B-C=-488/0, C-D=-219/189, D-E=-91/42, D-F=-344/224, B-H=-472/0

BOT CHORD

G-H=-477/505, F-G=-164/383 C-F=-486/211, C-G=0/251, B-G=-118/318 WFBS

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

  3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom
- 4) Bearing at joint(s) H considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface. 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 57 lb uplift at joint E and 325 lb uplift at joint F. 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



WEBS

1 Row at midpt

C-E

T1: 2x4 SP No.2 BOT CHORD 2x4 SP No.2 \*Except\*

B3: 2x4 SP No.3 2x4 SP No.3 WEBS

REACTIONS. (Ib/size) D=75/Mechanical, E=620/0-4-0, L=444/Mechanical Max Horz L=375(LC 7)
Max UpliftD=-64(LC 10), E=-258(LC 10)

Max Grav D=79(LC 17), E=696(LC 17), L=453(LC 18)

FORCES. (lb) - Maximum Compression/Maximum Tension

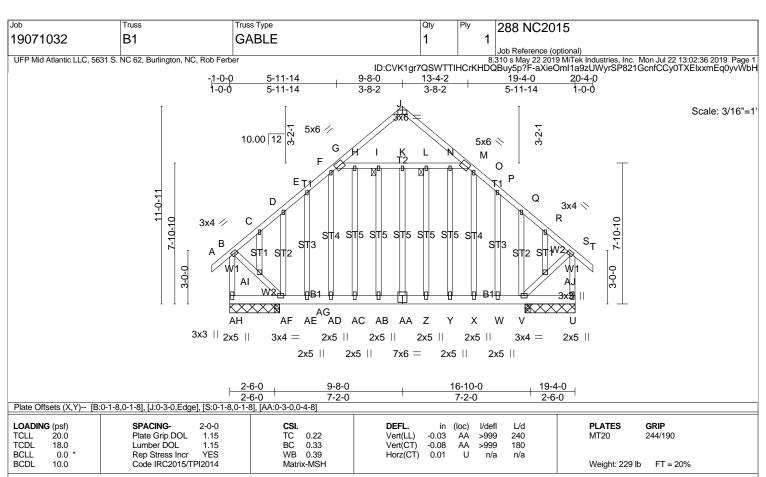
TOP CHORD BOT CHORD

AB=-574/19, B-C=-211/155, C-D=-92/49, E-G=-671/279, C-G=-359/179, A-L=-430/36 K-L=-208/169, J-K=-66/63, A-J=0/345, I-J=-184/505, H-I=-185/497, G-H=-218/504, F-H=-5/22, E-F=-83/84

B-I=-1/272, B-G=-542/254 WEBS

# NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions
- shown; Lumber DOL=1.60 plate grip DOL=1.60
  2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 64 lb uplift at joint D and 258 lb uplift at joint E.
  5) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



BRACING-

**JOINTS** 

TOP CHORD

BOT CHORD

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

LUMBER-

TOP CHORD 2x4 SP No 2 BOT CHORD 2x6 SP No.2 **WEBS** 2x4 SP No.2 \*Except\*

W2: 2x4 SP No.3 OTHERS 2x4 SP No.3

REACTIONS. (lb/size) AH=1131/2-9-8, U=1070/2-9-8, AF=516/2-9-8, V=-73/2-9-8, V=-73/2-9-8, AG=-642/0-3-8 Max Horz AH=318(LC 9)

Max UpitriAF=-544(LC 7), V=-311(LC 6), V=-73(LC 1), AG=-790(LC 17) Max GravAH=1149(LC 18), U=1081(LC 17), AF=881(LC 17), V=199(LC 9), AG=235(LC 10)

FORCES. (lb) - Maximum Compression/Maximum Tension

A-B=0/56, B-C=-767/39, C-D=-683/59, D-E=-725/97, E-F=-697/123, F-G=-595/134, G-J=-316/77, J-M=-315/77, M-O=-595/134, O-P=-695/123, P-Q=-732/87, Q-R=-657/43, R-S=-742/22, S-T=0/56, B-AH=-1116/16, S-U=-1097/0, G-H=-420/141, H-I=-420/141, I-K=-420/141, K-L=-420/141, K-L=-420/141, I-K=-420/141, I-K= TOP CHORD

L-N=-420/141, M-N=-420/141 **BOT CHORD** 

AG-AH=-295/283, AF-AG=-295/283, AE-AF=-7/560, AD-AE=-7/560, AC-AD=-7/560, AB-AC=-7/560, AA-AB=-7/560, Z-AA=-7/560, Y-Z=-7/560, X-Y=-7/560, W-X=-7/560, V-W=-7/560, U-V=-38/52

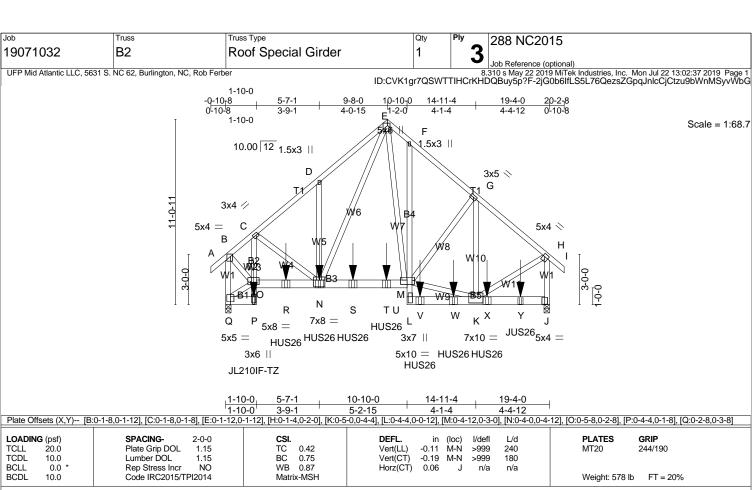
**WEBS** C-AI=-7/34, D-AF=-227/110, E-AE=-79/44, F-AD=-15/136, H-AC=-7/49, I-AB=-3/7, K-AA=0/11, L-Z=-3/6, N-Y=-2/51, O-X=-4/133, P-W=-51/38,

Q-V=-248/118, R-AJ=-3/37, B-AI=-11/756, AF-AI=-13/777, V-AJ=0/760, S-AJ=0/737

### NOTES-

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

- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only.4) Provide adequate drainage to prevent water ponding.
- 5) All plates are 1.5x3 MT20 unless otherwise indicated.
- 6) Vertical gable studs spaced at 1-4-0 oc and horizontal 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.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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 544 lb uplift at joint AF, 311 lb uplift at joint V and 790 lb uplift at
- 10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1. 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



BRACING-

TOP CHORD

BOT CHORD

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

LUMBER-

TOP CHORD 2x4 SP No 2

BOT CHORD 2x6 SP No.2 \*Except\*

B2: 2x4 SP No.3, B3: 2x6 SP No.1, B4: 2x4 SP No.2

WERS 2x4 SP No.3

REACTIONS. (lb/size) Q=7349/0-4-0, J=6403/0-4-0

Max Horz Q=315(LC 7)
Max UpliftQ=-1548(LC 8), J=-1154(LC 9) Max GravQ=8530(LC 2), J=7283(LC 2)

FORCES. (lb) - Maximum Compression/Maximum Tension

TOP CHORD A-B=0/39, B-C=-5799/1100, C-D=-7722/1449, D-E=-7668/1615, E-F=-6194/1297, F-G=-6375/1259, G-H=-6159/1125, H-I=0/39,

B-Q=-8393/1580, H-J=-6992/1232

BOT CHORD P-Q=-50/152 O-P=-330/1719 C-O=-2381/447 O-R=-1052/4507 N-R=-1045/4466 N-S=-775/4213 S-T=-775/4213 T-LI=-775/4213 M-U=-775/4213, L-M=-358/1907, F-M=-173/189, L-V=-49/9, V-W=-49/9, K-W=-49/9, K-X=-37/64, X-Y=-37/64, J-Y=-37/64

**WEBS** C-N=-387/1736, D-N=-299/217, E-M=-1003/4686, K-M=-787/4863, G-M=-215/276, G-K=-567/170, H-K=-912/5468, O-Q=-318/325,

B-O=-1165/6332, E-N=-1004/4278

# NOTES-

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

Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-4-0 oc, 2x4 - 1 row at 0-4-0 oc.

- Webs 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) Unbalanced roof live loads have been considered for this design.
  4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end
- zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom
- chord and any other members, with BCDL = 10.0psf.
- 7) Bearing at joint(s) Q, J 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 capable of withstanding 1548 lb uplift at joint Q and 1154 lb uplift at joint J. 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Use USP JL210IF-TZ (With 11-16d HDG nails into Girder & 6-10d x 1-1/2 HDG nails into Truss) or equivalent at 1-8-4 from the left end to connect truss(es)
- A1 (1 ply 2x10 SP) to back face of bottom chord.
- 11) Use USP HUS26 (With 14-16d nails into Girder & 6-16d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 3-7-4 from the left end to 15-7-4 to connect truss(es) À1A (1 ply 2x6 SP), A1 (1 ply 2x10 SP) to back face of bottom chord.

  12) Use USP JUS26 (With 4-10d nails into Girder & 4-10d nails into Truss) or equivalent at 17-7-4 from the left end to connect truss(es) A7 (1 ply 2x4 SP) to
- back face of bottom chord.
- 13) Fill all nail holes where hanger is in contact with lumber

# LOAD CASE(S) Standard

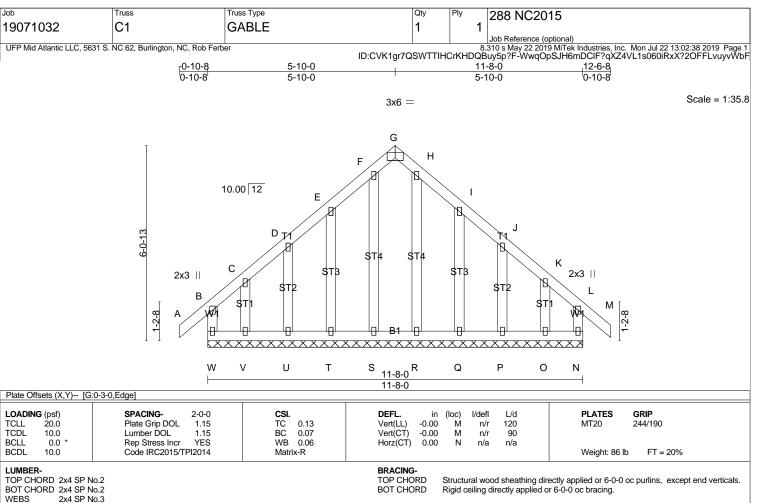
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: A-B=-60, B-E=-60, E-H=-60, H-I=-60, P-Q=-20, M-O=-20, J-L=-20

Concentrated Loads (lb)

Vert: P=-1463(B) N=-1460(B) R=-1460(B) S=-1460(B) T=-1460(B) V=-1463(B) W=-1463(B) X=-1463(B) Y=-416(B)



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

REACTIONS.

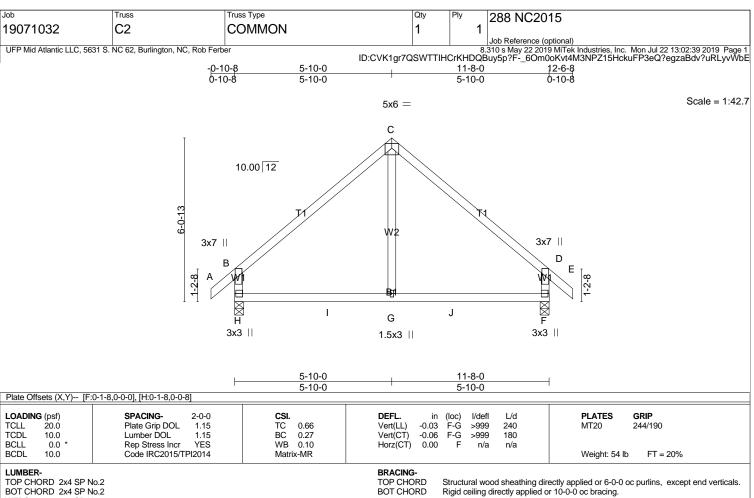
(lb/size) W=119/11-8-0, N=119/11-8-0, S=111/11-8-0, T=105/11-8-0, U=112/11-8-0, V=69/11-8-0, R=111/11-8-0, Q=105/11-8-0, P=112/11-8-0, O=69/11-8-0

Max Horz W=-174(LC 8)
Max UpliftW=-110(LC 6), N=-93(LC 7), T=-81(LC 10), U=-41(LC 10), V=-130(LC 10), Q=-81(LC 11), P=-42(LC 11), O=-126(LC 11)
Max Grav W=183(LC 18), N=168(LC 17), S=135(LC 20), T=120(LC 17), U=113(LC 21), V=173(LC 8), R=132(LC 19), Q=121(LC 18), P=113(LC 22), O=160(LC 9)

FORCES. (lb) - Maximum Compression/Maximum Tension

B-W=-139/79, A-B=0/39, B-C=-110/106, C-D=-67/77, D-E=-81/129, E-F=-140/203, F-G=-105/140, G-H=-105/140, H-I=-140/203, I-J=-81/129, J-K=-55/74, K-L=-94/91, L-M=0/39, L-N=-128/71 BOT CHORD V-W=-88/91, U-V=-88/91, T-U=-88/91, S-T=-88/91, R-S=-88/91, Q-R=-88/91, P-Q=-88/91, O-P=-88/91, N-O=-88/91 F-S=-109/27, E-T=-119/102, D-U=-94/70, C-V=-116/96, H-R=-109/27, I-Q=-119/102, J-P=-94/70, K-O=-116/94 WFBS

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  3) Truss designed for wind loads in the plane of the truss only.
- 4) All plates are 1.5x3 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing
- 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 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 3-6-0 tall by 2-0-0 wide will fit between the bottom
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 110 lb uplift at joint W, 93 lb uplift at joint N, 81 lb uplift at joint T, 41 lb uplift at joint U, 130 lb uplift at joint V, 81 lb uplift at joint Q, 42 lb uplift at joint P and 126 lb uplift at joint O.
- 11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



BOT CHORD

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

**REACTIONS.** (lb/size) H=516/0-4-0, F=516/0-4-0

Max Horz H=-174(LC 8)

Max UpliftH=-59(LC 10), F=-59(LC 11) Max Grav H=530(LC 17), F=530(LC 18)

**WEBS** C-G=0/259

### NOTES-

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

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 59 lb uplift at joint H and 59 lb uplift at joint F.
6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Job Truss Truss Type 288 NC2015 19071032 C3 Common Girder Job Reference (optional) B.310 s May 22 2019 MiTek Industries, Inc. Mon Jul 22 13:02:40 2019 Page 1 ID:CVK1gr7QSWTTIHCrKHDQBuy5p?F-Sly8E8LYeNUw\_Z8De\_7zRSxKnqEiPDCLsZkSznyvWbD UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Rob Ferber 5-10-0 8-8-13 11-8-0 2-11-3 2-10-13 2-11-3 2-10-13 Scale = 1:41.7 5x6 = С 10.00 12 3x5 // 3x5 💉 D В 6-0-13 5x5 💉 5x5 // Е wλ 1-2-8 1-2-8 K L M Ν G Н J5x6 = HUS26 5x6 =7x6 = THD26-2 7x6 = 7x8 =HUS26 HUS26 HUS26 5-10-0 11-8-0 2-11-3 8-8-13 2-11-3 2-10-13 2-10-13 2-11-3 Plate Offsets (X,Y)-- [A:0-1-4,0-2-8], [E:0-1-4,0-2-8], [G:0-3-0,0-4-8], [H:0-4-0,0-4-8], [I:0-3-0,0-4-8] LOADING (psf) SPACING-2-0-0 CSI DFFL. in I/defl L/d **PLATES** GRIP TC. Plate Grip DOL -0.04 244/190 TCLL 20.0 1.15 0.31 Vert(LL) G-H >999 240 MT20 BC **TCDL** 10.0 Lumber DOL 1.15 0.73 Vert(CT) -0.06 G-H >999 180 BCLL 0.0 Rep Stress Incr WB 0.91 Horz(CT) 0.01 **BCDI** 10.0 Code IRC2015/TPI2014 Matrix-MSH Weight: 179 lb FT = 20%LUMBER-BRACING-TOP CHORD 2x4 SP No 2 TOP CHORD Structural wood sheathing directly applied or 5-9-13 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing. BOT CHORD 2x4 SP No.3 \*Except\* W1: 2x6 SP No.2 REACTIONS. (lb/size) J=4447/0-4-0, F=3820/0-4-0 Max Horz J=-151(LC 4) Max UpliftJ=-522(LC 8), F=-427(LC 9)

BOT CHORD 2x6 SP No.2 WEBS

Max GravJ=5304(LC 2), F=4527(LC 2)

FORCES. (lb) - Maximum Compression/Maximum Tension

A-B=-4628/475, B-C=-3553/417, C-D=-3553/417, D-E=-4481/452, A-J=-4077/407, E-F=-4019/395

BOT CHORD J-K=-194/635, I-K=-194/635, I-L=-369/3504, H-L=-369/3504, H-M=-301/3391, G-M=-301/3391, G-N=-52/390, F-N=-52/390 C-H=-455/4313, D-H=-1019/192, D-G=-134/1271, B-H=-1188/218, B-I=-168/1492, A-I=-273/3085, E-G=-283/3192 WFBS

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, 2x6 - 2 rows staggered at 0-9-0 oc.

Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-4-0 oc.

Webs 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) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph (3-second qust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Bearing at joint(s) J, F 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 capable of withstanding 522 lb uplift at joint J and 427 lb uplift at joint F.

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

10) Use USP THD26-2 (With 18-16d nails into Girder & 12-10d nails into Truss) or equivalent at 1-6-8 from the left end to connect truss(es) a4 (2 ply 2x10 SP) to front face of bottom chord.

11) Use USP HUS26 (With 14-16d nails into Girder & 6-16d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 3-7-4 from the left end to 9-7-4 to connect truss(es) à5 (1 ply 2x10 SP), a6a (1 ply 2x10 SP) to front face of bottom chord.

12) Fill all nail holes where hanger is in contact with lumber.

### LOAD CASE(S) Standard

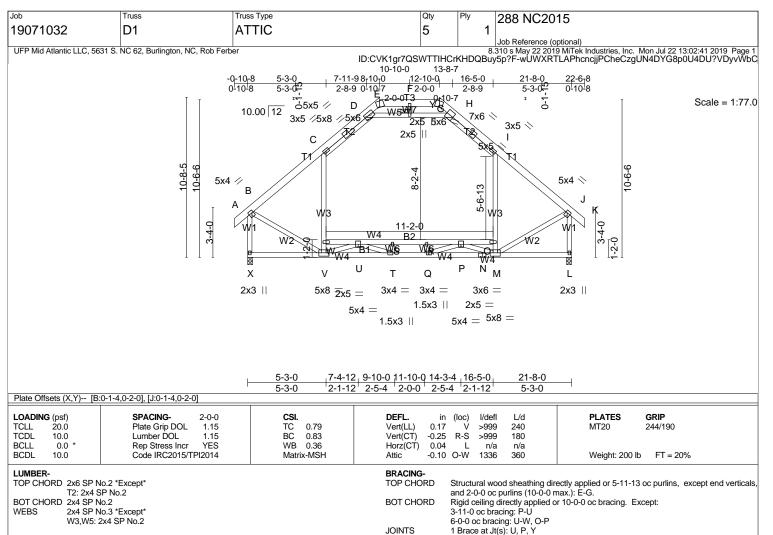
1) Dead + Roof Live (balanced): Lumber Increase=1.15. Plate Increase=1.15

Uniform Loads (plf)

Vert: A-C=-60, C-E=-60, F-J=-20

Concentrated Loads (lb)

Vert: H=-1380(F) K=-1870(F) L=-1380(F) M=-1370(F) N=-1370(F)



**REACTIONS.** (lb/size) X=1088/0-4-0, L=1088/0-4-0 Max Horz X=-307(LC 8)

Max Grav X=1315(LC 2), L=1315(LC 2)

FORCES. (lb) - Maximum Compression/Maximum Tension

TOP CHORD A-B=0/39, B-C=-1069/110, C-D=-777/208, D-E=-93/482, E-F=-94/669, F-G=-94/669, G-H=-93/482, H-I=-777/208, I-J=-1069/110, J-K=0/39, B-X=-1275/104, J-L=-1275/104

**BOT CHORD** WFBS

V-X=-295/307, T-V=0/1926, Q-T=0/2600, N-Q=0/1899, M-N=0/1899, L-M=-39/41, U-W=-141/163, S-U=-1975/0, R-S=-1975/0, P-R=-1975/0, P-P=-148/170 V-W=-69/279, C-W=-42/390, M-O=-69/279, I-O=-42/390, D-Y=-1325/341, H-Y=-1325/341, B-V=-1/880, J-M=-2/881, Q-R=-233/42, S-T=-231/39, U-V=-1416/0, M-P=-1416/0, M-P=-1416/0, M-P=-1416/0, M-P=-1416/0, M-P=-1416/0, M-P=-1416/0, M-P=-1416/0, M-P=-1/880, J-M=-2/881, Q-R=-233/42, S-T=-231/39, U-V=-1416/0, M-P=-1416/0, M-P=-141

F-Y=0/88, T-U=0/750

# NOTES-

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

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

3) Provide adequate drainage to prevent water ponding.

- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

- 6) Ceiling dead load (5.0 psf) on member(s). C-D, H-I, D-Y, H-Y 7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. U-W, S-U, R-S, P-R, O-P
- 8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

10) Attic room checked for L/360 deflection.

| 19071032   | D2 C  | common Supported                                  | Gable 1  | Job Reference (o         |  |  |  |  |  |
|--|---|---|--|--------------------------|--|--|--|--|--|
| UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Rob Ferber  8.310 s May 22 2019 MiTek Industries, Inc. Mon Jul 22 13:02:44 2019 Page 1 ID:t4z_4DEuTDm0pTk3HHYTBzyvWgW-L3Bf3VO2ic_MTAS_tqBvbl6z?RkHLCqwmBif6YyvWb9 |   |   |  |                          |  |  |  |  |  |
|  |   | 1-0-0 5-6-0<br>1-0-0 5-6-0                        |  | 11-0-0<br>5-6-0<br>1-0-0 |  |  |  |  |  |
|  |   |   | 3x6 =  |                          | Scale = 1:52.6                                   |  |  |  |  |
| 10.00 12 E G H 2x3    2x3    1 J K O Y E   |   |   |  |                          |  |  |  |  |  |
| $egin{array}{cccccccccccccccccccccccccccccccccccc$   |   |   |  |                          |  |  |  |  |  |
| 11-0-0<br>11-0-0   |   |   |  |                          |  |  |  |  |  |
| 11-U-U   Plate Offsets (X,Y) [F:0-3-0,Edge]  |   |   |  |                          |  |  |  |  |  |
| LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0   | SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2015/TPI2014 | CSI.<br>TC 0.42<br>BC 0.17<br>WB 0.16<br>Matrix-R | <b>DEFL.</b> ii Vert(LL) -0.00 Vert(CT) -0.00 Horz(CT) -0.00 | 1 K n/r 90               | PLATES GRIP MT20 244/190  Weight: 94 lb FT = 20% |  |  |  |  |

Qty

### LUMBER-

Job

Truss

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

288 NC2015

REACTIONS. (Ib/size) Q=168/11-0-0, L=168/11-0-0, O=165/11-0-0, P=161/11-0-0, N=165/11-0-0, M=161/11-0-0

Max Horz Q=-247(LC 8) Max UpliftQ=-183(LC 6), L=-180(LC 7), P=-255(LC 7), M=-253(LC 6)

Max GravQ=281(LC 18), L=279(LC 17), O=169(LC 20), P=366(LC 8), N=169(LC 19), M=364(LC 9)

Truss Type

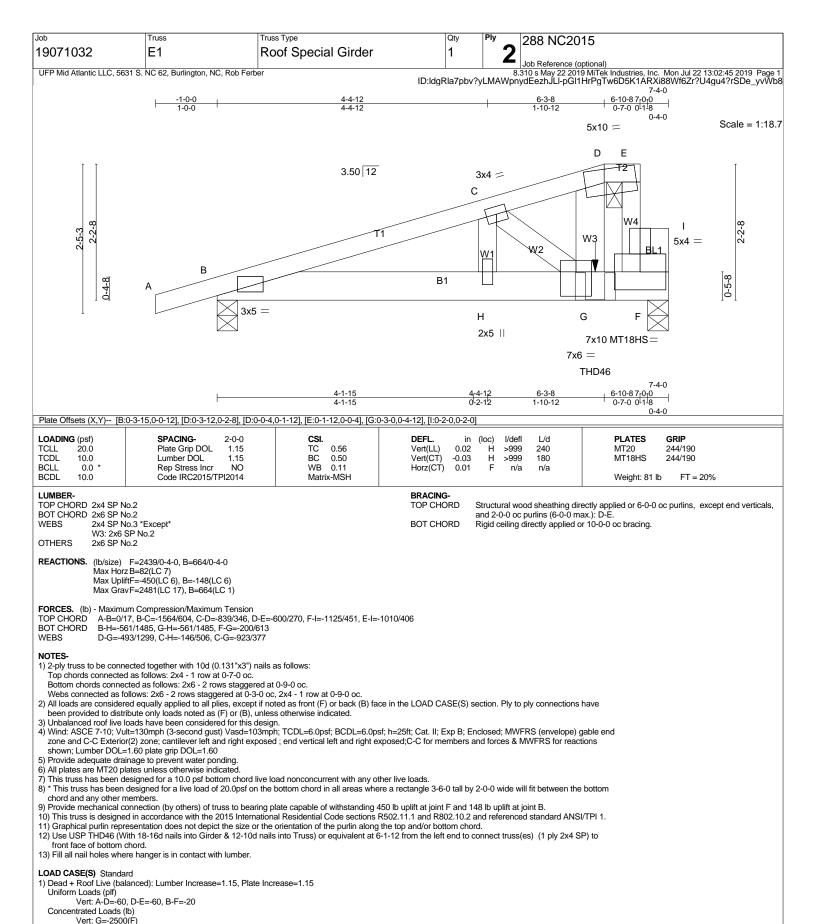
FORCES. (lb) - Maximum Compression/Maximum Tension

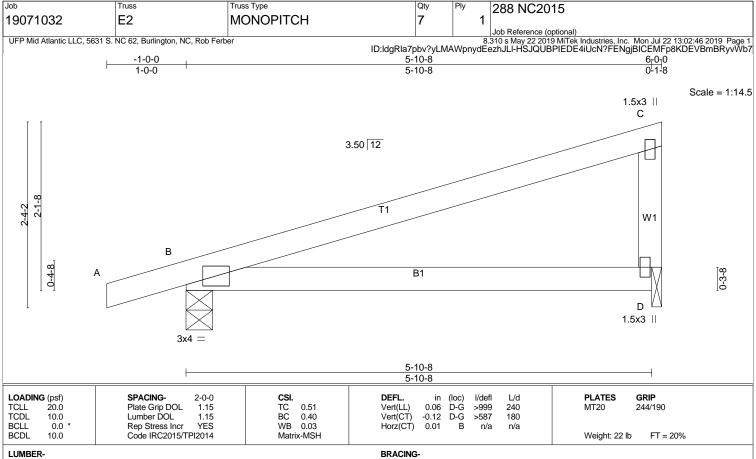
B-Q=-472/412, A-B=0/44, B-C=-266/250, C-D=-158/164, D-E=-189/289, E-F=-144/198, F-G=-144/198, G-H=-189/289, H-I=-156/164, I-J=-264/248, J-K=0/44, J-L=-468/408

BOT CHORD WFBS

P-Q=-138/123, O-P=-138/123, N-O=-138/123, M-N=-138/123, L-M=-138/123 E-O=-156/30, D-P=-251/214, C-Q=-568/542, G-N=-156/30, H-M=-250/212, I-L=-562/536

- Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  3) Truss designed for wind loads in the plane of the truss only.
- 4) All plates are 1.5x3 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web). 7) Gable studs spaced at 2-0-0 nc
- 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 3-6-0 tall by 2-0-0 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 183 lb uplift at joint Q, 180 lb uplift at joint L, 255 lb uplift at joint P and 253 lb uplift at joint M.
- 11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 5-10-8 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

LUMBER-

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

**REACTIONS.** (Ib/size) B=299/0-4-0, D=229/0-1-8 Max Horz B=81(LC 6)

Max UpliftB=-75(LC 6), D=-51(LC 10)

FORCES. (lb) - Maximum Compression/Maximum Tension

TOP CHORD A-B=0/17, B-C=-49/34

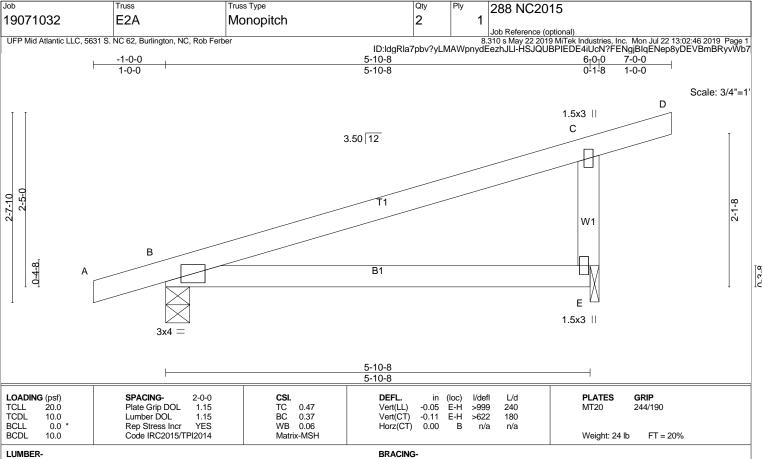
BOT CHORD B-D=0/0 WEBS C-D=-152/113

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

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

  3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Bearing at joint(s) D considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface. 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) D.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 75 lb uplift at joint B and 51 lb uplift at joint D.

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



TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 5-10-8 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

LUMBER-

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

**REACTIONS.** (lb/size) B=293/0-4-0, E=305/0-1-8 Max Horz B=92(LC 6)

Max UpliftB=-69(LC 6), E=-82(LC 10)

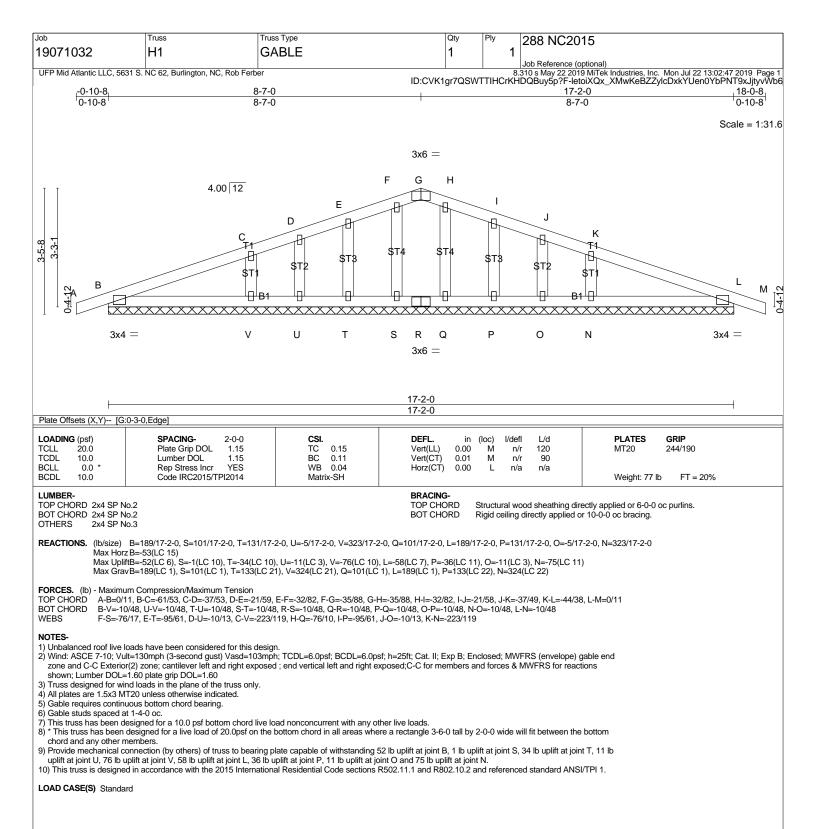
FORCES. (lb) - Maximum Compression/Maximum Tension TOP CHORD A-B=0/17, B-C=-75/45, C-D=-19/0

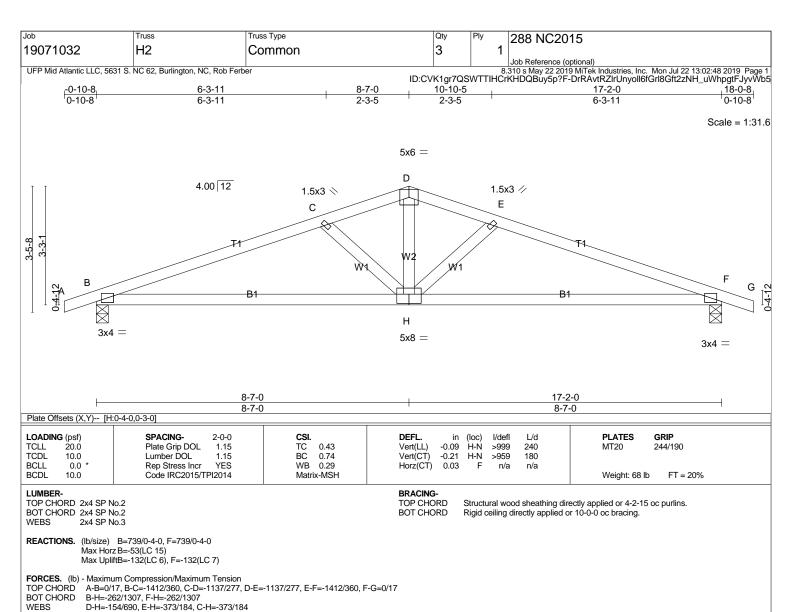
BOT CHORD B-E=0/0 WEBS C-E=-230/193

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

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

  3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom
- chord and any other members.
- 4) Bearing at joint(s) E considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface. 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) E.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 69 lb uplift at joint B and 82 lb uplift at joint E.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

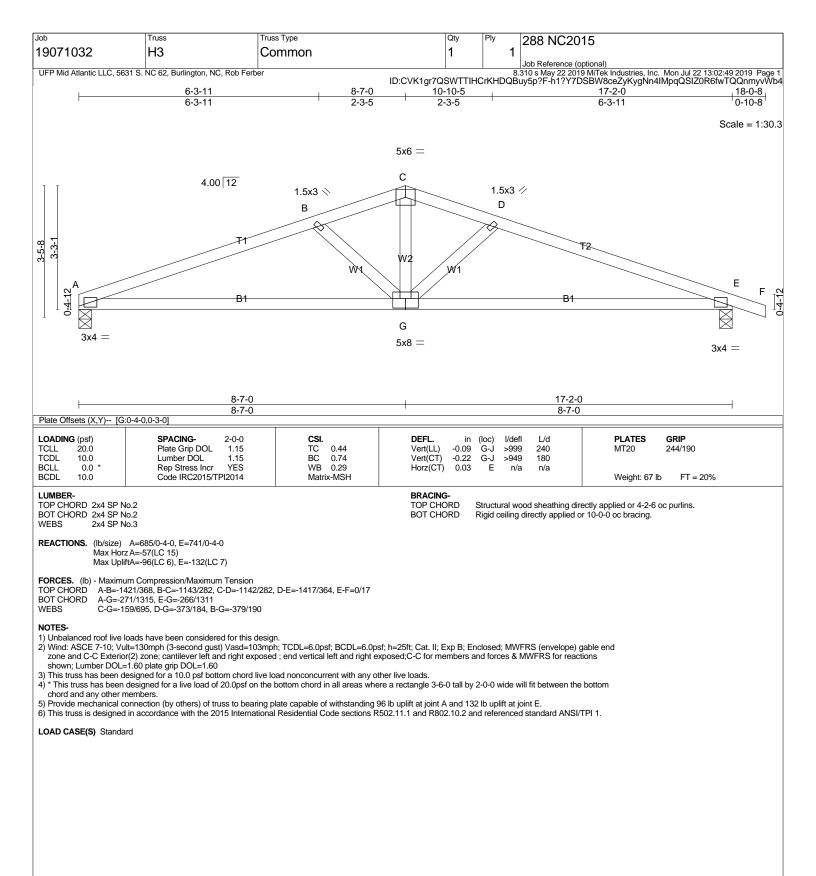


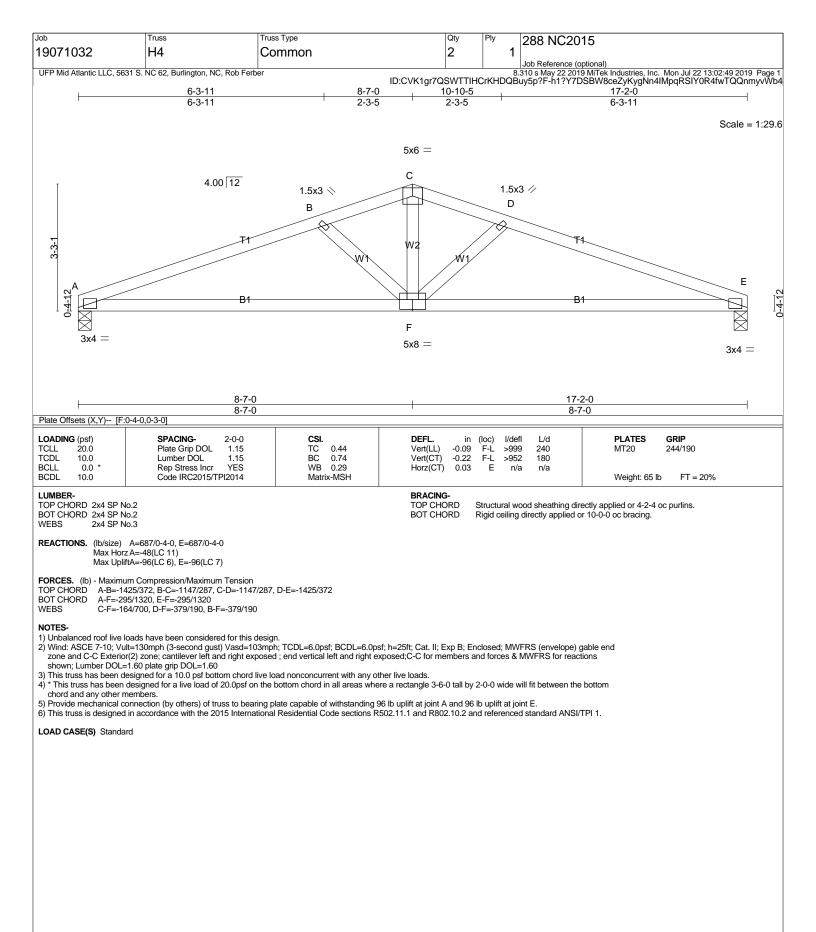


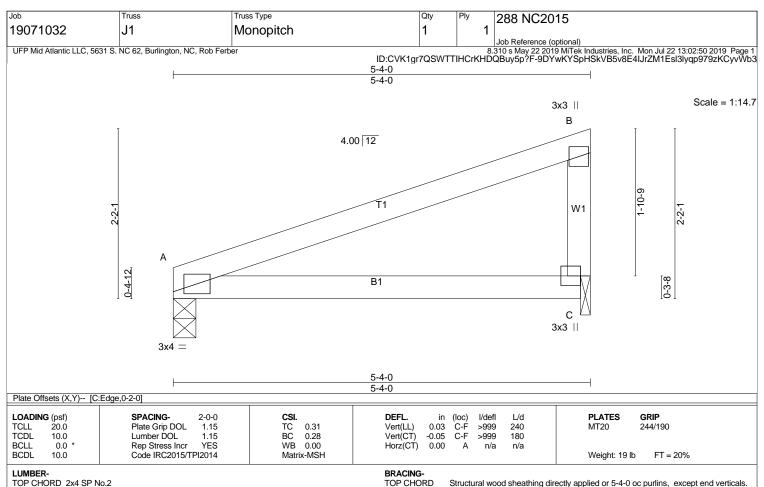
# NOTES-

Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 132 lb uplift at joint B and 132 lb uplift at joint B.
- 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.







BOT CHORD

Structural wood sheathing directly applied or 5-4-0 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.

LUMBER-

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

**REACTIONS.** (lb/size) A=207/0-3-8, C=207/0-1-8 Max Horz A=75(LC 9)

Max UpliftA=-32(LC 6), C=-44(LC 10)

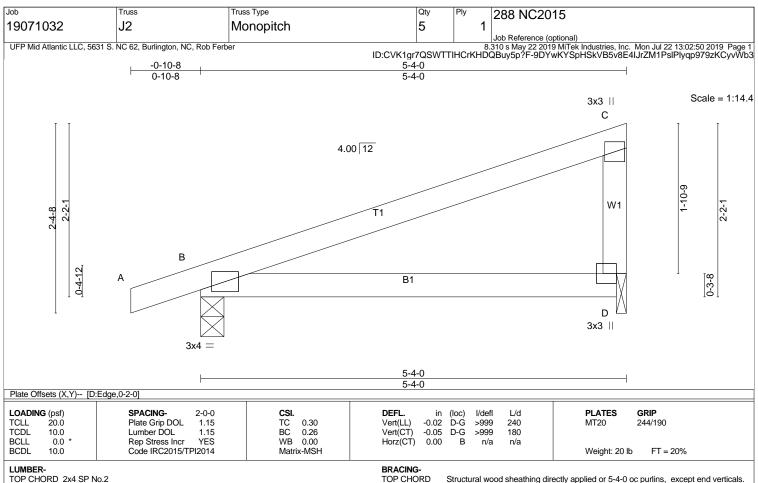
FORCES. (lb) - Maximum Compression/Maximum Tension

TOP CHORD A-B=-106/38, B-C=-130/96 BOT CHORD A-C=-20/70

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

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

  3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Bearing at joint(s) C considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface. 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) C.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 32 lb uplift at joint A and 44 lb uplift at joint C.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



BOT CHORD

Structural wood sheathing directly applied or 5-4-0 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.

LUMBER-

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

**REACTIONS.** (lb/size) B=264/0-3-8, D=203/0-1-8

Max Horz B=82(LC 9)

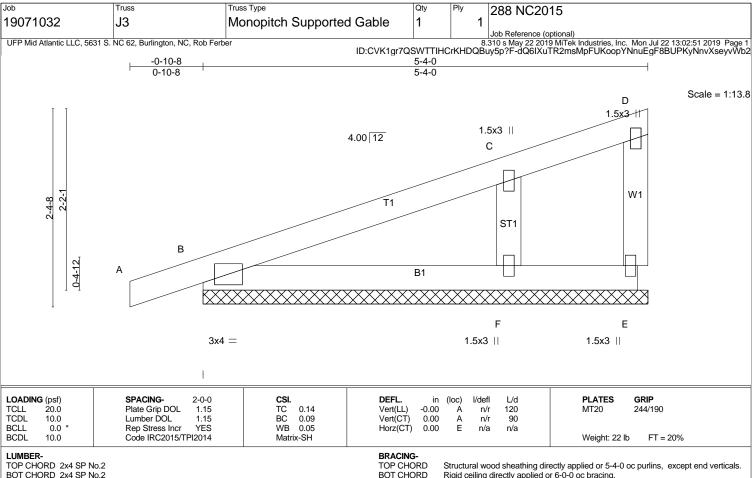
Max UpliftB=-70(LC 6), D=-43(LC 10)

FORCES. (lb) - Maximum Compression/Maximum Tension TOP CHORD A-B=0/17, B-C=-104/36, C-D=-128/95 BOT CHORD B-D=-20/67

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

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

  3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Bearing at joint(s) D considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface. 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) D.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 70 lb uplift at joint B and 43 lb uplift at joint D.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 5-4-0 oc purlins, except end verticals.

Rigid ceiling directly applied or 6-0-0 oc bracing.

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

WEBS 2x4 SP No.3 **OTHERS** 2x4 SP No.3

**REACTIONS.** (lb/size) E=-4/5-4-0, B=179/5-4-0, F=293/5-4-0

Max Horz B=81(LC 7)

Max UpliftE=-11(LC 9), B=-51(LC 6), F=-68(LC 10) Max GravE=6(LC 10), B=179(LC 1), F=293(LC 1)

 FORCES. (lb) - Maximum Compression/Maximum Tension

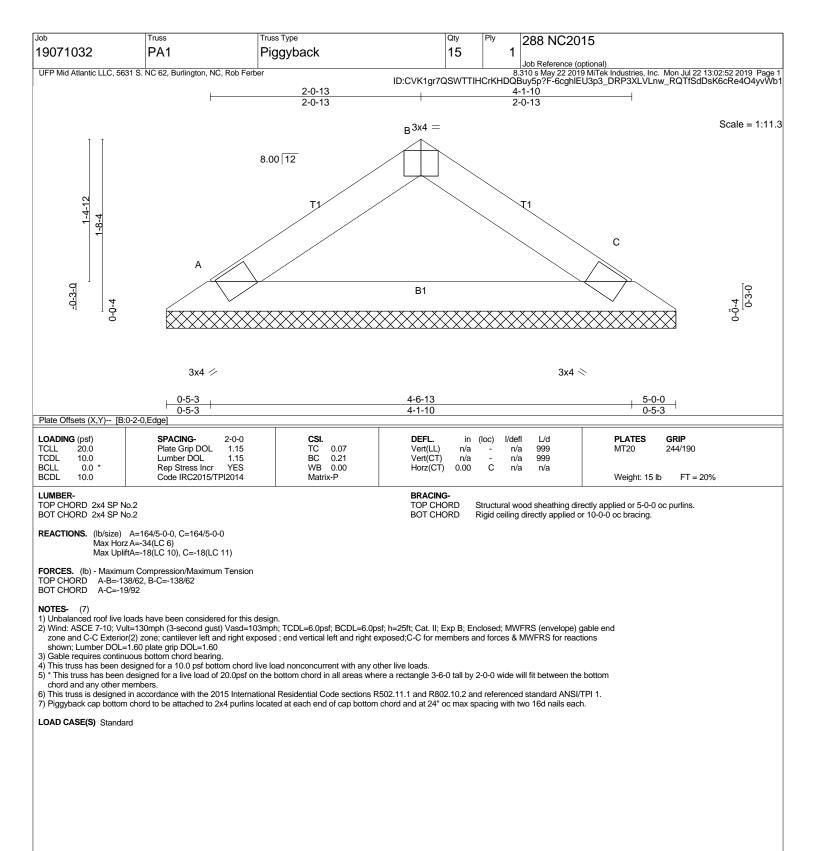
 TOP CHORD
 A-B=0/11, B-C=-60/43, C-D=-41/34, D-E=-4/9

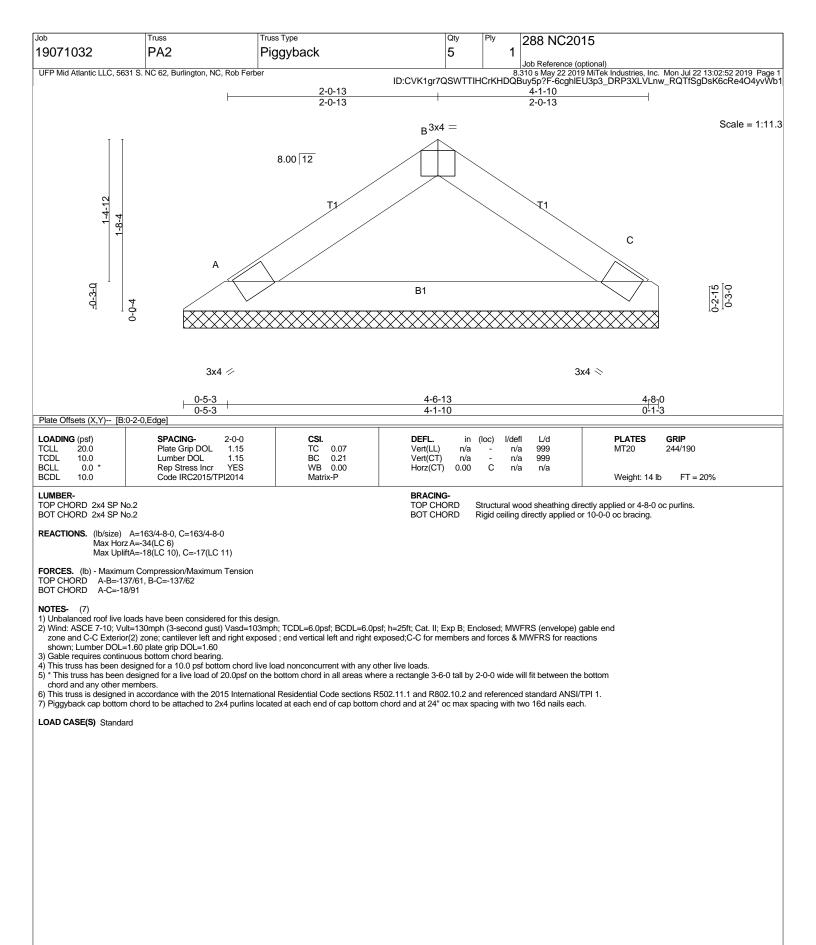
 BOT CHORD
 B-F=-36/37, E-F=-36/37

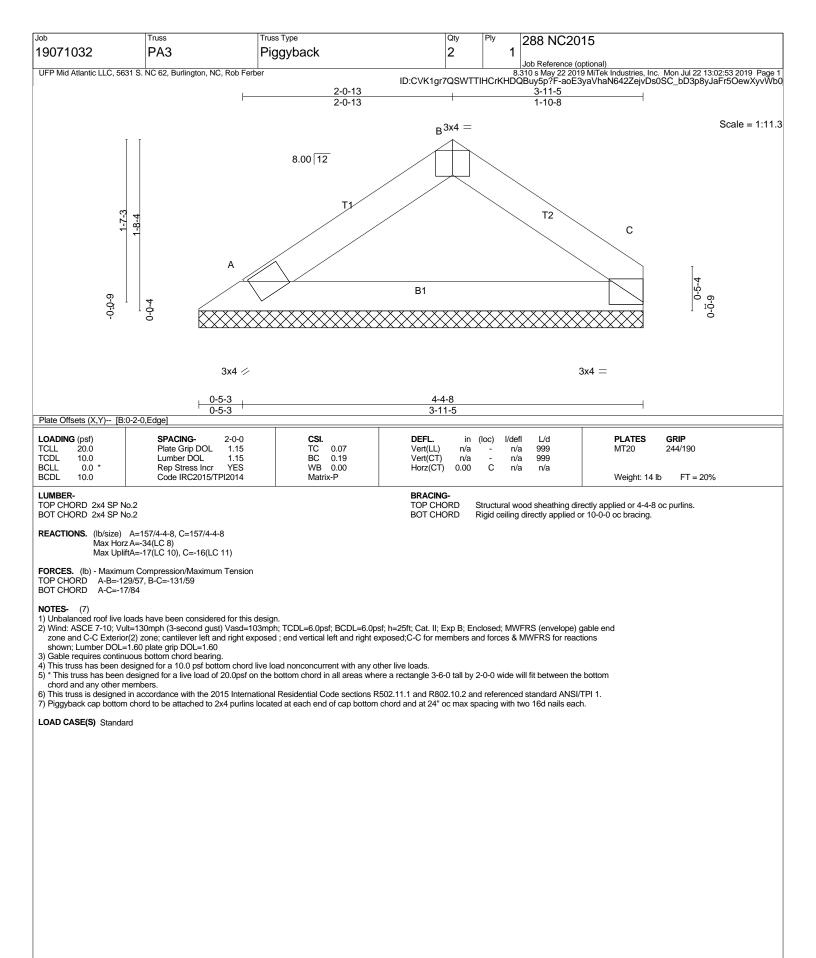
**WEBS** C-F=-205/164

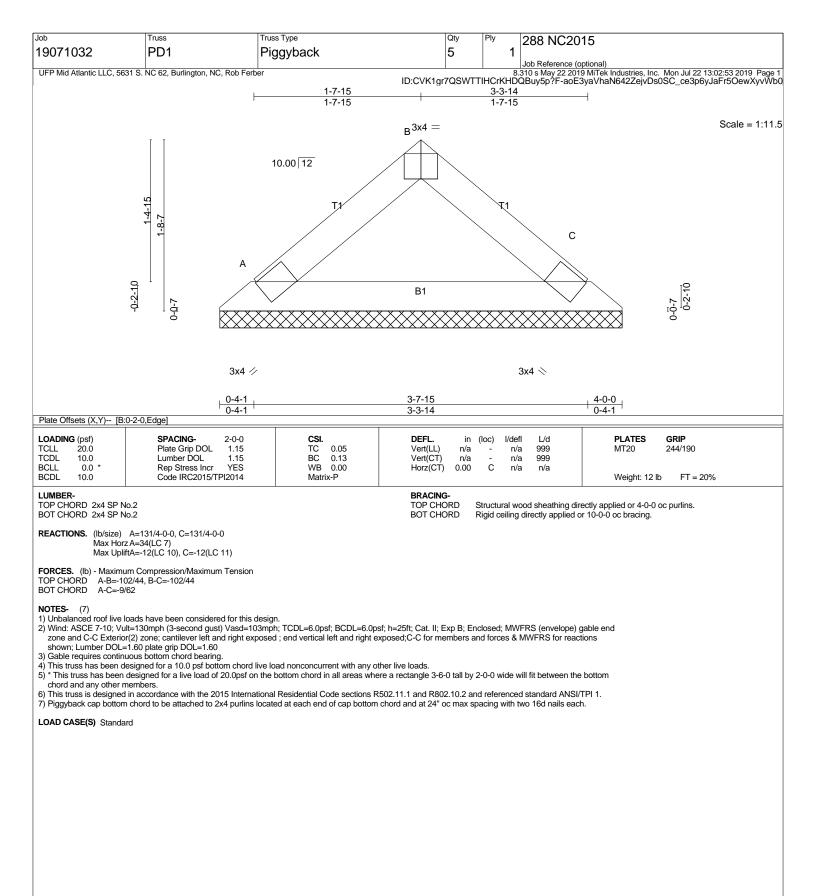
### NOTES-

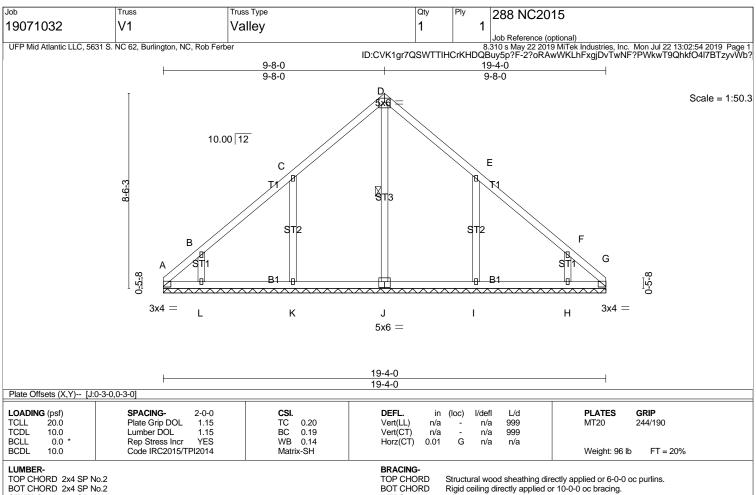
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only.
- Gable requires continuous bottom chord bearing.
- 4) Gable studs spaced at 2-0-0 oc.
- 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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 11 lb uplift at joint E, 51 lb uplift at joint B and 68 lb uplift at joint F.
- 8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) B.
  9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.











BOT CHORD 2x4 SP No.2 **OTHERS** 2x4 SP No.3

BOT CHORD

(lb/size) A=54/19-4-0, G=54/19-4-0, J=229/19-4-0, K=345/19-4-0, L=259/19-4-0, I=345/19-4-0, H=259/19-4-0 REACTIONS.

Max Uplith4=-87(LC 8), G=-46(LC 9), K=-187(LC 10), L=-147(LC 10), I=-187(LC 11), H=-145(LC 11) Max Grav A=156(LC 10), G=129(LC 11), J=389(LC 20), K=442(LC 17), L=279(LC 17), I=442(LC 18), H=277(LC 18)

FORCES. (lb) - Maximum Compression/Maximum Tension

A-B=-243/170, B-C=-184/124, C-D=-180/173, D-E=-180/167, E-F=-140/69, F-G=-202/125 A-L=-86/159, K-L=-86/159, J-K=-86/159, I-J=-86/159, H-I=-86/159, G-H=-86/159 TOP CHORD

BOT CHORD

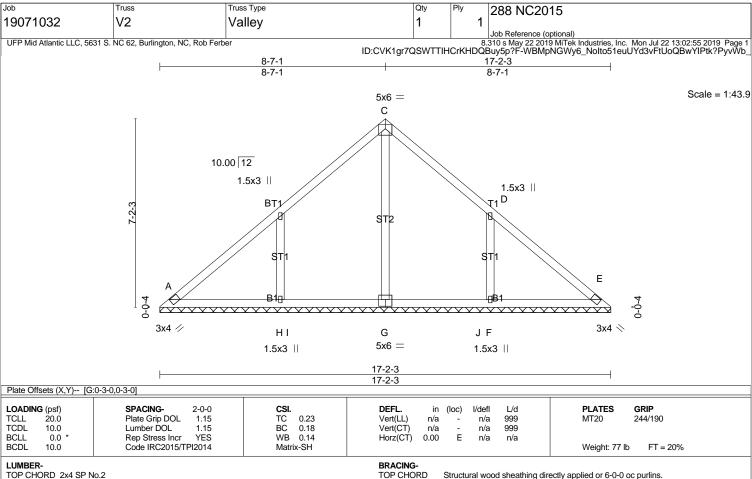
**WEBS** D-J=-175/15, C-K=-311/237, B-L=-240/188, E-I=-311/236, F-H=-240/187

### NOTES-

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

- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions
- shown; Lumber DOL=1.60 plate grip DOL=1.60
  3) All plates are 1.5x3 MT20 unless otherwise indicated.
- 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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 87 lb uplift at joint A, 46 lb uplift at joint G, 187 lb uplift at joint K,
- 147 lb uplift at joint L, 187 lb uplift at joint l and 145 lb uplift at joint H.

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



BOT CHORD 2x4 SP No.2 **OTHERS** 2x4 SP No.3

BOT CHORD

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

(lb/size) A=160/17-2-3, E=160/17-2-3, G=212/17-2-3, H=391/17-2-3, F=391/17-2-3

Max Horz A=-169(LC 8)

Max UpliftA=-13(LC 6), H=-209(LC 10), F=-209(LC 11)
Max GravA=176(LC 18), E=160(LC 1), G=362(LC 20), H=476(LC 17), F=476(LC 18)

WEBS C-G=-156/0, B-H=-332/245, D-F=-332/245

### NOTES-

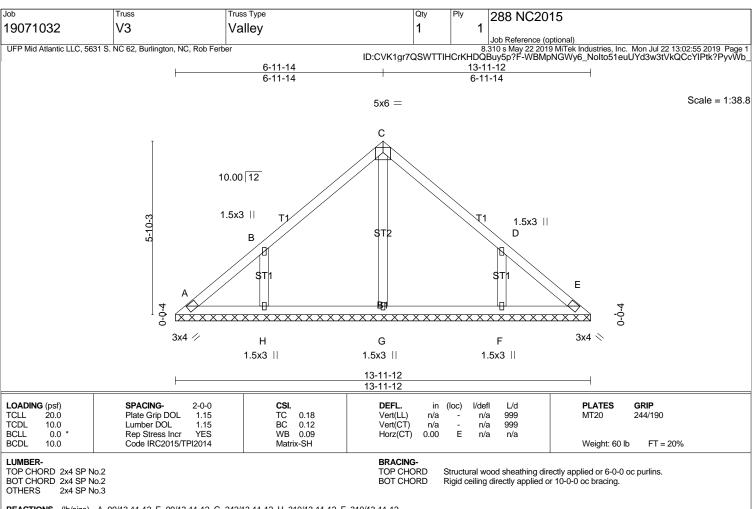
REACTIONS.

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

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

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

- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 13 lb uplift at joint A, 209 lb uplift at joint H and 209 lb uplift at joint
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



**REACTIONS.** (lb/size) A=99/13-11-12, E=99/13-11-12, G=242/13-11-12, H=310/13-11-12, F=310/13-11-12

Max Horz A=136(LC 7)

Max Upift(A=27(LC 6), E=-1(LC 7), H=-171(LC 10), F=-171(LC 11) Max Grav A=126(LC 18), E=107(LC 17), G=242(LC 1), H=345(LC 17), F=345(LC 18)

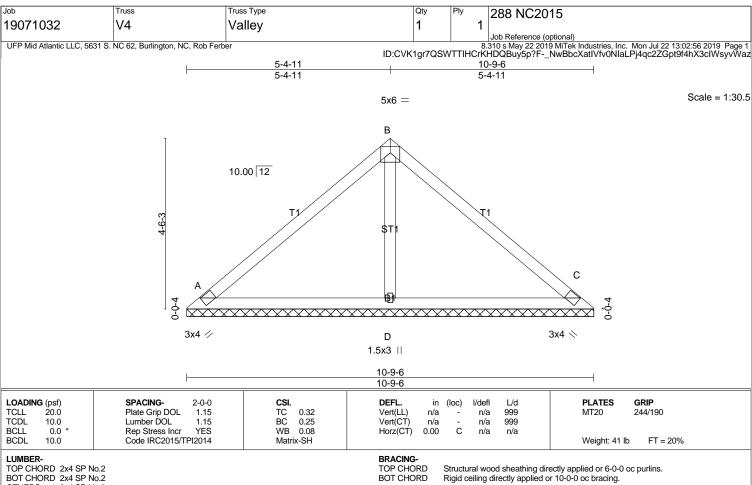
FORCES. (lb) - Maximum Compression/Maximum Tension

A-B=-133/107, B-C=-145/117, C-D=-133/109, D-E=-111/67 A-H=-43/98, G-H=-43/98, F-G=-43/98, E-F=-43/98 TOP CHORD BOT CHORD WEBS C-G=-159/0, B-H=-280/210, D-F=-280/210

### NOTES-

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

- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint A, 1 lb uplift at joint E, 171 lb uplift at joint H and 171 lb uplift at joint F.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

**REACTIONS.** (Ib/size) A=206/10-9-6, C=206/10-9-6, D=390/10-9-6 Max Horz A=103(LC 9)

Max UpliftA=-29(LC 11), C=-42(LC 11), D=-19(LC 10)

FORCES. (lb) - Maximum Compression/Maximum Tension

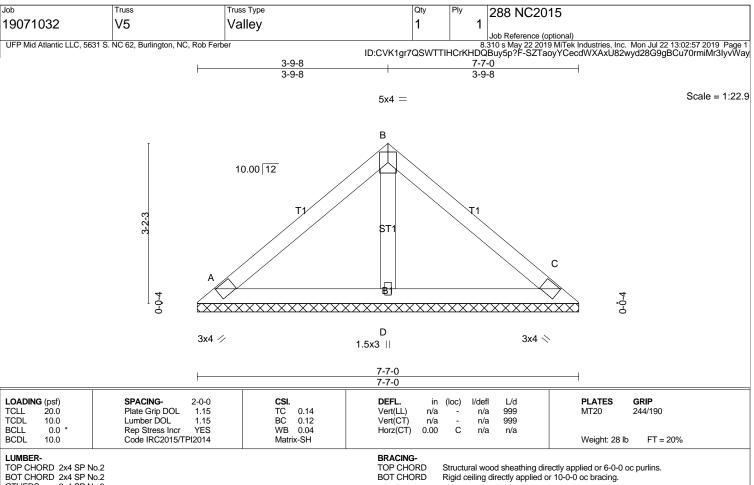
TOP CHORD A-B=-170/87, B-C=-162/72 BOT CHORD A-D=-23/75, C-D=-23/75

WEBS B-D=-218/62

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

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

  3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint A, 42 lb uplift at joint C and 19 lb uplift at joint D.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



**OTHERS** 2x4 SP No.3

**REACTIONS.** (Ib/size) A=140/7-7-0, C=140/7-7-0, D=266/7-7-0 Max Horz A=-70(LC 6)

Max UpliftA=-20(LC 11), C=-28(LC 11), D=-13(LC 10)

FORCES. (lb) - Maximum Compression/Maximum Tension

TOP CHORD A-B=-116/59, B-C=-110/51 BOT CHORD A-D=-15/51, C-D=-15/51 WEBS B-D=-148/46

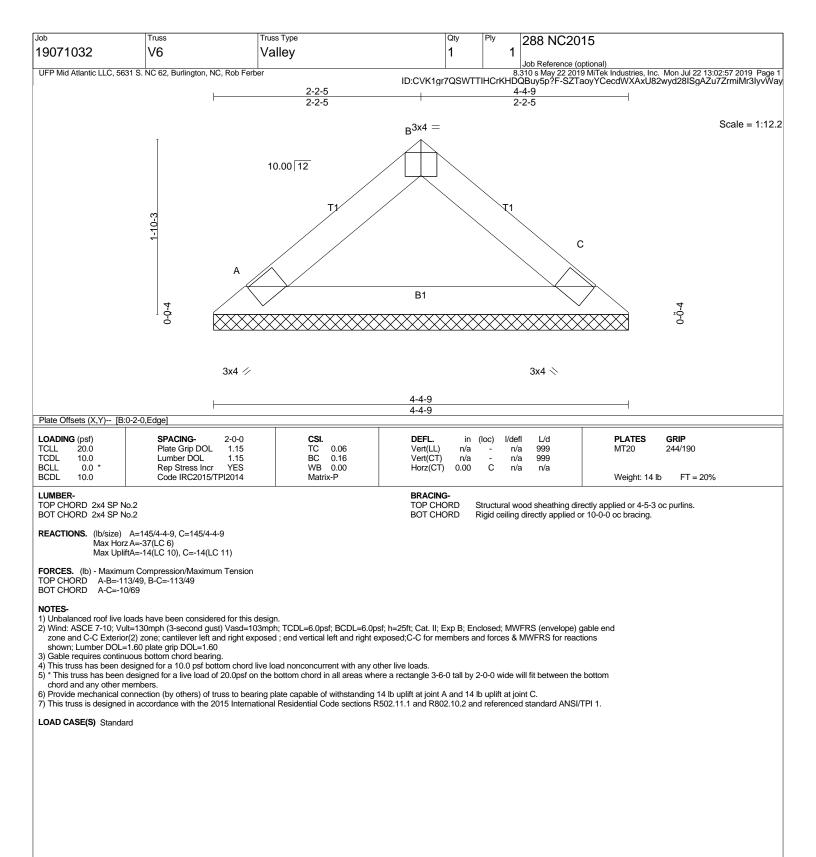
1) Unbalanced roof live loads have been considered for this design.

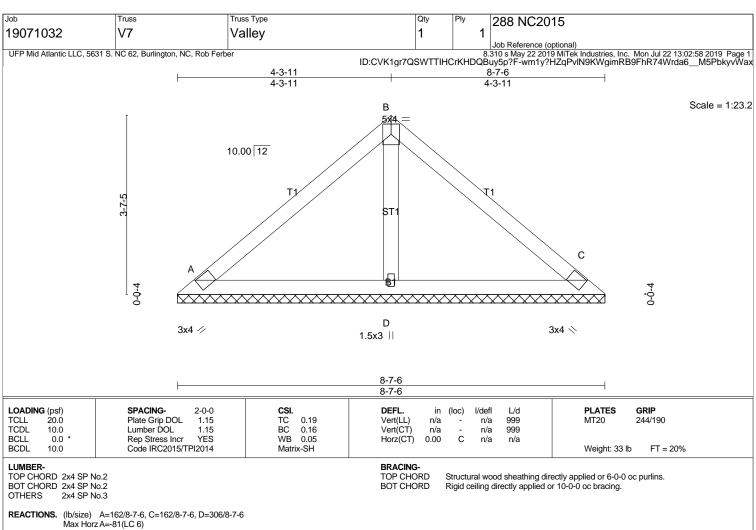
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown;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

3) Gable requires continuous bottom chord bearing.

- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 20 lb uplift at joint A, 28 lb uplift at joint C and 13 lb uplift at joint D.

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





Max UpliftA=-23(LC 11), C=-33(LC 11), D=-15(LC 10)

FORCES. (lb) - Maximum Compression/Maximum Tension

TOP CHORD A-B=-133/68, B-C=-127/58 BOT CHORD A-D=-18/59, C-D=-18/59

WEBS B-D=-171/51

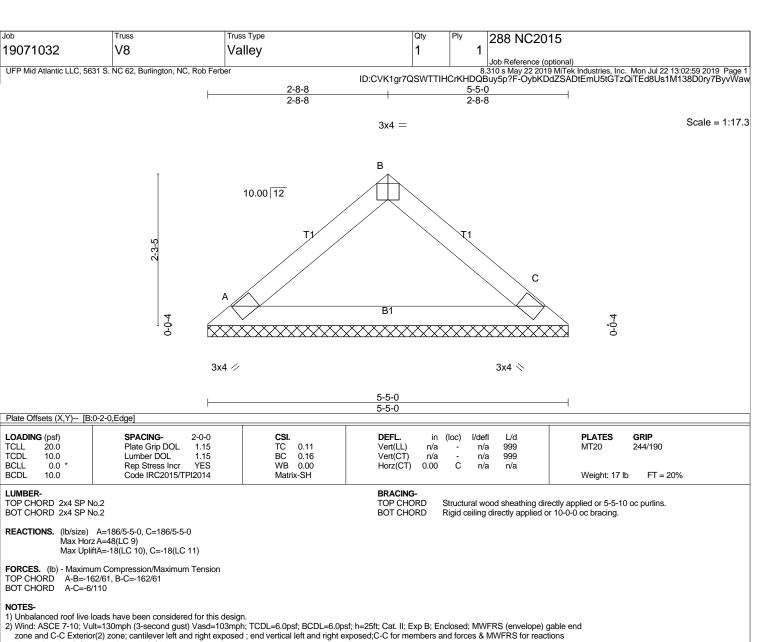
1) Unbalanced roof live loads have been considered for this design.

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

3) Gable requires continuous bottom chord bearing.

- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 23 lb uplift at joint A, 33 lb uplift at joint C and 15 lb uplift at joint D.

7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TP11.



- shown; Lumber DOL=1.60 plate grip DOL=1.60
  3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

  6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 18 lb uplift at joint A and 18 lb uplift at joint C.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.