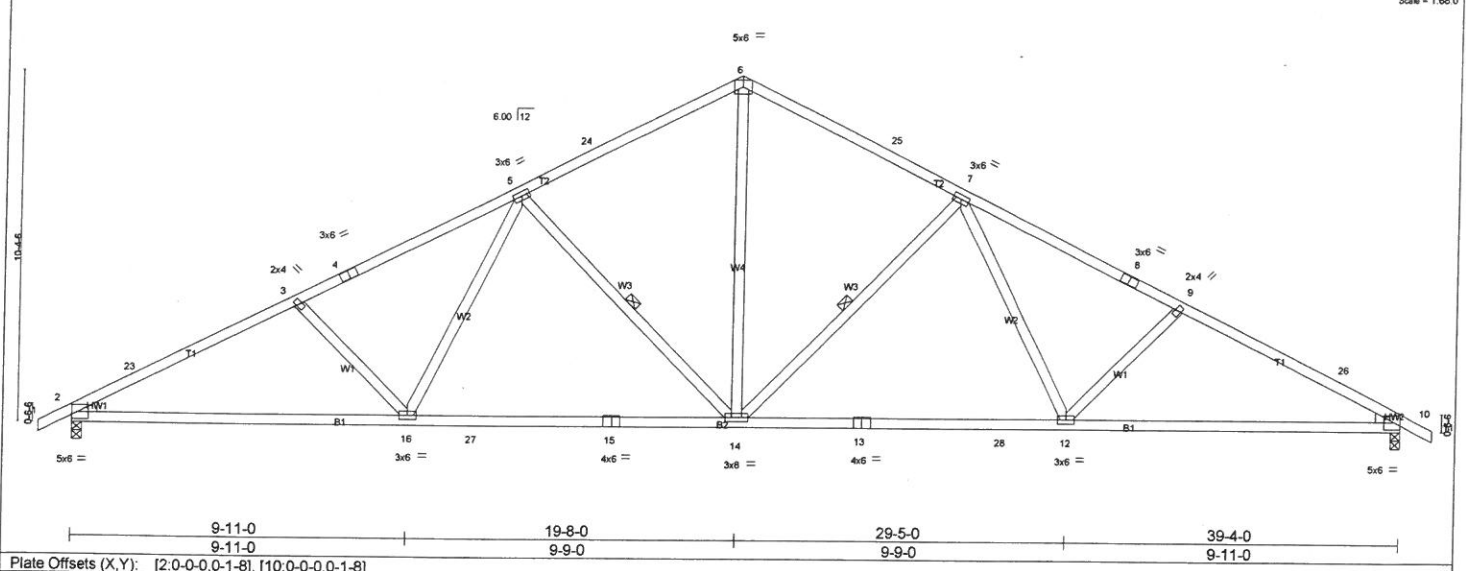


|        |       |            |     |     |               |          |
|--------|-------|------------|-----|-----|---------------|----------|
| Job    | Truss | Truss Type | Qty | Ply | SAVVY-GRIFFIN | 18147419 |
| MASTER | A01   | COMMON     | 99  | 1   |               |          |

Builders FirstSource, Apex, NC, 27523  
 7.350 s Sep 27 2012 MITek Industries, Inc. Wed Apr 30 14:49:57 2014 Page 1  
 ID:CY8ZQfOQd8LNtthjRDKHzQWBN-28HecBOvHyilVqapjVvu55Qu3TnAn0039flL03vzLV60  
 Job Reference (optional)



|                      |                       |            |                               |                |             |
|----------------------|-----------------------|------------|-------------------------------|----------------|-------------|
| <b>LOADING (psf)</b> | <b>SPACING</b>        | <b>CSI</b> | <b>DEFL</b>                   | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL 20.0            | Plates Increase 2-0-0 | TC 0.88    | in (loc) l/defl L/d           | MT20           | 244/190     |
| TCDL 10.0            | Lumber Increase 1.15  | BC 0.81    | Vert(LL) -0.44 14-16 >999 360 |                |             |
| BCLL 0.0 *           | Rep Stress Incr YES   | WB 0.61    | Vert(TL) -0.82 14-16 >575 240 |                |             |
| BCDL 10.0            | Code IRC2009/TPI2007  | (Matrix-M) | Horz(TL) 0.17 10 n/a n/a      |                |             |
|                      |                       |            | Wind(LL) 0.14 14-16 >999 240  | Weight: 206 lb | FT = 20%    |

**LUMBER**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.1 \*Except\*  
 B2: 2x4 SP M 31  
 WEBS 2x4 SP No.3  
 WEDGE  
 Left: 2x4 SYP No.3, Right: 2x4 SYP No.3

**BRACING**  
 TOP CHORD Structural wood sheathing directly applied or 1-11-14 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 7-14, 5-14

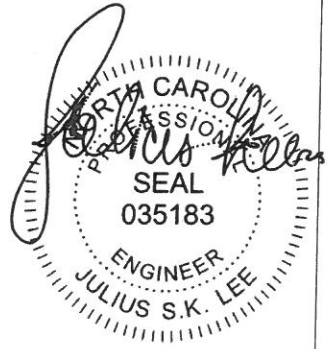
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 2=1800/0-3-8 (min. 0-2-2), 10=1800/0-3-8 (min. 0-2-2)  
 Max Horz 2=-113(LC 8)  
 Max Uplift 2=-103(LC 7), 10=-103(LC 8)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-23=-3226/445, 3-23=-3124/467, 3-4=-2961/419, 4-5=-2880/441, 5-24=-2130/387, 6-24=-2033/409, 6-25=-2033/409, 7-25=-2130/387, 7-8=-2880/441, 8-9=-2961/419, 9-26=-3123/467, 10-26=-3226/445  
 BOT CHORD 2-16=-316/2794, 16-27=-206/2340, 15-27=-206/2340, 14-15=-206/2340, 13-14=-214/2340, 13-28=-214/2340, 12-28=-214/2340, 10-12=-324/2794  
 WEBS 6-14=-183/1470, 7-14=-771/218, 7-12=0/562, 9-12=-324/171, 5-14=-771/218, 5-16=0/562, 3-16=-324/171

- NOTES** (8-10)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-05; 100mph (3-second gust); TCCL=4.2psf, BCCL=6.0psf, h=32ft; Cat. II; Exp B; enclosed; MWFRS (low-rise) and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 19-8-0, Exterior(2) 19-8-0 to 23-10-15 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
  - 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, with BCCL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 103 lb uplift at joint 2 and 103 lb uplift at joint 10.
  - This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
  - If Southern Pine (SP) lumber is specified, the design values are those effective 06/01/2013 by ALSC or proposed by SPIB.
  - This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
  - This truss design conforms with NC State residential code 2012 and ANSI/TPI 1-2007 based on the parameters shown.

**LOAD CASE(S)** Standard



April 30, 2014

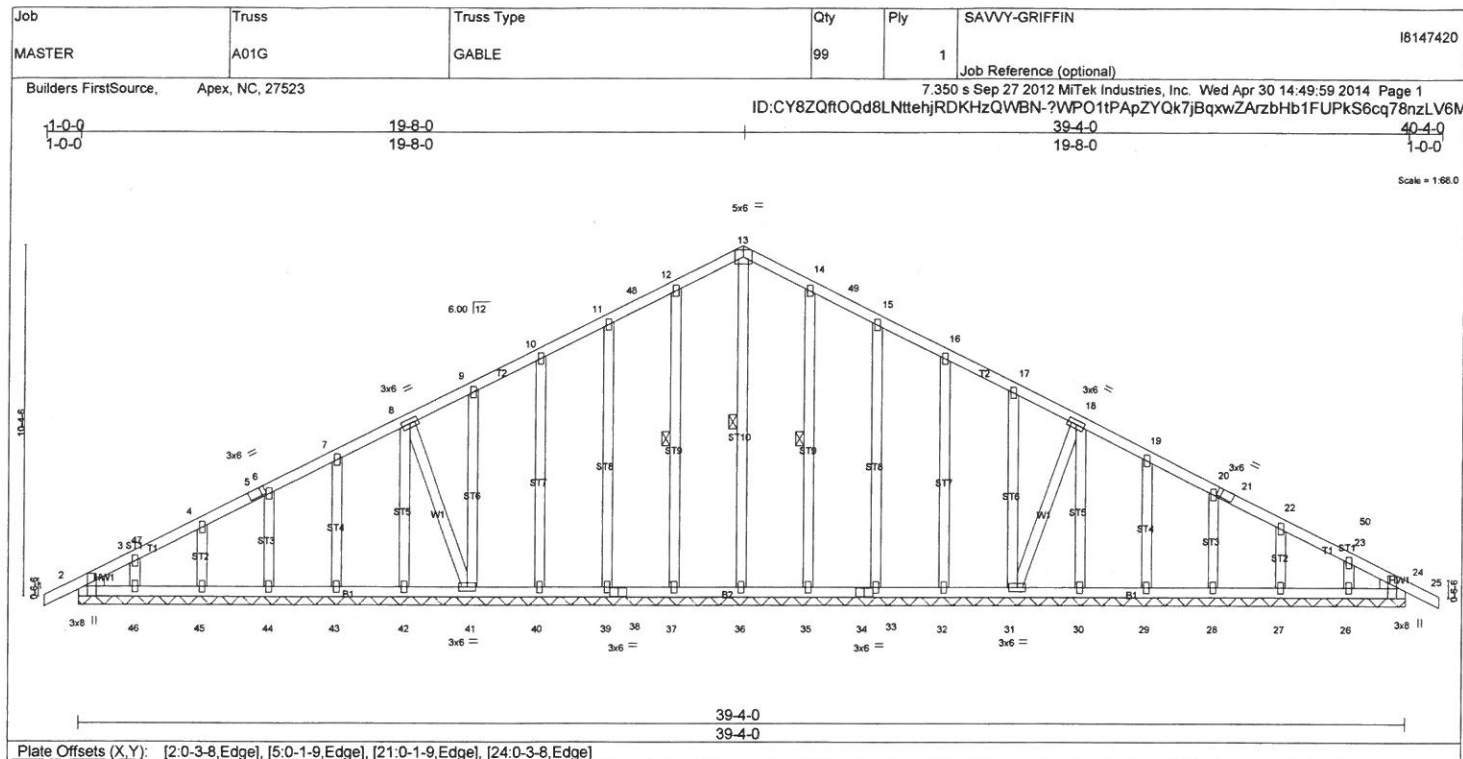


Plate Offsets (X,Y): [2:0-3-8,Edge], [5:0-1-9,Edge], [21:0-1-9,Edge], [24:0-3-8,Edge]

|                      |                      |            |                           |                |             |
|----------------------|----------------------|------------|---------------------------|----------------|-------------|
| <b>LOADING</b> (psf) | <b>SPACING</b> 2-0-0 | <b>CSI</b> | <b>DEFL</b>               | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL 20.0            | Plates Increase 1.15 | TC 0.09    | in (loc) l/defl L/d       | MT20           | 244/190     |
| TCDL 10.0            | Lumber Increase 1.15 | BC 0.04    | Vert(LL) -0.00 25 n/r 120 |                |             |
| BCLL 0.0 *           | Rep Stress Incr NO   | WB 0.15    | Vert(TL) -0.00 25 n/r 120 |                |             |
| BCDL 10.0            | Code IRC2009/TPI2007 | (Matrix)   | Horz(TL) 0.01 24 n/a n/a  |                |             |
|                      |                      |            |                           | Weight: 288 lb | FT = 20%    |

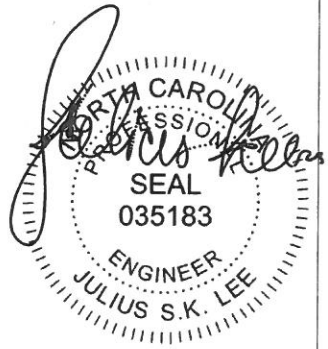
|  |  |
|--|--|
| <p><b>LUMBER</b></p> <p>TOP CHORD 2x4 SP No.2<br/>         BOT CHORD 2x4 SP No.2<br/>         WEBS 2x4 SP No.3<br/>         OTHERS 2x4 SP No.3<br/>         WEDGE<br/>         Left: 2x4 SP No.3, Right: 2x4 SP No.3</p> | <p><b>BRACING</b></p> <p>TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.<br/>         BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.<br/>         WEBS 1 Row at midpt 13-36, 12-37, 14-35</p> <div style="border: 1px solid black; padding: 2px; font-size: x-small;">             MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.         </div> |
|--|--|

**REACTIONS** All bearings 39-4-0.  
 (lb) - Max Horz 2=109(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 37, 39, 40, 41, 43, 44, 45, 46, 35, 33, 32, 31, 29, 28, 27, 26, 24  
 Max Grav All reactions 250 lb or less at joint(s) 2, 36, 37, 39, 40, 41, 42, 43, 44, 45, 46, 35, 33, 32, 31, 30, 29, 28, 27, 26, 24

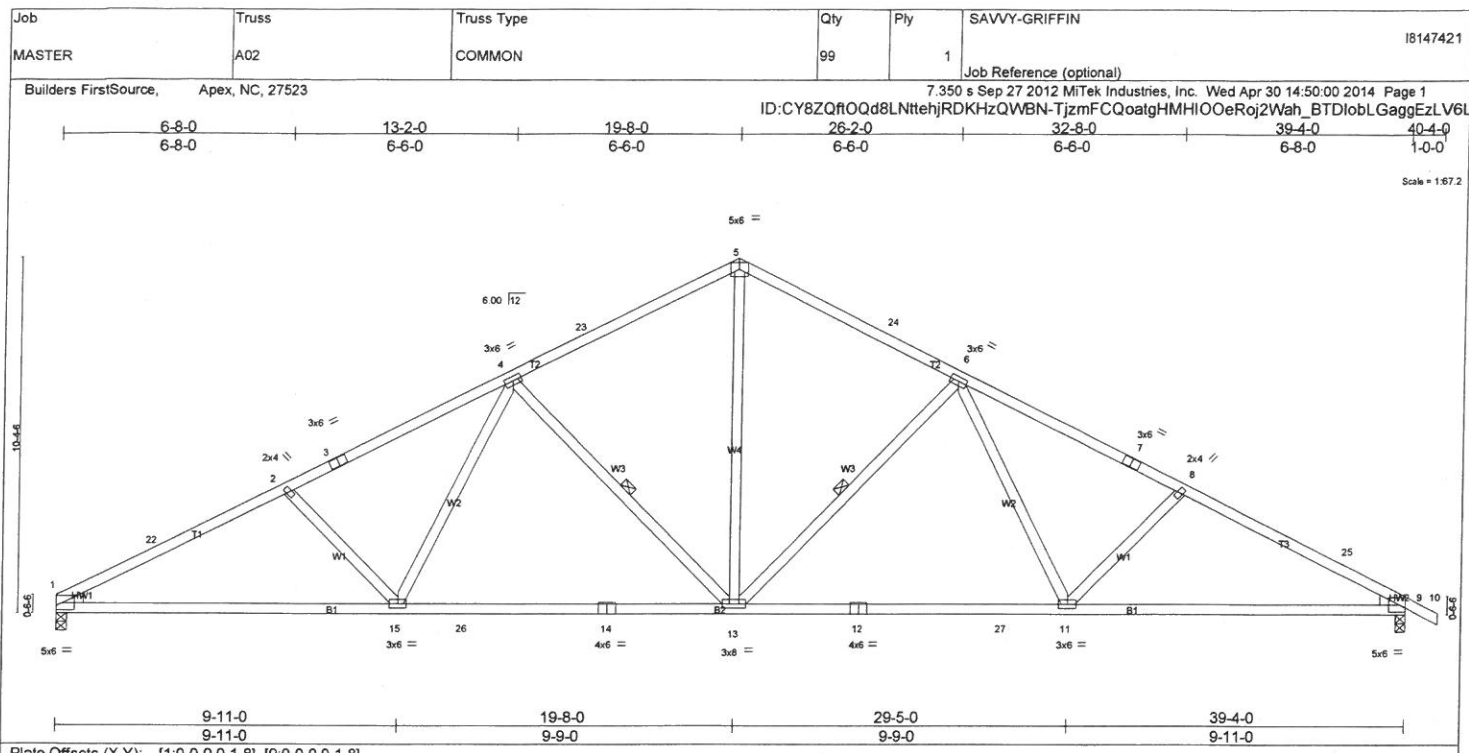
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 11-48=-30/261, 12-48=0/265, 12-13=-33/307, 13-14=-33/309, 14-49=0/267, 15-49=-30/263

- NOTES** (13-15)
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-05; 100mph (3-second gust); TCDL=4.2psf, BCDL=6.0psf, h=32ft; Cat. II; Exp B; enclosed; MWFRS (low-rise) and C-C Corner(3) -1-0-0 to 2-0-0, Exterior(2) 2-0-0 to 19-8-0, Corner(3) 19-8-0 to 22-8-0 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) All plates are 2x4 MT20 unless otherwise indicated.
  - 5) Gable requires continuous bottom chord bearing.
  - 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 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 100 lb uplift at joint(s) 2, 37, 39, 40, 41, 43, 44, 45, 46, 35, 33, 32, 31, 29, 28, 27, 26, 24.
  - 10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
  - 11) This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 12) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
  - 13) If Southern Pine (SP) lumber is specified, the design values are those effective 06/01/2013 by ALSC or proposed by SPIB.
  - 14) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
  - 15) This truss design conforms with NC State residential code 2012 and ANSI/TPI 1-2007 based on the parameters shown.

**LOAD CASE(S)** Standard



April 30,20



| LOADING (psf) | SPACING               | CSI        | DEFL                          | PLATES         | GRIP     |
|---------------|-----------------------|------------|-------------------------------|----------------|----------|
| TCLL 20.0     | Plates Increase 2-0-0 | TC 0.88    | in (loc) l/defl L/d           | MT20           | 244/190  |
| TCDL 10.0     | Lumber Increase 1.15  | BC 0.81    | Vert(LL) -0.44 11-13 >999 360 |                |          |
| BCLL 0.0 *    | Rep Stress Incr YES   | WB 0.61    | Vert(TL) -0.82 11-13 >575 240 |                |          |
| BCDL 10.0     | Code IRC2009/TPI2007  | (Matrix-M) | Horz(TL) 0.17 9 n/a n/a       |                |          |
|               |                       |            | Wind(LL) 0.14 11-13 >999 240  | Weight: 205 lb | FT = 20% |

**LUMBER**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.1 \*Except\*  
 B2: 2x4 SP M 31  
 WEBS 2x4 SP No.3  
 WEDGE  
 Left: 2x4 SYP No.3, Right: 2x4 SYP No.3

**BRACING**  
 TOP CHORD Structural wood sheathing directly applied or 1-7-8 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 6-13, 4-13

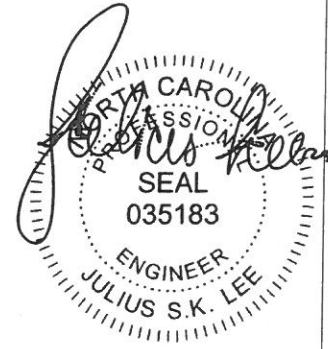
Mitek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 1=1739/0-3-8 (min. 0-2-1), 9=1801/0-3-8 (min. 0-2-2)  
 Max Horz 1=-119(LC 8)  
 Max Uplift 1=69(LC 7), 9=-103(LC 8)

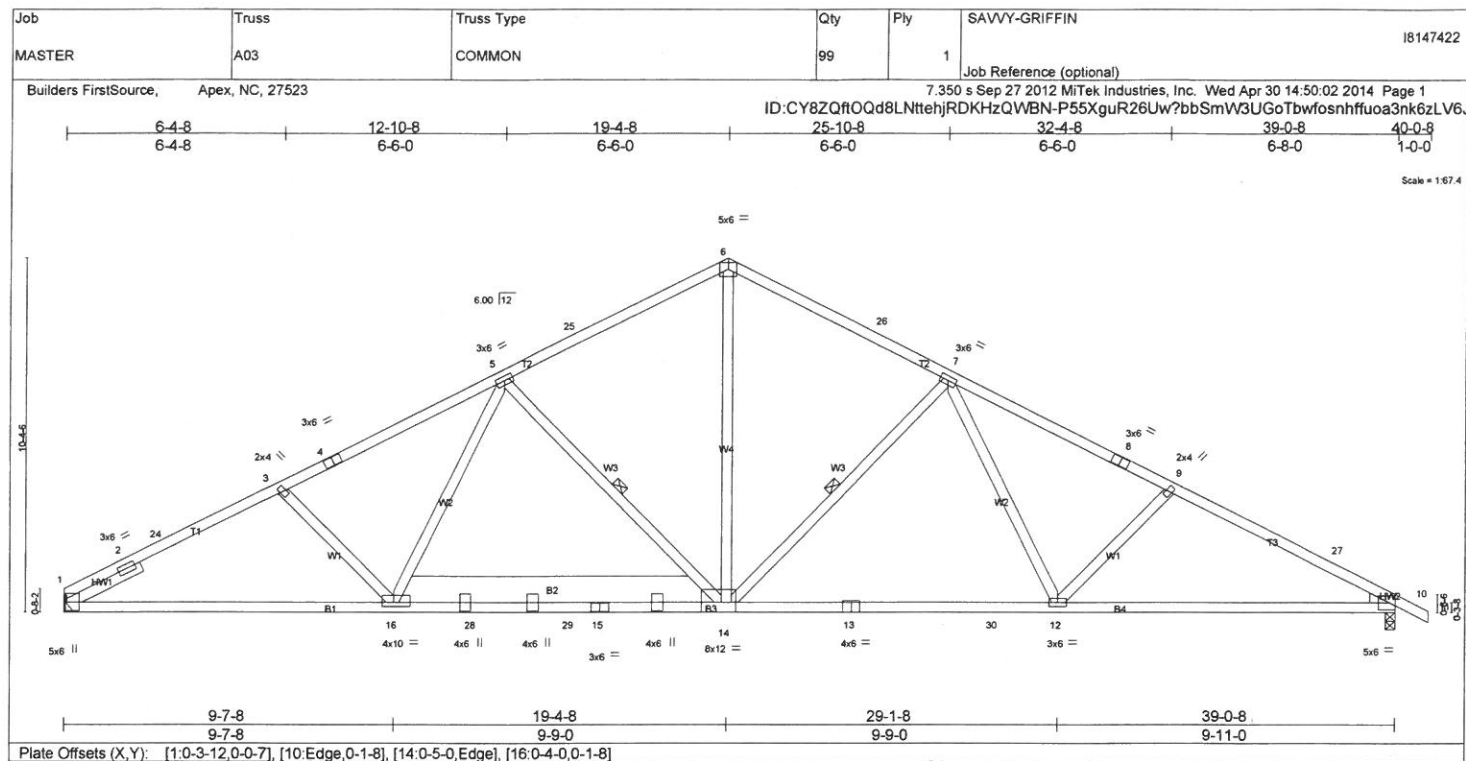
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-22=-3233/463, 2-22=-3132/484, 2-3=-2967/433, 3-4=-2886/455, 4-23=-2131/390,  
 5-23=-2035/412, 5-24=-2035/409, 6-24=-2131/387, 6-7=-2882/441, 7-8=-2963/419,  
 8-25=-3125/467, 9-25=-3227/445  
 BOT CHORD 1-15=-333/2802, 15-26=-207/2344, 14-26=-207/2344, 13-14=-207/2344, 12-13=-217/2342,  
 12-27=-217/2342, 11-27=-217/2342, 9-11=-327/2795  
 WEBS 5-13=-186/1472, 6-13=-771/218, 6-11=-0/563, 8-11=-324/171, 4-13=-774/219, 4-15=-12/568,  
 2-15=-327/181

- NOTES** (8-10)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-05, 100mph (3-second gust); TCDL=4.2psf, BCDL=6.0psf, h=32ft, Cat. II; Exp B; enclosed; MWFRS (low-rise) and C-C Exterior(2) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 19-8-0, Exterior(2) 19-8-0 to 23-10-15 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
  - 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, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (if lb) 9=103.
  - This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
  - If Southern Pine (SP) lumber is specified, the design values are those effective 06/01/2013 by ALSC or proposed by SPIB.
  - This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
  - This truss design conforms with NC State residential code 2012 and ANSI/TPI 1-2007 based on the parameters shown.

**LOAD CASE(S)** Standard



April 30, 201



| LOADING (psf) | SPACING              | CSI        | DEFL                          | PLATES         | GRIP     |
|---------------|----------------------|------------|-------------------------------|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.85    | in (loc) l/defl L/d           | MT20           | 244/190  |
| TCDL 10.0     | Plates Increase 1.15 | BC 0.88    | Vert(LL) -0.43 12-14 >999 360 |                |          |
| BCLL 0.0 *    | Lumber Increase 1.15 | WB 0.59    | Vert(TL) -0.80 12-14 >588 240 |                |          |
| BCDL 10.0     | Rep Stress Incr YES  | (Matrix-M) | Horz(TL) 0.16 10 n/a n/a      | Weight: 243 lb | FT = 20% |
|               | Code IRC2009/TPI2007 |            | Wind(LL) 0.14 12-14 >999 240  |                |          |

**LUMBER**  
 TOP CHORD 2x4 SP No.2 \*Except\*  
 T1: 2x4 SP No.1  
 BOT CHORD 2x4 SP No.1 \*Except\*  
 B3: 2x4 SP M 31, B2: 2x10 SP No.2  
 WEBS 2x4 SP No.3  
 WEDGE  
 Right: 2x4 SYP No.3  
 SLIDER Left 2x4 SP No.2 2-6-0

**BRACING**  
 TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 7-14, 5-14

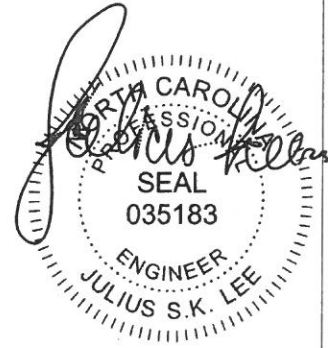
Mitek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 1=1697/Mechanical, 10=1770/0-3-8 (min. 0-2-1)  
 Max Horz 1=-121(LC 8)  
 Max Uplift 1=-67(LC 7), 10=-103(LC 8)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-1132/18, 2-24=-3180/478, 3-24=-3153/494, 3-4=-2983/439, 4-5=-2909/461, 5-25=-2065/387,  
 6-25=-1966/409, 6-26=-1966/405, 7-26=-2063/383, 7-8=-2817/438, 8-9=-2897/416,  
 9-27=-3061/464, 10-27=-3162/442  
 BOT CHORD 1-16=-338/2779, 16-28=-208/2326, 28-29=-209/2321, 15-29=-210/2318, 14-15=-212/2315,  
 13-14=-214/2282, 13-30=-214/2282, 12-30=-214/2282, 10-12=-324/2738  
 WEBS 6-14=-184/1415, 7-14=-773/219, 7-12=-0/565, 9-12=-325/171, 5-14=-812/227, 5-16=-19/626,  
 3-16=-257/165

- NOTES** (8-10)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-05; 100mph (3-second gust); TCDL=4.2psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; enclosed; MWFRS (low-rise) and C-C Exterior(2) 0-3-8 to 3-3-8, Interior(1) 3-3-8 to 19-8-0, Exterior(2) 19-8-0 to 23-10-15 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
  - 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, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 10=103.
  - This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
  - If Southern Pine (SP) lumber is specified, the design values are those effective 06/01/2013 by ALSC or proposed by SPIB.
  - This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
  - This truss design conforms with NC State residential code 2012 and ANSI/TPI 1-2007 based on the parameters shown.

**LOAD CASE(S)** Standard



April 30,20

|        |       |            |     |     |               |          |
|--------|-------|------------|-----|-----|---------------|----------|
| Job    | Truss | Truss Type | Qty | Ply | SAVVY-GRIFFIN | 18147423 |
| MASTER | A03G  | GABLE      | 99  | 1   |               |          |

Builders FirstSource, Apex, NC, 27523  
 7,350 s Sep 27 2012 MITek Industries, Inc. Wed Apr 30 14:50:03 2014 Page 1  
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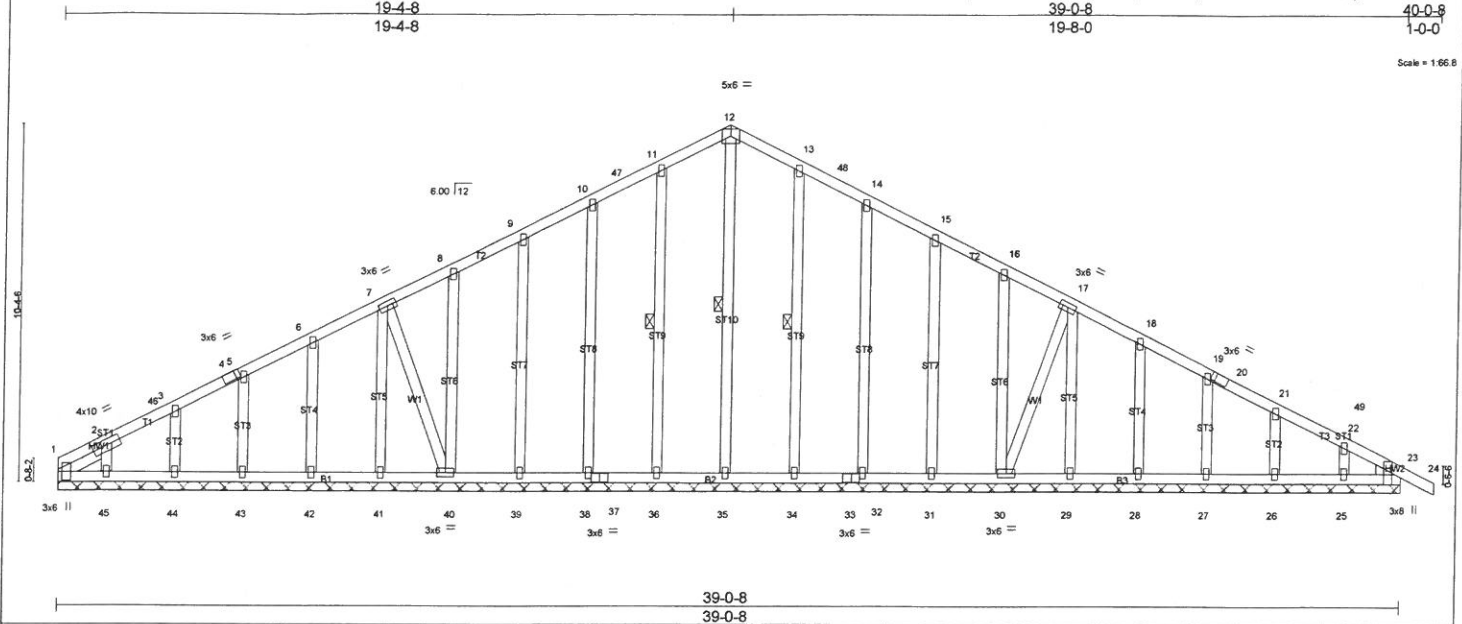


Plate Offsets (X,Y): [1:0-3-0,0-1-3], [4:0-1-9,Edge], [20:0-1-9,Edge], [23:0-3-8,Edge]

| LOADING (psf) | SPACING              | CSI      | DEFL                      | PLATES         | GRIP     |
|---------------|----------------------|----------|---------------------------|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.09  | in (loc) l/defl L/d       | MT20           | 244/190  |
| TCDL 10.0     | Plates Increase 1.15 | BC 0.04  | Vert(LL) -0.00 24 n/r 120 |                |          |
| BCLL 0.0 *    | Lumber Increase 1.15 | WB 0.15  | Vert(TL) -0.00 24 n/r 120 |                |          |
| BCDL 10.0     | Rep Stress Incr NO   | (Matrix) | Horz(TL) 0.01 23 n/a n/a  |                |          |
|               | Code IRC2009/TPI2007 |          |                           | Weight: 287 lb | FT = 20% |

**LUMBER**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.3  
 OTHERS 2x4 SP No.3  
 WEDGE  
 Right: 2x4 SP No.3  
 SLIDER Left 2x4 SP No.2 1-4-13

**BRACING**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 12-35, 11-36, 13-34

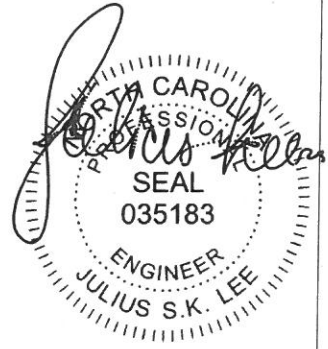
MITek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** All bearings 39-0-8  
 (lb) - Max Horz 1=-112(LC 5)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 36, 38, 39, 40, 42, 43, 44, 45, 34, 32, 31, 30, 28, 27, 26, 25, 23  
 Max Grav All reactions 250 lb or less at joint(s) 1, 35, 36, 38, 39, 40, 41, 42, 43, 44, 45, 34, 32, 31, 30, 29, 28, 27, 26, 25, 23

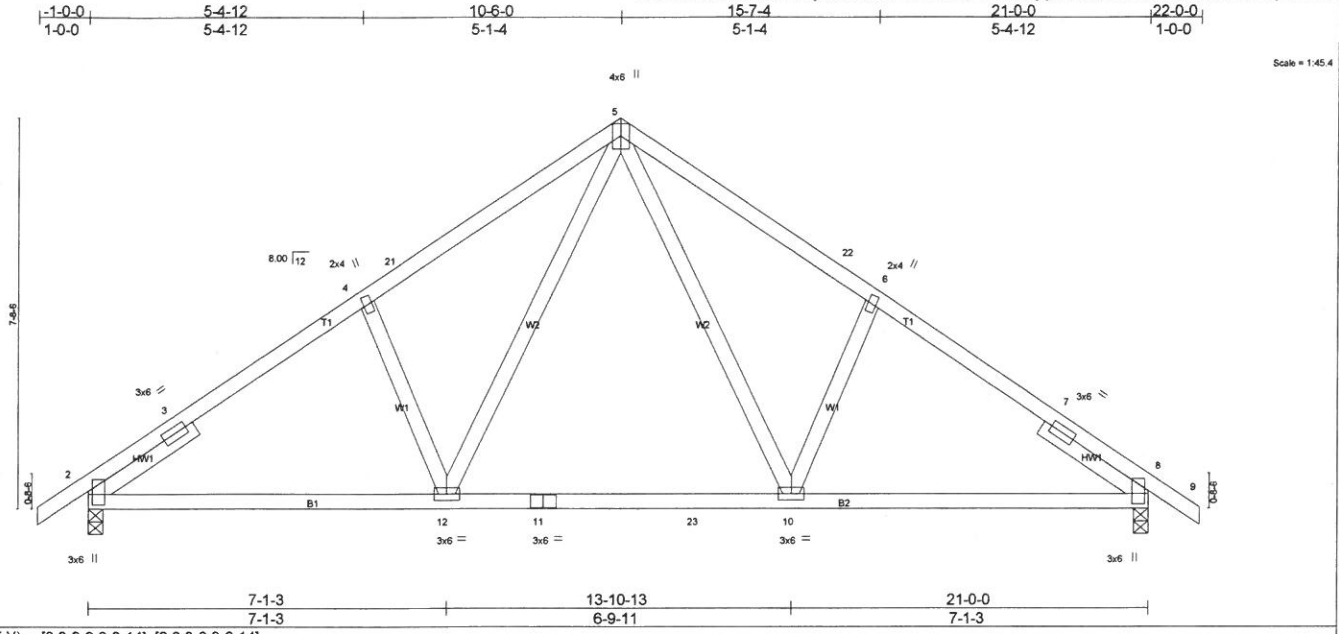
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 10-47=-31/261, 11-47=0/264, 11-12=-34/307, 12-13=-34/307, 13-48=0/265, 14-48=-31/261

- NOTES** (13-15)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-05; 100mph (3-second gust); TCCL=4.2psf; BCCL=6.0psf; h=32ft; Cat. II; Exp B; enclosed; MWFRS (low-rise) and C-C Corner(3) 0-3-8 to 3-3-8, Exterior(2) 3-3-8 to 19-8-0, Corner(3) 19-8-0 to 22-8-0 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
  - 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.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 36, 38, 39, 40, 42, 43, 44, 45, 34, 32, 31, 30, 28, 27, 26, 25, 23.
  - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 23.
  - This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
  - If Southern Pine (SP) lumber is specified, the design values are those effective 06/01/2013 by ALSC or proposed by SPIB.
  - This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
  - This truss design conforms with NC State residential code 2012 and ANSI/TPI 1-2007 based on the parameters shown.

**LOAD CASE(S)** Standard



April 30, 201



| LOADING (psf) | SPACING              | CSI        | DEFL                          | PLATES         | GRIP     |
|---------------|----------------------|------------|-------------------------------|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.30    | in (loc) l/defl L/d           | MT20           | 244/190  |
| TCDL 10.0     | Plates Increase 1.15 | BC 0.56    | Vert(LL) -0.13 10-12 >999 360 |                |          |
| BCLL 0.0 *    | Lumber Increase 1.15 | WB 0.20    | Vert(TL) -0.21 10-12 >999 240 |                |          |
| BCDL 10.0     | Rep Stress Incr YES  | (Matrix-M) | Horz(TL) 0.03 8 n/a n/a       | Weight: 116 lb | FT = 20% |
|               | Code IRC2009/TPI2007 |            | Wind(LL) 0.02 12-15 >999 240  |                |          |

**LUMBER**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.3  
 SLIDER Left 2x4 SP No.2 2-6-0, Right 2x4 SP No.2 2-6-0

**BRACING**  
 TOP CHORD Structural wood sheathing directly applied or 5-3-6 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

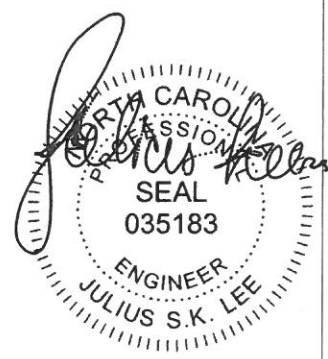
MITek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 2=961/0-3-8 (min. 0-1-8), 8=961/0-3-8 (min. 0-1-8)  
 Max Horz 2=163(LC 6)  
 Max Uplift 2=65(LC 7), 8=65(LC 8)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-572/1, 3-4=-1092/199, 4-21=-1124/233, 5-21=-1037/255, 5-22=-1038/255, 6-22=-1124/233, 6-7=-1093/199, 7-8=-572/1  
 BOT CHORD 2-12=-138/953, 11-12=0/665, 11-23=0/665, 10-23=0/665, 8-10=-97/954  
 WEBS 5-10=-93/493, 6-10=-255/178, 5-12=-93/492, 4-12=-255/178

- NOTES** (8-10)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-05, 100mph (3-second gust); TCDL=4.2psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; enclosed; MWFRS (low-rise) and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 10-6-0, Exterior(2) 10-6-0 to 14-8-15 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
  - 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, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.
  - This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
  - If Southern Pine (SP) lumber is specified, the design values are those effective 06/01/2013 by ALSC or proposed by SPIB.
  - This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
  - This truss design conforms with NC State residential code 2012 and ANSI/TPI 1-2007 based on the parameters shown.

**LOAD CASE(S)** Standard



April 30,20

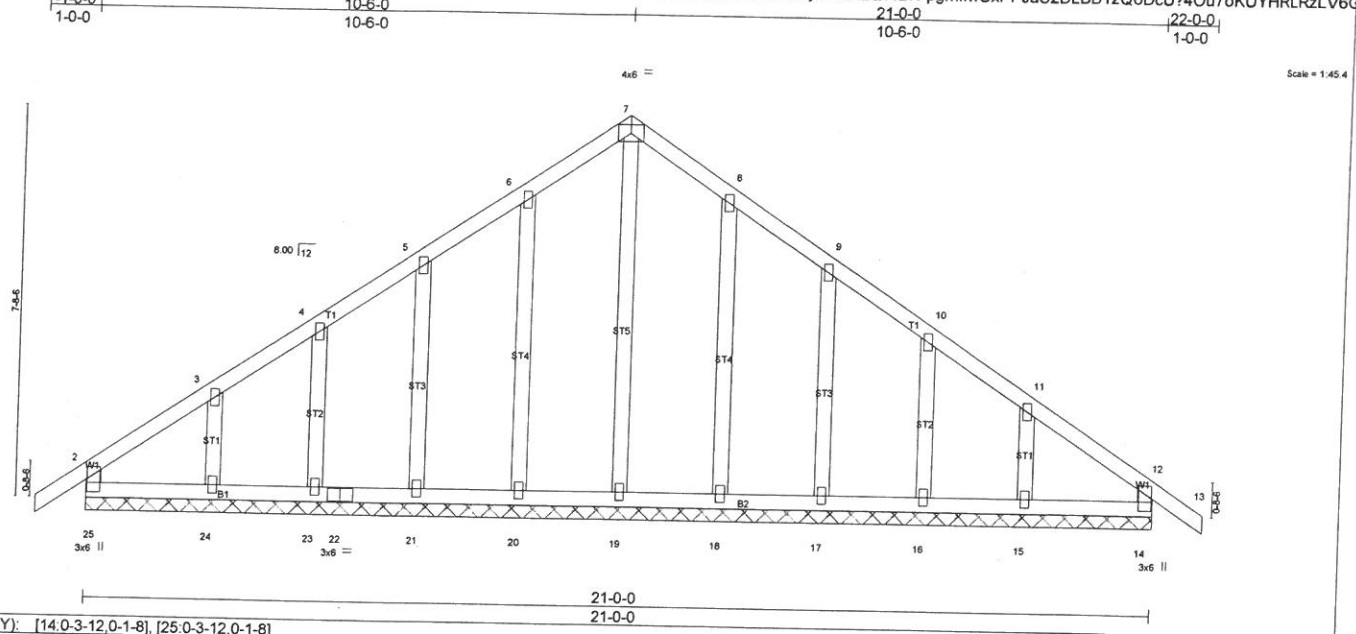


Plate Offsets (X,Y): [14,0-3-12,0-1-8], [25,0-3-12,0-1-8]

| LOADING (psf) | SPACING              | CSI      | DEFL                      | PLATES         | GRIP     |
|---------------|----------------------|----------|---------------------------|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.11  | in (loc) l/defr L/d       | MT20           | 244/190  |
| TCDL 10.0     | Plates Increase 1.15 | BC 0.06  | Vert(LL) -0.00 13 n/r 120 |                |          |
| BCLL 0.0 *    | Lumber Increase 1.15 | WB 0.18  | Vert(TL) -0.01 13 n/r 120 |                |          |
| BCDL 10.0     | Rep Stress Incr NO   | (Matrix) | Horz(TL) 0.00 14 n/a n/a  |                |          |
|               | Code IRC2009/TPI2007 |          |                           | Weight: 130 lb | FT = 20% |

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

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

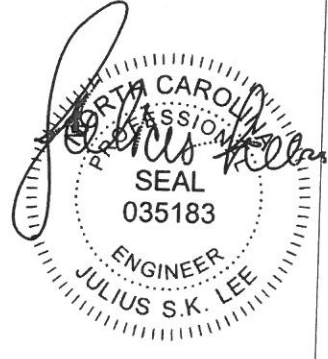
MITek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** All bearings 21-0-0.  
 (lb) - Max Horz 25=176(LC 6)  
 Max Uplift All uplift 100 lb or less at joint(s) 25, 14, 20, 21, 23, 24, 18, 17, 16, 15  
 Max Grav All reactions 250 lb or less at joint(s) 25, 14, 19, 20, 21, 23, 24, 18, 17, 16, 15

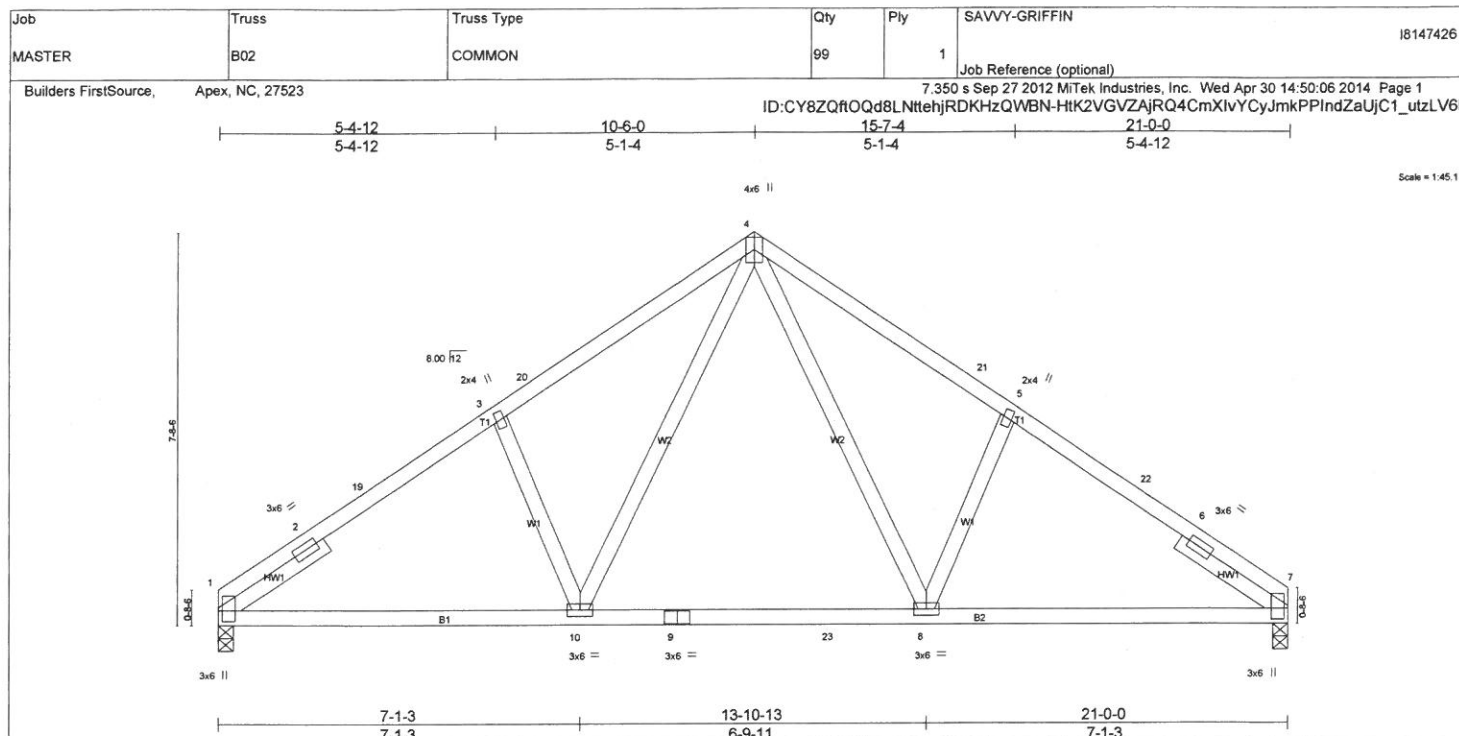
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- NOTES** (13-15)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-05, 100mph (3-second gust); TCDL=4.2psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; enclosed; MWFRS (low-rise) and C-C Corner(3) -1-0-0 to 2-0-0, Extenor(2) 2-0-0 to 10-6-0, Corner(3) 10-6-0 to 13-6-0 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
  - 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.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 25, 14, 20, 21, 23, 24, 18, 17, 16, 15.
  - This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
  - If Southern Pine (SP) lumber is specified, the design values are those effective 06/01/2013 by ALSC or proposed by SPIB.
  - This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
  - This truss design conforms with NC State residential code 2012 and ANSI/TPI 1-2007 based on the parameters shown.

**LOAD CASE(S)** Standard



April 30, 201



|   |                       |            |                              |                |             |
|---|-----------------------|------------|------------------------------|----------------|-------------|
| Plate Offsets (X,Y): [1:0-2-8,0-0-14], [7:0-3-3,0-0-14] |                       |            |                              |                |             |
| <b>LOADING</b> (psf)                                    | <b>SPACING</b>        | <b>CSI</b> | <b>DEFL</b>                  | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL 20.0   | Plates Increase 2-0-0 | TC 0.29    | in (loc) l/defl L/d          | MT20           | 244/190     |
| TCDL 10.0   | Lumber Increase 1.15  | BC 0.56    | Vert(LL) -0.13 8-10 >999 360 |                |             |
| BCLL 0.0 *  | Rep Stress Incr YES   | WB 0.21    | Vert(TL) -0.20 8-10 >999 240 |                |             |
| BCDL 10.0   | Code IRC2009/TPI2007  | (Matrix-M) | Horz(TL) 0.03 7 n/a n/a      |                |             |
|   |                       |            | Wind(LL) 0.03 8-17 >999 240  | Weight: 112 lb | FT = 20%    |

**LUMBER**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.3  
 SLIDER Left 2x4 SP No.2 2-6-0, Right 2x4 SP No.2 2-6-0

**BRACING**  
 TOP CHORD Structural wood sheathing directly applied or 5-3-9 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

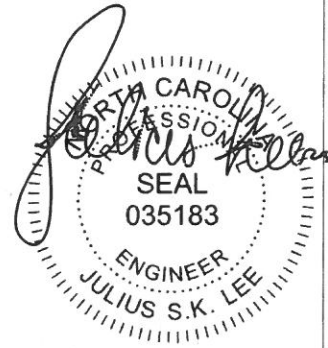
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 1=901/0-3-8 (min. 0-1-8), 7=901/0-3-8 (min. 0-1-8)  
 Max Horz 1=-164(LC 5)  
 Max Uplift 1=-31(LC 7), 7=-31(LC 8)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-584/29, 2-19=-1204/196, 3-19=-1100/209, 3-20=-1133/244, 4-20=-1045/265, 4-21=-1046/265,  
 5-21=-1133/244, 5-22=-1101/209, 6-22=-1205/196, 6-7=-584/29  
 BOT CHORD 1-10=-150/962, 9-10=0/669, 9-23=0/669, 8-23=0/669, 7-8=-134/962  
 WEBS 4-8=-94/500, 5-8=-260/179, 4-10=-94/498, 3-10=-260/179

- NOTES** (8-10)
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-05; 100mph (3-second gust); TCCL=4.2psf, BCCL=6.0psf, h=32ft, Cat. II; Exp B; enclosed; MWFRS (low-rise) and C-C Exterior(2) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 10-6-0, Exterior(2) 10-6-0 to 14-8-15 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 BCCL = 10.0psf.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7.
  - 6) This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 7) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
  - 8) If Southern Pine (SP) lumber is specified, the design values are those effective 06/01/2013 by ALSC or proposed by SPIB.
  - 9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
  - 10) This truss design conforms with NC State residential code 2012 and ANSI/TPI 1-2007 based on the parameters shown.

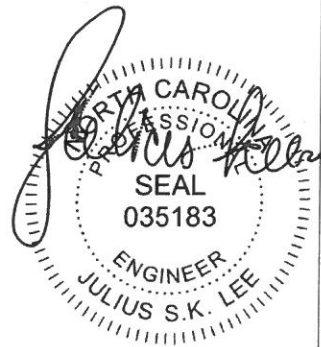
**LOAD CASE(S)** Standard



April 30, 2014



|   |                      |   |                             |                |               |          |
|---|----------------------|---|-----------------------------|----------------|---------------|----------|
| Job<br>MASTER   | Truss<br>B02-3PL     | Truss Type<br>COMMON  | Qty<br>99                   | Ply<br>3       | SAVVY-GRIFFIN | I8147427 |
| Builders FirstSource, Apex, NC, 27523   |                      | 7.350 s Sep 27 2012 MiTek Industries, Inc. Wed Apr 30 14:50:07 2014 Page 1<br>ID:CY8ZQfOQd8LnttehJRDKHzQWBN-m3uQjcVBx0ZHhMLkic3RVXlplpe1M11dysmYQKzLV6E |                             |                |               |          |
|   |                      |   |                             |                |               |          |
| Plate Offsets (X,Y): [1:0-0-0,0-3-2], [5:Edge,0-3-2], [7:0-5-0,0-4-12]  |                      |   |                             |                |               |          |
| <b>LOADING</b> (psf)  | <b>SPACING</b>       | <b>CSI</b>  | <b>DEFL</b>                 | <b>PLATES</b>  | <b>GRIP</b>   |          |
| TCLL 20.0   | 2-0-0                | TC 0.67   | in (loc) l/defl L/d         | MT20           | 244/190       |          |
| TCDL 10.0   | Plates Increase 1.15 | BC 0.56   | Vert(LL) -0.12 7-9 >999 360 |                |               |          |
| BCLL 0.0 *  | Lumber Increase 1.15 | WB 0.77   | Vert(TL) -0.29 7-9 >869 240 |                |               |          |
| BCDL 10.0   | Rep Stress Incr NO   | (Matrix-M)  | Horz(TL) 0.07 5 n/a n/a     |                |               |          |
|   | Code IRC2009/TPI2007 |   | Wind(LL) 0.08 6-7 >999 240  | Weight: 387 lb | FT = 20%      |          |
| <b>LUMBER</b>   |                      |   |                             |                |               |          |
| TOP CHORD 2x4 SP No.2   |                      |   |                             |                |               |          |
| BOT CHORD 2x6 SP DSS  |                      |   |                             |                |               |          |
| WEBS 2x4 SP No.2  |                      |   |                             |                |               |          |
| WEDGE   |                      |   |                             |                |               |          |
| Left: 2x6 SYP No.2, Right: 2x6 SYP No.2   |                      |   |                             |                |               |          |
| <b>REACTIONS</b> (lb/size) 1=9768/0-3-8 (min. 0-3-5), 5=9768/0-3-8 (min. 0-3-5)   |                      |   |                             |                |               |          |
| Max Horz 1=-164(LC 3)   |                      |   |                             |                |               |          |
| Max Uplift 1=-770(LC 5), 5=-770(LC 6)   |                      |   |                             |                |               |          |
| <b>FORCES</b> (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  |                      |   |                             |                |               |          |
| TOP CHORD 1-2=-12582/1001, 2-3=-8857/754, 3-4=-8857/754, 4-5=-12582/1002  |                      |   |                             |                |               |          |
| BOT CHORD 1-9=-843/10366, 8-9=-843/10366, 7-8=-843/10366, 6-7=-777/10366, 5-6=-777/10366  |                      |   |                             |                |               |          |
| WEBS 3-7=-750/9403, 4-7=-3842/397, 4-6=-285/4143, 2-7=-3842/397, 2-9=-284/4143  |                      |   |                             |                |               |          |
| <b>NOTES</b> (10-12)  |                      |   |                             |                |               |          |
| 1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:<br>Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.<br>Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-4-0 oc.<br>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 7-05; 100mph (3-second gust); TCCL=4.2psf, BCDL=6.0psf, h=32ft, Cat II; Exp B; enclosed; MWFRS (low-rise); 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (j=lb) 1=770, 5=770.  |                      |   |                             |                |               |          |
| 8) This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.   |                      |   |                             |                |               |          |
| 9) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.  |                      |   |                             |                |               |          |
| 10) If Southern Pine (SP) lumber is specified, the design values are those effective 06/01/2013 by ALSC or proposed by SPIB.  |                      |   |                             |                |               |          |
| 11) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.                        |                      |   |                             |                |               |          |
| 12) This truss design conforms with NC State residential code 2012 and ANSI/TPI 1-2007 based on the parameters shown.   |                      |   |                             |                |               |          |
| <b>LOAD CASE(S)</b> Standard  |                      |   |                             |                |               |          |
| 1) Regular: Lumber Increase=1.15, Plate Increase=1.15   |                      |   |                             |                |               |          |
| Uniform Loads (plf)   |                      |   |                             |                |               |          |
| Vert: 1-3=-60, 3-5=-60, 10-13=-870(F=-850)  |                      |   |                             |                |               |          |



April 30, 201

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 BEFORE USE.**  
 Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure 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/TPI1 Quality Criteria, D58-89 and BCS11 Building Component Safety Information** available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Julius Lee PE,  
 1109 Coastal Bay  
 Boynton Beach, FL 33435

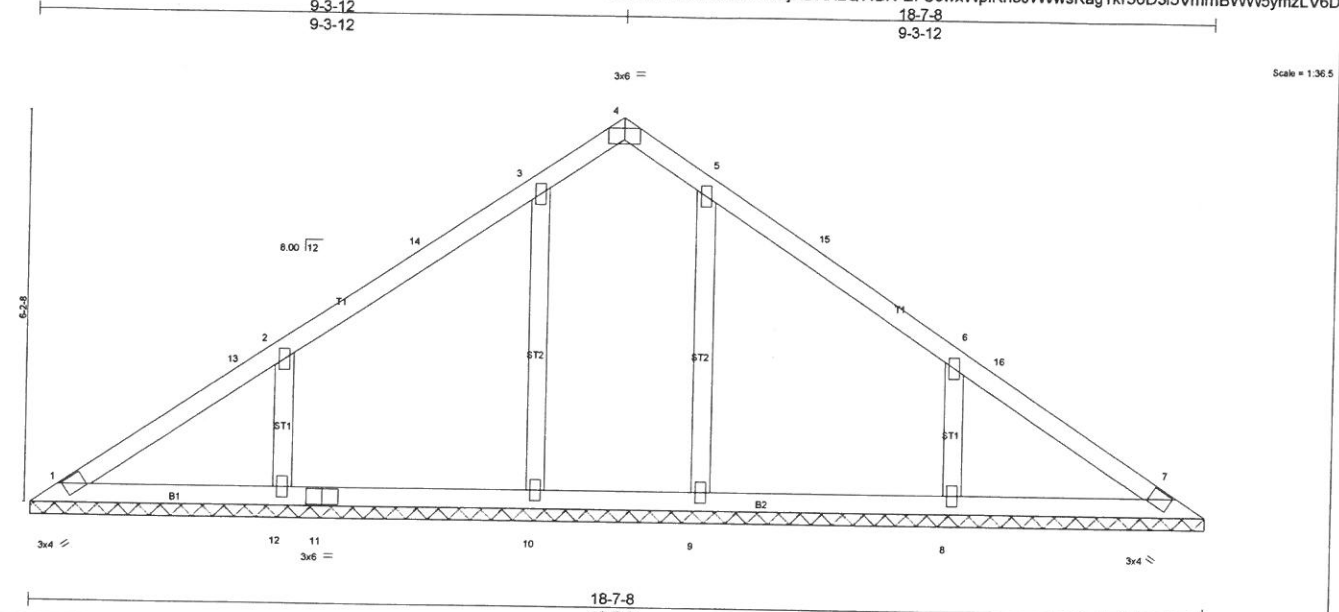


Plate Offsets (X,Y): [4:0-3-0,Edge] 18-7-8

|                      |                      |            |                         |               |             |
|----------------------|----------------------|------------|-------------------------|---------------|-------------|
| <b>LOADING (psf)</b> | <b>SPACING</b> 2-0-0 | <b>CSI</b> | <b>DEFL</b>             | <b>PLATES</b> | <b>GRIP</b> |
| TCLL 20.0            | Plates Increase 1.15 | TC 0.34    | in (loc) l/defl L/d     | MT20          | 244/190     |
| TCDL 10.0            | Lumber Increase 1.15 | BC 0.21    | Vert(LL) n/a - n/a 999  |               |             |
| BCLL 0.0 *           | Rep Stress Incr YES  | WB 0.10    | Vert(TL) n/a - n/a 999  |               |             |
| BCDL 10.0            | Code IRC2009/TPI2007 | (Matrix)   | Horz(TL) 0.00 7 n/a n/a |               |             |
|                      |                      |            |                         | Weight: 80 lb | FT = 20%    |

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

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

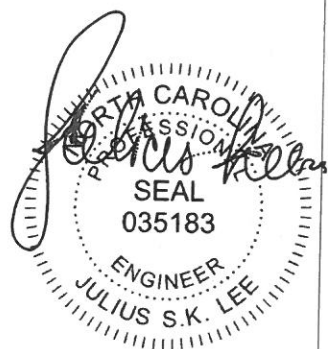
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** All bearings 18-7-8.  
 (lb) - Max Horz 1=138(LC 6)  
 Max Uplift All uplift 100 lb or less at joint(s) 8, 9, 12, 10  
 Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 8=343(LC 12), 9=314(LC 1), 12=343(LC 11), 10=314(LC 1)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 6-8=-256/168, 2-12=-256/168

- NOTES** (10-12)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-05; 100mph (3-second gust); TCDL=4.2psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; enclosed; MWFRS (low-rise) and C-C Exterior(2) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 9-3-12, Exterior(2) 9-3-12 to 12-3-12 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
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - 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, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 9, 12, 10.
  - This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
  - If Southern Pine (SP) lumber is specified, the design values are those effective 06/01/2013 by ALSC or proposed by SPIB.
  - This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
  - This truss design conforms with NC State residential code 2012 and ANSI/TPI 1-2007 based on the parameters shown.

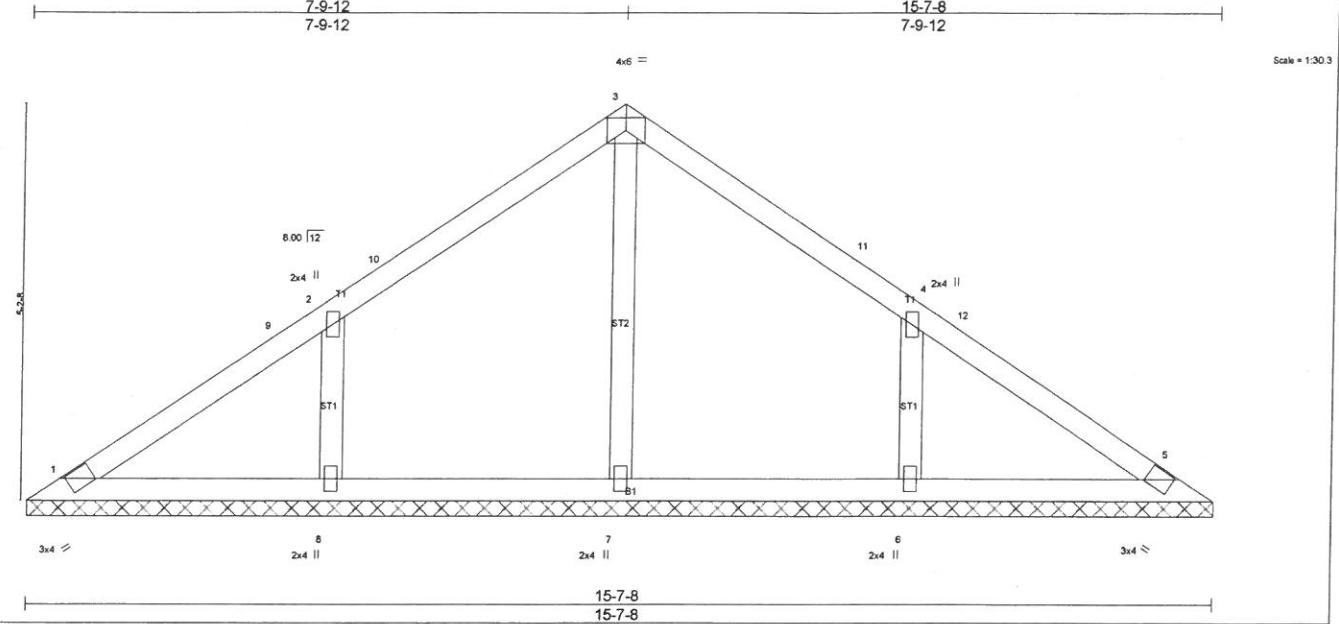
**LOAD CASE(S)** Standard



April 30, 20

|        |       |            |     |     |               |          |
|--------|-------|------------|-----|-----|---------------|----------|
| Job    | Truss | Truss Type | Qty | Ply | SAVVY-GRIFFIN | 18147429 |
| MASTER | V02   | VALLEY     | 99  | 1   |               |          |

Builders FirstSource, Apex, NC, 27523 7.350 s Sep 27 2012 MITek Industries, Inc. Wed Apr 30 14:50:09 2014 Page 1  
 ID:CY8ZQftOQd8LNttehJRDKHzQWBN-iS0A8HXRTep?xgU6Q16vayOEvdQHqyJwPAFfUCzLV6C  
 Job Reference (optional)



|                      |                      |            |                                 |               |             |
|----------------------|----------------------|------------|---------------------------------|---------------|-------------|
| <b>LOADING (psf)</b> | <b>SPACING</b> 2-0-0 | <b>CSI</b> | <b>DEFL</b> in (loc) l/defl L/d | <b>PLATES</b> | <b>GRIP</b> |
| TCLL 20.0            | Plates Increase 1.15 | TC 0.34    | Vert(LL) n/a - n/a 999          | MT20          | 244/190     |
| TCDL 10.0            | Lumber Increase 1.15 | BC 0.19    | Vert(TL) n/a - n/a 999          |               |             |
| BCLL 0.0 *           | Rep Stress Incr YES  | WB 0.08    | Horz(TL) 0.00 5 n/a n/a         |               |             |
| BCDL 10.0            | Code IRC2009/TPI2007 | (Matrix)   |                                 | Weight: 63 lb | FT = 20%    |

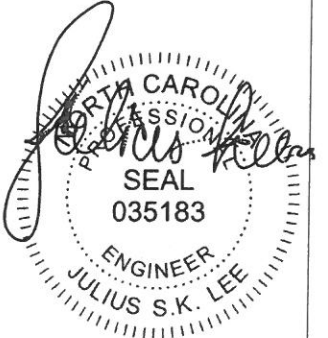
|                       |  |
|-----------------------|--|
| <b>LUMBER</b>         | <b>BRACING</b>   |
| TOP CHORD 2x4 SP No.3 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  |
| BOT CHORD 2x4 SP No.3 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.   |
| OTHERS 2x4 SP No.3    | MITek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide. |

**REACTIONS** All bearings 15-7-8.  
 (lb) - Max Horz 1=-114(LC 5)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 6, 8  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 6=348(LC 12), 8=348(LC 11)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 4-6=-261/166, 2-8=-261/166

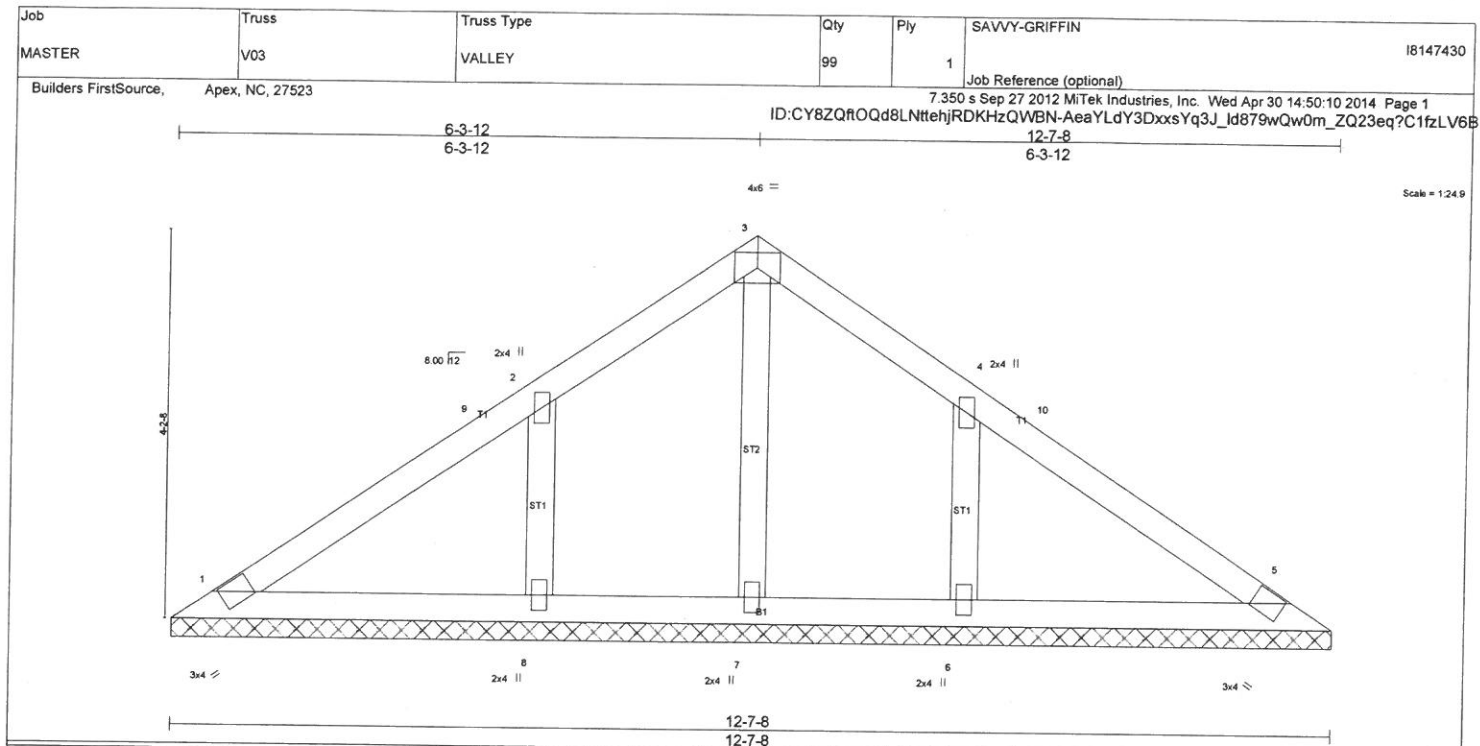
- NOTES** (9-11)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-05; 100mph (3-second gust); TCFL=4.2psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; enclosed; MWFRS (low-rise) and C-C Exterior(2) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 7-9-12, Exterior(2) 7-9-12 to 10-9-12 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
  - Gable requires continuous bottom chord bearing.
  - 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 6, 8.
  - This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
  - If Southern Pine (SP) lumber is specified, the design values are those effective 06/01/2013 by ALSC or proposed by SPIB.
  - This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
  - This truss design conforms with NC State residential code 2012 and ANSI/TPI 1-2007 based on the parameters shown.

**LOAD CASE(S)** Standard



April 30, 201

|  |  |
|--|--|
| <p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 BEFORE USE.</b><br/>         Design valid for use only with Mitek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure 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 <b>ANSI/TPI1 Quality Criteria, D58-89 and BCS11 Building Component Safety Information</b> available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.</p> | <p>Julius Lee PE.<br/>         1109 Coastal Bay<br/>         Boynton Beach, FL 33435</p> |
|--|--|



|                      |                      |            |                         |               |             |
|----------------------|----------------------|------------|-------------------------|---------------|-------------|
| <b>LOADING</b> (psf) | <b>SPACING</b>       | <b>CSI</b> | <b>DEFL</b>             | <b>PLATES</b> | <b>GRIP</b> |
| TCLL 20.0            | 2-0-0                | TC 0.26    | in (loc) l/defl L/d     | MT20          | 244/190     |
| TCDL 10.0            | Plates Increase 1.15 | BC 0.16    | Vert(LL) n/a - n/a 999  |               |             |
| BCLL 0.0 *           | Lumber Increase 1.15 | WB 0.05    | Vert(TL) n/a - n/a 999  |               |             |
| BCDL 10.0            | Rep Stress Incr YES  | (Matrix)   | Horz(TL) 0.00 5 n/a n/a |               |             |
|                      | Code IRC2009/TPI2007 |            |                         | Weight: 51 lb | FT = 20%    |

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

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

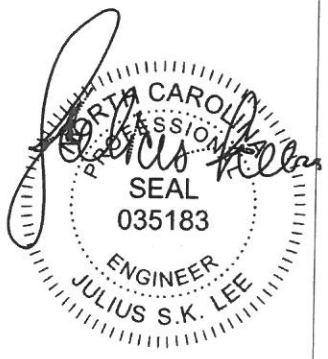
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** All bearings 12-7-8.  
 (lb) - Max Horz 1=91(LC 5)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 6, 8  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 6=300(LC 12), 8=300(LC 11)

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

- NOTES** (9-11)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-05; 100mph (3-second gust); TCCL=4.2psf; BCDL=6.0psf; h=32ft. Cat. II; Exp B; enclosed; MWFRS (low-rise) and C-C Exterior(2) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 6-3-12, Exterior(2) 6-3-12 to 9-3-12 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
  - Gable requires continuous bottom chord bearing.
  - 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 6, 8.
  - This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
  - If Southern Pine (SP) lumber is specified, the design values are those effective 06/01/2013 by ALSC or proposed by SPIB.
  - This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
  - This truss design conforms with NC State residential code 2012 and ANSI/TPI 1-2007 based on the parameters shown.

**LOAD CASE(S)** Standard



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Julius Lee PE,  
 1109 Coastal Bay  
 Boynton Beach, FL 33435

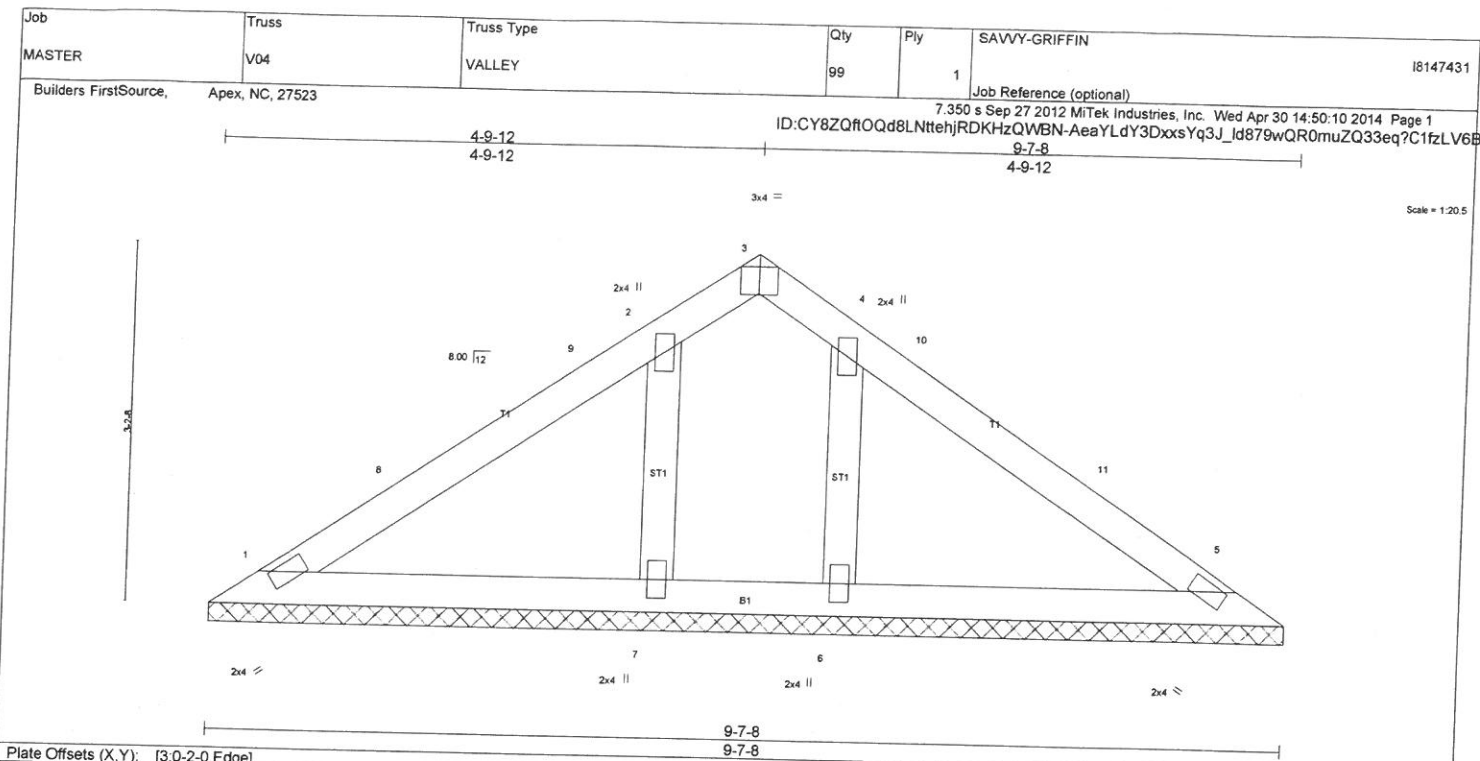


Plate Offsets (X,Y): [3.0-2.0,Edge]

|                      |                      |            |                         |               |             |
|----------------------|----------------------|------------|-------------------------|---------------|-------------|
| <b>LOADING</b> (psf) | <b>SPACING</b> 2-0-0 | <b>CSI</b> | <b>DEFL</b>             | <b>PLATES</b> | <b>GRIP</b> |
| TCLL 20.0            | Plates Increase 1.15 | TC 0.29    | in (loc) l/defl L/d     | MT20          | 244/190     |
| TCDL 10.0            | Lumber Increase 1.15 | BC 0.16    | Vert(LL) n/a - n/a 999  |               |             |
| BCLL 0.0 *           | Rep Stress Incr YES  | WB 0.05    | Vert(TL) n/a - n/a 999  |               |             |
| BCDL 10.0            | Code IRC2009/TPI2007 | (Matrix)   | Horz(TL) 0.00 5 n/a n/a |               |             |
|                      |                      |            |                         | Weight: 36 lb | FT = 20%    |

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

**BRACING**  
 TOP CHORD Structural wood sheathing directly applied or 9-7-8 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

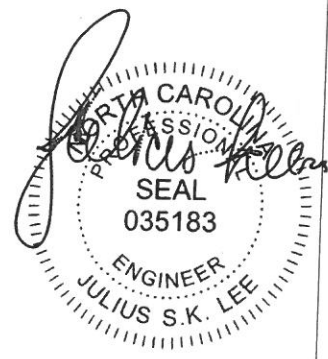
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer installation guide.

**REACTIONS** All bearings 9-7-8.  
 (lb) - Max Horz 1=68(LC 5)  
 Max Uplift All uplift 100 lb or less at joint(s) 6, 7  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=280(LC 12), 7=280(LC 11)

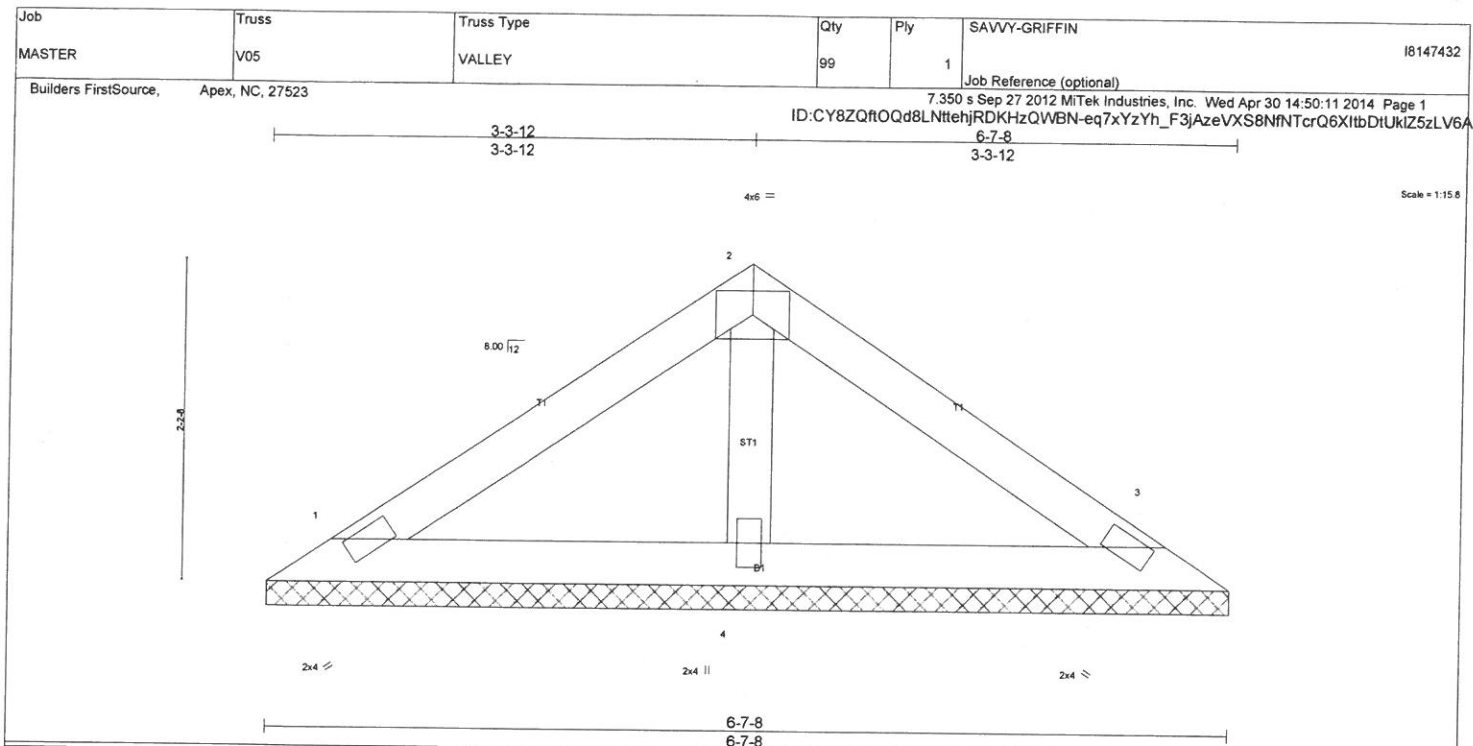
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- NOTES** (9-11)
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-05; 100mph (3-second gust); TCCL=4.2psf, BCDL=6.0psf, h=32ft, Cat. II; Exp B; enclosed; MWFRS (low-rise) and C-C Exterior(2) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 4-9-12, Exterior(2) 4-9-12 to 7-9-12 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 100 lb uplift at joint(s) 6, 7.
  - 7) This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R602.10.2 and referenced standard ANSI/TPI 1.
  - 8) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
  - 9) If Southern Pine (SP) lumber is specified, the design values are those effective 06/01/2013 by ALSC or proposed by SPIB.
  - 10) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
  - 11) This truss design conforms with NC State residential code 2012 and ANSI/TPI 1-2007 based on the parameters shown.

**LOAD CASE(S)** Standard



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|                      |                      |            |                         |               |             |
|----------------------|----------------------|------------|-------------------------|---------------|-------------|
| <b>LOADING</b> (psf) | <b>SPACING</b>       | <b>CSI</b> | <b>DEFL</b>             | <b>PLATES</b> | <b>GRIP</b> |
| TCLL 20.0            | 2-0-0                | TC 0.25    | in (loc) l/def L/d      | MT20          | 244/190     |
| TCDL 10.0            | Plates Increase 1.15 | BC 0.14    | Vert(LL) n/a - n/a 999  |               |             |
| BCLL 0.0 *           | Lumber Increase 1.15 | WB 0.03    | Vert(TL) n/a - n/a 999  |               |             |
| BCDL 10.0            | Rep Stress Incr YES  | (Matrix)   | Horz(TL) 0.00 3 n/a n/a |               |             |
|                      | Code IRC2009/TPI2007 |            |                         | Weight: 22 lb | FT = 20%    |

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

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

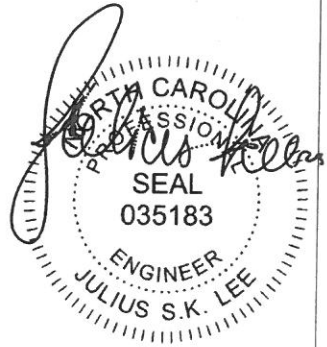
MITek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 1=121/6-7-8 (min. 0-1-8), 3=121/6-7-8 (min. 0-1-8), 4=210/6-7-8 (min. 0-1-8)  
Max Horz 1=-44(LC 5)  
Max Uplift 1=-16(LC 7), 3=-20(LC 8)

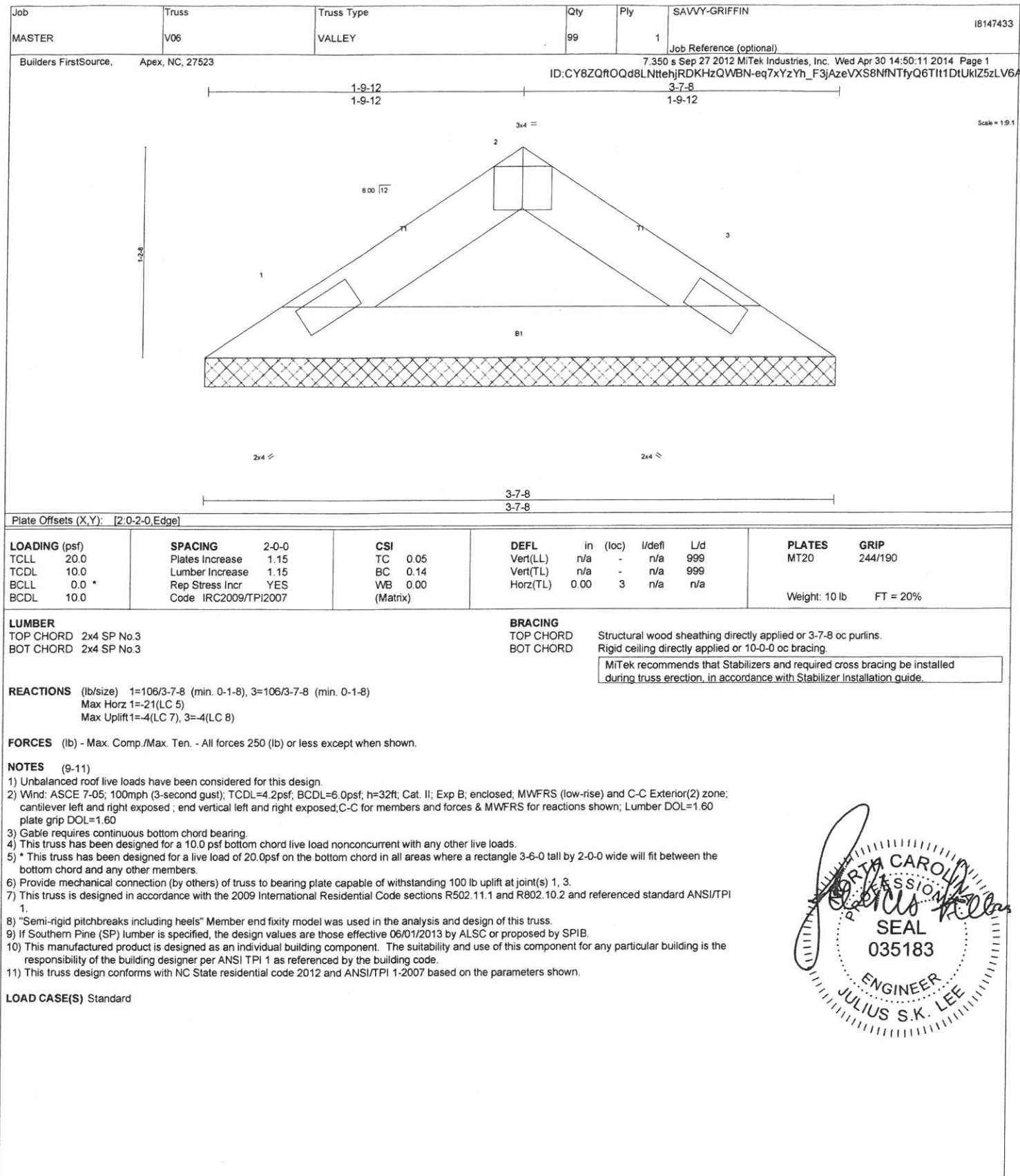
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- NOTES** (9-11)
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-05; 100mph (3-second gust); TCDL=4.2psf, BCDL=6.0psf, h=32ft, Cat. II; Exp B; enclosed; MWFRS (low-rise) 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 100 lb uplift at joint(s) 1, 3.
  - 7) This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 8) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
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**LOAD CASE(S)** Standard



April 30, 2014



April 30, 201

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Julius Lee PE.  
 1109 Coastal Bay  
 Boynton Beach, FL 33435

# Symbols

# ▶ General Safety Notes

ANSI/TP11: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-89: Design Standard for Bracing.  
BCSII: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.





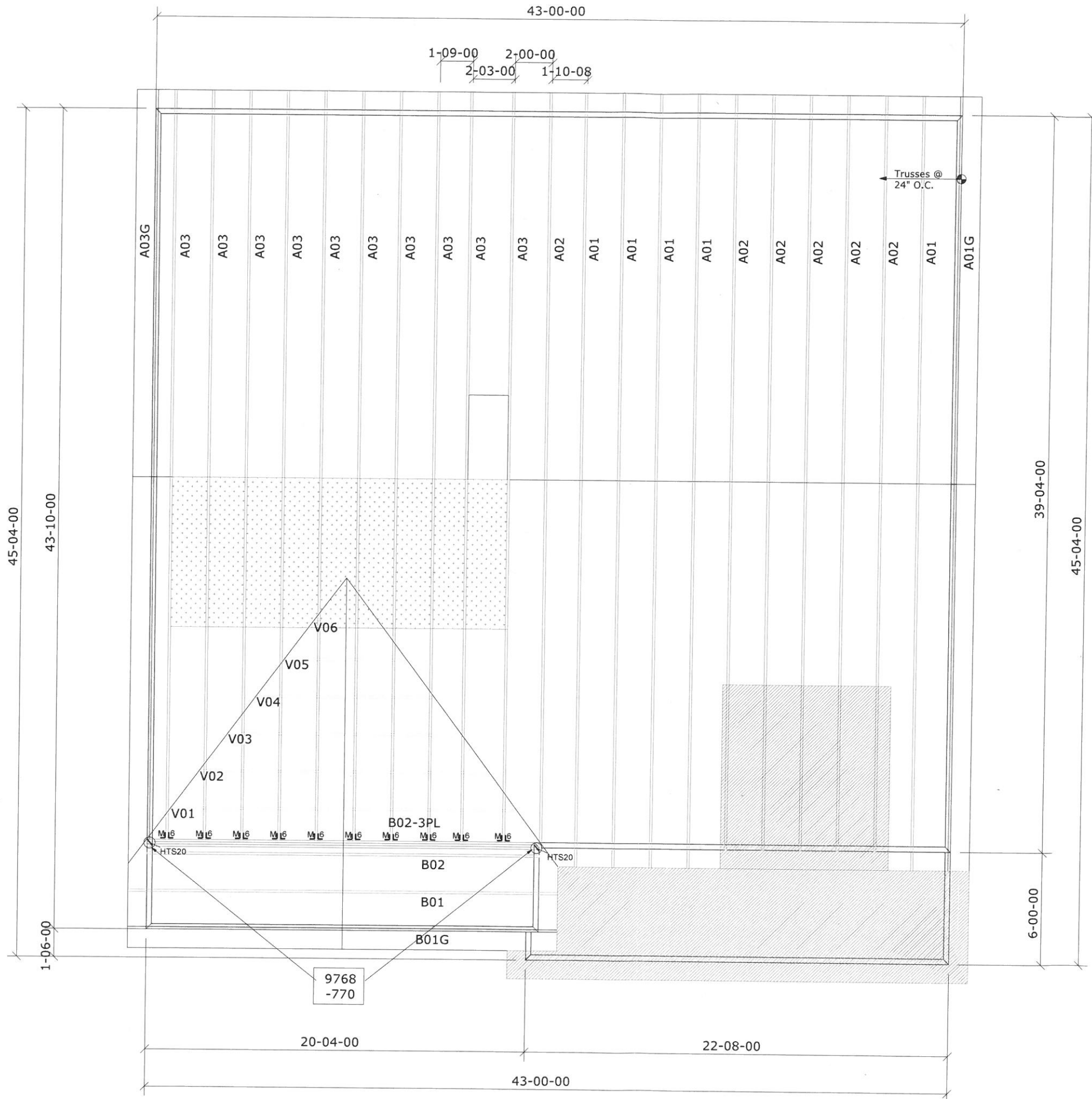
**Builders First Source**  
 23 Red Cedar Way  
 Apex, NC 27523  
 Phone: (919) 363-4956  
 Fax: (919) 387-8565  
 http://www.blr.com

**General Notes:**  
 - Per ANSI/TPI 1-2002 all "Truss to Wall" connections are the responsibility of the Building Designer, not the Truss Manufacturer.  
 - Dimensions are Feet-Inches- Sixteenths.  
 - Trusses are to be 24" o.c. unless noted otherwise (U.N.O.)  
 - Trusses are not designed to support brick U.N.O.  
 - Do not cut or modify trusses without first contacting Builders FirstSource.  
 - Immediately contact Builders FirstSource if trusses are damaged.

**Connection Notes:**  
 - All hangers are to be Simpson or equivalent U.N.O.  
 - Use Manufacturer's specifications for all hanger connections U.N.O.  
 - Use 10d x 1 1/2" Nails in hanger connections to single ply roof girder trusses.

**Floor Notes:**  
 - Shift truss as required to avoid plumbing traps.  
 - Installation Contractor and/or Field Supervisor are to verify all dimensions, trap locations, and options prior to installation

**Dimension Notes:**  
 - Drawing not to scale. Do not scale dimensions



| Hanger List |       | All Tie Downs H2.5A Unless noted |  |
|-------------|-------|----------------------------------|--|
| 10          | HTU26 | WLS                              |  |
| 2           | HTS20 |                                  |  |

| Special Items List |  |
|--------------------|--|
| Misc Material      |  |

| SAVVY   |             |
|---------|-------------|
| GRIFFIN | Elev: C     |
| ---     | NC Lot: --- |

| Appwright # |                |
|-------------|----------------|
| BASE/LH     | Code: IRC 2009 |
|             | Loading:       |
|             | T.C.L.L. 20    |
|             | T.C.D.L. 10    |
|             | B.C.L.L. 0     |
|             | B.C.D.L. 10    |

| Revision History |          | Wind:             |         |
|------------------|----------|-------------------|---------|
| Rev1:            | xx/xx/xx | M.P.H.            | 100 mph |
| Rev2:            | xx/xx/xx | Exposure Category |         |
| Rev3:            | xx/xx/xx | EXPOSURE B        |         |
| Pick Ticket:     | ---      | Job No:           | ---     |
| Sales No:        | ---      | Acct No:          | ---     |

| Hatch Legend |                |
|--------------|----------------|
| [Pattern]    | Attic Room     |
| [Pattern]    | Volume Ceiling |
| [Pattern]    | Stick Framing  |





**A** FRONT ELEVATION - THE GRIFFIN 4346 - C  
3/16" = 1'-0"

**NOTICE TO CONTRACTOR**  
All construction must comply with  
current NC Building Codes and is subject  
to field inspection and verification.

| ROOF VENTILATION CALCULATIONS |           |
|-------------------------------|-----------|
| <b>VENTING</b>                |           |
| ATTIC AREA EQUALS             | 2225 SQFT |
| VENTILATION REQUIRED EQUALS   | 15 SQFT   |

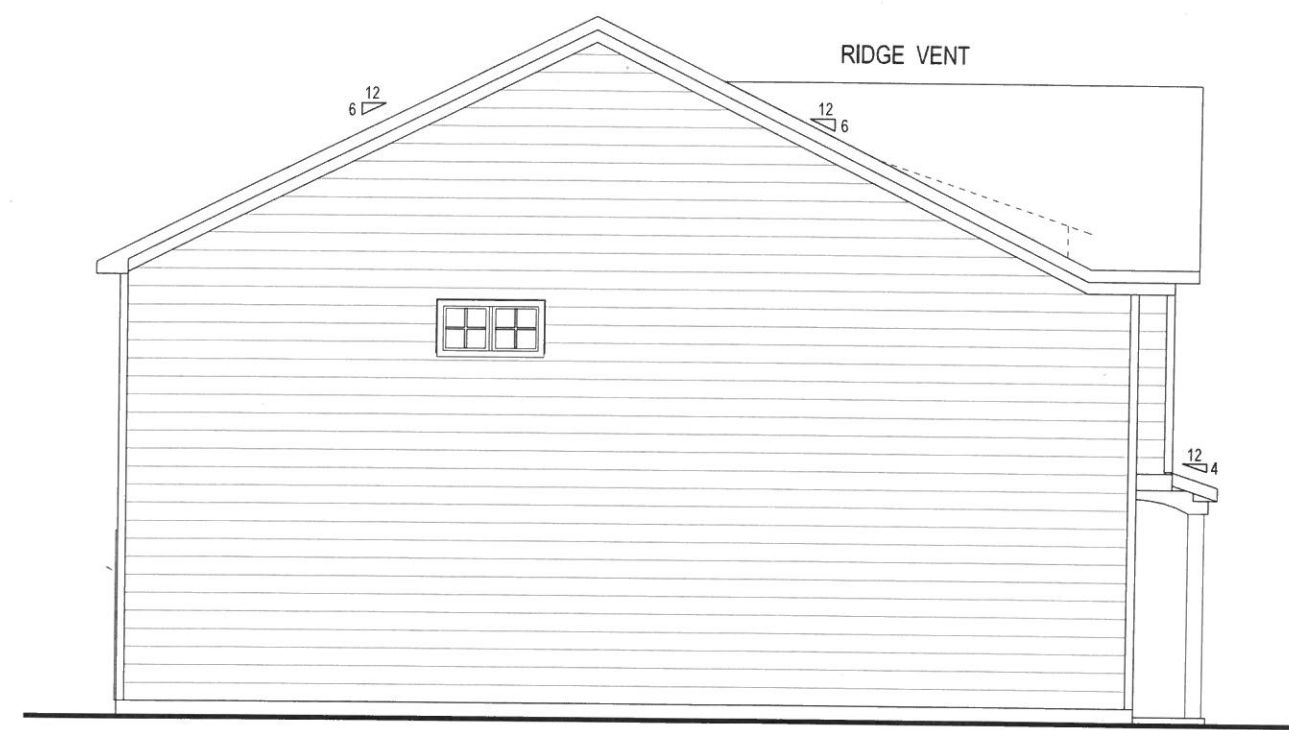
| VENTILATION REQUIRED     |    |       |              |
|--------------------------|----|-------|--------------|
| 2"CONT. VENT EAVE STRIP: | 80 | LF=   | 6.6          |
| RIDGE VENT:              | 82 | LF=   | 7.26         |
| GABLE VENT:              | 2  | SQFT= | 4            |
| <b>TOTAL</b>             |    |       | <b>17.92</b> |

SIDING PER COMMUNITY REQUIREMENT.  
GUTTERS PER COMMUNITY REQUIREMENT.

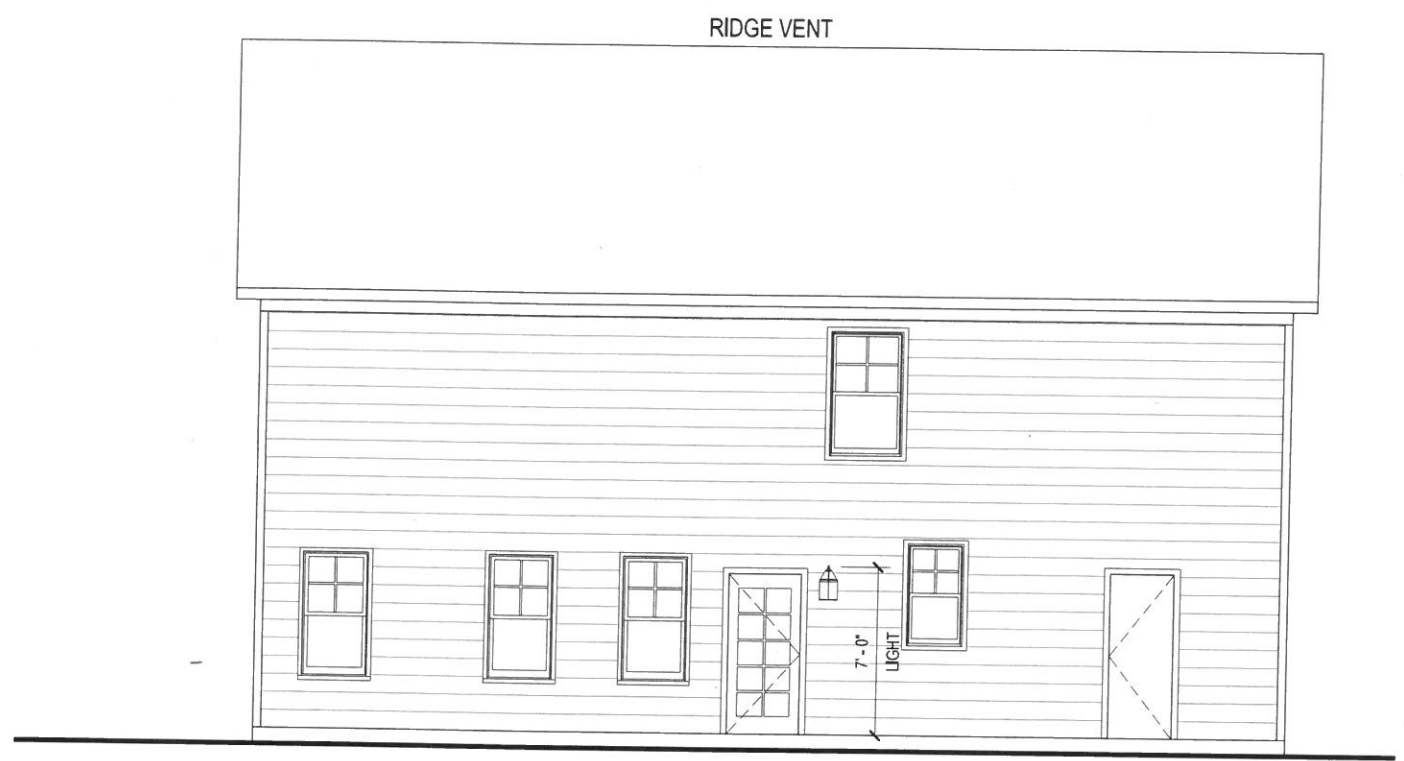
This plan is designed to the  
2009 International Residential Code  
with the most stringent of  
amendments required by the following  
states: AL., GA., NC., SC., VA.

| SQUARE FOOTAGES |         |
|-----------------|---------|
| NAME            | AREA    |
| 1ST FLOOR AREA  | 1319 SF |
| 2ND FLOOR AREA  | 1786 SF |
| FRONT PORCH     | 134 SF  |
| GARAGE          | 436 SF  |
| REAR PATIO      | 128 SF  |

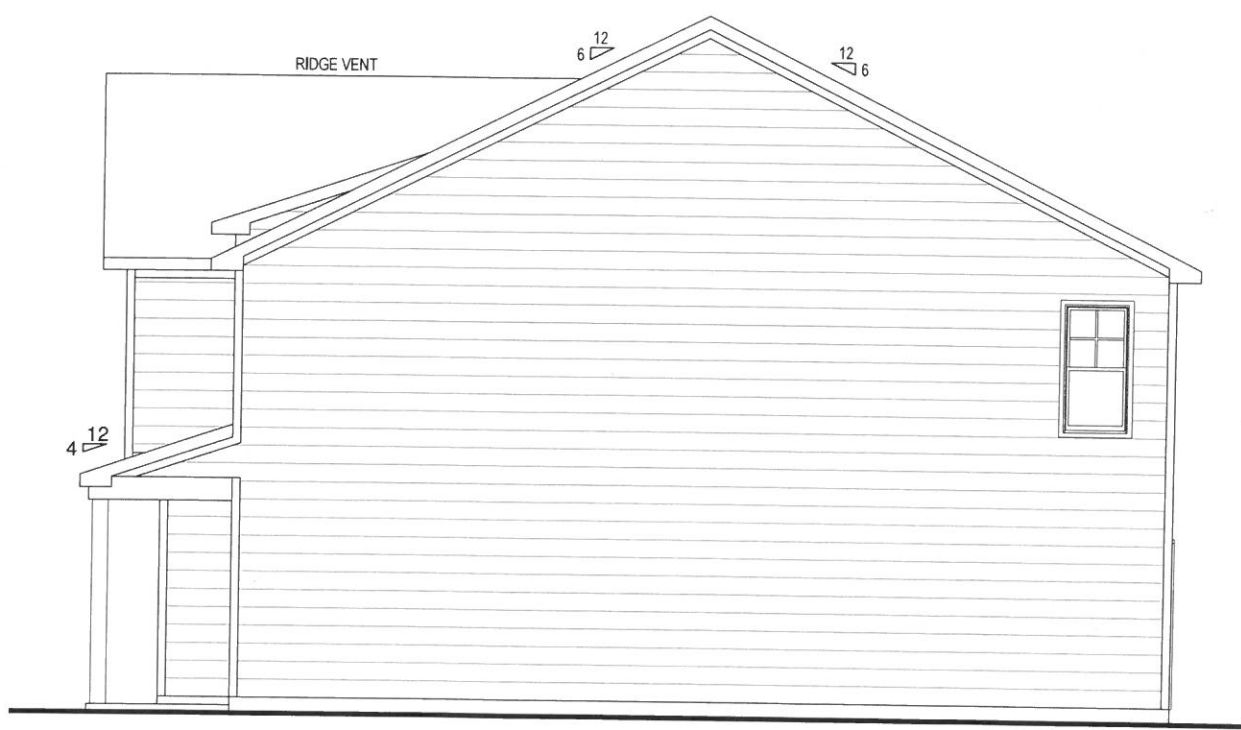
B7 memo  
HARNETT COUNTY CENTRAL PERMITTING  
APPLICATION # 1350030724  
JOB NAME Savvy  
DATE PLANS RECEIVED 7-10-15  
SITE PLANS APPROVED \_\_\_\_\_  
APPROVED BY MR 7-10-15



**B** LEFT ELEVATION  
1/8" = 1'-0"




**D** REAR ELEVATION  
1/8" = 1'-0"

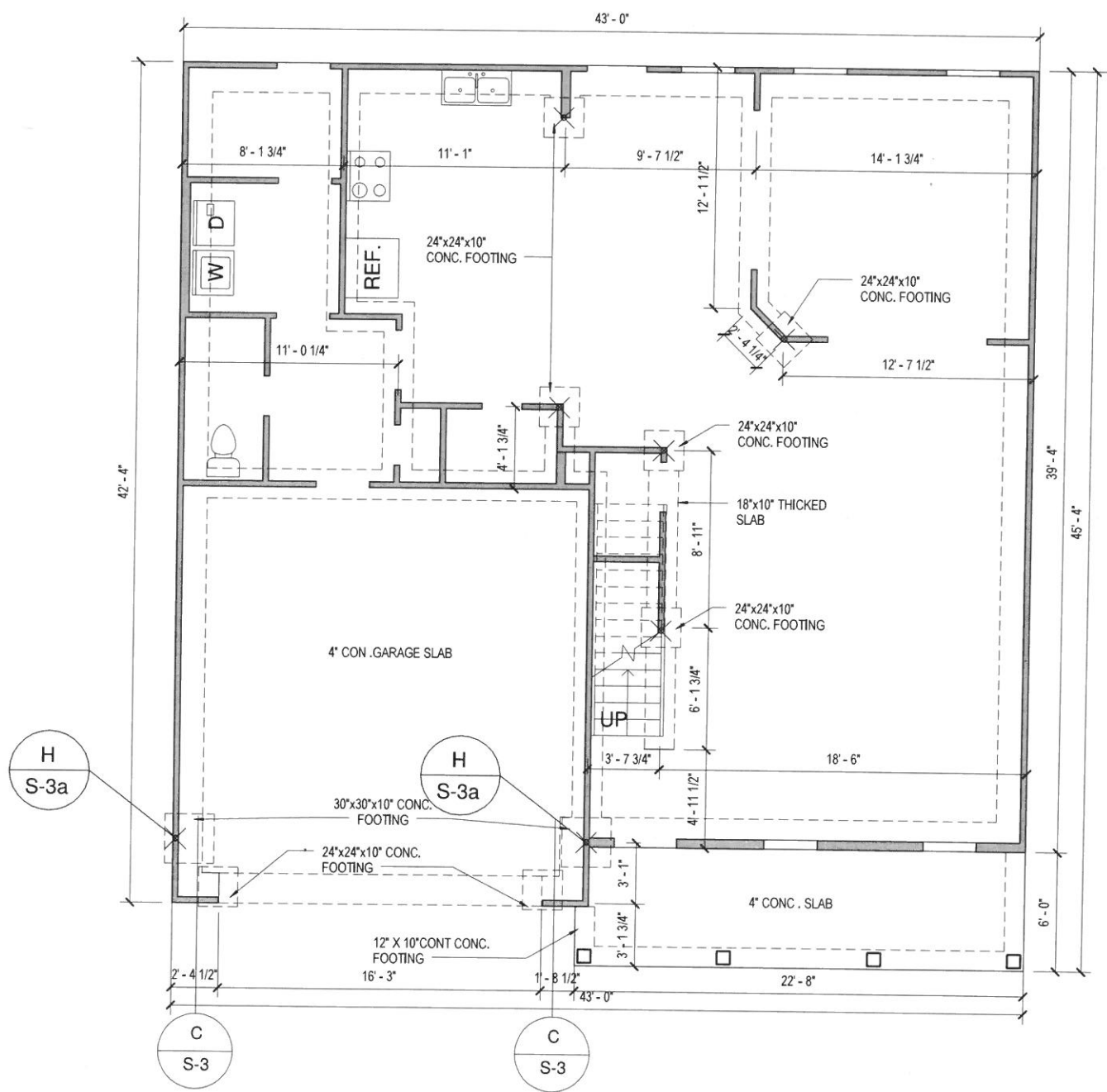


**C** RIGHT ELEVATION  
1/8" = 1'-0"

✕ REPRESENTS A POINT  
LOADS END FROM AN  
ABOVE OCCURANCE

SEE SHEET S-1 FOR  
SLAB DETAILS

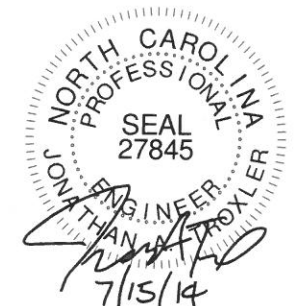
HIGH WIND AREAS ONLY  
  
TIE DOWN FOR UPLIFT  
LOADS WHERE INDICATED.  
REQUIRED ONLY IN HIGH  
WIND AREAS. SEE S-3a



APA- PF  
**A SLAB PLAN**  
1/8" = 1'-0"

STRUCTURAL DESIGN BY:  
SOUTHERN ENGINEERS, P.A.  
3716 BENSON DR. RALEIGH, NC 27609  
LICENSE: C-1287, PHONE: 919-878-1617

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- \* Any deviation or discrepancies on plans are to be brought to the immediate attention of Southern Engineer's liability
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- \* Use of these plans constitutes approval of terms & conditions as defined in the customer agreement.



**I-JOISTS**  
TJI 210 OR EQUAL  
UNLESS NOTED OTHERWISE

NOTE: INSTALL ALL ENGINEERED  
LUMBER IN ACCORDANCE W/  
MANUF. INSTRUCTIONS.

**HEADER AND COLUMN NOTES**

1. ALL EXTERIOR AND LOAD BEARING HEADER SHALL BE MIN. (2) 2x6 WITH (1) SUPPORT STUD (1) KING STUD, UNLESS NOTED OTHERWISE.
2. THE NUMBER SHOWN AT BEAM AND HEADER SUPPORTS INDICATES THE NUMBER OF SUPPORT STUDS REQUIRED IN STUD POCKET OR COLUMN
3. COLUMN CONSISTING OF (7) OR MORE STUDS SHALL BE WRAPPED WITH 22-GAUGE METAL STRAPS AT 2" O.C.

⊙ REPRESENTS A POINT LOAD FROM AN ABOVE OCCURRENCE

⊗ REPRESENTS A POINT LOADS END FROM AN ABOVE OCCURRENCE

NOTE: REFER TO SHEET S-3 FOR FRAMING NOTE

**BRACING NOTES:**

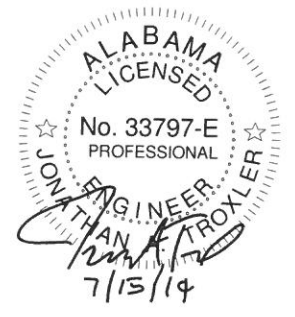
1. WALL BRACING ANALYSIS BASED ON R602.10 - CODE AND COMMENTARY FOR 2012 NC RESIDENTIAL CODE (FINAL 03-06-2013; EFFECTIVE DATE SEPTEMBER 1, 2013).  
FOR 130 MPH : WALLS SHALL BE BRACED ACCORDING TO SECTION R4506.2 AND R602.10- CODE AND COMMENTARY FOR 2012 NC RESIDENTIAL CODE (FINAL 03-06-2013; EFFECTIVE DATE SEPTEMBER 1, 2013)
2. NOTE THAT THE WALL BRACING AMOUNT PROVIDED ON THE PLANS (DETAILS AND SPECIFICATIONS) IS GREATER THAN THE AMOUNT OF WALL BRACING REQUIRED BY THE CODE. SEE NOTE BELOW FOR DETAILS AND SPECIFICATIONS FOR WALL BRACING.
3. BRACING METHOD AND TYPE: CONTINUOUS SHEATHING PER SECTION R602.10.3 USING WSP (WOOD STRUCTURAL PANEL SHEATHING).
4. EXTERIOR WALL SHEATHING : SHEATH EXTERIOR WALLS WITH 7/16" WSP (WOOD STRUCTURAL PANEL) SHEATHING AND ATTACH WITH 8D NAILS AT A 6"/12" NAILING PATTERN (6" OC AT PANEL EDGES AND 12" OC AT INTERMEDIATE SUPPORTS).  
FOR 130 MPH: SHEATH EXTERIOR WALLS WITH 7/16" WSP (WOOD STRUCTURAL PANEL) SHEATHING (FOR EXPOSURE C, USE 15/32" WSP) AND ATTACH WITH 8D NAILS AT A 3"/6" NAILING PATTERN (3" OC AT PANEL EDGES AND 12" OC AT INTERMEDIATE SUPPORTS). SHEATHING SHALL EXTEND TO UPPERMOST DOUBLE BEARING PLATE). BLOCK AT ROOF PER R602.10.5.5.
5. MINIMUM WALL LENGTHS ARE BASED ON TABLE R602.10.1 AND ARE TO BE LOCATED AS SPECIFIED IN SECTION R602.10.3.2.
6. HOLD-DOWN DEVICE (NOTE AS "HD" ON PLANS) SHALL BE AN 800 POUND CAPACITY ASSEMBLY AS NOTED ON PLANS. SEE DETAILS FOR HD ASSEMBLY.
7. INTERIOR BRACED WALL: (NOTED AS "IBW" ON PLANS) ATTACH 1/2" GYPSUM BOARD ON EACH SIDE OF WALL WITH A MIN. OF 5D COOLER NAILS OR #6 SCREWS @ 7" O.C. ALONG THE EDGES AND AT INTERMEDIATE SUPPORTS. INTERIOR BRACED WALLS SHALL BE CONNECTED AS DESCRIBED IN R602.10.5.4 AND FIGURES CR602.10.5.4 (1) AND CR602.10.5.4(2).

**HIGH WIND AREAS ONLY**

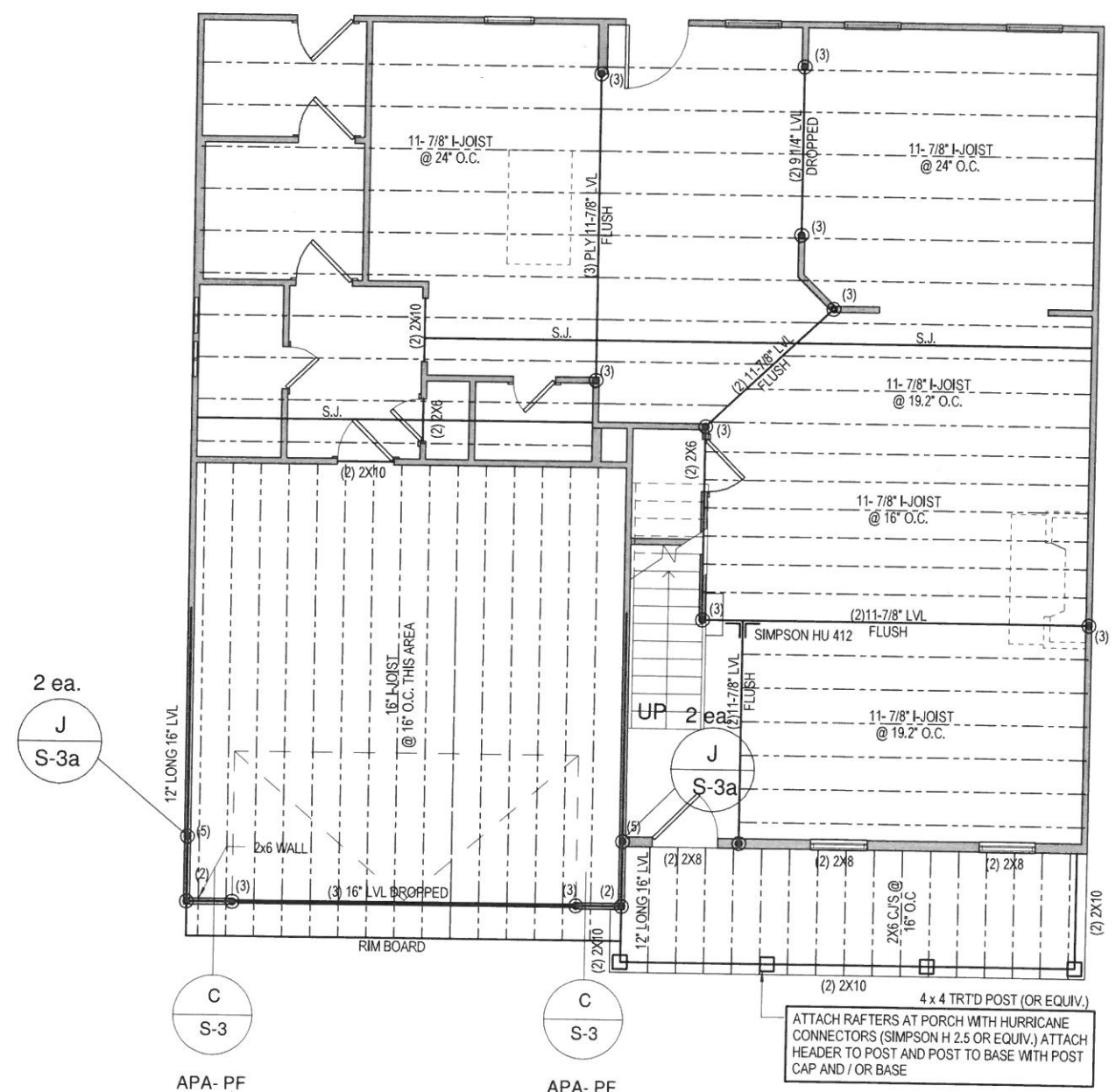
TIE DOWN FOR UPLIFT LOADS WHERE INDICATED. REQUIRED ONLY IN HIGH WIND AREAS. SEE S-3a

STRUCTURAL DESIGN BY:  
SOUTHERN ENGINEERS, P.A.  
3716 BENSON DR. RALEIGH, NC 27609  
LICENSE: C-1287, PHONE: 919-878-1617

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**WHOLE HOUSE BRACING SUMMARY**  
(CITY OF RALEIGH)  
TOTAL REQUIRED BRACING: 61  
TOTAL PROVIDED BRACING: 274  
(IN FEET)



ATTACH RAFTERS AT PORCH WITH HURRICANE CONNECTORS (SIMPSON H 2.5 OR EQUIV.) ATTACH HEADER TO POST AND POST TO BASE WITH POST CAP AND / OR BASE


**SECOND FLOOR FRAMING**  
1/8" = 1'-0"

NOTE: INSTALL ALL ENGINEERED LUMBER IN ACCORDANCE W/ MANUF. INSTRUCTIONS.

NOTE: REFER TO SHEET S-3 FOR FRAMING NOTES

⊙ REPRESENTS A POINT LOAD FROM AN ABOVE OCCURRENCE

**HIGH WIND AREAS ONLY**



TIE DOWN FOR UPLIFT LOADS WHERE INDICATED. REQUIRED ONLY IN HIGH WIND AREAS. SEE S-3a

**BRACING NOTES:**

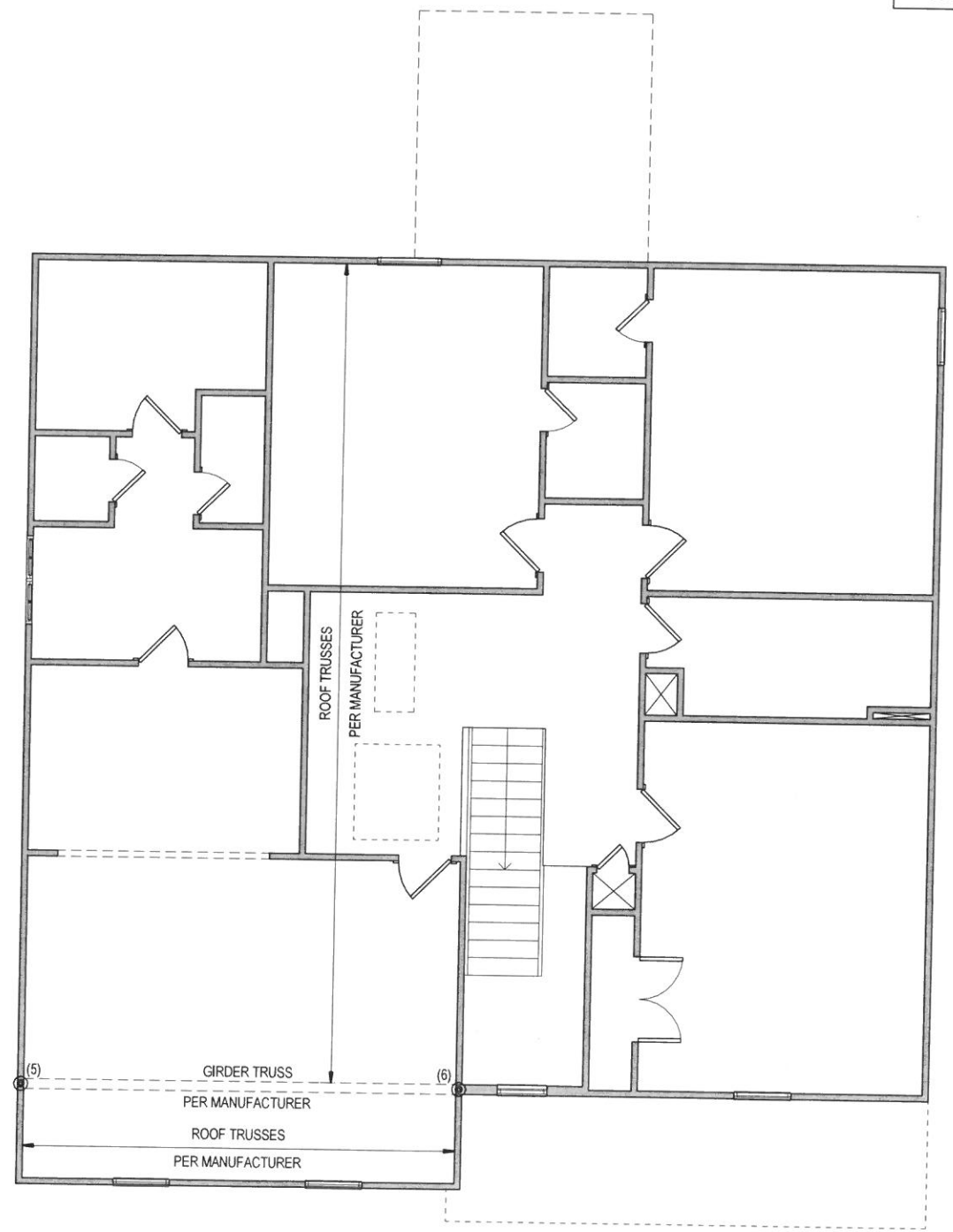
1. WALL BRACING ANALYSIS BASED ON R602.10 - CODE AND COMMENTARY FOR 2012 NC RESIDENTIAL CODE (FINAL 03-06-2013; EFFECTIVE DATE SEPTEMBER 1, 2013).  
FOR 130 MPH : WALLS SHALL BE BRACED ACCORDING TO SECTION R4506.2 AND R602.10- CODE AND COMMENTARY FOR 2012 NC RESIDENTIAL CODE (FINAL 03-06-2013; EFFECTIVE DATE SEPTEMBER 1, 2013)
2. NOTE THAT THE WALL BRACING AMOUNT PROVIDED ON THE PLANS (DETAILS AND SPECIFICATIONS) IS GREATER THAN THE AMOUNT OF WALL BRACING REQUIRED THE CODE. SEE NOTE BELOW FOR DETAILS AND SPECIFICATIONS FOR WALL BRACING.
3. BRACING METHOD AND TYPE: CONTINUOUS SHEATHING PER SECTION R602.10.3 USING WSP (WOOD STRUCTURAL PANEL SHEATHING).
4. EXTERIOR WALL SHEATHING : SHEATH EXTERIOR WALLS WITH 7/16" WSP (WOOD STRUCTURAL PANEL) SHEATHING AND ATTACH WITH 8D NAILS AT A 6"/12" NAILING PATTERN (6" OC AT PANEL EDGES AND 12" OC AT INTERMEDIATE SUPPORTS).  
FOR 130 MPH: SHEATH EXTERIOR WALLS WITH 7/16" WSP (WOOD STRUCTURAL PANEL) SHEATHING (FOR EXPOSURE C, USE 15/32" WSP) AND ATTACH WITH 8D NAILS AT A 3"/6" NAILING PATTERN (3" OC AT PANEL EDGES AND 12" OC AT INTERMEDIATE SUPPORTS). SHEATHING SHALL EXTEND TO UPPERMOST DOUBLE BEARING PLATE). BLOCK AT ROOF PER R602.10.5.5.
5. MINIMUM WALL LENGTHS ARE BASED ON TABLE R602.10.1 AND ARE TO BE LOCATED AS SPECIFIED IN SECTION R602.10.3.2.
6. HOLD-DOWN DEVICE (NOTE AS "HD" ON PLANS) SHALL BE AN 800 POUND CAPACITY ASSEMBLY AS NOTED ON PLANS. SEE DETAILS FOR HD ASSEMBLY.
7. INTERIOR BRACED WALL: (NOTED AS "IBW" ON PLANS) ATTACH 1/2" GYPSUM BOARD ON EACH SIDE OF WALL WITH A MIN. OF 5D COOLER NAILS OR #6 SCREWS @ 7" O.C. ALONG THE EDGES AND AT INTERMEDIATE SUPPORTS. INTERIOR BRACED WALLS SHALL BE CONNECTED AS DESCRIBED IN R602.10.5.4 AND FIGURES CR602.10.5.4 (1) AND CR602.10.5.4(2).

**HEADER AND COLUMN NOTES**

1. ALL EXTERIOR AND LOAD BEARING HEADER SHALL BE MIN. (2) 2x6 WITH (1) SUPPORT STUD AND (1) KING STUD, UNLESS NOTED OTHERWISE.
2. THE NUMBER SHOWN AT BEAM AND HEADER SUPPORTS INDICATES THE NUMBER OF SUPPORT STUDS REQUIRED IN STUD POCKET OR COLUMN
3. COLUMN CONSISTING OF (7) OR MORE STUDS SHALL BE WRAPPED WITH 22-GAUGE METAL STRAPS AT 24" O.C.

STRUCTURAL DESIGN BY:  
SOUTHERN ENGINEERS, P.A.  
3716 BENSON DR., RALEIGH, NC 27609  
LICENSE: C-1287, PHONE: 919-878-1617


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NOTE: TOP PLATE UPLIFT CONNECTIONS PROVIDED BY TRUSS MANUFACTURER

**A SECOND FLOOR CEILING FRAMING**  
1/8" = 1'-0"

**HIGH WIND AREAS ONLY**



TIE DOWN FOR UPLIFT LOADS WHERE INDICATED. REQUIRED ONLY IN HIGH WIND AREAS. SEE S-3a

NOTE: REFER TO SHEET S-3 FOR FRAMING NOTE

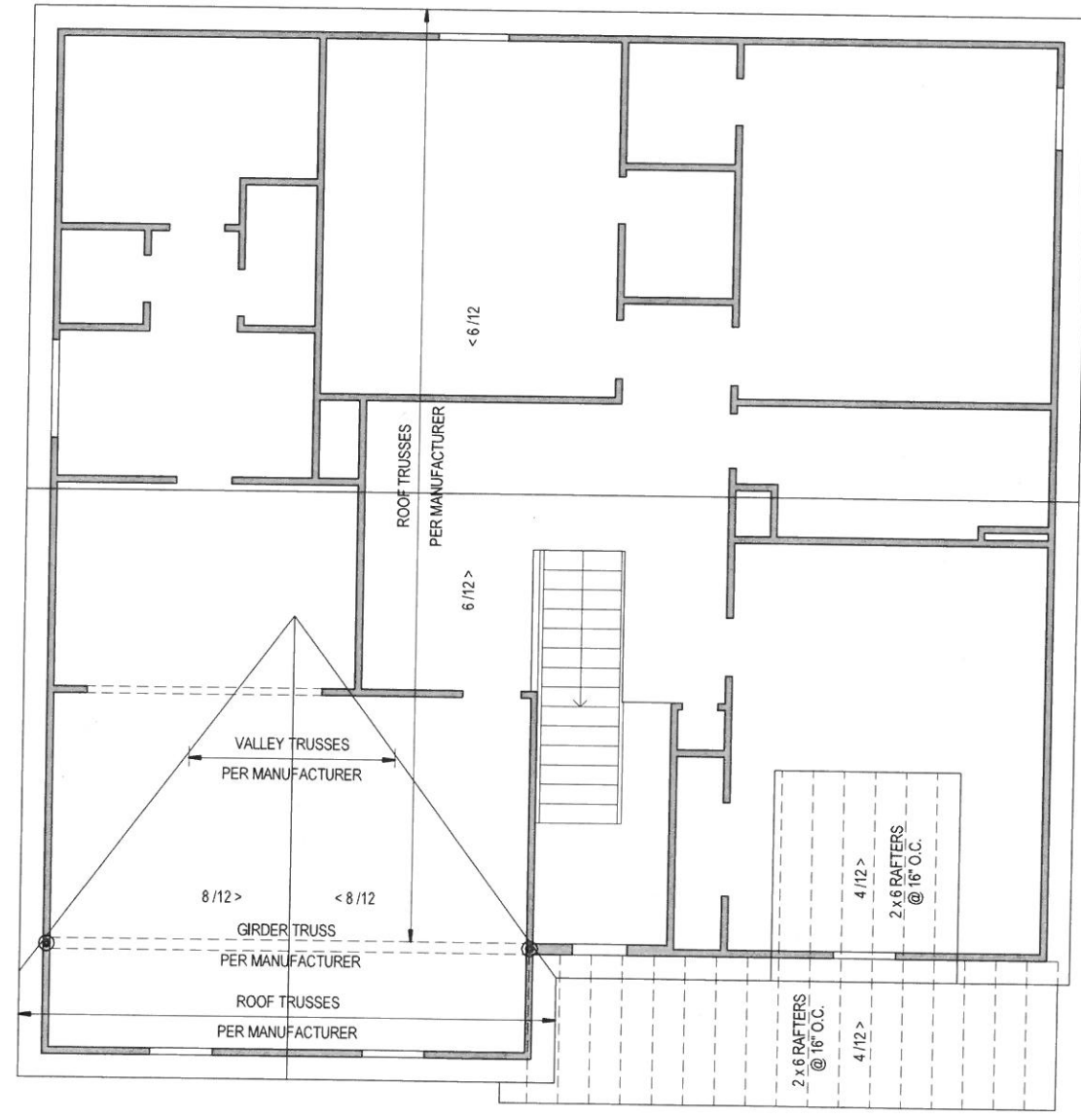
⊙ REPRESENTS A POINT LOAD FROM AN ABOVE OCCURRENCE

**TRUSS SYSTEM REQUIREMENTS**

1. TRUSS SYSTEM LAYOUTS (PLACEMENT PLANS) SHALL BE DESIGNED IN ACCORDANCE WITH SEALED STRUCTURAL PLANS. ANY NEED TO CHANGE TRUSSES SHALL BE COORDINATED WITH SOUTHERN ENGINEERS.
2. TRUSS SCHEMATIC (POFILES) SHALL BE PREPARED AND SEALED BY TRUSS MANUFACTURER.
3. ALL TRUSSES SHALL BE DESIGNED FOR BEARING ON SPF #2 OR #3 PLATES OR LEDGERS (UNQ).
4. ALL REQUIRED ANCHORS FOR TRUSSES DUE TO UPLIFT OR BEARING SHALL MEET THE REQUIREMENTS AS SPECIFIED ON THE TRUSS SCHEMATIC

STRUCTURAL DESIGN BY:  
SOUTHERN ENGINEERS, P.A.  
3716 BENSON DR., RALEIGH, NC 27609  
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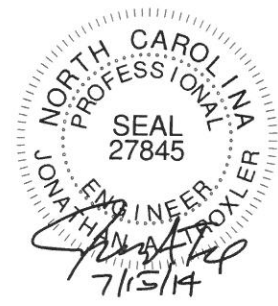


**A ROOF FRAMING**  
1/8" = 1'-0"

Company name:  
**Savvy Homes**

SAVVY HOMES  
8025 CREDMOOR RD. SUITE 100  
RALEIGH, NC 27613  
PH 919-781-8104

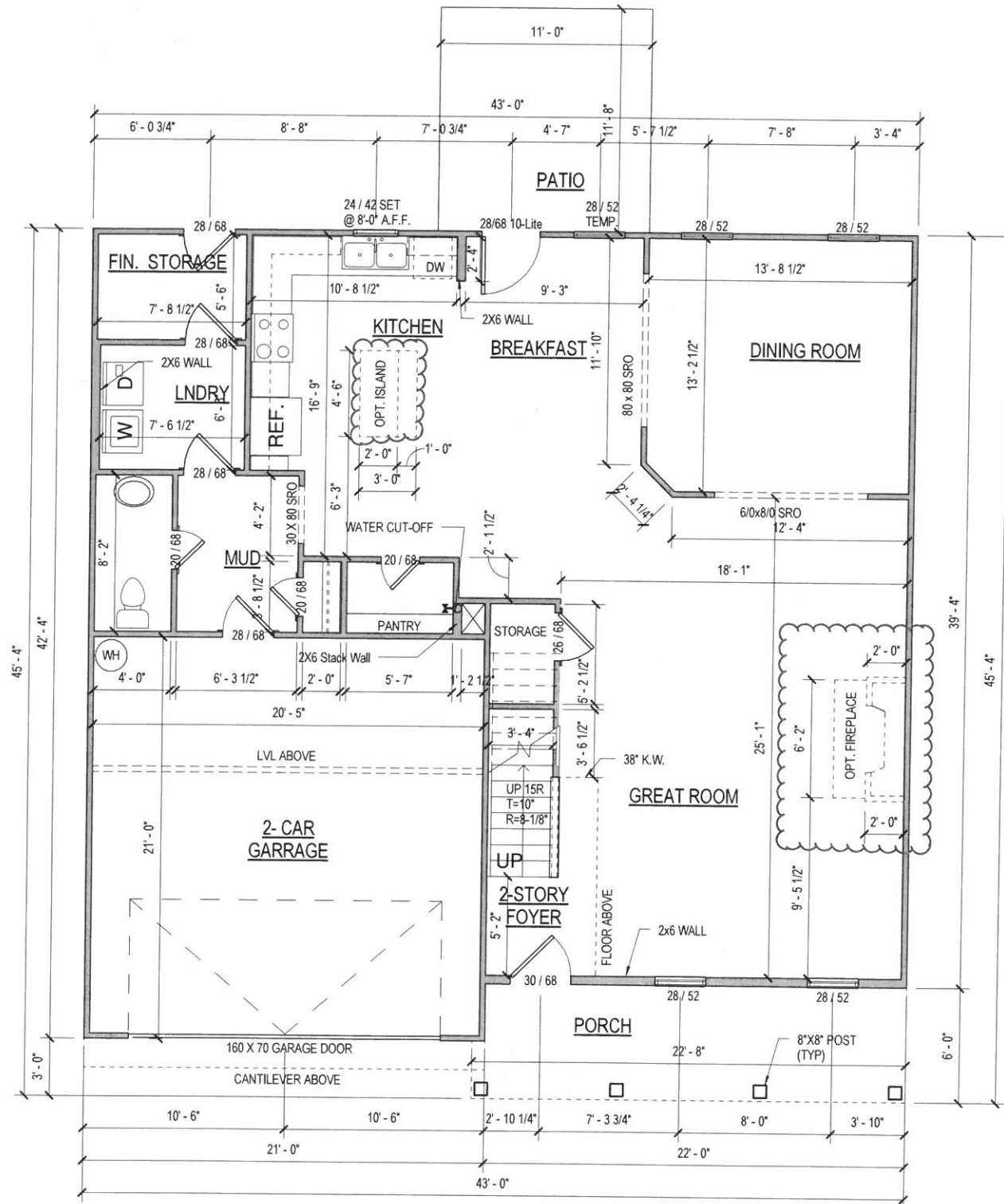
Project name:  
**GRIFFIN 4346-C (13) T**  
Roof Framing



Date  
18/4/2014

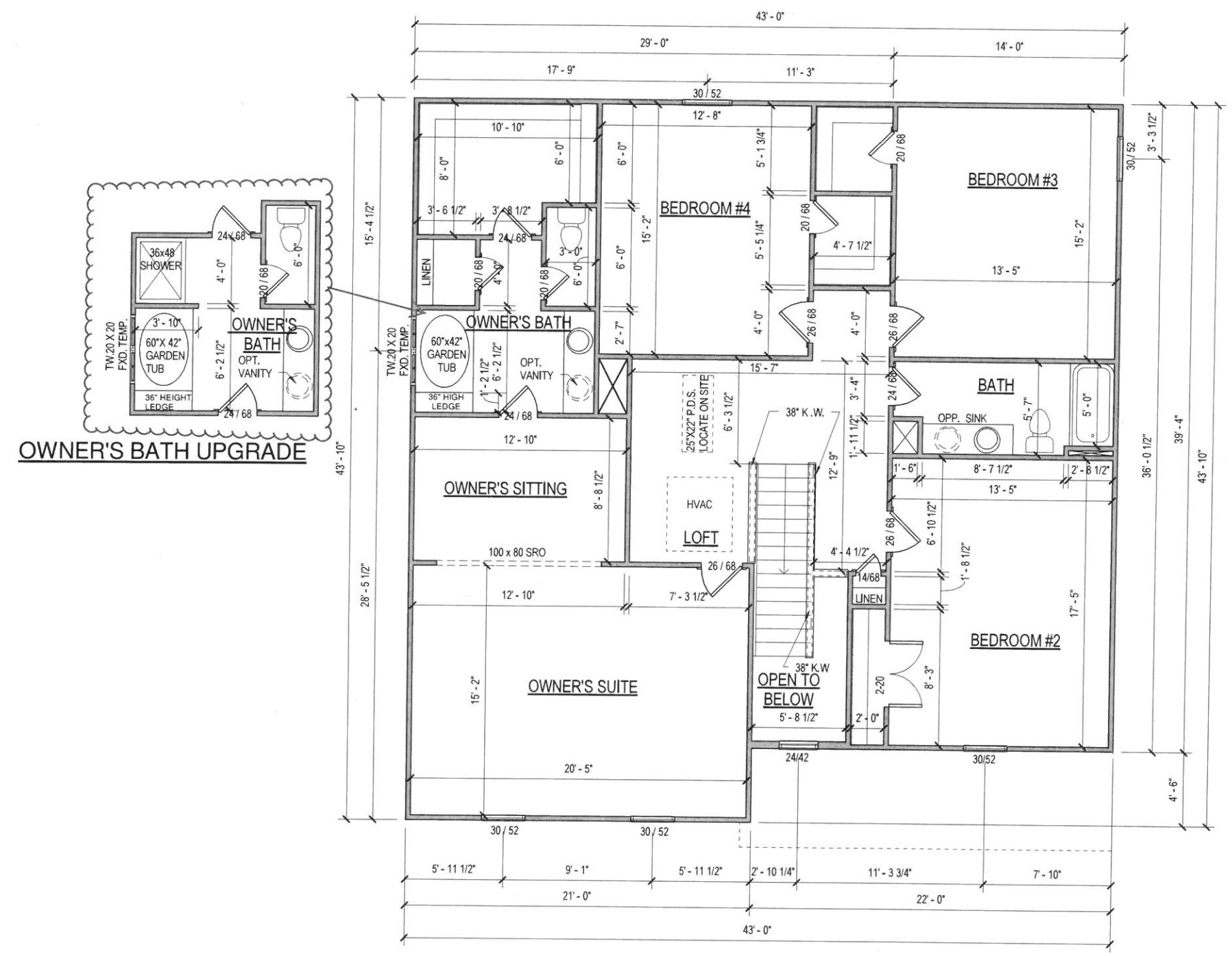
Sheet #

2d

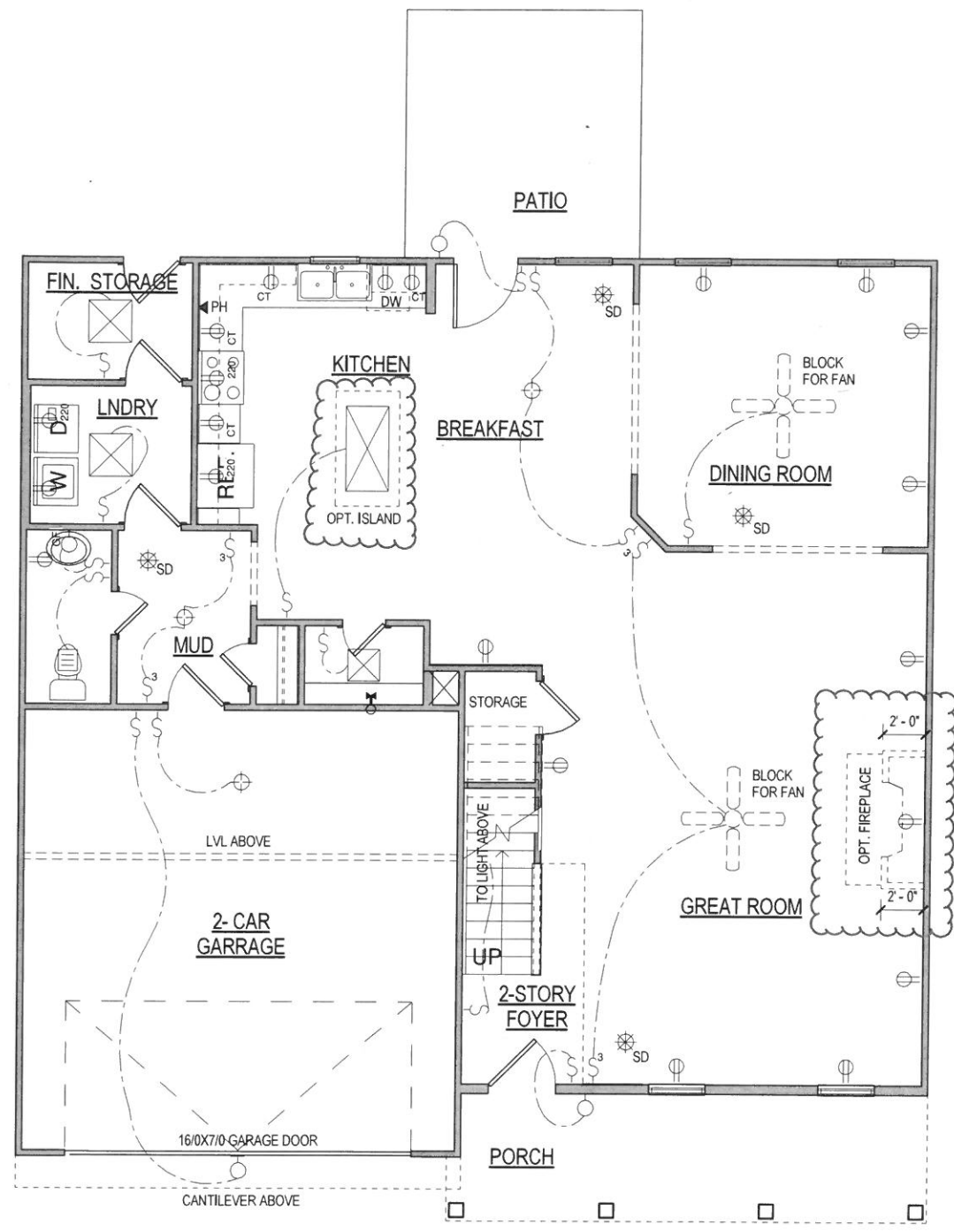


**A** FIRST FLOOR PLAN  
 1/8" = 1'-0"





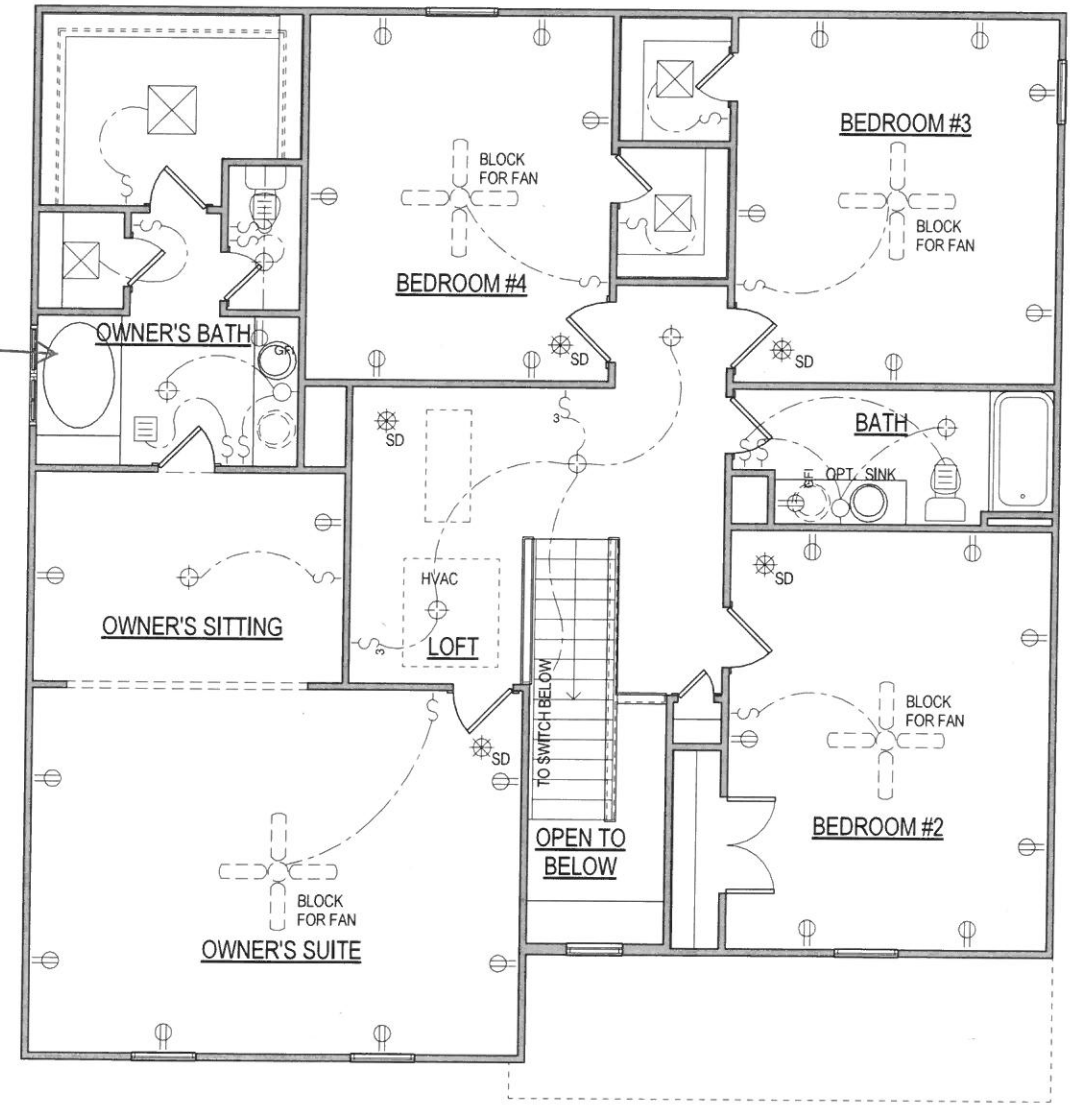
**A** SECOND FLOOR PLAN  
1/8" = 1'-0"



**A** FIRST FLOOR PLAN - ELECTRICAL  
1/8" = 1'-0"



| ELECTRICAL LEGEND |   |
|-------------------|---|
|                   | SWITCH                                    |
|                   | THREE - WAY SWITCH                        |
|                   | DUPLEX                                    |
|                   | 220 VOLT OUTLET                           |
|                   | GFCI DUPLEX                               |
|                   | COUNTERTOP DUPLEX                         |
|                   | PHONE OUTLET                              |
|                   | SMOKE DETECTOR / CARBON MONOXIDE DETECTOR |
|                   | CEILING LIGHT                             |
|                   | WALL HUNG LIGHT                           |
|                   | VENT                                      |
|                   | 24" FLOURESCENT                           |
|                   | 24" x 48" FLOURESCENT                     |



**B** SECOND FLOOR PLAN - ELECTRICAL  
1/8" = 1'-0"

# I-Joist Length, on Top of Flange

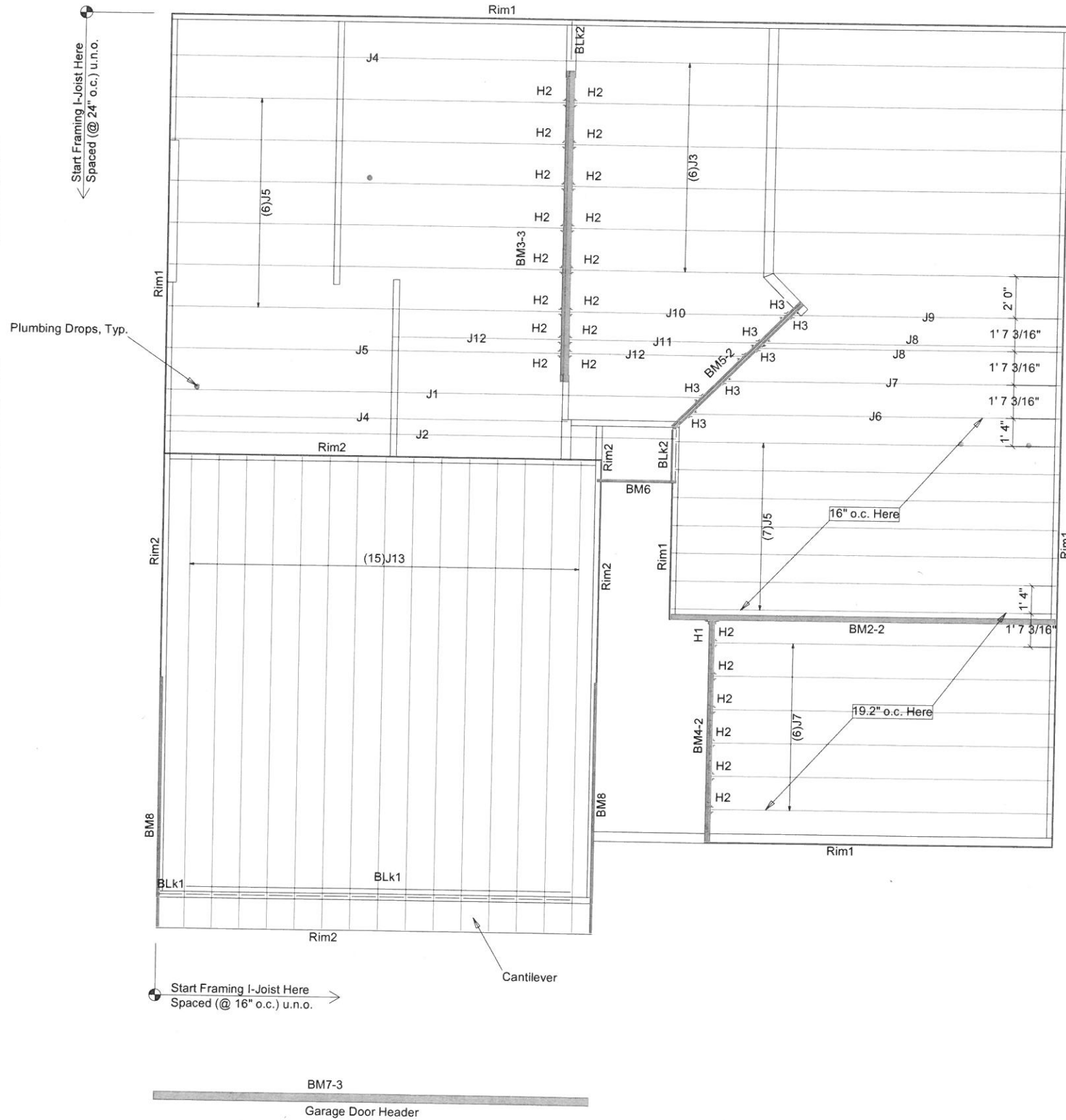
Note: Refer to current Boise Cascade Installation Guide for details not shown.

## General Notes:

- 1.) \*READ\* Boise Installation Guide before installation of products.
- 2.) All I-Joist, LVL beams, and Rim Board must be field cut to length.
- 3.) Contractor must verify and approve the above material list.
- 4.) I-Joist may be moved 3" out of its own o.c. spacing, up to 19.2" o.c., to allow for plumbing drops.
- 5.) This layout is a placement plan and, was designed in accordance with the original design of the structure (unless otherwise noted). See original plans for additional structural notes.
- 6.) Ceramic tile floors should be supported per APA standards. Additional joists may be required.
- 7.) HVAC & PLUMBER, "Review" Boise Installation Guide (Joist Hole Location & Sizing) Chart "BEFORE" cutting the I-joist product.
- 8.) "Blocking", are Random Length I-joist. Labeled as such.

| Connector Summary |     |         |                |        |
|-------------------|-----|---------|----------------|--------|
| PlotID            | Qty | Manuf   | Product        | Flange |
| H1                | 1   | Simpson | HHUS410        | None   |
| H2                | 22  | Simpson | IUS 2.06/11.88 | None   |
| H3                | 9   |         | SUR 2.06/11    | None   |

| Products |         |   |        |       |
|----------|---------|---|--------|-------|
| PlotID   | Net Qty | Product                                 | Length | Plies |
| J1       | 1       | 11-7/8" BCI® 5000s-1.8 SP               | 26' 0" | 1     |
| J2       | 1       | 11-7/8" BCI® 5000s-1.8 SP               | 25' 0" | 1     |
| J3       | 6       | 11-7/8" BCI® 5000s-1.8 SP               | 24' 0" | 1     |
| J4       | 2       | 11-7/8" BCI® 5000s-1.8 SP               | 20' 0" | 1     |
| J5       | 14      | 11-7/8" BCI® 5000s-1.8 SP               | 19' 0" | 1     |
| J6       | 1       | 11-7/8" BCI® 5000s-1.8 SP               | 18' 0" | 1     |
| J7       | 7       | 11-7/8" BCI® 5000s-1.8 SP               | 17' 0" | 1     |
| J8       | 2       | 11-7/8" BCI® 5000s-1.8 SP               | 15' 0" | 1     |
| J9       | 1       | 11-7/8" BCI® 5000s-1.8 SP               | 14' 0" | 1     |
| J10      | 1       | 11-7/8" BCI® 5000s-1.8 SP               | 11' 0" | 1     |
| J11      | 1       | 11-7/8" BCI® 5000s-1.8 SP               | 10' 0" | 1     |
| J12      | 2       | 11-7/8" BCI® 5000s-1.8 SP               | 9' 0"  | 1     |
| J13      | 15      | 16" BCI® 6000s-1.8 SP                   | 23' 0" | 1     |
| BM1-2    | 2       | 1-3/4" x 9-1/4" VERSA-LAM® 2.0 3100 SP  | 10' 0" | 2     |
| BM2-2    | 2       | 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP | 20' 0" | 2     |
| BM3-3    | 3       | 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP | 16' 0" | 3     |
| BM4-2    | 2       | 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP | 12' 0" | 2     |
| BM5-2    | 2       | 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP | 10' 0" | 2     |
| BM6      | 1       | 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP | 4' 0"  | 1     |
| BM7-3    | 3       | 1-3/4" x 16" VERSA-LAM® 2.0 3100 SP     | 22' 0" | 3     |
| BM8      | 2       | 1-3/4" x 16" VERSA-LAM® 2.0 3100 SP     | 12' 0" | 1     |
| Rim1     | 11      | 1" x 11-7/8" BC RIM BOARD OSB           | 12' 0" | 1     |
| Rim2     | 6       | 1" x 16" BC RIM BOARD OSB               | 12' 0" | 1     |
| BLk2     | 1       | 11-7/8" BCI® 5000s-1.8 SP               | 4' 0"  | 1     |
| BLk1     | 1       | 16" BCI® 6000s-1.8 SP                   | 18' 0" | 1     |



|            |     |
|------------|-----|
| Revisions: | BY: |
|            |     |
|            |     |
|            |     |

**Boise Cascade**

DO NOT Cut Flanges

**84 LUMBER**  
Build on what we know.™

6301 Old Wake Forest Road, Raleigh, N.C. 27604 (919) 872-6884

Savvy Homes  
L54 Kenlan Farms  
Griffin C  
Second Floor Layout

|                       |
|-----------------------|
| BC FRAMER             |
| Scale: Not to a Scale |
| Date: 04.21.2015      |
| By: kelvinWOOD        |
| File:                 |
| DWG:                  |
| Sheet: 1 of 1         |

**F05** 2x3/2" min plywood/OSB or rimboard closure.

**F10** Backer block (12" wide min.) Nail with 10-10d nails. Install tight to top flange.

**F07** See Boise literature for vertical load capacity.

**B12-A** Side Loaded Connector Double & Triple 1-3/4" Versa-Lam® Nail Pattern.

**F08** Solid block all posts from above to bearing below.

**F07-A** See Boise literature for vertical load capacity.

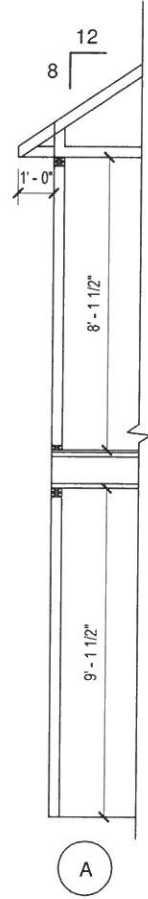
**F56** Exterior Wood Sheathing. 1/2" die through joists (ASTM A307 Grades A&B, SAE J429 Grades 1 or 2, or higher) with washers and nuts or 1/2" dia lag screws (full penetration) 350 lb capacity per fastener. Treated Ledger - Use only fasteners that are approved for use with corresponding wood treatment. Boise Rimboard. Design of moisture control by others (only structural components shown above).

**F58** Double BCI Joist Connection. Filler Block (see literature). Web-Filler Nailing 12" OC. Connection valid for all applications. Contact Boise EWP Engineering for specific conditions.

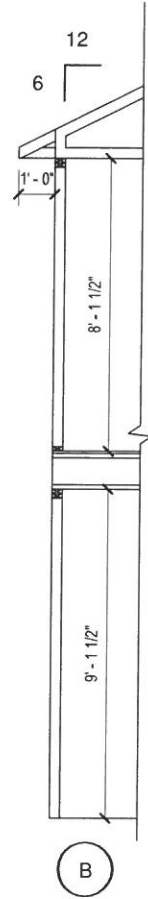
**F13-D** Nail each end with 1 - 3" (10d) nail. 1 1/2" minimum end bearing length at all floor and roof details.

## 2nd Floor Layout

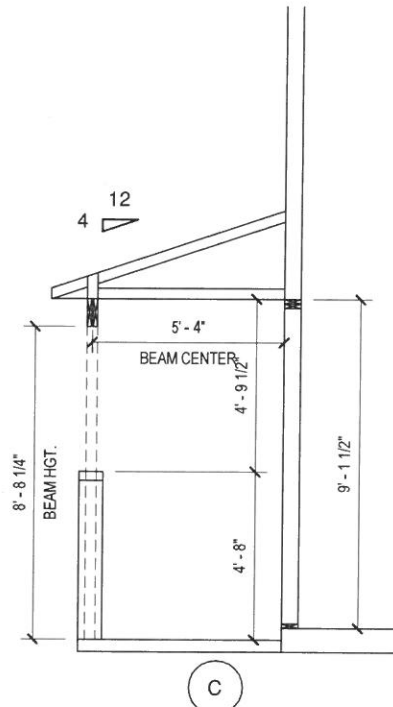
NOTE: SECTIONS AND DETAILS PROVIDED ON THIS SHEET ARE FOR SCHEMATIC USE ONLY. SEE TRUSS DOCUMENTATION AND/OR STRUCTURAL SHEETS FOR CONSTRUCTION INFORMATION



A



B



C

PLAN NAME  
Carmichael

ALL FLOOR PLANS AND ELEVATIONS COPYRIGHT BY SAVVY HOLDINGS, LLC ©2014. NO PART MAY NOT BE REPRODUCED BY ANY MEANS WITHOUT PERMISSION. ALL RIGHTS RESERVED.

Company name:  
**Savvy Homes**

SAVVY HOMES  
8025 CREEDMOOR RD. SUITE 100  
RALEIGH, NC 27613  
PH 919-781-8104

Project name:  
**GRIFFIN 4346-C (13) T**  
Sections and Details

Date  
18/4/2014

Sheet #

6aS

**STRUCTURAL NOTES**

2012 NCRS (2009 IRC)  
100 and 130 mph ZONE

1) ENGINEER'S SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS INCLUDING ROOF RAFTERS, HIPs, VALLEYS, RIDGES, FLOORS, WALLS, BEAMS AND HEADERS, COLUMNS, CANTILEVERS, OFFSET LOAD BEARING WALLS, PIER & GIRDER SYSTEM AND FOOTINGS. ENGINEER'S SEAL DOES NOT CERTIFY DIMENSIONAL ACCURACY OR ARCHITECTURAL LAYOUT INCLUDING ROOF SYSTEM. ALL REQUIREMENTS FOR PROFESSIONAL CERTIFICATION SHALL BE PROVIDED BY THE APPROPRIATE PROFESSIONAL. SOUTHERN ENGINEERS, P.A. CERTIFIES ONLY THE STRUCTURAL COMPONENTS AS SPECIFICALLY STATED.

2) ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE NORTH CAROLINA STATE RESIDENTIAL CODE - 2012 EDITION (2009 IRC), PLUS ALL LOCAL CODES AND REGULATIONS. (FOR 130 MPH: ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE 2012 NORTH CAROLINA RESIDENTIAL CODE (2009 IRC) (WITH SPECIAL CONSIDERATION TO CHAPTER 45-HIGH WIND ZONES AND CHAPTER 46-COASTAL AND FLOOD PLAIN CONSTRUCTION STANDARDS AND THE WOOD FRAME CONSTRUCTION MANUAL (WFCM) 2001 EDITION), PLUS ALL LOCAL CODES AND REGULATIONS). THE STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR, AND WILL NOT HAVE CONTROL OF, CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE CONSTRUCTION WORK, NOR WILL THE ENGINEER BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE CONSTRUCTION WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. "CONSTRUCTION REVIEW" SERVICES ARE NOT PART OF OUR CONTRACT. ALL MEMBERS SHALL BE FRAMED, ANCHORED, TIED AND BRACED IN ACCORDANCE WITH GOOD CONSTRUCTION PRACTICE AND THE BUILDING CODE.

3) DESIGN LOADS (R301.4) (LISTED AS: LIVE LOAD, DEAD LOAD, DEFLECTION LIMIT) ROOMS OTHER THAN SLEEPING ROOMS: (40 PSF, 10 PSF, L/360) SLEEPING ROOMS: (30 PSF, 10 PSF, L/360) ATTIC WITH PERMANENT STAIR: (40 PSF, 10 PSF, L/360) ATTIC WITH OUT PERMANENT STAIR: (20 PSF, 10 PSF, L/360) ATTIC WITH OUT STORAGE: (10 PSF, 10 PSF, L/240) STAIRS: (40 PSF, --, L/360) EXTERIOR BALCONIES: (60 PSF, 10 PSF, L/360) DECKS: (40 PSF, 10 PSF, L/360) GUARDRAILS AND HANDRAILS: (200 LBS) PASSENGER VEHICLE GARAGES: (50 PSF, 10 PSF, L/360) FIRE ESCAPES: (40 PSF, 10 PSF, L/360) SNOW: (20 PSF) WIND LOAD: (BASED ON 100 OR 130 MPH WIND VELOCITY)

4) WALL BRACING: WALLS SHALL BE BRACED ACCORDING TO R602.10- CODE AND COMMENTARY FOR 2012 NC RESIDENTIAL CODE (FINAL 03-06-2013: EFFECTIVE DATE SEPTEMBER 1, 2013). (FOR 130 MPH: WALLS SHALL BE BRACED ACCORDING TO SECTION R4506.2 AND R602.10- CODE AND COMMENTARY FOR 2012 NC RESIDENTIAL CODE (FINAL 03-06-2013: EFFECTIVE DATE SEPTEMBER 1, 2013)). NOTE THAT THE BRACING AS SPECIFIED ON THE PLANS IS BASED ON THE PRESCRIPTIVE BRACING REQUIREMENTS OF THE CODE AND SHALL BE VERIFIED AND/OR APPROVED BY THE CODE OFFICIAL.

5) CONCRETE SHALL HAVE A MINIMUM 28 DAY STRENGTH OF 3000 PSI AND A MAXIMUM SLUMP OF 5 INCHES UNLESS NOTED OTHERWISE (UNO). AIR ENTRAINMENT PER TABLE 402.2. ALL CONCRETE SHALL BE PROPORTIONED, MIXED, HANDLED, SAMPLED, TESTED, AND PLACED IN ACCORDANCE WITH ACI STANDARDS. ALL SAMPLES FOR PUMPING SHALL BE TAKEN FROM THE EXIT END OF THE PUMP.

6) ALLOWABLE SOIL BEARING PRESSURE ASSUMED TO BE 2000 PSF. THE CONTRACTOR MUST CONTACT A GEOTECHNICAL ENGINEER AND THE STRUCTURAL ENGINEER IF UNSATISFACTORY SUBSURFACE CONDITIONS ARE ENCOUNTERED. THE SURFACE AREA ADJACENT TO THE FOUNDATION WALL SHALL BE PROVIDED WITH ADEQUATE DRAINAGE, AND SHALL BE GRADED SO AS TO DRAINSURFACE WATER AWAY FROM FOUNDATION WALLS.

7) ALL FRAMING LUMBER SHALL BE SPF #2 (Fb = 875 PSI) UNLESS NOTED OTHERWISE (UNO). ALL TREATED LUMBER SHALL BE SYP #2 (Fb=975 PSI). PLATE MATERIAL MAY BE SPF #3 OR SYP #3 (Fc(perp) = 425 PSI - MIN).

8) ALL WOODEN BEAMS AND HEADERS SHALL HAVE THE FOLLOWING END SUPPORTS: (1) 2x4 STUD COLUMN FOR 6'-0" MAX. BEAM SPAN (UNO), (2) 2x4 STUDS FOR BEAM SPAN GREATER THAN 6'-0" (UNO).

9) L.V.L. SHALL BE LAMINATED VENEER LUMBER: Fb=2600 PSI, Fv=285 PSI, E=1,900,000 PSI. P.S.L. SHALL BE PARALLEL STRAND LUMBER: Fb=2900 PSI, Fv=290 PSI, E=2,000,000 PSI. L.S.L. SHALL BE LAMINATED STRAND LUMBER: Fb=2250 PSI, Fv=400 PSI, E=1,550,000 PSI. INSTALL ALL CONNECTIONS PER MANUFACTURERS INSTRUCTIONS.

10) ALL ROOF TRUSS AND I-JOIST LAYOUTS SHALL BE PREPARED IN ACCORDANCE WITH THE SEALED STRUCTURAL DRAWINGS. TRUSSES AND I-JOISTS SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS. ANY CHANGE IN TRUSS OR I-JOIST LAYOUT SHALL BE COORDINATED WITH SOUTHERN ENGINEERS.

11) ALL STRUCTURAL STEEL SHALL BE ASTM A-36. STEEL BEAMS SHALL BE SUPPORTED AT EACH END WITH A MINIMUM BEARING LENGTH OF 3 1/2" INCHES AND FULL FLANGE WIDTH. PROVIDE SOLID BEARING FROM BEAM SUPPORT TO FOUNDATION. BEAMS SHALL BE ATTACHED TO EACH SUPPORT WITH TWO LAG SCREWS (1/2" DIAMETER x 4" LONG). LATERAL SUPPORT IS CONSIDERED ADEQUATE PROVIDED THE JOIST ARE TOE NAILED TO THE SOLE PLATE, AND SOLE PLATE IS NAILED OR BOLTED TO THE BEAM FLANGE @ 48" O.C. ALL STEEL TUBING SHALL BE ASTM A500.

12) REBAR SHALL BE DEFORMED STEEL, ASTM615, GRADE 60.

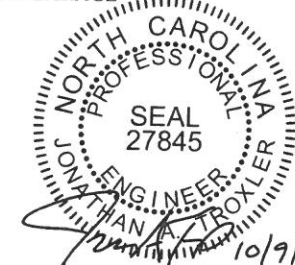
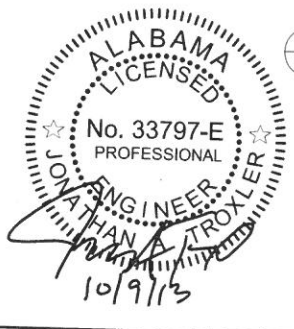
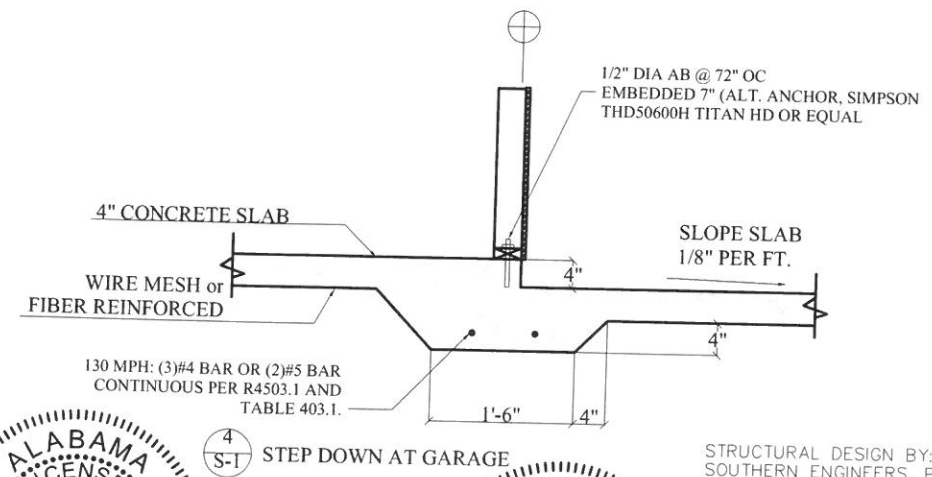
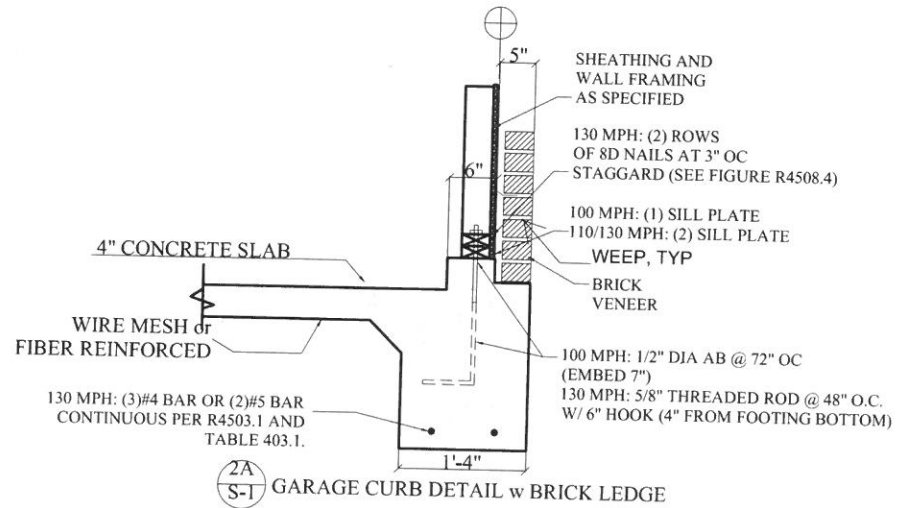
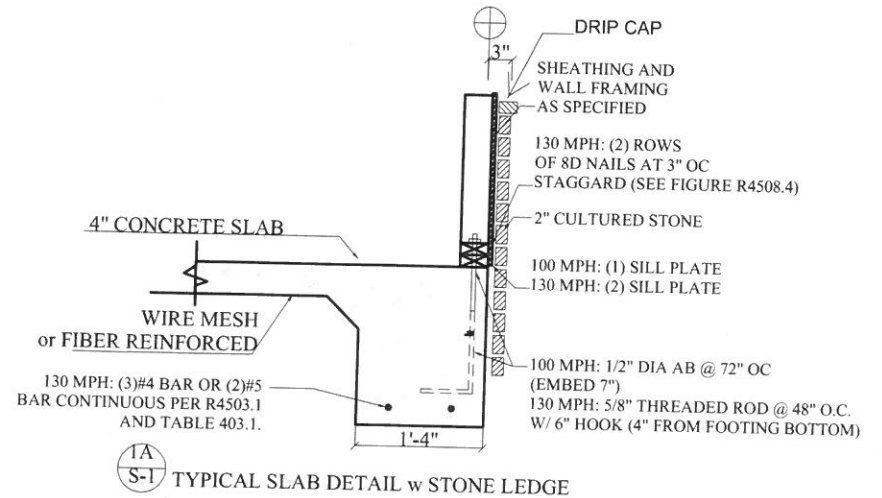
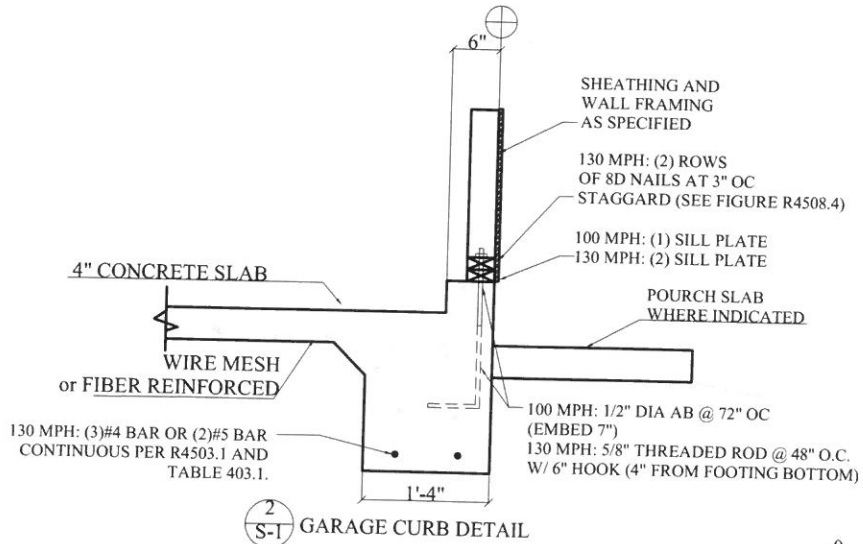
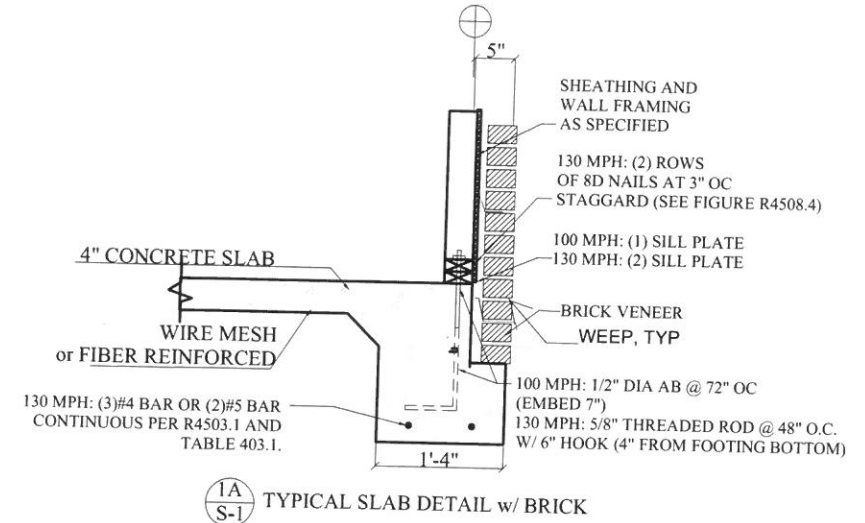
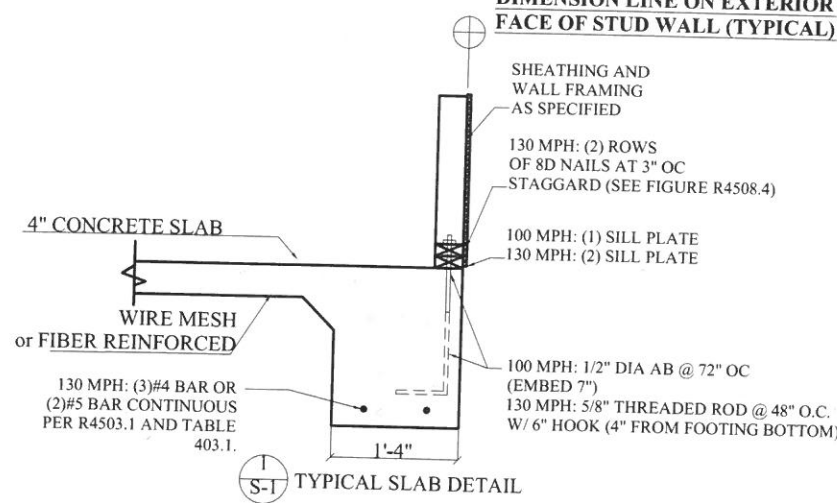
13) FLITCH BEAMS SHALL BE BOLTED TOGETHER USING (2) ROWS OF 1/2" DIAMETER BOLTS (ASTM A307) WITH WASHERS PLACED UNDER THE THREADED END OF BOLT. BOLTS SHALL BE SPACED AT 24" O.C. (MAX), AND STAGGERED AT THE TOP AND BOTTOM OF BEAM (2" EDGE DISTANCE), WITH 2 BOLTS LOCATED AT 6" FROM EACH END.

14) BRICK LINTELS SHALL BE 3 1/2"x3 1/2"x1/4" STEEL ANGLE FOR UP TO 6'-0" SPAN AND 6"x4"x5/16" STEEL ANGLE WITH 6" LEG VERTICAL FOR SPANS UP TO 9'-0" (UNO).

15) 100 MPH: THE POSITIVE AND NEGATIVE DESIGN PRESSURE FOR DOORS AND WINDOWS FOR A MEAN ROOF HEIGHT OF 35 FEET OR LESS SHALL BE 25 PSF. THE POSITIVE AND NEGATIVE DESIGN PRESSURES REQUIRED FOR ANY ROOF OR WALL CLADDING APPLICATION NOT SPECIFICALLY ADDRESSED IN THE NORTH CAROLINA STATE RESIDENTIAL CODE - 2012 EDITION SHALL BE AS FOLLOWS:

**ROOF**  
45.4 PSF - 2.25:12 PITCH OR LESS  
34.8 PSF - 2.25:12 TO 7:12 PITCH  
21 PSF - 7:12 TO 12:12 PITCH  
**WALLS**  
24.1 PSF - WALLS

**DIMENSION LINE ON EXTERIOR FACE OF STUD WALL (TYPICAL)**



STRUCTURAL DESIGN BY:  
SOUTHERN ENGINEERS, P.A.  
3716 BENSON DR., RALEIGH, NC 27609  
LICENSE: C-1287, PHONE: 919-878-1617

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- Any deviations or discrepancies on plans are to be brought to the immediate attention of Southern Engineers. Failure to do so will void Southern Engineer's liability.
- Seal is valid for a project permitted within one year from date of seal.
- Use of these plans constitutes approval of terms & conditions as defined in the customer agreement.

PLAN NAME: Details  
8/16/2013

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SAVVY HOMES

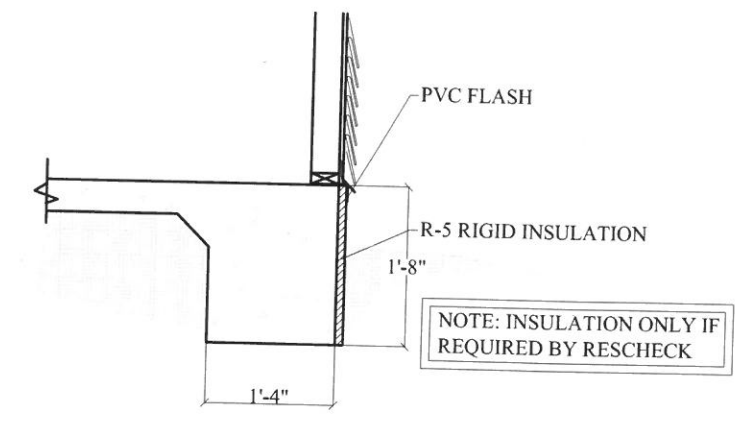
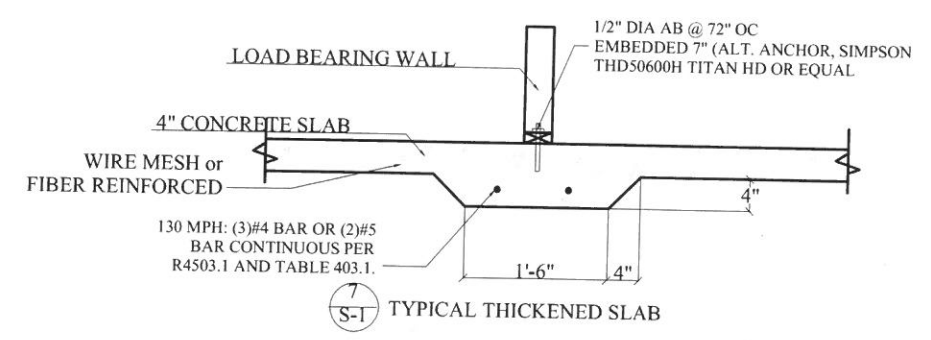
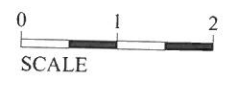
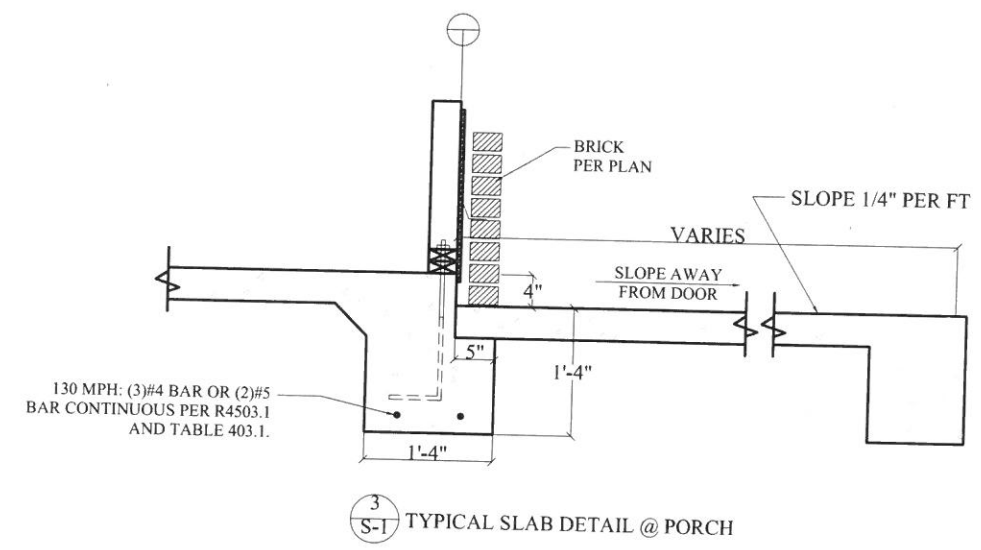
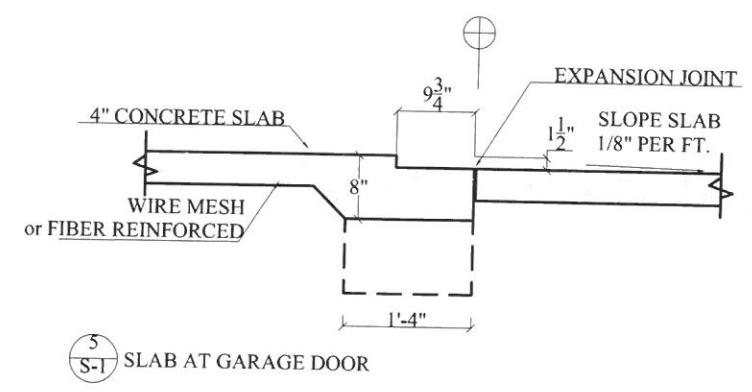
Company name: Savvy Homes

SAVVY HOMES  
8025 BREEDMOOR RD. SUITE 100  
RALEIGH, NC 27613  
PH 919-781-8104

Project name: Sections and Details  
Mono Slab Details

Date: 8/16/2013  
Sheet #: S-1.1

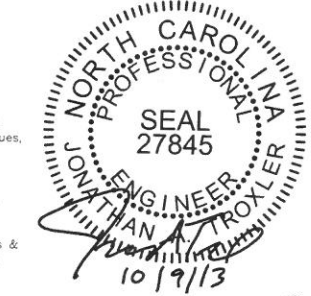
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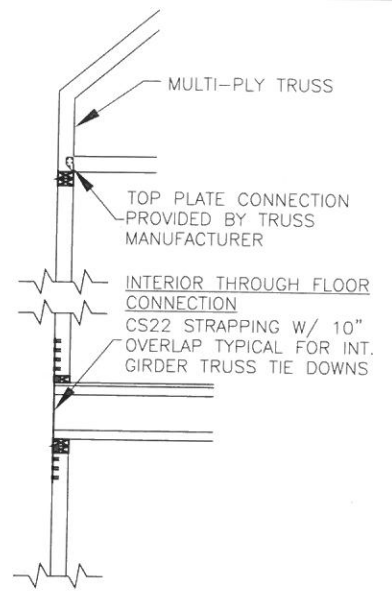
**MONO SLAB INSULATION**  
1"=1'-0"

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3716 BENSON DR., RALEIGH, NC 27609  
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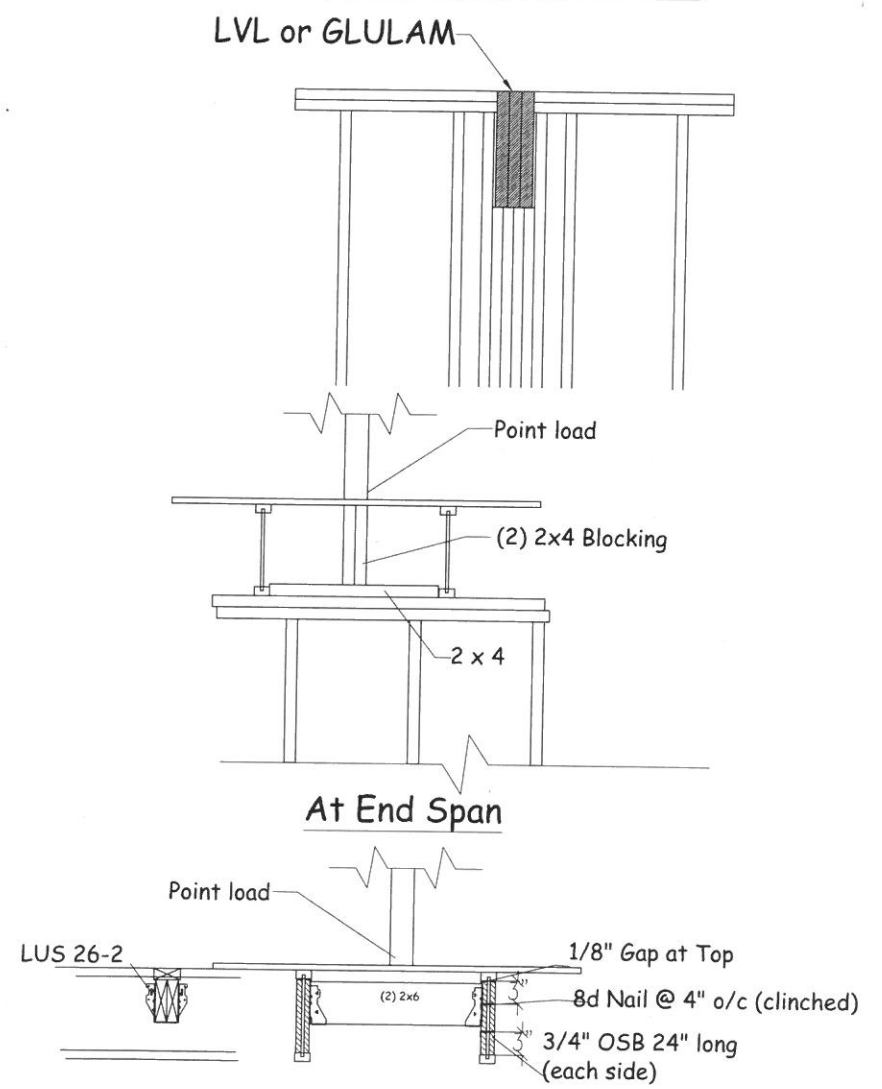


NOTE:  
\* INTERIOR TIE DOWNS ARE ONLY  
REQUIRED FOR GIRDER TRUSSES  
OR TRUSSES WITH MORE THAN 1  
PLY.  
\* ALL TIE DOWNS ARE PROVIDED  
BY TRUSS MANUFACTURER FOR  
TOP PLATE CONNECTIONS.  
\* FOR EXTERIOR WALLS,  
CONTINUOUS SHEATHING METHOD  
SHALL PROVIDE REQUIRED UPLIFT  
TO FOUNDATION.  
\* ADDITIONAL FOUNDATION  
CONNECTIONS NOT REQUIRED IN  
WIND ZONES 110MPH OR LESS  
\* SEE S-3a FOR TIE DOWN  
SPECIFICATIONS IN WIND ZONES  
OF 120MPH OR MORE ONLY

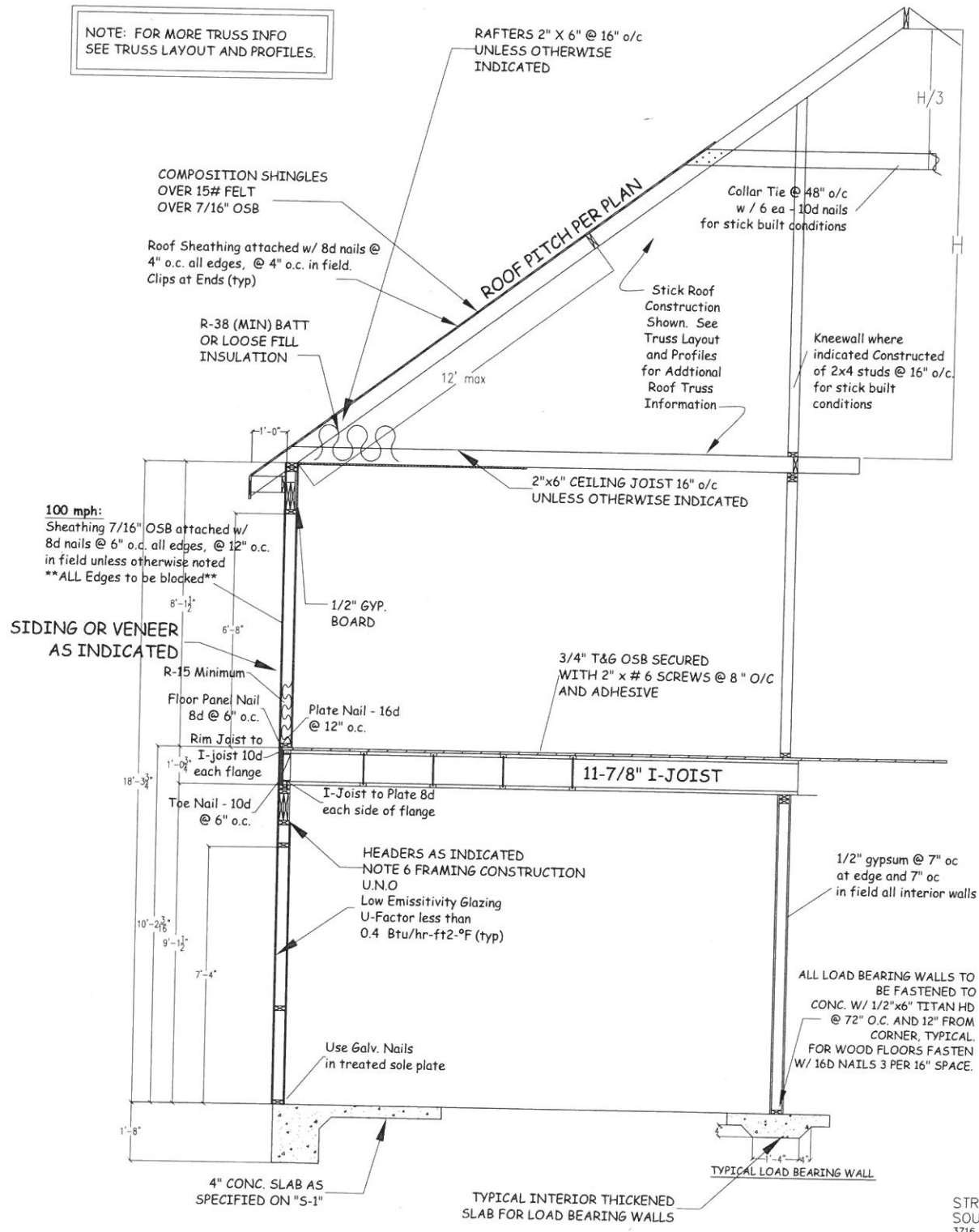


**INTERIOR GIRDER TRUSS TIE DOWNS**

**TYPICAL MULTI-STUD  
BEAM POCKET - (IN GARAGE)**

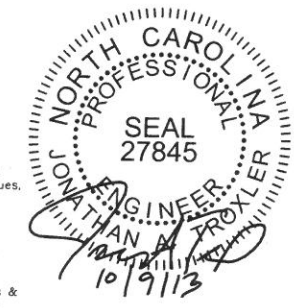


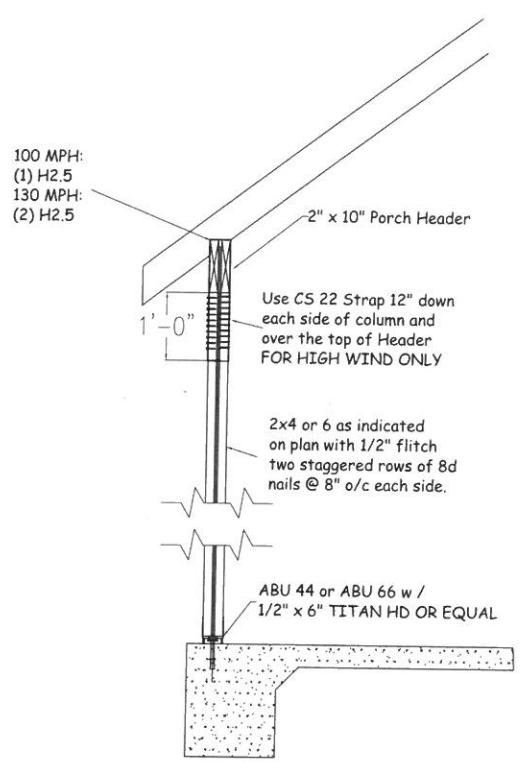
NOTE: FOR MORE TRUSS INFO  
SEE TRUSS LAYOUT AND PROFILES.



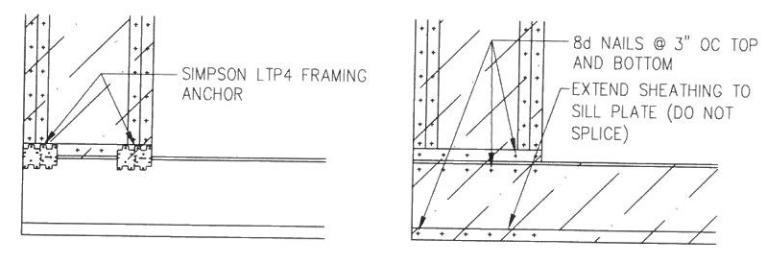
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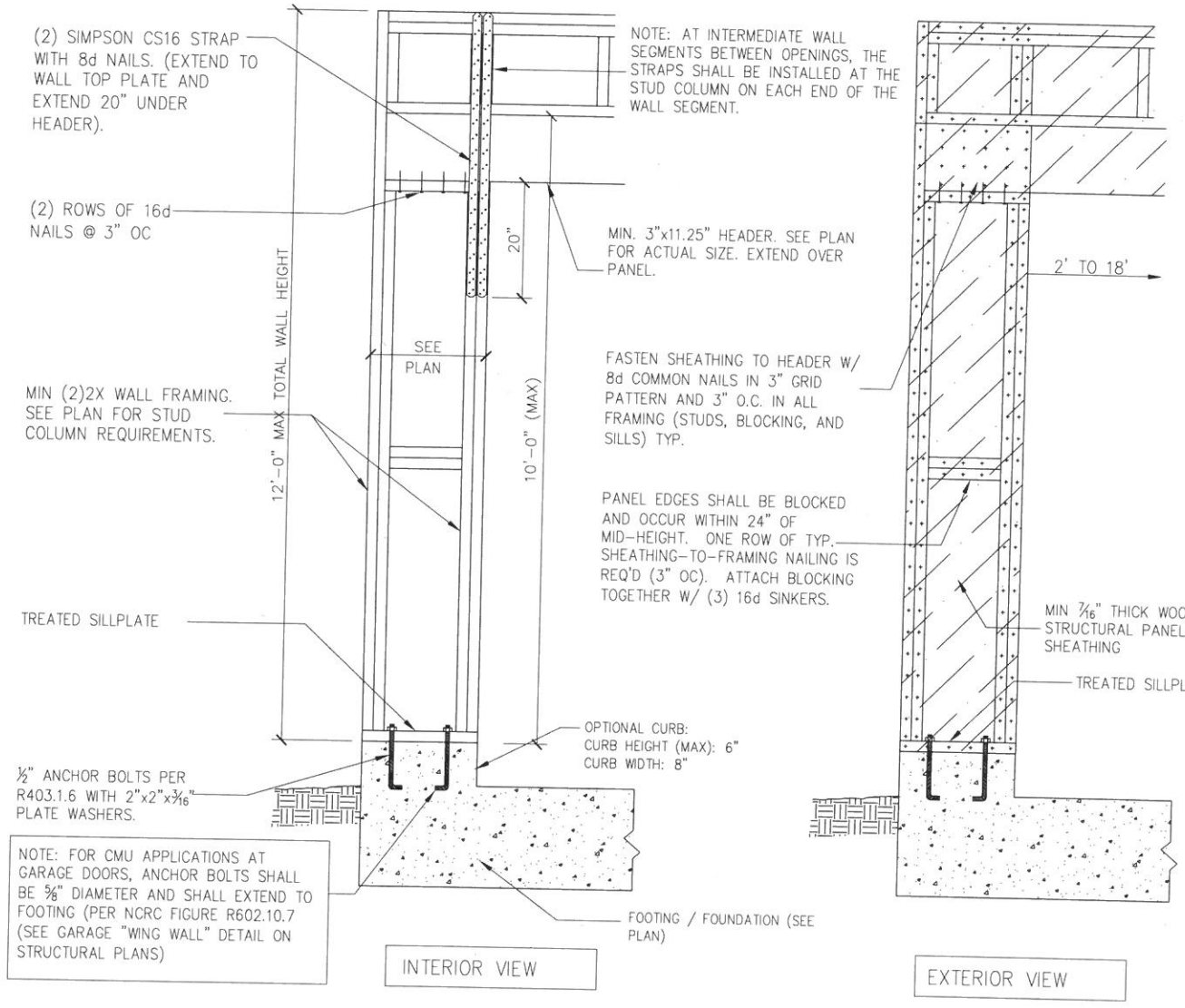
**TYPICAL EXTERIOR COLUMN TIE DOWN**



FRAMING ANCHOR OPTION

WSP OVERLAP OPTION

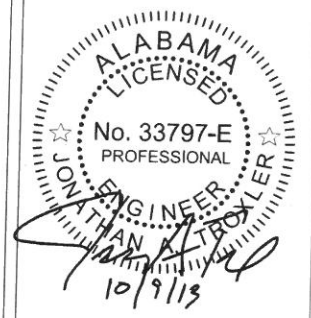
CS-PF - OVER WOOD FLOOR



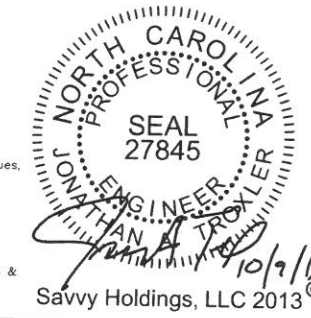
INTERIOR VIEW

EXTERIOR VIEW

**(B) END CONDITION DETAIL**  
(FOR USE WITH SINGLE CS-PF CONDITION) DETAIL AND APPLICATION BASED ON NCRC FIGURE R602.10.1 - PORTAL FRAME CONSTRUCTION

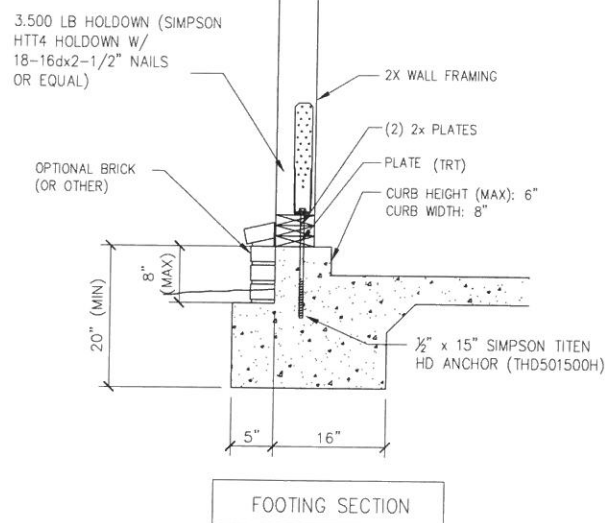


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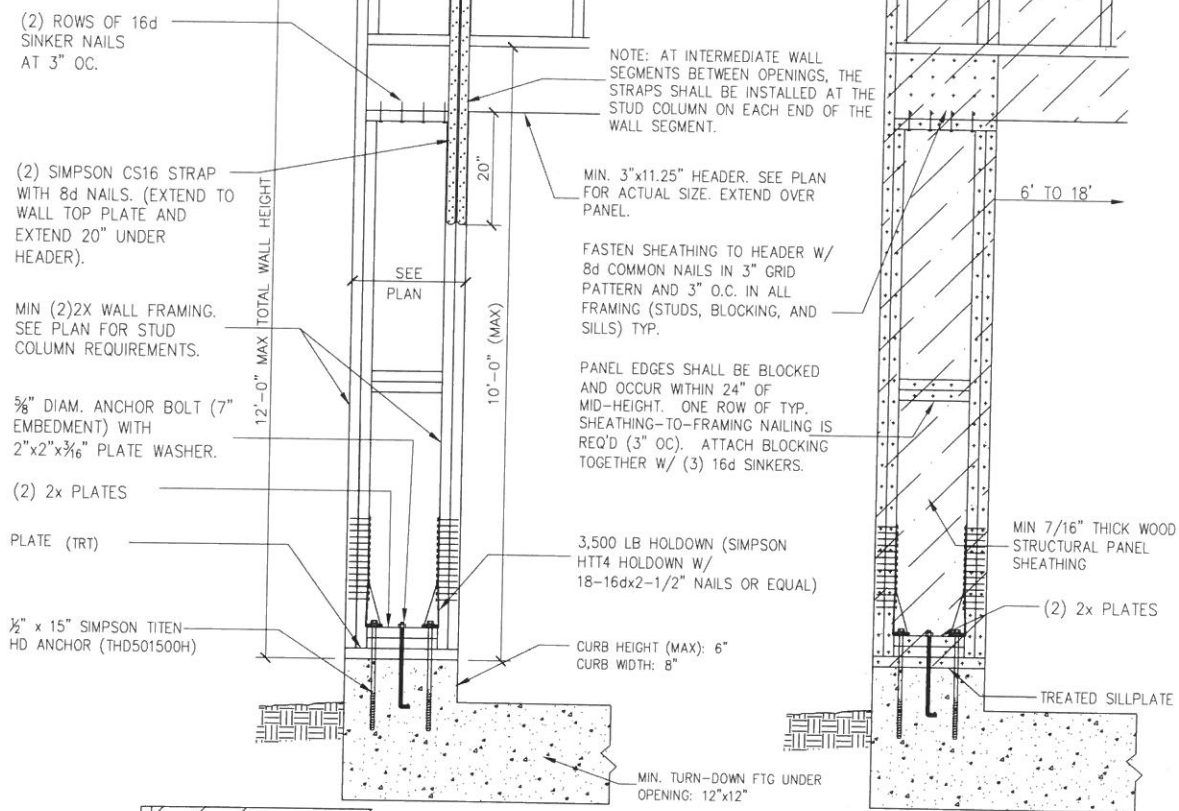
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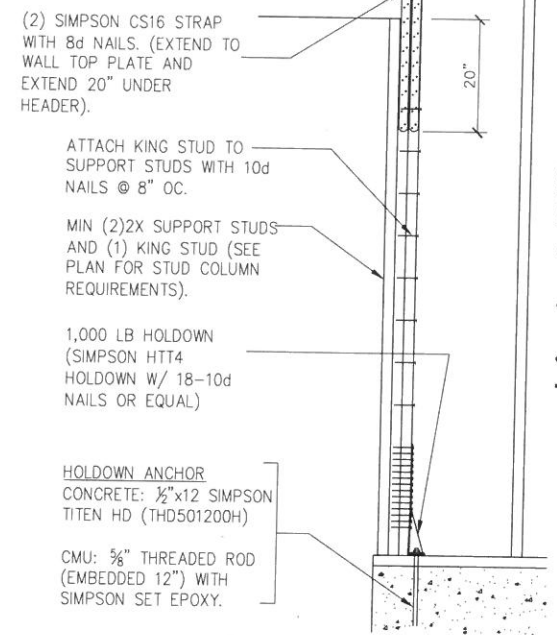
FOOTING SECTION

**C** APA PORTAL FRAME W/ HOLD-DOWNS  
DETAIL AND APPLICATION BASED ON APA TT-100E WITH USE OF TABLE 1 FOR APA PORTAL FRAME WITH HOLD-DOWN CAPACITIES.



INTERIOR VIEW

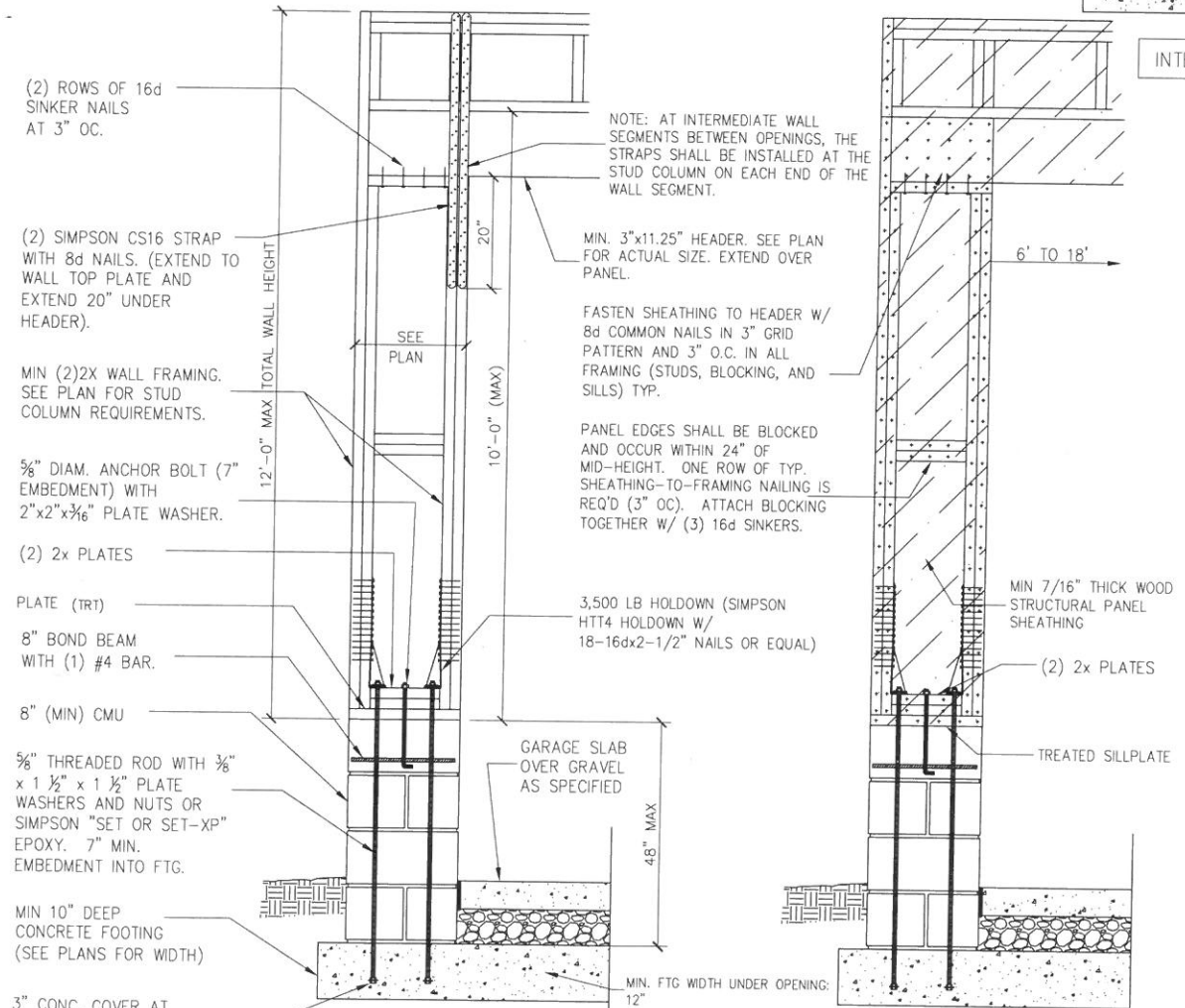
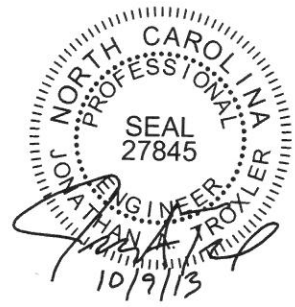
EXTERIOR VIEW



**D** END CONDITION DETAIL  
(FOR USE WITH SINGLE APA PORTAL FRAME CONDITION)  
DETAIL AND APPLICATION BASED ON APA TT-100E WITH USE OF TABLE 1 FOR APA PORTAL FRAME WITH HOLD-DOWN CAPACITIES.

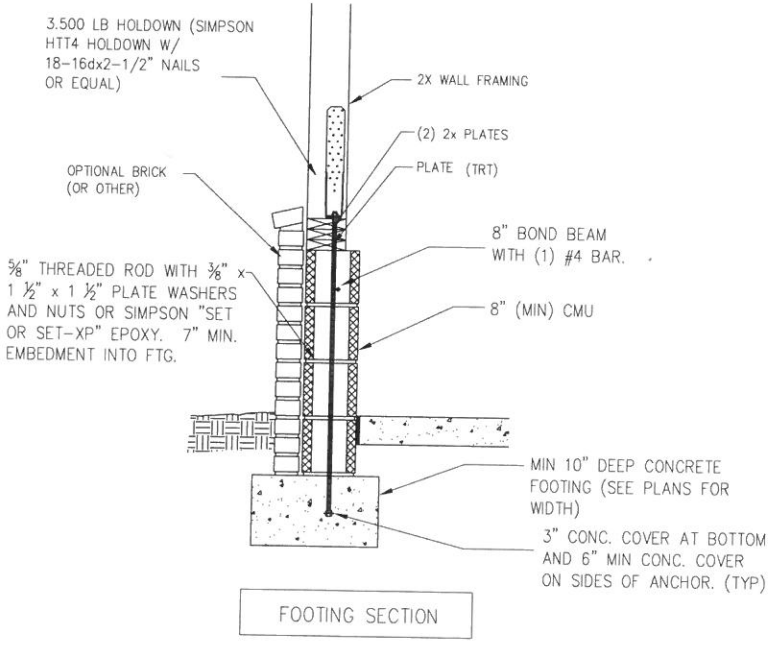
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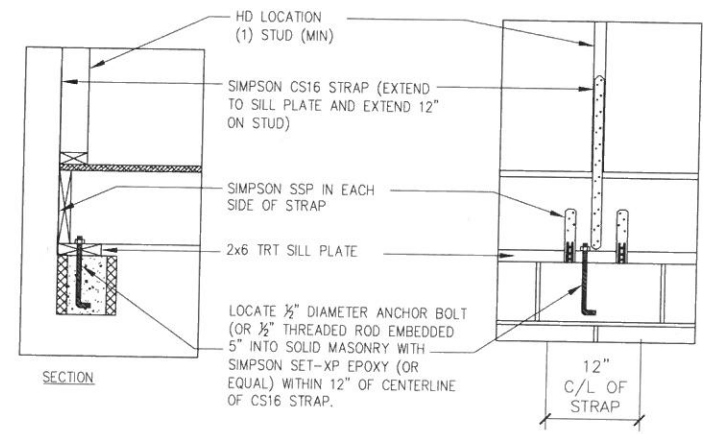
INTERIOR VIEW

EXTERIOR VIEW



FOOTING SECTION

**E** APA PORTAL FRAME W/ HOLD-DOWNS  
DETAIL AND APPLICATION BASED ON APA TT-100E WITH USE OF TABLE 1 FOR APA PORTAL FRAME WITH HOLD-DOWN CAPACITIES.



**F** 'HD' HOLD-DOWN DETAIL  
(OVER WOOD FLOOR)

NOTE: ALTERNATE HD HOLD-DOWN DEVICES OR SYSTEMS MAY BE USED TO MEET THE CODE REQUIRED 800 LB CAPACITY IN LIEU OF THE ABOVE DETAIL.